Administrator & User Guide
SAP Integration Hub
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SAP Integration Hub - Administrator and User Guide



Typographic Conventions

Type Style	Description
Example	Words or characters quoted from the screen. These include field names, screen titles, pushbutton labels, menu names, menu paths, and menu options. Textual cross-references to other documents.
Example	Emphasized words or expressions.
`EXAMPLE`	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
`Example`	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade, and database tools.
`Example`	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
`<Example>`	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
`EXAMPLE`	Keys on the keyboard, for example, `F2` or `ENTER`.

Table of Contents

Document History **8**

1 Introduction **9**
1.1 Glossary 11
1.2 Abbreviations and Acronyms 11

2 Prerequisites **12**
2.1 Localized Countries 14
2.2 Integration Hub License 14
2.2.1 Purchase an Integration Hub Subscription 14
2.2.2 Managing the Integration Hub Subscription 15
2.2.3 Assigning the Integration Hub Licenses 15
2.2.4 Managing the Integration Hub Licenses 17
2.3 Installation Prerequisites 21
2.4 Installation Sequence 21

3 Installing the Integration Solutions Add-On **22**
3.1 Registering the Integration Solutions Add-On 22
3.2 Assigning the Integration Solutions Add-On to Users 24
3.3 Add-On Installation on SAP Business One Client 25
3.4 Upgrading from Previous Integration Solutions Add-On Releases 26
3.5 Uninstalling the Integration Solutions Add-On 27
3.6 Installing Integration Solutions Add-On on Cloud Environment 28

4 Installing the Integration Solutions Installer **29**
4.1 Installing the Integration Solutions Installer 30
4.2 Upgrading the Integration Solutions Installer 34
4.3 Removing the Integration Solutions Installer 39

5 Integration Hub Administration Console **40**
5.1 Logging On to the Integration Hub Administration Console 40
5.2 Elements of the Integration Hub Administration Console 43
5.2.1 Dashboard Display 44
5.2.2 New Customers 45
5.2.3 Assign SLD Categories to Customers 47
5.2.4 Configuration Menu 48
5.2.5 Message Logs 50
5.3 Custom Language Tool 52
5.4 Application Deployment Status 54

6 Intercompany **56**
6.1 Setting Up the Intercompany Integration Solution in the Integration Hub 56
6.2 Upgrading the Existing Intercompany Environment to the Integration Hub 58

7 Shopify **62**
7.1 Setting Up Shopify in the Integration Hub 63
7.2 Setup in SAP Business One 76
7.2.1 Shopify Settings 77
7.2.2 Master Data Mapping Tool 90
7.2.3 UDF Integration 91

7.3 Using Shopify 93
7.3.1 Customer Master Data 93
7.3.2 Products Master Data 94
7.4 Shopify Transactions 97
7.4.1 Windows Enhancements in SAP Business One 97
7.4.2 Orders with Payment 98
7.4.3 Document Combinations 100
7.4.4 Orders with Cash on Delivery 102
7.4.5 Tax Handling 104
7.4.6 Freight Handling 105

8 United Parcel Services (UPS) 107
8.1 UPS Setup in Administration Console 107
8.2 Setup in SAP Business One 116
8.3 Using UPS 118
8.3.1 Address Validation 118
8.3.2 Freight Quote 120
8.3.3 Shipment Tracking Number 121
8.3.4 Print Labels 121

9 Nexmo 123
9.1 Nexmo Setup in Administration Console 123
9.2 Setup in SAP Business One 129
9.2.1 Print Preferences 131
9.2.2 Send Message 132
9.2.3 Business Partner Master Data 133
9.3 Using Nexmo 134
9.3.1 Automatic SMS Notification based on Print Preferences 134
9.3.2 Manual SMS Notification 135
9.3.3 SMS Notification for SMS Type Campaigns 135
9.3.4 SMS Template for Marketing Documents 135

10 Fixer 143
10.1 Fixer Setup in Administration Console 144
10.2 Setup in SAP Business One 152
10.3 Using Fixer 153
10.3.1 Manual Exchange Rates Retrieval 153
10.3.2 Automatic Retrieval of Exchange Rates 153

11 Mailchimp 154
11.1 MailChimp Setup in Administration Console 154
11.2 Setup in SAP Business One 162
11.2.1 Print Preferences 163
11.2.2 Send Message 165
11.2.3 Business Partner Master Data 166
11.3 Using Mailchimp 167
11.3.1 Automatic E-mail Notification based on Print Preferences 167
11.3.2 Manual E-mail Notification 168
11.3.3 E-mail Notification for E-mail Type Campaigns 168
11.3.4 E-mail Template for Marketing Documents 169

12 SendGrid 179
12.1 SendGrid Setup in Administration Console 179
12.2 Setup in SAP Business One 188
12.2.1 Print Preferences 189

12.2.2 Send Message 192
12.2.3 Business Partner Master Data 193
12.3 Using SendGrid 194
12.3.1 Automatic E-mail Notification based on Print Preferences 194
12.3.2 Manual E-mail Notification 195
12.3.3 E-mail Notification for E-mail Type Campaigns 195
12.3.4 E-mail Template for Marketing Documents 196

13 SAP Business One RFQ 206
13.1 RFQ Setup in Administration Console 206
13.2 Setup in SAP Business One 215
13.2.1 User Setup 216
13.2.2 Business Partner Master Data 217
13.2.3 Purchase Quotation 218
13.3 Using RFQ 220
13.3.1 Message / Alerts Overview 220
13.3.2 Purchase Quotation E-mail to Vendor 221

14 Magento 223
14.1 Setting Up Magento in Integration Hub 223
14.2 Setup in SAP Business One 232
14.2.1 Magento Settings 233
14.2.2 Master Data Mapping Tool 247
14.2.3 UDF Integration 247
14.3 Using Magento 250
14.3.1 Customer Group Data 250
14.3.2 Customer Master Data 250
14.3.3 Product Master Data 252
14.4 Magento Transactions 255
14.4.1 Windows Enhancements in SAP Business One 255
14.4.2 Orders with Payment 256
14.4.3 Document Combinations 258
14.4.4 Orders with Cash on Delivery 260
14.4.5 Tax Handling 261
14.4.6 Freight Handling 263

15 Deutsche Post DHL 264
15.1 DHL Setup in Administration Console 264
15.2 Setup in SAP Business One 272
15.3 Using DHL 274
15.3.1 Address Validation 274
15.3.2 Freight Quote 276
15.3.3 Shipment Tracking Number 277

16 Salesforce 278
16.1 Salesforce Setup in Administration Console 278
16.2 Setup in SAP Business One 288
16.2.1 Salesforce Settings 289
16.2.2 Master Data Mapping Tool 301
16.2.3 UDF Integration 302
16.3 Using Salesforce 304
16.3.1 Lead 304
16.3.2 Customer Master Data 305
16.3.3 Contact Master Data 308
16.3.4 Products Master Data 308
16.4 Salesforce Transactions 310

16.4.1 Windows Enhancements in SAP Business One ... 310
16.4.2 Opportunity ... 310
16.4.3 Sales Quotation ... 311
16.4.4 Sales Order ... 311

17 Expensify ... 313
17.1 Setting Up Expensify in Integration Hub ... 313
17.2 Setup in SAP Business One ... 321
17.2.1 Expensify Settings ... 322
17.3 Using Expensify ... 327
17.3.1 Expense Data ... 327

18 Aramex ... 328
18.1 Aramex Setup in Administration Console ... 328
18.2 Setup in SAP Business One ... 336
18.3 Using Aramex ... 338
18.3.1 Address Validation ... 338
18.3.2 Freight Quote ... 339
18.3.3 Shipment Tracking Number ... 340
18.3.4 Print Labels ... 341

19 FedEx ... 342
19.1 FedEx Setup in Administration Console ... 342
19.2 Setup in SAP Business One ... 350
19.3 Using FedEx ... 352
19.3.1 Address Validation ... 352
19.3.2 Freight Quote ... 353
19.3.3 Shipment Tracking Number ... 354

20 Dynamics 365 Sales ... 356
20.1 Dynamics 365 Sales Setup in Administration Console ... 356
20.2 Setup in SAP Business One ... 364
20.2.1 Dynamics 365 Sales Settings ... 365
20.2.2 Master Data Mapping Tool ... 378
20.3 Using Dynamics 365 Sales ... 379
20.3.1 Lead ... 379
20.3.2 Customer Master Data ... 380
20.3.3 Contact Master Data ... 382
20.3.4 Products Master Data ... 383
20.4 Dynamics 365 Sales Transactions ... 385
20.4.1 Windows Enhancements in SAP Business One ... 385
20.4.2 Opportunity ... 386
20.4.3 Sales Quotation ... 386
20.4.4 Sales Order ... 387

21 SAP S/4 HANA ... 388
21.1 Master Data (Item and Business Partner) ... 389
21.2 Intercompany Purchasing (Sales from Central Stock and Sales from Local Stock) ... 390

22 SAP ECC ... 391
22.1 Master Data (Item and Business Partner) ... 392
22.2 Intercompany Purchasing (Sales from Central Stock and Sales from Local Stock) ... 393

23 WooCommerce 394
23.1 Setting Up WooCommerce in Integration Hub 394
23.2 Setup in SAP Business One 403
23.2.1 WooCommerce Settings 404
23.2.2 Master Data Mapping Tool 416
23.2.3 UDF Integration 417
23.3 Using WooCommerce 418
23.3.1 Customer Master Data 418
23.3.2 Product Master Data 420
23.4 WooCommerce Transactions 423
23.4.1 Windows Enhancements in SAP Business One 423
23.4.2 Orders with Payment 424
23.4.3 Document Combinations 425
23.4.4 Orders with Cash on Delivery 428
23.4.5 Tax Handling 429
23.4.6 Freight Handling 431

24 Tagrain POS 432
24.1 Setting Up Tagrain POS in Integration Hub 432
24.2 Setup in SAP Business One 440
24.2.1 Tagrain Settings 441
24.3 Using Tagrain 450
24.3.1 Customer Group Data 450
24.3.2 Customer Master Data 450
24.3.3 Manufacturer (Brand) 452
24.3.4 Item Group 453
24.3.5 Product Master Data 454
24.3.6 Composite Products - Assembly Bill of Materials 456
24.3.7 Freight (Surcharge) 457
24.3.8 Tax codes 458
24.4 Tagrain Transactions 458
24.4.1 Windows Enhancements in SAP Business One 459
24.4.2 Sales Transactions 461
24.4.3 Refund Transactions 463
24.4.4 Tax Handling 465
24.4.5 Freight Handling 465
24.4.6 Expense Transactions 465

Document History

Version	Date	Change
1.0	2019-10-03	First Version - Shopify, UPS, Nexmo, Fixer
1.1	2019-12-18	Second Version - Magento, Salesforce, SendGrid, Mailchimp, Deutsche Post DHL, RFQ
1.2	2020-02-28	Third Version – Expensify, Aramex, FedEx, Dynamics 365 Sales.
1.3	2020-08-06	Fourth Version – SAP S/4 HANA
1.4	2020-12-20	Fifth Version – WooCommerce, SAP ECC
1.5	2021-06-28	Sixth Version – Tagrain POS

1 Introduction

Note

The version number is 57.0. The naming convention 2.0.57.0 means that version 57.0 of the embedded software version is based on B1iF 2.0.

The Integration Hub is a concept and technical platform for seamlessly connecting SAP software with established business applications and integrating relevant processes. Applications can be integrated via the hub to improve SAP software functionality or to extend coverage.

The pre-defined templates offer a quick and easy customer-specific realization of the integrations. Programming knowledge or technical knowledge of the application is not necessary, as the templates are preconfigured as far as possible.

Integration Hub templates are currently available for the following applications:

- **Shopify:** A cloud-based e-commerce platform that allows you to sell products in multiple ways, such as through mobile, social media, online marketplaces, brick-and-mortar locations, and pop-up shops.
- **UPS:** A package delivery company and provider of global supply chain management solutions. UPS operates through three segments: U.S. Domestic Package operations, International Package operations, and Supply Chain & Freight operations.
- **Nexmo:** An SMS service that helps inform, reassure, and delight their customers with the information they need, when and wherever they need it.
- **Fixer:** A simple and lightweight API for foreign exchange (forex) rates. Fixer provides currency conversion and exchange rates for current and historical times, ensuring accurate data on transactions in the case that currency has changed over time.
- **Mailchimp**: Mailchimp is an American marketing automation platform and an Email marketing service.
- **SendGrid:** SendGrid is a Denver, Colorado-based customer communication platform for transactional and marketing Email.
- **SAP Business One RFQ**: SAP Business One users can send purchase quotations to business partners electronically
- **Magento**: Magento ecommerce platform provides online merchants with a flexible shopping cart system, as well as control over the look, content, and functionality of their online store. Magento offers powerful marketing, search engine optimization, and catalog-management tools
- **DHL**: DHL International GmbH is an international courier, parcel, and express mail which is a division of the German logistics company Deutsche Post DHL. Deutsche Post DHL is the world's largest logistics company, now in over 220 countries and territories worldwide, particularly in sea and air mail.
- **Salesforce**: Salesforce is a cloud computing service as a software (SaaS) company that specializes in customer relationship management (CRM). Salesforce's customer relationship management software instantly streamlines and automates an enterprise's business processes.
- **Expensify:** Expensify application for expense management, receipt scanning, and business travel. It is used to manage expenses, transactions, and money matters through its real-time data and reporting processes.
- **Aramex:** Aramex is an international express, mail delivery, and logistics services company. Aramex provides comprehensive logistics and transportation solutions.

- **FedEx:** FedEx Corporation is an American multinational delivery services company headquartered in Memphis, Tennessee. FedEx Services provides sales, marketing, information technology, communications, customer service, technical support, billing and collection services, and certain back-office functions that support our transportation segments.
- **Dynamics 365 Sales:** Dynamics 365 Sales enables sales people to build strong relationships with their customers, take actions based on insights, and close sales faster. Use Dynamics 365 Sales to keep track of your accounts and contacts, nurture your sales from lead to order, and create sales collateral. It also lets you create marketing lists and campaigns, and even follow service cases associated with specific accounts or opportunities.
- **SAP S/4 HANA**: SAP S/4 HANA is a future-ready enterprise resource planning (ERP) system with built-in intelligent technologies, including AI, machine learning, and advanced analytics. It transforms business processes with intelligent automation and runs on SAP HANA, a leading in-memory database that offers real-time processing speeds and a dramatically simplified data model.
- **SAP ECC**: SAP ERP Central Component (ECC) is an enterprise resource planning software that consists of several modules that provide the organizations with great control over their key business processes. With modules like Financials (FI), Material Management (MM), Sales and Distribution (SD), Human Capital Management (HCM), among others, SAP ECC is one of the preferred choices for many organizations.
- **WooCommerce:** WooCommerce is an open-source e-commerce plugin for WordPress. It is designed for small to large-sized online merchants using WordPress. WooCommerce provides store functionality right out of the box, with a free plugin available from the Plugin Repository.
- **Tagrain POS:** Tagrain POS is an easy-to-use, plug-and-play cloud-based point-of-sale software. A complete POS solution to manage everyday sales, refunds, returns, and customers.

In addition, templates for other applications in the areas of logistics, web shops, communication, as well as ERP and CRM systems can be added.

1.1 Glossary

Term	Definition
Customer	Customer is an entity name in the Integration Hub.
Integration Hub	The Integration Hub is an out-of-the-box integration solution for the integration of SAP software with other business applications and services.
Intercompany	An abbreviation for the Intercompany Integration Solution for SAP Business One.
Administration Console	Administration Console is a term used for the Web User Interface of Integration Hub.

1.2 Abbreviations and Acronyms

Term	Definition
API	Application Programming Interface
B1if	An abbreviation for the integration framework for SAP Business One, which includes several business scenarios that integrate the SAP software with third-party software and mobile devices.
COD	Cash on delivery
DI	Data Interface
Intercompany integration solution	An abbreviation for the Intercompany integration solution for SAP Business One.
SDK	Software Development Kit
SLD	System Landscape Directory

2 Prerequisites

Required Installed Components and Technical Requirements

Before installing the Integration Hub installer (`IntegrationSolutions.exe`), ensure you meet the following requirements.

- SAP Integration Framework 2.0.
- To improve the transaction runtime performance, deploy multiple DI proxy instances. To deploy multiple DI proxy instances, refer to Note WDF 1975033.
- Microsoft .NET Framework 4.0
- Minimum memory assigned to Apache SAP Integration Framework 2.0 should be 4 GB
- Microsoft Windows Operating System (to run the Integration Hub installer).
- SAP HANA ODBC 32 Bit Driver must be installed for Database Type SAP HANA.
- Supported web browser – Google Chrome

  Note

  Installing Integration Hub does not require any other SAP Software except SAP Integration Framework 2.0 and can be installed on a stand-alone system.

Customers running SAP Business One need to install the Integration Solutions add-on [`IntegrationSolutionsAddon.ard`]

- SAP Business One, compliant to the following:
  - SAP Business One Hardware Requirements Guide
  - Platform Support Matrix for SAP Business One
  - Platform Support Matrix for SAP Business One, version for SAP HANA
- SAP Business One SDK Data Interface API (DI API), 64-bit or 32-bit
- For connecting to SAP Business One companies on Microsoft SQL, you have installed the SQL Native Client
- The Integration Hub requires 1.25 GB RAM per user/SAP Business One Client instance (1 GB for SAP Business One + 0.25 GB for add-on = 1.25 GB).
- When working with non-English locales, ensure that the decimal separator and thousand separator setups in SAP Business One match the locale setting in Windows.

  Note

  Customers running S/4 HANA and SAP ECC do not require this add-on to use the Integration Hub template for S/4 HANA and ECC.

User Rights

- You have administrator rights on the computer to install the Integration Hub components.

For more information about installer issues related to the User Account Control (UAC) in Microsoft Windows operating systems, see Note WDF 1492196.

- SAP **Business One:** You have superuser access to the SAP Business One company databases to install the integration solutions add-on.
- SAP **S/4 HANA and SAP ECC:** You have superuser access to the SAP system to use the *Integration Hub templates for S/4 HANA and SAP ECC*.

Application Prerequisites

You need respective accounts on the selected platforms:

- Shopify - https://www.shopify.com/signup

  A Basic Shopify plan is the minimum requirement to integrate with SAP Business One. Shopify trial account is not supported.
- Nexmo - https://dashboard.nexmo.com/sign-up
- UPS - https://www.ups.com/doapp/signup
- Fixer - https://fixer.io/signup

  The free or basic pricing option is sufficient to retrieve exchange rates.
- Mailchimp - https://mailchimp.com/

  Mailchimp Transactional email service must be activated in the Mailchimp account.

  Transactional Email is available as an add-on to Standard and higher monthly Mailchimp plans, or the legacy Monthly Plan.
- SendGrid - https://sendgrid.com/
- SAP Business One RFQ - SMTP details are needed to configure RFQ.
- Magento - https://magento.com/

  Magento ver. 2.3 (Enterprise and Open source) and above versions are supported.
- Deutsche Post DHL - https://www.logistics.dhl
- Salesforce - https://login.salesforce.com/

  Salesforce Enterprise Edition, Unlimited Edition, Developer Edition, and Performance Edition are supported.
- Expensify - https://www.expensify.com/
- Aramex - https://www.aramex.com/
- FedEx - https://www.fedex.com/global/choose-location.html
- Dynamics 365 Sales - https://dynamics.microsoft.com/en-us/
- SAP S/4HANA - https://www.sap.com/products/s4hana-erp.html
- SAP ECC - https://www.sap.com/products/enterprise-management-erp.html
- WooCommerce - https://woocommerce.com/

  A WordPress Business plan with WooCommerce Plugins installed is the minimum requirement to integrate with SAP Business One.

2.1 Localized Countries

The Integration Hub is currently supported in the following SAP Business One localizations:

Australia, Austria, Belgium, Brazil, Canada, Chile, Costa Rica, Cyprus, Czech Republic, France, Germany, Guatemala, Hungary, India, Israel, Italy, Mexico, New Zealand, Netherlands, Panama, Poland, P.R. China, Russia, Singapore, Slovakia, South Africa, Spain, Switzerland, UK International / Republic of Ireland, USA, Denmark, Finland, Norway, Portugal, Sweden, Turkey, Central MENA (United Arab Emirates, Egypt, Lebanon, Oman, Qatar, Saudi Arabia) and Brexit (United Kingdom of Great Britain and Northern Ireland)

For more information on supported localization, see Note WDF 3006743.

> **Note**
>
> You can use the solution in countries other than those listed above. For more information on using the solution in non-localized countries, see Note WDF 2844963.

2.2 Integration Hub License

The Integration Hub supports subscription-based licensing. The customer needs to pay a recurring subscription fee in order to use the product.

Customer will not be able to use the Integration Hub application and unable to perform the upgrades if the subscription is expired.

2.2.1 Purchase an Integration Hub Subscription

You can purchase the Integration Hub application subscription at any time to keep up with your business needs.

To purchase an Integration Hub application subscription, perform the following steps:

1. Navigate to https://walldorfsolutions.com/store.
   All available Integration Hub application subscriptions are displayed. Also, economical bundled subscription options are available.

2. Hover the cursor over an application, then click *Add to cart*.
   This will take you to a page confirming that the selected application is in your cart. Similarly, you may add more application subscriptions to your cart.

3. On the cart page, you can change the quantity if you'd like to purchase more than one quantity of an application subscription.

4. Click *Proceed to Checkout.*

5. If you are already logged in to Walldorf solutions, then complete the Order by providing the payment method details (Credit Card or Purchase Order) information and choose *Buy Now*.
6. Otherwise, complete the account registration process by providing the Billing details and Additional information, and then choose *Buy Now*.
7. After you've completed your order, you are prompted with the order details, download link, and subscription information.
8. Also, you will receive an Order confirmation email with the subscription details and Production key & Sandbox key if applicable.

Note

The credit card entered during checkout will be saved in the customer account, and future renewal orders will be placed automatically unless canceled by the user.

Note

The Sandbox license key is delivered if applicable for the product subscription and is valid for 30 days. After the time period, the Sandbox license key will expire, and you need to contact support to renew the Sandbox license on a need basis.

2.2.2 Managing the Integration Hub Subscription

Customers who buy the Integration hub application subscription can view and manage their subscriptions from their Customer Account (https://walldorfsolutions.com/my-account).

After logging in, click *My account*, and then *My Subscriptions*.

All subscriptions are listed in the *My Subscriptions* section. Customers can view subscription details, including:

- Subscription no.
- Subscription totals
- Downloads
- Related orders
- Saved billing address

To cancel the subscription, click *Cancel*.

To renew the subscription, click *Renew now*.

To update the payment method information, click *Payment Methods*, and then *Add Payment Method*.

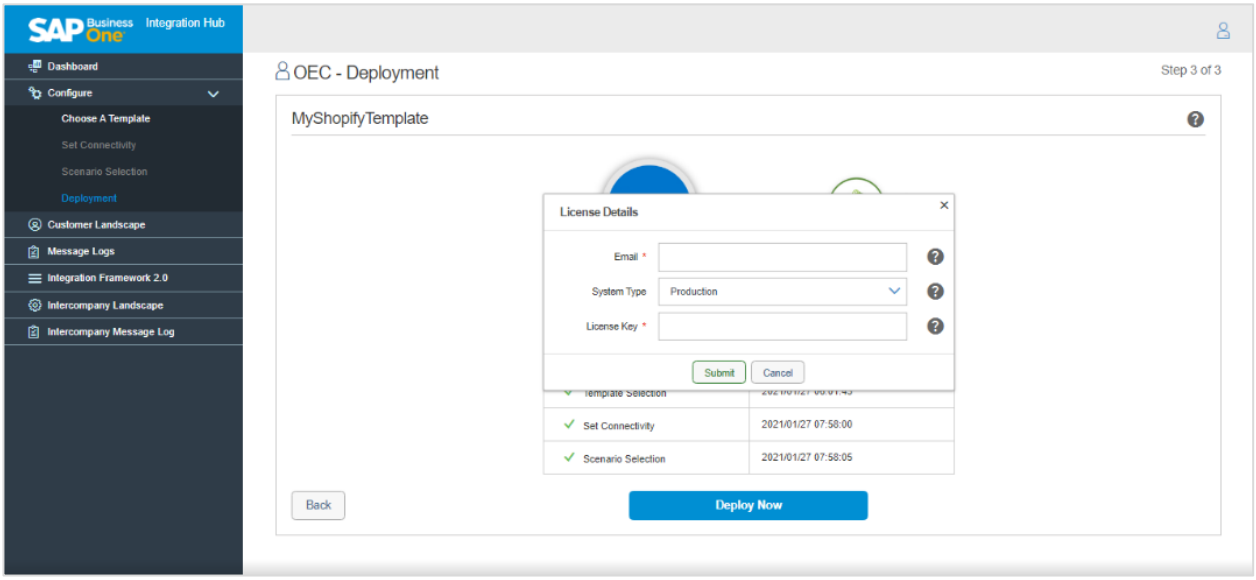
2.2.3 Assigning the Integration Hub Licenses

To assign the subscription license to the Integration hub application, perform the following:

1. In the Integration Hub Administration Console, in the *Dashboard* menu, in the *Customers* area, choose the *Add New Customer* button. For more information, see Adding New Customers section in this guide.
2. Select the template to which you would like to assign the license.

Let's take an example of a Shopify template to assign the license.

Perform the steps as mentioned in the Setting Up Shopify in the Integration Hub section in this guide completely, and during deployment, the application prompts you to provide the license details.



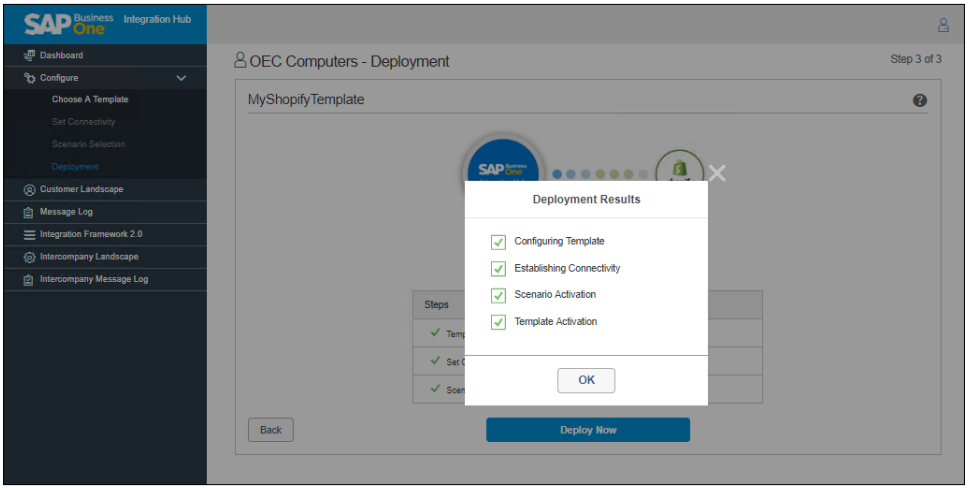
The *License Details* window contains the following fields:

Field Name	Description
Email	Enter the email address at which you receive the license keys. **Note** *Email* is a mandatory field
System Type	Select the System Type – *Production* or *Sandbox* from the drop-down list. **Note** Choose the appropriate system type as mentioned in the license email.
License Key	Enter the License key received in the email. **Note** *License Key* is a mandatory field

3. Enter the *Email, System Type,* and *License Key* information and choose the *Submit* button.

   The application validates the license information; if all entered information is correct, the application displays the license activation message and subsequently show the *Deployment Results* window. Otherwise, the application will show you the appropriate license error.

4. The checkboxes in the *Deployment Results* window indicate the deployment status. Choose the *OK* button



Similarly, you can assign the licenses to other Integration Hub applications.

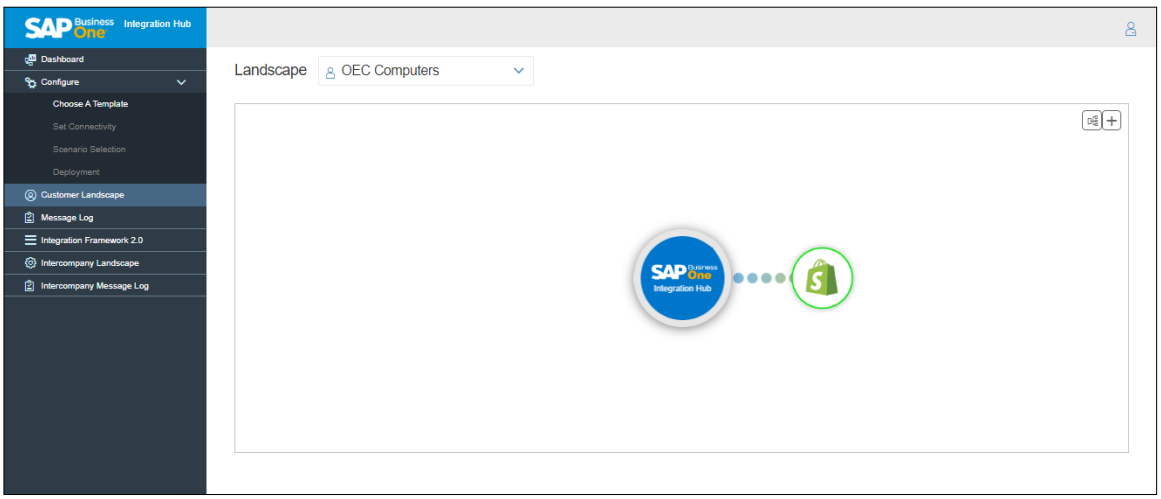
2.2.4 Managing the Integration Hub Licenses

The application allows you to activate the new licenses, deactivate the existing licenses, or change the sandbox system to a production system using the *Manage license* option.

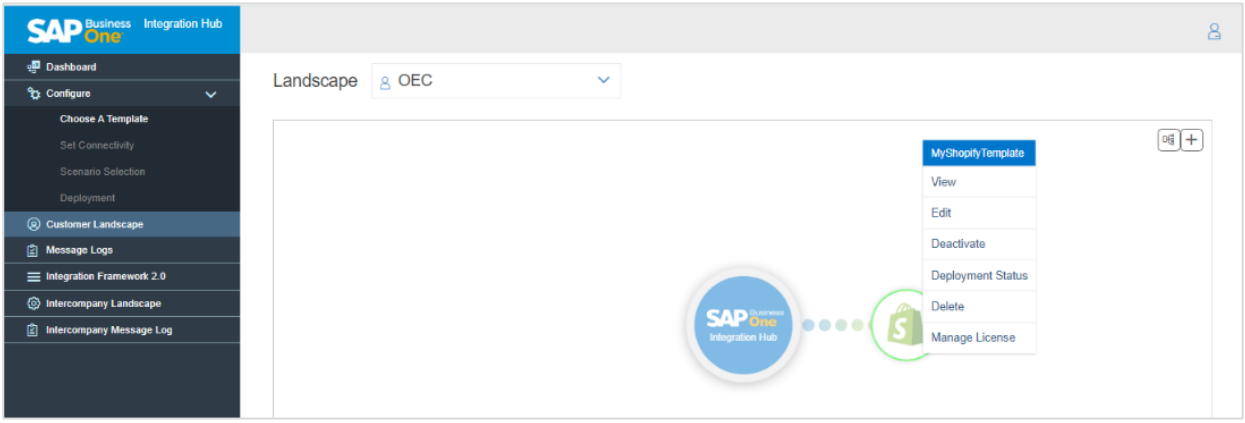
With the *Manage License* option, you can also get the updated license information from the license server immediately. You may need to manually refresh the license definition in case of any manual upgrade in your subscription to apply it with immediate effect. Otherwise, the system is designed to auto-update the license information periodically.

To activate/deactivate the license or retrieve the latest license information from the license server, perform the following:

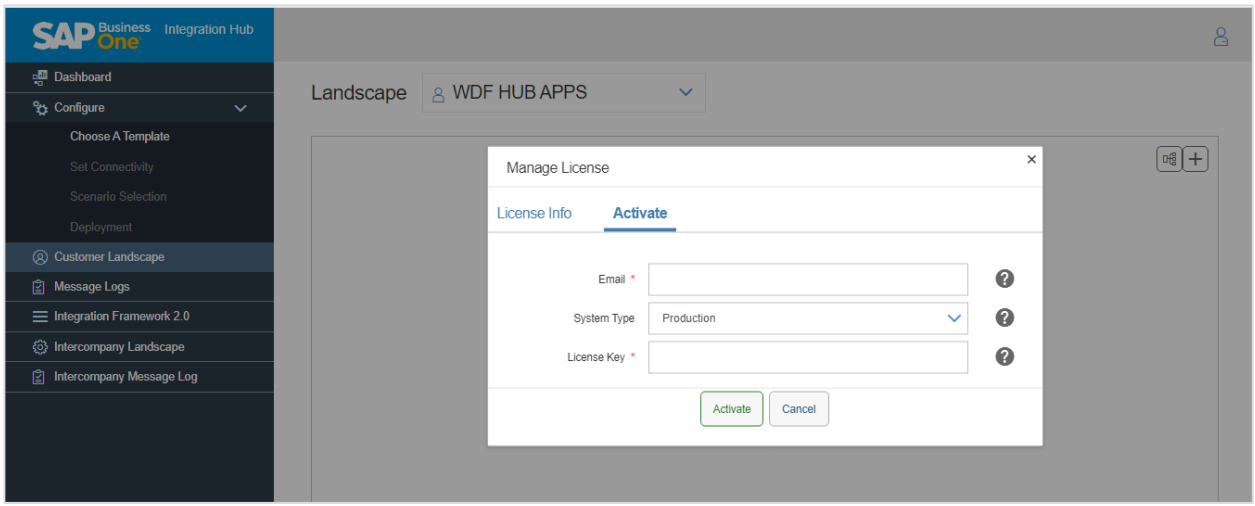
1. The deployed applications are displayed in the customer landscape. Let's take an example of the Shopify template to activate/deactivate the license and retrieve the latest license information from the license server.



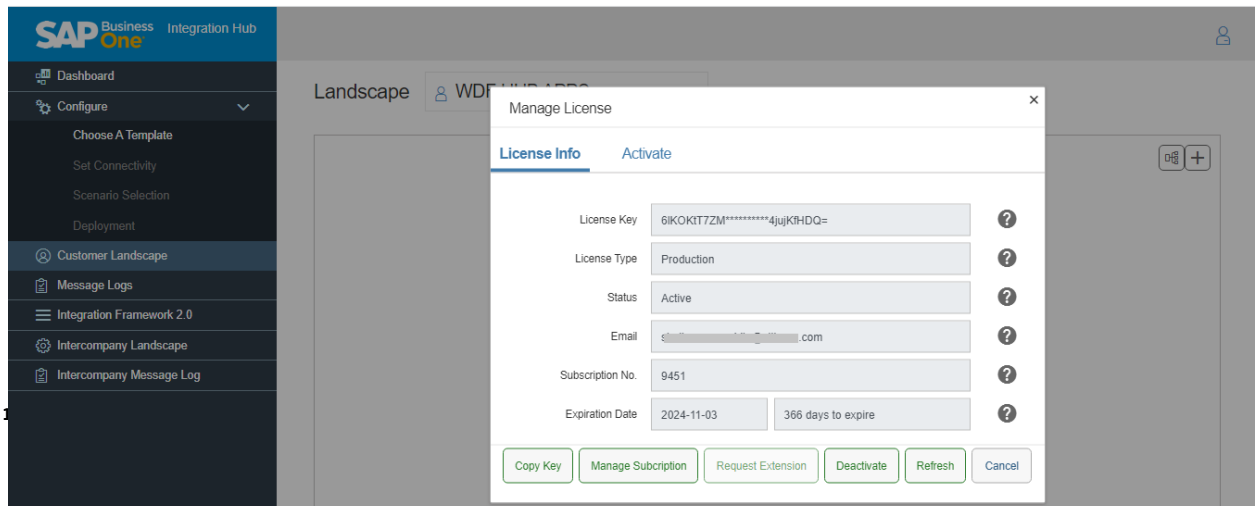
2. Right-click the Shopify logo on the template and choose *Manage Licenses.*



3. The *Manage License* window appears.
4. In the *Activate* Tab, in case if you would like to replace the existing license, i.e., converting the sandbox system to the production system. Then provide the new license information, such as *Email*, *System Type,* and new *License Key,* on the *Activate* Tab and click the *Activate* button.



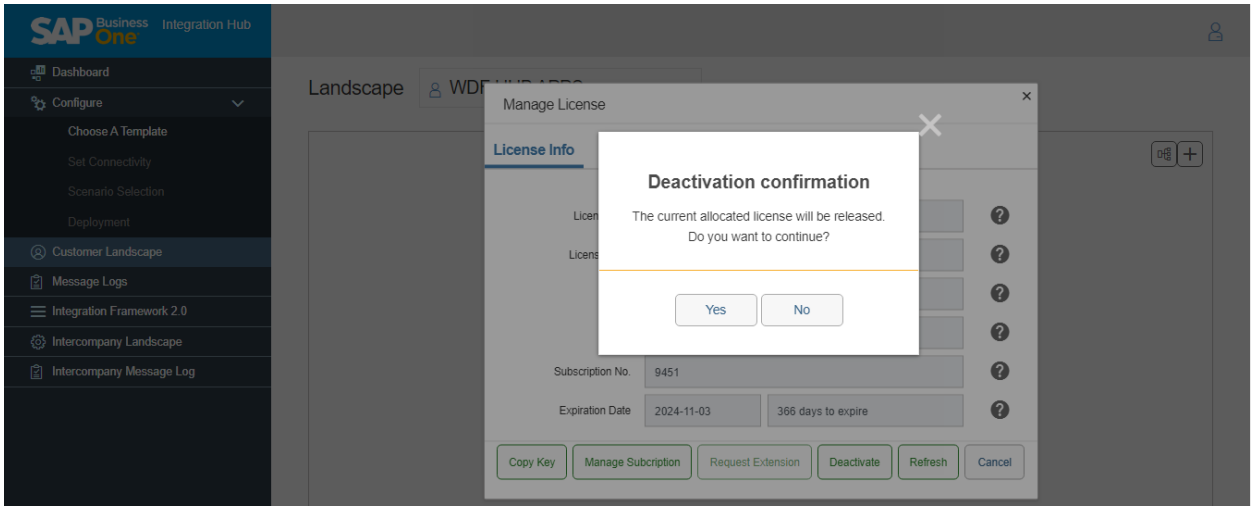
5. In the *License Info* section, you can view all the activated or deactivated license details, such as License Key, License Type, Status, Email, and Subscription No. and Expiration Date. You also have the buttons available to perform various actions related to the specific license.



The fields and buttons in the *License Info* section are as follows:

- *License Key*: Shows the license key.
- *License Type*: Shows the license type, whether Production or Sandbox.
- *Status*: Shows the activation status, whether Active or Inactive.
- *Email:* Shows the registered email on which the license was delivered.
- *Subscription No.*: Shows the license subscription number.
- *Expiration Date*: Shows the license expiry date and the number of days left for expiration.
- *Copy Key*: You can copy the complete license key by clicking on the Copy Key button.
- *Manage Subscription*: Using this button, you can view specific subscription details directly in your account on the Walldorf Portal.
- *Request Extension:* In the case of a sandbox license, you can directly request an extension of the Sandbox License. On clicking this button, you will be redirected to your email with all the details pre-filled in the email, like Send To, Sandbox license key, subscription details, etc.
- *Activate/Deactivate*: You can activate or deactivate the license key by using this button.
- *Refresh*: You can refresh the license key by using this button. In case you would like to retrieve the latest license information from the license server. You may need to manually refresh the license definition in case of any manual upgrade in your subscription to apply it with immediate effect.
- *Cancel*: You can cancel the Manage license window by using this button.

6. In case if you would like to change your system hardware or move the application to another system, then you should first deactivate (return) the existing license. Click on the *Deactivate* button.
   On deactivation, the license count is reinstated and you can use the license key in another system.



7. The *Deactivation Confirmation* prompt appears. Choose *Yes* to confirm the deactivation.

8. Afterward, the license gets released, and solution deployment gets deactivated.

   Similarly, you may activate/deactivate or retrieve the latest license information from the license server on other integration hub templates as well.

Note

- In case of a system crash, you should contact the application support team to get the new license key.
- To manage the license, you need Internet on the machine where you are activating/deactivating the Walldorf License.
- In case you have restricted access, please whitelist the URL: https://hooks.walldorfsolutions.com.
- If you encounter the "License information is not yet refreshed, try again" error while activating, deactivating, or refreshing a license. Along with the above points, also verify that the file LoadDotNetAssembly.dll exists in the following directory:
  C:\Program Files\SAP\SAP Business One Integration\IntegrationServer\Tomcat\webapps\B1iXcellerator\WEB-INF\lib

2.3 Installation Prerequisites

- Create a backup file of your SAP software production databases.
- Uninstall any previously installed versions of Java runtime or Java SDK.

2.4 Installation Sequence

The sequence for installation of the SAP Integrations Hub is as follows:

1. Customers running SAP **Business One** need to install the Integration Solutions add-on.

> **Note**
>
> If you are integrating with SAP Software other than SAP Business One, then do not install the Integration Solutions add-on.

2. Install the Integration Solutions Installer and select I*ntegration Hub* during installation.

> **Note**
>
> SAP S/4 HANA and SAP ECC customers need to install the Integration Solutions Installer.

3 Installing the Integration Solutions Add-On

> **Note**
>
> If you are integrating with SAP Software other than SAP Business One, then do not install the Integration Solutions add-on.

Install the Integration Solutions Add-On on a Microsoft Windows operating system.

If you are using the 32-bit version of the SAP Business One client, you can install and run only the 32-bit version of the Integration Solutions add-on. If you are using the 64-bit version of the SAP Business One client, you can install and run only the 64-bit version of the Integration Solutions add-on.

3.1 Registering the Integration Solutions Add-On

To begin the installation of the Integration Solutions add-on, you need to register the add-on on the SAP Business One server from the SAP Business One client application. After the registration is completed, the Integration Solutions add-on installation package is uploaded to the SAP Business One server. Register the Integration Solutions add-on only **once**, that is, on each client. You must have superuser authorization in SAP Business One to register the Integration Solutions add-on.

To register the Integration Hub, follow this procedure:

1. In SAP Business One, log on to a company with a user who has superuser authorization.
2. In the SAP Business One *Main Menu*, choose *Administration* → *Add-Ons* → *Add-On Administration*.
3. In the *Add-On Administration* window, choose the *Register Add-On* button.
4. Locate and select the add-on registration data file `(IntegrationSolutionsAddon.ard)` by choosing the (...) *(Browse)* button next to the *Registration Data File* field.

   The installation package is automatically populated on selection of the *Registration Data File* field. If the installation package is not filled automatically, locate and select the add-on installation package `(IntegrationSolutionsAddon.exe)` by choosing the (...) *(Browse)* button.
5. To assign the add-on to the current company, select the *Assign to Current Company* checkbox. This option is selected by default.
6. Choose the *OK* button.
7. In the *Add-On Administration* window, the name of the add-on appears in the list of *Company-Assigned Add-Ons*.

   The add-on installation package is now uploaded to the SAP Business One server. The add-on is now available for all company databases on the server.

> **Note**
>
> Use the up-arrow button to move the order of the SAP Integration Solutions add-on up the list of *Company-Assigned Add-Ons*.

8. In the *Company-Assigned Add-Ons* window area, in the Integration Solutions add-on row, click the arrow in the *Default Group* column and select *Automatic* from the dropdown list. Select the *Active* checkbox.
9. Choose the *Update* button.
10. Choose the *OK* button.
11. Log off the SAP Business One application.
12. Log on to the SAP Business One application for a company with a user who has superuser authorization.

The Add-on installer wizard launches automatically.

13. In the *Welcome* window of the Add-on installer wizard, choose the *Next* button.

The *Select Installation Folder* window is displayed. The *Folder* field is populated with the default installation path.

14. To install the add-on to a different path, choose the (...) *(Browse)* button.
15. In the *Select Installation Folder* window, choose the *Install* button.
16. In the *Installation Complete* window, choose the *Finish* button.
17. In the system message window that informs you that SAP Business One will close, choose the *OK* button.

The Integration Hub database script executes automatically, and its progress is displayed in the SAP Business One status bar.

A system message appears, informing you that the database structure is modified, and all open windows will be closed

18. Choose the *Yes* button to continue adding user-defined fields.

A system message informs you that closing SAP Business One will stop all running processes and close all open windows.

19. Choose the *Yes* button to close SAP Business One.

3.2 Assigning the Integration Solutions Add-On to Users

After the Integration Solutions add-on is assigned to a company, the add-on is by default available to all users who have authorization for that company.

Ensure that the Integration Solutions add-on is assigned to all users of the company.

To assign the Integration Solutions add-on to users, follow this procedure:

1. In SAP Business One, log on to a company that has the Integration Solutions add-on installed with a user who has superuser authorization.
2. In the SAP Business One *Main Menu*, choose *Administration* → *Add-Ons* → *Add-On Administration*.
3. In the *Add-On Administration* window, on the *User Preferences* tab, select a user from the *Users* list.
4. From the *Add-Ons* list, select the Integration Solutions add-on.
5. In the *Preference* field, choose *Automatic* from the drop-down list.

   The user preference is displayed next to the add-on.
6. Choose the *Update* button.

3.3 Add-On Installation on SAP Business One Client

Once the Integration Solutions add-on has been registered to a server, the add-on can be installed on the SAP Business One client. To initiate installation on the registered client machine, you need to restart SAP Business One. When the client reconnects to the company database with the assigned add-on, the server automatically downloads the installer. When the Integration Solutions add-on installer wizard appears, follow the steps provided on the screen.

Caution

- You must complete the Integration Solutions add-on installation wizard steps within the available installation time (shown in the SAP Business One status bar). Otherwise, the system will automatically interrupt the procedure. In that case, you must restart the client to install the add-on again.
- If you choose the *Cancel* button to interrupt the procedure, wait for a system timeout before using the SAP Business One application.

Note

During initialization, if you receive the following system message: "*The database structure has been modified. To resume process, all open windows will be closed. Continue*?", choose the *Yes* button to close all windows and proceed with initialization.

When the initialization is complete, the system displays the following message: "*The SAP Add-On Initialization completed successfully*". Choose the *OK* button to restart the application. If you choose the *Cancel* button, you must restart SAP Business One manually before you can use the add-on.

The SAP Business One application performs the initialization process only once for each company database.

Caution

Ensure that the Integration Solutions add-on log folder has read and write permissions.

Log folder location is as follows:

%PROGRAMDATA%\sap\SAP Business One\Log\SAP Business One\<Username>\Addon\IntegrationSolutions

Where *Username* is logged-in User name. For example - C:\ProgramData\SAP\SAP Business One\Log\SAP Business One\Administrator\Addon\IntegrationSolutions

Note

- If you encounter any issues during the installation of the intercompany add-on, the "Addon Error Log" screen will appear with the SQL script version and detailed error description. You need to log the support ticket to Walldorf support along with the addon error logs.
- If you encounter any issues during the installation of the intercompany add-on, the "Reset Add-On Version" button in the Application Deployment Status screen is available. This button serves a crucial role by facilitating the clearing of the CTX_CONF table, a pivotal step in resolving issues associated with the add-on installation process.

3.4 Upgrading from Previous Integration Solutions Add-On Releases

All requirements described in the Prerequisites section above are fulfilled!

Note

1. Before starting the upgrade, you must remove the previously installed add-on with the name `Intercompany` from the *Add-on Administration* window.
2. If the Intercompany Solution Add-On is already installed and the name is "`IntegrationSolutionAddon`" in the SAP Business One *Add-On Manager* screen, then it must be uninstalled, and the new add-on application should be installed. Or, if the Add-On Name is "`Walldorf Intercompany`" in the SAP Business One *Add-On Manager* screen, then it can be upgraded by following the standard add-on upgrade process.

To perform the upgrade procedure, proceed as follows:

1. In SAP Business One, log on to a company with a user who has superuser authorization.
2. In the SAP Business One *Main Menu*, choose *Administration* → *Add-Ons* → *Add-On Administration*.

   The *Add-On Administration* window appears.
3. Choose the *Register Add-On* button (below the list of *Available Add-Ons*).
4. Locate and select the add-on registration data file `(*.ard)` by choosing the (...) *(Browse)* button next to the *Registration Data File* field.

   * = stands for the name of the add-on. The file for the intercompany Hub add-on is named `IntegrationSolutionsAddon.ard`.
5. If the *Installation Package* field is not filled automatically, locate and select the add-on installation package `(*.exe)` by choosing the (...) *(Browse)* button.

   * stands for the name of the add-on. The file for the integration solutions add-on is named `IntegrationSolutionsAddon.exe`.
6. To assign the add-on to the current company, select the *Assign to Current Company* checkbox (this option is selected by default).
7. Choose the *OK* button.

   In the *Add-On Administration* window, the name of the add-on appears in the list of *Company-Assigned Add-Ons*.

   The add-on installation package has been uploaded to the SAP Business One server. The add-on is now available for all company databases on this server.

   Note

   Use  to move the order of the integration solutions add-on up the list of *Company-Assigned Add-Ons.*
8. In the *Company-Assigned Add-Ons* screen area, in the *Integration Solutions add-on* row, click on the arrow in the *Default Group* column and select *Automatic* from the dropdown list. Select the *Active* checkbox.
9. In the *Add-on Administration* window, choose the *Update* button.
10. In the *Add-on Administration* window, choose the *OK* button.
11. Close the SAP Business One application.

12. Open SAP Business One. Log on to a company with a user who has superuser authorization.

    The add-on installation launches automatically.

13. In the *Welcome* window of the Intercompany Setup Wizard, choose the *Next* button.

    The *Select Installation Folder* window is displayed. The folder field is populated with the default installation path.

14. To install the add-on to a different path, choose the (...) *(Browse)* button.
15. In the *Select Installation Folder* window, choose the *Install* button.

    When the installation is finished, an *Installation Complete* window is displayed.

16. In the *Installation Complete* window, choose the *Finish* button.

    A system message is displayed, informing you that SAP Business One will close after installation.

17. In the system message window, choose the *OK* button.
18. Open SAP Business One. Log on to a company with a user who has superuser authorization.

    The Integration Solutions add-on database script executes automatically, and the progress is displayed in the SAP Business One status bar.

    Upon completion, a system message is displayed, informing you that SAP Business One will close after the add-on installation.

> **Caution**
>
> After upgrading the Integration Solutions add-on, ensure that the Integration Solutions Installer is also upgraded as per the steps mentioned in section 4.2 of this document.

3.5 Uninstalling the Integration Solutions Add-On

This section explains how to uninstall the Integration Solutions add-on.

> **Caution**
>
> Do not uninstall the Integration Solutions add-on if the add-on is currently being used by your company. Once you remove the software, you will no longer be able to use the Integration Hub features.

When you remove the Integration Solutions add-on, the add-on installation package is removed from the SAP Business One server. When a client with the add-on installed subsequently connects to the server, the add-on is also removed from the client.

To uninstall the Integration Solutions add-on, perform the following steps:

1. Open SAP Business One on a client with the add-on installed.
2. Log on to a company that has the add-on installed with a user who has superuser authorization.
3. In the SAP Business One *Main Menu*, choose *Administration* → *Add-Ons* → *Add-On Administration*.
4. In the *Add-On Administration* window, select the *Company Preferences* tab.
5. To unassign the add-on, select the add-on in the *Company-Assigned Add-Ons* list. C ose

6. The add-on is removed from the *Company-Assigned Add-Ons* list.
7. In the *Available Add-Ons* list, select the *Integration Solutions add-on*. Choose the *Remove Add-On* button.
8. The add-on is removed from the list of *Available Add-Ons*.
9. The system will automatically launch the removal procedure the next time you start the SAP Business One application from a client that is connected to the server.
10. Open SAP Business One.
11. The *Windows Installer* window is displayed.
12. Choose the *Yes* button.

The add-on uninstallation is completed automatically.

> **Note**
>
> If you do not want to use the SAP Business One company database for Integration Hub transactions, perform the following:
>
> - If you are using a Microsoft SQL database, remove the CTX_IC_SP_TransactionNotification stored procedure call from SBO_SP_TransactionNotification.
> - If you are using an SAP HANA database, remove the CTX_IC_SP_TRANSACTIONNOTIFICATION_DOC and CTX_IC_SP_TRANSACTIONNOTIFICATION_MASTER stored procedures from SBO_SP_TRANSACTIONNOTIFICATION.

3.6 Installing Integration Solutions Add-On on Cloud Environment

To see how to install the add-on on the cloud control center (CCC) environment, please see the section “9.1 Enabling Add-Ons for Lightweight Deployment” in the SAP Business One Cloud Administrator's Guide.

4 Installing the Integration Solutions Installer

The Integration Hub and Intercompany Solution are two different solutions. Both can be installed separately or together using the configuration available in the Integration Solutions installer.

To install the integration solutions, you need to run the Integration Solutions installer.

The Integration Solutions installer performs the following:

- Upload the integration solution scenario package to the SAP Integration Framework 2.0.
- Installs the Integration Hub Administration Console.



Recommendation

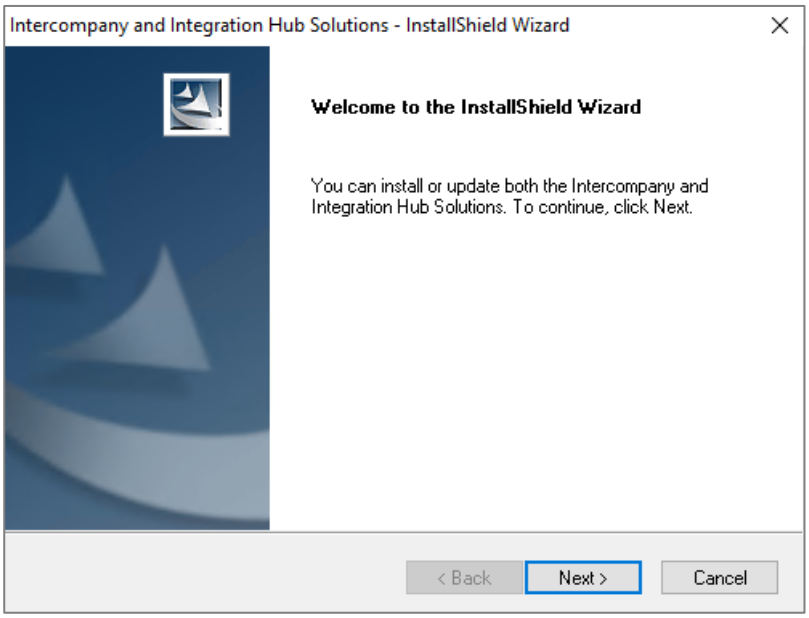
- Ensure that you have installed the Integration Solutions add-on in SAP Business One companies if you are not integrating to SAP S/4 HANA or SAP ECC Software.

4.1 Installing the Integration Solutions Installer

To install the Integration Solutions Installer, perform the following:

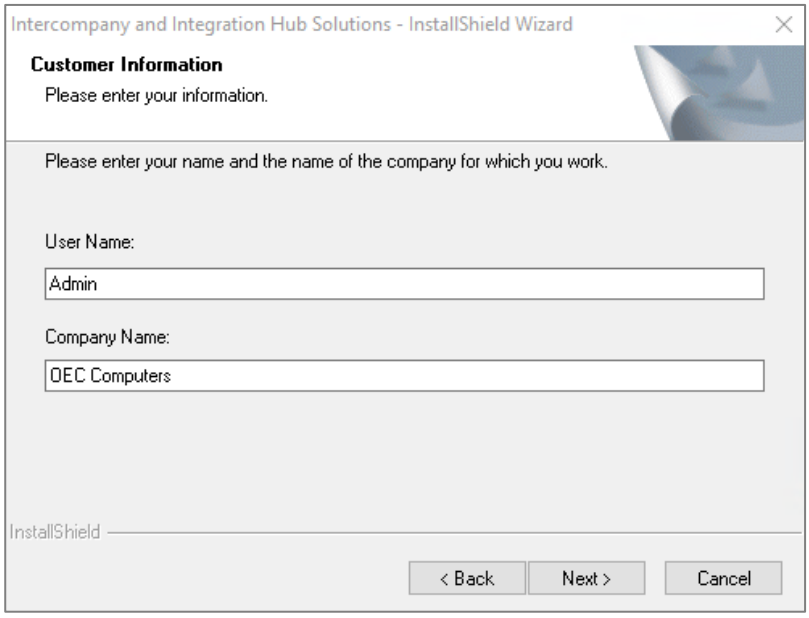
1. Launch the Integration Solutions installer as an administrator by right-clicking the `IntegrationSolutions.exe` file.

The InstallShield wizard *Welcome* window appears.



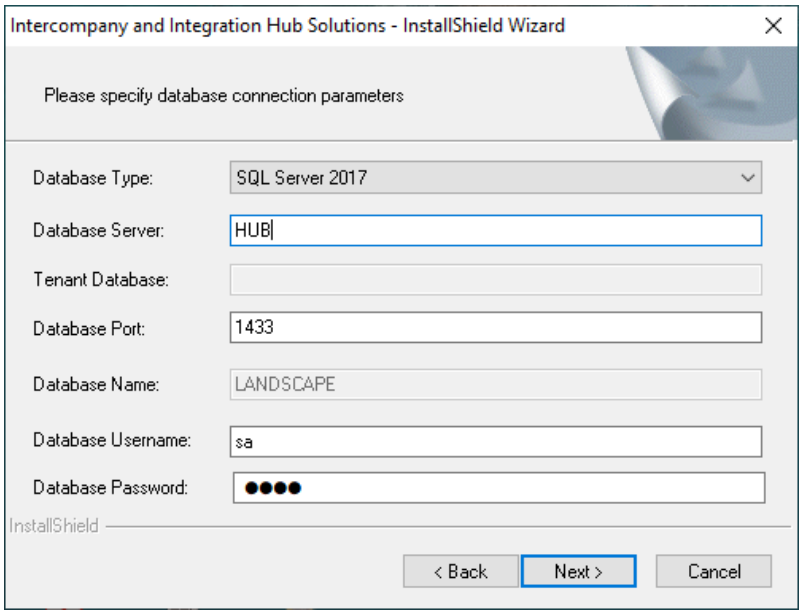
2. In the InstallShield wizard *Welcome* window, choose the *Next* button.

3. In the *Customer Information* window, enter your user name and company name and choose the *Next* button.



4. In the *Database Connection Parameters* window, enter the following information and choose the *Next* button.

- *Database Type* – Choose the database type from the dropdown list. Currently, only Microsoft SQL Server 2008, 2012, 2014, 2016, 2017,2019, and SAP HANA DB are supported.
- *Database Server* –The database server name is pre-populated by default.
- *Tenant Database* –Enter the tenant database name. This is needed for Database type SAP HANA running on SAP B1 10.0.
- *Port* – The default port for the Microsoft SQL Server `(1433)` and default port for the SAP HANA DB (`30015`) is prepopulated in this field.
- *Database Name* – By default, the database name is set to *Landscape* .
- *Database Username* – Enter the username to connect to the database
- *Database Password* – Enter the password to connect to the database

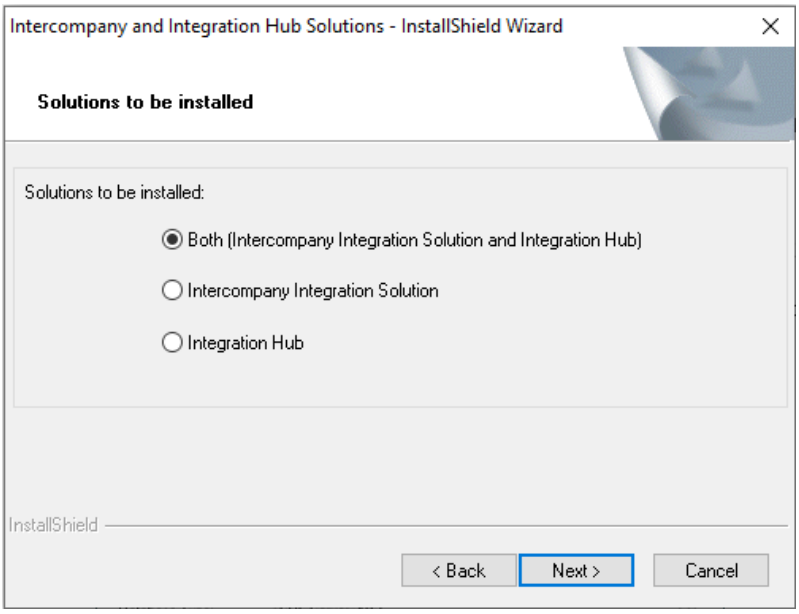


5. In the *Solutions to be Installed* window, select the solutions to be installed and choose the *Next* button.

- *Both (Intercompany Integration Solution and Integration Hub):* Use this option to install both the Intercompany Integration Solution and the Integration Hub Solution.
- *Intercompany Integration Solution:* Use this option to install the Intercompany Integration Solution only.
- *Integration Hub:* Use this option to install the Integration Hub only.

Note

Based on the option selected, the installer uploads the scenario package to the SAP Integration Framework 2.0.



6. In the *Connection Details and Installation Option* window, enter the following information and choose the *Next* button.

- *Framework Server* – The framework server name is displayed by default.
- *Framework Port* – Choose the protocol type from the dropdown and enter the corresponding port. The protocol and port should match the settings provided during B1if installation. The default HTTP port for the framework server (8080) is displayed in this field.

  Note

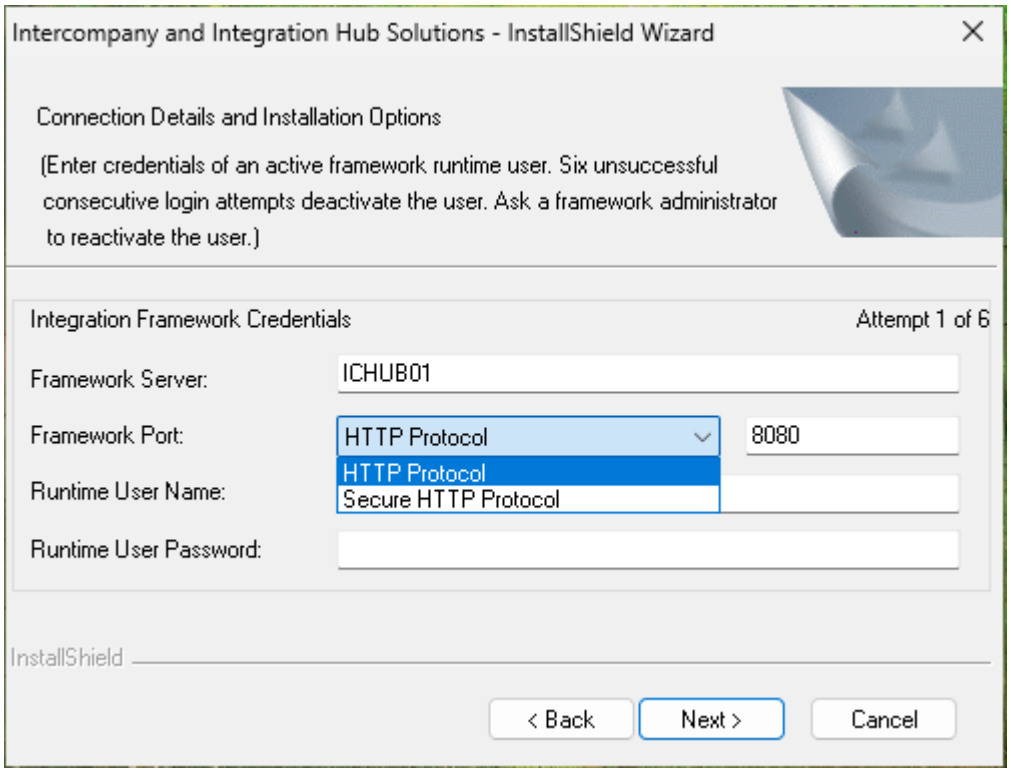
  If you choose the HTTPS protocol type, ensure that the security certificate for HTTPS is properly installed.
- *Runtime User Name* –The default runtime user name is `B1iadmin`.

  Note

  To ensure that the runtime user is active, check the B1iP Control Center.
- *Runtime User Password*

  Note

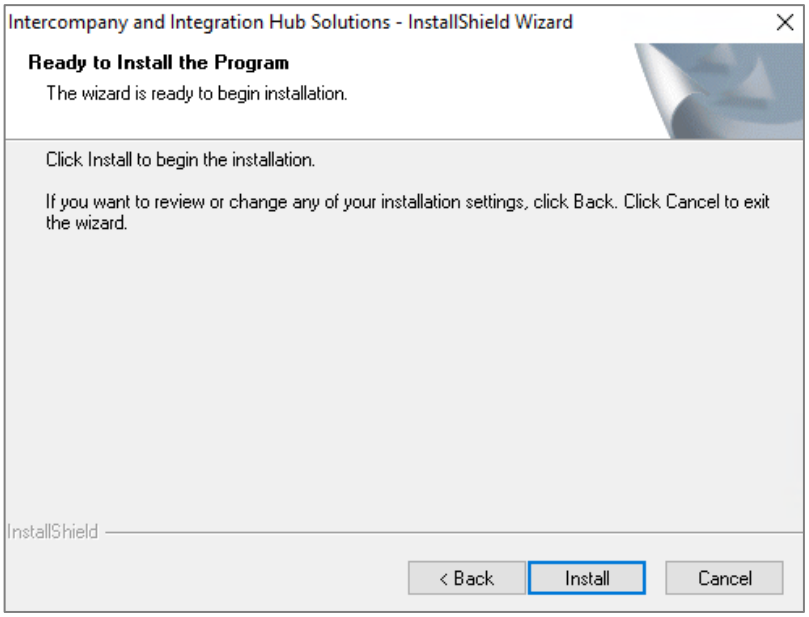
  Entering an incorrect password for the runtime user six consecutive times will deactivate the runtime user. You can reactivate the runtime user in the B1iP Control Center.



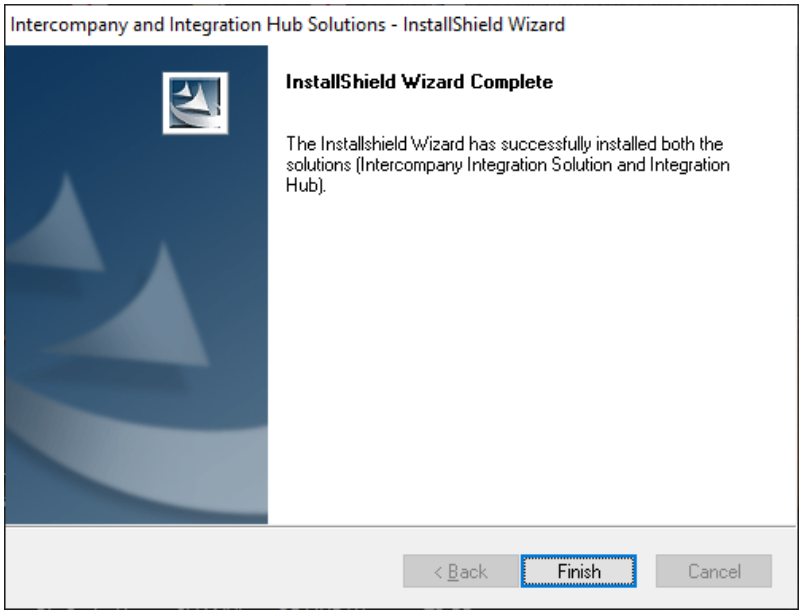
Note

Upgrade of the intercompany integration solution from B1iF version 1.0 to B1iF version 2.0 must be done manually. To do so, in the Intercompany Administration Console, choose the *Setup* option in the top menu bar. In the left frame, choose the *Landscape* option, and on the *Intercompany Landscape* page, choose the *Upgrade to B1iF 2.0* button.

7. To start the installation process, in the *Ready to Install the Program* window, choose the *Install* button.



8. Choose the *Finish* button.



9. If the restart option is displayed in the window, select *Yes, I want to restart my computer now* and choose the *Finish* button.

> **Note**
>
> If any problems or errors arise during installation, the setup can be restarted in maintenance mode, which repairs all relevant components.

4.2 Upgrading the Integration Solutions Installer

Before upgrading, you must ensure that

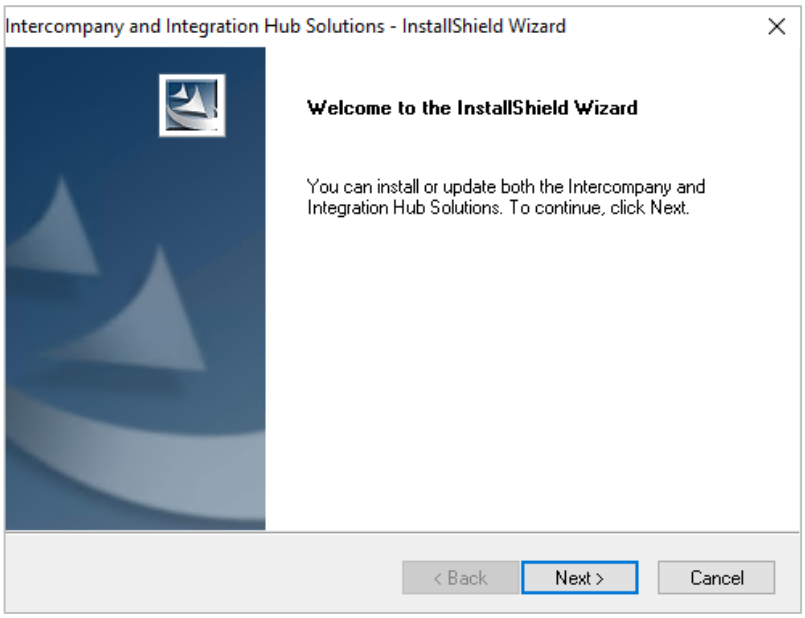
- All integration Hub transactions have successfully replicated to all receiver applications, and there is no message in the *Integration Framework → Monitoring → Queue Monitor* waiting to be processed.
- All users are logged off from the SAP companies.

Before upgrading the *Integration Solutions Installer,* ensure that the Integration Solutions add-on is already upgraded as per the steps mentioned in section 3.4 of this document. An add-on upgrade is not needed if you are integrating with SAP Software other than SAP Business One.

If you are installing a **patch** for an existing installation or **upgrading** to a newer release, follow the steps below:

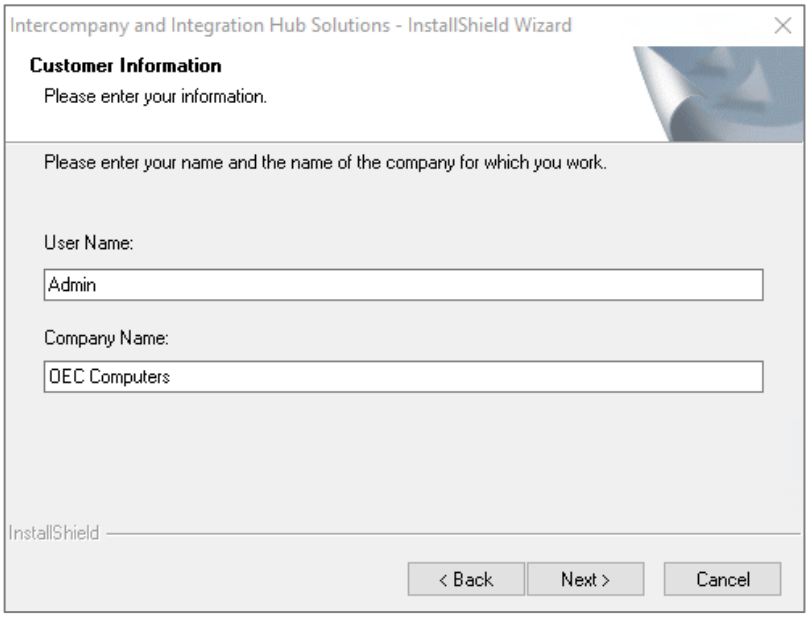
1. Launch the integration solutions installer by double-clicking the `IntegrationSolutions.exe` file.

   The InstallShield wizard *Welcome* window appears.



2. In the InstallShield wizard *Welcome* window, choose the *Next* button.

3. In the *Customer Information* window, enter your user name and company name and choose the *Next* button.



4. In the *Database Connection Parameters* window, enter the following information and choose the *Next* button.
   - Database Type - Choose the database type from the dropdown list. Currently, only Microsoft SQL Server 2008, 2012, 2014, 2016, 2017,2019, and SAP HANA DB are supported
   - Database server

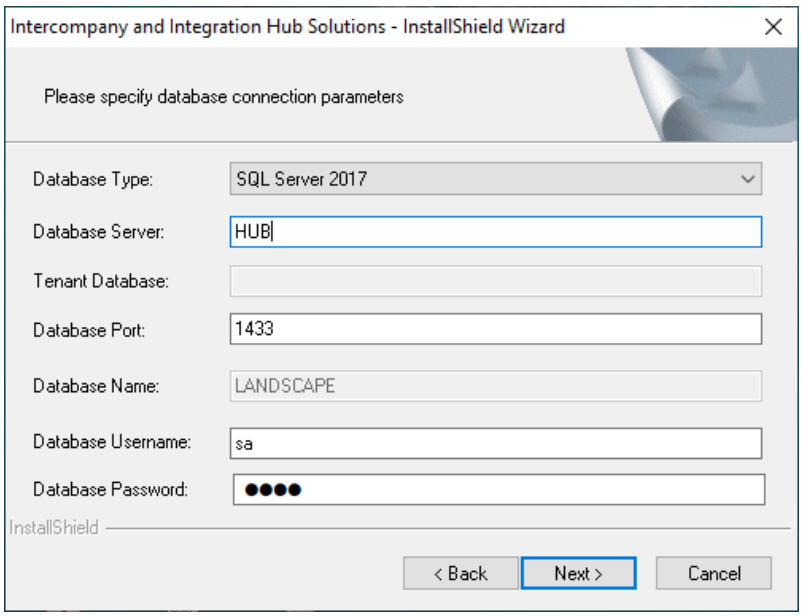
     The database server name is populated by default.

- Tenant Database

  Enter the tenant database name. This is needed for Database type SAP HANA running on SAP B1 10.0.
- Port

  The default port for Microsoft SQL Server `(1433)` and the default port for the SAP HANA DB (`30015`) are prepopulated in this field.
- Database name

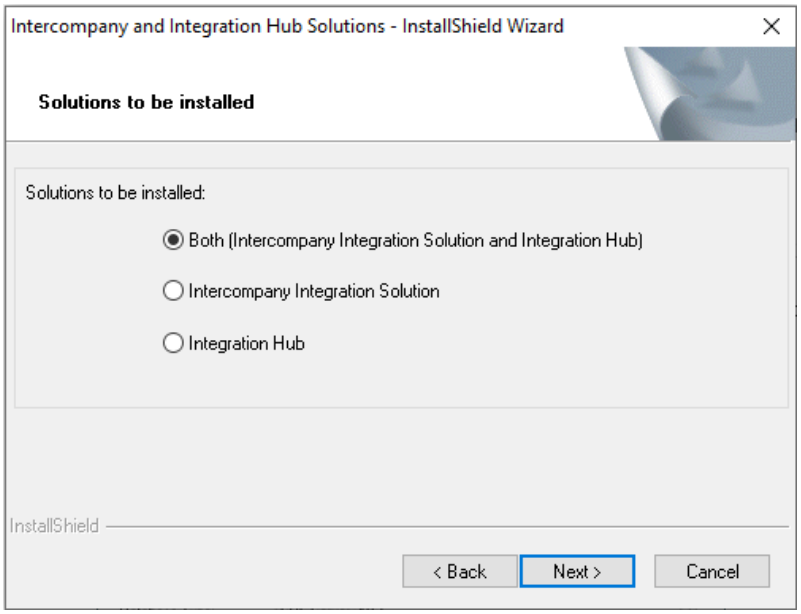
  The database name is set by default to `Landscape`.
- User name
- Password



5. In the *Solutions to be Installed* window, select the solutions to be upgraded and choose the *Next* button.
   - *Both (Intercompany Integration Solution and Integration Hub):* Use this option to upgrade both the Intercompany Integration Solution and Integration Hub Solution.
   - *Intercompany Integration Solution:* Use this option to upgrade the Intercompany Integration Solution only.
   - *Integration Hub:* Use this option to upgrade the Integration Hub only.

   Note

   Based on the option selected, the installer upgrades the scenario package in the SAP Integration Framework 2.0.



6. In the *Connection Details and Installation Option* window, enter the following information and choose the *Next* button.
   - *Framework Server* – The framework server name is displayed by default.
   - *Framework Port* – Choose the protocol type from the dropdown and enter the corresponding port. The protocol and port should match the settings provided during B1if installation. The default HTTP port for the framework server (8080) is displayed in this field.

     Note

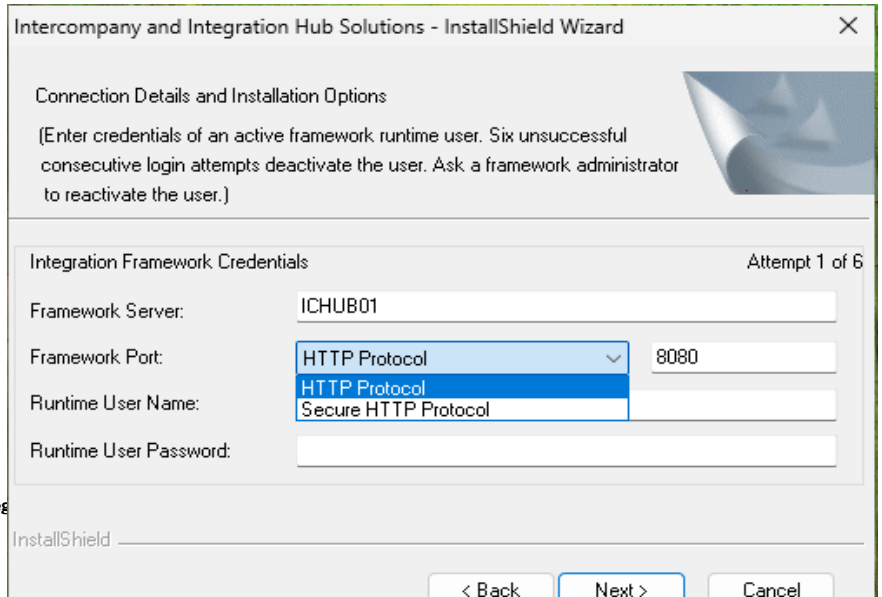
     If you choose the HTTPS protocol type, ensure that the security certificate for HTTPS is properly installed.
   - *Runtime User Name* –The default runtime user name is `B1iadmin`.

     Note

     To ensure that the Runtime user is active, check the B1iP Control Center.
   - *Runtime User Password*

     Note

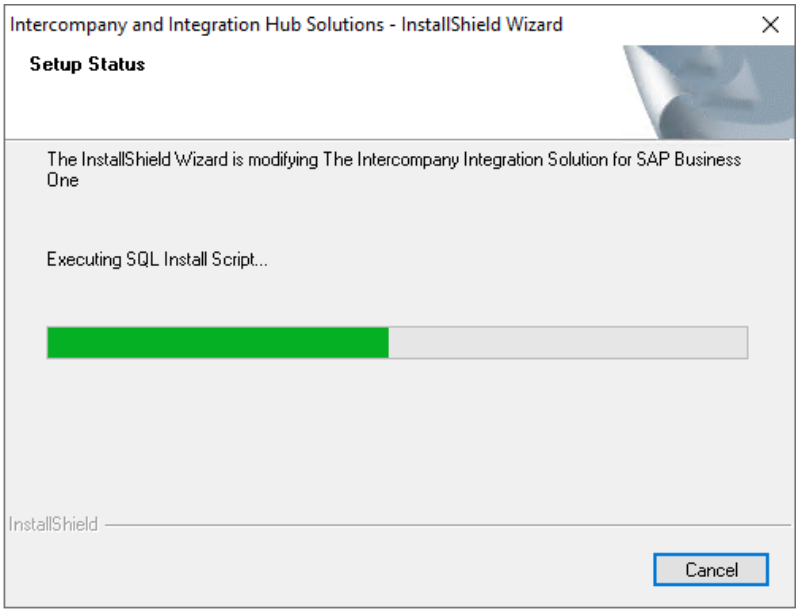
     Entering an incorrect password for the runtime user six consecutive times will deactivate the runtime user. You can reactivate the runtime user in the B1iP Control Center.



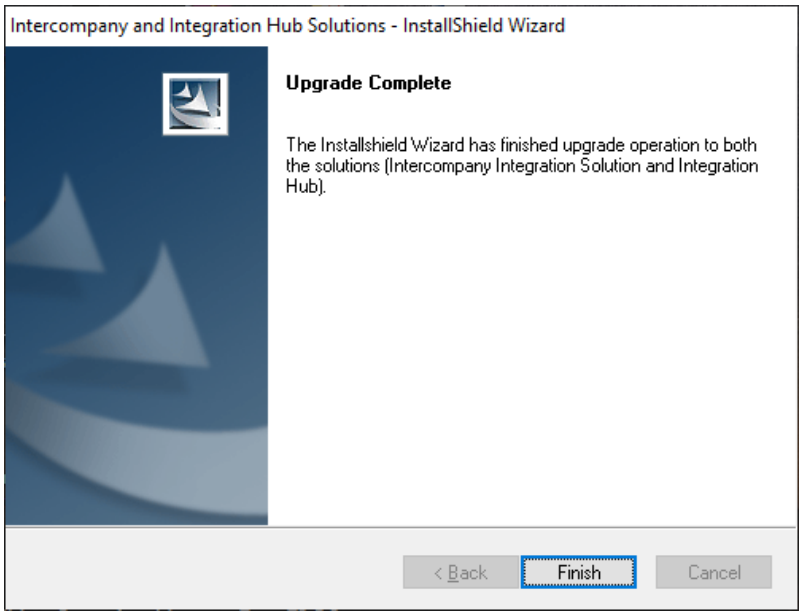
Note

Upgrade of the intercompany integration solution from B1iF version 1.0 to B1iF version 2.0 must be done manually. To do so, in the Intercompany Administration Console, choose the *Setup* option in the top menu bar. In the left frame, choose the *Landscape* option, and on the *Intercompany Landscape* page, choose the *Upgrade to B1iF 2.0* button.

7. At this stage, the installer begins the upgrade process.



8. In the *Upgrade Complete* window, choose the *Finish* button.



Note

- If the restart option is displayed in the window, select *Yes, I want to restart my computer now,* and choose the *Finish* button.
- If you encounter any problems or errors during installation, the setup can be restarted in maintenance mode. Maintenance mode repairs all relevant components.

4.3 Removing the Integration Solutions Installer

This procedure enables you to uninstall the integration solution installer:

1. In the Microsoft Windows environment, choose *Control Panel* → *Add/Remove Programs*.
2. Select the *Intercompany Integration Solution for SAP Business One* from the list.
3. Choose the *Uninstall* button.
4. To confirm, choose the *OK* button.

Caution

Do not remove the integration solution if it is in use in your company. Once you remove the software, you will no longer be able to use the integration solution features.

5 Integration Hub Administration Console

5.1 Logging On to the Integration Hub Administration Console

The Administration Console menu and URL is accessible based on the *solution to be installed* option selected in the installer during Installation:

If the user chooses,

- *Both (Intercompany Integration Solution and Integration Hub)*

  To launch the Administration Console in a Microsoft Windows environment, choose *Start* → *All Programs* → *Intercompany and Integration Hub Solutions* → *Intercompany and Integration Hub Solutions*.

  Alternatively, enter the following URL in the web browser address bar:

  <Protocol>://<ServerAddress>:XXXX/B1iXcellerator/exec/dummy/com.cxs.b1i.ipo/bfd/OE.MyAccount.bfd?!

  Where:

  `<Protocol>`: The protocol type, either http or https, of the integration server for SAP Business One that is provided during B1if installation.

  `<ServerAddress>`: The address of the integration server for SAP Business One where the integration solutions Installer is installed.

  `XXXX` = The port number assigned to the integration server for SAP Business One. The default port assigned to the integration server for SAP Business One is `8080`

  > **Note**
  >
  > Screenshots used in this guide are taken using *Both (Intercompany Integration Solution and Integration Hub)* options.

- *Intercompany Integration Solution*

  To launch the Administration Console in a Microsoft Windows environment, choose *Start* → *All Programs* → *Intercompany Administration Console* → *Intercompany Administration Console*

  Alternatively, enter the following URL in the web browser address bar:

  <Protocol>://<ServerAddress>:XXXX/B1iXcellerator/exec/dummy/com.cxs.b1i.ipo/bfd/OE.MyAccount.bfd?!

  Where:

  `<Protocol>`: The protocol type, either http or https, of the integration server for SAP Business One that is provided during B1if installation.

  `<ServerAddress>`: The address of the integration server for SAP Business One where the integration solutions Installer is installed.

`XXXX` = The port number assigned to the integration server for SAP Business One. The default port assigned to the integration server for SAP Business One is `8080`

- *Integration Hub*

  To launch the Administration Console in a Microsoft Windows environment, choose *Start* → *All Programs* → *Integration Hub Solutions* → *Integration Hub Solutions*. Alternatively, enter the following URL in the web browser address bar:

  http://<ServerAddress>:XXXX/B1iXcellerator/exec/dummy/com.cxs.b1i.ipo/bfd/OE.MyAccount.bfd?!

  Where:

  `<ServerAddress>`: The address of the integration server for SAP Business One where the integration solutions Installer is installed.

  `XXXX` = The port number assigned to the integration server for SAP Business One. The default port assigned to the integration server for SAP Business One is `8080`

  Note

  - Do not enter the IP address (127.0.0.1) or **`localhost`** as the `<ServerAddress>`.
  - The URL is case sensitive. Ensure that the capitalization of the URL matches the example above.
  - For security reasons, you can use HTTPS for the session. On the server side, the communication protocol (HTTP or HTTPS) can be configured. On the client side, the user has the option to switch to the HTTPS protocol.

  Recommendation

  We recommended using the HTTPS protocol. To do so, you must first configure the communication protocol on the server side. For more information, see the *SAP Business One Administrator's Guide* on the SAP Help Portal

  At this time, the use of HTTPS is intended only for plain transport-level security purposes.

  To use the HTTPS protocol for the Integration Hub Administration Console, enter the following URL in the web browser address bar and press the Enter key on the keyboard:

  https://<ServerAddress>:XXXX/B1iXcellerator/exec/dummy/com.cxs.b1i.ipo/bfd/OE.MyAccount.bfd?!

  Where:

  - `<ServerAddress>`: The address of the integration server for SAP Business One on which you installed the Integration Solutions Installer.

    Caution

    Do not enter the IP address (127.0.0.1) or **`localhost`** as the `<ServerAddress>`.

  - XXXX: The HTTPS port number assigned to the integration server. The default port assigned to the integration server is `8443`.

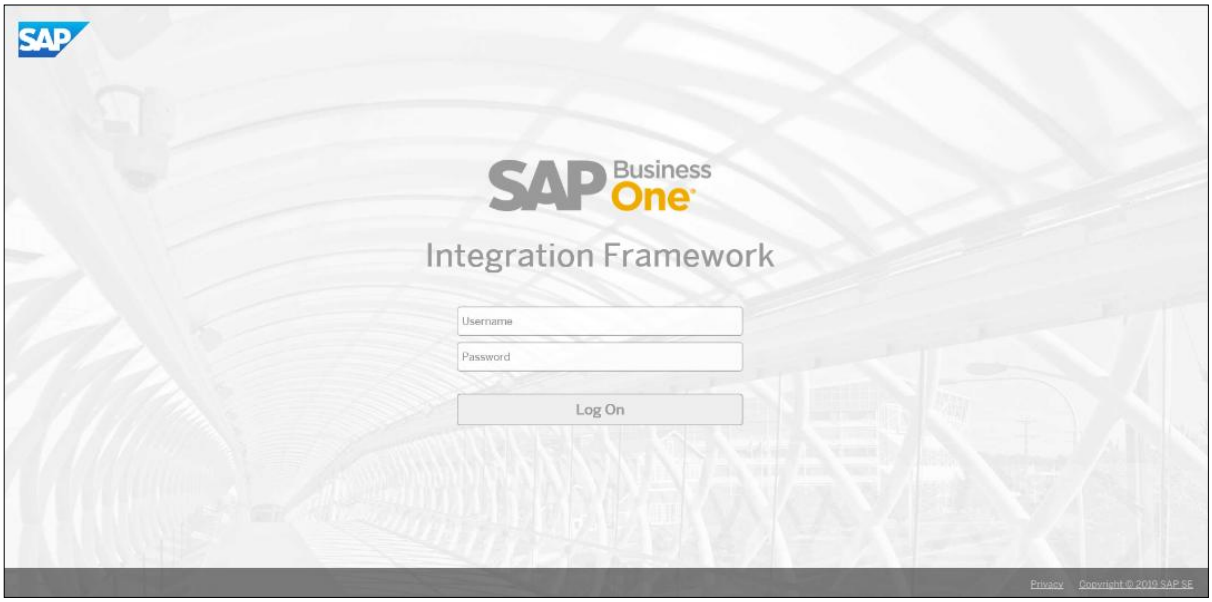
    Note

    The system generates a self-signed certificate during the installation of the integration components for SAP Business One. When using the HTTPS protocol for the first time, the web browser displays

a security warning. SAP recommends allowing the browser to accept this certificate to prevent such warnings in the future. Alternatively, you can purchase certificates issued by a certification authority.

To log on to the Integration Hub Administration Console, you must enter the user ID and password for an active B1iF user and choose the *Log On* button.

> **Note**
>
> - The default B1iF user is `B1iadmin`.
> - The user ID and password are case sensitive.



5.2 Elements of the Integration Hub Administration Console

The following menus are available in the Integration Hub Administration Console to allow you to manage the Integration Hub:

Field Name	Description
Dashboard	Displays the system resource information, server status, customers, and the *Add New Customer* button (which allows you to add new customers to the Integration Hub).
Configure	Allows you to choose a template for the customer, set the connectivity, select scenarios, and deploy scenarios.
Customer Landscape	Displays the connected applications for the selected customer.
Message Logs	Displays the success log, processing log, and failure log for the selected customer and selected template for a selected duration.
Integration Framework 2.0	Allows you to access the SAP Integration Framework 2.0.
Intercompany Landscape	Allows you to access the intercompany landscape information.
Intercompany Message Log	Allows you to access the intercompany message log filter.

5.2.1 Dashboard Display

The dashboard displays the system resource information, server status, and customers registered in the Integration Hub for integrations.

The System Resource Information area contains the following fields:

Field Name	Description
Database Size	Displays the current size (GB) of the integration framework databases.
Documents	Displays the total number of store documents.
Used Memory	Displays the memory consumption of the integration framework in GB.
Used Memory	Displays the memory consumption of the integration framework in percent.
Available CPUs	Displays the number of available central processing units.

The Server Status area contains the following fields:

Field Name	Description
Maximum Memory	Displays the memory (GB) available for the integration framework.
Used Memory	Displays the memory used (GB) by the integration framework.
Detected CPU Cores	Displays the number of detected central processing unit cores or processors.
Scheduler Threads	Displays the number of scheduler threads in the integration framework.
Last Start of B1iP	Displays the time stamp of the last B1iP start
Crashed Last Time?	Display detections of improper shutdowns of the integration framework.

The Customers area contains the following fields:

Field Name	Description
Customer Name	Displays the customer's name.
Connected Apps	Displays the list of activated templates.
Queue	Displays the number of replications in process.
Errors	Displays the number of failed replications.
+	Allows you to add or configure a new template.
	Allows you to edit the customer details.
	Allows you to delete the customer details.
	Allows you to assign the SLD category.

Note

When installing the Integration Hub for the first time, the *Customers* area is empty (in other words, no customers are added or registered in the Integration Hub).

Note

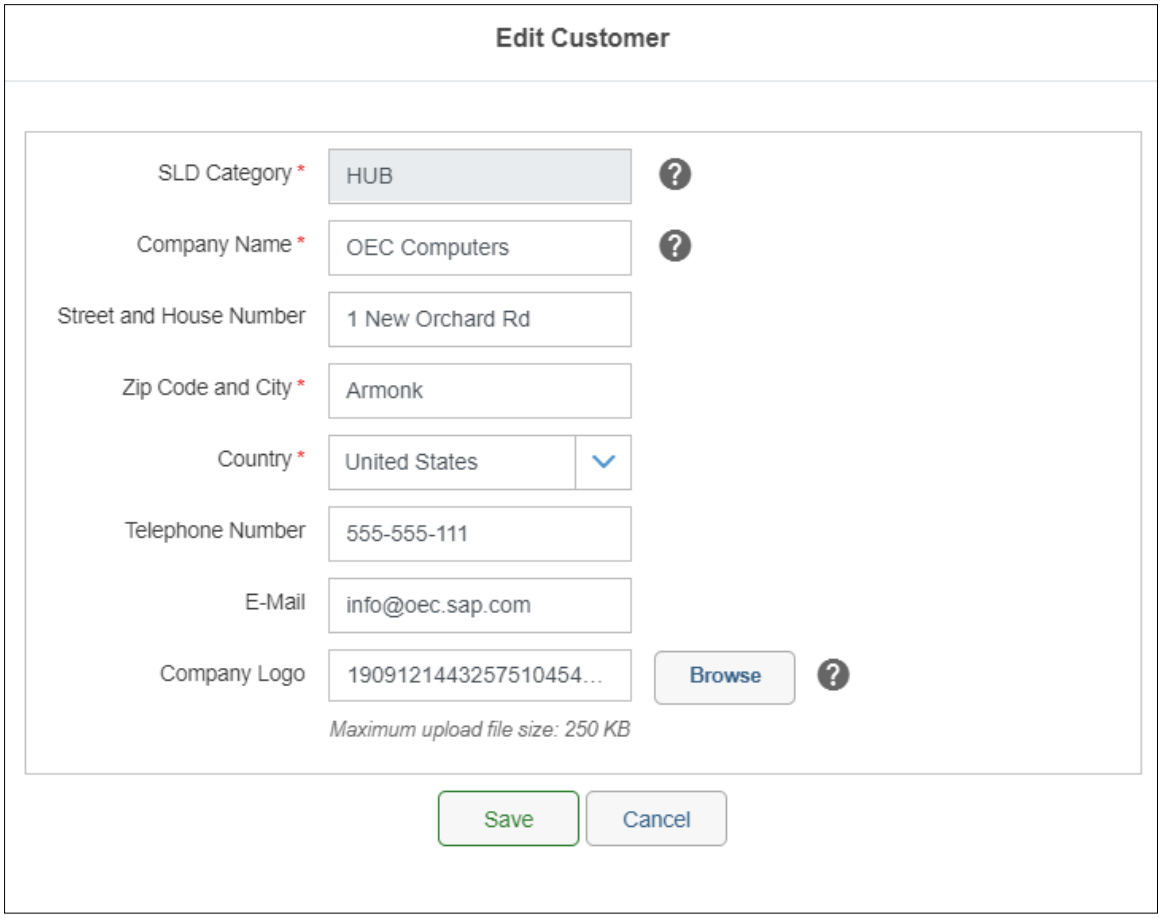
In the *Customers* area, you can choose the icon to display the structure of customer details in table form or choose the icon to display the structure of customer details in list form.

5.2.2 New Customers

To integrate a third-party application with SAP Business One, a customer must be registered in the Integration Hub.

To add a new customer, perform the following.

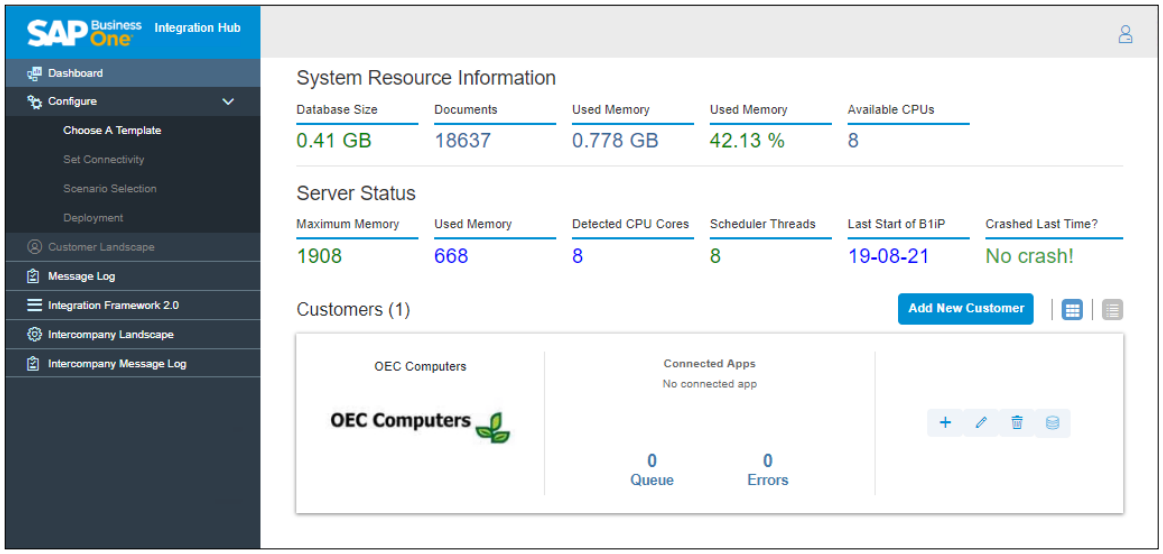
1. In the Integration Hub Administration Console, in the *Dashboard* menu, in the *Customers* area, choose the *Add New Customer* button.
2. In the *Edit Customer* window, enter all required data and choose the *Save* button to add the customer to the Integration Hub



The Add New Customer window contains the following fields:

Field Name	Description
SLD Category	Enter the *SLD Category*. This is a mandatory field. **Note** The SLD category *HUB* is displayed by default. To create a new *SDL Category*, enter the new SLD category name and then save with complete customer information.
Company Name	Enter the name of the customer/company. This is a mandatory field.
Street and House Number	Enter the street and house number of the customer/company.
Zip Code and City	Enter the ZIP Code and city of the customer/company. These are mandatory fields.
Country	Select the country of the customer/company. This is a mandatory field.
Telephone Number	Enter the telephone number of the customer/company.
E-Mail	Enter a valid email for the customer/company.
Company Logo	Upload the logo of the customer/company. The maximum upload file size is 250 KB.

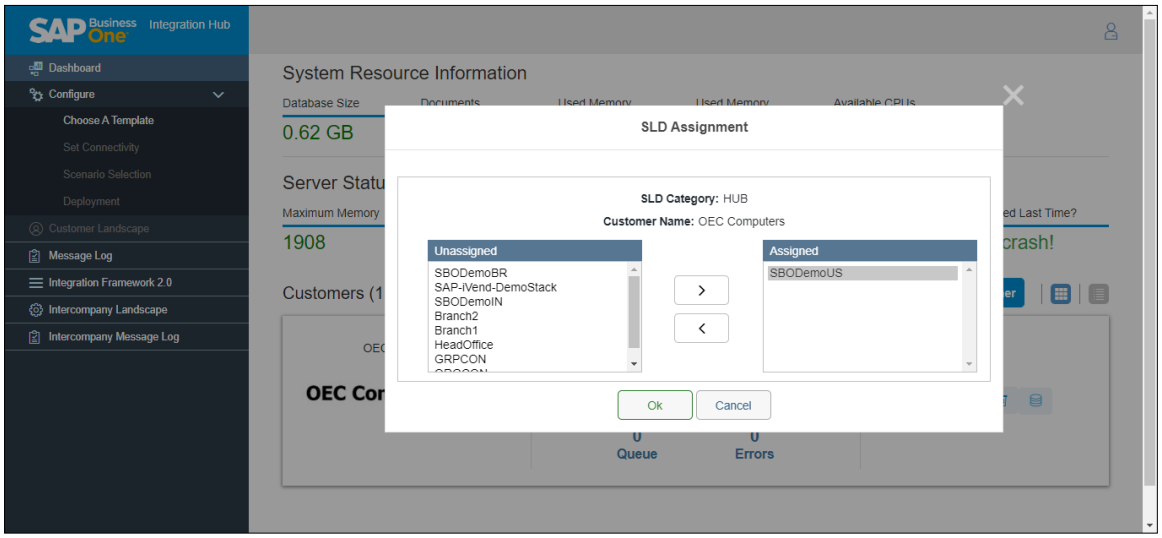
The added customer information is displayed in the *Customer* area of the right pane.



5.2.3 Assign SLD Categories to Customers

To assign an SLD category to a customer, perform the following:

1. In the Administration Console, choose the (*Assign SLD Category*) icon.
2. In the SLD Assignment window, select the database name from the *Unassigned* list and move it to the *Assigned* list using the arrow button.
3. Choose the *Ok* button. The system displays the following message: “SLD Category Assigned Successfully”.

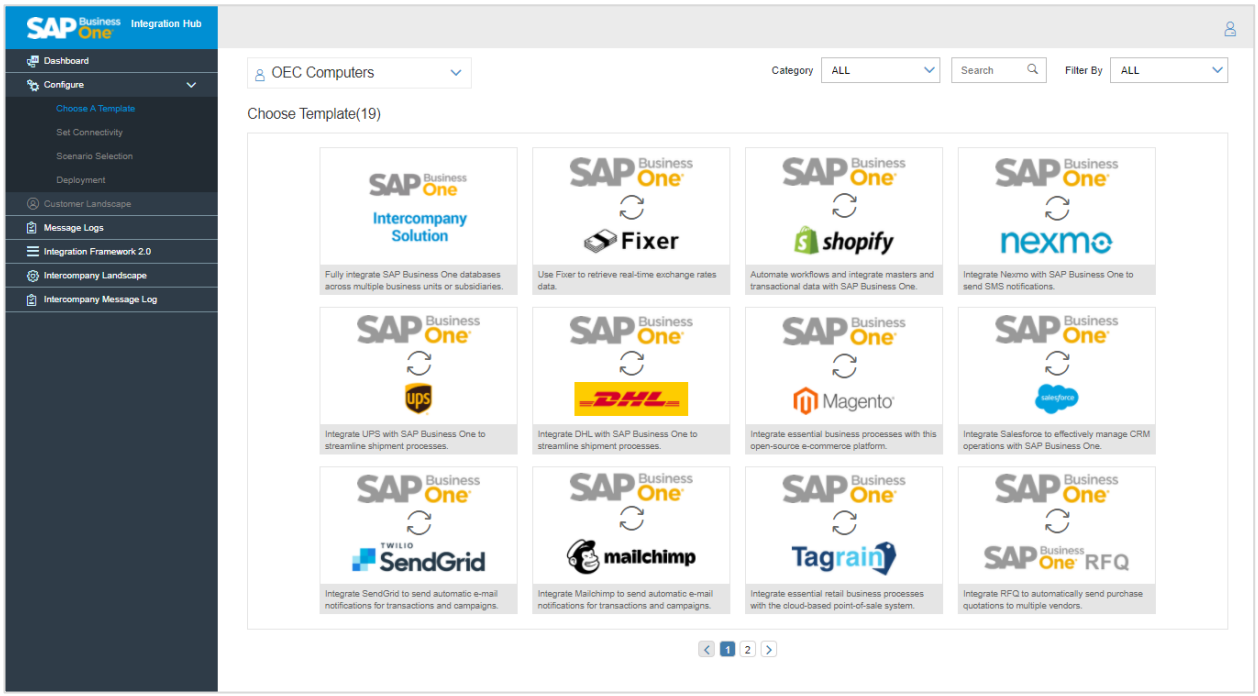


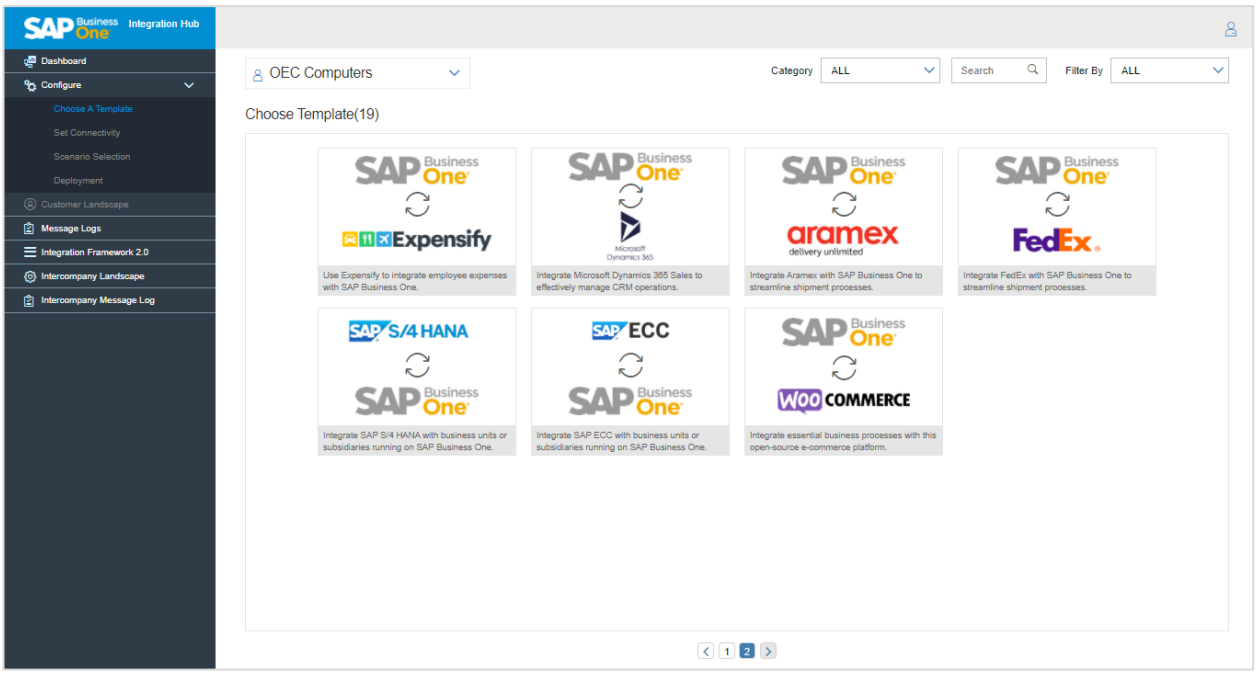
5.2.4 Configuration Menu

After you create the first customer, the *Configure* menu is displayed in the Integration Hub Administration Console.

To search the list of available templates you can use to integrate with SAP Business One, perform the following:

1. In the Integration Hub Administration Console, in the *Configure* menu, choose the *Choose a Template* option. Alternatively, in the *Dashboard* menu, in the *Customers* area, choose the + (*Configure New Template*) icon.





2. You can filter the list of templates based on selection criteria (*Category* and *Filter By)* or search based on text input.

Field Name	Description
Category	Use the dropdown list in the *Category* field to filter the list of available templates based on category. The following categories are available in the dropdown list: • E-commerce • CRM • SAP Apps • E-mail & SMS • Shipping Carriers • Exchange Rates • Expense Management • Retail
Filter By	Use the dropdown list in the *Filter By* field to filter the existing templates that are already connected or all templates available based on the *Category* value selected.

Examples

- In the dropdown list in the *Category* field, choose *E-commerce* to filter the list of templates available in the Integration Hub related to e-commerce, and choose *Filter By* as either:
  - *All*
    According to the filter selection, the Integration Hub displays the templates available, for example, Shopify.
  - *Connected Apps*
    If no E-commerce templates exist, the filter results are blank.

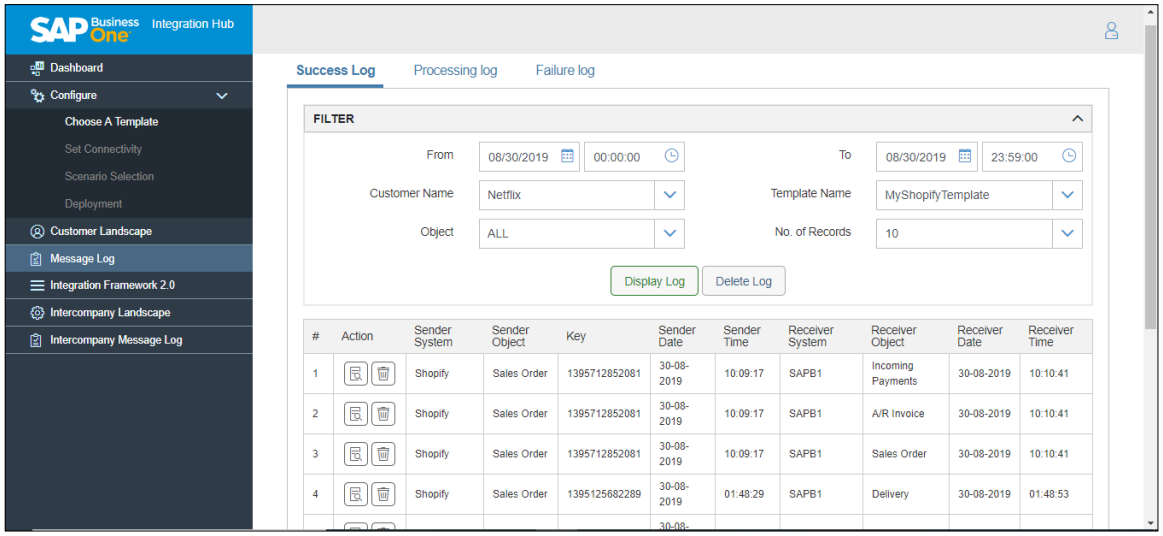
- In the dropdown list in the *Category* field, choose *Shipping Carriers* to filter the list of templates available in the Integration Hub related to shipping carriers, and choose *Filter By* as either:
  - *All*
    According to the filter selection, the Integration Hub displays the templates available, for example, UPS.
  - *Connected Apps*
    If no shipping carrier templates exist, the filter results are blank.

5.2.5 Message Logs

The *Message Logs* menu shows all transactions between SAP Business One and integrated applications. The following three types of messages are displayed:

- The *Success Log* displays successful transactions.
- The *Processing Log* displays transactions that are still in process.
- The *Failure Log* displays the transactions that failed.

Each message log type can be filtered by date and time, sender system, or receiver system.



The *Filter* area contains the following fields:

Field Name	Description
From	Enter the date (in MM/DD/YYYY format) and time (HH:MM) from which you want to filter message logs.
To	Enter the date (in MM/DD/YYYY format) and time (HH:MM) to which you want to filter the message logs.
Customer Name	Select the customer registered in the Integration Hub from the dropdown list.
Template Name	Select the application for which the message log is to be displayed.
Object	From the dropdown list, select the object for which the message log is to be displayed
No. of Records	From the dropdown list, select the number of message log records to be displayed per page.

The following fields are displayed in the *Result* area of the filter:

Field Name	Description
#	Displays the automatic sequence number of the result. This field is read only.
Action	To view the detailed log, choose  icon. To delete the detailed log, choose  icon.
Sender System	Displays the sender system from the SLD. This field is read only.
Sender Object	Displays the sender object. This field is read only.
Key	Displays the primary key of the object. This field is read only.
Sender Date	Displays the sender system date. This field is read only.
Sender Time	Displays the sender system time. This field is read only.
Receiver System	Displays the receiver system from the SLD. This field is read only.
Receiver Object	Displays the receiver object. This field is read only.
Receiver Date	Displays the receiver system date. This field is read only.
Receiver Time	Displays the receiver system time. This field is read only.

If the message log becomes too large, you can delete the message log by specifying the *From* and *To Date* values and choosing the *Delete Log* button. This deletes the log entries between the two dates.

5.3 Custom Language Tool

The Custom Language Tool enables authorized users to upload custom language resource strings for the application graphical user interface (GUI) in SAP Business One.

To open the Custom Language Tool in SAP Business One, in the SAP Business One *Main Menu*, choose *Administration → Integration Hub → Custom Language Tool.*

Custom Language Tool Window

Field	Description
Language	From the dropdown list, select the language to which you would like to change the UI string.
Excel File Path	Specify the path of the language resource string template file.
Prepare Template	Choose this button to prepare a Microsoft Excel based template.
Validate	Choose this button to check the correctness and completeness of the data in the selected template.
Upload	Choose this button to import the language resource string template file. Note You need to restart SAP Business One to view the uploaded language resource strings.
Restore Default	Choose this button to revert to the default language resource string for the selected language. This is required if you want to revert to the standard, default UI string. Note You need to restart SAP Business One to view the default strings.
Cancel	Choose this button to close the *Custom Language Tool* window.

To import data using the custom language tool, perform the following steps:

1. In the *Custom Language Tool* window, from the dropdown list in the *Language* field, select a language.

   Note

   Languages supported by the application are displayed in the drop-down list. Resource strings for the Finland, Norway, Portugal, and Sweden localizations are available in English language. You can download the English strings and upload the language strings supported for these localizations.

2. To generate the Microsoft Excel-based template, choose the *Prepare Template* button.
3. Open the template and update the *Language Resource String* for each *Language Resource ID*. Choose the Save button to save the template.

Caution

Do not alter the template or delete or modify records in any column other than the *Language Resource String* column.

4. To navigate to the template path, choose the *Browse* button.
5. To check the correctness and completeness of the data in the selected template, choose the *Validate* button. Any errors that are detected are displayed in the error column of the template. Rectify all errors and validate the template again.
6. Choose the *Upload* button to import the data.

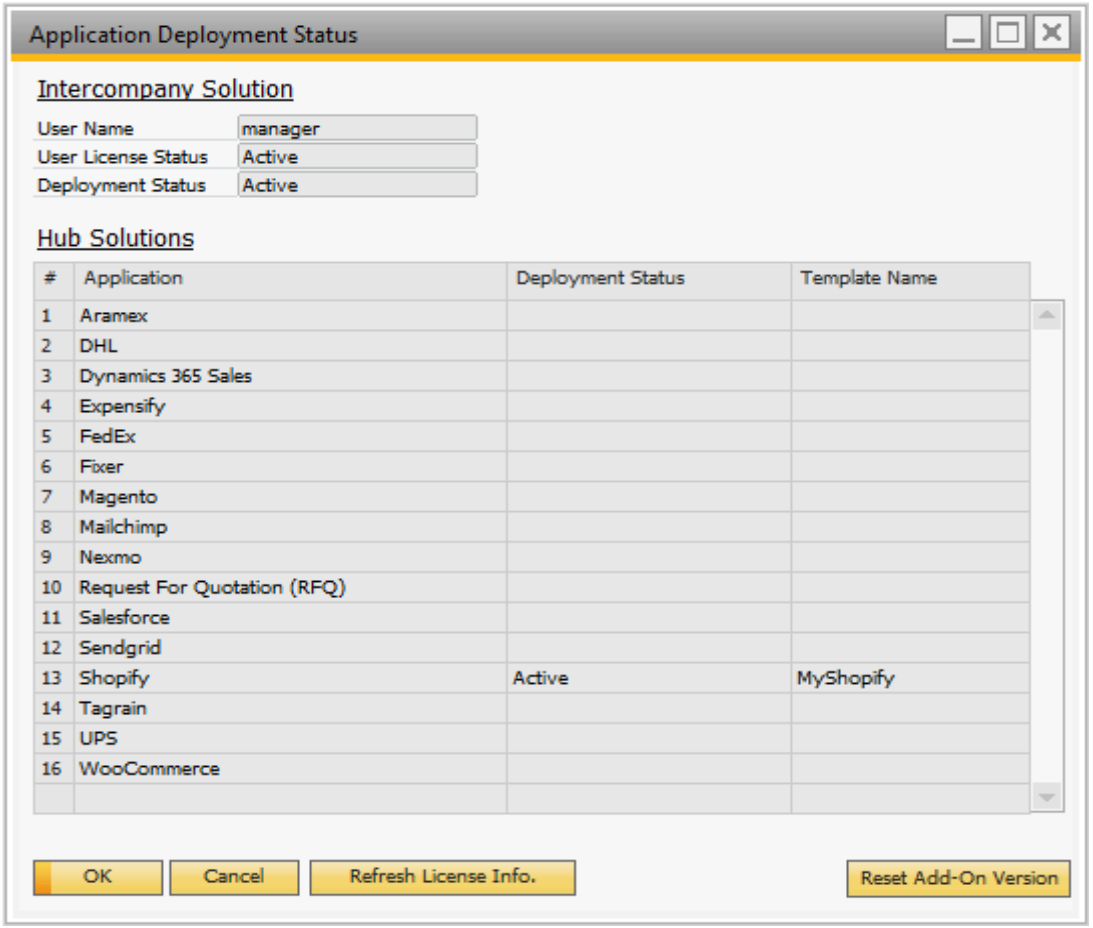
5.4 Application Deployment Status

The Application Deployment Status window provides a comprehensive overview of the deployment status of both the Intercompany solution and the Integration Hub applications within SAP Business One. This window also displays the status of intercompany licenses allocated specifically to the currently logged-in user.

The user can choose Refresh License Info. button on the Application Deployment Status window in SAP Business One to update the latest information in the OE_USERINFO table about the SAP license(s).

The Reset Add-On Version button in the Application Deployment Status screen is specifically designed to address challenges encountered during the installation of the intercompany add-on. This button is used for the clearing of the CTX_CONF table, a pivotal step in resolving issues associated with the installation process.

To open the Application Deployment Status in SAP Business One, in the SAP Business One *Main Menu*, choose *Administration → Integration Hub → Application Deployment Status.*



Application Deployment Status Window

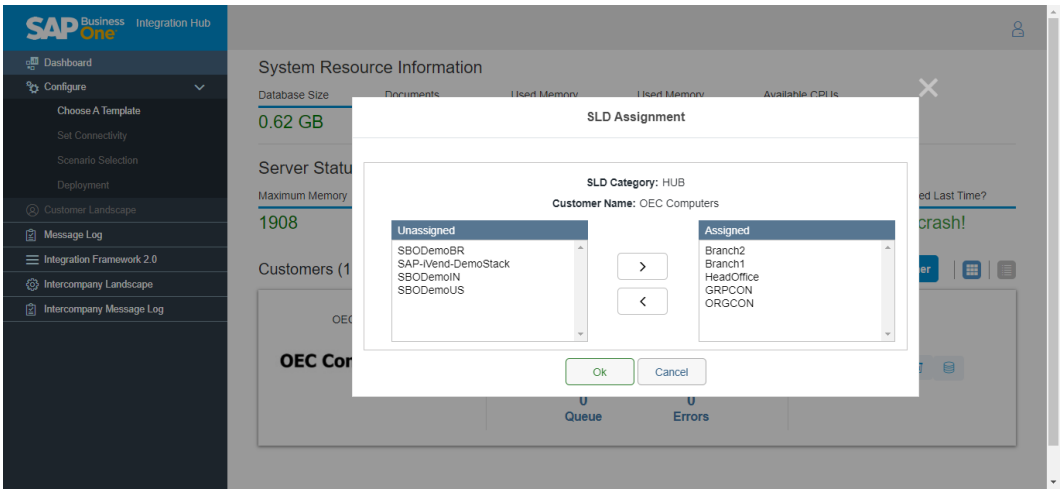
Field	Description
User Name	Displays the logged-in user name in SAP Business One.
User License Status	Displays the license status of the logged-in user in SAP Business One. The following are the statuses that can be visible on the *Application Deployment Status* screen: · *Active*: The status represents that the Walldorf license is allocated to the logged-in user. · *Non-Allocated*: The status represents that the Walldorf license is not allocated to the logged-in user.
Deployment Status	Displays the deployment status of the Integration Hub connector. The following are the statuses that can be visible on the *Application Deployment Status* screen: · *Active*: The status represents the solution is deployed and active. · *Inactive*: The status represents the feature template is not inactive.
Template Name	Displays the template name of the deployed Integration Hub connector
Refresh License Info.	Choose this button on the Application Deployment Status window in SAP Business One to update the latest information in the OE_USERINFO table about the SAP license(s).
Reset Add-On Version	Choose this button to clear the CTX_CONF table. You can use this button if any error is encountered during the add-on installation.

6 Intercompany

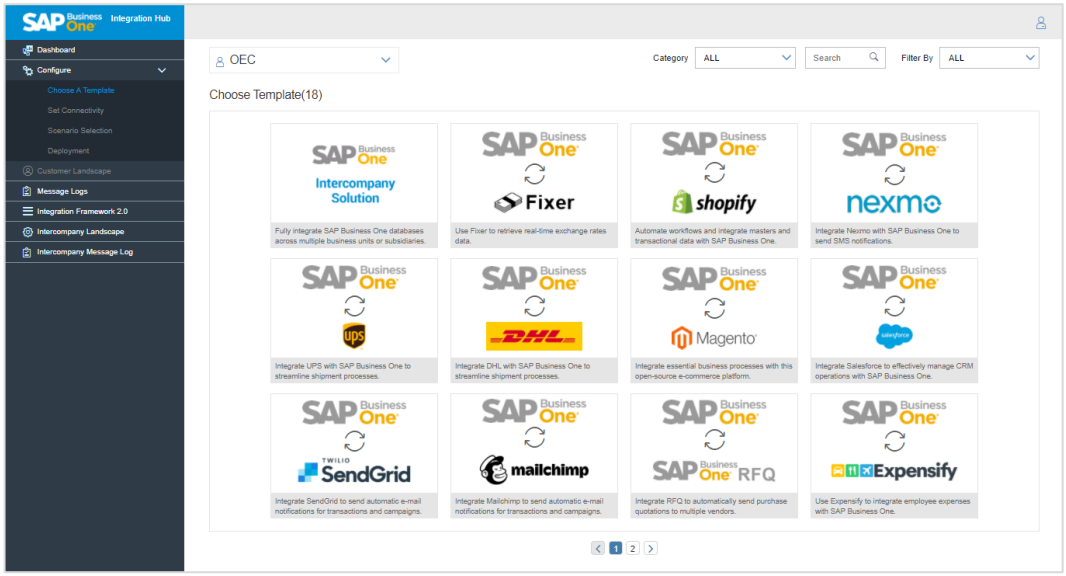
6.1 Setting Up the Intercompany Integration Solution in the Integration Hub

To set up the intercompany integration solution in the Integration Hub Administration Console, perform the following:

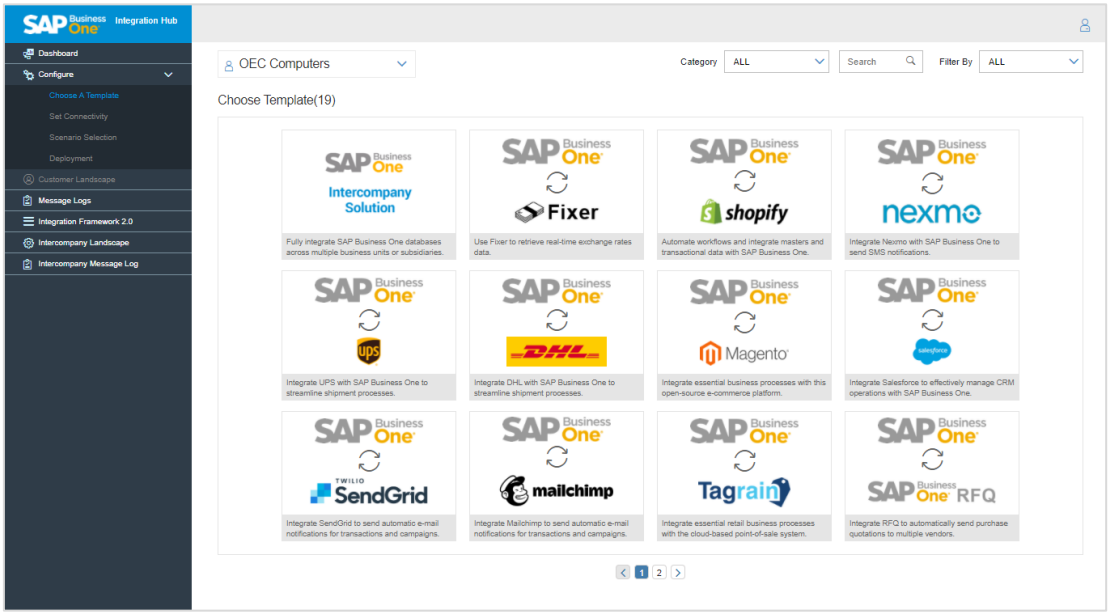
1. In the Integration Hub Administration Console, in the *Dashboard* menu, in the *Customers* area, choose the *Add New Customer* button. For more information, see Adding New Customers.
2. Click the (*Assign SLD Category*) icon.
3. Select all SLDs to be configured in the intercompany integration solution.



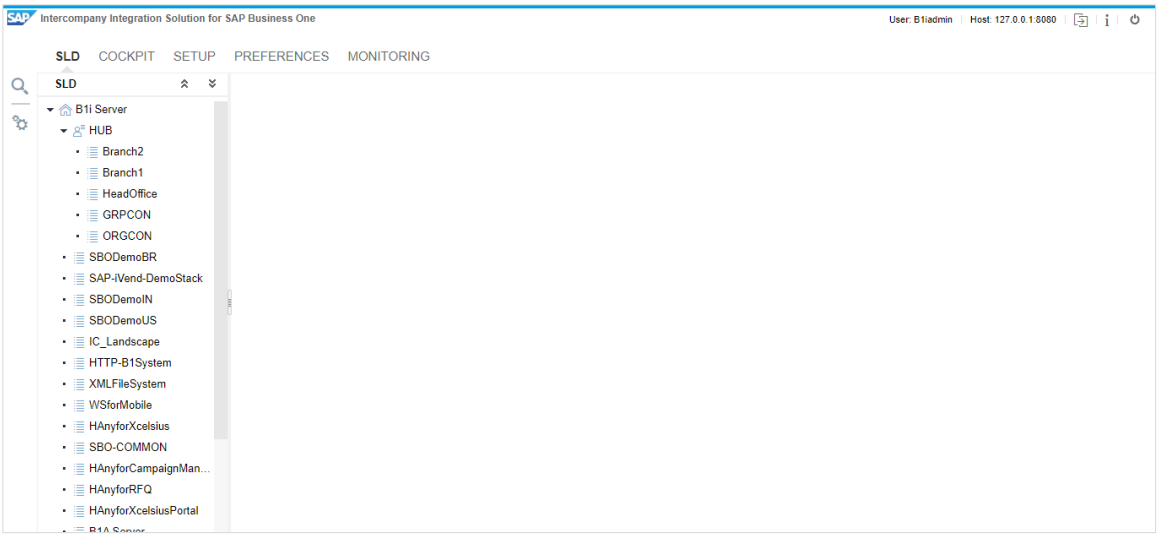
4. In the *Configure* menu, choose the *Choose a Template* option.



5. Select the *Intercompany Solution* template to integrate the intercompany integration solution with SAP Business One.



6. The SLD page of Intercompany Administration Console opens.



For information on setting up and configuring the intercompany integration solution for SAP Business One, refer to the following Knowledge articles to perform Intercompany Solution setups:

https://support.walldorfsolutions.com/portal/en/kb/articles/configurations-in-sap-business-one-after-installing-intercompany-2-1-2021

https://support.walldorfsolutions.com/portal/en/kb/articles/setting-up-the-intercompany-landscape

Refer to the below YouTube Playlist to perform Intercompany Solution setups as per your business needs:

https://www.youtube.com/playlist?list=PL5_XNyp01c5UJ8igeMG_Pj_siCgkc65T5

https://www.youtube.com/playlist?list=PL5_XNyp01c5UTU337UIlrdJSunPwEtb3n

6.2 Upgrading the Existing Intercompany Environment to the Integration Hub

To upgrade an existing intercompany integration solution environment to the Integration Hub, perform the following:

1. Install the Integration Solutions add-on. For more information, see Installing the Integration Solutions Add-On
2. Perform steps 1-4 in Installing the Integration Solutions Installer.
3. In the *Connection Details and Installation Option* window, enter the following information and choose the *Next* button.
    - *Framework Server* – The framework server name is prepopulated by default.
    - *Framework Port* – Choose the protocol type from the dropdown and enter the corresponding port. The protocol and port should match the settings provided during B1if installation. The default HTTP port for the framework server (8080) is displayed in this field.

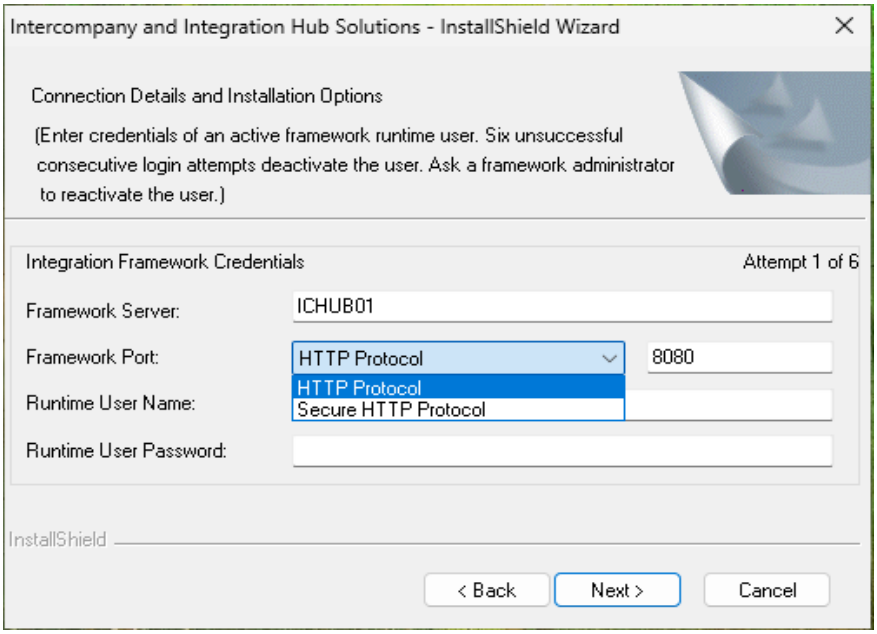
Note

If you choose the HTTPS protocol type, ensure that the security certificate for HTTPS is properly installed.

- *Runtime User Name* – The default runtime user name is `B1iadmin`.
- *Runtime User Password*

Note

Upgrade of the intercompany integration solution from B1iF version 1.0 to B1iF version 2.0 must be done manually. To do so, in the Intercompany Administration Console, choose the *Setup* option in the top menu bar. In the left frame, choose the *Landscape* option, and on the *Intercompany Landscape* page, choose the *Upgrade to B1iF 2.0* button.

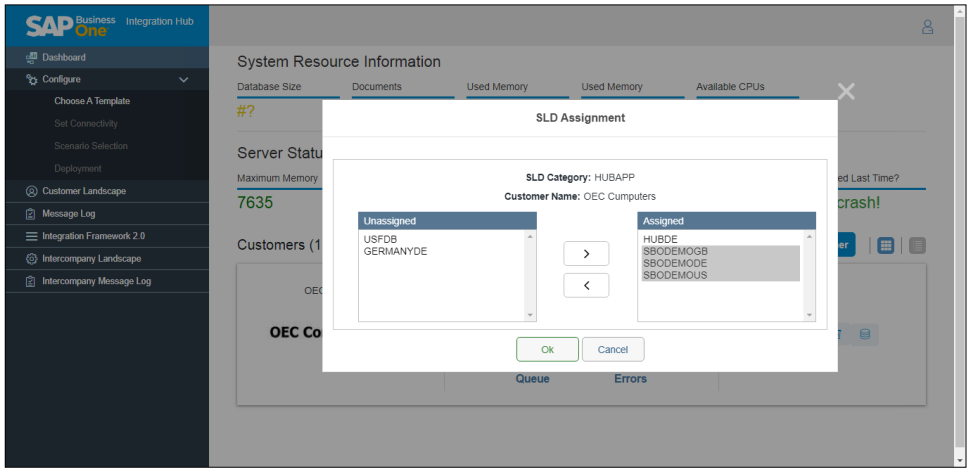


- To start the installation process, choose the *Install* button in the *Ready to Install the Program* window.
- Choose the *Finish* button.

4. Log in to the Integration Hub Administration Console.

5. In the *Dashboard* menu, in the *Customers* area, choose the *Add New Customer* button and enter all required data.

6. Click the (*Assign SLD Category*) icon and move all intercompany integration solution SLDs to the category created for the customer.



7. In the *Configure* menu, select the *Choose a Template* option.
8. Select the *Intercompany Solution* template.

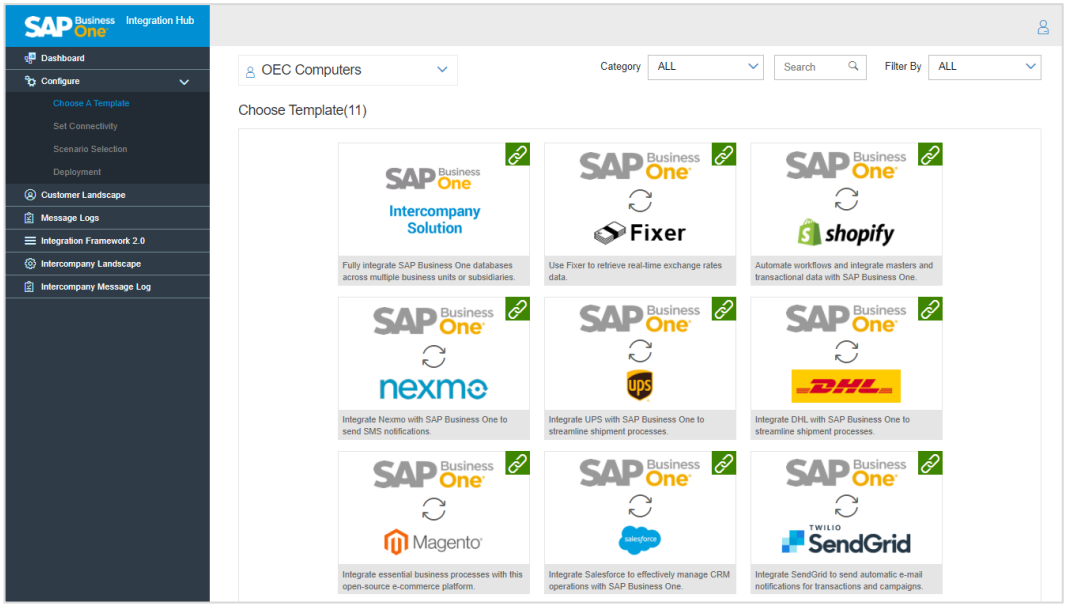
The SLD page of the Administration Console for the intercompany integration solution opens.

9. In the *Setup* menu, choose *Landscape*.

The *Intercompany Landscape* page appears.

10. In the *SLD Category* field, select the *HUB Category* that was created during customer creation.
11. If the intercompany integration solution is already upgraded to B1iF version 2.0, you can deploy the solution. Perform the currency key mapping.
12. If the Intercompany solution is running on B1iF version 1.x, you need to first upgrade the solution to B1iF version 2.0. For more information on upgrading to B1iF version 2.0, see the Upgrading the Intercompany Solution from B1iF 1.x to B1iF 2.0 knowledge article available on Walldorf support portal.

Once the solution is upgraded and deployed, it will appear as a connected application in the Integration Hub.



For information on using the intercompany integration solution for SAP Business One, you may refer to the Knowledge article available on the Walldorf support portal and product videos available on YouTube.

Refer to the knowledge articles available on the URL below for details on the Intercompany Integration solution:

https://support.walldorfsolutions.com/portal/en/kb/intercompany-integration-solution

Refer to the YouTube playlist below for details on the Intercompany Integration Solution:

https://www.youtube.com/playlist?list=PL5_XNyp01c5UJ8igeMG_Pj_siCgkc65T5

https://www.youtube.com/playlist?list=PL5_XNyp01c5UTU337UIlrdJSunPwEtb3n

7 Shopify

Shopify is an e-commerce platform that allows users to create online retail stores. This cloud-based platform gives the flexibility to access and run a business from anywhere.

Shopify allows users to:

- Create and customize an online store.
- Sell in multiple ways, such as through mobile, social media, online marketplaces, brick-and-mortar locations, and pop-up shops.
- Manage products, inventory, payments, and shipping.

The integration between Shopify and SAP Business One facilitates automated, bidirectional data exchange between Shopify and SAP Business One, eliminating data re-entry and reducing costly errors. This automated integration is performed over numerous touch points to streamline business processes. Order information, including customer data, is exchanged with SAP Business One, while shipping details can be passed back to Shopify when the order is fulfilled. Additionally, *Product, Price,* and *Inventory* information can be integrated into Shopify.

The solution allows you to integrate one SAP Business One company database with one Shopify e-commerce store.

Note

Shopify Store Currency must match SAP B1 local currency.

7.1 Setting Up Shopify in the Integration Hub

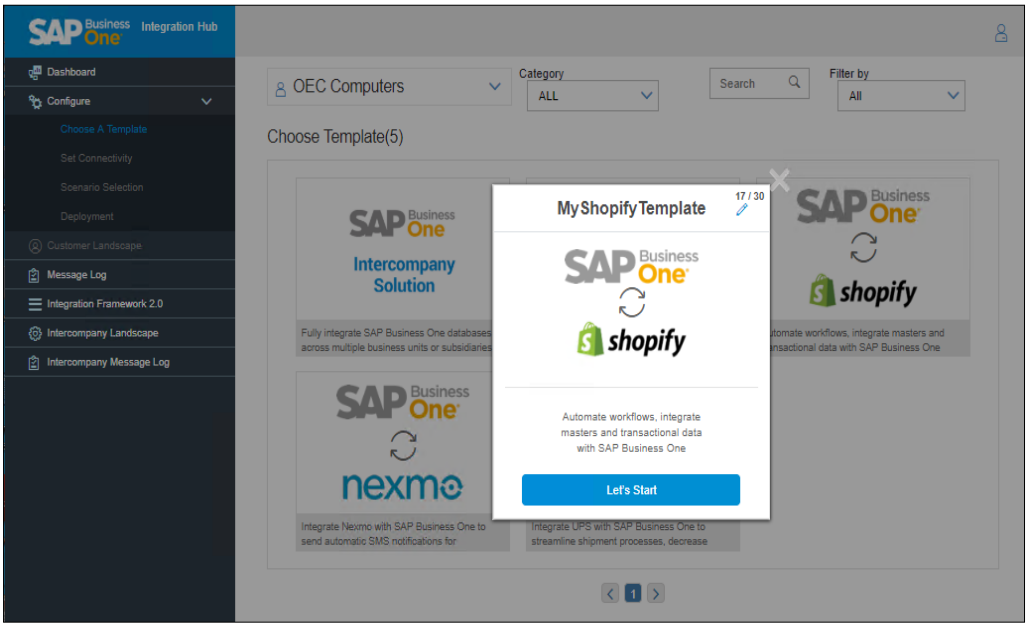
To set up Shopify in the Integration Hub Administration Console, perform the following:

1. In the Integration Hub Administration Console, in the *Dashboard* menu, in the *Customers* area, choose the *Add New Customer* button. For more information, see Adding New Customers.
2. Select the *Shopify* template to integrate Shopify with SAP Business One.

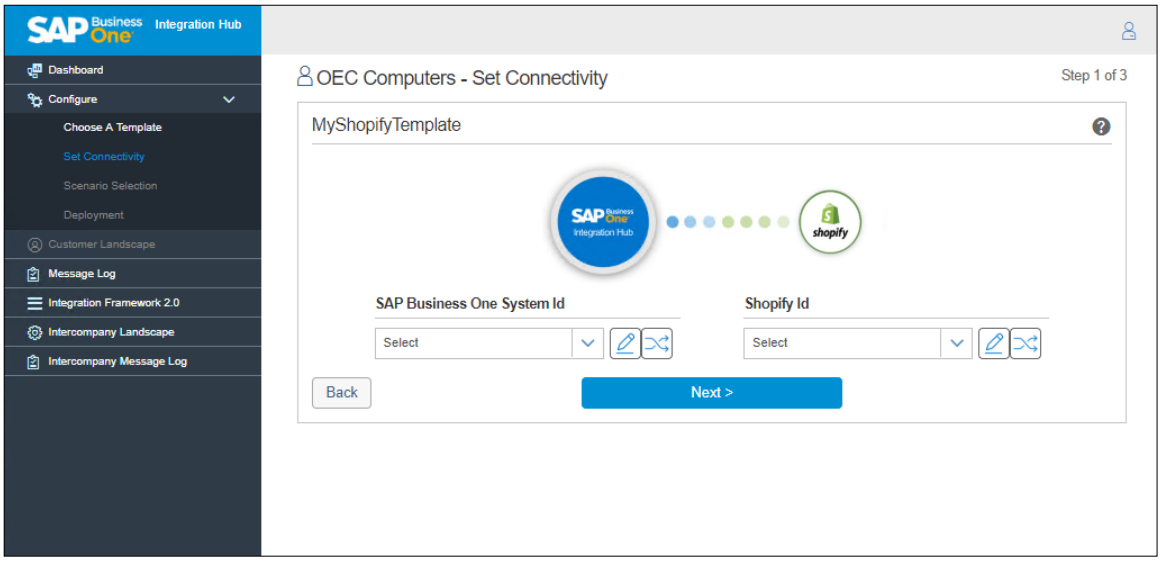
In the *MyShopify Template* window, choose the *Let's Start* button to start configuring the connectivity settings.

Note

By default, the template name is displayed as *MyShopify Template*. You can change the template name by clicking the Edit button to *Edit Template Nam*e.



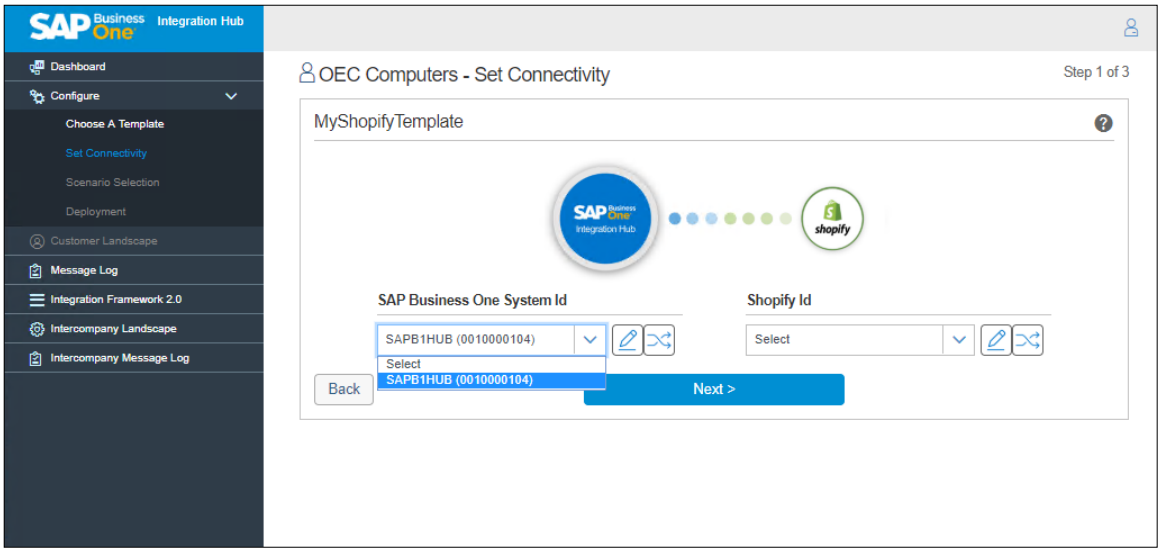
The *Set Connectivity* page appears. Perform the following three steps to complete the configurations for connectivity.



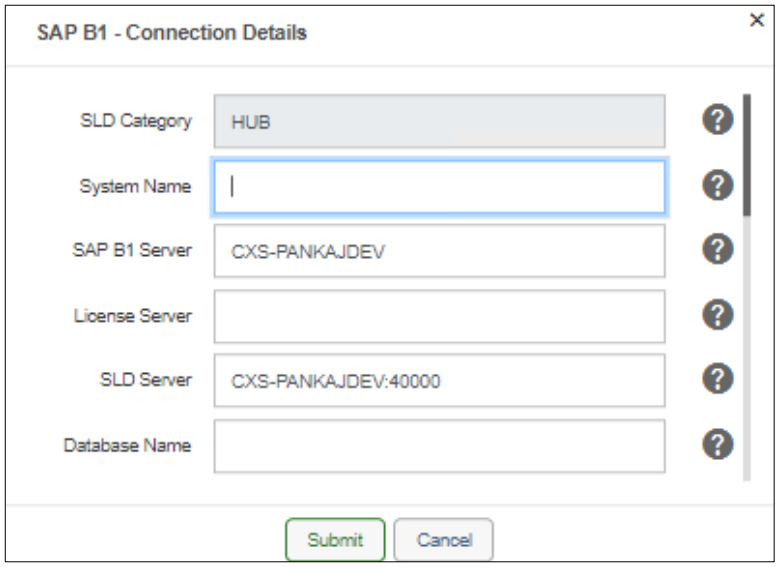
Step 1 – Set Connectivity

3. Choose the SAP Business One SLD to provide the connection between SAP Business One system ID and the Shopify ID.

> **Note**
>
> By default, the solution displays all the SAP Business One SLDs available in the *SLD Category* field selected during customer creation.



To add a new SLD category or edit an existing SLD category, in the *SAP Business System ID* field, choose the (*Add/Edit*) icon. The *SAP B1 - Connection Details* window appears.



The *SAP B1 - Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. **Note** *System Name* is a mandatory field required to add or update the SAP Business One SLD.
SAP B1 Server	Enter the SAP Business One server name/IP address. **Note** *SAP B1 Server* is a mandatory field required to add/update SLD information for SAP Business One.
License Server	Enter the server name or IP address and port number of the SAP Business One license server. The default port is `30000`.
SLD Server	Enter the valid *SLD Server* details, including the port. **Note** *SLD Server* details are a mandatory field required to add/update SLD information for SAP Business One.
Database Name	Enter the name of the SAP Business One database. **Note** *Database Name* is a mandatory field required to add/update the SAP Business One System SLD.

	Caution The *Database Name* must be entered the same as the SAP Business One database name.
Database Type	Choose the database type from the dropdown list. Currently, only Microsoft SQL Server 2005, 2008, 2012, 2014, 2016, 2017, and SAP HANA DB are supported. Note *Database Type* is a mandatory field required to add/update the SAP Business One SLD.
Database User	Enter the user to access the company database using the database connection. *Database User* is a mandatory field required to add/update the SAP Business One SLD. Caution Ensure the *Database User* is valid; otherwise, the connection cannot be established.
Database Password	Enter a valid password for the database login. Note *Database Password* is a mandatory field to add/update the SAP Business One SLD. Caution Ensure the *Database Password* is valid; otherwise, the connection cannot be established.
Database Port	Enter the port for the database.
Username	Enter **`B1i`** in this field. Note *Username* is a mandatory field required to add/update the SAP Business One SLD. Caution Ensure that a user with this name exists in the SAP Business One database.
Password	Enter a valid password for the B1i user of SAP Business One.
Language	Select the language from the list of languages.
Is Trust	Select *True* or *False*. The default value for this field is *False.* To use a trusted connection, choose *True* from the dropdown list.
Jco Path	Enter the path for the JCO library. For example: `C:\Program Files (x86)\SAP\SAP Business One DI API\JCO\LIB`
DI Proxy Host	If the SAP Integration Framework 2.0 is installed on a separate server (that is, other than on the SAP Business One server), you must define the DI proxy host. The value in this field must be the same as the SAP Business One server address. Example *The DI Proxy Host* can be the same as the *SAP Business One Server.*
DI Proxy Port	The default value of *DI Proxy Port* is `2099`.

Proxy Host	The proxy host is required in a multi-instance scenario. If the B1i server connects to the SAP Business One server through a proxy server, enter the address of the proxy server in this field.
Proxy Port	Enter the proxy port in this field.

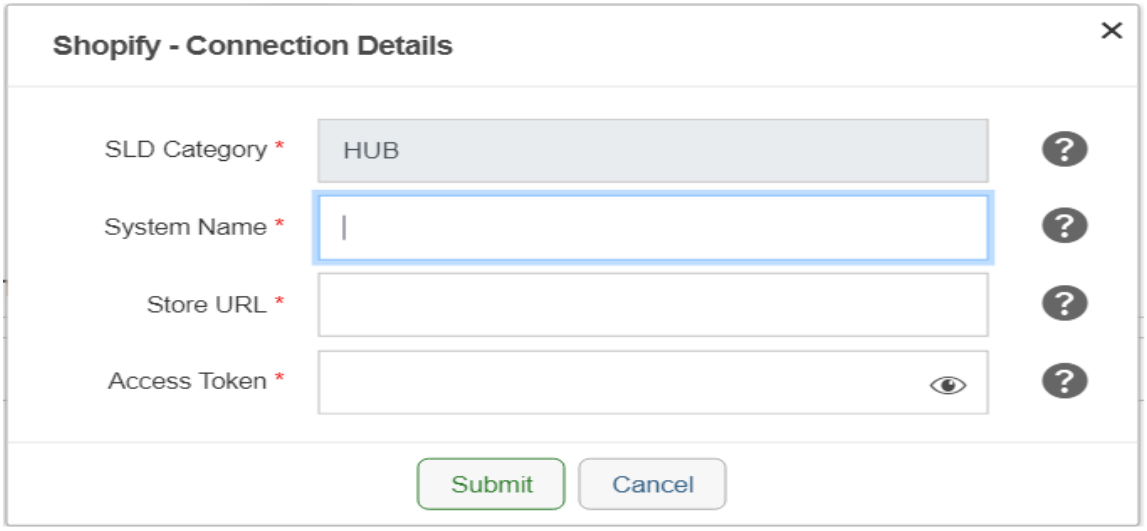
4. Enter the required data and choose the *Submit button.* The *SAP Business One SLD* entry is created.

5. Choose the (*Test Connection*) icon to test the connection between the SAP Business One system ID in the Integration Hub and the SAP Business One SLD.

   If the connection is successful, the success message appears “Test Connection Successful”. If the connection is unsuccessful, a failure message appears: “Test Connection Failed”. If you receive the failure message, please provide the correct credentials and try again.

6. To add/edit the Shopify *SLD Category*, on the *Set Connectivity* page, in the *Shopify ID* area, choose the (*Add/Edit*) button.

   The *Shopify - Connection Details* window appears.

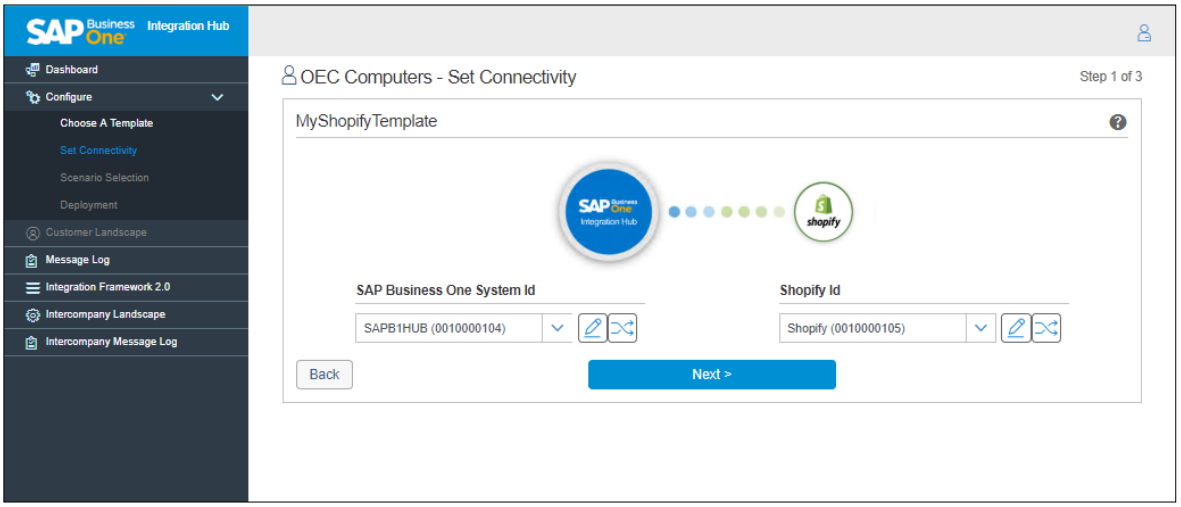


The *Shopify - Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Selected by default when SLD Category is already created. This field is a mandatory field.
System Name	Enter the name of the Shopify instance.
Store URL	Enter the URL for the Shopify store. This is a mandatory field. Caution Ensure the *Store URL* is valid; otherwise, the connection cannot be established.
Access Token	Enter the Access Token to log in to Shopify. This is a mandatory field. Caution Ensure the *Access Token* is valid; otherwise, the connection cannot be established.

	For more information about obtaining a Shopify Access Token, see the section “Generate credentials from the Shopify admin” at https://help.shopify.com/en/manual/apps/private-apps.

7. After entering the required fields, choose the *Submit button.* The SLD for Shopify is created.



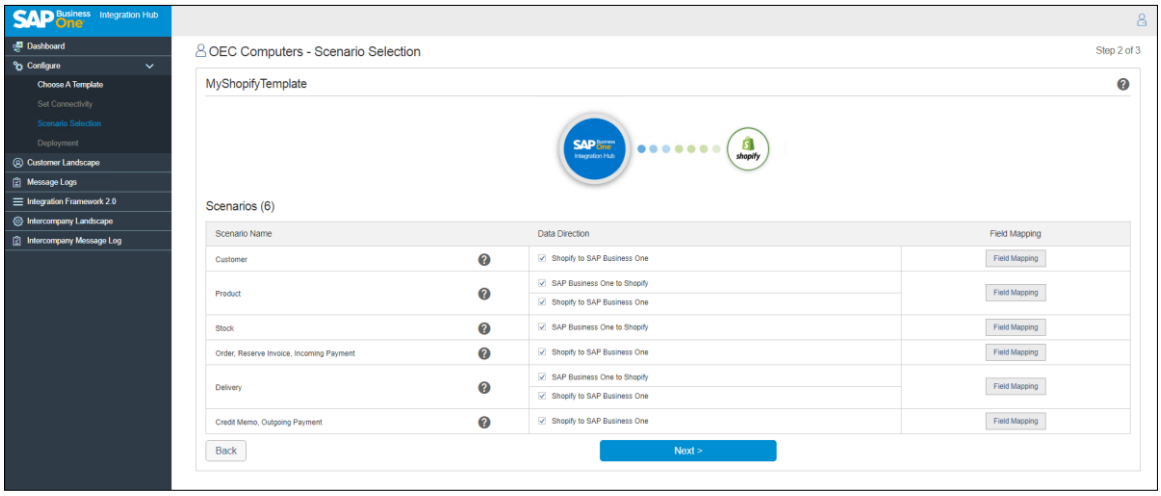
8. Choose the (*Test Connection*) icon to test the connection between the Integration Hub and the Shopify application.

   If the connection is successful, a success message appears “Test Connection Successful”. If the connection is unsuccessful, a failure message appears “Test Connection Failed”. If you receive the failure message, please provide the correct credentials and try again.

9. Choose the *Next* button to proceed to Step 2.

Step 2 – Scenario Selection

10. The scenarios (for example, *Master Data, Transactions*) are preselected. For scenarios such as *Customer, Product, Order, Reserve Invoice, Incoming Payment, Delivery, Credit Memo,* and *Outgoing Payment,* the direction of integration (i.e., from Shopify to SAP Business One or from SAP Business One to Shopify) and field mapping are selected by default.



11. For each scenario, choose the *Field Mapping* button to select or unselect the fields to be mapped in the *Field Mapping* window. Mandatory fields are grayed out and cannot be unselected.

Scenario Name – Customer:
Mapping is unidirectional from Shopify to SAP Business One. The *Customer* mapping list contains the following fields:

SAP Business One	Shopify
Customer.CardCode	Customer.ID
Customer.CardName	Customer.FIRST_NAME
Customer.Email	Customer.E_MAIL
Customer.Phone	Customer.Phone
Customer.Remark	Customer.Note
Customer.Type	Customer.Type
Customer.Default Group	Customer.Group
Customer.Currency	Customer.Currency
Customer.Payment Term	Customer.Payment Term
Address.Address Name	Address.Company
Address.Street	Address.Address
Address.Block	Address.Apartment
Address.State	Address.State
Address.Country	Address.Country
Address.Zip Code	Address.Zip Code
Address.City	Address.City

SAP Business One	Shopify
Address.Address Name 2	Address.Name

Scenario Name – Product:

Mapping is bidirectional between Shopify and SAP Business One. The *Product* mapping list contains the following fields:

SAP Business One	Shopify
Item.ItemCode	Product.sku
Item.ItemName	Product.Product Name
Item.SalesUnitWeight	Product.weight
Item.Item Remarks	Product.Description
Product.Tax Liable	Product.Charge taxes on this product
Item.Bar Code	Product.Barcode (ISBN, UPC, GTIN, etc.)
Item.Price	Product.Price
Item.Inventory Item	Product.Track quantity
Item.Weight Unit	Product.weight unit
Item.Cross reference code	Product.id
Item.Variant Item	Product.variant
Item.Inventory item id	Product.inventory item id

Scenario Name –Stock :

Mapping is from SAP Business One to Shopify. The *Stock* mapping list contents:

SAP Business One	Shopify
Item.ItemCode	Product.SKU
Warehouse	Location Name
Quantity	Quantity

Scenario Name – Order, Reserve Invoice, Incoming Payment:

Mapping is unidirectional from Shopify to SAP Business One. The *Order*, *Reserve Invoice*, *Incoming Payment* mapping list contains the following fields:

SAP Business One	Shopify
Order.DocDate	Order.created_at
Order.DocDueDate	Order.created_at
Order.CardCode	Order.customer
Order.Customer Reference no	Order.order number
Order.Comments	Order.comments
Order.DocTotal	Order.total price
Order.TotalTax	Order.total tax

SAP Business One	Shopify
Order.DocumentStatus	Order.status
Order.ItemCode	Order.variant id
Order.Unit Price	Order.price
Order.Quantity	Order.quantity
Order.Line Item Id	Order.line item id
Order.Freight Charges	Order.shipping charges
AddressExtension.Address Name2	Shipping_address.name
AddressExtension.ShipToStreet	shipping_address.address1
AddressExtension.ShipToBlock	shipping_address.address2
AddressExtension.ShipToCity	shipping_address.city
AddressExtension.ShipToZipCode	shipping_address.zip
AddressExtension.ShipToState	shipping_address.province_code
AddressExtension.ShipToCountry	shipping_address.country_code
AddressExtension.ShipToPhone	shipping _address.phone
AddressExtension.Address Name2	Billing_address.name
AddressExtension.BillToStreet	billing_address.address1
AddressExtension.BillToBlock	billing_address.address2
AddressExtension.BillToCity	billing_address.city
AddressExtension.BillToZipCode	billing_address.zip
AddressExtension.BillToState	billing_address.province_code
AddressExtension.BillToCountry	billing_address.country_code
AddressExtension.BillToPhone	Billing_address.phone

Scenario Name – Delivery:

Mapping is bidirectional between Shopify and SAP Business One. The *Delivery* mapping list contains the following fields:

SAP Business One	Shopify
Delivery.DocDate	Fullfilment.created_at
Delivery.DocDueDate	Fullfilment.created_at
Delivery.CardCode	Fullfilment.customer
Delivery.Customer Reference no	Fullfilment.order number
Delivery.Comments	Fullfilment.comments
Delivery.DocTotal	Fullfilment.total price
Delivery.TotalTax	Fullfilment.total tax
Delivery.ItemCode	Fullfilment.sku
Delivery.Unit Price	Fullfilment.price
Delivery.Quantity	Fullfilment.quantity

SAP Business One	Shopify
Delivery.TrackingNumber	Fullfilment.tracking number
Delivery.Warehouse	Fullfilment.location id
Delivery.Line Item Id	Fullfilment.line item id
Delivery.Freight Charges	Fullfilment.shipping charges
AddressExtension.ShipToStreet	shipping_address.address1
AddressExtension.ShipToBlock	shipping_address.address2
AddressExtension.ShipToCity	shipping_address.city
AddressExtension.ShipToZipCode	shipping_address.zip
AddressExtension.ShipToState	shipping_address.province_code
AddressExtension.ShipToCountry	shipping_address.country_code

Scenario Name – Credit Memo, Outgoing Payment:
Mapping is unidirectional from Shopify to SAP Business One. The *Credit Memo*, *Outgoing Payment* mapping list contains the following fields:

SAP Business One	Shopify
CreditMemo.DocDate	Refund.created_at
CreditMemo.DocDueDate	Refund.created_at
CreditMemo.CardCode	Refund.customer
CreditMemo.Comments	Refund.comments
CreditMemo.DocTotal	Refund.total price
CreditMemo.TotalTax	Refund.total tax
CreditMemo.ItemCode	Refund.sku
CreditMemo.Unit Price	Refund.price
CreditMemo.Quantity	Refund.quantity
CreditMemo.Line Item Id	Refund.line item id
CreditMemo.Freight Charges	Refund.shipping charges
AddressExtension.ShipToStreet	shipping_address.address1
AddressExtension.ShipToBlock	shipping_address.address2
AddressExtension.ShipToCity	shipping_address.city
AddressExtension.ShipToZipCode	shipping_address.zip
AddressExtension.ShipToState	shipping_address.province_code
AddressExtension.ShipToCountry	shipping_address.country_code
AddressExtension.BillToStreet	billing_address.address1
AddressExtension.BillToBlock	billing_address.address2
AddressExtension.BillToCity	billing_address.city
AddressExtension.BillToZipCode	billing_address.zip
AddressExtension.BillToState	billing_address.province_code
AddressExtension.BillToCountry	billing_address.country_code

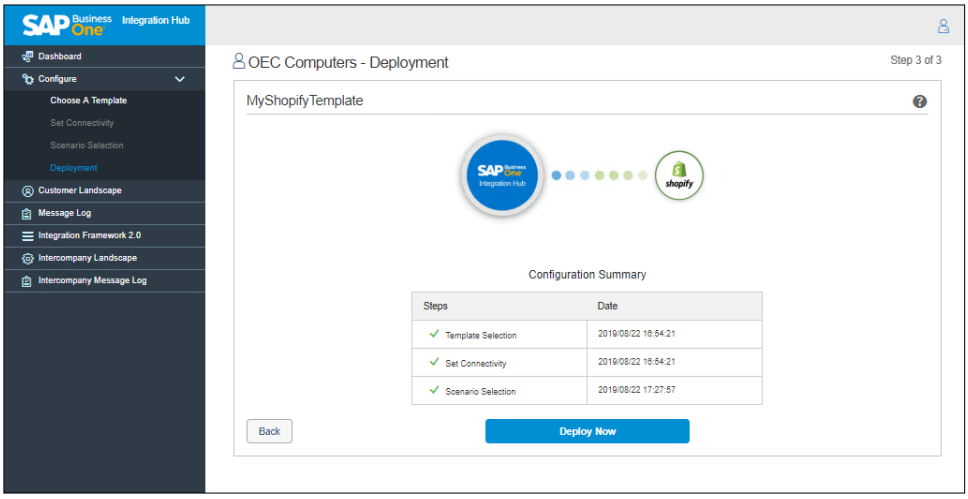
12. Choose the *Next* button to proceed to Step 3.

Step 3 – Deployment

13. The Integration Hub pre-checks the configurations before the solution can be deployed.

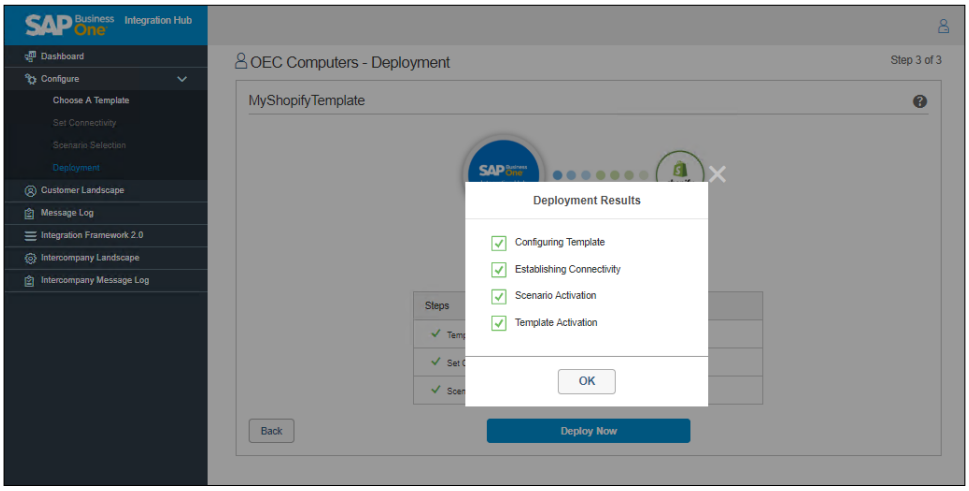
The *Configuration Summary* table is displayed. If all steps are successful, the solution is ready for deployment.

To deploy the solution, choose the *Deploy Now* button.



14. The application prompts you to provide the license details. For more information, refer to the Assigning the Integration Hub licenses section in this document.

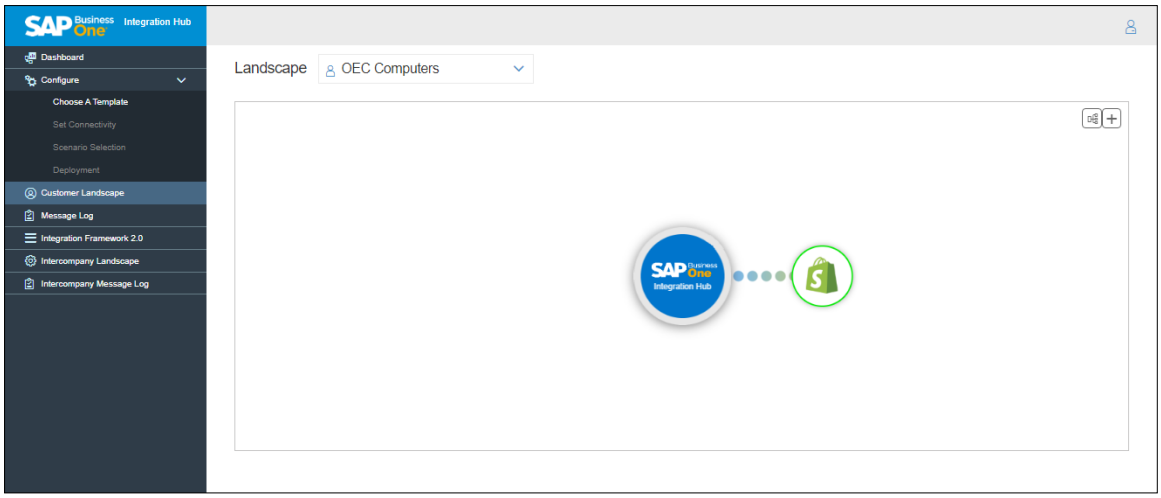
15. The Integration Hub displays the *Deployment Results* window, which indicates whether the deployment is successful or failed. The checkboxes in the *Deployment Results* window indicate the deployment status.



Note

After you enable the multi-branch function in SAP Business One, you must re-deploy the Shopify Template.

16. After all stages in the *Deployment Results* window are checked, choose the *OK* button. Deployment of the feature in the Integration Hub enables the features in SAP Business One. The Customer Landscape displays the connection of SAP Business One to Shopify.



17. To modify the template after successful feature activation, right-click the Shopify logo on the template.

18. Right-clicking a template logo displays a window with the following fields:

Field Name	Description
View	Displays the *Set Connectivity* window in view mode.
Edit	Displays the *Set Connectivity* window in edit mode.
De-activate	Deactivates the Shopify deployment.
Deployment Status	Displays the deployment status with date and time.
Delete Template	Choose the delete template to delete the template. It is an Irreversible action. **Note** On deleting the template, the template will be marked as Inactive in the application deployment status window in SAP Business One.
Delete Deployment Info.	Choose to delete deployment info. to delete the complete deployment information of the template. It is an Irreversible action. **Note** On deleting the deployment information, the template will not be deleted from the deployment panel screen, it will be deactivated only.
Manage Licenses	Choose Manage License to activate/deactivate the integration Hub License. For more information, see the Managing the Integration Hub licenses section in this guide.

7.2 Setup in SAP Business One

After deploying Shopify in the Integration Hub, check that the feature is correctly activated in SAP Business One and enter the B1i server details. To do so, perform the following:

1. In the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Application Deployment Status*.

The *Deployment Status* field should display 'Active', indicating that the feature is deployed in the Integration Hub. If the status displays 'Inactive', then redeploy the feature in the *Integration Hub.*

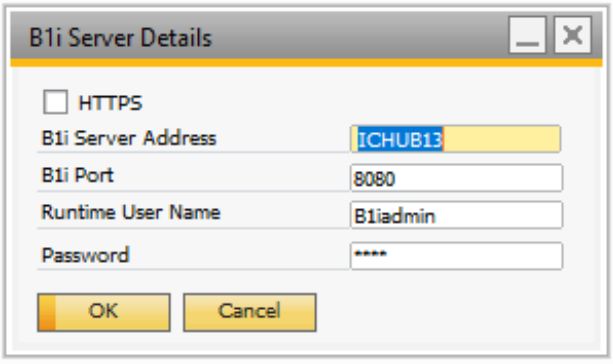
The following are the statuses that can be visible on the *Application Deployment Status* screen:

- *Active*: The status represents the solution is deployed and active.
- *Inactive*: The status represents the feature template is not inactive.

For more details, refer to the *Application Deployment Status* section in this guide.

> **Note**
>
> You must restart the SAP Business One client after Shopify deployment from the Integration HUB. On login, the add-on script will execute, and the relevant setup window will appear.

2. In SAP Business One, choose *Administration* → *Integration Hub* → *B1i Server Details* to enter the B1i server details.



The *B1i Server Details* window contains the following fields:

Field Name	Description
B1i Server Address	Enter the server name or IP address of the B1i server.
B1i Port	Enter the port of the B1i Server. The default port for HTTP is `8080`.
Username	Enter **`B1i run time user`**.
Password	Enter the *Password* for B1i run time user.
HTTPS	Select the checkbox to enable the solution to use HTTPS.

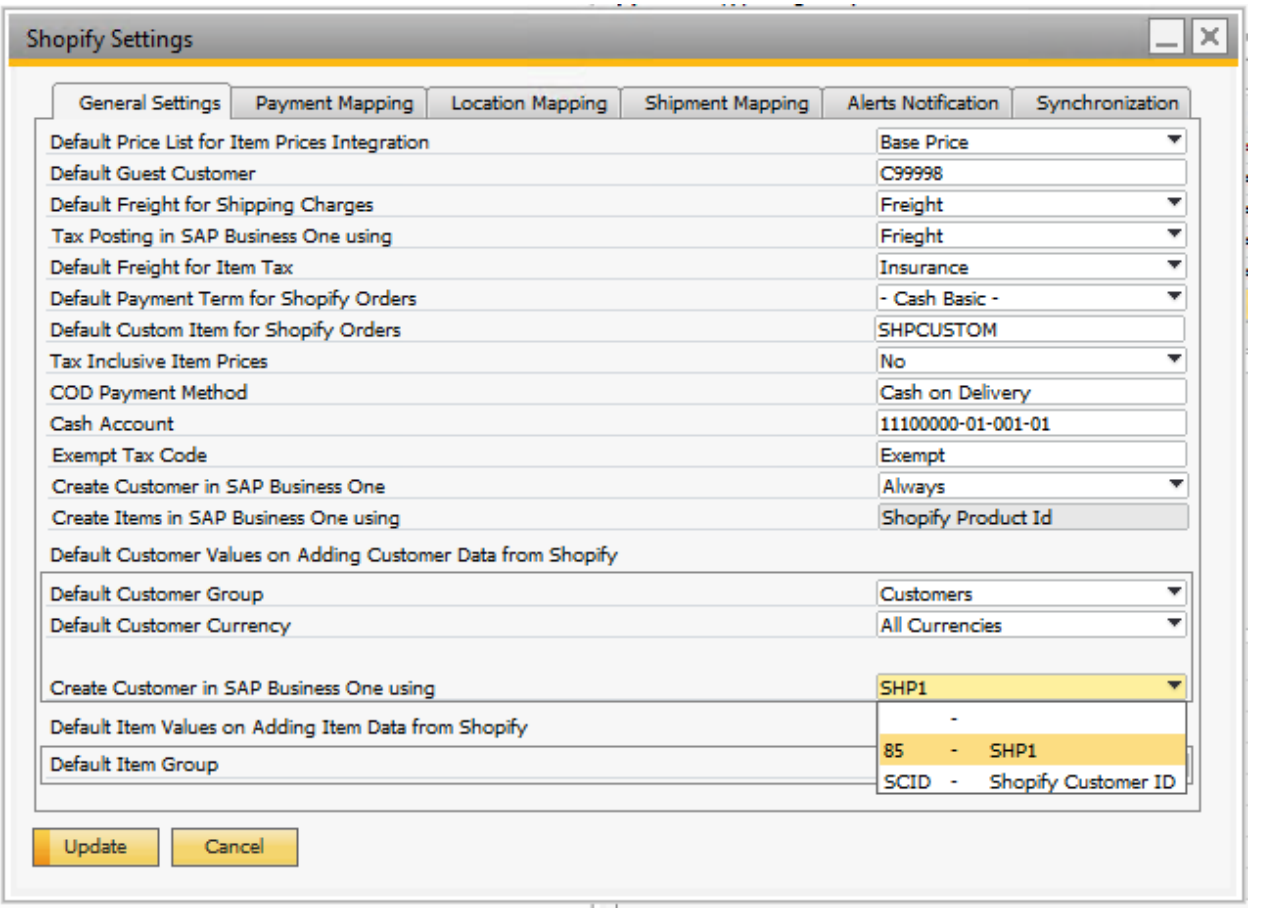
> **Note**
>
> Please ensure that the SLD entry for this company exists in SAP B1if and the solution is properly deployed.

7.2.1 Shopify Settings

On the Main Menu, go to *Administration* → *Integration Hub* → *Shopify Settings* to configure the required Shopify settings.

7.2.1.1 General Settings

To configure the required settings for Shopify in SAP Business One, in the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Shopify Settings* → *General Settings* tab.



The *General Settings* tab of *Shopify* window contains the following fields:

Field Name	Description
Default Price List for Item Prices Integration	Select a price list. The selected price list is used to integrate product prices from SAP Business One to Shopify.
Default Guest Customer	Select a customer. The selected customer is used to integrate orders of guest customers from SAP Business One to Shopify.
Default Freight for Shipping Charges	Select a freight component for shipping charges. The selected freight component is used to integrate the header level shipping amount per order in Shopify to SAP Business One.
Tax Posting in SAP Business One using	From the dropdown list, select either *Freight* or *Tax Code Determination*. ○ *Freight* – Whenever a Shopify Order is integrated to SAP Business One, the Shopify Order tax amount is posted to the default freight mapped in the *Default Freight for Item Tax* setting. ○ *Tax Code Determination* – Whenever a Shopify Order is integrated into SAP Business One, the Tax code is automatically set in SAP Business One based on the Tax code determination. The Hub application will not post the Shopify Order Tax amount in SAP Business One, The transaction tax amount is automatically calculated in SAP Business One based on the applied tax Code, Note You must complete the Tax code determination in SAP Business One based on your requirement and ensure the tax code applied in a transaction by both application i.e. Shopify and SAP Business One should be same. otherwise, it may lead to document total inconsistency.
Default Freight for Item Tax	Select a freight component for the tax component. The selected freight component is used to integrate the item level tax amount per order in Shopify to SAP Business One. Note The value in this field is needed if the *Tax Posting in SAP Business One* setting is having value as *Freight.*
Default Payment Term for Shopify Orders	Select a payment term from the list of payment terms in SAP Business One. The selected payment term is the default payment term for all orders of Shopify integrated in SAP Business One.
Default Custom Item for Shopify Orders	Select an Item from the list of items. The selected item is used as the default custom item while integrating orders with custom items from Shopify to SAP Business One.

	Note Only non-inventory item will appear in the choose from the list.
Tax Inclusive Item Prices	Select *Yes* or *No* from the dropdown list depending on your settings in Shopify.
COD Payment Method	Enter the cash on delivery method name as specified in Shopify.
Cash Account	Choose an account from the list of accounts. The selected account is used for posting cash transactions in SAP Business One.
Exempt Tax Code	Select a tax code from the list of tax codes. The selected tax code is used in all orders integrated from Shopify to SAP Business One. The selected tax code must be of zero rate.
Create Customer in SAP Business One	From the dropdown list, select either *Always* or *On First Order*. ○ *Always* - Whenever a customer is created in Shopify, the customer is also created in SAP. ○ *On First Order* – When the first order is placed by the customer, the customer is created in SAP.
Create Items in SAP Business One using	From the dropdown list, select either *Shopify SKU* or *Shopify Product Id*. ○ *Shopify SKU* – When a product is downloaded from Shopify and created in SAP Business One. It will be created using the Shopify SKU code as *Item No*. Note You must ensure that the SKU is defined for all products in Shopify and that there is no duplication of SKU. ○ *Shopify Product ID* – When a product is downloaded from Shopify and created in SAP Business One. It will be created using the Shopify Product ID as *Item No*. Caution This setting is irreversible. You cannot change it after initialization.
Default Customer Values on Adding Customer Data from Shopify	
Default Customer Group	Select a customer group from the list of customer groups. The selected customer group is used as the default customer group while integrating customer master data from Shopify to SAP Business One.
Default Customer Currency	Select a currency from the list of currencies. The selected currency is used while integrating the customers from Shopify to SAP Business One.
Create Customer in SAP Business One using	Select the option either the custom numbering series or the Shopify Customer ID that will be used

	while adding the customer data from Shopify to SAP Business One. ○ If the *Shopify Customer ID* is selected, the Shopify Customer ID will be used to create the customer in both the Card Code in SAP Business One. ○ If a numbering series for the Customer is selected in this field, the Card Code will be auto-generated by *SAP Business One.*
Branch Assignment for Customer	Select the branch that will be used while adding/updating customer data from Shopify to SAP Business One. Choose the button of the Branch Assignment for the Customer field. In the Branch Assignment for Customer window, in the Active column, select the required branches. Note This field is relevant for the multi-branch function.
Default Item Values on Adding Item Data from Shopify	
Default Item Group	Select an item group from the list of values. The selected item group is used as the default item group while integrating customers from Shopify to SAP Business One.

7.2.1.2 Payment Mapping

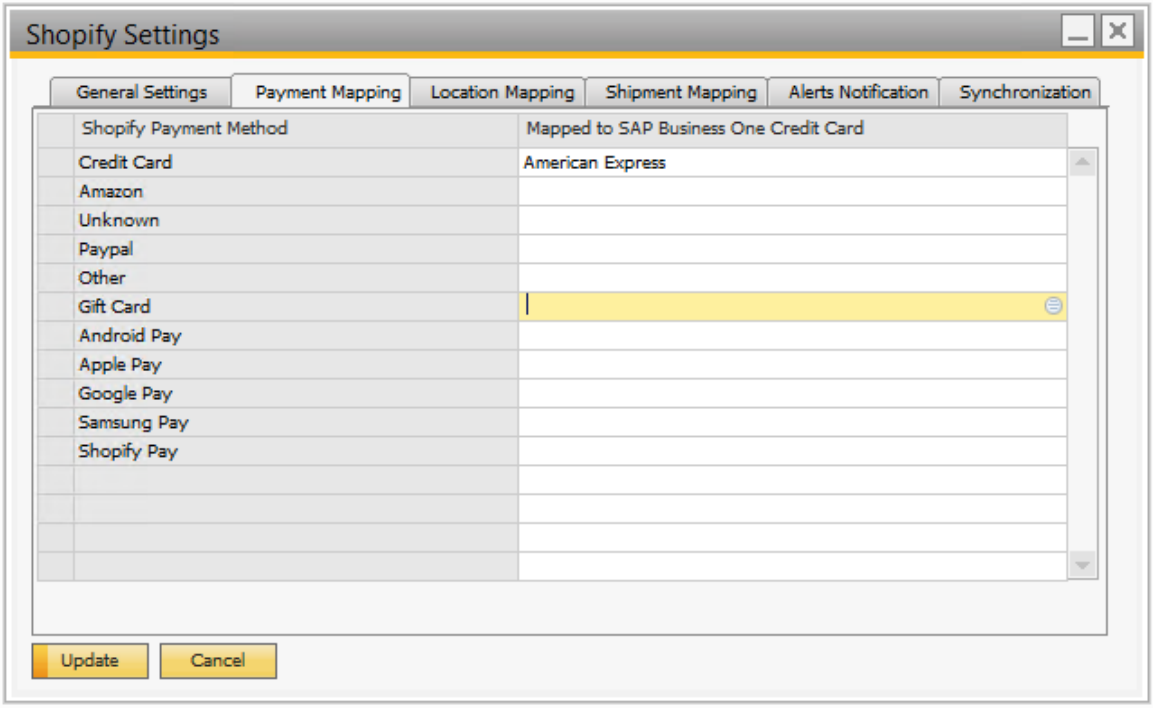
You can map Shopify payment methods on the *Payment Mapping* tab in the *Shopify* window in SAP Business One.

When a customer checks out in Shopify, multiple choices for order payments are available. Payment can be made using any of the methods enabled in the payment provider's area of Shopify. There are several ways for customers to pay online in addition to credit cards, including PayPal, Amazon Pay, and Apple Pay.

Payment methods other than cash or cash on delivery (COD) are mapped with credit cards in SAP Business One. This mapped information is used to post the payment transaction against the order in SAP Business One.

A gift card can also be used as an alternative payment method. Each gift card has a unique code that needs to be entered during checkout. The balance of the gift card can be redeemed over multiple checkouts. The gift card is mapped with the credit card in SAP Business One.

The Shopify cash on delivery (COD) payment method is handled differently in SAP Business One than the other Shopify payment methods. The user needs to specify the COD payment method in the *General Settings* window. When a payment transaction of COD payment type is integrated from Shopify to SAP Business One, the system generates the incoming payment with reference to the A/R reserve invoice and displays the order number in the *Reference* fields available in the *Incoming Payment* window.



The *Payment Mapping* tab in the *Shopify* window contains the following fields:

Field Name	Description
Shopify Payment Method	Displays the list of payment methods available in Shopify.
Mapped to SAP Business One Credit Card	Select the credit card from the list of credit cards. The Shopify payment method is mapped to SAP Business One credit card; it is used to post the payment transaction in SAP Business One.

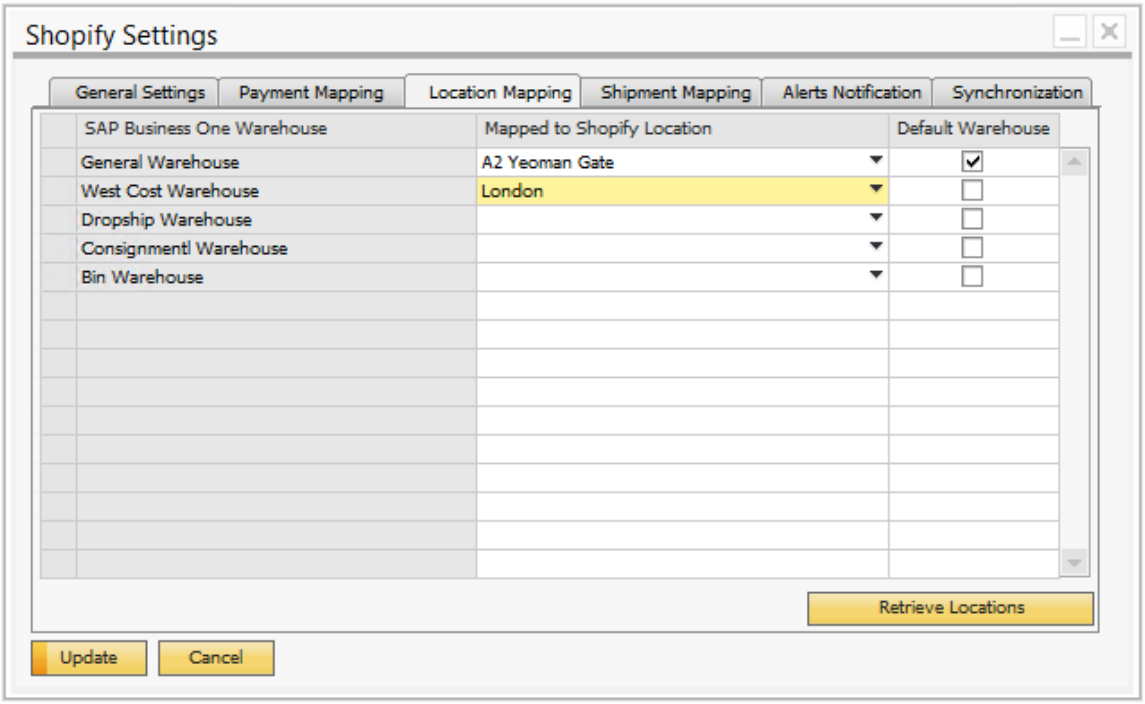
7.2.1.3 Location Mapping

Location mapping information is used to integrate inventory data from SAP Business One to Shopify.

A Shopify store can have multiple locations where inventory can be tracked and orders can be fulfilled. A Shopify location can be a retail store, warehouse, or any place to manage inventory. It is a physical place or an application where you can sell products, manage inventory, and fulfill orders.

Users need to map SAP Business One warehouses to the locations defined in Shopify. One warehouse is connected to one Shopify location. For example, if four locations are defined in Shopify (for instance, New York, Texas, California, and Florida), then these four locations need to be mapped with the warehouses in SAP Business One (for instance, warehouse 01, 02, 03, and 04). You can, for example, map warehouse 01 of SAP Business One with the New York location of Shopify, warehouse 02 with Texas, warehouse 03 with California, and warehouse 04 with Florida.

You can map Shopify store locations to SAP Business One warehouses on the *Location Mapping* tab in the *Shopify* window in SAP Business One.



The *Location Mapping* tab in the *Shopify* window contains the following fields:

Field Name	Description
SAP Warehouse	Displays the list of SAP Business One warehouses.
Mapped to Shopify Location	Select the Shopify location to be mapped to the SAP Business One warehouse. The location mapped is used for updating the inventory details in Shopify from SAP Business One.
Default Warehouse	Select one SAP Business One warehouse as the default for any one Shopify location.
Retrieve Locations	Choose the *Retrieve Locations* button to pull the locations from Shopify.

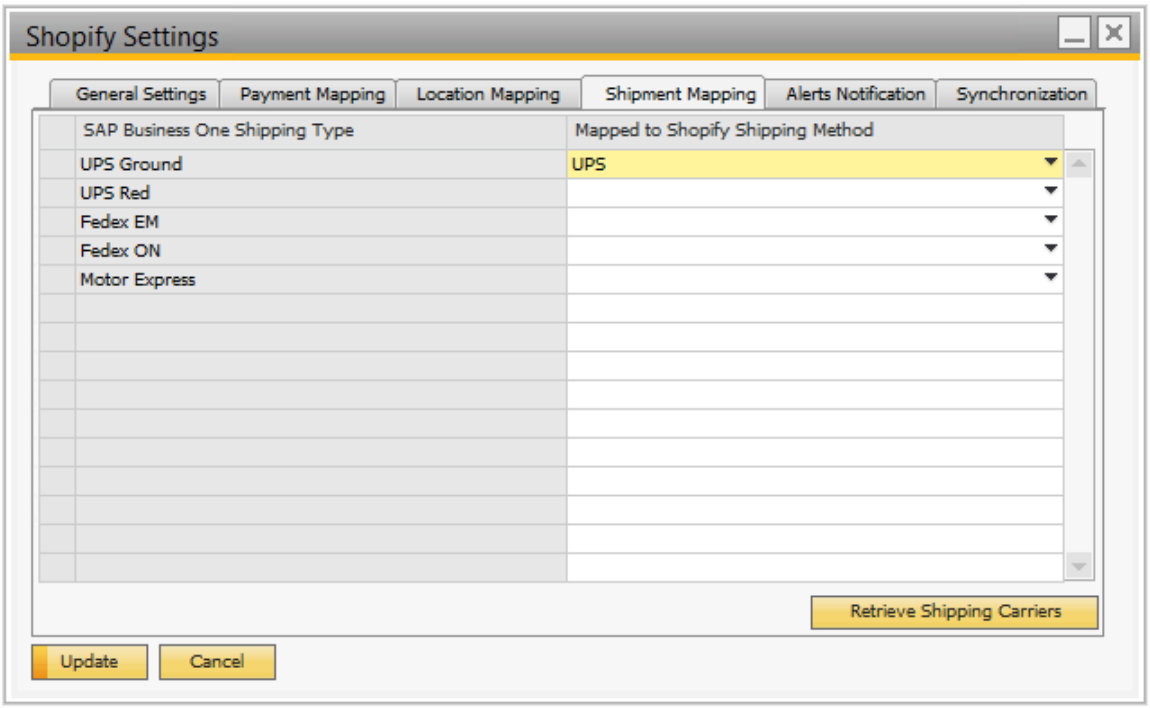
Note

- A Shopify location can have only one SAP Business One warehouse set as the default. One Shopify location cannot be mapped to multiple SAP Business One warehouses.
- When a web order integrates from Shopify to SAP Business One, the application uses the default warehouse at the sales order line level.
- If the multi-branch function is enabled in SAP Business One, the application uses the mapped warehouse branch at the document header and line-level while integrating the document from Shopify to SAP Business One.

7.2.1.4 Shipment Mapping

The shipping methods which are available in Shopify need to be mapped with the shipping types in SAP Business One. Shipment mapping is used to integrate the shipping method in transactions.

You can map Shopify shipping methods on the *Shipment Mapping* tab in the *Shopify* window in SAP Business One.

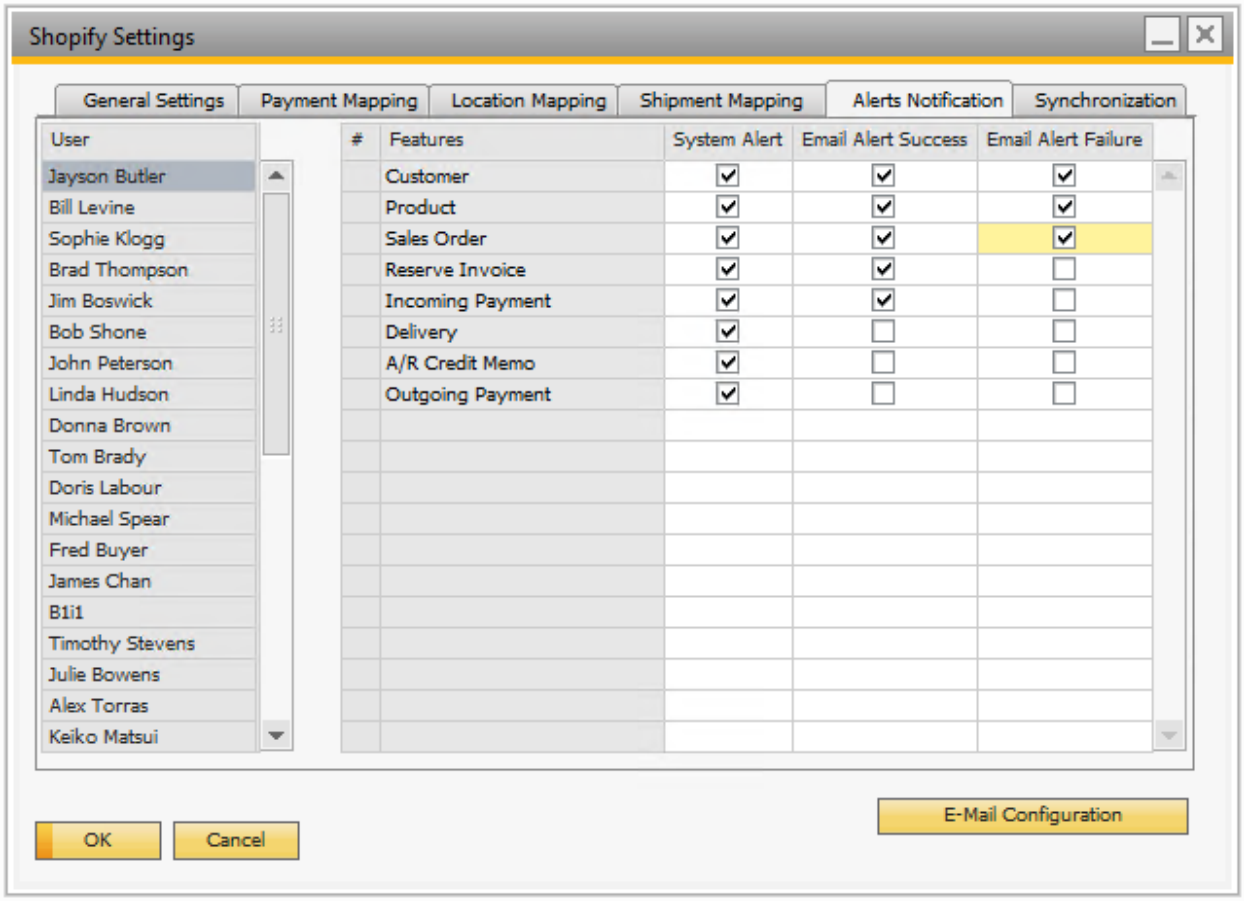


The Shipment Mapping tab in the Shopify window contains the following fields:

Field Name	Description
SAP Business One Shipping Types	Displays the list of shipping types in SAP Business One.
Mapped to Shopify Shipping Method	Manually enter the shipment method details supported by Shopify. The shipping method mapped is used for updating the tracking and shipment details in Shopify and SAP Business One.
Refresh	The *Refresh* button will pull the shipping type from Shopify.

7.2.1.5 Alerts Notification

Configure the alert settings on the *Alerts Notification* tab in the *Shopify* window in SAP Business One.



The *Alerts Notification* tab in the *Shopify* window contains the following fields:

Field Name	Description
User	Displays the list of users in SAP Business One. Choose a user for whom to set up the alert notification authorizations. This field is read only.
Features	Displays the list of Integration Hub features for Shopify. This field is read only. The alert can be set for customer, products, sales order, reserve invoice, incoming payment, delivery, return, A/R credit memo, and outgoing payment.
System Alert	Select this checkbox to send notifications as a system alert.
Email Alert Success	Select the checkbox to send email notifications for successful transactions.
Email Alert Failure	Select the checkbox to send email notifications for failed transactions.

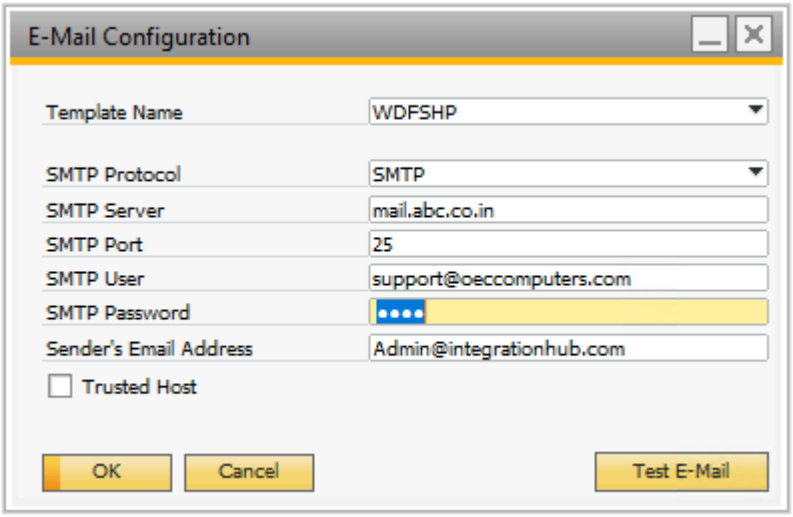
Note

In case of an email for failed transactions, the user will receive the failed XML payload as an attachment.

Email Configuration

Click the *Email Configuration* button to set up the SMTP details for email alert notifications.

Alternatively, to display the *Email Configuration* window, choose *Administration → Integration Hub → E-Mail Configuration*.



The *Email Configuration* window contains the following fields:

Field Name	Description
Template Name	Display the active Shopify template.
SMTP Protocol	Choose the communication protocol SMTP/SMTPS/TLS.
SMTP Server	Specify the address of the outgoing mail server.
SMTP Port	Specify the port for the outgoing mail server.
SMTP User	Specify the user's name for the outgoing mail server.
SMTP Password	Specify the password for the outgoing mail server.
Sender's Email Address	Specify the email address of the sender.
Trusted Host	Select the checkbox to add the name of the e-mail server to the list of trusted hosts.
Test E-Mail	Click the button to test the connection. The email notification will be sent to the logged-in user in SAP Business One. Note Ensure that the Login User's email ID is correctly specified in the User Setup.

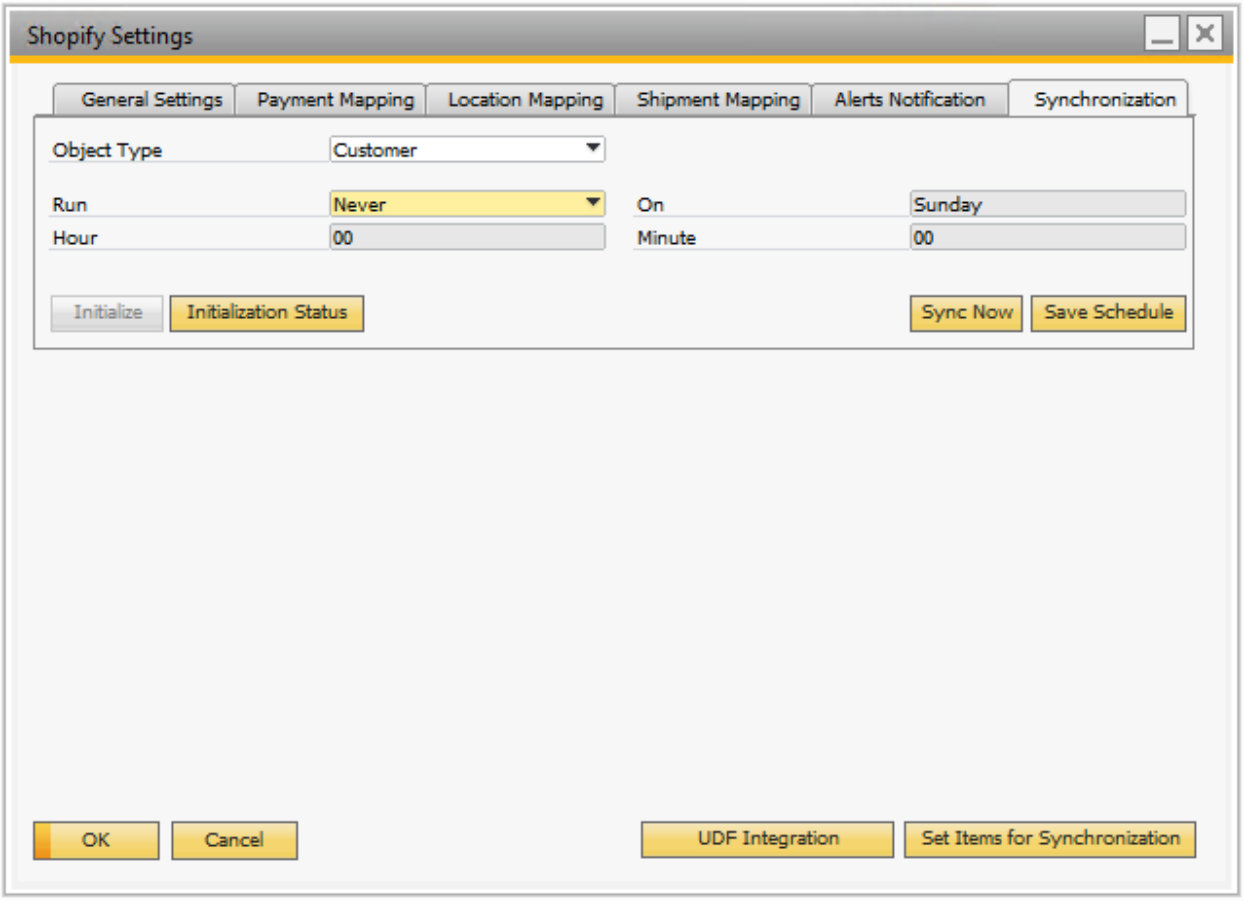
7.2.1.6 Initialization Process

Once the Shopify feature is enabled in SAP Business One, you need to initialize the integration of the objects between SAP Business One and Shopify. The objects include customers, products, and inventory.

> **Note**
>
> Ensure that the weight UOM code in SAP Business One is the same as that in Shopify.

> **Note**
>
> If product or customer data already exists in both the application before initialization, then you need to map their internal codes in SAP Business One. Use the Master Data Mapping Tool to map the Shopify customer or the Product's internal codes.

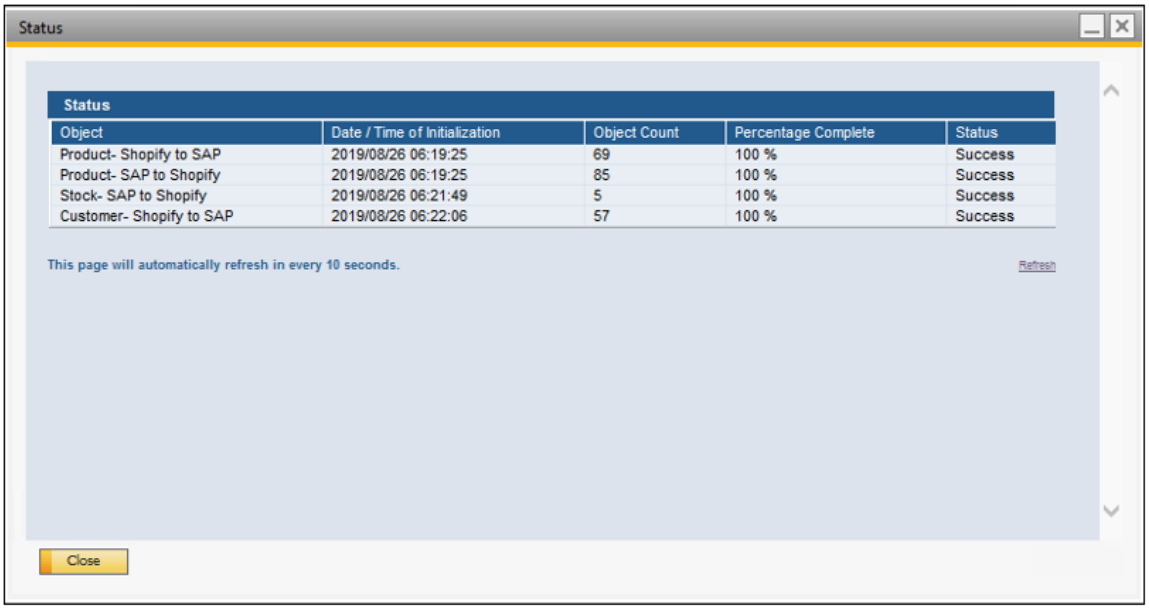
To initialize customer, product, and inventory objects, choose *Administration* → *Integration Hub* → *Shopify Settings* → *Synchronization* tab, and choose the *Initialize* button.



The *Synchronization* tab in the *Shopify* window contains the following fields:

Field Name	Description
Object Type	Displays the list of objects available for synchronization between SAP Business One and Shopify. The objects are as follows: • Customer • Product • Order • Inventory
Run	Select the frequency of the automation run from the dropdown list (*Daily*, *Weekly*, or *Never*).
On	Select the weekday on which you want to run the synchronization. **Note** The selection is available only for a weekly type run.
Hour	Choose the hour frequency at which you want the synchronization to run.
Minute	Choose the minute frequency at which you want the synchronization to run.
Initialize	Choose the *Initialize* button to synchronize the object data between SAP Business One and Shopify. **Note** The *Initialize* button is active until chosen for the first time. Once the initialization is performed, the *Initialize* button is disabled.
Set Items for Synchronization	Choose this button to mark bulk items for synchronization from SAP business One to Shopify.

Choose the *Initialization Status* button to view the initialization status of the data replication between Shopify and SAP Business One.



Note

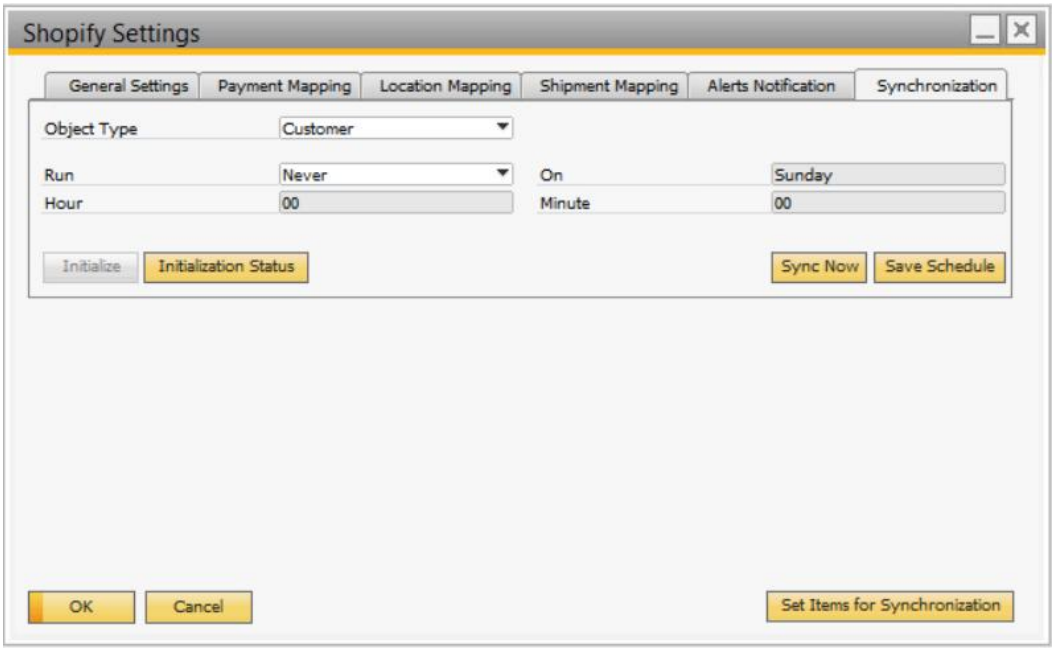
The *Initialize* button is active until the initialization is performed for the first time. Once the initialization is done, close the Shopify Settings window and reopen it. The *Initialize* button is disabled, and the Sync Now and Save Schedule button is enabled. All products created after the initialization will be integrated between both systems based on the scheduled synchronization or manual synchronization

7.2.1.7 Synchronization

The following two methods are available for synchronizing data between SAP Business One and Shopify:

- **Manual Synchronization:**
  If you want integrations to be performed immediately (instead of waiting for the SCHEDULER services run), choose the *Sync Now* button to immediately synchronize data for the selected object.

- **Automatic Synchronization:**
  You can configure automatic integrations between SAP Business One and Shopify at a specified frequency (daily or weekly) and on specific intervals. The synchronization runs based on the schedule set for the object.



Synchronization is supported for the following four objects: customer, product, order, and inventory.

- **Customer Synchronization**
  You can integrate all customer master data from Shopify to SAP Business One. Scheduling synchronization enables the system to integrate customer master data automatically according to the schedule by running the Scheduler services.

- **Product Synchronization**
  You can integrate all item master data between SAP Business One and Shopify. Scheduling synchronization enables the system to integrate item master data automatically according to the schedule by running the Scheduler services.

  - **Set Bulk Items for Synchronization**

When synchronizing items from SAP Business One to Shopify, you can select items in bulk using the *Set Items for Synchronization* menu in the Integration Hub.

1. Choose *Administration → Integration Hub → Set Items for Synchronization*.
2. In the *Set Items for Synchronization - Selection Criteria* window, select the item range and item groups range and choose the *Ok* button.
3. In the *Set Items for Synchronization* window, select the checkbox for the item codes and item name to synchronize.
4. Choose the *Update* button to mark the items for synchronization from SAP to Shopify.

- **Order Synchronization**
  You can integrate all orders from Shopify to SAP Business One. Scheduling synchronization enables the system to integrate sales orders automatically according to the schedule by running the Scheduler services.

- **Inventory Synchronization**
  You can integrate products inventory from SAP Business One to Shopify. Scheduling synchronization enables the system to integrate product inventories automatically according to the schedule by running the Scheduler services.

 Caution

Customers must set the synchronization time settings on redeployment of the Application.

 Note

If any master data or transaction failed in the message log due to some missing configurations or values in Shopify. In this case, you must perform the synchronization again to import the data, as retrying the failed message will not work due to the missing information in the existing payload.

7.2.2 Master Data Mapping Tool

This tool allows the user to map the existing customer and product data in Shopify and SAP Business One. This is needed in case the same product or customer master already exists in both the applications, and you would like to map their internal code to prevent data duplicity between the applications.

To display the *Master Data Mapping Tool* window, choose *Administration → Integration Hub → Master Data Mapping Tool.*

Use the following steps to import the mapping data using the master data mapping tool:

1. Select a template from the *Template* dropdown list.
2. Select the customer or product from the *Master Data Type* dropdown list.
3. Choose the *Download from App* button to download the data from Shopify.
4. To check the data download status, choose the *Status* button.
5. Once the data download is complete, choose the *Prepare Template* button to generate the Microsoft Excel-based template for the selected master, i.e., Customer or Product. The application downloads the data from Shopify.

Note

Only Active customers will be downloaded from Shopify.

6. Open the template and provide the relevant information:
   - For the Customer template, you need to provide the *SAP B1 Card Code (*Customer Code*)*
   - For the Product template, you need to provide the *SAP B1 Item Code*
7. Choose the *Browse* button to navigate to the template path.
8. Choose the *Validate* button to check the correctness and completeness of the data in the selected template.
9. Choose the *Upload* button to import the data.

7.2.3 UDF Integration

The Shopify connector supports the integration of User Defined Fields (UDFs) between the Shopify and SAP Business One applications. This functionality allows users to map the existing User Defined Fields (UDFs) in Shopify and SAP Business One. This is particularly useful when the UDFs with the same length, datatype, and structure exist in both applications and can be mapped for seamless integration. By leveraging this feature, businesses can ensure that custom data fields are synchronized between Shopify and SAP Business One.

The Shopify connector supports the integration of User Defined Fields (UDFs) on the following Objects:

1. Customer
2. Products
3. Variants
4. Sales Order

To perform the UDF Integration, follow these steps:

1. Open the UDF Integration window by navigating to *Administration → Integration Hub → UDF Integration*.
2. The *UDF Integration-Selection Criteria* window will appear.
3. The active template for the Shopify connector will automatically be displayed in the Template Name field.
4. Select the specific object you want to map UDFs for in the *Object Type* field.
5. Click *OK* to open the UDF Integration Mapping screen.
6. Click the *Retrieve Custom Fields* button to fetch the list of Shopify custom fields.
7. In the left column titled *SAP User Defined Fields (UDF)*, select the SAP UDFs. In the *Mapped to Shopify Custom Fields* column, select the corresponding Shopify custom fields.
8. In the *Data Type* column, choose the data type for the Shopify custom fields.
9. Click the *Add/Update* button to save the data.

The following Shopify data types for custom fields are supported for the UDF integration with SAP Business One:

Shopify Data Type	SAP B1 UDF Type
Single line Text	Alphanumeric
Integer	Numeric
Single line Text	Rate, Amount, Price, Quantity, Percents, Measure
boolean	Checkbox

Note

1. If there is no data in the Shopify custom fields for a master record or transaction, the corresponding custom field information will not be included in the Shopify payload except Product master. As a result, it will be ignored during UDF integration. This occurs because the Shopify API does not retrieve data for empty custom fields. For the Product Master, the UDF information will be synchronized regardless of whether the corresponding Shopify custom field already contains a value.

To ensure successful data integration, consider the following approaches:

- Integration from SAP Business One to Shopify: Enter default or dummy data into the Shopify custom field to ensure it is retrieved in the Shopify payload and overwritten with information synced from SAP.
- Integration from Shopify to SAP Business One: Ensure that the correct information is entered into the custom fields in Shopify before initiating the sync.

2. The user needs to ensure that they have mapped the correct UDFs with the same data type, length, and structure between the applications.

3. Later on, if you do not want to integrate UDF information between the applications, you may delete the relevant row from the *UDF Integration Mapping* screen. Once the row is deleted, the UDF information will no longer be integrated during the initialization and synchronization process.

Caution

The SAP Business One UDFs with "Linked to Entities" Validation will not appear in the column *SAP User Defined Fields (UDF)*.

7.3 Using Shopify

7.3.1 Customer Master Data

The customer master data integration is unidirectional (in other words, from Shopify to SAP Business One). Customer information, like *Billing* and *Shipping addresses* and other details, is integrated from Shopify to SAP Business One.

When the customer data is integrated from Shopify to SAP Business One, if the *Shopify Customer ID* option is selected in the *Create Customer in SAP Business One Using* field under Shopify General Settings, the Shopify Customer ID will be used to update both the Card Code and Cross Reference Code in SAP Business One. However, if a numbering series for the customer is selected in the same field, the Card Code will be auto-generated by *SAP Business One. O*n adding customer information from Shopify to SAP Business One, the application uses the default customer group and currency configured in the *General Settings of Shopify*.

The following actions are supported for customer master data:

- *Add Customer -* Add new customer information. The customer master addition is unidirectional (in other words, from Shopify to SAP Business One).
- *Update Customers* - Edit existing customer information. The customer master update is unidirectional (in other words, from Shopify to SAP Business One).

  Note

  Customers with an *Account Status* set as *enabled* will be integrated into SAP Business One.

  Caution

  Customers deleted from Shopify will not be integrated into SAP Business One.

To display the customer data that is synchronized from Shopify to SAP Business One, in the SAP Business One *Main Menu*, choose Business *Partners* → *Business Partner Master Data* → *Integration Hub.*

The following fields have been added to the window and are relevant to the Integration Hub. For details of other fields in the *Customer Master Data* window, refer to the SAP Business One online help.

Field Name	Description
Template Name	Displays the name of the Shopify template.
Cross Reference Code	Displays the Shopify customer ID.

7.3.2 Products Master Data

The Integration Hub supports the integration of existing product data as well as new product data between both applications. In other words, product synchronization between SAP Business One and Shopify is bidirectional.

All products added to Shopify or updated in Shopify are synchronized in SAP Business One with the default item group configured in the Shopify *General Settings*.

Shopify products for which the *Track Quantity* is not selected are marked as non-inventory items in SAP Business One.

The *Item Code* in SAP Business One is mapped with the Stock Keeping Unit (SKU) in Shopify for integration.

To synchronize products from SAP Business One to Shopify, in the SAP Business One *Main Menu*, choose *Inventory* → *Item Master Data*. On the *Integration Hub* tab, choose the *Sync* button.

The following fields have been added to the *Item Master Data* window and are relevant to the Integration Hub. For details of other fields on the *Item Master Data* window, refer to the SAP Business One online help.

Field Name	Description
Template Name	Displays the name of the Shopify template.
Cross Reference Code	Displays the Shopify product ID for normal products or the variant product ID for variant products.
Sync	Select this checkbox to synchronize the product information from SAP Business One to Shopify.

Caution

You cannot delete products from Shopify and SAP Business One. If a deleted product is used in a transaction, then data inconsistency will occur.

Managing items by Batches/ Serial Number are not supported for synchronization.

7.3.2.1 Normal Products

The integration of normal products is bidirectional between Shopify and SAP Business One. Products other than variant products or gift certificates are integrated as normal products.

7.3.2.2 Variant Products

The integration of variant products is unidirectional (in other words, from Shopify to SAP Business One). Variants can be added to a product that comes in more than one option, such as size or color. Each combination of options for a product is a variant of that product.

For example, a user sells t-shirts with two options: size and color. The size option has three values: small, medium, and large. The color option has two values: blue and green. One specific variant from these options is a small blue t-shirt.

Each variant is integrated as a separate item in SAP Business One.

7.3.2.3 Gift Card

A gift card can also be sold to a customer via Shopify (in other words, a customer can purchase a gift card like a regular item). The customer is emailed a gift voucher that can be given to someone or redeemed next time while making a payment.

A gift card is integrated as a sales item in SAP Business One. If the gift card in Shopify is set to have *Track Quantity,* then the gift card is marked as an inventory item in SAP Business One.

> **Note**
>
> The integration of gift cards is unidirectional (in other words, from Shopify to SAP Business One).

7.3.2.4 Product Prices

The price integration between SAP Business One and Shopify is bidirectional. The application uses the default price list defined in the *General Settings* for Shopify to integrate the prices from SAP Business One to Shopify.

To open the Shopify *General Settings*, in the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Shopify Settings* → *General Settings* tab.

The price list selected in the *Default Price List for Items Prices Integration* field is the integrated price list from SAP Business One to Shopify.

7.3.2.5 Product Inventory

The inventory integration is unidirectional (in other words, from SAP Business One to Shopify). The inventory status is updated from SAP Business One to Shopify.

From SAP Business One, inventory data is integrated from the warehouse that is mapped with the Shopify location. To map the SAP Business One warehouse to a Shopify location, choose *Administration* → *Integration Hub* → *Shopify Settings* → *Location Mapping.*

The inventory can be synchronized from the *Synchronization* tab of the *Shopify* window. To synchronize inventory, choose *Administration* → *Integration Hub* → *Shopify Settings* → *Synchronization.*

There are two ways to synchronize inventory:

- Manual Synchronization of Inventory:
  Whenever required, choose the *Sync Now* button to synchronize the inventory from SAP Business One to Shopify.
- Automatic Synchronization of Inventory:
  Select the parameters for *Object Type*, *Run, On, Hour,* and *Minutes* to schedule synchronization, and then choose the *Save Schedule* button to schedule inventory synchronization at the predefined day and time.

Field Name	Description
Object Type	Select the *Stock* from the dropdown list.
Run	Specify if you want to run the synchronization daily or weekly.
On	If you chose the *Weekly* option, select the day of the week.
Hour	Select the hour at which you want the synchronization to run.
Minutes	Select the minutes on which you want the synchronization to run.
Sync Now	Choose this button to start the synchronization immediately.
Save Schedule	Choose this button to implement the selected schedule for the synchronization.

7.4 Shopify Transactions

The following Shopify transactions are supported:

- Sales Order
- Payment
- Order Cancellation
- Fulfillment
- Refund

7.4.1 Windows Enhancements in SAP Business One

New fields that are relevant to the Integration Hub have been added to different document windows in SAP Business One. The fields provide additional information regarding the Shopify integration transactions.

7.4.1.1 Sales Order

New fields in the *Sales Order* document window:

Field Name	Description
Template Name	Name of the Shopify template.
External Order ID	Order ID generated from Shopify
Discount Code	Displays the discount code applied to the Shopify order
Source Name	Displays the source name of the Shopify order **Note** Values for Shopify channels are protected and cannot be assigned by other API clients: web, pos, shopify_draft_order, iphone, and android.

7.4.1.2 Delivery

New fields in the *A/R Delivery* document window:

Field Name	Description
Template Name	Name of the Shopify template.
External Order ID	Order ID generated from Shopify
External Delivery ID	Delivery ID generated from Shopify

7.4.1.3 A/R Reserve Invoice

New fields in the *A/R Reserve Invoice* document window:

Field Name	Description
Template Name	Name of the Shopify template.
External Order ID	Order ID generated from Shopify
Discount Code	Displays the discount code applied to the Shopify order
Source Name	Displays the source name of the Shopify order

7.4.1.4 A/R Credit Memo

New fields in the A/R Credit Memo document window.

Field Name	Description
Template Name	Name of the Shopify template.
External Order ID	Order ID generated from Shopify
Discount Code	Displays the discount code applied on Shopify order
Source Name	Displays the source name of the Shopify order

7.4.2 Orders with Payment

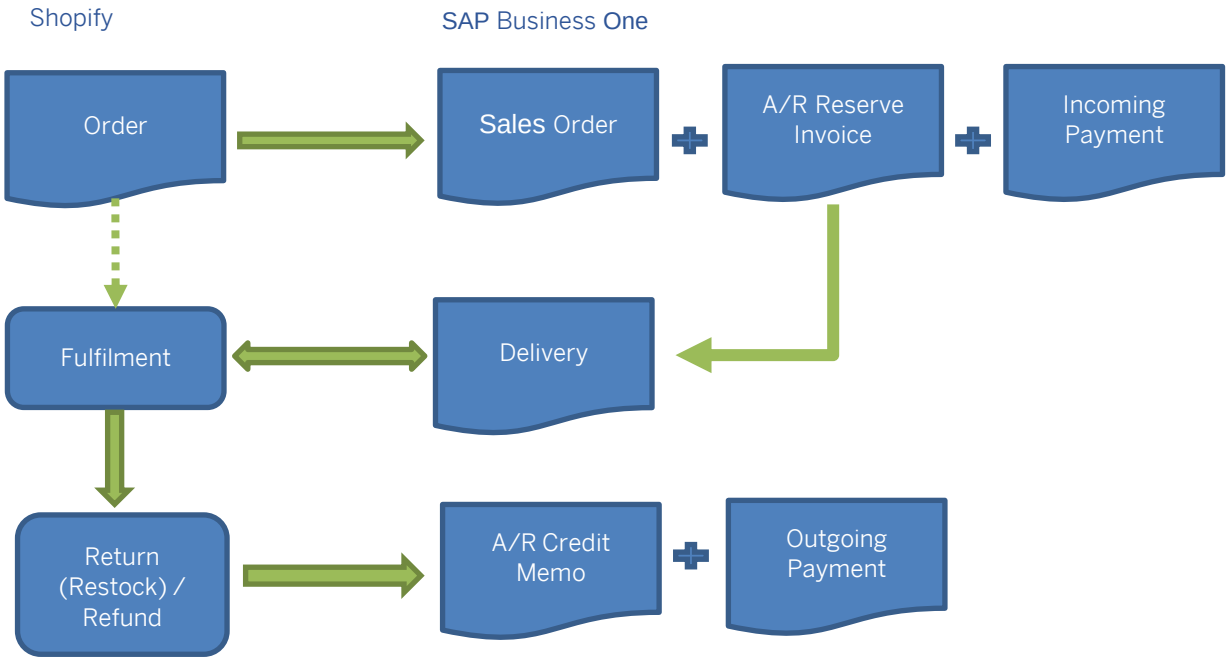
The Information related to orders created in Shopify is synchronized to SAP Business One. The payment for the order can be made

- At the time of booking the order
- Cash On Delivery.

The Application handles these scenarios differently as per payment/order types. For instance, all Shopify orders for which payment is made at the time of placing the order are handled in SAP Business One by posting a *Sales Order*, corresponding *A/R Reserve Invoice,* and *Incoming Payment* for that *A/R Reserve Invoice*.

The following illustration shows the data flow between Shopify and SAP Business One for Orders with Payment:

Order with Payments



Shopify also supports guest users to place orders online. When a guest user places an order in Shopify, the same is synchronized to SAP Business One with a default customer, which is mapped in the *General Settings* of Shopify.

For all Shopify orders, the payment terms in SAP Business One is the default payment terms, which are set in the *General Settings* of Shopify in SAP Business One

Note

Shopify has the flexibility to have the item prices as gross prices, including taxes. If tax-inclusive pricing is enabled in Shopify, then the user must enable the *Tax Inclusive Item Prices* as *Yes* in the *General Settings* of Shopify in SAP Business One.

The following is the list of combinations of documents in the overall transaction flow in Shopify and their corresponding integration documents in SAP Business One.

7.4.3 Document Combinations

The following is the list of combinations of documents in the overall transaction flow in Shopify and their corresponding integration documents in SAP Business One

7.4.3.1 Order with Payment and Fulfillment

1. On Shopify, log in as a Customer and select the mode of payment Pay with Credit Card.
2. An order in Shopify is synchronized as a sales order in SAP Business One and generates an A/R Reserve Invoice with an Incoming Payment against the A/R Reserve Invoice.

The order can be fulfilled either from Shopify by the administrator of the Shopify site or from SAP Business One.

- Order Fulfillment from Shopify
    1. Log in to Shopify as an administrator, open the order, and click on the *Mark as Fulfilled* button. A fulfillment window opens.
    2. On the fulfillment window, update quantities, provide tracking information, and click on the *Fulfill Items* button to complete the fulfillment of the order.
    3. On the order fulfillment, a Delivery Document against the A/R Reserve Invoice is generated in SAP Business One. The quantity for delivery of the order can be either the total quantity or a partial quantity.
    4. *Delivery Document* against A/R Reserve Invoice is generated in SAP Business One.

- Order Fulfillment from SAP Business One
    1. Once an order is created in Shopify, the information of the order can be viewed in SAP Business One.
    2. The replication information between Shopify and SAP Business One can be checked by observing the alert message for Sales Order, A/R Reserve Invoice, and Incoming Payment.
       The *Sales Order* information is reflected at the location *Main Menu → Sales A/R → Sales Order.*
       The *A/R Reserve Invoice* is reflected at location *Main Menu → Sales A/R → A/R Reserve Invoice.*
       The *Incoming Payment* reflects at the location *Main Menu → Banking → Incoming Payments → Incoming Payments*.
    3. On the A/R Reserve Invoice, copy the *A/R Reserve Invoice* to *Delivery*. In the Delivery, click on the *Add* button; this will fulfill the order. The order is marked as *Fulfilled* in Shopify.

7.4.3.2 Order Cancellation after Payment

1. On Shopify, log in as a Customer and select the mode of payment Pay with Credit Card.

2. The order from Shopify is synchronized as a Sales Order in SAP Business One and generates an A/R Reserve Invoice with an Incoming Payment against the A/R Reserve Invoice.
3. The Sales Order is canceled in Shopify.
4. *An A/R Credit Memo* is generated against the A/R Reserve Invoice in SAP Business One.
5. *Outgoing Payment* against *A/R Credit Memo* is generated in SAP Business One.

7.4.3.3 Refund for Fulfilled Order

1. On Shopify, log in as a Customer and select the mode of payment *Pay with Credit Card*.
2. An order in Shopify is synchronized as a *Sales order* in SAP Business One and generates an *A/R Reserve Invoice* with an *Incoming Payment* against the *A/R Reserve Invoice*.
3. The order fulfillment is made from either Shopify or SAP Business One.
4. The *Delivery Document* against the A/R Reserve Invoice is generated in SAP Business One.
5. Refund can only be initiated from Shopify:
    a. On Refund initiation (with Restock Checkbox checked), *Standalone A/R Credit Memo* with stock information is generated in SAP Business One, and *Outgoing Payment* against *A/R Credit Memo* is generated in SAP Business One
    b. On Refund initiation (without Restock Checkbox checked), *Standalone A/R Credit Memo* without stock information is generated in SAP Business One, and *Outgoing Payment* against *A/R Credit Memo* is generated in SAP Business One

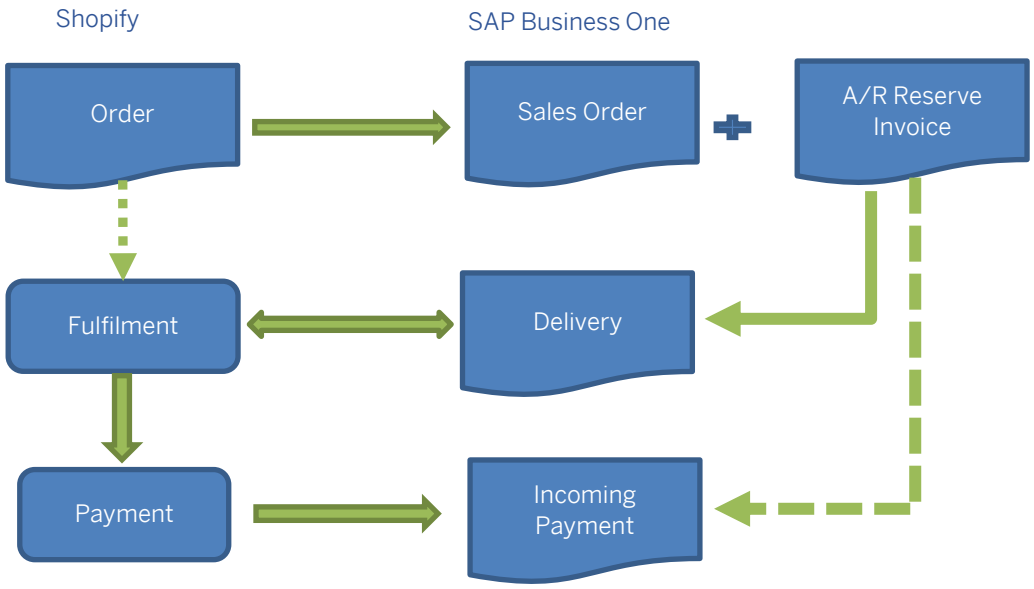
7.4.3.4 Partial Refund for Fulfilled Order

1. On Shopify, log in as a Customer and select the mode of payment *Pay with Credit Card*.
2. An order in Shopify is synchronized as a Sales Order in SAP Business One and generates an *A/R Reserve Invoice* with an *Incoming Payment* against the *A/R Reserve Invoice*.
3. The order fulfillment is made from either Shopify or SAP Business One.
4. The *Delivery Document* against the *A/R Reserve Invoice* is generated in SAP Business One.
5. On Refund initiation (with Restock Checkbox checked), a *Standalone A/R Credit Memo* with stock information of partial quantity is generated in SAP Business One, and an *Outgoing Payment* against an *A/R Credit Memo* is generated in SAP Business One

7.4.4 Orders with Cash on Delivery

For Cash on Delivery orders in SAP Business One, a Sales Order Corresponding *A/R Reserve Invoice* is posted. Later, when the customer makes the cash payment, an *incoming payment* is posted with reference to the *A/R Reserve Invoice.*

The following illustration shows the data flow between Shopify and SAP Business One based on Orders with Cash on Delivery:



The following are the scenarios for Cash on Delivery Orders:

7.4.4.1 Order with Cash On Delivery Payment with fulfillment in SAP Business One

1. On Shopify, log in as a Customer and select the mode of payment *Cash On Delivery*.
2. An order in Shopify is synchronized as a *Sales Order* in SAP Business One and generates an *A/R Reserve Invoice.*
3. In the *A/R Reserve Invoice*, copy the *A/R Reserve Invoice* to *Delivery*. On Delivery, click on the *Add* button; this will fulfill the order.
   The order is marked as *Fulfilled* in the Fulfillment column and as *Pending* in the Payment column in Shopify.
4. Open the Order in Shopify and click on **the** *Mark as Paid* button upon receiving payment at the time of delivery.
5. An *Incoming Payments* document is generated against the A/R Reserve Invoice.

7.4.4.2 Order with Cash On Delivery Payment with fulfillment in Shopify

1. On Shopify, log in as a Customer and select the mode of payment Cash On Delivery.
2. An order in Shopify is synchronized as a Sales Order in SAP Business One and generates an A/R Reserve Invoice.
3. The order is marked as *Unfulfilled* in the Fulfillment column and as *Pending* in the Payment column in Shopify.
4. Open the order in Shopify and click on **the** *Mark as Fulfilled* button. This will create a *Delivery document* in SAP Business One against the *A/R Reserve Invoice*.
5. Open the order in Shopify, click on *the Mark as Paid* button upon receiving payment at the time of delivery.
6. An Incoming Payments document is generated against the A/R Reserve Invoice in SAP Business One.

7.4.4.3 Order Cancellation

1. On Shopify, log in as a Customer and select the mode of payment Cash On Delivery.
2. An order in Shopify is synchronized as a *Sales Order* in SAP Business One and generates an A/R Reserve Invoice.
3. A Sales Order is canceled in Shopify.
4. An *A/R Credit Memo* is generated against the *A/R Reserve Invoice* in SAP Business One.

7.4.4.4 Refund for Fulfilled Order

1. On Shopify, log in as a Customer, select the mode of payment Cash On Delivery.
2. An order in Shopify is synchronized as a Sales Order in SAP Business One and generates an A/R Reserve Invoice.
3. Perform the Order fulfillment in SAP Business One or Shopify.
4. Open the Order in Shopify and click on the Mark as Paid button upon receiving payment at the time of delivery.
5. An Incoming Payments document is generated against the A/R Reserve Invoice.
6. Refund can only be initiated from Shopify:
    a. On Refund initiation (with Restock Checkbox checked), in SAP Business One, a standalone A/R Credit Memo with stock information and an Outgoing Payment against the A/R Credit Memo is generated.
    b. On Refund initiation (without Restock Checkbox checked), in SAP Business One, a standalone A/R Credit Memo without stock information is generated, and an Outgoing Payment against the A/R Credit Memo is generated.

7.4.4.5 Partial Refund for Fulfilled Order

1. On Shopify, log in as a Customer, select the mode of payment Cash On Delivery.
2. An order in Shopify is synchronized as a Sales Order in SAP Business One and generates an A/R Reserve Invoice.
3. Perform Order fulfillment from SAP Business One or Shopify.
4. Open the Order in Shopify and click on the Mark as Paid button upon receiving payment at the time of delivery.
5. An Incoming Payments document is generated against the A/R Reserve Invoice.
6. On Refund initiation (with Restock Checkbox checked), in SAP Business One a standalone A/R Credit Memo with stock information of partial quantity and an Outgoing Payment against the A/R Credit Memo is generated in SAP Business One.

7.4.5 Tax Handling

The application handles the Tax integration either by posting the Shopify Tax amount to the default freight mapped in the *General Settings* of Shopify or by using the SAP Business On Tax Code Determination.

7.4.5.1 Tax Handling using Freight

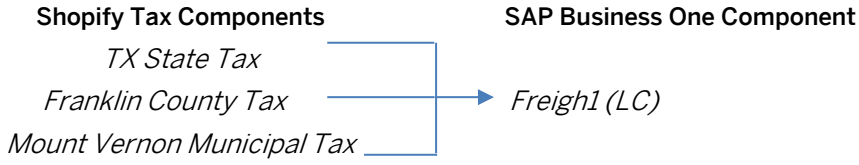
In the Shopify *General Settings,* if the value selected in the *Tax Posting in SAP Business One using* setting is *Freight,* then the synchronization of the tax amounts between Shopify and SAP Business One is handled by saving the tax amounts in a default freight mapped in the *General Settings* of Shopify.

Map a freight component in SAP Business One at line level to all tax components in respective line level in Shopify.

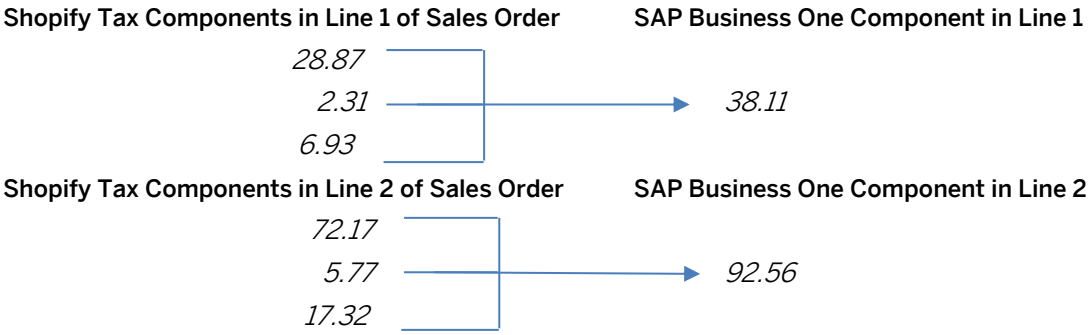
The tax amounts that are calculated in Shopify, irrespective of tax components, are integrated as a single component in SAP Business One i.e. the tax amounts per line item of Shopify are summarized and are mapped to a freight in line item of the sales order in SAP Business One.

Example

For example: A Sales Order in Shopify with three items has three tax components per line.



All the above taxes of Shopify per line are summarized and updated in the Freight 1 (LC) field in the respective lines of SAP Business One Sales Order.



Default Tax Code in SAP Business One

For all orders that are integrated from Shopify to SAP Business One, a default exempt tax code is set and defined in the *General Settings*. The same tax code is used in freight as well.

7.4.5.2 Tax Handling using Tax Code Determination

In the Shopify *General Settings,* if the value selected in the *Tax Posting in SAP Business One using* setting is *Tax Code Determination,* then whenever a Shopify Order is integrated into SAP Business One, the Tax code is automatically set in SAP Business One based on the Tax code determination.

When any Order is downloaded from Shopify to SAP Business One, the hub application posts the Items, quantity, discount, and freight. The line-level tax code and on header-level freight are automatically applied by SAP Business One using Tax Code Determination.

The Shopify Order Tax amount will not be posted; the tax amount is automatically calculated in SAP Business One based on the applied tax Code.

Note

You must complete the Tax code determination in SAP Business One based on your requirement and ensure the tax code is applied in a transaction by both applications, i.e., Shopify and SAP Business One should be the same. Otherwise, it may lead to total document inconsistency

7.4.6 Freight Handling

The shipping amounts that are calculated in Shopify, irrespective of shipping components, are synchronized as a single freight component in SAP Business One. The shipping amounts of Shopify are mapped to a single freight component in the header level of the sales order in SAP Business One.

For shipping charges, the application uses the default freight defined in the *General Settings*.

Example

Example 1: A Sales Order in Shopify with any kind of shipping type such as Standard Shipping is mapped to single freight component in SAP Business One.

Shopify Shipping Component		SAP Business One Component
Standard Shipping	→	Shipping

Example 2: A Sales Order in Shopify with any kind of shipping type, such as Free Shipping, is mapped to a single freight component in SAP Business One.

Shopify Shipping Component		SAP Business One Component
Free Shipping	→	Shipping

Example 3: A Sales Order in Shopify with any kind of shipping type, such as Custom Shipping, is mapped to a single freight component in SAP Business One.

Shopify Shipping Component		SAP Business One Component
Custom Shipping	→	Shipping

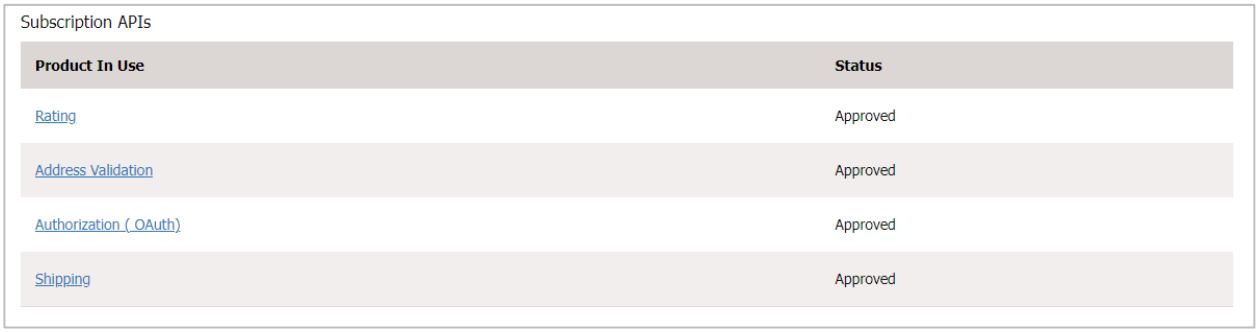
8 United Parcel Services (UPS)

United Parcel Service is a package delivery company. The company is a provider of global supply chain management solutions. UPS operates through three segments: U.S. Domestic Package operations, International Package operations, and Supply Chain & Freight operations.

The UPS Connector is equipped with robust support for the OAuth 2.0 security model, ensuring secure and reliable authentication processes. OAuth 2.0 enhances security by enabling delegated access without exposing credentials and safeguarding sensitive information during system interactions.

By integrating OAuth 2.0, the UPS Connector ensures compliance with modern security standards while providing seamless connectivity and data exchange capabilities for users and businesses.

The following APIs in the UPS account need to be permitted:



Subscription APIs

Product In Use	Status
Rating	Approved
Address Validation	Approved
Authorization (OAuth)	Approved
Shipping	Approved

1. **Authorization (OAuth):** Create an authorization token for your application to utilize UPS APIs. This API product is required for all integrations.
2. **Address Validation:** Validates addresses at the street level in the United States and Puerto Rico.
3. **Rating:** Compare delivery services and shipping rates to determine the best option.
4. **Shipping:** Prepare your package for shipment, manage returns, and cancel scheduled shipments.

For more information about the API permission, go to “My Apps” in the UPS account.

The integration of United Parcel Service and SAP Business One achieves the following objectives:

1. Business Partner Address Validation.
2. Freight Rates.
3. Shipment Tracking Number.

8.1 UPS Setup in Administration Console

The following are the steps to set up UPS in the Administration Console:

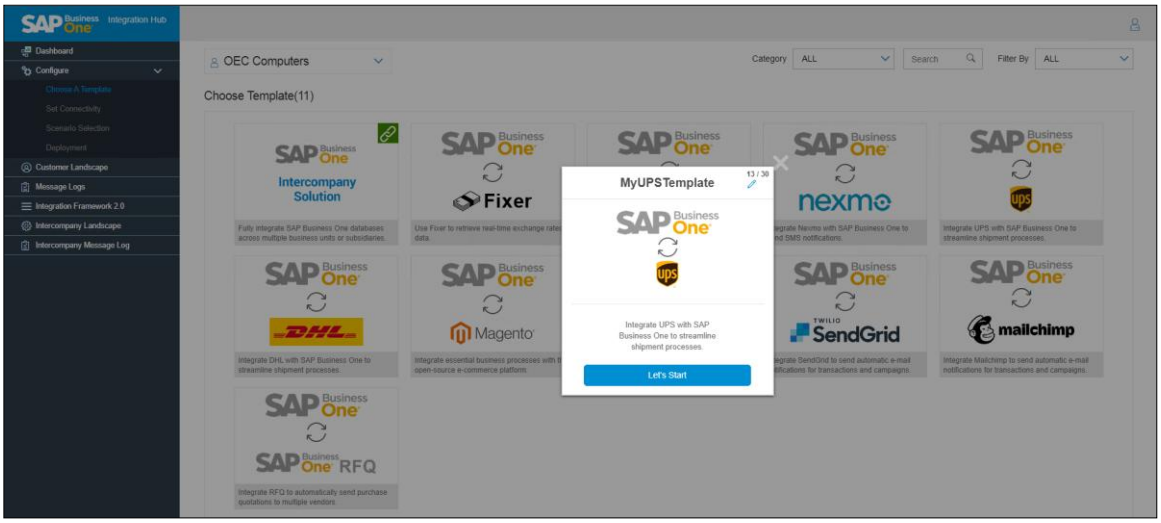
1. Add New Customer. Refer to the section Add New Customer in the document.

2. Select the *UPS* template to integrate.

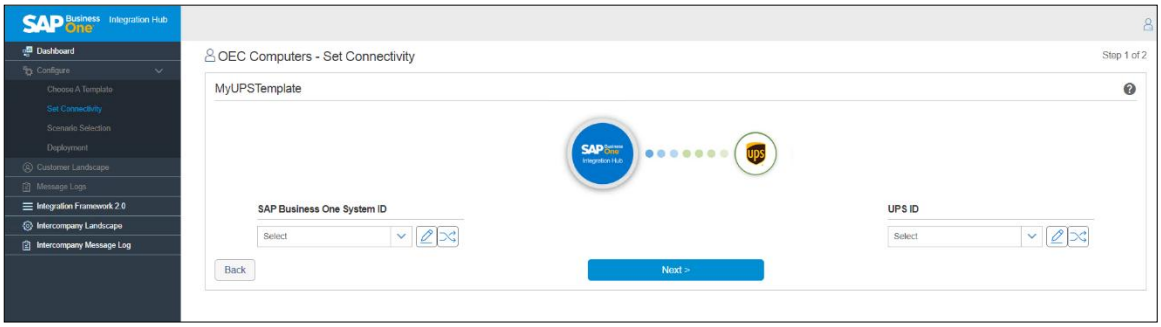
Upon selecting the template, a message "*Let's Start*" prompts to start configuring the connectivity settings. Change the template name by clicking the Edit button to edit the template name. Otherwise, it appears as *MyUPS Template.*

Note

By default, the name of the template appears as *MyUPS Template* and can be renamed.



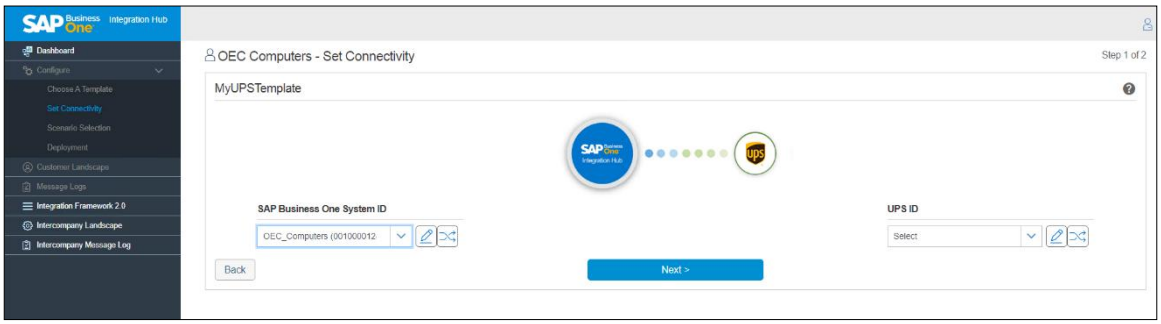
3. Upon choosing the Let's Start button, a Set Connectivity page appears with the following two steps to complete the configurations for connectivity.



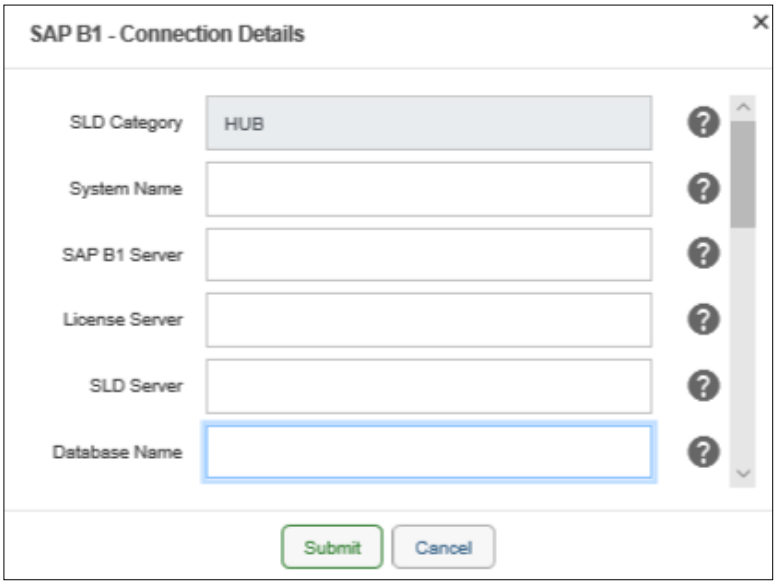
Step 1 – Set Connectivity

4. Choose the SAP Business One SLD to provide the connection between *SAP Business One System Id* and UPS Id.

> **Note**
>
> By default, the solution displays all the SAP Business One SLDs available in *SLD Category* selected during customer creation.



5. To add a new SLD or edit an existing SAP Business One SLD under the *SAP Business One System Id* area, choose the Add / Edit button.



The *SAP Business One Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update SAP Business One SLD.
SAP Business One Server	Enter SAP Business One Server Name / IP Address. Note *SAP Business One Server* is the mandatory field to add/update SLD information for SAP Business One.
License Server	Enter *License Server* details. i.e., Server Name or IP Address and port number of the SAP Business One License Server. The default port is 30000.
SLD Server	Enter the valid *SLD Server* details with the port. Note *SLD Server* details is the mandatory field to add/update SLD information for SAP Business One.
Database Name	Enter the name of the SAP Business One Database. Note *Database Name* is the mandatory field to add/update SAP Business One System SLD. Caution The *Database Name* must be entered the same as SAP Business One Database Name.
Database Type	Currently, only Microsoft SQL Server 2005, 2008, 2012, 2014, 2016, 2017 and SAP Hana DB are supported. Choose the database type from the drop-down list.

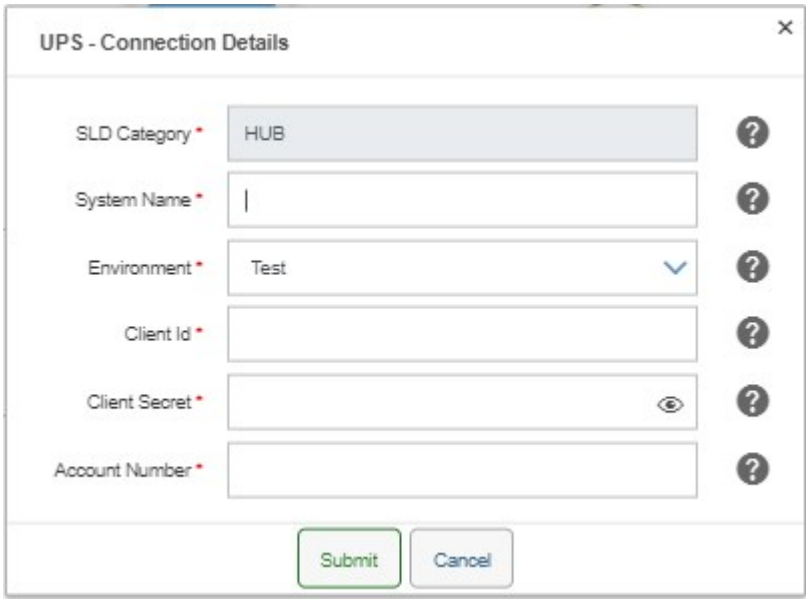
	Note *Database Type* is the mandatory field to add/update SAP Business One SLD.
Database User	Enter the user to access the company database using the database connection. *Database User* is the mandatory field to add/update SAP Business One SLD. Caution The *Database User* must be valid. Invalid *Database User* will result in failure to establish the connection.
Database Password	Enter a valid password for database login. Note *Database Password* is the mandatory field to add/update SAP Business One SLD. Caution The *Database Password* must be valid. Invalid *Database Password* will result in failure to establish the connection.
Database Port	Enter the port for the database.
Username	Enter **B1i** in this field. Note *Username* is the mandatory field to add/update SAP Business One SLD. It is set as B1i by default and uneditable. Caution Ensure that a user with this name exists in the SAP Business One database.
Password	Enter a valid password for a B1i user of SAP Business One.
Language	Select the language from the list of languages.
Is Trust	Select *True* or *False*. The default value for this field is *False.* To use a trusted connection, choose *True* from the drop-down list.
jcoPath	Enter path for jco library. Example of Installation path of JCO: C:\Program Files (x86)\SAP\SAP Business One DI API\JCO\LIB
DI ProxyHost	The DI Proxy host must be defined if B1i is installed on a separate server (this is, other than the SAP Business One server). The value in this field must be the same as the SAP Business One Server address. Example *Proxyhost* can be the same as *SAP Business One Server.*
DI ProxyPort	The default value of *DI Proxy Port* is 2099.
Proxy Host	The proxy host is defined in a multi-instance scenario. If the B1i server connects to the SAP Business One server through a proxy server, then enter the address of the proxy server in this field.
Proxy Port	Enter the proxy port in this field.

6. Enter the valid data and choose the *Submit* button. An SAP Business One SLD is created.

Choose the *Test Connection* icon to test the connection between the SAP Business One System Id in Integration Hub and the SAP Business One System Landscape Directory.

If the connection is successful, a success message appears: “Test Connection Successful”. If the connection is unsuccessful, a failure message appears: “Test Connection Failed”. Please provide the correct credentials.

7. To add / edit UPS instance SLD under the UPS ID area, choose the *Add / Edit* button.
The UPS Connection Details window appears.



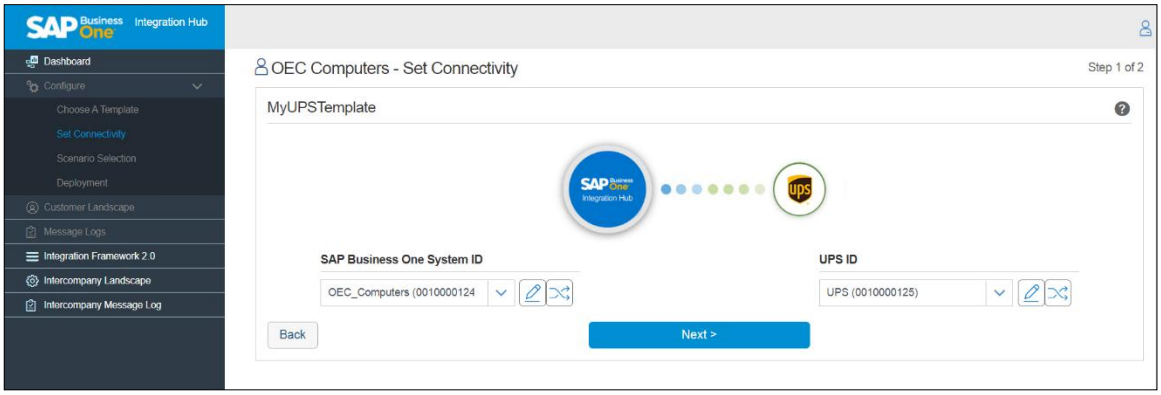
The *UPS Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read-only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update UPS SLD.
Environment	Select from the Test or Production environment.
Client Id	Enter the Client ID generated from the UPS App.
Client Secret	Enter the Client Secret generated from the UPS App.
Account Number	Enter the UPS Account number

Note

To obtain your client ID and Client Secret, you will need to create an application. This application will be linked to your shipper accounts(s) and email address associated with your ups.com ID.

8. Provide the valid information in the fields and choose the *Submit button.* SLD for UPS is created.

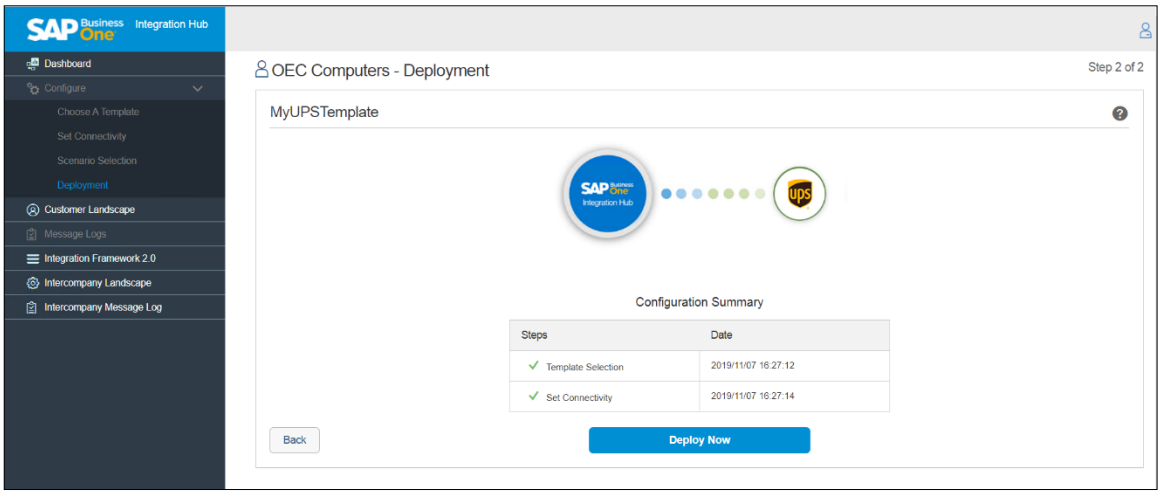


9. Choose the *Test Connection* icon to test the connection between the Integration Hub and UPS.
If the connection is successful, a success message appears “Test Connection Successful”.
If the connection is unsuccessful, a failure message appears “Test Connection Failed”.

10. Choose the *Next* button to proceed to Step2*.*

Configuration Summary

11. The Configuration summary displays the *Date* and time for *Template Selection* and *Set Connectivity steps*.

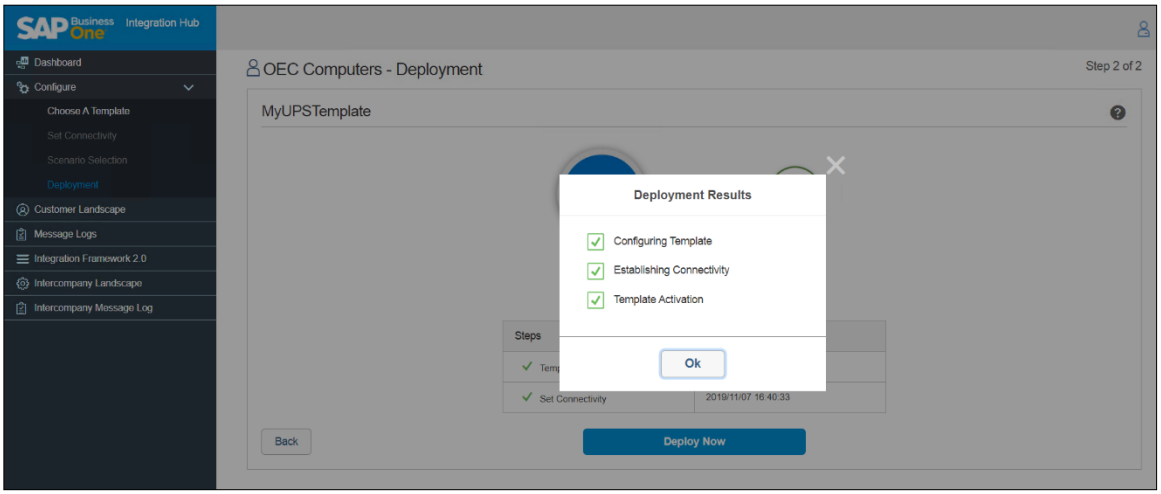


Step 2 – Deployment

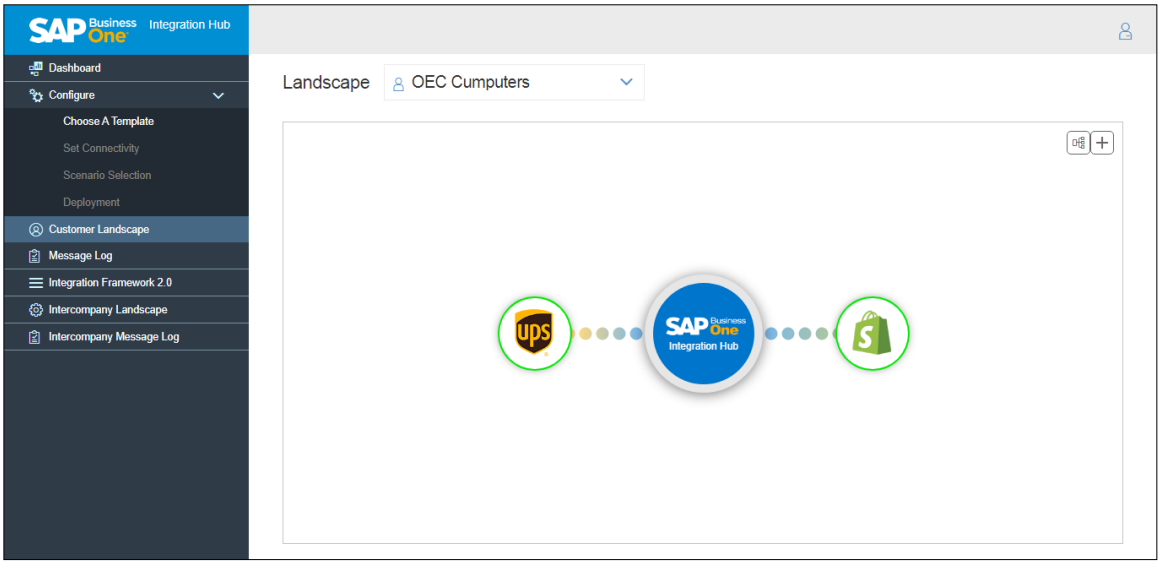
12. To deploy the solution, choose the *Deploy Now* button.

13. The application prompts you to provide the license details. For more information, refer to the Assigning the Integration Hub licenses section in this document.

14. The Integration Hub displays the *Deployment Results* whether the deployment is successful or failed. The checkbox in the *Deployment Results* window displays the status of each deployment stage.



15. Once all stages are checked, click the *OK* button on the *Deployment Results* window to proceed. The successful deployment of the solution in Integration Hub results in enabling the features in SAP Business One. The Customer Landscape displays the connection of SAP Business One to UPS.



16. To modify the template after successful feature activation, right-click on the logo of the template.

17. Right click on the UPS logo. It will display following fields:

Field Name	Description
View	Displays the *Set Connectivity* window in view mode.
Edit	Displays the *Set Connectivity* window in Edit mode.
De-activate	Deactivates the UPS deployment.
Deployment Status	Displays the deployment status with date and time.
Delete Template	Choose delete template to delete the template. It is an Irreversible action. Note On deleting the template, the template will be marked as Inactive in the application deployment status window in SAP Business One.
Delete Deployment Info.	Choose *Delete Deployment Info*. to delete the complete deployment information of the template. It is an Irreversible action. Note On deleting the deployment information, the template will not be deleted from the deployment panel screen, it will be deactivated only.
Manage Licenses	Choose Manage License to Activate/Deactivate the integration Hub License. For more information, see Managing the Integration Hub licenses section in this guide.

8.2 Setup in SAP Business One

1. In the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Application Deployment Status*.

   The *Deployment Status* field should display 'Active', indicating that the feature is deployed in the Integration Hub. If the status displays 'Inactive', then redeploy the feature in the *Integration Hub.*

   The following are the statuses that can be visible on the *Application Deployment Status* screen:

   - *Active*: The status represents the solution is deployed and active.
   - *Inactive*: The status represents the feature template is not inactive.

   For more details, refer to the *Application Deployment Status* section in this guide.

   Note

   You must restart the SAP Business One client after UPS deployment from the Integration HUB. On login, the Add-On script will execute, and the relevant setup window will appear.

2. *In* SAP Business One, choose *Main Menu* → *Administration* → *Integration Hub* → *B1i Server Details* to enter the B1i Server details. This window enables to enter the B1i Server Details.

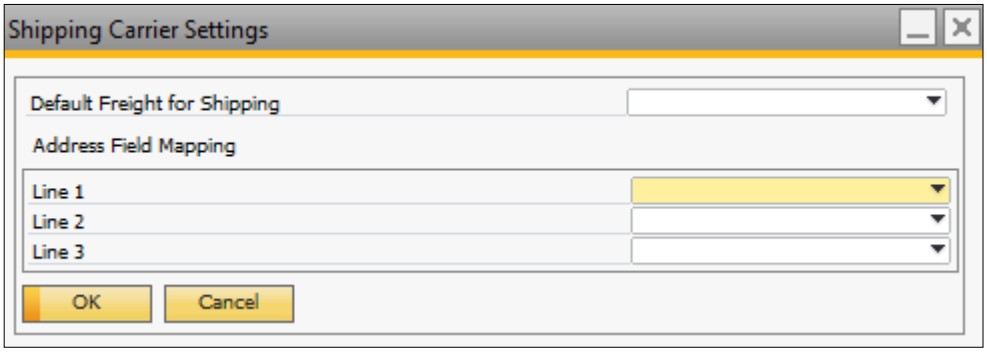
   The *B1i Server Details* window contains the following fields:

Field Name	Description
B1i Server Address	Enter the server name or IP address of B1i server.
B1i Port	Enter the port of B1i Server. The default port for HTTP is 8080
Username	B1i runtime user
Password	Enter the password for B1i run time user.
HTTPS	Select the checkbox to enable the solution to use HTTPS.

   Note

   Please ensure that the SLD entry for this company exists in SAP B1if and the solution is properly deployed.

3. In SAP Business One, choose *Main Menu* → *Administration* → *Integration Hub*→ *Shipping Carrier Settings to* configure the shipping carrier settings for UPS.



Note

- You must define the ISO Currency code for the base and all other currencies defined in the database.
- The Shipping Carrier Settings are mandatory settings for integrating with SAP Business One.

The *Shipping Carrier Settings* window contains the following mandatory fields:

Field Name	Description
Default Freight for Shipping	For shipping amounts, the application uses the default freight defined in shipping carrier settings, which is picked from SAP.
Address Field Mapping – Line 1	Select the address line 1 item from the list of address line items. The following is the list of optional address line items: • Address Name 1 • Address Name 2 • Street/ PO Box • Block • Street No. • Building/Floor/Room
Address Field Mapping – Line 2	Select the address line 2 item from the list of address line items. The following is the list of optional address line items: • Address Name 1 • Address Name 2 • Street/ PO Box • Block • Street No. • Building/Floor/Room
Address Field Mapping – Line 3	Select the address line 3 item from the list of address line items. The following is the list of optional address line items: • Address Name 1 • Address Name 2 • Street/ PO Box • Block • Street No. • Building/Floor/Room

8.3 Using UPS

8.3.1 Address Validation

Address Validation helps in validating the *Ship To* and *Bill To* addresses to avoid any address-related issues in later stages. The address validation API from UPS is used to request general validation of city, state, and zip code, or a validation of a specific street address in the U.S. or Puerto Rico.

The validate address functionality in SAP Business One is available in the:

- Business Partner Master Data
- Delivery Document

Note

The address validation feature works only for U.S. and Puerto Rico addresses.

The special character is not supported in the customer name for UPS.

8.3.1.1 Business Partner Master Data

The addresses in SAP Business One can be validated according to the UPS address format in the customer master data.

In SAP Business One, choose *Main Menu* → *Business Partner* → *Business Partner Master Data* → *Addresses.*

To validate the *Bill To* and *Ship To* addresses of a customer, choose the icon in the *Addresses* Tab in *Business Partner Master Data*.

Note

The validate address functionality in *Business Partner Master Data* works only if the *Shipping Type* in the *General* tab is UPS.

8.3.1.2 Delivery Document

Addresses in SAP Business One can be validated according to the UPS address format in the delivery document. To validate the *Bill To* and *Ship To* addresses of a customer, choose the icon in the *Logistics* tab in the delivery document.

Note

The validate address functionality in the *Delivery Document* works only if the *Shipping Type* in the *Logistics* tab is UPS.

8.3.1.3 Windows Enhancement

New fields that are relevant to the UPS have been added to the Delivery Document. The fields provide additional information regarding the UPS transactions.

Field Name	Description
Get Tracking Number	Fetches the tracking number from UPS. The user can use this button when the tracking number is not fetched at the time of adding the document.
Logistics	
Service	Displays the UPS services based on Ship from country. Note The application uses the first line warehouse country as ship from country.
Integration Hub	
Payer	Payer may be Shipper, Receiver, or Third Party.
Bill Account Number	Bill Account number given by freight carrier.
Customs Value	Goods value disclosed to customs
Insurance Amount	Amount insured for the goods.
Negotiated Rate Indicator	Rates negotiated with UPS.
Third Party Address	Address of Third Party Payer.
Third Party Contact Person	Contact person of Third Party Payer.

8.3.1.4 Address Validation Result

Address Validation Result enables the validation of the addresses as per the UPS address format with the help of API and notifies the user with the error message or successful message. SAP Business One displays the result with specific colors having a particular meaning as per the color result.

Example

If the address validation is

- **Successful**, The system displays the address in green color, along with the message in the status bar and suggestions in the grid.
- **Unsuccessful** or failed, the system displays the address in red color, along with the message in the status bar and suggestions in the grid.

8.3.2 Freight Quote

Freight Quote helps in getting a list of all the shipping services and rates based on the package's specifications. The *Freight Quote* functionality in SAP Business One is available in the *Packing Slip* window of *Delivery Document* only.

Prerequisite

The following are the prerequisites for getting Freight Quotes from UPS:

- The *Shipping Type* in the *Logistics* tab should be **UPS,** and the UPS service should be selected.
- The item used in the delivery document must have *Length, Width, Height, and Weight* defined.
- Customer *Tel1* or *Tel2* or *Mobile Phone or Fax, and E-mail* must be defined in *Main Menu* → *Business Partner* → *Business Partner Master Data* →*General* Tab.
- *User Name, E-mail, Mobile Phone*, *Fax,* and *Department* must be defined for the logged-in user in the *Users-Setup* window.

8.3.2.1 Get Freight Quote

Get Freight Quote checks for freight quote through API based on the package type selected in the *Packing Slip* in *Delivery Document*.

To get the freight quote:

1. In the Delivery document, choose *Main Menu* → *Sales A/R* → *Delivery* → *Logistics tab.*
2. Select the customer and validate the *Bill To* and *Ship To* addresses of a customer using the icon.
3. On the Integration Hub Tab. Based on the requirement, specify the values in the Payer, Bill Account Number, Customs Value, Insurance Amount, and Negotiated Rates Indicator. If Payer is a third Party, then specify the Third Party Address and Third Party Contact Person.
4. Right-click on the *Logistics* window and select *Packaging Slip*.
5. Provide the *Package No., Type,* and *Weight* (lbs./kg) unit.

> **Note**
>
> The UPS package type used in the packing slip must have *Length, Width,* and *Height defined* in *the package type s- setup window.*

6. In the Line level, move the item from the *Available Items* list to the *Package Contents* list and choose the *Get Freight Rate* button.
7. The freight quote from UPS is updated in the packing slip. Click on the *Ok* button to close the Packaging Slip.
8. The freight amount in the freight field of the delivery document displays the Freight amount.

8.3.3 Shipment Tracking Number

Shipping Tracking Number automatically updates the tracking number from UPS when the delivery document is added. If the solution fails to update the tracking number while updating the freight amount, the solution provides the flexibility to fetch the tracking number by choosing *Get Tracking No.* button in the *Delivery* window.

To get the Tracking Number:

1. In SAP Business One, choose *Main Menu* → *Sales A/R* → *Delivery*. Complete the Delivery document and click on the *Add* Button.
   Specify all the information as mentioned in the steps of *Get Freight Quote*.
2. A pop-up displays a message: *You cannot change this document after you have added it. Continue?* Click on *Yes* to continue.
3. A tracking number is generated.
4. Alternatively, click on the *Get Tracking Number* button on the Delivery document if the delivery document is already added.
5. Copy the tracking number and track the Package in UPS site at URL https://www.ups.com/track?loc=en_US&requester=ST/

Note

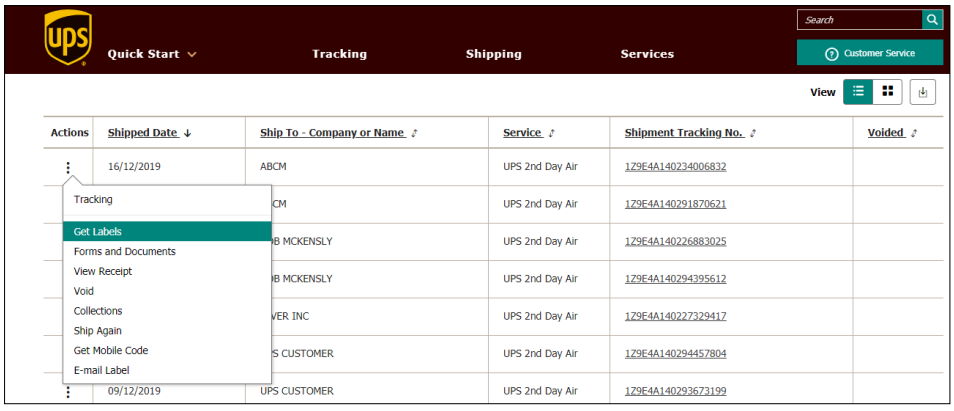
The *Tracking Number* is generated only when customer phone number is updated for in *Business Partner Master Data* and address is verified.

8.3.4 Print Labels

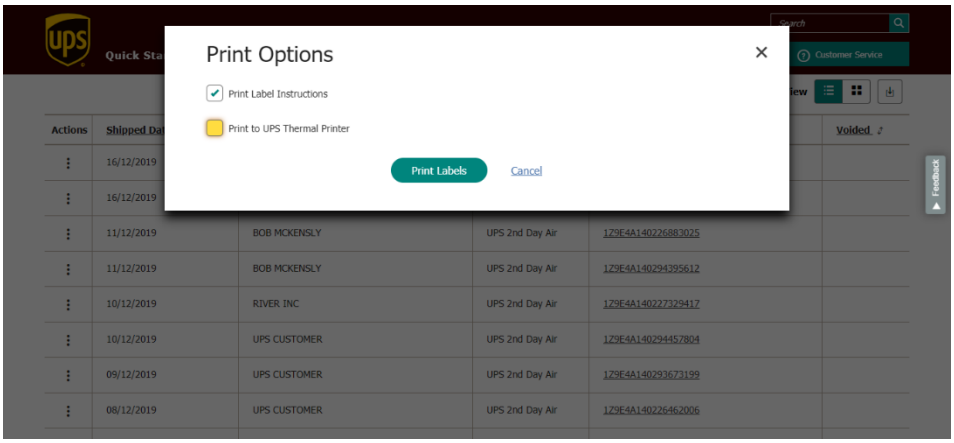
Once shipment tracking number is generated, the user can create the labels from the UPS site.

The URL for all shipments created for UPS account is - https://www.ups.com/ship/history?loc=en_DE

Select the required shipment and choose Get Labels as shown below.



Then on Print labels option screen, select the Print option to print the label for the shipment.



For more information, refer to Labels and Receipts FAQ at the following link

https://www.ups.com/us/en/campusship-support/labels-and-receipts-faq.page#contentBlock-11

9 Nexmo

Nexmo allows businesses to communicate seamlessly and notify internal and external stakeholders by configuring SMS and SMS-based alerts and notifications in SAP Business One. It allows users to configure the SMS notification based on pre-defined SMS templates. Enabling an event-based alert mechanism ensures the timely delivery of relevant information. Events are setup in the SAP Business One database, and these events trigger a call to the Nexmo SMS API.

Nexmo covers the following integration scenarios:

1. Automatic SMS Notification based on Print Preferences
2. Manual SMS Notification
3. SMS Notification for SMS type Campaigns

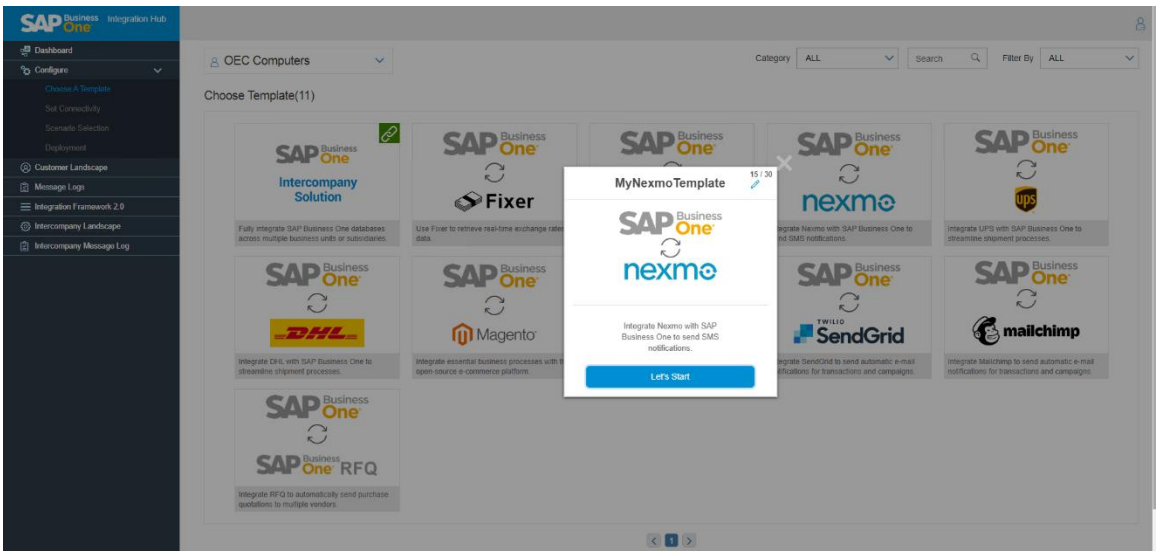
9.1 Nexmo Setup in Administration Console

The following are the steps to set up Nexmo in Administration Console:

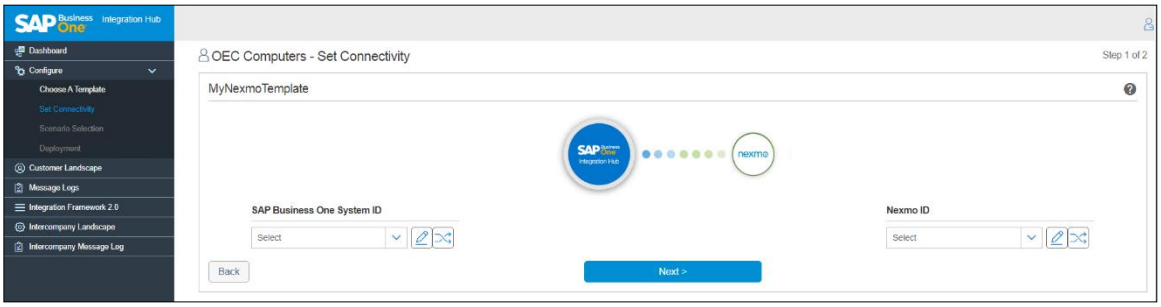
1. Add New Customer. Refer to the section Add New Customer in the document.
2. Select the *Nexmo* template to integrate.

   Upon selecting the template, a message "*Let's Start*" prompts to start configuring the connectivity settings. Change the template name by clicking the Edit button to edit the template name. Otherwise, it appears as *MyNexmo Template.*

> **Note**
>
> By default, the name of the template appears as *MyNexmo Template* and can be renamed.



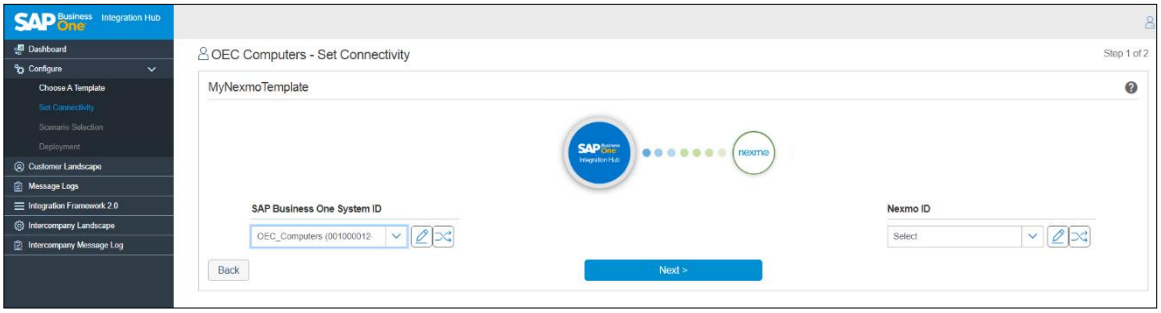
3. Upon choosing the *Let's Start* button, a *Set Connectivity* page appears with the following two steps to complete the configurations for connectivity.



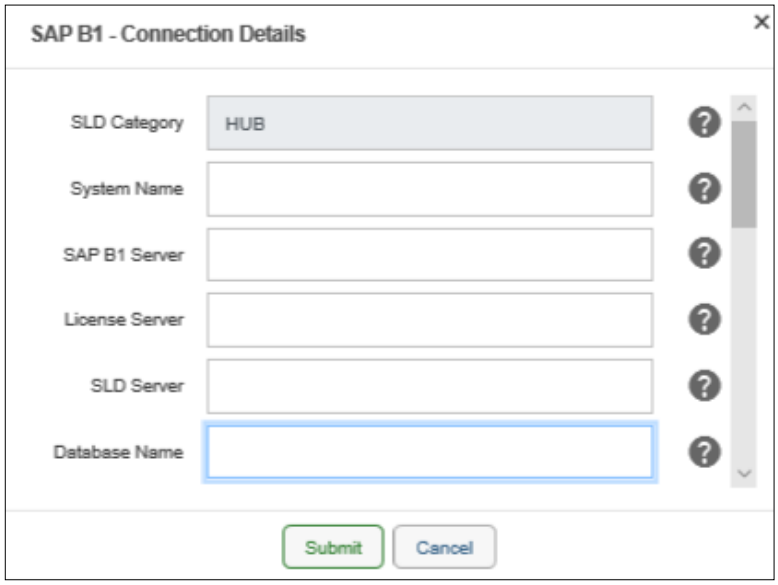
Step 1 – Set Connectivity

4. . Choose the SAP Business One SLD to provide the connection between *SAP Business One System Id* and *Nexmo Id*.

> **Note**
>
> By default, the solution displays all the SAP Business One SLDs available in *SLD Category* selected during customer creation.



5. To add a new SLD or edit existing SAP Business One SLD under SAP Business System Id area, choose *Add / Edit* button.



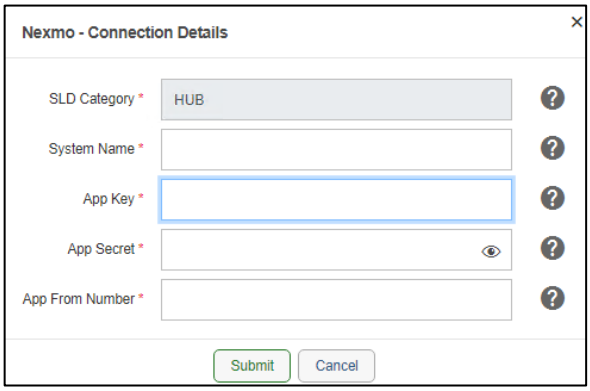
The *SAP Business One Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update SAP Business One SLD.
SAP Business One Server	Enter SAP Business One Server Name / IP Address. Note *SAP Business One Server* is the mandatory field to add/update SLD information for SAP Business One.
License Server	Enter *License Server* details. i.e. Server Name or IP Address and port number of the SAP Business One License Server. The default port is 30000.
SLD Server	Enter the valid *SLD Server* details with port. Note *SLD Server* details is the mandatory field to add/update SLD information for SAP Business One.
Database Name	Enter the name of the SAP Business One Database. Note *Database Name* is the mandatory field to add/update SAP Business One System SLD. Caution The *Database Name* must be entered same as SAP Business One Database Name.
Database Type	Currently, only Microsoft SQL Server 2005, 2008, 2012, 2014, 2016, 2017 and SAP Hana DB are supported. Choose the database type from the dropdown list.

	Note *Database Type* is the mandatory field to add/update SAP Business One SLD.
Database User	Enter the user to access the company database using the database connection. *Database User* is the mandatory field to add/update SAP Business One SLD. Caution The *Database User* must be valid. Invalid *Database User* will result in failure to establish the connection.
Database Password	Enter a valid password for database login. Note *Database Password* is the mandatory field to add/update SAP Business One SLD. Caution The *Database Password* must be valid. Invalid *Database Password* will result in failure to establish the connection.
Database Port	Enter the port for database.
Username	Enter `B1i` in this field. Note *Username* is the mandatory field to add/update SAP Business One SLD. It is set as B1i by default and un editable. Caution Ensure that a user with this name exists in the SAP Business One database.
Password	Enter a valid password for a B1i user of SAP Business One.
Language	Select the language from the list of languages.
Is Trust	Select *True* or *False*. The default value for this field is *False.* To use a trusted connection, choose *True* from the dropdown list.
JcoPath	Enter path for jco library. Example of Installation path of JCO: C:\Program Files (x86)\SAP\SAP Business One DI API\JCO\LIB
DI ProxyHost	The DI Proxy host must be defined if B1i is installed on a separate server (this is, other than the SAP Business One server). The value in this field must be the same as the SAP Business One Server address. Example *Proxyhost* can be the same as *SAP Business One Server.*
DI ProxyPort	The default value of *DI Proxy Port* is 2099.
Proxy Host	The proxy host is defined in a multi-instance scenario. If the B1i server connects to the SAP Business One server through a proxy server, then enter the address of the proxy server in this field.
Proxy Port	Enter the proxy port in this field.

6. Enter the valid data and choose the *Submit button.* An *SAP Business One SLD* is created.
7. Choose the *Test Connection* icon to test the connection between the SAP Business One System Id in Integration Hub and SAP Business One System Landscape Directory.

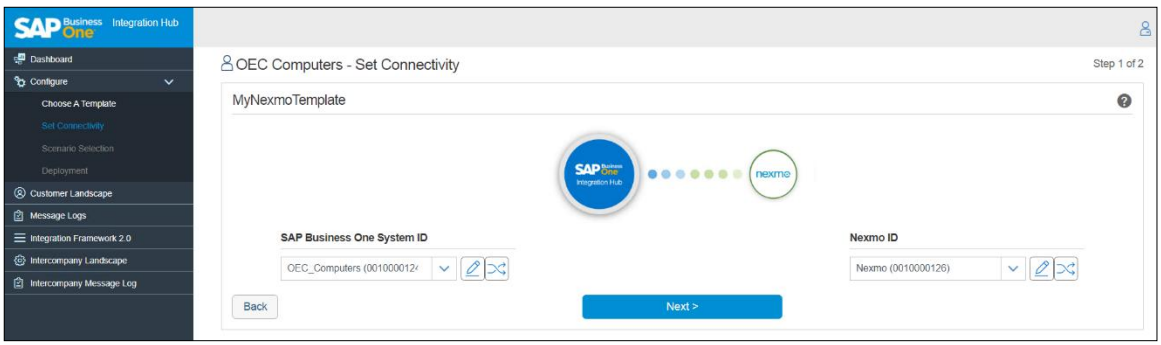
   If the connection is successful, a success message appears: “Test Connection Successful”.
   If the connection is unsuccessful, a failure message appears: “Test Connection Failed”. Please provide the correct credentials.
8. To add/edit Nexmo instance SLD under the Nexmo Id area, choose the *Add / Edit* button.



The *Nexmo Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. **Note** *System Name* is the mandatory field to add or update Nexmo SLD.
App Key	Application Key provided by Nexmo.
App Secret	Application Secret provided by Nexmo
App From Number	Enter the from number (Short Code/Long Number) used for sending SMS notification.

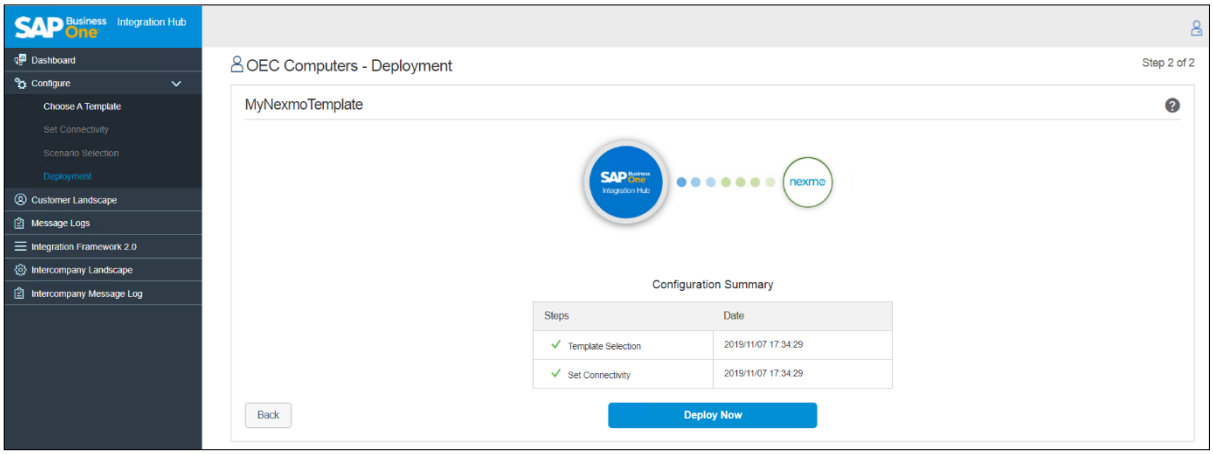
9. Provide the valid information in the fields and choose the *Submit button.* SLD for Nexmo will be created.



10. Choose the *Test Connection* icon to test the connection between the Integration Hub and Nexmo.
    If the connection is successful, a success message appears “Test Connection Successful”.
    If the connection is unsuccessful, a failure message appears “Test Connection Failed”.
11. Choose the *Next* button to proceed to Step2.

Configuration Summary

12. The Configuration summary displays the *Date* and time for *Template Selection* and *Set Connectivity steps*.

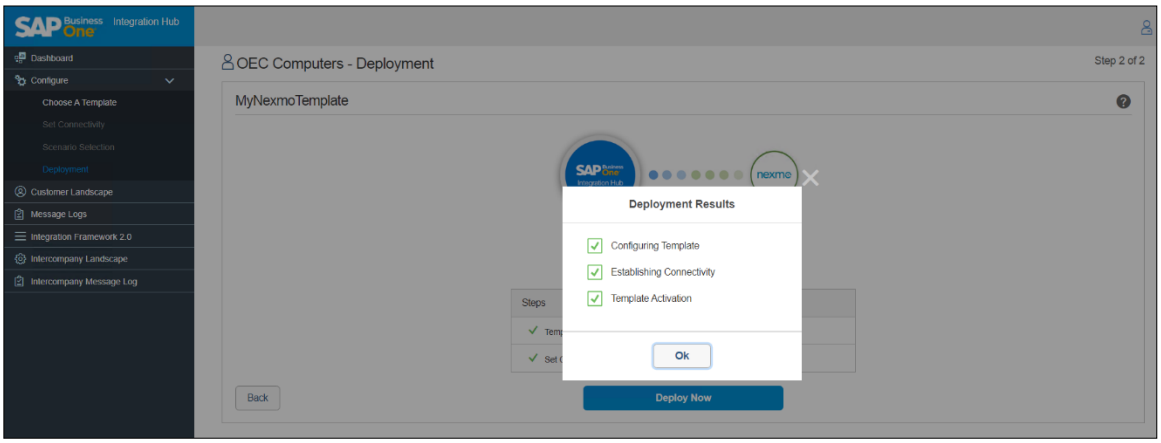


Step 2 – Deployment

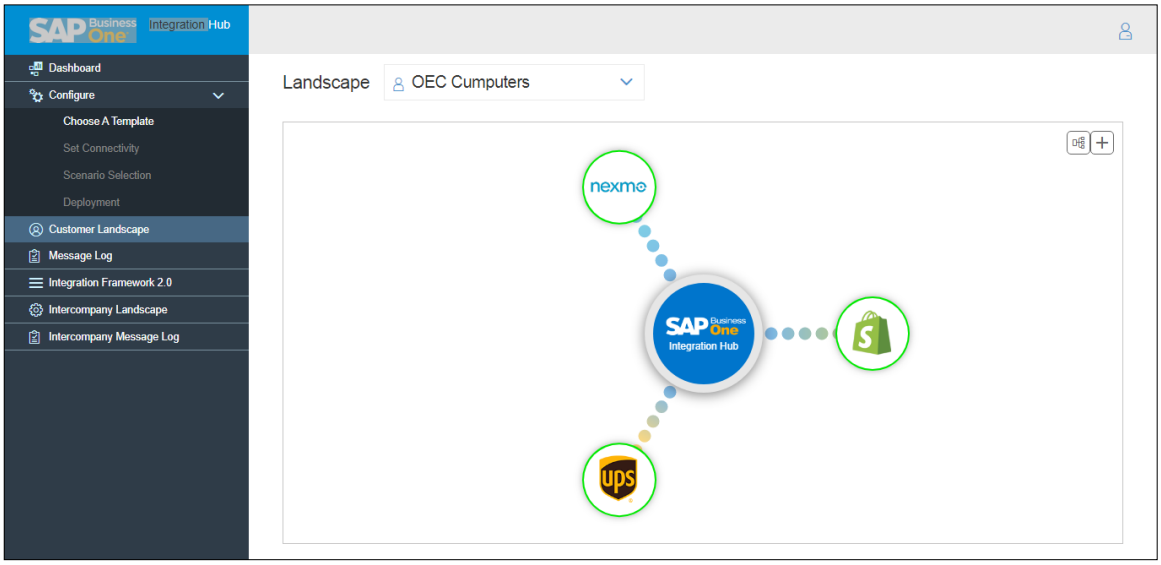
13. To deploy the solution, choose the *Deploy Now* button.

14. The application prompts you to provide the license details. For more information, refer to the Assigning the Integration Hub licenses section in this document.

15. The Integration Hub displays the *Deployment Results* whether the deployment is successful or failed. The checkbox in the *Deployment Results* window displays status of each deployment stage.



16. Once all stages are checked, click the *OK* button on the *Deployment Results* window to proceed. The successful deployment of solution in Integration Hub results in enabling the features in SAP Business One. Customer Landscape displays connection of SAP Business One to Nexmo.



17. To modify the template after successful feature activation, right click on the logo of the template.

18. Right click on the Nexmo logo displays window with the following fields:

Field Name	Description
View	Displays the *Set Connectivity* window in view mode.
Edit	Displays the *Set Connectivity* window in Edit mode.
De-activate	Deactivates the Nexmo deployment.
Deployment Status	Displays the deployment status with date and time.
Delete Template	Choose delete template to delete the template. It is an Irreversible action. **Note** On deleting the template, the template will be marked as Inactive in the application deployment status window in SAP Business One.
Delete Deployment Info.	Choose delete deployment info. to delete the complete deployment information of the template. It is an Irreversible action. **Note** On deleting the deployment information, the template will not be deleted from deployment panel screen, it will be deactivated only.
Manage Licenses	Choose Manage License to Activate/Deactivate the integration Hub License. For more information, see Managing the Integration Hub licenses section in this guide.

9.2 Setup in SAP Business One

1. In the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Application Deployment Status*.

   The *Deployment Status* field should display 'Active', indicating that the feature is deployed in the Integration Hub. If the status displays 'Inactive', then redeploy the feature in the *Integration Hub.*

The following are the statuses that can be visible on the *Application Deployment Status* screen:

- *Active*: The status represents the solution is deployed and active.
- *Inactive*: The status represents the feature template is not inactive.

For more details, refer the *Application Deployment Status* section in this guide.

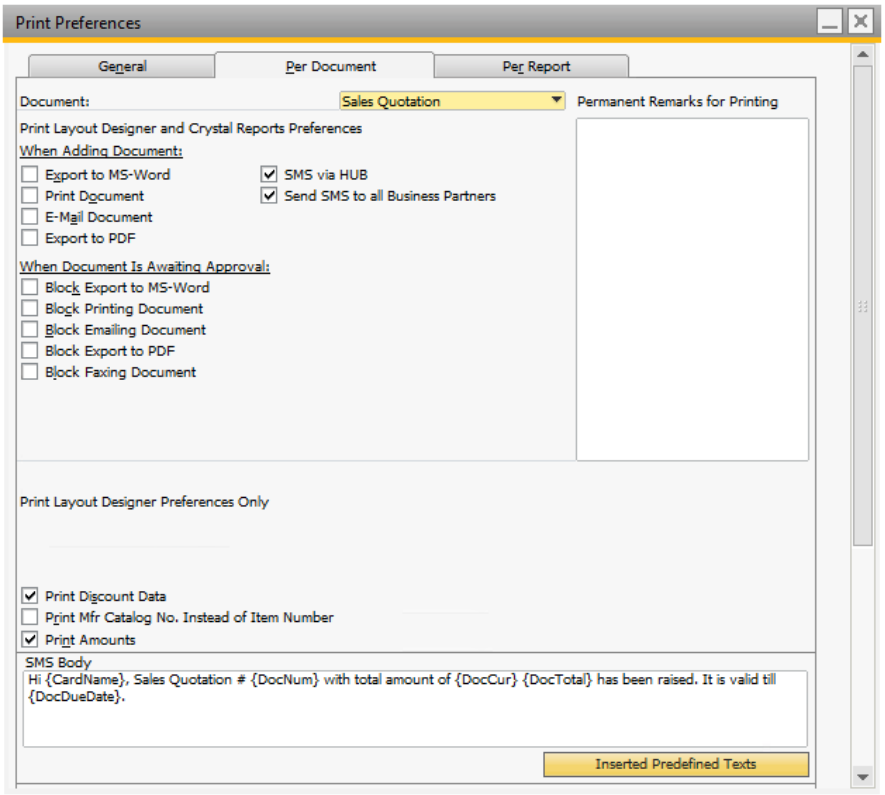
> **Note**
>
> You must Re-start the SAP Business One client after Nexmo deployment from the Integration HUB. On login, the Add-On script will execute and relevant setup window appears.

2. After successful activation of *Nexmo* new fields are added to the following documents:
   - Print Preferences
   - Business Partner Master Data
   - Send Message

9.2.1 Print Preferences

In *Print Preferences* document the *SMS via HUB* and *Send SMS To all Business Partners fields are available* to send SMS automatically through Nexmo when document is added.

To open the *Print Preferences* window, from the SAP Business One *Main Menu,* choose *Administration→System Initialization→ Print Preferences →Per Document*

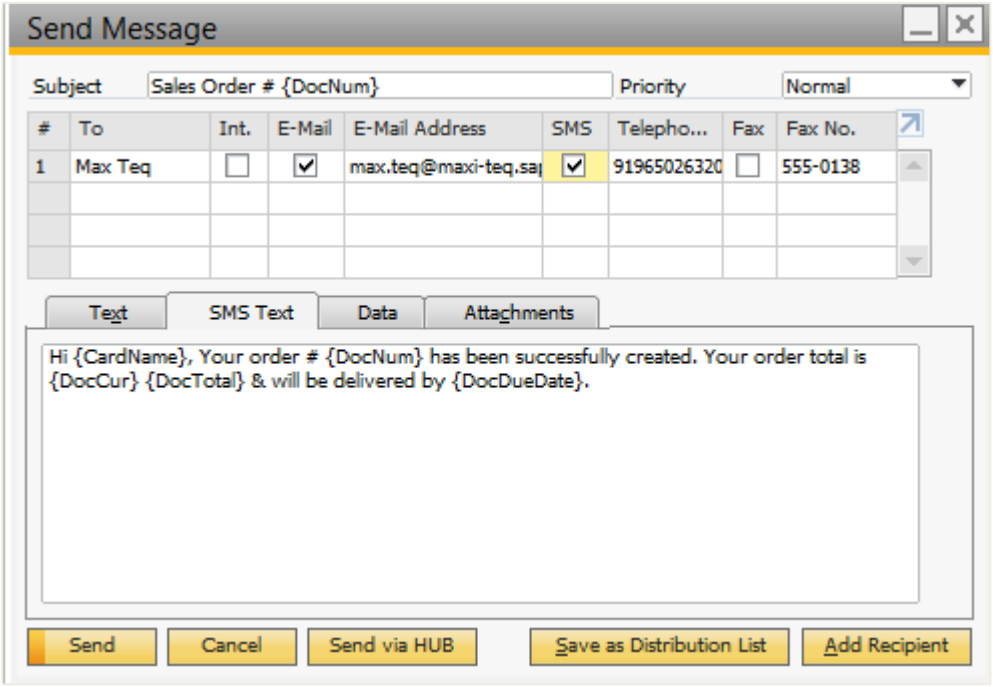


The *Print Preferences* window contains the following new fields for Nexmo:

Field Name	Description
SMS via HUB	Select this check box to send automatic SMS notification to the business partners contact person mentioned in the marketing documents, while adding the document.
Send SMS to all Business Partners	If the SMS via HUB check box is selected, then application checks the *Send SMS to all Business partners* check box. If this check box is selected, then application does not perform other checks and send the SMS automatically to the contact person used in the document.
SMS Body	This contains the default template with placeholders.

9.2.2 Send Message

In the *Send Message* window, a *Send via HUB* button is available. To open the *Send Message* window, open any marketing document and in the toolbar choose the *SAP Business One Mailer* ✉ icon.



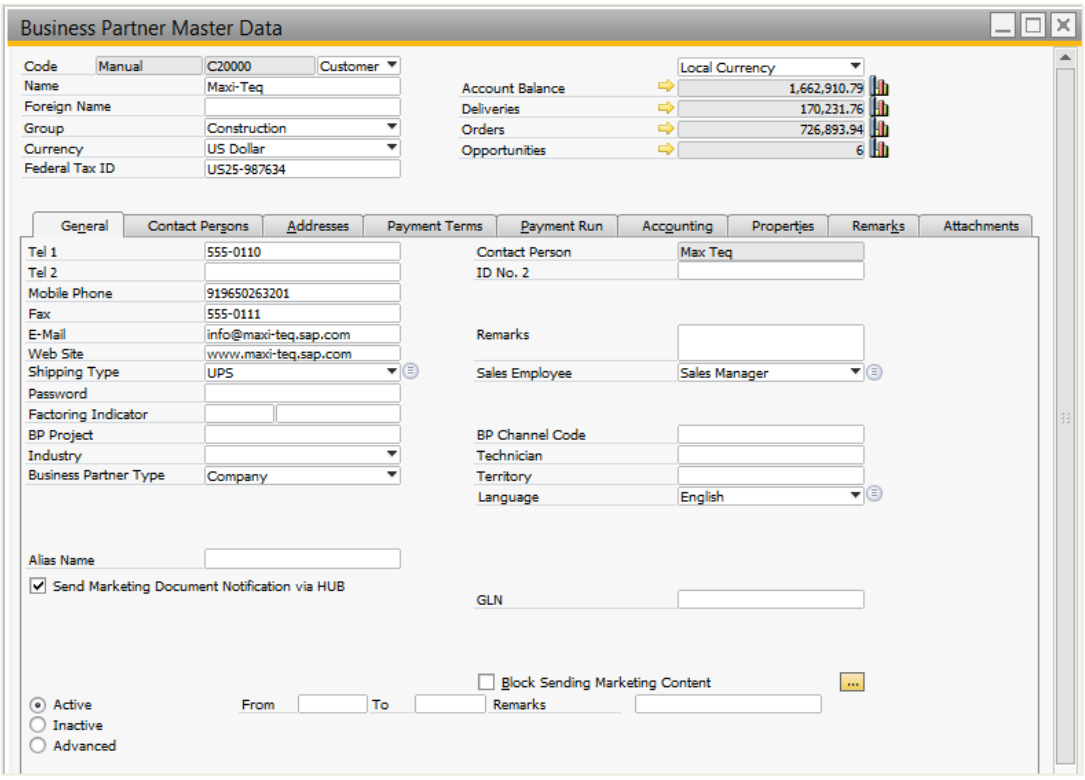
The *Send Message* window contains the following new fields:

Field Name	Description
SMS Text	Displays the SMS text saved in the Print preferences.
Send via HUB	To send SMS notification manually to corresponding business partner contact person, choose the *Send via HUB* button in the *Send Message* window from any marketing document. This triggers the Nexmo SMS API to send the SMS. Application will display the "operation completed successfully" message.

9.2.3 Business Partner Master Data

In the *Business Partner Master Data* window, a field *Send Marketing Document Notification via HUB* is available in the *General* tab.

To open the *Business Partner Master Data* window, from the SAP Business One *Main Menu*, choose *Business Partner → Business Partner Master Data.*



The *Business Partner Master Data* window contains the following fields:

Field Name	Description
Send Marketing Document Notification via HUB	Select this checkbox to send SMS notification automatically to the business partner contact person used in the marketing documents.

9.3 Using Nexmo

9.3.1 Automatic SMS Notification based on Print Preferences

The solution automatically sends the SMS notification based on the configuration in the *Print Preferences* page.

The following documents are supported for automatic SMS notification:

- Sales Quotation
- Sales Order
- Delivery
- Return Request
- Returns
- A/R Down Payment
- A/R Invoice
- A/R Credit Memo
- Purchase Quotation
- Purchase Order
- Goods Receipt PO
- Goods Return Request
- Goods Return
- A/P Down Payment
- A/P Invoice
- A/P Credit Memo

The add-on automatically pre-populates the SMS content for all above document in the newly added SMS body section. To modify the content, use the *Placeholder*.

Before sending the automatic SMS notification the application checks the following setups:

1. *SMS via HUB* check box in *Print Preferences*

   Select *SMS via HUB* check box to send the SMS notification to the business partners contact person used in the marketing documents.

2. *Send SMS to all Business Partners* check box in *Print Preferences*

   If the *SMS via HUB* check box is selected, then the application checks the *Send SMS to all Business Partners* check box. If this check box is selected, then application does not perform other checks and send the SMS automatically to the contact person used in the document.

3. *Send Marketing Document Notification via HUB* check box in *Business Partners Master Data*

   If the *SMS via HUB* check box is selected, then application checks the *Send SMS to all Business Partners* check box. If this check box is not selected, then application checks *Send Marketing Document Notification via HUB* check box in Business Partners. If the Business partners check box is selected, then the application sends the automatic SMS notification, otherwise the SMS notification will not be sent.

9.3.2 Manual SMS Notification

The application allows a user to manually send the SMS notification from any marketing document. Choose the *Mailer* ✉icon on tool bar of the marketing document to manually send the SMS to corresponding business partner contact person.

In order to send SMS, choose the *Send via HUB* button available on *Send Message* window that triggers the Nexmo SMS API to send the SMS. On choosing the *Send via HUB* button, application displays the "operation completed successfully" message.

9.3.3 SMS Notification for SMS Type Campaigns

The application allows to send the bulk SMS notification through SMS type campaigns using Nexmo SMS API. The target recipients are defined in the *Campaign Generation Wizard* and the SMS is sent to the target recipients.

To create SMS notification through SMS Type Campaigns, perform the following steps:

1. Create a campaign using *Campaign Generation Wizard* and select the options on the screen.
2. Select the *Send E-Mail Using SAP Business One Mail* option and choose the *Next* button, the *Send Message* window opens.
3. In order to send SMS, choose the *Send via HUB* button available on *Send Message* window that triggers the Nexmo SMS API to send the SMS.
4. On choosing the *Send via HUB* button, the application displays the "operation completed successfully" message.

9.3.4 SMS Template for Marketing Documents

SMS Trigger: When a new sales quotation document is added in SAP Business One, the system sends the SMS automatically if the *SMS via HUB* option in the *Print Preferences* window is enabled/checked and Business Partner conditions are met. To send the SMS manually, choose the *SAP Business One Mailer* ✉ icon in the tool bar.

The message content is populated automatically for the documents based on the SMS templates defined in the *Print Preferences* setup. To modify the content, use the *Placeholder.*

In the SMS Template, the {} refers to the logical description of the field.

9.3.4.1 Sales Quotation Creation

SMS to Customer:

Hi {CardName}, Sale Quotation # {DocNum} with total amount of {DocCur} {DocTotal} has been raised. It is valid till {DocDueDate}.

Place Holders	Logical Field Description	SAP Business One Table	SAP Business One Field
CardName	Customer Name	OQUT-Sales Quotation	CardName
DocNum	Sales Quotation No.	OQUT-Sales Quotation	DocNum
DocCur	Currency	OQUT-Sales Quotation	DocCur
DocTotal	Total Amount	OQUT-Sales Quotation	DocTotal
DocDueDate	Valid till Date	OQUT-Sales Quotation	DocDueDate

9.3.4.2 Sales Order Creation

SMS to Customer:

Hi {CardName}, Your order # {DocNum} has been successfully created. Your order total is {DocCur} {DocTotal} & will be delivered by {DocDueDate}.

Place Holders	Logical Field Description	SAP Business One Table	SAP Business One Field
CardName	Customer Name	ORDR-Sales Order	CardName
DocNum	Sales Order No.	ORDR-Sales Order	DocNum
DocCur	Currency	ORDR-Sales Order	DocCur
DocTotal	Total Amount	ORDR-Sales Order	DocTotal
DocDueDate	Fulfillment Date	ORDR-Sales Order	DocDueDate

9.3.4.3 Delivery Creation

SMS to Customer:

Hi {CardName}, A shipment worth {DocCurl} {DocTotal} has been shipped on {DocDate}.

Place Holders	Logical Field Description	SAP Business One Table	SAP Business One Field
CardName	Customer Name	ODLN-Delivery	CardName
DocCur	Currency	ODLN-Delivery	DocCur
DocTotal	Total Amount	ODLN-Delivery	DocTotal
DocDate	Document Date	ODLN-Delivery	DocDate

9.3.4.4 Return Request Creation

SMS to Customer:

Hi {CardName}, Your Return Request # {DocNum} has been initiated on {DocDate} for {DocCur} {DocTotal}.

Place Holders	Logical Field Description	SAP Business One Table	SAP Business One Field
CardName	Customer Name	ORRR- Return Request	CardName
DocNum	Return Request No	ORRR- Return Request	DocNum
DocDate	Document Date	ORRR- Return Request	DocDate
DocCur	Currency	ORRR- Return Request	DocCur
DocTotal	Total Amount	ORRR- Return Request	DocTotal

9.3.4.5 Return Creation

SMS to Customer:

Hi {CardName}, A Return document # {DocNum} has been created on {DocDate} for {DocCur} {DocTotal}.

Place Holders	Logical Field Description	SAP Business One Table	SAP Business One Field
CardName	Customer Name	ORDN- Return	CardName
DocNum	Return No	ORDN- Return	DocNum
DocDate	Document Date	ORDN- Return	DocDate
DocCur	Currency	ORDN- Return	DocCur
DocTotal	Total Amount	ORDN- Return	DocTotal

9.3.4.6 A/R Down Payment Creation

SMS to Customer:

Hi {CardName}, A/R Down Payment Invoice # {DocNum} created on {DocDate} for {DocCur} {DocTotal}.

Place Holders	Logical Field Description	SAP Business One Table	SAP Business One Field
CardName	Customer Name	ODPI- A/R Down Payment Invoice	CardName
DocNum	Down Payment No	ODPI- A/R Down Payment Invoice	DocNum
DocDate	Document Date	ODPI- A/R Down Payment Invoice	DocDate
DocCur	Currency	ODPI- A/R Down Payment Invoice	DocCur
DocTotal	Total Amount	ODPI- A/R Down Payment Invoice	DocTotal

9.3.4.7 A/R Invoice Creation

SMS to Customer:

Hi {CardName}, A/R Invoice # {DocNum} has been created for {DocCur} {DocTotal} on {DocDate}.

Place Holders	Logical Field Description	SAP Business One Table	SAP Business One Field
CardName	Customer Name	OINV-A/R Invoice	CardName
DocNum	Invoice No.	OINV-A/R Invoice	DocNum
DocCur	Currency	OINV-A/R Invoice	DocCur
DocTotal	Invoice Amount	OINV-A/R Invoice	DocTotal
DocDate	Document Date	OINV-A/R Invoice	DocDate

9.3.4.8 A/R Credit Memo Creation

SMS to Customer:

Hi {CardName}, A/R Credit Memo # {DocNum} has been created for {DocCur} {DocTotal} on {DocDate}.

Place Holders	Logical Field Description	SAP Business One Table	SAP Business One Field
CardName	Customer Name	ORIN-A/R Credit Memo	CardName
DocNum	Credit Memo No.	ORIN-A/R Credit Memo	DocNum
DocCur	Currency	ORIN-A/R Credit Memo	DocCur
DocTotal	Amount	ORIN-A/R Credit Memo	DocTotal
DocDate	Document Date	ORIN-A/R Credit Memo	DocDate

9.3.4.9 Purchase Quotation Creation

SMS to Vendor:

Hi {CardName}, This is to request you to share the quote for the RFQ # {DocNum} and is required by {ReqDate}.

Place Holders	Logical Field Description	SAP Business One Table	SAP Business One Field
CardName	Vendor Name	OPQT-Purchase Quotation	CardName
DocNum	PQ Number	OPQT-Purchase Quotation	DocNum
ReqDate	Required Date	OPQT-Purchase Quotation	ReqDate

9.3.4.10 Purchase Order Creation

SMS to Vendor:

Hi {CardName}, Purchase Order # {DocNum} worth {DocCur} {DocTotal} has been created on {DocDate} and is required by {DocDueDate}.

Place Holders	Logical Field Description	SAP Business One Table	SAP Business One Field
CardName	Vendor Name	OPOR-Purchase Order	CardName
DocNum	PO Number	OPOR-Purchase Order	DocNum
DocCur	Currency	OPOR-Purchase Order	DocCur
DocTotal	Total Amount	OPOR-Purchase Order	DocTotal
DocDate	Document Date	OPOR-Purchase Order	DocDate
DocDueDate	Required by	OPOR-Purchase Order	DocDueDate

9.3.4.11 Goods Receipt PO Creation

SMS to Vendor:

Hi {CardName}, Goods worth {DocCur} {DocTotal} has been received on {DocDate}.

Place Holders	Logical Field Description	SAP Business One Table	SAP Business One Field
CardName	Vendor Name	OPDN-Goods Receipt PO	CardName
DocCur	Currency	OPDN-Goods Receipt PO	DocCur
DocTotal	Total Amount	OPDN-Goods Receipt PO	DocTotal
DocDate	Document Date	OPDN-Goods Receipt PO	DocDate

9.3.4.12 Goods Return Request Creation

SMS to Vendor:

Hi {CardName}, Goods Return Request # {DocNum} has been initiated on {DocDate} for {DocCur} {DocTotal}.

Place Holders	Logical Field Description	SAP Business One Table	SAP Business One Field
CardName	Vendor Name	OPRR-Goods Return Request	CardName
DocNum	Goods Return No	OPRR-Goods Return Request	DocNum
NumAtCard	Vendor Ref No	OPRR-Goods Return Request	NumAtCard
DocDate	Document Date	OPRR-Goods Return Request	DocDate
DocCur	Currency	OPRR-Goods Return Request	DocCur
DocTotal	Total Amount	OPRR-Goods Return Request	DocTotal

9.3.4.13 Goods Return Creation

SMS to Vendor:

Hi {CardName}, Goods worth {DocCur} {DocTotal} has been returned on {DocDate} due to {Comments}.

Place Holders	Logical Field Description	SAP Business One Table	SAP Business One Field
CardName	Vendor Name	ORPD-Goods Return	CardName
DocCur	Currency	ORPD-Goods Return	DocCur
DocTotal	Total Amount	ORPD- Goods Return	DocTotal
DocDate	Document Date	ORPD- Goods Return	DocDate
Comments	Remarks	ORPD- Goods Return	Comments

9.3.4.14 A/P Down Payment Creation

SMS to Vendor:

Hi {CardName}, A/P Down Payment Invoice # {DocNum} has been created for {DocCur} {DocTotal} on {DocDate}.

Place Holders	Logical Field Description	SAP Business One Table	SAP Business One Field
DocNum	A/P Down Payment No	ODPO-A/P Down Payment Invoice	DocNum
CardName	Vendor Name	ODPO-A/P Down Payment Invoice	CardName
DocCur	Currency	ODPO-A/P Down Payment Invoice	DocCur
DocTotal	Amount	ODPO-A/P Down Payment Invoice	DocTotal
DocDate	Document Date	ODPO-A/P Down Payment Invoice	DocDate

9.3.4.15 A/P Invoice Creation

SMS to Vendor:

Hi {CardName}, Your A/P Invoice # {NumAtCard} for {DocCur} {DocTotal} has been created on {DocDate} and {DocNum} is the reference number in our records.

Place Holders	Logical Field Description	SAP Business One Table	SAP Business One Field
CardName	Vendor Name	OPCH-A/P Invoice	CardName
NumAtCard	Vendor Reference	OPCH-A/P Invoice	NumAtCard
DocCur	Currency	OPCH-A/P Invoice	DocCur
DocTotal	Invoice Amount	OPCH-A/P Invoice	DocTotal
DocDate	Document Date	OPCH-A/P Invoice	DocDate
DocNum	Document No	OPCH-A/P Invoice	DocNum

9.3.4.16 A/P Credit Memo Creation

SMS to Vendor:

Hi {CardName}, A/P Credit Memo # {DocNum} has been created for {DocCur} {DocTotal} on {DocDate}.

Place Holders	Logical Field Description	SAP Business One Table	SAP Business One Field
CardName	Customer Name	ORPC-A/P Credit Memo	CardName
DocNum	Credit Memo No.	ORPC-A/P Credit Memo	DocNum
DocCur	Currency	ORPC-A/P Credit Memo	DocCur
DocTotal	Amount	ORPC-A/P Credit Memo	DocTotal
DocDate	Document Date	ORPC-A/P Credit Memo	DocDate

9.3.4.17 List of Place Holders

Following are the placeholders supported in SMS templates:

S.No.	Place Holders	Remarks
1	*{CardCode}*	Business Partner Code
2	*{CardName}*	Business Partner Name
3	*{NumAtCard}*	Business Partner Ref. No
4	*{DocNum}*	Document Number
5	*{DocStatus}*	Document Status
6	*{DocDate}*	Document Date
7	*{DocDueDate}*	Document Due Date
8	*{TaxDate}*	Document Posting Date
9	*{Comments}*	Remarks on Document
10	*{DiscPrcnt}*	Discount Percentage
11	*{DiscSum}*	Discount Amount
12	*{TotalExpns}*	Freight Amount
13	*{VatSum}*	Tax Amount
14	*{DocTotal}*	Document Total
15	*{DocTotalFC}*	Document Total (FC)
16	*{SlpCode}*	SlpName From OSLP
17	*{OwnerCode}*	FirstName+LastName From OHEM table
18	*{CntctCode}*	FirstName From OCPR table
19	*{TrackNo}*	Tracking Number
20	*{UserSign)*	User Name(U_Name) from OUSR

10 Fixer

The Fixer API is capable of delivering real-time exchange rate data for 170 world currencies. The API comes with multiple endpoints, each serving a different use case. Endpoint functionalities include getting the latest exchange rate data for all or a specific set of currencies, converting amounts from one currency to another, retrieving time-series data for one or multiple currencies, and querying the API for daily fluctuation data. The integration between the Fixer web service and SAP Business One facilitates the automated update of the exchange rate data in SAP Business One. The biggest advantage of integrating the Fixer web service with SAP Business One is the automatic retrieval of exchange rates data that saves time and is error-free.

With this integration, the exchange rates data is automatically retrieved in the *Exchange Rates and Indexes*. This integration helps in process automation – no need to put any manual exchange rates in the SAP Business One or make any extra efforts to check the latest exchange rates for foreign currencies (USD, AUD, EUR, etc.). The Fixer integration provides the automatic integration of exchange rate information with SAP Business One.

10.1 Fixer Setup in Administration Console

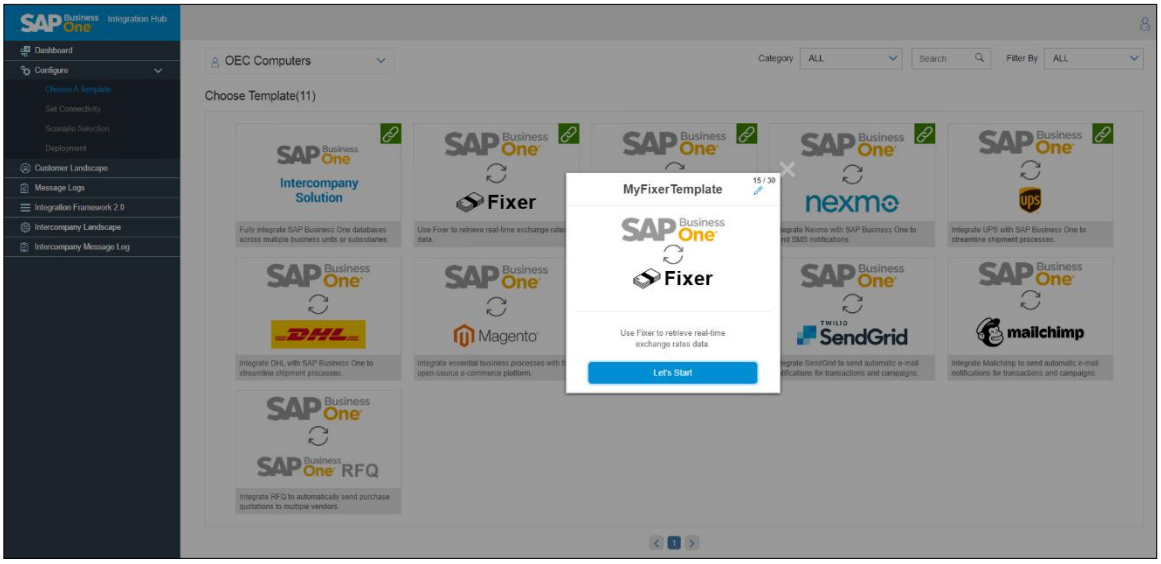
The following are the steps to set up Fixer in Administration Console:

1. Add New Customer. Refer to the section Add New Customer in the document.
2. Select the *Fixer* template to integrate.

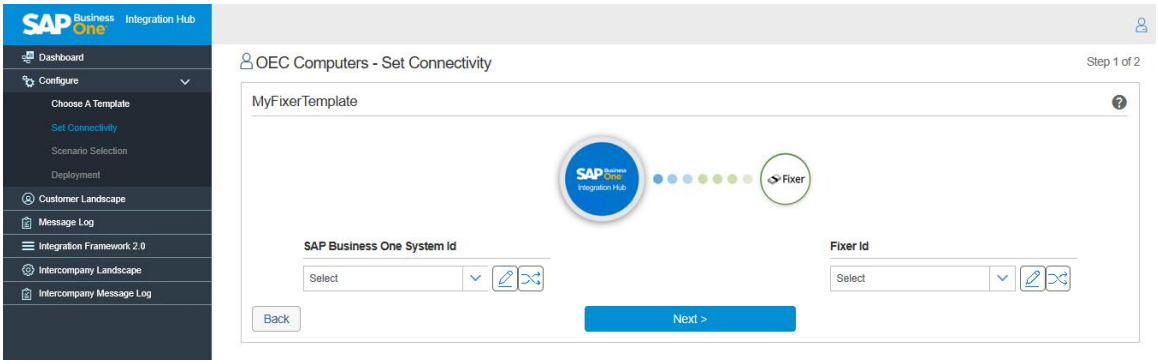
Upon selecting the template, a message "*Let's Start*" prompts to start configuring the connectivity settings. Change the template name by clicking the Edit button to edit the template name. Otherwise, it appears as a *MyFixer Template.*

Note

By default, the name of the template appears as *MyFixer Template* and can be renamed.



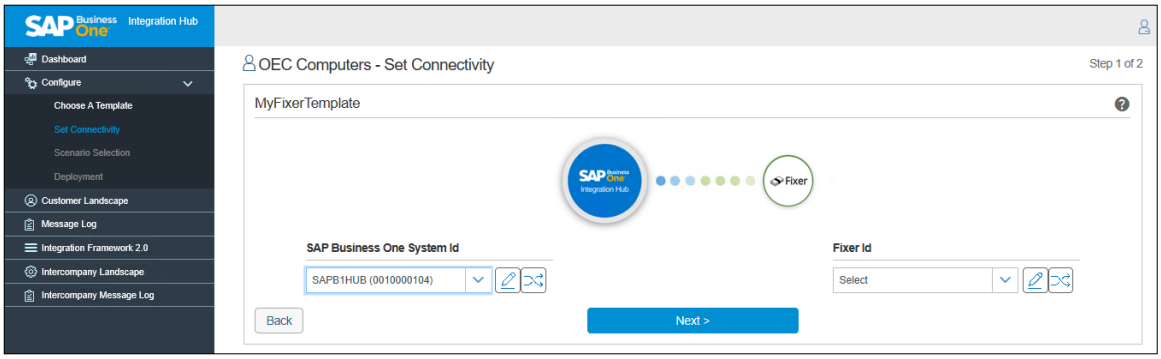
3. Upon choosing the *Let's Start* button, a *Set Connectivity* page appears with the following two steps to complete the configurations for connectivity.



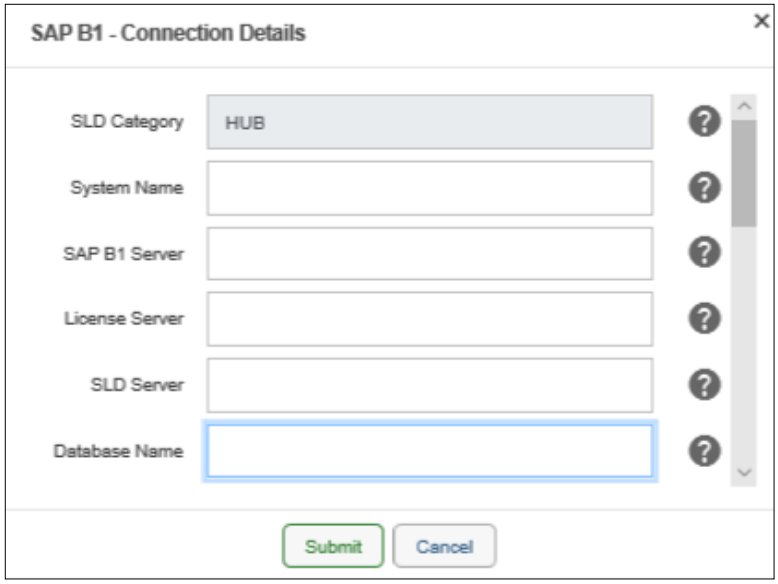
Step 1 – Set Connectivity

4. Choose the SAP Business One SLD to provide the connection between *SAP Business One System Id* and *Fixer Id.*

> **Note**
>
> By default, the solution displays all the SAP Business One SLDs available in *SLD Category* selected during customer creation.



5. To add a new SLD or edit existing SAP Business One SLD under SAP Business System Id area, choose *Add / Edit* button.



The *SAP Business One Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update SAP Business One SLD.
SAP Business One Server	Enter SAP Business One Server Name / IP Address. Note *SAP Business One Server* is the mandatory field to add/update SLD information for SAP Business One.
License Server	Enter *License Server* details. i.e. Server Name or IP Address and port number of the SAP Business One License Server. The default port is 30000.
SLD Server	Enter the valid *SLD Server* details with port. Note *SLD Server* details is the mandatory field to add/update SLD information for SAP Business One.
Database Name	Enter the name of the SAP Business One Database. Note *Database Name* is the mandatory field to add/update SAP Business One System SLD. Caution The *Database Name* must be entered same as SAP Business One Database Name.
Database Type	Currently, only Microsoft SQL Server 2005, 2008, 2012, 2014, 2016, 2017 and SAP Hana DB are supported. Choose the database type from the dropdown list. Note *Database Type* is the mandatory field to add/update SAP Business One SLD.
Database User	Enter the user to access the company database using the database connection. *Database User* is the mandatory field to add/update SAP Business One SLD. Caution The *Database User* must be valid. Invalid *Database User* will result in failure to establish the connection.
Database Password	Enter a valid password for database login. Note *Database Password* is the mandatory field to add/update SAP Business One SLD. Caution The *Database Password* must be valid. Invalid *Database Password* will result in failure to establish the connection.
Database Port	Enter the port for database.
Username	Enter `B1i` in this field.

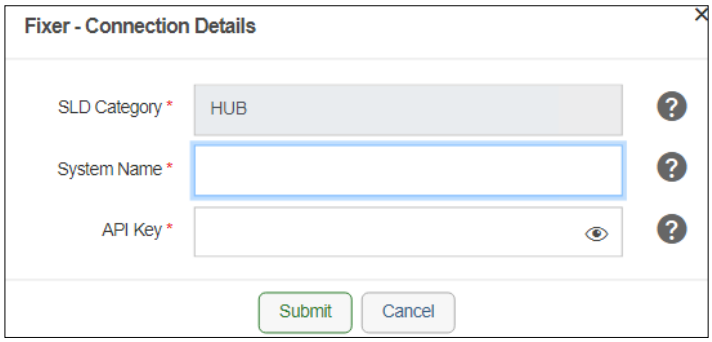
	Note *Username* is the mandatory field to add/update SAP Business One SLD. It is set as B1i by default and un editable. Caution Ensure that a user with this name exists in the SAP Business One database.
Password	Enter a valid password for B1i user of SAP Business One.
Language	Select the language from the list of languages.
Is Trust	Select *True* or *False*. The default value for this field is *False.* To use a trusted connection, choose *True* from the dropdown list.
jcoPath	Enter path for jco library. Example of Installation path of JCO: C:\Program Files (x86)\SAP\SAP Business One DI API\JCO\LIB
DI ProxyHost	The DI Proxy host must be defined if B1i is installed on a separate server (this is, other than the SAP Business One server). The value in this field must be same as SAP Business One Server address. Example *Proxyhost* can be same as *SAP Business One Server.*
DI ProxyPort	The default value of *DI Proxy Port* is 2099.
Proxy Host	The proxy host is defined in a multi-instance scenario. If the B1i server connects to the SAP Business One server through a proxy server then, enter the address of the proxy server in this field.
Proxy Port	Enter the proxy port in this field.

6. Enter the valid data and choose the *Submit button.* An *SAP Business One SLD* is created.

7. Choose the *Test Connection* icon to test the connection between the SAP Business One System Id in Integration Hub and SAP Business One System Landscape Directory.

   If the connection is successful, a success message appears “Test Connection Successful”.
   If the connection is unsuccessful, a failure message appears “Test Connection Failed”. Please provide the correct credentials.

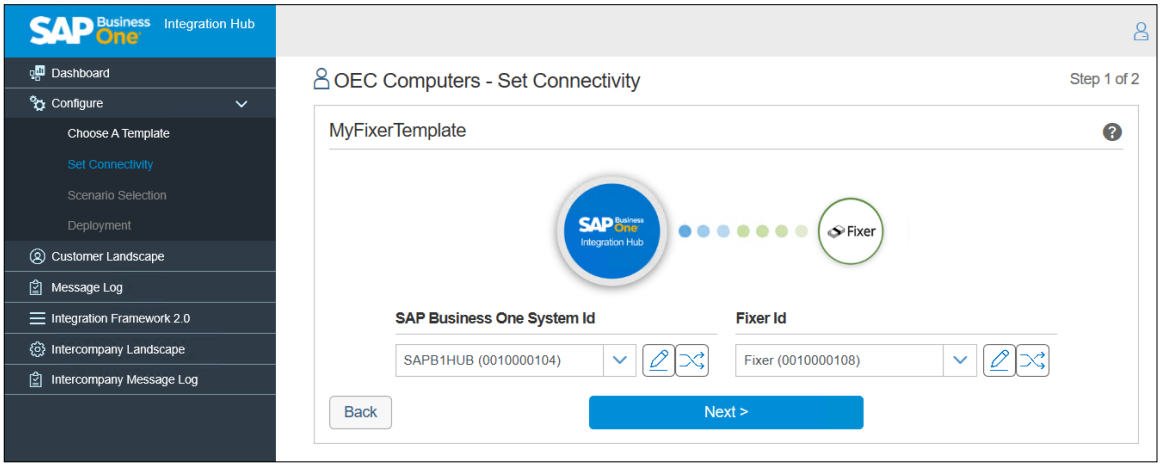
8. To add / edit Fixer instance SLD under Fixer Id area, choose the Add / Edit button.



The *Fixer Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update Fixer SLD.
App Key	Application Key provided by Fixer

9. Provide the valid information in the fields and choose the *Submit button.* SLD for Fixer will be created.

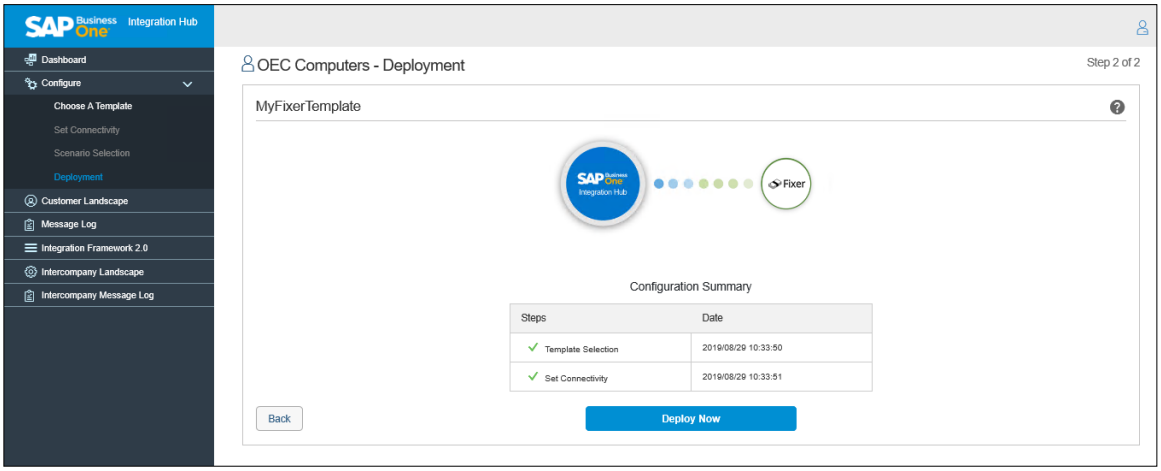


10. Choose the *Test Connection* icon to test the connection between the Integration Hub and Fixer.
If the connection is successful, a success message appears “Test Connection Successful”.
If the connection is unsuccessful, a failure message appears “Test Connection Failed”.

11. Choose the *Next* button to proceed to Step2.

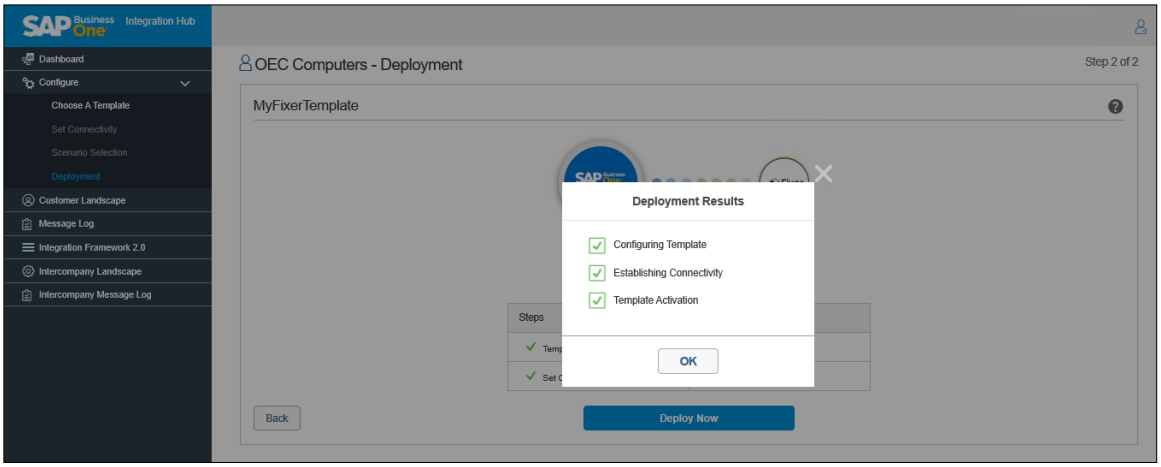
Summary

12. The Configuration summary displays the *Date* and time for *Template Selection* and *Set Connectivity steps*.

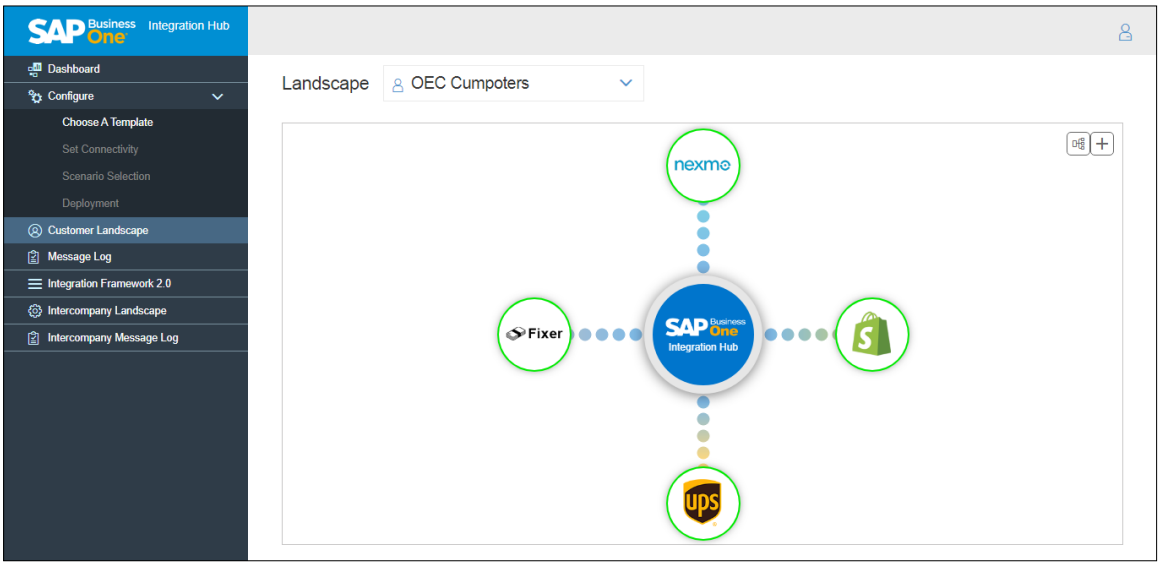


Step 2 – Deployment

13. To deploy the solution, choose the *Deploy Now* button.
14. The application prompts you to provide the license details. For more information, refer to the Assigning the Integration Hub licenses section in this document
15. The Integration Hub displays the *Deployment Results* whether the deployment is successful or failed. The checkbox in the *Deployment Results* window displays status of each deployment stage.



16. Once all stages are checked, click the *OK* button on the *Deployment Results* window to proceed. The successful deployment of solution in Integration Hub results in enabling the features in SAP Business One. Customer Landscape displays connection of SAP Business One to Fixer.



17. To modify the template after successful feature activation, right click on the logo of the template.

18. Right click on the Fixer logo displays window with the following fields:

Field Name	Description
View	Displays the *Set Connectivity* window in view mode.
Edit	Displays the *Set Connectivity* window in Edit mode.
De-activate	Deactivates the Fixer deployment.
Deployment Status	Displays the deployment status with date and time.
Delete Template	Choose delete template to delete the template. It is an Irreversible action. **Note** On deleting the template, the template will be marked as Inactive in the application deployment status window in SAP Business One.
Delete Deployment Info.	Choose delete deployment info. to delete the complete deployment information of the template. It is an Irreversible action. **Note** On deleting the deployment information, the template will not be deleted from deployment panel screen, it will be deactivated only.
Manage Licenses	Choose Manage License to Activate/Deactivate the integration Hub License. For more information, see Managing the Integration Hub licenses section in this guide.

10.2 Setup in SAP Business One

1. In the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Application Deployment Status*.

   The *Deployment Status* field should display 'Active', indicating that the feature is deployed in the Integration Hub. If the status displays 'Inactive', then redeploy the feature in the *Integration Hub.*

   The following are the statuses that can be visible on the *Application Deployment Status* screen:

   - *Active*: The status represents the solution is deployed and active.
   - *Inactive*: The status represents the feature template is not inactive.

   For more details, refer to the *Application Deployment Status* section in this guide.

   > **Note**
   >
   > You must restart the SAP Business One client after the Fixer deployment from the Integration HUB. On login, the Add-On script will execute, and relevant fixer windows will appear.

2. Enter B1i Server Details in SAP Business One in *Main Menu* → *Administration* → *Integration Hub* → *B1i Server Details* window. This window enables to enter the *B1i Server Details*.

The *B1i Server Details* contain the following fields:

Field Name	Description
B1i Server Address	Enter the server name or IP address of B1i server.
B1i Port	Enter the port of B1i Server. The default port for HTTP is 8080
Username	B1i run time user
Password	Enter the password for B1i run time user.
HTTPS	Select the checkbox to enable the solution to use HTTPS.

> **Note**
>
> Please ensure that the SLD entry for this company exists in SAP B1if and the solution is properly deployed.

10.3 Using Fixer

10.3.1 Manual Exchange Rates Retrieval

The application provides the option to manually retrieve the exchange rates at any time. The following steps describe the process to retrieve the exchange rates:

1. A *Retrieve Exchange Rates* button is available on the *Exchange Rates and Indexes* window.

   Choose *Main Menu →Administration →Exchange Rate and Indexes →Exchange Rates*.
2. On choosing this button, the *Retrieve Exchange Rates* window appears.
3. In this window, by default *From Date* and *To Date* is the current system date. Specify the date range and choose *OK,*
4. The application retrieves the exchange rates of the selected dates.

Note

The solution supports the retrieval of Historical Exchange Rates data. The base currency used for retrieving the exchange rates is always the local currency of the system. The system updates the exchange rates of all the available currencies in the system.

Note

You must define the ISO Currency code for the base and all other currencies defined in the database.

10.3.2 Automatic Retrieval of Exchange Rates

The application can be set to automatically retrieve the exchange rates. The fixer scheduler option is available to provide the frequency of the scheduler. Choose *Main Menu →Administration →Exchange Rate and Indexes →Fixer Scheduler.*

In the *Fixer Scheduler*, the option to run the scheduler on a daily or weekly basis is available.

1. In the *Run* field, choose the run frequency (Daily or Weekly).
2. If the *Weekly* option is selected, then select the weekday in the *On* field.
3. In the *Hour* field, choose the hour frequency at which you would like to run the replication.
4. In the *Minute* field, choose the minute frequency at which you would like to run the replication.
5. Choose the *Save Schedule* button.

11 Mailchimp

The integration between Mailchimp and SAP Business One facilitates the manual E-mail notification, automatic E-mail notification based on print preferences, and E-mail notification based on a campaign generation wizard from SAP Business One. The Integration comes with predefined E-mail templates and placeholders. The E-mail templates are customizable to suit your business communication. The logged-in user id must be defined in the system.

> **Note**
>
> Mailchimp Transactional email service must be activated in the MailChimp account.
> Transactional Email is available as an add-on to Standard and higher monthly Mailchimp plans or the legacy Monthly Plan.

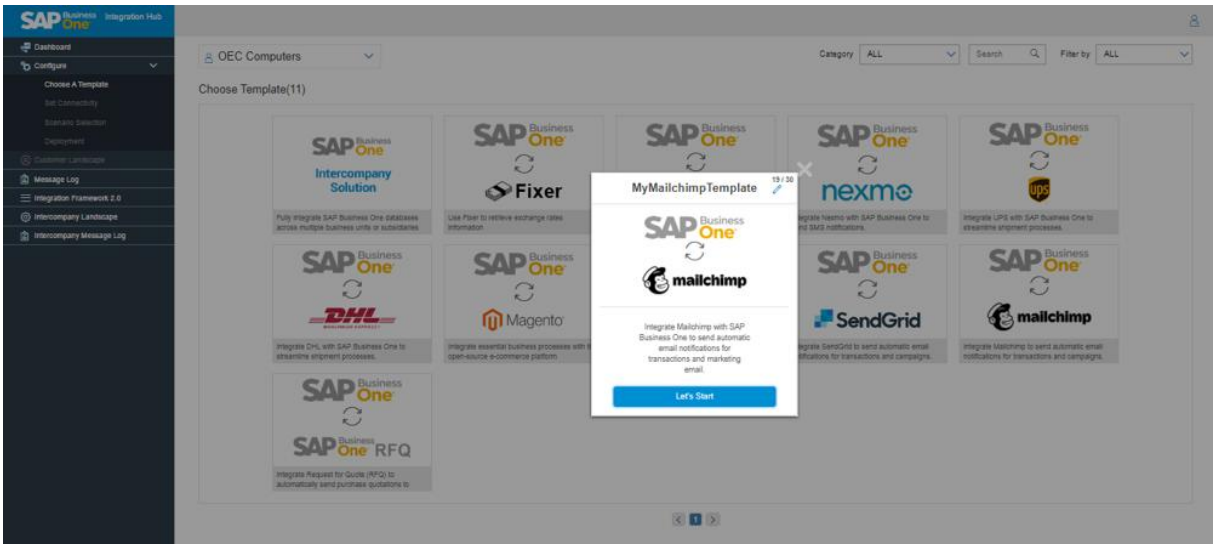
11.1 MailChimp Setup in Administration Console

The following are the steps to set up Mailchimp in Administration Console:

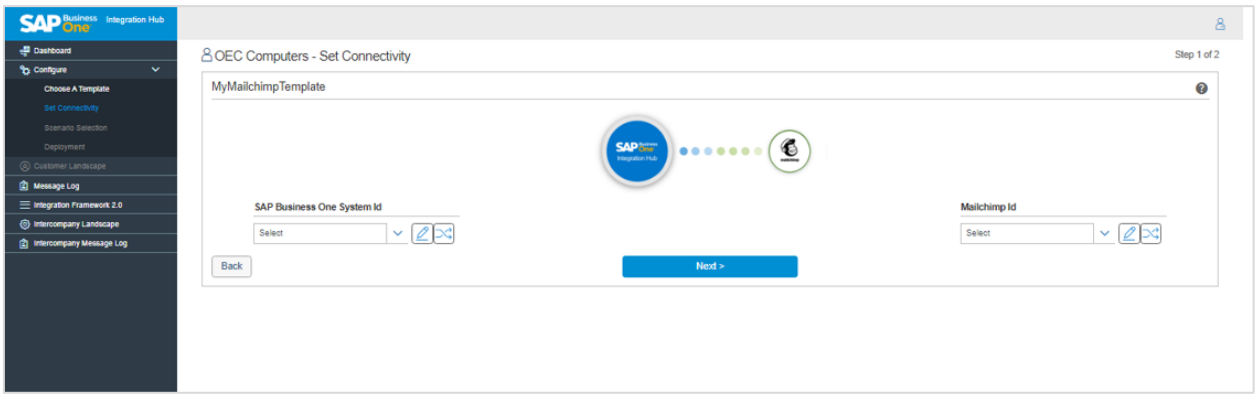
1. Add New Customer. Refer to the section Add New Customer in the document.
2. Select the *Mailchimp* template to integrate.

   Upon selecting the template, a message "*Let's Start*" prompts to start configuring the connectivity settings. Change the template name by clicking the Edit button to edit the template name. Otherwise, it appears as a *MyMailchimp Template.*

   > **Note**
   >
   > By default, the name of the template appears as *MyMailchimp Template* and can be renamed.



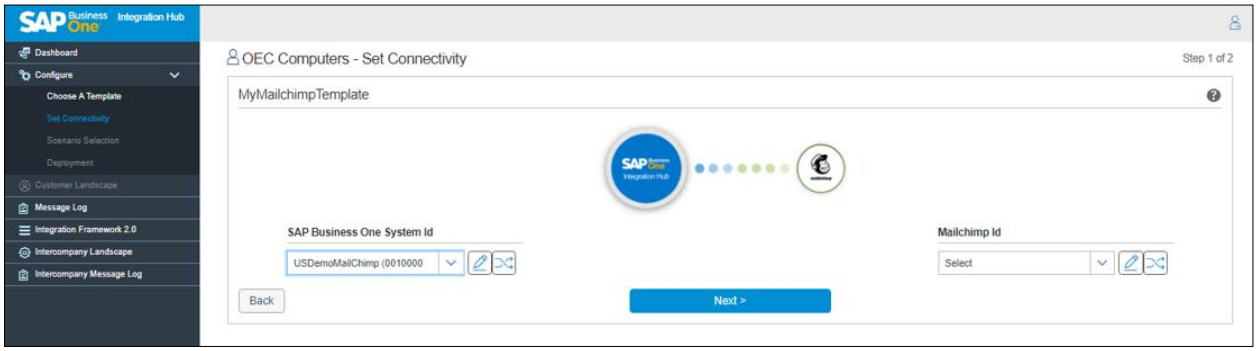
3. Upon choosing the *Let's Start* button, a *Set Connectivity* page appears with the following two steps to complete the configurations for connectivity.



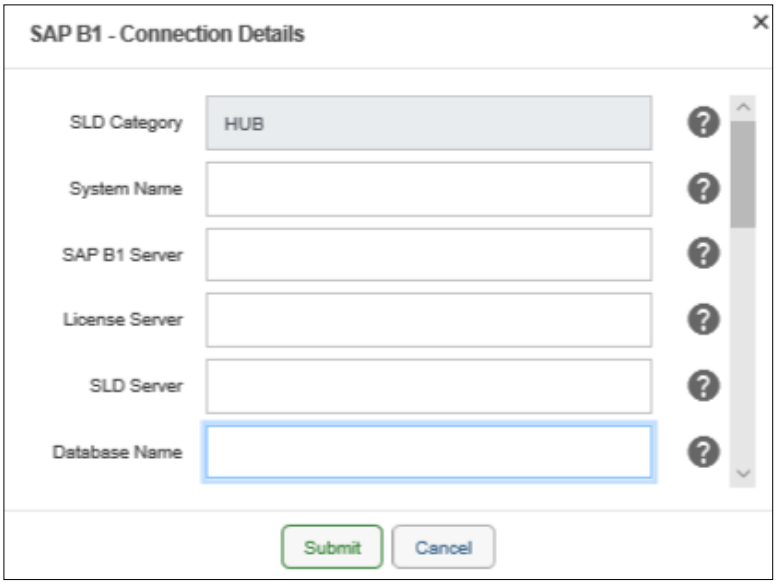
Step 1 – Set Connectivity

4. Choose the SAP Business One SLD to provide the connection between *SAP Business One System Id* and *Mailchimp Id.*

> **Note**
>
> By default, the solution displays all the SAP Business One SLDs available in *SLD Category* selected during customer creation.



5. To add a new SLD or edit existing SAP Business One SLD under SAP Business System Id area, choose *Add / Edit* button.



The *SAP Business One Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update SAP Business One SLD.
SAP Business One Server	Enter SAP Business One Server Name / IP Address. Note *SAP Business One Server* is the mandatory field to add/update SLD information for SAP Business One.
License Server	Enter *License Server* details. i.e. Server Name or IP Address and port number of the SAP Business One License Server. The default port is 30000.
SLD Server	Enter the valid *SLD Server* details with port. Note *SLD Server* details is the mandatory field to add/update SLD information for SAP Business One.
Database Name	Enter the name of the SAP Business One Database. Note *Database Name* is the mandatory field to add/update SAP Business One System SLD. Caution The *Database Name* must be entered same as SAP Business One Database Name.
Database Type	Currently, only Microsoft SQL Server 2005, 2008, 2012, 2014, 2016, 2017 and SAP Hana DB are supported. Choose the database type from the dropdown list. Note *Database Type* is the mandatory field to add/update SAP Business One SLD.

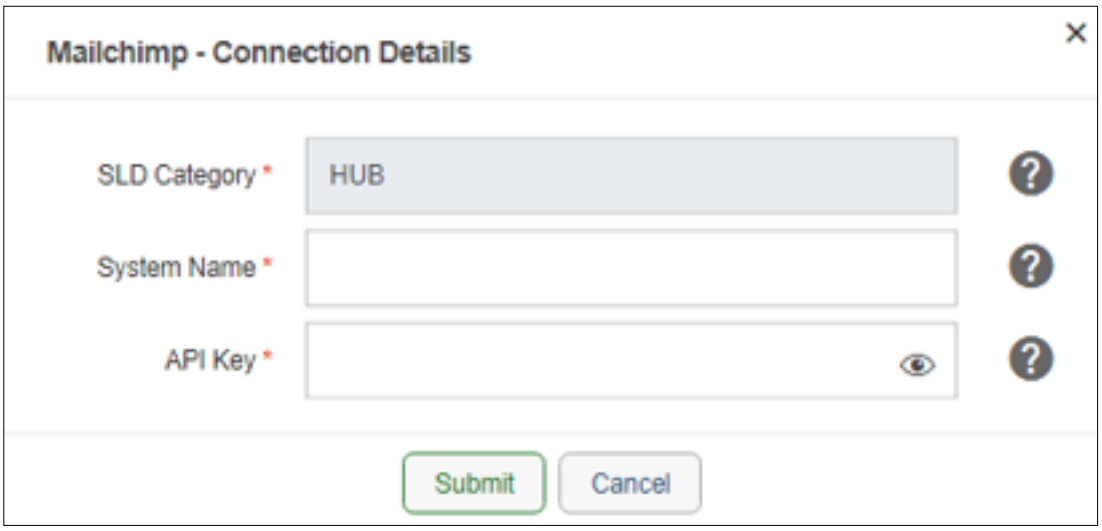
Database User	Enter the user to access the company database using the database connection. *Database User* is the mandatory field to add/update SAP Business One SLD. Caution The *Database User* must be valid. Invalid *Database User* will result in failure to establish the connection.
Database Password	Enter a valid password for database login. Note *Database Password* is the mandatory field to add/update SAP Business One SLD. Caution The *Database Password* must be valid. Invalid *Database Password* will result in failure to establish the connection.
Database Port	Enter the port for database.
Username	Enter `B1i` in this field. Note *Username* is the mandatory field to add/update SAP Business One SLD. It is set as B1i by default and un editable. Caution Ensure that a user with this name exists in the SAP Business One database.
Password	Enter a valid password for B1i user of SAP Business One.
Language	Select the language from the list of languages.
Is Trust	Select *True* or *False*. The default value for this field is *False.* To use a trusted connection, choose *True* from the dropdown list.
JcoPath	Enter path for jco library. Example of Installation path of JCO: C:\Program Files (x86)\SAP\SAP Business One DI API\JCO\LIB
DI ProxyHost	The DI Proxy host must be defined if B1i is installed on a separate server (this is, other than the SAP Business One server). The value in this field must be same as SAP Business One Server address. Example *Proxyhost* can be same as *SAP Business One Server.*
DI ProxyPort	The default value of *DI Proxy Port* is 2099.
Proxy Host	The proxy host is defined in a multi-instance scenario. If the B1i server connects to the SAP Business One server through a proxy server then, enter the address of the proxy server in this field.
Proxy Port	Enter the proxy port in this field.

6. Enter the valid data and choose the *Submit button.* An *SAP Business One SLD* is created.

7. Choose the *Test Connection* icon to test the connection between the SAP Business One System Id in Integration Hub and SAP Business One System Landscape Directory.

   If the connection is successful, a success message appears “Test Connection Successful”. If the connection is unsuccessful, a failure message appears “Test Connection Failed”. Please provide the correct credentials.

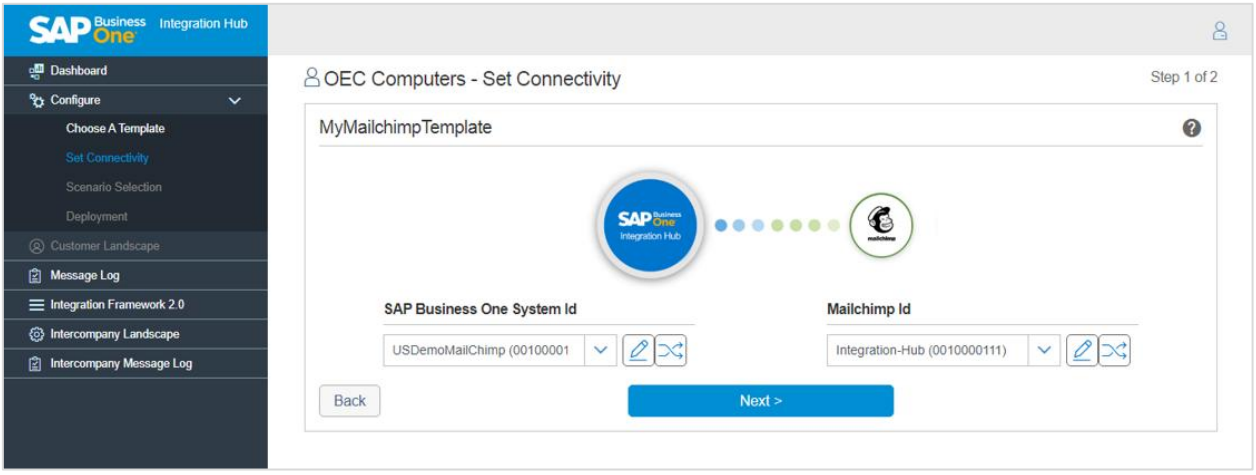
8. To add / edit Mailchimp instance SLD under Mailchimp Id area, choose the Add / Edit button.



The *Mailchimp Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update Mailchimp SLD.
API Key	Specify the API Key generated by Mailchimp Transactional Email. To Generate the API Key refer to the "Generate your API key" section on this URL https://mandrill.zendesk.com/hc/en-us/articles/360047420753.

9. Provide the valid information in the fields and choose the *Submit button.* SLD for Mailchimp will be created.

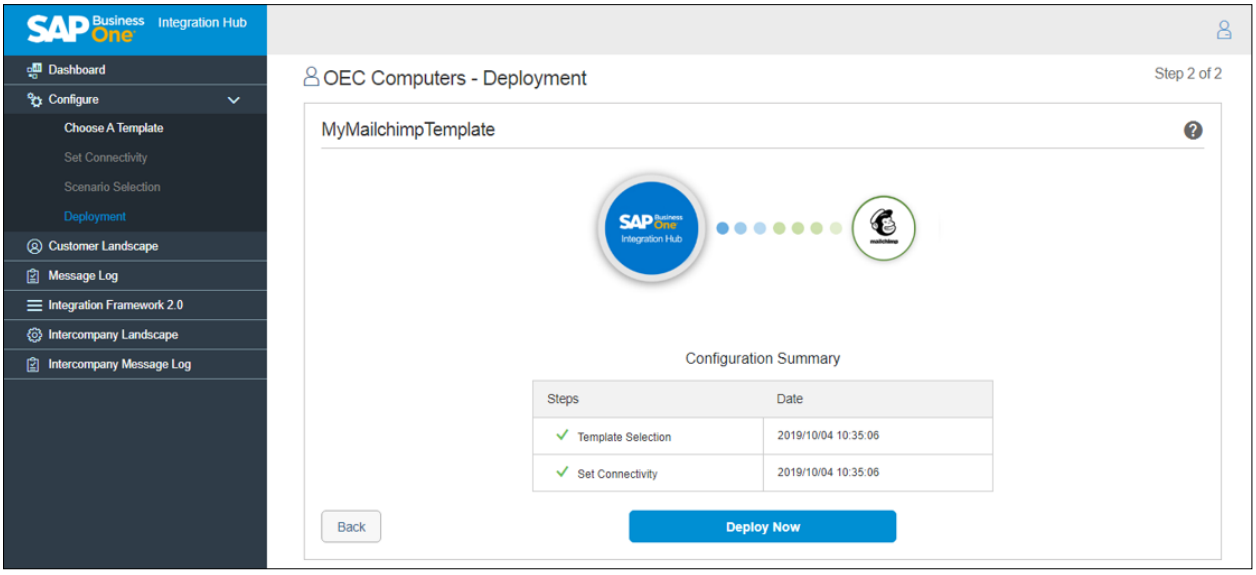


10. Choose the *Test Connection* icon to test the connection between the Integration Hub and Mailchimp.
If the connection is successful, a success message appears “Test Connection Successful”.
If the connection is unsuccessful, a failure message appears “Test Connection Failed”.

11. Choose the *Next* button to proceed to Step2.

Summary

12. The Configuration summary displays the *Date* and time for *Template Selection* and *Set Connectivity steps*.

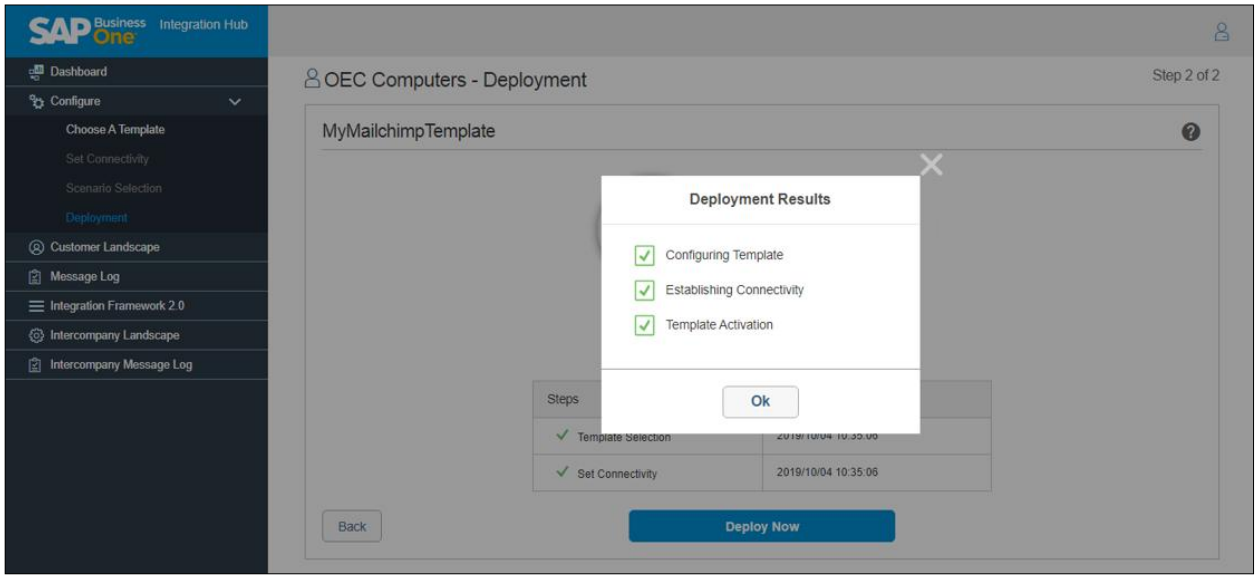


Step 2 – Deployment

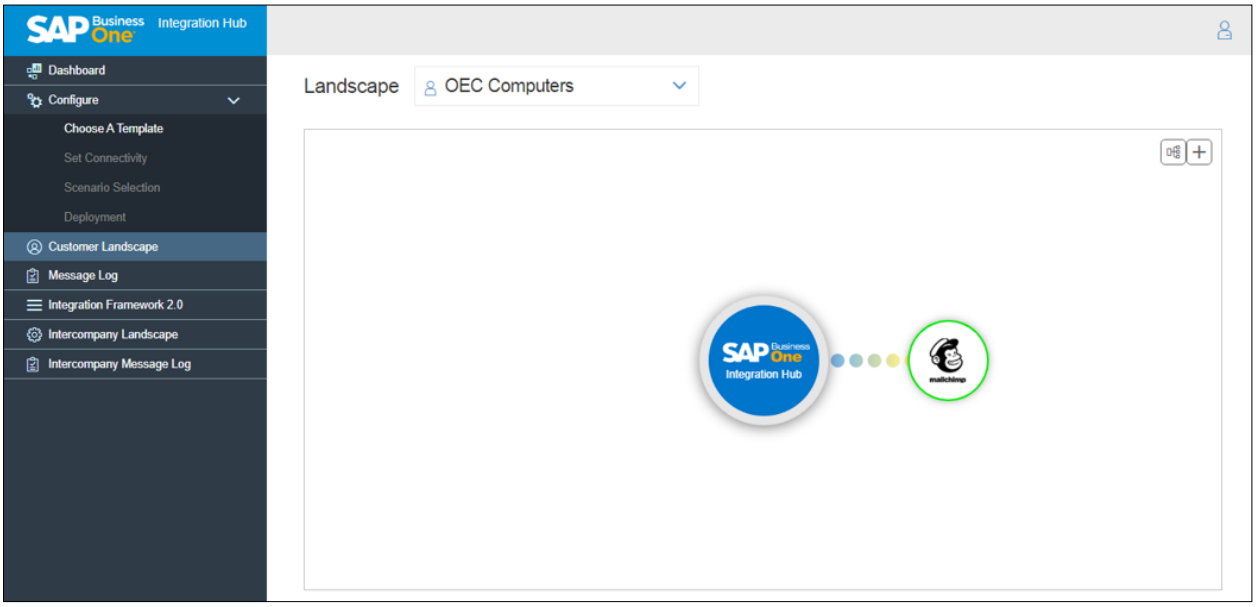
13. To deploy the solution, choose the *Deploy Now* button.

14. The application prompts you to provide the license details. For more information, refer to the Assigning the Integration Hub licenses section in this document.

15. The Integration Hub displays the *Deployment Results* whether the deployment is successful or failed. The checkbox in the *Deployment Results* window displays status of each deployment stage.



16. Once all stages are checked, click the *OK* button on the *Deployment Results* window to proceed. The successful deployment of solution in Integration Hub results in enabling the features in SAP Business One. Customer Landscape displays connection of SAP Business One to Mailchimp.



17. To modify the template after successful feature activation, right click on the logo of the template.

18. Right click on the Mailchimp logo displays window with the following fields:

Field Name	Description
View	Displays the *Set Connectivity* window in view mode.
Edit	Displays the *Set Connectivity* window in Edit mode.
De-activate	Deactivates the Mailchimp deployment.
Deployment Status	Displays the deployment status with date and time.
Delete Template	Choose delete template to delete the template. It is an Irreversible action. Note On deleting the template, the template will be marked as Inactive in the application deployment status window in SAP Business One.
Delete Deployment Info.	Choose delete deployment info. to delete the complete deployment information of the template. It is an Irreversible action. Note On deleting the deployment information, the template will not be deleted from deployment panel screen, it will be deactivated only.
Manage Licenses	Choose Manage License to Activate/Deactivate the integration Hub License. For more information, see Managing the Integration Hub licenses section in this guide.

11.2 Setup in SAP Business One

1. In the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Application Deployment Status*.

   The *Deployment Status* field should display 'Active', indicating that the feature is deployed in the Integration Hub. If the status displays 'Inactive', then redeploy the feature in the *Integration Hub.*

   The following are the statuses that can be visible on the *Application Deployment Status* screen:

   - *Active*: The status represents the solution is deployed and active.
   - *Inactive*: The status represents the feature template is not inactive.

   For more details, refer to the *Application Deployment Status* section in this guide.

   Note

   You must restart the SAP Business One client after Mailchimp deployment from the Integration HUB. Upon login, the Add-On script will execute, and a relevant setup window will appear.

2. Enter B1i Server Details in SAP Business One in *Main Menu* → *Administration* → *Integration Hub* → *B1i Server Details* window. This window enables to enter the *B1i Server Details*.

The *B1i Server Details* contains the following fields:

Field Name	Description
B1i Server Address	Enter the server name or IP address of B1i server.
B1i Port	Enter the port of the B1i Server. The default port for HTTP is 8080
Username	B1i run time user
Password	Enter the password for B1i run time user.
HTTPS	Select the checkbox to enable the solution to use HTTPS.

Note

Please ensure that the SLD entry for this company exists in SAP B1if and the solution is properly deployed.

3. After successful activation of *Mailchimp,* new fields are added to the following documents:
   - Print Preferences
   - Business Partner Master Data
   - Send Message

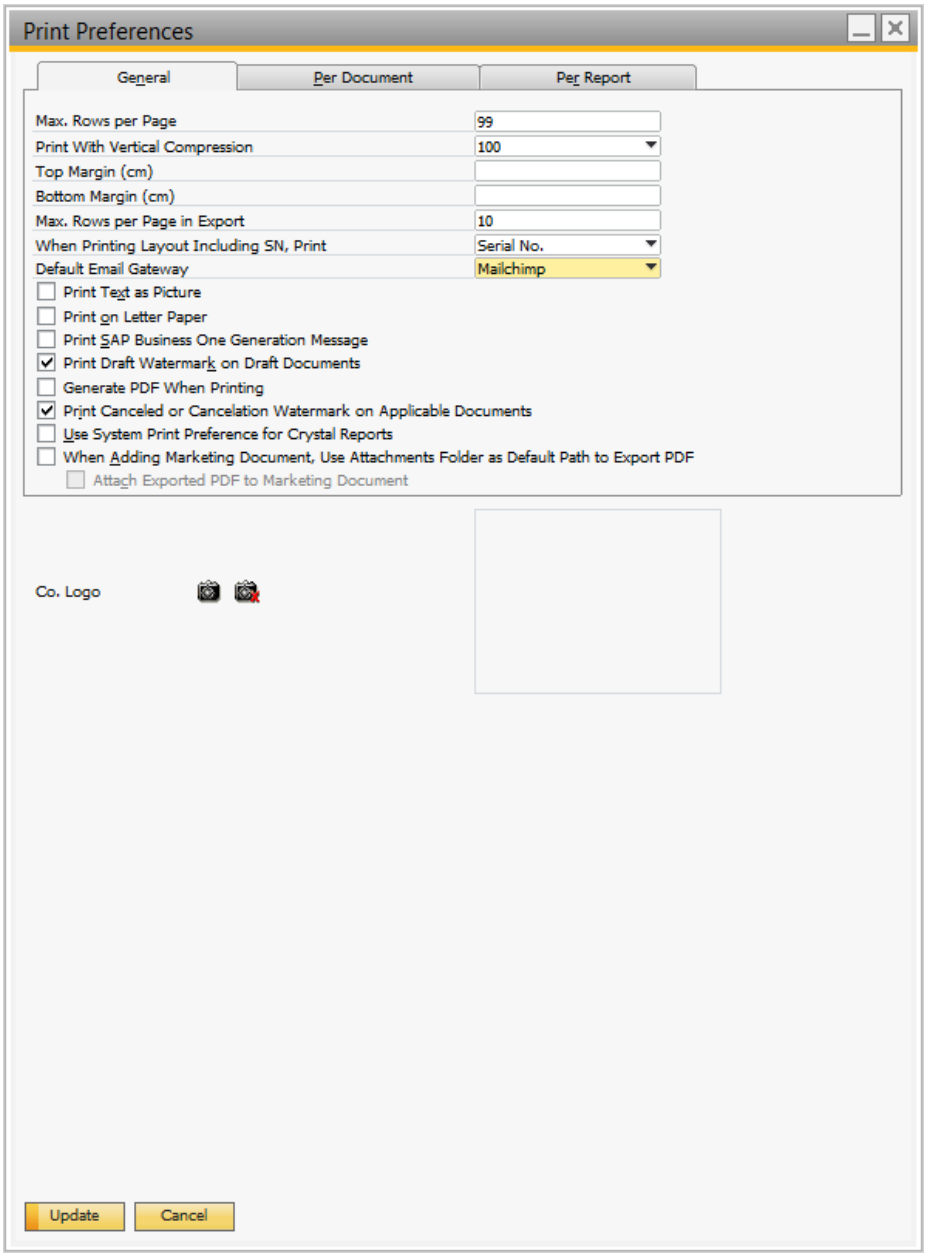
11.2.1 Print Preferences

In *Print Preferences* document the *E-mail via HUB* and *Send E-mail To all Business Partners* *fields are available* to send E-mail automatically through Mailchimp when document is added.

To open the *Print Preferences* window, from the SAP Business One *Main Menu,* choose *Administration→System Initialization→ Print Preferences*

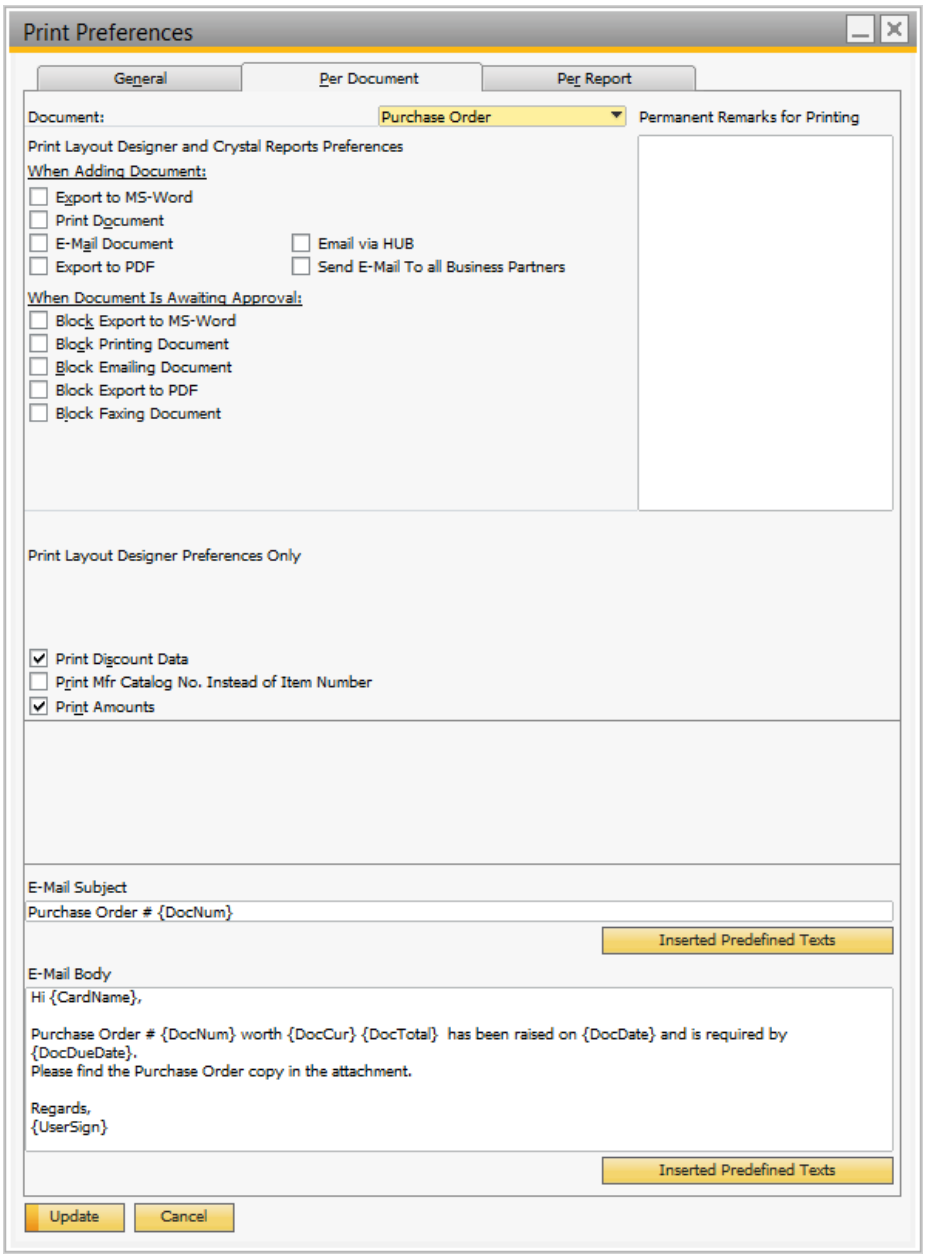
Default E-mail Gateway

To configure Default E-mail Gateway as Mailchimp on the *Print Preferences* window, from the SAP Business One *Main Menu,* choose *Administration→System Initialization→ Print Preferences→General*



E-mail via HUB

To configure E-mail via HUB on the *Print Preferences* window, from the SAP Business One *Main Menu,* choose *Administration→System Initialization→ Print Preferences →Per Document*

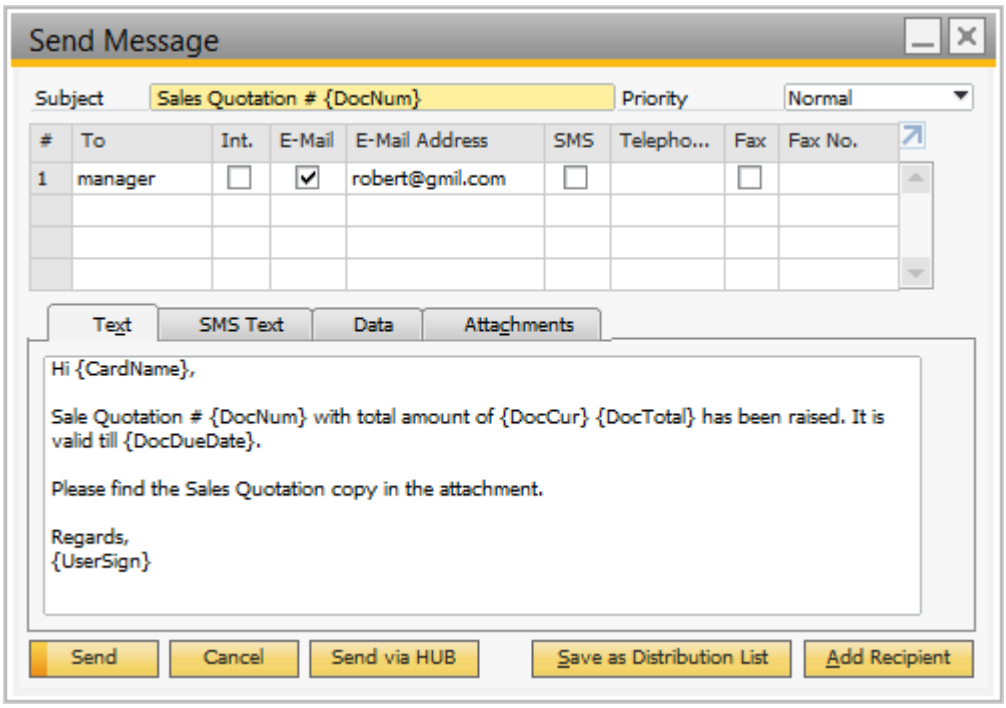


The *Print Preferences* window contains the following new fields:

Field Name	Description
E-mail via HUB	Select this check box to send automatic E-mail notification to the business partners contact person mentioned in the marketing documents, while adding the document.
Send E-mail to all Business Partners	If the Emil via HUB check box is selected, then application checks the *Send E-mail to all Business partners* check box. If this check box is selected, then application does not perform other checks and send the E-mail automatically to the contact person used in the document.

11.2.2 Send Message

In the *Send Message* window, a *Send via HUB* button is available. To open the *Send Message* window, open any marketing document and in the toolbar choose the *SAP Business One Mailer* ✉ icon.



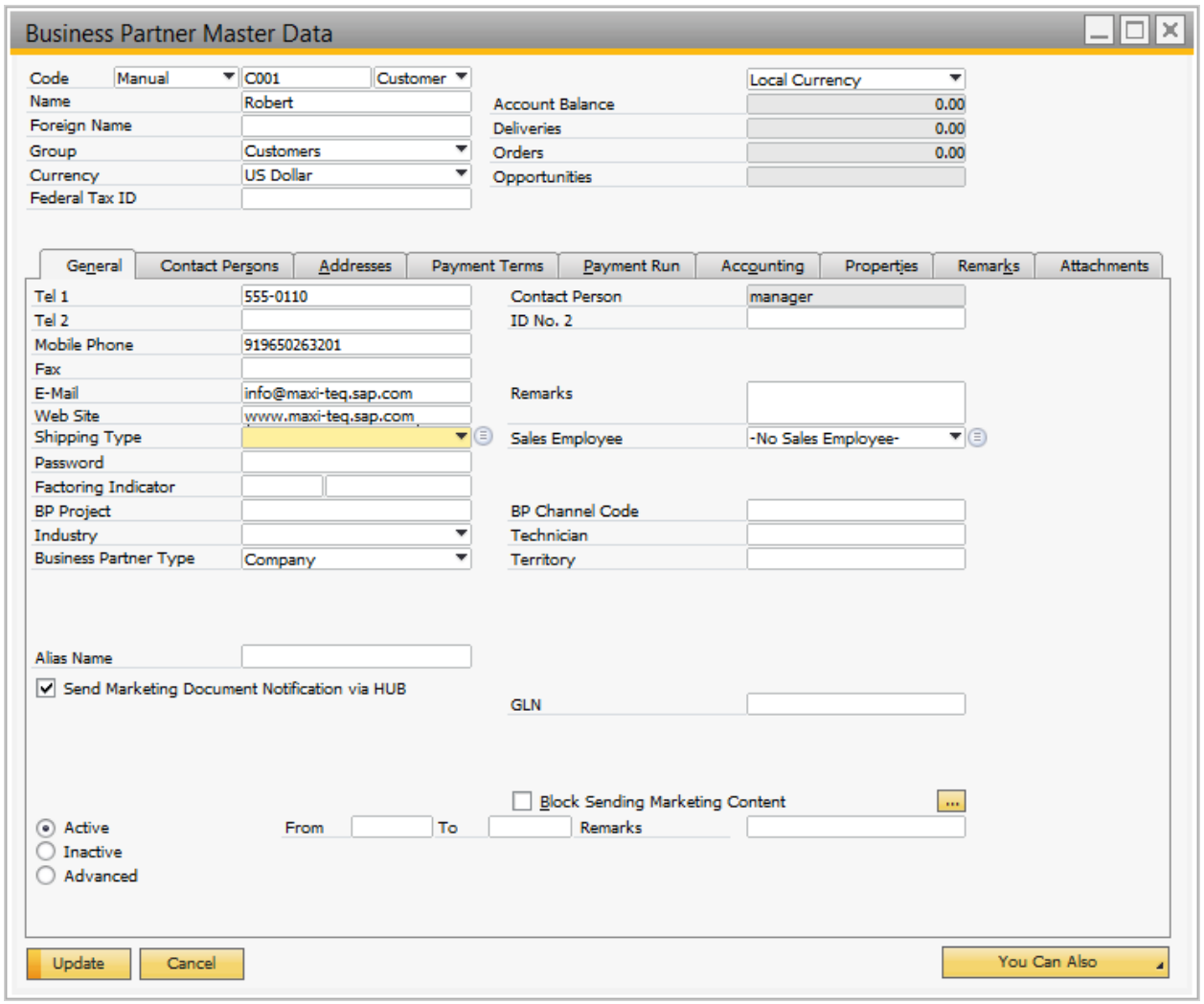
The *Send Message* window contains the following new fields:

Field Name	Description
Send via HUB	To send E-mail notification manually to corresponding business partner contact person, choose the *Send via HUB* button in the *Send Message* window from any marketing document. This triggers the Mailchimp E-mail API to send the E-mail. Application will display the “operation completed successfully” message.

11.2.3 Business Partner Master Data

In *Business Partner Master Data* window, a field *Send Marketing Document Notification via HUB* is available in the *General* tab.

To open the *Business Partner Master Data* window, from the SAP Business One *Main Menu*, choose *Business Partner → Business Partner Master Data.*



The *Business Partner Master Data* window contains the following fields:

Field Name	Description
Send Marketing Document Notification via HUB	Select this checkbox to send E-mail notification automatically to the business partner contact person used in the marketing documents.

11.3 Using Mailchimp

11.3.1 Automatic E-mail Notification based on Print Preferences

The solution automatically sends the E-mail notification based on the configuration in the *Print Preferences* page.

Note

The Logged-in User E-mail id must be defined in the system.

The following documents are supported for automatic E-mail notification:

- Sales Quotation
- Sales Order
- Delivery
- Return Request
- Returns
- A/R Down Payment
- A/R Invoice
- A/R Credit Memo
- Purchase Quotation
- Purchase Order
- Goods Receipt PO
- Goods Return Request
- Goods Return
- A/P Down Payment
- A/P Invoice
- A/P Credit Memo

The add-on automatically pre-populates the E-mail content for all the above documents in the E-mail body section. To modify the content, use the *Placeholder*.

Before sending the automatic E-mail notification, the application checks the following setups:

1. *E-mail via HUB* check box in *Print Preferences*

   Select *E-mail via HUB* check box to send the E-mail notification to the business partners' contact person used in the marketing documents.

2. *Send E-mail to all Business Partners* check box in *Print Preferences*

   If the *E-mail via HUB* check box is selected, then the application checks the *Send E-mail to all Business Partners* check box. If this check box is selected, then the application does not perform other checks and sends the E-mail automatically to the contact person used in the document.

3. *Send Marketing Document Notification via HUB* check box in *Business Partners Master Data*

If the *E-mail via HUB* check box is selected, then the application checks the *Send E-mail to all Business Partners* check box. If this check box is not selected, then the application checks *Send Marketing Document Notification via the HUB* check box in Business Partners. If the Business partner's check box is selected, then the application sends the automatic E-mail notification, otherwise the E-mail notification will not be sent.

11.3.2 Manual E-mail Notification

The application allows a user to manually send the E-mail notification from any marketing document. Choose the *Mailer* ✉ icon on marketing document to manually send the E-mail to corresponding business partner contact person.

In order to send E-mail, choose the *Send via HUB* button available on *Send Message* window that triggers the Mailchimp E-mail API to send the E-mail. On choosing the *Send via HUB* button, application displays the "operation completed successfully" message.

11.3.3 E-mail Notification for E-mail Type Campaigns

The application allows to send the bulk E-mail notification through E-mail type campaigns using Mailchimp E-mail API.

The target recipients are defined in the *Campaign Generation Wizard* and the E-mail is sent to the target recipients.
To create E-mail notification through E-mail Type Campaigns, perform the following steps:

1. Create a campaign using *Campaign Generation Wizard* and select the options on the screen.
2. Select the *Send E-Mail Using SAP Business One Mail* option and choose the *Next* button, the *Send Message* window opens.
3. In order to send E-mail, choose the *Send via HUB* button available on *Send Message* window that triggers the Mailchimp E-mail API to send the E-mail.
4. On choosing the *Send via HUB* button, the application displays the "operation completed successfully" message.

11.3.4 E-mail Template for Marketing Documents

E-mail Trigger: When a new sales quotation document is added in SAP Business One, the system sends the E-mail automatically if the *E-mail via HUB* option in the *Print Preferences* window is enabled/checked and Business Partner conditions are met. To send the E-mail manually, choose the *SAP Business One Mailer* ✉ icon in the tool bar.

The message content is populated automatically for the documents based on the E-mail templates defined in the *Print Preferences* setup. To modify the content, use the *Placeholder*.

Note

A send message screen will be populated automatically for the documents for which print preferences setup is defined and user can also change or edit the default template set for the documents.

In the E-mail Template, the {} refers to the logical description of the field.

Note

For any auto-linked documents, the system does not send the email notifications with the Pdf as an attachment.

11.3.4.1 Sales Quotation Creation

E-mail to Customer:

Subject: Sales Quotation # {DocNum}

Hi {CardName},

Sale Quotation # {DocNum} with total amount of {DocCur} {DocTotal} has been raised. It is valid till {DocDueDate}. Please find the Sales Quotation copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Customer Name	OQUT-Sales Quotation	CardName
DocNum	Sales Quotation No.	OQUT-Sales Quotation	DocNum
DocCur	Currency	OQUT-Sales Quotation	DocCur
DocTotal	Total Amount	OQUT-Sales Quotation	DocTotal
DocDueDate	Valid till Date	OQUT-Sales Quotation	DocDueDate

11.3.4.2 Sales Order Creation

E-mail to Customer:

Subject: Sales Order # {DocNum}

Hi {CardName},

Your order # {DocNum} has been successfully created. Your order total is {DocCur} {DocTotal} & will be delivered by {DocDueDate}.
Please find the Sales Order copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Customer Name	ORDR-Sales Order	CardName
DocNum	Sales Order No.	ORDR-Sales Order	DocNum
DocCur	Currency	ORDR-Sales Order	DocCur
DocTotal	Total Amount	ORDR-Sales Order	DocTotal
DocDueDate	Fulfillment Date	ORDR-Sales Order	DocDueDate

11.3.4.3 Delivery Creation

E-mail to Customer:

Subject: Delivery Document # {DocNum}

Hi {CardName},

A shipment worth {DocCurl} {DocTotal} has been shipped on {DocDate}. Please find the Delivery copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Customer Name	ODLN-Delivery	CardName
DocCur	Currency	ODLN-Delivery	DocCur
DocTotal	Total Amount	ODLN-Delivery	DocTotal
DocDate	Document Date	ODLN-Delivery	DocDate

11.3.4.4 Return Request Creation

E-mail to Customer:

Subject: Return Request # {DocNum}

Hi {CardName},

Your request for return has been initiated on {DocDate} for {DocCur} {DocTotal}. Please find the Return Request copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
DocNum	Return Request No	ORRR- Return Request	DocNum
CardName	Customer Name	ORRR- Return Request	CardName
DocDate	Document Date	ORRR- Return Request	DocDate
DocCur	Currency	ORRR- Return Request	DocCur
DocTotal	Total Amount	ORRR- Return Request	DocTotal

11.3.4.5 Return Creation

E-mail to Customer:

Subject: Return Document # {DocNum}

Hi {CardName},

A return document has been created on {DocDate} for {DocCur} {DocTotal}.
Please find the Return copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
DocNum	Return No	ORDN- Return	DocNum
CardName	Customer Name	ORDN- Return	CardName
DocDate	Document Date	ORDN- Return	DocDate
DocCur	Currency	ORDN- Return	DocCur
DocTotal	Total Amount	ORDN- Return	DocTotal

11.3.4.6 A/R Down Payment Creation

E-mail to Customer:

Subject: A/R Down Payment # {DocNum}

Hi {CardName},

A/R Down payment document created on {DocDate} for {DocCur} {DocTotal}.
Please find the A/R Down Payment Invoice copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
DocNum	Down Payment No	ODPI- A/R Down Payment Invoice	DocNum
CardName	Customer Name	ODPI- A/R Down Payment Invoice	CardName
DocDate	Document Date	ODPI- A/R Down Payment Invoice	DocDate
DocCur	Currency	ODPI- A/R Down Payment Invoice	DocCur
DocTotal	Total Amount	ODPI- A/R Down Payment Invoice	DocTotal

11.3.4.7 A/R Invoice Creation

E-mail to Customer:

Subject: A/R Invoice # {DocNum}

Hi {CardName},

A/R Invoice # {DocNum} has been created for {DocCur} {DocTotal} on {DocDate}.
Please find the A/R Invoice copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Customer Name	OINV-A/R Invoice	CardName
DocNum	Invoice No.	OINV-A/R Invoice	DocNum
DocCur	Currency	OINV-A/R Invoice	DocCur
DocTotal	Invoice Amount	OINV-A/R Invoice	DocTotal
DocDate	Document Date	OINV-A/R Invoice	DocDate

11.3.4.8 A/R Credit Memo Creation

E-mail to Customer:

Subject: A/R Credit Memo # {DocNum}

Hi {CardName},

A/R Credit Memo # {DocNum} has been created for {DocCur} {DocTotal} on {DocDate}.
Please find the A/R Credit Memo copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Customer Name	ORIN-A/R Credit Memo	CardName
DocNum	Credit Memo No.	ORIN-A/R Credit Memo	DocNum
DocCur	Currency	ORIN-A/R Credit Memo	DocCur
DocTotal	Amount	ORIN-A/R Credit Memo	DocTotal
DocDate	Document Date	ORIN-A/R Credit Memo	DocDate

11.3.4.9 Purchase Quotation Creation

E-mail to Vendor:

Subject: Request for Quotation # {DocNum}

Hi {CardName},

This is to request you to share the quote for the list of items in the RFQ # {DocNum} attached with this mail and is required by {ReqDate}.
Please find the Request for Quotation copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Vendor Name	OPQT-Purchase Quotation	CardName
DocNum	PQ Number	OPQT-Purchase Quotation	DocNum
ReqDate	Required Date	OPQT-Purchase Quotation	ReqDate

11.3.4.10 Purchase Order Creation

E-mail to Vendor:

Subject: Purchase Order # {DocNum}

Hi {CardName},

Purchase Order # {DocNum} worth {DocCur} {DocTotal} has been raised on {DocDate} and is required by {DocDueDate}.
Please find the Purchase Order copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Vendor Name	OPOR-Purchase Order	CardName
DocNum	PO Number	OPOR-Purchase Order	DocNum
DocCur	Currency	OPOR-Purchase Order	DocCur
DocTotal	Total Amount	OPOR-Purchase Order	DocTotal
DocDate	Document Date	OPOR-Purchase Order	DocDate
DocDueDate	Required by	OPOR-Purchase Order	DocDueDate

11.3.4.11 Goods Receipt PO Creation

E-mail to Vendor:

Subject: Goods Receipt PO # {DocNum}

Hi {CardName},

Goods worth {DocCur}{DocTotal} has been received on {DocDate}.
Please find the Goods Receipt PO copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Vendor Name	OPDN-Goods Receipt PO	CardName
DocNum	GRPO Number	OPDN- Goods Receipt PO	DocNum
DocCur	Currency	OPDN-Goods Receipt PO	DocCur
DocTotal	Total Amount	OPDN-Goods Receipt PO	DocTotal
DocDate	Document Date	OPDN-Goods Receipt PO	DocDate

11.3.4.12 Goods Return Request Creation

E-mail to Vendor:

Subject: Goods Return Request # {DocNum}

Hi {CardName},

Goods Return Request has been initiated on {DocDate} for {DocCur} {DocTotal}.
Please find the Goods Return Request copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
DocNum	Goods Return No	OPRR-Goods Return Request	DocNum
CardName	Vendor Name	OPRR-Goods Return Request	CardName
DocDate	Document Date	OPRR-Goods Return Request	DocDate
DocCur	Currency	OPRR-Goods Return Request	DocCur
DocTotal	Total Amount	OPRR-Goods Return Request	DocTotal

11.3.4.13 Goods Return Creation

E-mail to Vendor:

Subject: Goods Return # {DocNum}

Hi {CardName},

Goods worth {DocCur} {DocTotal} has been returned on {DocDate} due to {Comments}.
Please find the Goods Return copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
DocNum	Goods Return No	ORPD-Goods Return	DocNum
CardName	Vendor Name	ORPD-Goods Return	CardName
DocCur	Currency	ORPD-Goods Return	DocCur
DocTotal	Total Amount	ORPD- Goods Return	DocTotal
DocDate	Document Date	ORPD- Goods Return	DocDate
Comments	Remarks	ORPD- Goods Return	Comments

11.3.4.14 A/P Down Payment Creation

E-mail to Vendor:

Subject: A/P Down Payment # {DocNum}

Hi {CardName},

A/P Down payment document has been created for {DocCur} {DocTotal} on {DocDate}.
Please find the A/P Down Payment Invoice copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
DocNum	A/P Down Payment No	ODPO-A/P Down Payment Invoice	DocNum
CardName	Vendor Name	ODPO-A/P Down Payment Invoice	CardName
DocCur	Currency	ODPO-A/P Down Payment Invoice	DocCur
DocTotal	Amount	ODPO-A/P Down Payment Invoice	DocTotal
DocDate	Document Date	ODPO-A/P Down Payment Invoice	DocDate

11.3.4.15 A/P Invoice Creation

E-mail to Vendor:

Subject: A/P Invoice # {DocNum}

Hi {CardName},

Your Invoice {NumAtCard} for {DocCur} {DocTotal} has been accepted on {DocDate} and {DocNum} is the reference number in our records. Please find the A/P Invoice copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Vendor Name	OPCH-A/P Invoice	CardName
NumAtCard	Vendor Reference	OPCH-A/P Invoice	NumAtCard
DocCur	Currency	OPCH-A/P Invoice	DocCur
DocTotal	Invoice Amount	OPCH-A/P Invoice	DocTotal
DocDate	Document Date	OPCH-A/P Invoice	DocDate
DocNum	Document No	OPCH-A/P Invoice	DocNum

11.3.4.16 A/P Credit Memo Creation

E-mail to Vendor:

Subject: A/P Credit Memo # {DocNum}

Hi {CardName},

Credit Memo {DocNum} has been created for {DocCur} {DocTotal} on {DocDate}.
Please find the A/P Credit Memo copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Customer Name	ORPC-A/P Credit Memo	CardName
DocNum	Credit Memo No.	ORPC-A/P Credit Memo	DocNum
DocCur	Currency	ORPC-A/P Credit Memo	DocCur
DocTotal	Amount	ORPC-A/P Credit Memo	DocTotal
DocDate	Document Date	ORPC-A/P Credit Memo	DocDate

11.3.4.17 List of Place Holders

Following are the placeholders supported in E-mail templates:

S.No.	Place Holders	Remarks
1	*{CardCode}*	Business Partner Code
2	*{CardName}*	Business Partner Name
3	*{NumAtCard}*	Business Partner Ref. No
4	*{DocNum}*	Document Number
5	*{DocStatus}*	Document Status
6	*{DocDate}*	Document Date
7	*{DocDueDate}*	Document Due Date
8	*{TaxDate}*	Document Posting Date
9	*{Comments}*	Remarks on Document
10	*{DiscPrcnt}*	Discount Percentage
11	*{DiscSum}*	Discount Amount
12	*{TotalExpns}*	Freight Amount
13	*{VatSum}*	Tax Amount
14	*{DocTotal}*	Document Total
15	*{DocTotalFC}*	Document Total (FC)
16	*{SlpCode}*	SlpName From OSLP
17	*{OwnerCode}*	FirstName+LastName From OHEM table
18	*{CntctCode}*	FirstName From OCPR table
19	*{TrackNo}*	Tracking Number
20	*{UserSign)*	User Name(U_Name) from OUSR

12 SendGrid

The integration between SendGrid and SAP Business One facilitates the manual E-mail notification, automatic E-mail notification based on print preferences, E-mail notification based on campaign generation wizard from SAP Business One. The Integration comes with predefined E-mail templates and placeholders. The E-mail templates are customizable to suite your business communication.

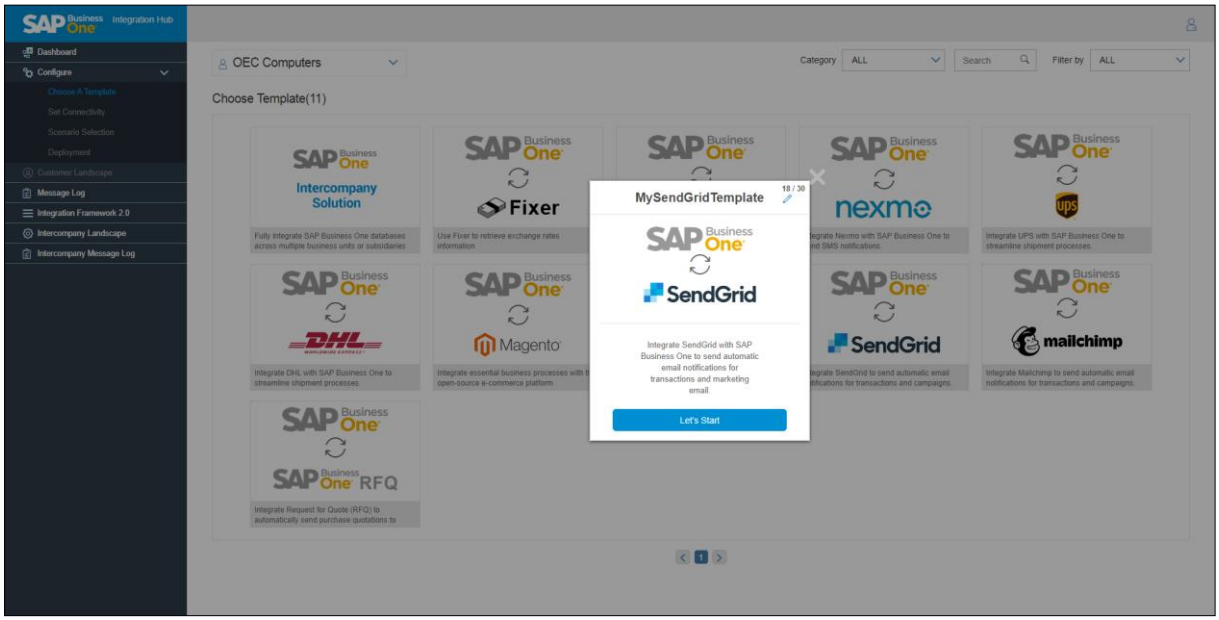
12.1 SendGrid Setup in Administration Console

The following are the steps to setup SendGrid in Administration Console:

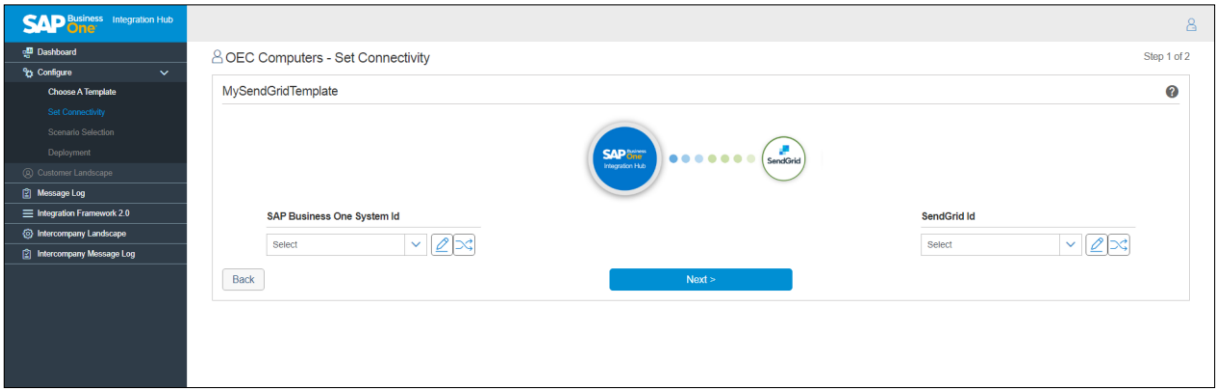
1. Add New Customer. Refer to section Add New Customer in the document.
2. Select the *SendGrid* template to integrate.

   Upon selecting the template, a message "*Let's Start*" prompts to start configuring the connectivity settings. Change the template name by clicking the Edit button to edit the template name. Otherwise it appears as *MySendGrid Template.*

   > **Note**
   >
   > By default, the name of the template appears as *MySendGrid Template* and can be renamed.



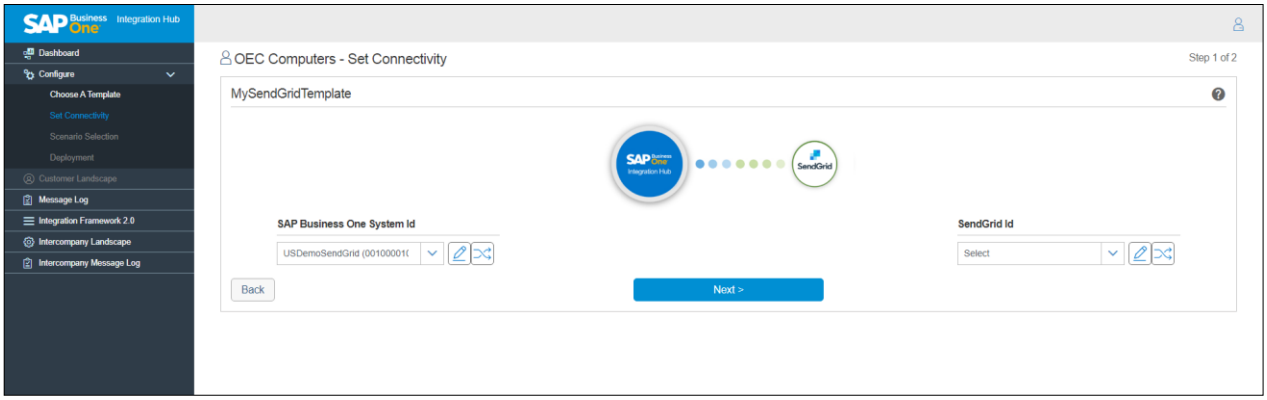
3. Upon choosing the *Let's Start* button, a *Set Connectivity* page appears with the following two steps to complete the configurations for connectivity.



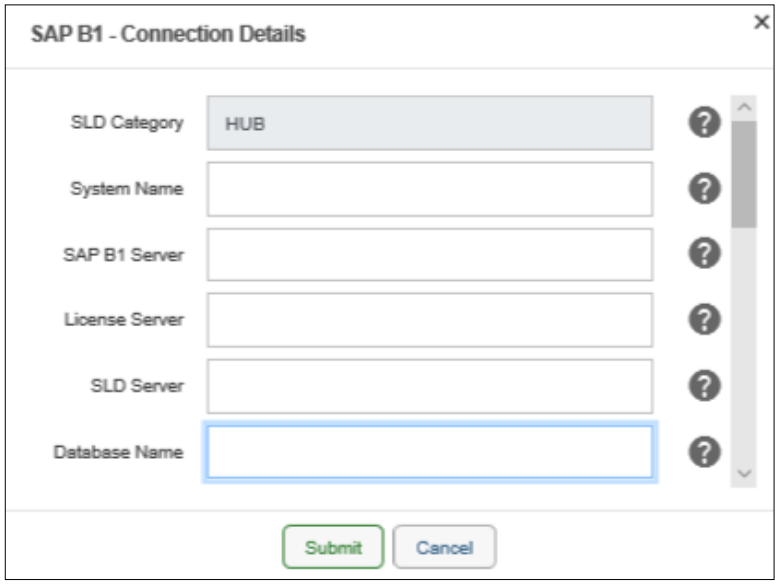
Step 1 – Set Connectivity

4. Choose the SAP Business One SLD to provide the connection between *SAP Business One System Id* and *SendGrid Id*.

> **Note**
>
> By default, the solution displays all the SAP Business One SLDs available in *SLD Category* selected during customer creation.



5. To add a new SLD or edit existing SAP Business One SLD under SAP Business System Id area, choose *Add / Edit* button.



The *SAP Business One Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. **Note** *System Name* is the mandatory field to add or update SAP Business One SLD.
SAP Business One Server	Enter SAP Business One Server Name / IP Address. **Note** *SAP Business One Server* is the mandatory field to add/update SLD information for SAP Business One.
License Server	Enter *License Server* details. i.e. Server Name or IP Address and port number of the SAP Business One License Server. The default port is 30000.
SLD Server	Enter the valid *SLD Server* details with port. **Note** *SLD Server* details is the mandatory field to add/update SLD information for SAP Business One.
Database Name	Enter the name of the SAP Business One Database. **Note** *Database Name* is the mandatory field to add/update SAP Business One System SLD. **Caution** The *Database Name* must be entered same as SAP Business One Database Name.
Database Type	Currently, only Microsoft SQL Server 2005, 2008, 2012, 2014, 2016, 2017 and SAP Hana DB are supported. Choose the database type from the dropdown list. **Note** *Database Type* is the mandatory field to add/update SAP Business One SLD.

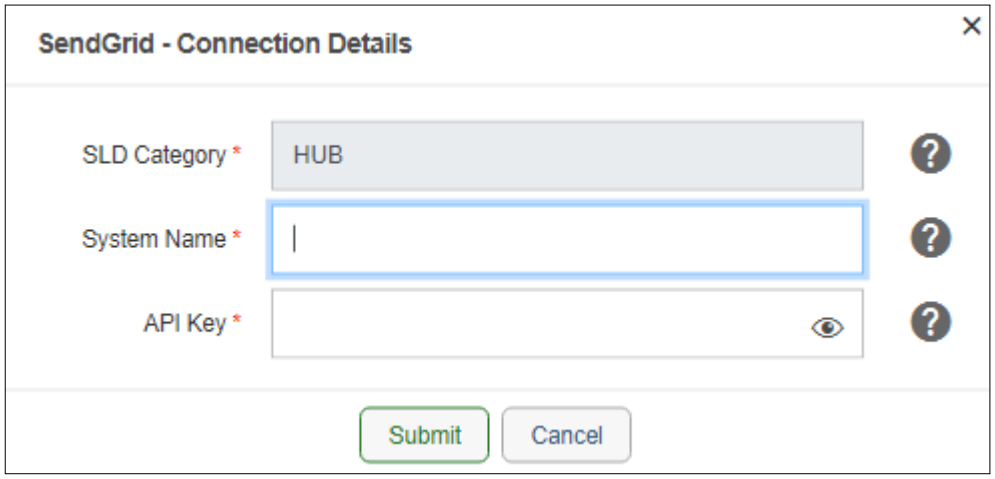
Database User	Enter the user to access the company database using the database connection. *Database User* is the mandatory field to add/update SAP Business One SLD. Caution The *Database User* must be valid. Invalid *Database User* will result in failure to establish the connection.
Database Password	Enter a valid password for database login. Note *Database Password* is the mandatory field to add/update SAP Business One SLD. Caution The *Database Password* must be valid. Invalid *Database Password* will result in failure to establish the connection.
Database Port	Enter the port for database.
Username	Enter **`B1i`** in this field. Note *Username* is the mandatory field to add/update SAP Business One SLD. It is set as B1i by default and un editable. Caution Ensure that a user with this name exists in the SAP Business One database.
Password	Enter a valid password for B1i user of SAP Business One.
Language	Select the language from the list of languages.
Is Trust	Select *True* or *False*. The default value for this field is *False*. To use a trusted connection, choose *True* from the dropdown list.
jcoPath	Enter path for jco library. Example of Installation path of JCO: C:\Program Files (x86)\SAP\SAP Business One DI API\JCO\LIB
DI ProxyHost	The DI Proxy host must be defined if B1i is installed on a separate server (this is, other than the SAP Business One server). The value in this field must be same as SAP Business One Server address. Example *Proxyhost* can be same as *SAP Business One Server*.
DI ProxyPort	The default value of *DI Proxy Port* is 2099.
Proxy Host	The proxy host is defined in a multi-instance scenario. If the B1i server connects to the SAP Business One server through a proxy server then, enter the address of the proxy server in this field.
Proxy Port	Enter the proxy port in this field.

6. Enter the valid data and choose the *Submit button.* An *SAP Business One SLD* is created.

7. Choose the *Test Connection* icon to test the connection between the SAP Business One System Id in Integration Hub and SAP Business One System Landscape Directory.

   If the connection is successful, a success message appears “Test Connection Successful”. If the connection is unsuccessful, a failure message appears “Test Connection Failed”. Please provide the correct credentials.

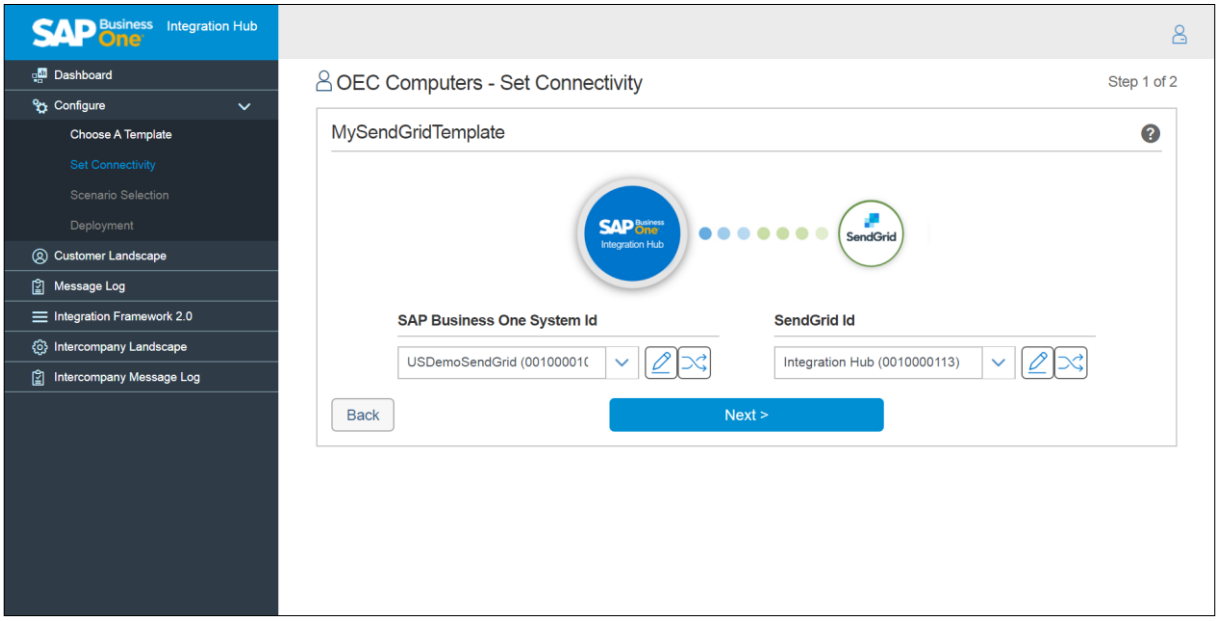
8. To add / edit SendGrid instance SLD under SendGrid Id area, choose the Add / Edit button.



The *SendGrid Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update SendGrid SLD.
App Key	Application Key provided by SendGrid. For help on creating API Key, Refer to the https://sendgrid.com/docs/ui/account-and-settings/api-keys/

9. Provide the valid information in the fields and choose the *Submit button.* SLD for SendGrid will be created.

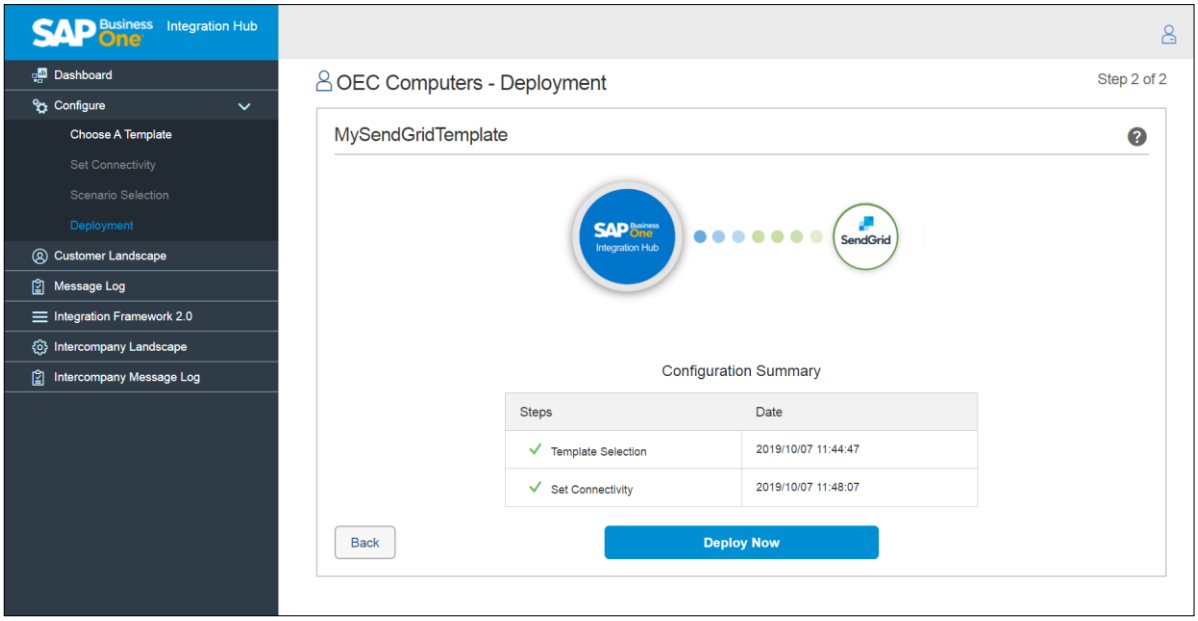


10. Choose the *Test Connection* icon to test the connection between the Integration Hub and SendGrid.
If the connection is successful, a success message appears “Test Connection Successful”.
If the connection is unsuccessful, a failure message appears “Test Connection Failed”.

11. Choose the *Next* button to proceed to Step2.

Summary

12. The Configuration summary displays the *Date* and time for *Template Selection* and *Set Connectivity steps*.

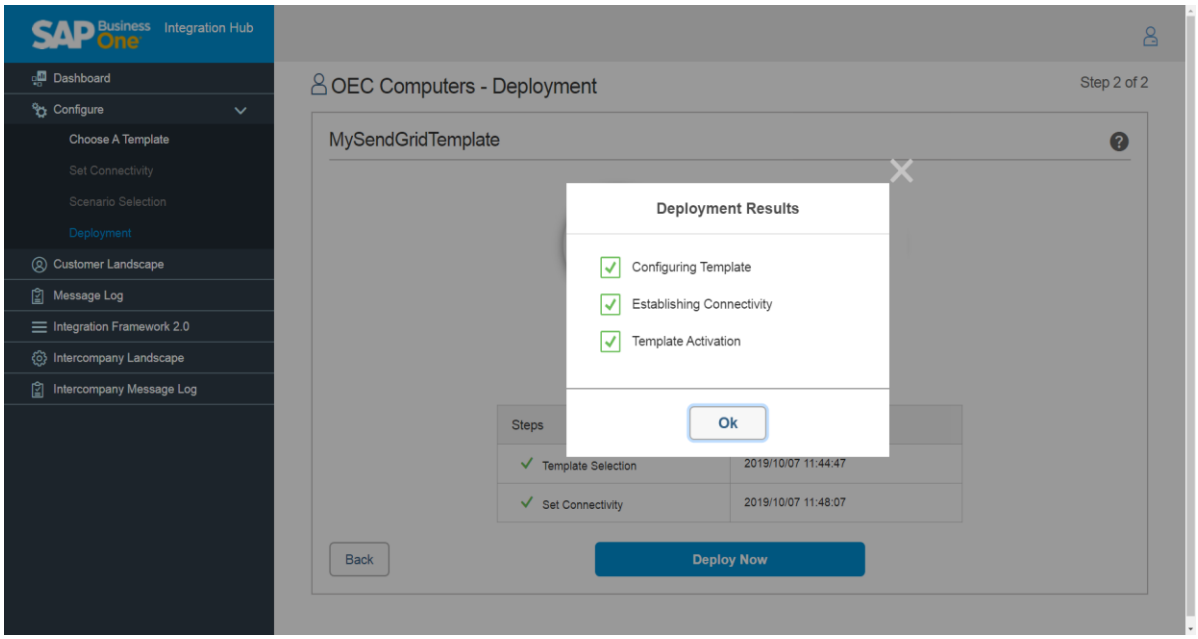


Step 2 – Deployment

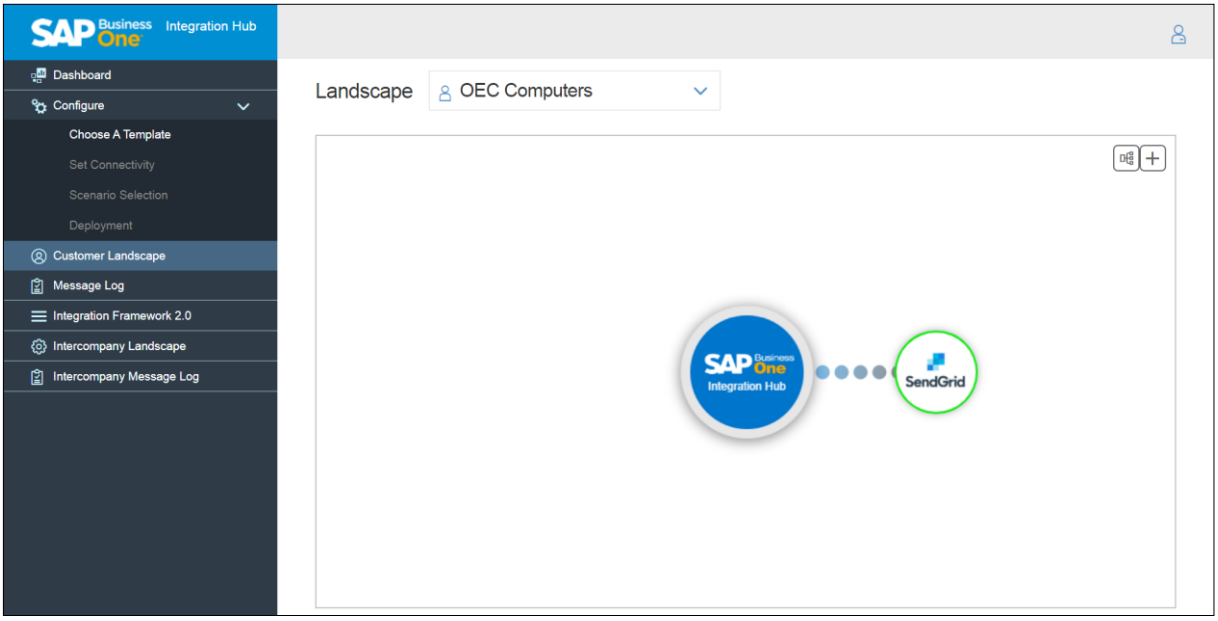
13. To deploy the solution, choose the *Deploy Now* button.

14. The application prompts you to provide the license details. For more information, refer to the Assigning the Integration Hub licenses section in this document.

15. The Integration Hub displays the *Deployment Results* whether the deployment is successful or failed. The checkbox in the *Deployment Results* window displays status of each deployment stage.


SAP Business One Integration Hub
Dashboard
Configure
Choose A Template
Set Connectivity
Scenario Selection
Deployment
Customer Landscape
Message Log
Integration Framework 2.0
Intercompany Landscape
Intercompany Message Log
OEC Computers - Deployment
Step 2 of 2
MySendGridTemplate
Deployment Results
Configuring Template
Establishing Connectivity
Template Activation
Ok
Steps
Template Selection
2019/10/07 11:44:47
Set Connectivity
2019/10/07 11:48:07
Back
Deploy Now

16. Once all stages are checked, click the *OK* button on the *Deployment Results* window to proceed. The successful deployment of solution in Integration Hub results in enabling the features in SAP Business One. Customer Landscape displays connection of SAP Business One to SendGrid.



17. To modify the template after successful feature activation, right click on the logo of the template.

18. Right click on the SendGrid logo displays window with the following fields:

Field Name	Description
View	Displays the *Set Connectivity* window in view mode.
Edit	Displays the *Set Connectivity* window in Edit mode.
De-activate	Deactivates the SendGrid deployment.
Deployment Status	Displays the deployment status with date and time.
Delete Template	Choose delete template to delete the template. It is an Irreversible action. Note On deleting the template, the template will be marked as Inactive in the application deployment status window in SAP Business One.
Delete Deployment Info.	Choose delete deployment info. to delete the complete deployment information of the template. It is an Irreversible action. Note On deleting the deployment information, the template will not be deleted from deployment panel screen, it will be deactivated only.
Manage Licenses	Choose Manage License to Activate/Deactivate the integration Hub License. For more information, see Managing the Integration Hub licenses section in this guide.

12.2 Setup in SAP Business One

1. In the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Application Deployment Status*. The *Deployment Status* field should display 'Active', indicating that the feature is deployed in the Integration Hub. If the status displays 'Inactive', then redeploy the feature in the *Integration Hub.*

   The following are the statuses that can be visible on the *Application Deployment Status* screen:

   - *Active*: The status represents the solution is deployed and active.
   - *Inactive*: The status represents the feature template is not inactive.

   For more details, refer the *Application Deployment Status* section in this guide.

> **Note**
>
> You must Re-start the SAP Business One client after SendGrid deployment from the Integration HUB. On login, the Add-On script will execute and relevant setup window appears.

2. Enter B1i Server Details in SAP Business One in *Main Menu* → *Administration* → *Integration Hub* → *B1i Server Details* window. This window enables to enter the *B1i Server Details*.

The *B1i Server Details* contains the following fields:

Field Name	Description
B1i Server Address	Enter the server name or IP address of B1i server.
B1i Port	Enter the port of B1i Server. The default port for HTTP is 8080
Username	B1i run time user
Password	Enter the password for B1i run time user.
HTTPS	Select the checkbox to enable the solution to use HTTPS.

> **Note**
>
> Please ensure that the SLD entry for this company exists in SAP B1if and the solution is properly deployed.

3. After successful activation of SendGrid, new fields are added to the following documents:
   - Print Preferences
   - Business Partner Master Data
   - Send Message

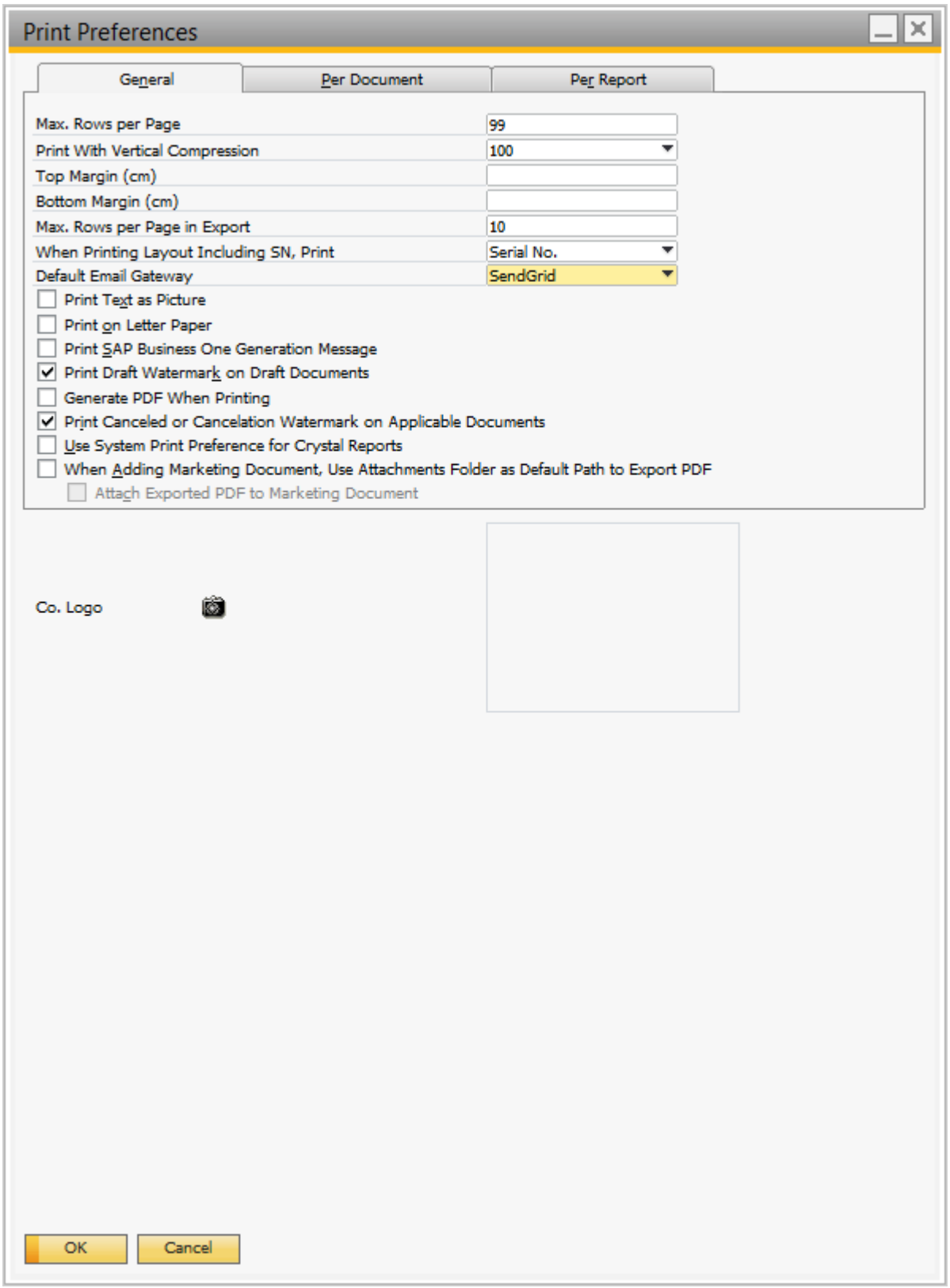
12.2.1 Print Preferences

In *Print Preferences* document the *E-mail via HUB* and *Send E-mail To all Business Partners fields are available* to send E-mail automatically through SendGrid when document is added.

To open the *Print Preferences* window, from the SAP Business One *Main Menu,* choose *Administration→System Initialization→ Print Preferences*

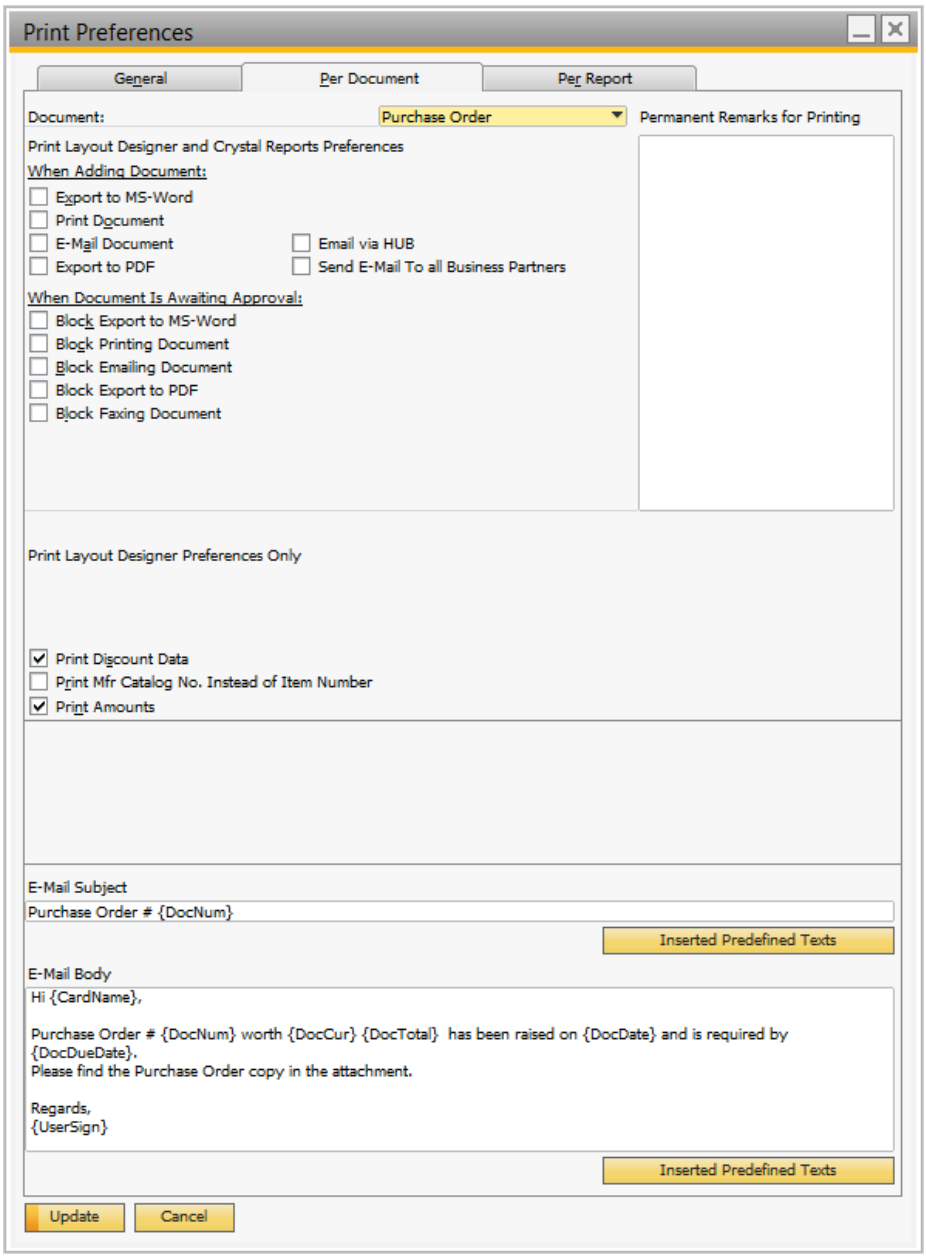
Default E-mail Gateway

To configure Default E-mail Gateway as SendGrid on the *Print Preferences* window, from the SAP Business One *Main Menu,* choose *Administration→System Initialization→ Print Preferences→General*


Print Preferences
General
Per Document
Per Report
Max. Rows per Page
99
Print With Vertical Compression
100
Top Margin (cm)
Bottom Margin (cm)
Max. Rows per Page in Export
10
When Printing Layout Including SN, Print
Serial No.
Default Email Gateway
SendGrid
Print Text as Picture
Print on Letter Paper
Print SAP Business One Generation Message
Print Draft Watermark on Draft Documents
Generate PDF When Printing
Print Canceled or Cancelation Watermark on Applicable Documents
Use System Print Preference for Crystal Reports
When Adding Marketing Document, Use Attachments Folder as Default Path to Export PDF
Attach Exported PDF to Marketing Document
Co. Logo
OK
Cancel

E-mail via HUB

To configure E-mail via HUB on the *Print Preferences* window, from the SAP Business One *Main Menu,* choose *Administration→System Initialization→ Print Preferences →Per Document*

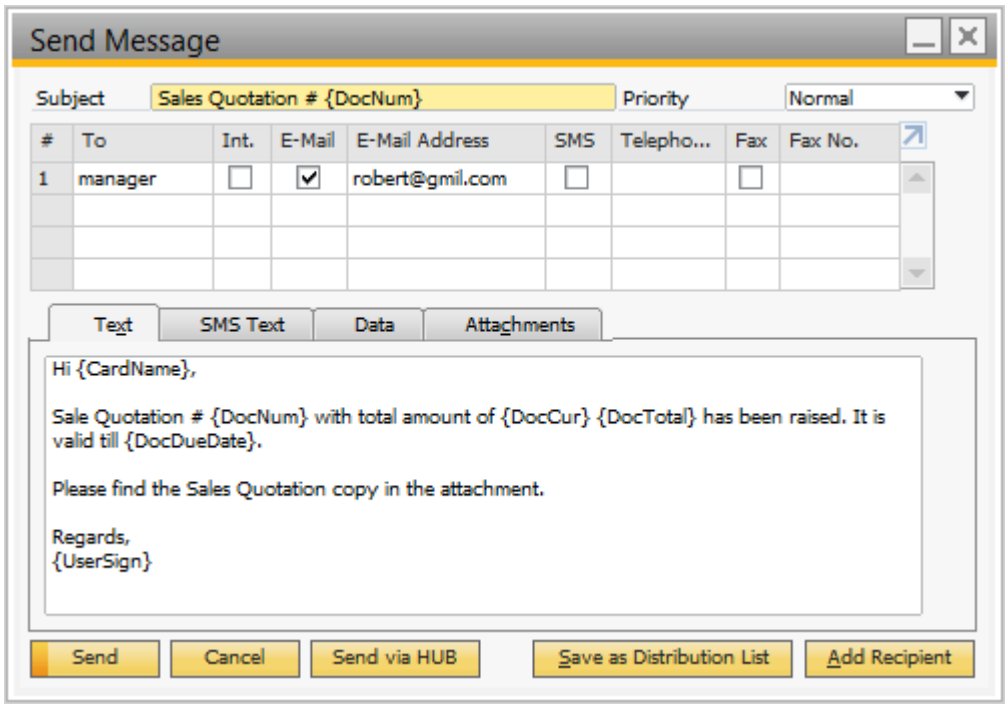


The *Print Preferences* window contains the following new fields:

Field Name	Description
E-mail via HUB	Select this check box to send automatic E-mail notification to the business partners' contact person mentioned in the marketing documents while adding the document.
Send E-mail to all Business Partners	If the Emil via HUB check box is selected, then application checks the *Send E-mail to all Business partners* check box. If this check box is selected, then application does not perform other checks and send the E-mail automatically to the contact person used in the document.

12.2.2 Send Message

In the *Send Message* window, a *Send via HUB* button is available. To open the *Send Message* window, open any marketing document and in the toolbar choose the *SAP Business One Mailer* ✉ icon.



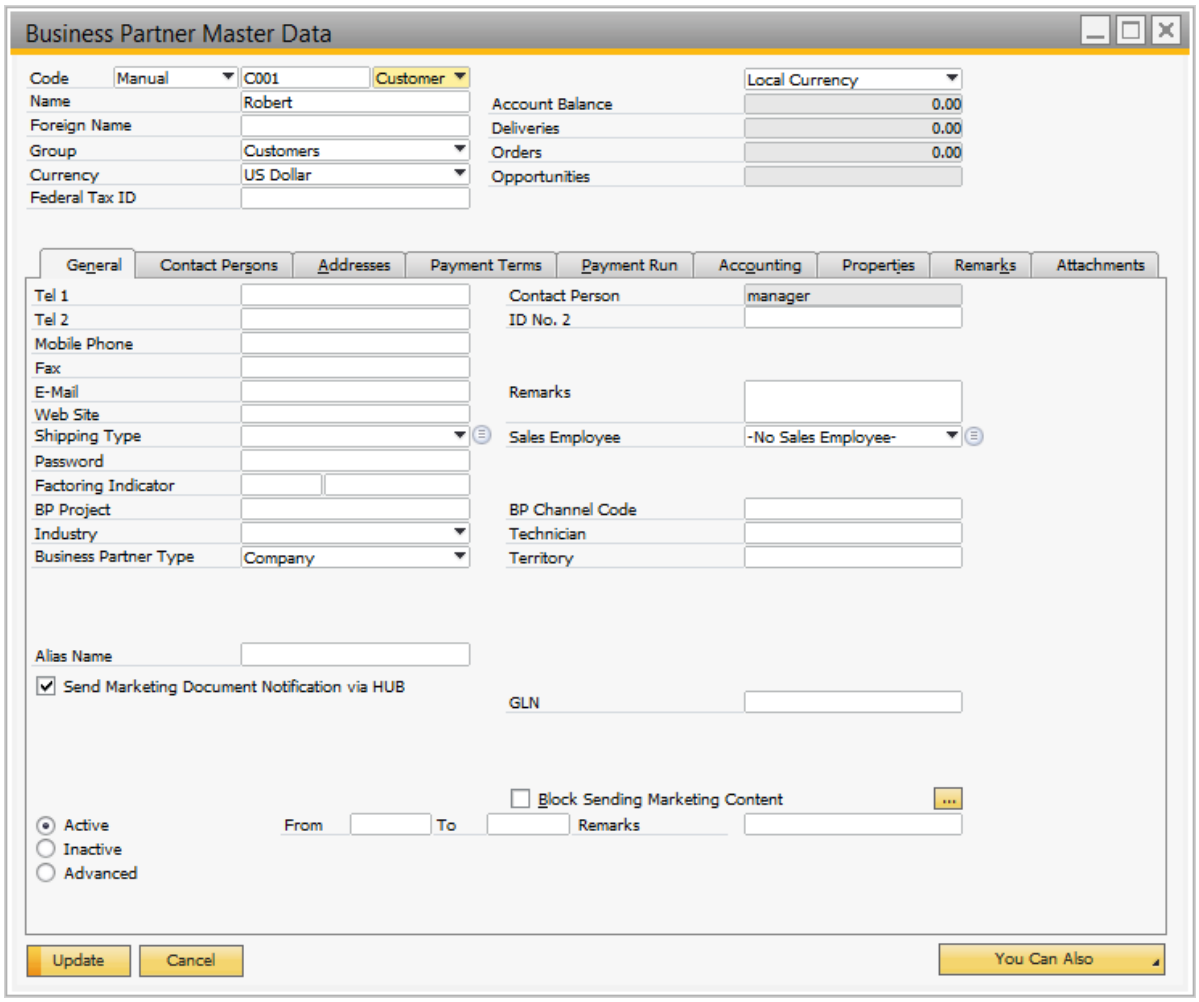
The *Send Message* window contains the following new fields:

Field Name	Description
Send via HUB	To send E-mail notification manually to corresponding business partner contact person, choose the *Send via HUB* button in the *Send Message* window from any marketing document. This triggers the SendGrid E-mail API to send the E-mail. Application will display the "operation completed successfully" message.

12.2.3 Business Partner Master Data

In *Business Partner Master Data* window, a field *Send Marketing Document Notification via HUB* is available in the *General* tab.

To open the *Business Partner Master Data* window, from the SAP Business One *Main Menu*, choose *Business Partner → Business Partner Master Data.*



The *Business Partner Master Data* window contains the following new fields:

Field Name	Description
Send Marketing Document Notification via HUB	Select this checkbox to send E-mail notification automatically to the business partner contact person used in the marketing documents.

12.3 Using SendGrid

12.3.1 Automatic E-mail Notification based on Print Preferences

The solution automatically sends the E-mail notification based on the configuration in the *Print Preferences* page.

> **Note**
>
> The Logged-in User E-mail id must be defined in the system.

The following documents are supported for automatic E-mail notification:

- Sales Quotation
- Sales Order
- Delivery
- Return Request
- Returns
- A/R Down Payment
- A/R Invoice
- A/R Credit Memo
- Purchase Quotation
- Purchase Order
- Goods Receipt PO
- Goods Return Request
- Goods Return
- A/P Down Payment
- A/P Invoice
- A/P Credit Memo

The add-on automatically pre-populates the E-mail content for all above document in the newly added E-mail body section. To modify the content, use the *Placeholder*.

Before sending the automatic E-mail notification the application checks the following setups:

1. *E-mail via HUB* check box in *Print Preferences*

   Select *E-mail via HUB* check box to send the E-mail notification to the business partners contact person used in the marketing documents.

2. *Send E-mail to all Business Partners* check box in *Print Preferences*

   If the *E-mail via HUB* check box is selected, then the application checks the *Send E-mail to all Business Partners* check box. If this check box is selected, then application does not perform other checks and send the E-mail automatically to the contact person used in the document.

3. *Send Marketing Document Notification via HUB* check box in *Business Partners Master Data*

If the *E-mail via HUB* check box is selected, then application checks the *Send E-mail to all Business Partners* check box. If this check box is not selected, then application checks *Send Marketing Document Notification via HUB* check box in Business Partners. If the Business partners check box is selected, then the application sends the automatic E-mail notification, otherwise the E-mail notification will not be sent.

12.3.2 Manual E-mail Notification

The application allows a user to manually send the E-mail notification from any marketing document. Choose the *Mailer* ✉ icon on marketing document to manually send the E-mail to corresponding business partner contact person.

In order to send E-mail, choose the *Send via HUB* button available on *Send Message* window that triggers the SendGrid E-mail API to send the E-mail. On choosing the *Send via HUB* button, application displays the "operation completed successfully" message.

12.3.3 E-mail Notification for E-mail Type Campaigns

The application allows to send the bulk E-mail notification through E-mail type campaigns using SendGrid E-mail API.

Note

The Logged-in User E-mail id must be defined in the system.

The target recipients are defined in the *Campaign Generation Wizard* and the E-mail is sent to the target recipients.
To create E-mail notification through E-mail Type Campaigns, perform the following steps:

1. Create a campaign using *Campaign Generation Wizard* and select the options on the screen.
2. Select the *Send E-Mail Using SAP Business One Mail* option and choose the *Next* button, the *Send Message* window opens.
3. In order to send E-mail, choose the *Send via HUB* button available on *Send Message* window that triggers the SendGrid E-mail API to send the E-mail.
4. On choosing the *Send via HUB* button, the application displays the "operation completed successfully' message.

12.3.4 E-mail Template for Marketing Documents

E-mail Trigger: When a new sales quotation document is added in SAP Business One, the system sends the E-mail automatically if the *E-mail via HUB* option in the *Print Preferences* window is enabled/checked and Business Partner conditions are met. To send the E-mail manually, choose the *SAP Business One Mailer* ✉ icon in the tool bar.

The message content is populated automatically for the documents based on the E-mail templates defined in the *Print Preferences* setup. To modify the content, use the *Placeholder*.

Note

A send message screen will be populated automatically for the documents for which print preferences setup is defined and user can also change or edit the default template set for the documents.

In the E-mail Template, the {} refers to the logical description of the field.

Note

For any auto-linked documents, the system does not send the email notifications with the Pdf as an attachment.

12.3.4.1 Sales Quotation Creation

E-mail to Customer:

Subject: Sales Quotation # {DocNum}

Hi {CardName},

Sale Quotation # {DocNum} with total amount of {DocCur} {DocTotal} has been raised. It is valid till {DocDueDate}. Please find the Sales Quotation copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Customer Name	OQUT-Sales Quotation	CardName
DocNum	Sales Quotation No.	OQUT-Sales Quotation	DocNum
DocCur	Currency	OQUT-Sales Quotation	DocCur
DocTotal	Total Amount	OQUT-Sales Quotation	DocTotal
DocDueDate	Valid till Date	OQUT-Sales Quotation	DocDueDate

12.3.4.2 Sales Order Creation

E-mail to Customer:

Subject: Sales Order # {DocNum}

Hi {CardName},

Your order # {DocNum} has been successfully created. Your order total is {DocCur} {DocTotal} & will be delivered by {DocDueDate}.
Please find the Sales Order copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Customer Name	ORDR-Sales Order	CardName
DocNum	Sales Order No.	ORDR-Sales Order	DocNum
DocCur	Currency	ORDR-Sales Order	DocCur
DocTotal	Total Amount	ORDR-Sales Order	DocTotal
DocDueDate	Fulfillment Date	ORDR-Sales Order	DocDueDate

12.3.4.3 Delivery Creation

E-mail to Customer:

Subject: Delivery Document # {DocNum}

Hi {CardName},

A shipment worth {DocCurl} {DocTotal} has been shipped on {DocDate}. Please find the Delivery copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Customer Name	ODLN-Delivery	CardName
DocCur	Currency	ODLN-Delivery	DocCur
DocTotal	Total Amount	ODLN-Delivery	DocTotal
DocDate	Document Date	ODLN-Delivery	DocDate
BaseRef	Order No	DLN1-Delivery Rows	BaseRef

12.3.4.4 Return Request Creation

E-mail to Customer:

Subject: Return Request # {DocNum}

Hi {CardName},

Your request for return has been initiated on {DocDate} for {DocCur} {DocTotal}. Please find the Return Request copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
DocNum	Return Request No	ORRR- Return Request	DocNum
CardName	Customer Name	ORRR- Return Request	CardName
DocDate	Document Date	ORRR- Return Request	DocDate
DocCur	Currency	ORRR- Return Request	DocCur
DocTotal	Total Amount	ORRR- Return Request	DocTotal

12.3.4.5 Return Creation

E-mail to Customer:

Subject: Return Document # {DocNum}

Hi {CardName},

A return document has been created on {DocDate} for {DocCur} {DocTotal}.
Please find the Return copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
DocNum	Return No	ORDN- Return	DocNum
CardName	Customer Name	ORDN- Return	CardName
DocDate	Document Date	ORDN- Return	DocDate
DocCur	Currency	ORDN- Return	DocCur
DocTotal	Total Amount	ORDN- Return	DocTotal

12.3.4.6 A/R Down Payment Creation

E-mail to Customer:

Subject: A/R Down Payment # {DocNum}

Hi {CardName},

A/R Down payment document created on {DocDate} for {DocCur} {DocTotal}.
Please find the A/R Down Payment Invoice copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
DocNum	Down Payment No	ODPI- A/R Down Payment Invoice	DocNum
CardName	Customer Name	ODPI- A/R Down Payment Invoice	CardName
DocDate	Document Date	ODPI- A/R Down Payment Invoice	DocDate
DocCur	Currency	ODPI- A/R Down Payment Invoice	DocCur
DocTotal	Total Amount	ODPI- A/R Down Payment Invoice	DocTotal

12.3.4.7 A/R Invoice Creation

E-mail to Customer:

Subject: A/R Invoice # {DocNum}

Hi {CardName},

A/R Invoice # {DocNum} has been created for {DocCur} {DocTotal} on {DocDate}.
Please find the A/R Invoice copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Customer Name	OINV-A/R Invoice	CardName
DocNum	Invoice No.	OINV-A/R Invoice	DocNum
DocCur	Currency	OINV-A/R Invoice	DocCur
DocTotal	Invoice Amount	OINV-A/R Invoice	DocTotal
DocDate	Document Date	OINV-A/R Invoice	DocDate

12.3.4.8 A/R Credit Memo Creation

E-mail to Customer:

Subject: A/R Credit Memo # {DocNum}

Hi {CardName},

A/R Credit Memo # {DocNum} has been created for {DocCur} {DocTotal} on {DocDate}.
Please find the A/R Credit Memo copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Customer Name	ORIN-A/R Credit Memo	CardName
DocNum	Credit Memo No.	ORIN-A/R Credit Memo	DocNum
DocCur	Currency	ORIN-A/R Credit Memo	DocCur
DocTotal	Amount	ORIN-A/R Credit Memo	DocTotal
DocDate	Document Date	ORIN-A/R Credit Memo	DocDate

12.3.4.9 Purchase Quotation Creation

E-mail to Vendor:

Subject: Request for Quotation # {DocNum}

Hi {CardName},

This is to request you to share the quote for the list of items in the RFQ # {DocNum} attached with this mail and is required by {ReqDate}.
Please find the Request for Quotation copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Vendor Name	OPQT-Purchase Quotation	CardName
DocNum	PQ Number	OPQT-Purchase Quotation	DocNum
ReqDate	Required Date	OPQT-Purchase Quotation	ReqDate

12.3.4.10 Purchase Order Creation

E-mail to Vendor:

Subject: Purchase Order # {DocNum}

Hi {CardName},

Purchase Order # {DocNum} worth {DocCur} {DocTotal} has been raised on {DocDate} and is required by {DocDueDate}.
Please find the Purchase Order copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Vendor Name	OPOR-Purchase Order	CardName
DocNum	PO Number	OPOR-Purchase Order	DocNum
DocCur	Currency	OPOR-Purchase Order	DocCur
DocTotal	Total Amount	OPOR-Purchase Order	DocTotal
DocDate	Document Date	OPOR-Purchase Order	DocDate
DocDueDate	Required by	OPOR-Purchase Order	DocDueDate

12.3.4.11 Goods Receipt PO Creation

E-mail to Vendor:

Subject: Goods Receipt PO # {DocNum}

Hi {CardName},

Goods worth {DocCur}{DocTotal} has been received on {DocDate}.
Please find the Goods Receipt PO copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Vendor Name	OPDN-Goods Receipt PO	CardName
DocNum	GRPO Number	OPDN-Goods Receipt PO	DocNum
DocCur	Currency	OPDN-Goods Receipt PO	DocCur
DocTotal	Total Amount	OPDN-Goods Receipt PO	DocTotal
DocDate	Document Date	OPDN-Goods Receipt PO	DocDate

12.3.4.12 Goods Return Request Creation

E-mail to Vendor:

Subject: Goods Return Request # {DocNum}

Hi {CardName},

Goods Return Request has been initiated on {DocDate} for {DocCur} {DocTotal}.
Please find the Goods Return Request copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
DocNum	Goods Return No	OPRR-Goods Return Request	DocNum
CardName	Vendor Name	OPRR-Goods Return Request	CardName
DocDate	Document Date	OPRR-Goods Return Request	DocDate
DocCur	Currency	OPRR-Goods Return Request	DocCur
DocTotal	Total Amount	OPRR-Goods Return Request	DocTotal

12.3.4.13 Goods Return Creation

E-mail to Vendor:

Subject: Goods Return # {DocNum}

Hi {CardName},

Goods worth {DocCur} {DocTotal} has been returned on {DocDate} due to {Comments}.
Please find the Goods Return copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
DocNum	Goods Return No	ORPD-Goods Return	DocNum
CardName	Vendor Name	ORPD-Goods Return	CardName
DocCur	Currency	ORPD-Goods Return	DocCur
DocTotal	Total Amount	ORPD- Goods Return	DocTotal
DocDate	Document Date	ORPD- Goods Return	DocDate
Comments	Remarks	ORPD- Goods Return	Comments

12.3.4.14 A/P Down Payment Creation

E-mail to Vendor:

Subject: A/P Down Payment # {DocNum}

Hi {CardName},

A/P Down payment document has been created for {DocCur} {DocTotal} on {DocDate}.
Please find the A/P Down Payment Invoice copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
DocNum	A/P Down Payment No	ODPO-A/P Down Payment Invoice	DocNum
CardName	Vendor Name	ODPO-A/P Down Payment Invoice	CardName
DocCur	Currency	ODPO-A/P Down Payment Invoice	DocCur
DocTotal	Amount	ODPO-A/P Down Payment Invoice	DocTotal
DocDate	Document Date	ODPO-A/P Down Payment Invoice	DocDate

12.3.4.15 A/P Invoice Creation

E-mail to Vendor:

Subject: A/P Invoice # {DocNum}

Hi {CardName},

Your Invoice {NumAtCard} for {DocCur} {DocTotal} has been accepted on {DocDate} and {DocNum} is the reference number in our records. Please find the A/P Invoice copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Vendor Name	OPCH-A/P Invoice	CardName
NumAtCard	Vendor Reference	OPCH-A/P Invoice	NumAtCard
DocCur	Currency	OPCH-A/P Invoice	DocCur
DocTotal	Invoice Amount	OPCH-A/P Invoice	DocTotal
DocDate	Document Date	OPCH-A/P Invoice	DocDate
DocNum	Document No	OPCH-A/P Invoice	DocNum

12.3.4.16 A/P Credit Memo Creation

E-mail to Vendor:

Subject: A/P Credit Memo # {DocNum}

Hi {CardName},

Credit Memo {DocNum} has been created for {DocCur} {DocTotal} on {DocDate}.
Please find the A/P Credit Memo copy in the attachment.

Regards,
{UserSign}.

Place Holders	Logical Field Description	SAP B1 Table	SAP B1 Field
CardName	Customer Name	ORPC-A/P Credit Memo	CardName
DocNum	Credit Memo No.	ORPC-A/P Credit Memo	DocNum
DocCur	Currency	ORPC-A/P Credit Memo	DocCur
DocTotal	Amount	ORPC-A/P Credit Memo	DocTotal
DocDate	Document Date	ORPC-A/P Credit Memo	DocDate

12.3.4.17 List of Place Holders

Following are the placeholders supported in E-mail templates:

S.No.	Place Holders	Remarks
1	*{CardCode}*	Business Partner Code
2	*{CardName}*	Business Partner Name
3	*{NumAtCard}*	Business Partner Ref. No
4	*{DocNum}*	Document Number
5	*{DocStatus}*	Document Status
6	*{DocDate}*	Document Date
7	*{DocDueDate}*	Document Due Date
8	*{TaxDate}*	Document Posting Date
9	*{Comments}*	Remarks on Document
10	*{DiscPrcnt}*	Discount Percentage
11	*{DiscSum}*	Discount Amount
12	*{TotalExpns}*	Freight Amount
13	*{VatSum}*	Tax Amount
14	*{DocTotal}*	Document Total
15	*{DocTotalFC}*	Document Total (FC)
16	*{SlpCode}*	SlpName From OSLP
17	*{OwnerCode}*	FirstName+LastName From OHEM table

S.No.	Place Holders	Remarks
18	*{CntctCode}*	FirstName From OCPR table
19	*{TrackNo}*	Tracking Number
20	*{UserSign)*	User Name(U_Name) from OUSR

13 SAP Business One RFQ

SAP Business One users can send purchase quotations to business partners electronically. The process of sending requests and gathering purchase quotations is part of SAP Business One using the integration hub is called request for quotation (RFQ). This process allows SAP Business One users to automatically generate a Web-based quotation submission form, which the integration framework server hosts. Business partners, who receive an E-mail that contains a link to the quotation submission form, can directly submit their offers to the buyer and the data in SAP Business One is updated accordingly.

13.1 RFQ Setup in Administration Console

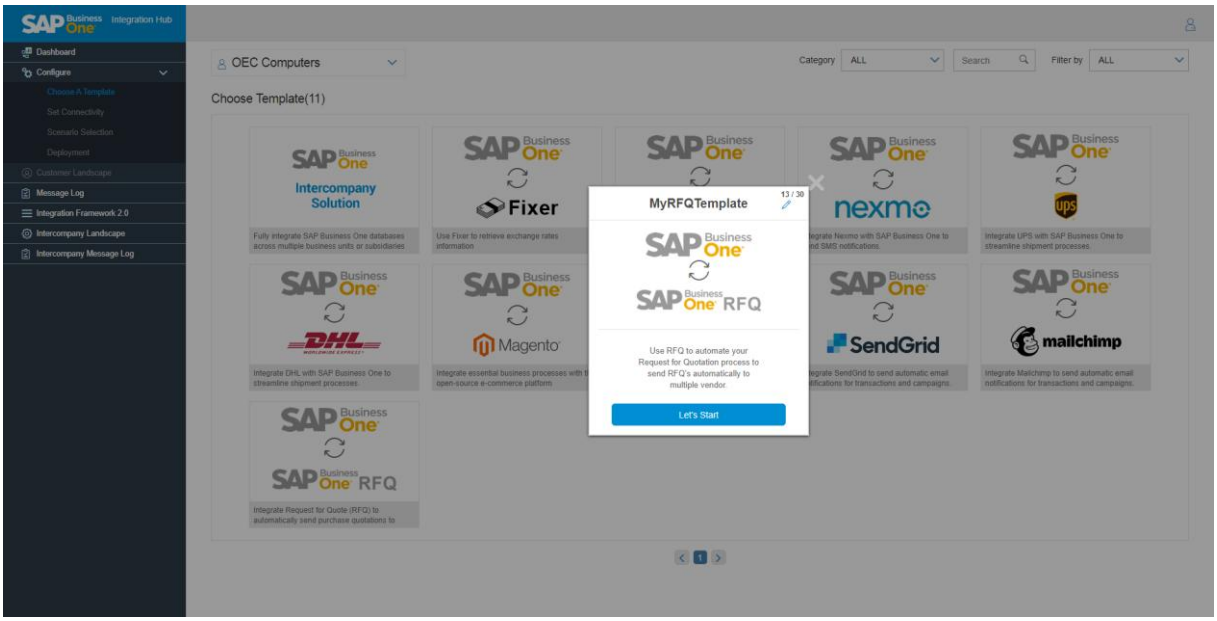
The following are the steps to setup RFQ in Administration Console:

1. Add New Customer. Refer to section Add New Customer in the document.
2. Select the *SAP Business One RFQ* template to integrate.

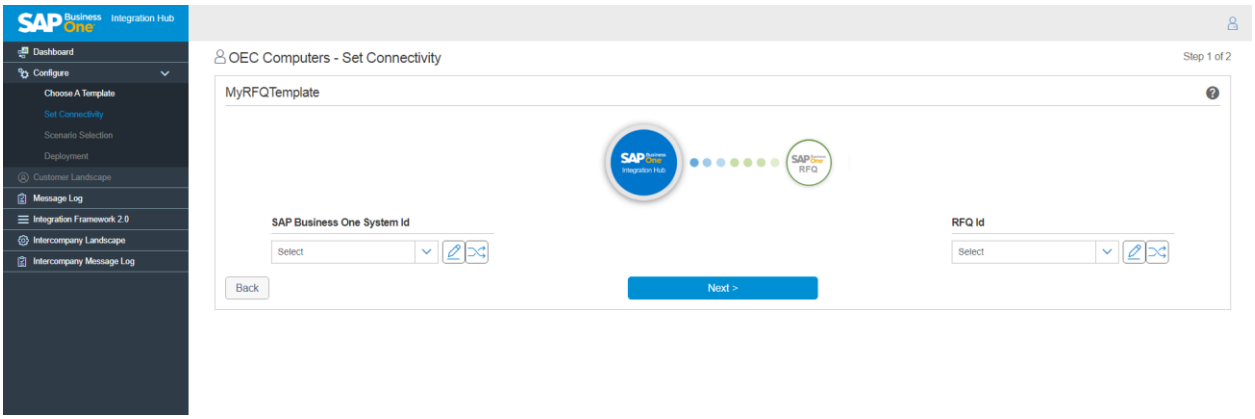
   Upon selecting the template, a message "*Let's Start*" prompts to start configuring the connectivity settings. Change the template name by clicking the Edit button to edit the template name. Otherwise it appears as *MyRFQ Template.*

Note

By default, the name of the template appears as *MyRFQ Template* and can be renamed.



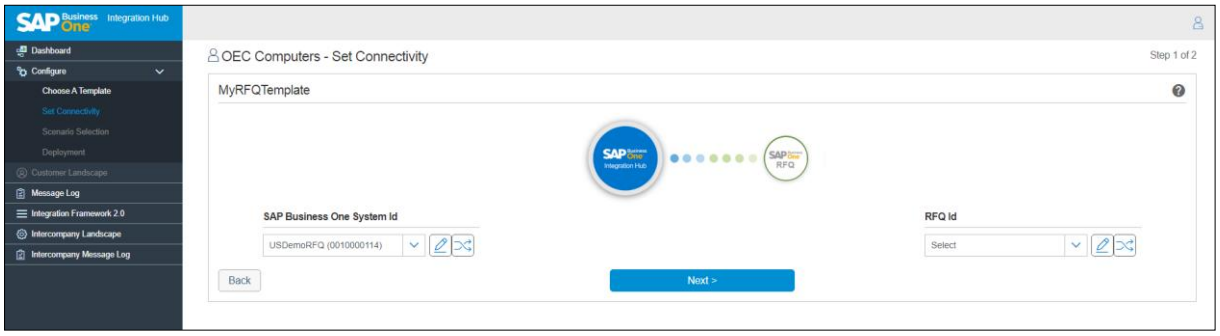
3. Upon choosing the *Let's Start* button, a *Set Connectivity* page appears with the following two steps to complete the configurations for connectivity.



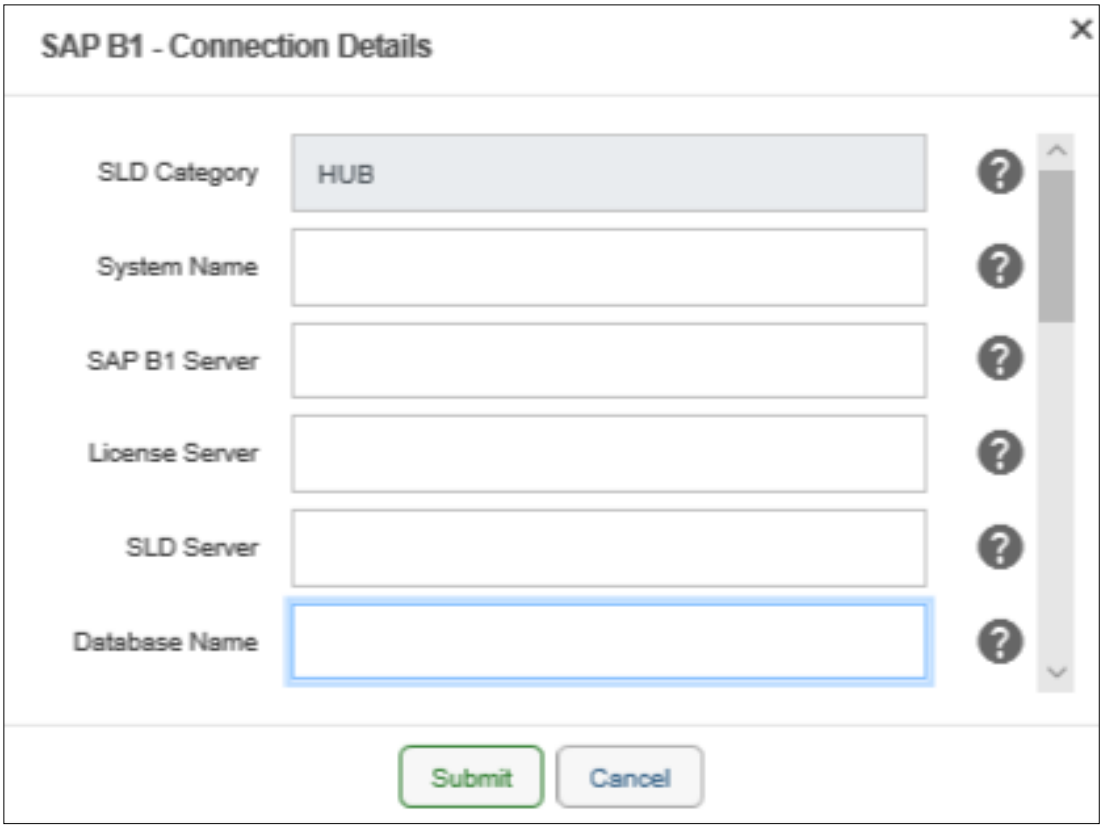
Step 1 – Set Connectivity

4. Choose the SAP Business One SLD to provide the connection between *SAP Business One System Id* and *RFQ Id.*

> **Note**
>
> By default, the solution displays all the SAP Business One SLDs available in *SLD Category* selected during customer creation.



5. To add a new SLD or edit existing SAP Business One SLD under SAP Business System Id area, choose *Add / Edit* button.



The *SAP Business One Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update SAP Business One SLD.
SAP Business One Server	Enter SAP Business One Server Name / IP Address. Note *SAP Business One Server* is the mandatory field to add/update SLD information for SAP Business One.
License Server	Enter *License Server* details. i.e. Server Name or IP Address and port number of the SAP Business One License Server. The default port is 30000.
SLD Server	Enter the valid *SLD Server* details with port. Note *SLD Server* details is the mandatory field to add/update SLD information for SAP Business One.
Database Name	Enter the name of the SAP Business One Database. Note *Database Name* is the mandatory field to add/update SAP Business One System SLD. Caution The *Database Name* must be entered same as SAP Business One Database Name.
Database Type	Currently, only Microsoft SQL Server 2005, 2008, 2012, 2014, 2016, 2017 and SAP Hana DB are supported. Choose the database type from the dropdown list. Note *Database Type* is the mandatory field to add/update SAP Business One SLD.
Database User	Enter the user to access the company database using the database connection. *Database User* is the mandatory field to add/update SAP Business One SLD. Caution The *Database User* must be valid. Invalid *Database User* will result in failure to establish the connection.
Database Password	Enter a valid password for database login. Note *Database Password* is the mandatory field to add/update SAP Business One SLD. Caution The *Database Password* must be valid. Invalid *Database Password* will result in failure to establish the connection.
Database Port	Enter the port for database.
Username	Enter **`B1i`** in this field.

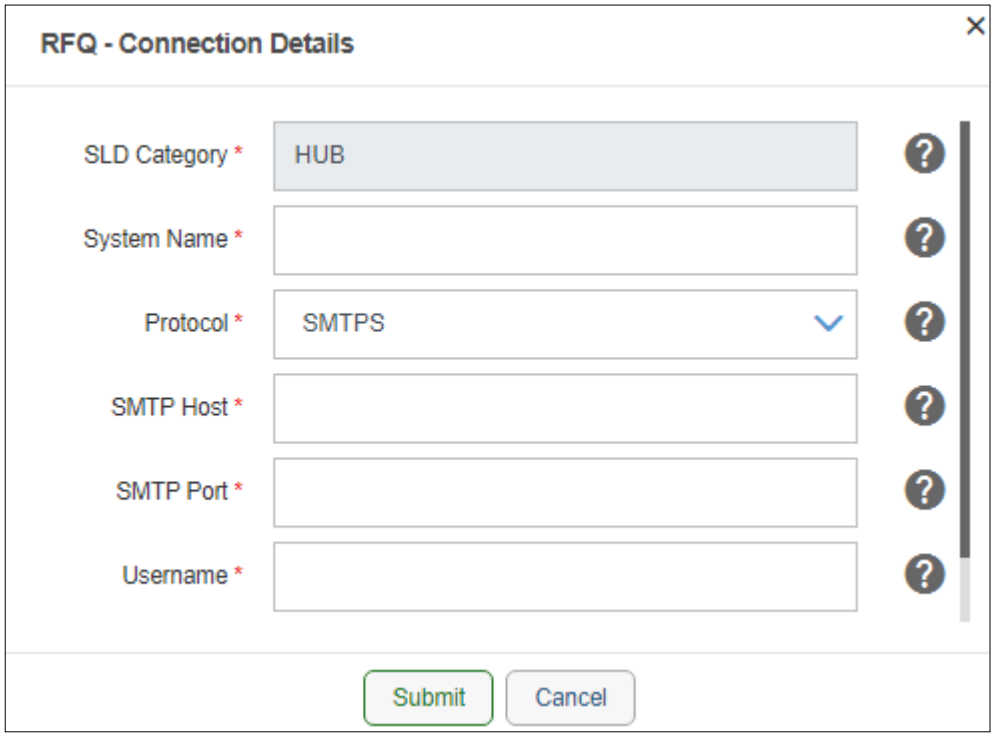
	Note *Username* is the mandatory field to add/update SAP Business One SLD. It is set as B1i by default and un editable. Caution Ensure that a user with this name exists in the SAP Business One database.
Password	Enter a valid password for B1i user of SAP Business One.
Language	Select the language from the list of languages.
Is Trust	Select *True* or *False*. The default value for this field is *False.* To use a trusted connection, choose *True* from the dropdown list.
JcoPath	Enter path for jco library. Example of Installation path of JCO: C:\Program Files (x86)\SAP\SAP Business One DI API\JCO\LIB
DI ProxyHost	The DI Proxy host must be defined if B1i is installed on a separate server (this is, other than the SAP Business One server). The value in this field must be same as SAP Business One Server address. Example *Proxyhost* can be same as *SAP Business One Server.*
DI ProxyPort	The default value of *DI Proxy Port* is 2099.
Proxy Host	The proxy host is defined in a multi-instance scenario. If the B1i server connects to the SAP Business One server through a proxy server then, enter the address of the proxy server in this field.
Proxy Port	Enter the proxy port in this field.

6. Enter the valid data and choose the *Submit button.* An *SAP Business One SLD* is created.

7. Choose the *Test Connection* icon to test the connection between the SAP Business One System Id in Integration Hub and SAP Business One System Landscape Directory.

   If the connection is successful, a success message appears “Test Connection Successful”. If the connection is unsuccessful, a failure message appears “Test Connection Failed”. Please provide the correct credentials.

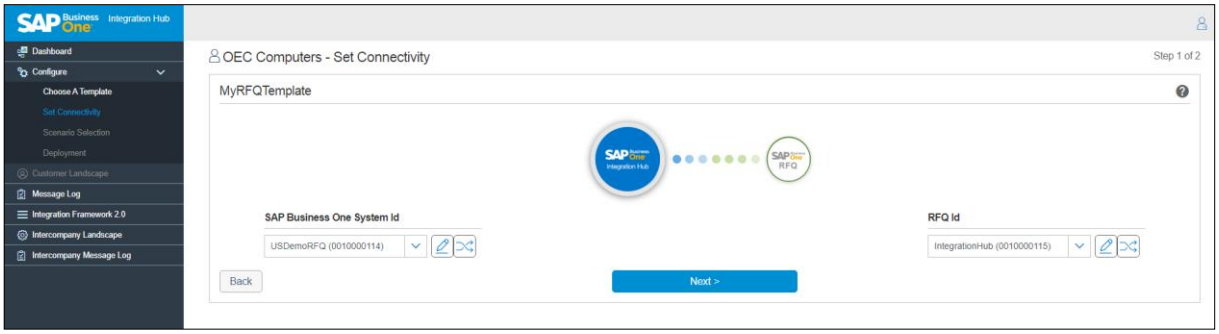
8. To add / edit RFQ instance SLD under RFQ Id area, choose the Add / Edit button.



The *RFQ Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update RFQ SLD.
Protocol	Select the Protocol to be used for RFQ communication from SMTP/ SMTPS/ TLS
SMTP Host	Enter the SMTP Host name.
SMTP Port	Enter the SMTP port.
Username	Enter the username to connect SMTP host.
Password	Enter the password to connect SMTP host.

9. Provide the valid information in the fields and choose the *Submit button.* SLD for RFQ will be created.

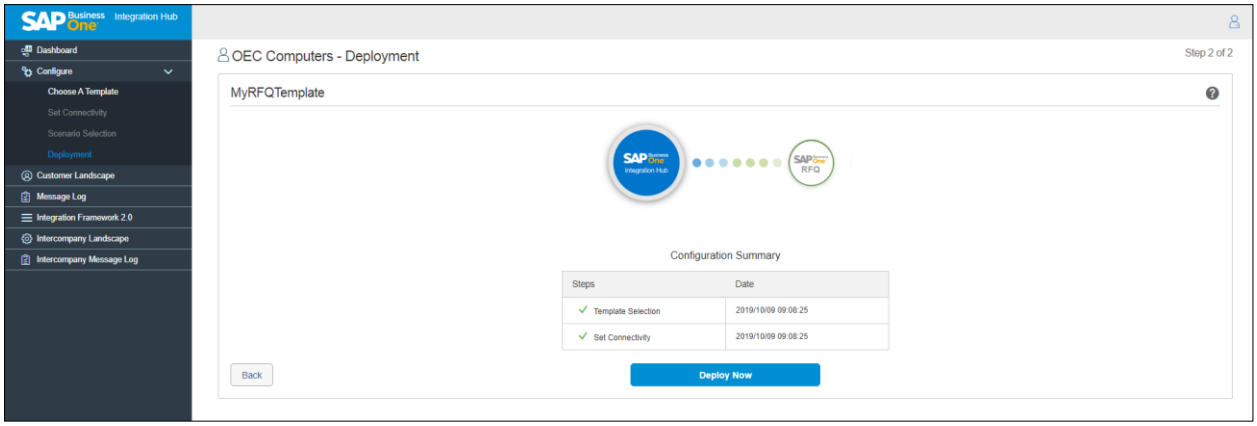


10. Choose the *Test Connection* icon to test the connection between the Integration Hub and RFQ.
If the connection is successful, a success message appears “Test Connection Successful”.
If the connection is unsuccessful, a failure message appears “Test Connection Failed”.

11. Choose the *Next* button to proceed to Step2.

Summary

12. The Configuration summary displays the *Date* and time for *Template Selection* and *Set Connectivity steps*.

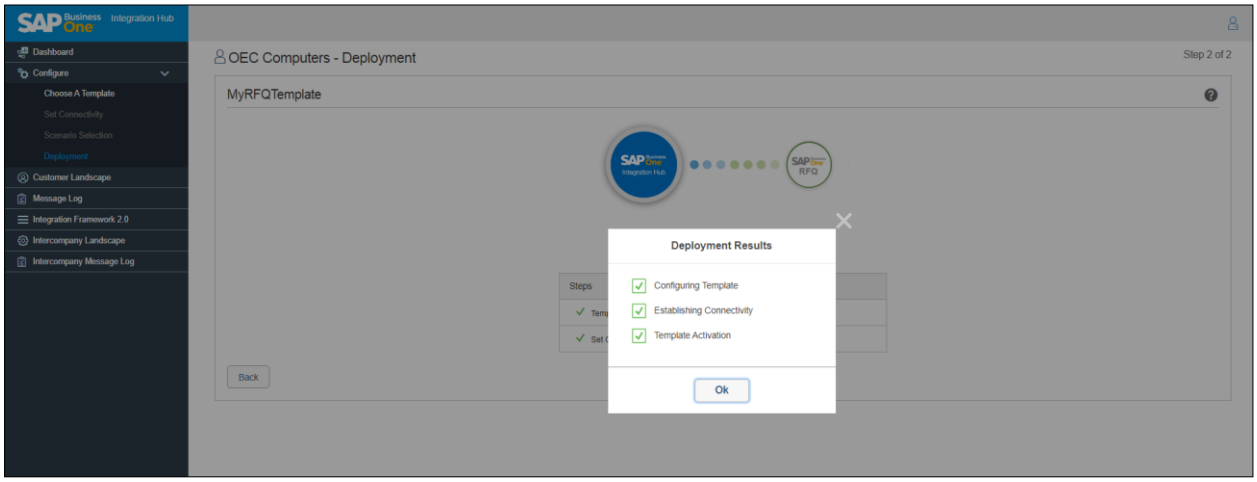


Step 2 – Deployment

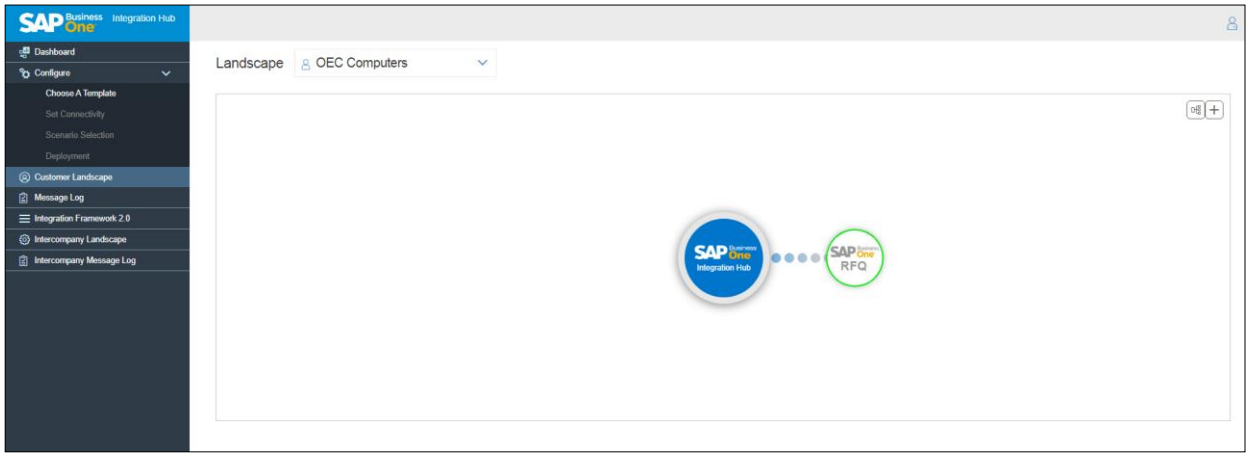
13. To deploy the solution, choose the *Deploy Now* button.

14. The application prompts you to provide the license details. For more information, refer to the Assigning the Integration Hub licenses section in this document.

15. The Integration Hub displays the *Deployment Results* whether the deployment is successful or failed. The checkbox in the *Deployment Results* window displays status of each deployment stage.



16. Once all stages are checked, click the *OK* button on the *Deployment Results* window to proceed. The successful deployment of solution in Integration Hub results in enabling the features in SAP Business One. Customer Landscape displays connection of SAP Business One to RFQ.



17. To modify the template after successful feature activation, right click on the logo of the template.

18. Right click on the RFQ logo displays window with the following fields:

Field Name	Description
View	Displays the *Set Connectivity* window in view mode.
Edit	Displays the *Set Connectivity* window in Edit mode.
De-activate	Deactivates the RFQ deployment.
Deployment Status	Displays the deployment status with date and time.
Delete Template	Choose delete template to delete the template. It is an Irreversible action. **Note** On deleting the template, the template will be marked as Inactive in the application deployment status window in SAP Business One.
Delete Deployment Info.	Choose delete deployment info. to delete the complete deployment information of the template. It is an Irreversible action. **Note** On deleting the deployment information, the template will not be deleted from deployment panel screen, it will be deactivated only.
Manage Licenses	Choose Manage License to Activate/Deactivate the integration Hub License. For more information, see Managing the Integration Hub licenses section in this guide.

13.2 Setup in SAP Business One

1. In the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Application Deployment Status*. The *Deployment Status* field should display 'Active', indicating that the feature is deployed in the Integration Hub. If the status displays 'Inactive', then redeploy the feature in the *Integration Hub.*

   The following are the statuses that can be visible on the *Application Deployment Status* screen:

   - *Active*: The status represents the solution is deployed and active.
   - *Inactive*: The status represents the feature template is not inactive.

   For more details, refer to the *Application Deployment Status* section in this guide.

   > **Note**
   >
   > You must restart the SAP Business One client after RFQ deployment from the Integration HUB.

2. Enter B1i Server Details in SAP Business One in *Main Menu* → *Administration* → *Integration Hub* → *B1i Server Details* window. This window enables to enter the *B1i Server Details*.

The *B1i Server Details* contains the following fields:

Field Name	Description
B1i Server Address	Enter the server name or IP address of B1i server.
B1i Port	Enter the port of the B1i Server. The default port for HTTP is 8080
Username	B1i run time user
Password	Enter the password for B1i run time user.
HTTPS	Select the checkbox to enable the solution to use HTTPS.

> **Note**
>
> Please ensure that the SLD entry for this company exists in SAP B1if and the solution is properly deployed.

3. After successful activation of *RFQ,* the following Email fields information should be completed in the following fields:
   - User-Setup
   - Business Partner Master Data
   - Purchase Quotation

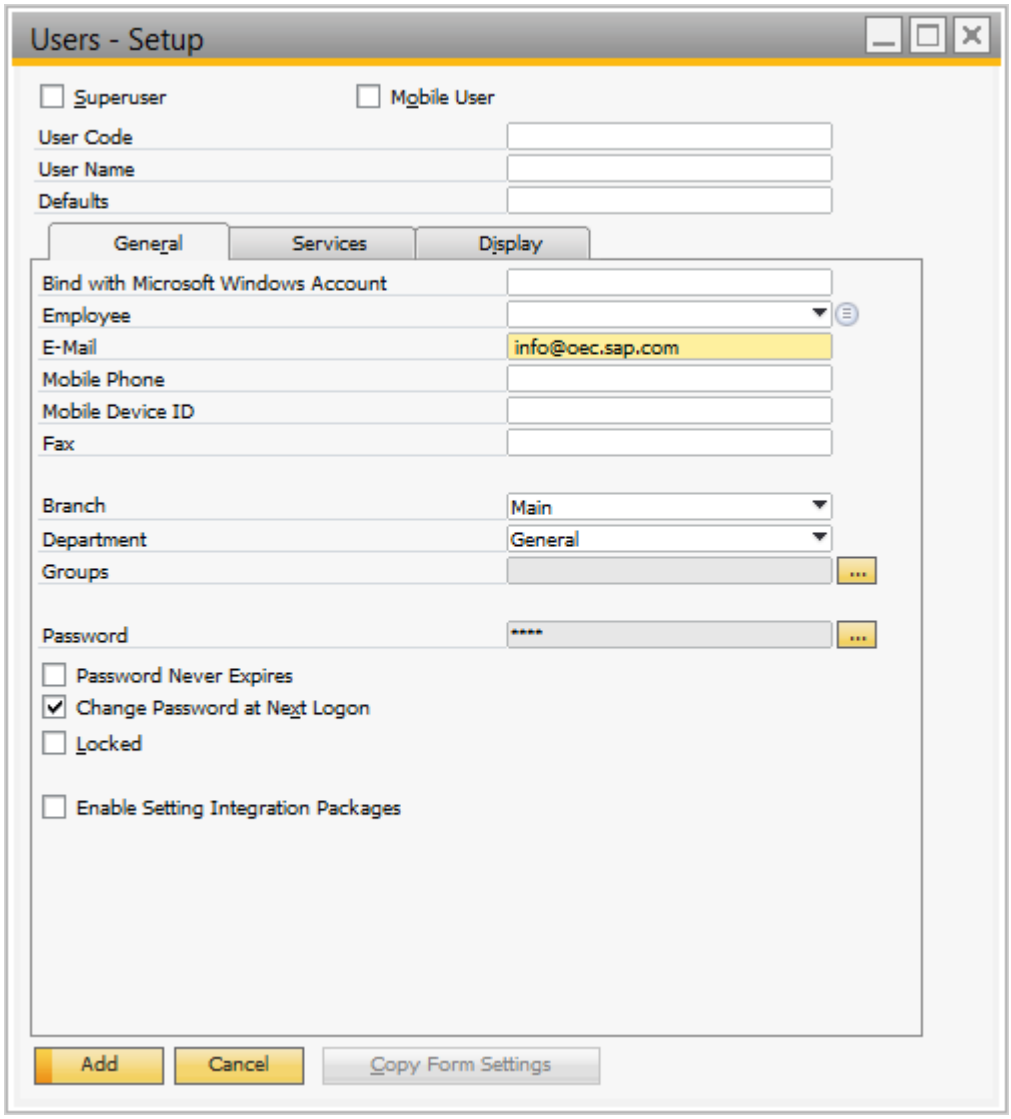
13.2.1 User Setup

A request for quote (RFQ) is a type of procurement solicitation in which a company asks outside vendors to submit a quote for the completion of a specific task or project or supply of goods. An RFQ provides comprehensive information to the bidder or supplier concerning the project's/item requirement.

An RFQ is a standard process whose purpose is to invite suppliers into a bidding process to bid on specific products or services.

To send E-mails, E-mail addresses of all the participants i.e. Vendor's contact persons, SAP Business One users in the RFQ process needs to be updated.

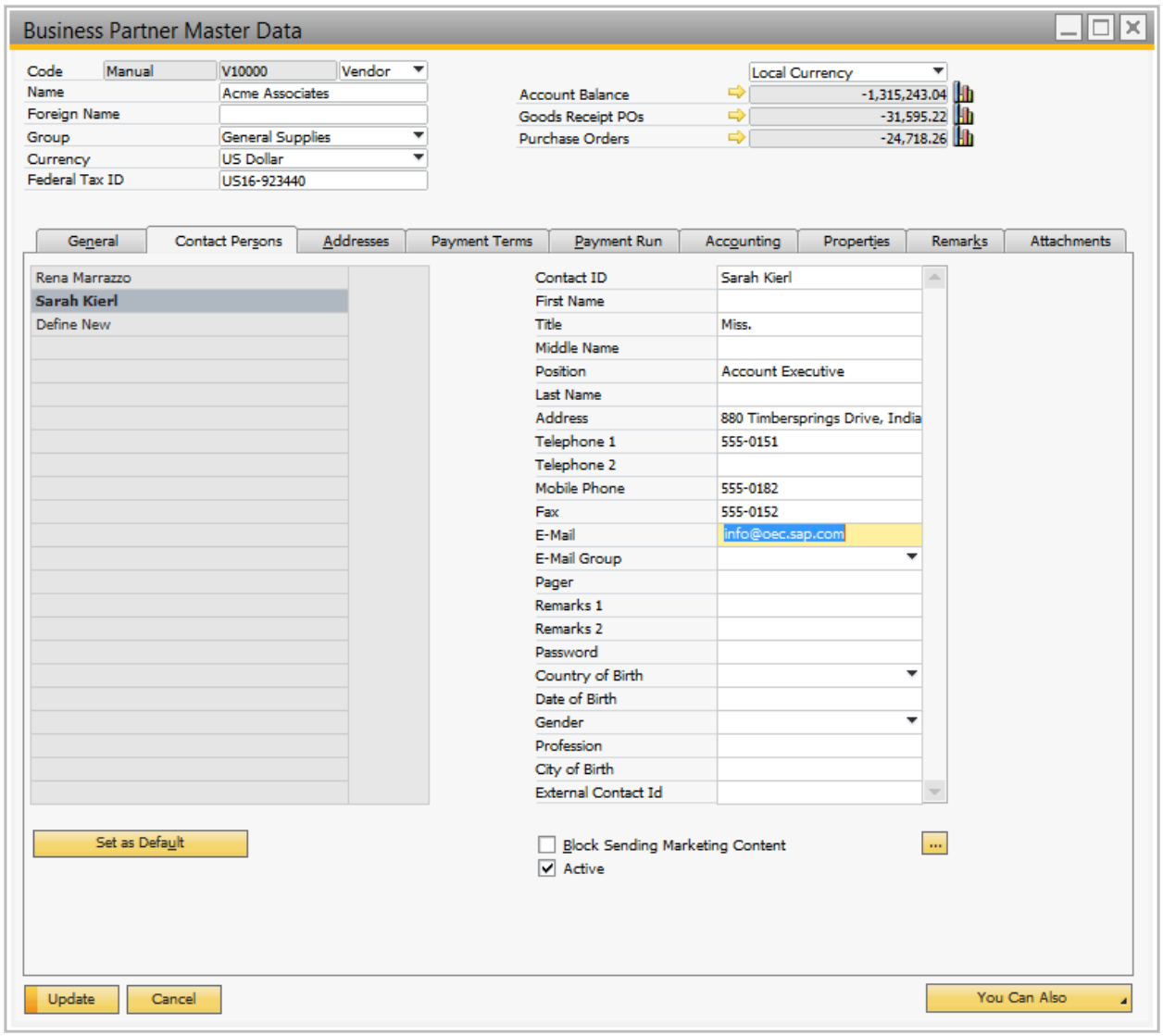
In the *User-Setup* window, E-mail information is required. To open the *User Setup* window, go to *Main Menu* → *Administration* → *Setup* → *General* →*User*



13.2.2 Business Partner Master Data

In *Business Partner Master Data* window, a field *E-Mail* is available in the *Contact Person* tab.

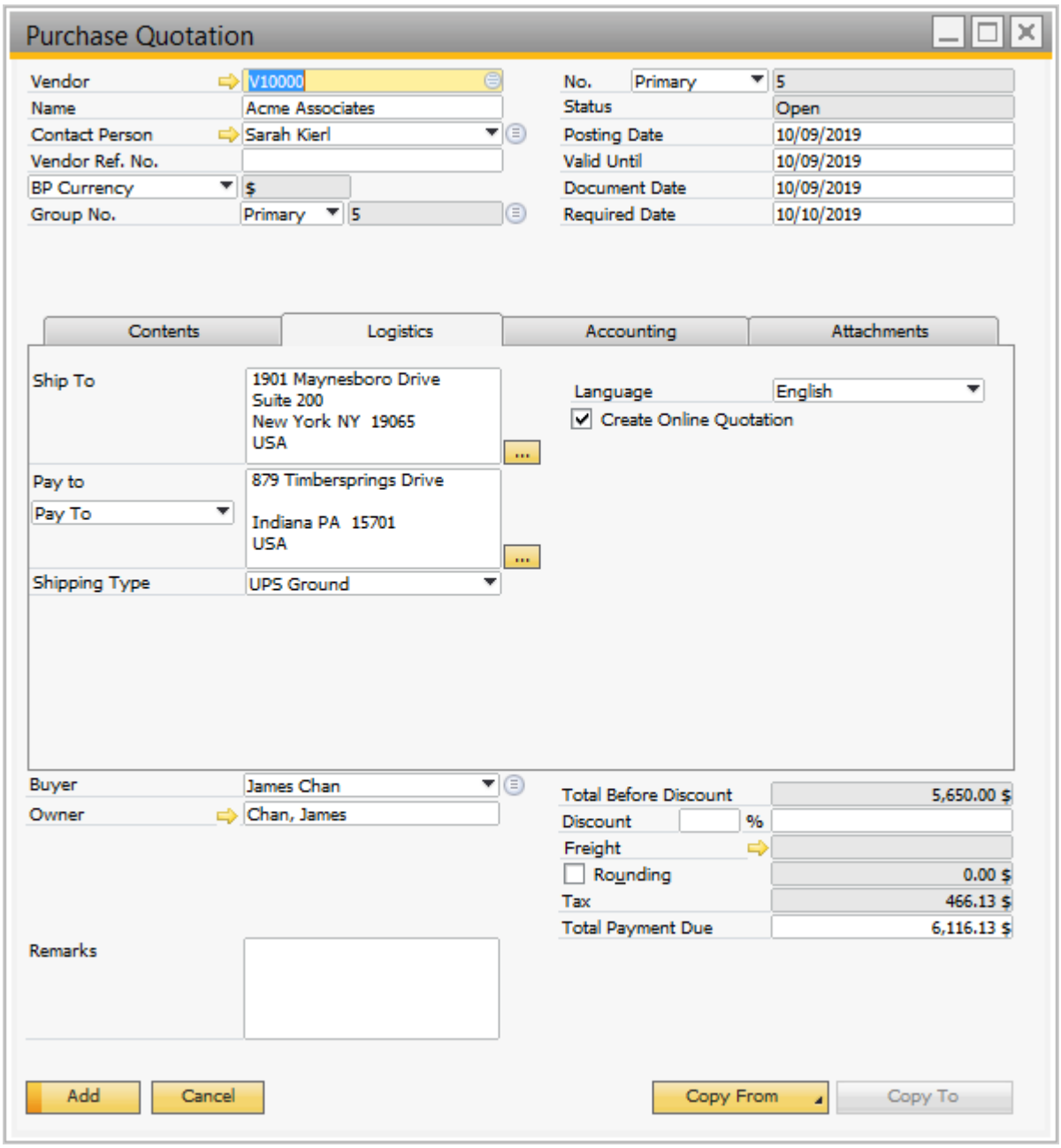
To open the *Business Partner Master Data* window, from the SAP Business One *Main Menu*, choose *Business Partner → Business Partner Master Data.*



13.2.3 Purchase Quotation

A user in SAP Business One creates a purchase quotation and selects the Create Online Quotation checkbox in the *Purchasing – AP → Purchase Quotation* Logistics tab. Based on the purchase quotation data, the integration framework creates a Web-page that it hosts on the integration framework server. Additionally, it creates an E-mail that contains a link to the Web-page and sends the E-mail to the potential vendor or vendors. The potential vendor receives the E-mail, opens the link to the Web-page and fills in his or her information for the purchase request. The vendor submits the form and the integration framework submits the data to SAP Business One, and sends an E-mail with the submitted information to the vendor and the SAP Business One user.

In *Logistics* tab of the *Purchase Quotation*, select the flag for *Create Online Quotations.* To open the *Purchase Quotation* window, go to *Main Menu* → *Purchasing A/P* → *Purchase Quotation*



Note

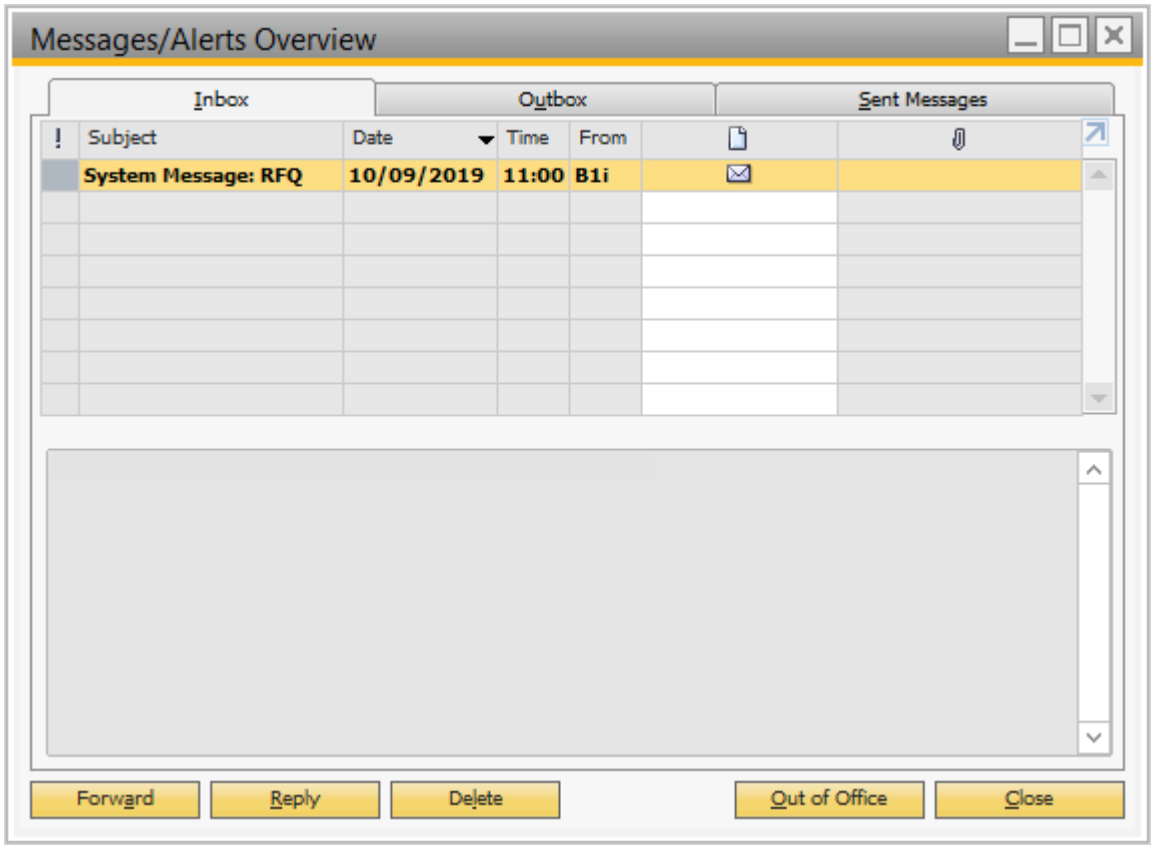
The selection of '*Create Online Quotation*' is mandatory to make the quotation consider for RFQ.

By selecting, the *Create Online Quotation* checkbox in the Logistics tab of purchase quotation, the integration framework will trigger the process of adding the purchase quotation.

13.3 Using RFQ

13.3.1 Message / Alerts Overview

The solution automatically sends the E-mail on creation of Purchase Quotation. Message / Alerts Overview pops up with *Subject* as *System Message: RFQ*



13.3.2 Purchase Quotation E-mail to Vendor

Purchase quotation E-mail is automatically sent to the vendor with a link to the web-page.
The following is sample E-mail sent to vendor for the purchase Quotation.

Dear Vendor,

This e-mail is to inform you that we have published a request for quotation to your company.

Please provide your offer online using this link HTTP://Integration-Hub.owhs04ismlme3hdv5ayhfst4qa.tx.internal.cloudapp.net:8080/B1iXcellerator/RFQ/index.html?docID=191009101207324113970A0102087CBE.xml&TenantId=MyRFQTemplate

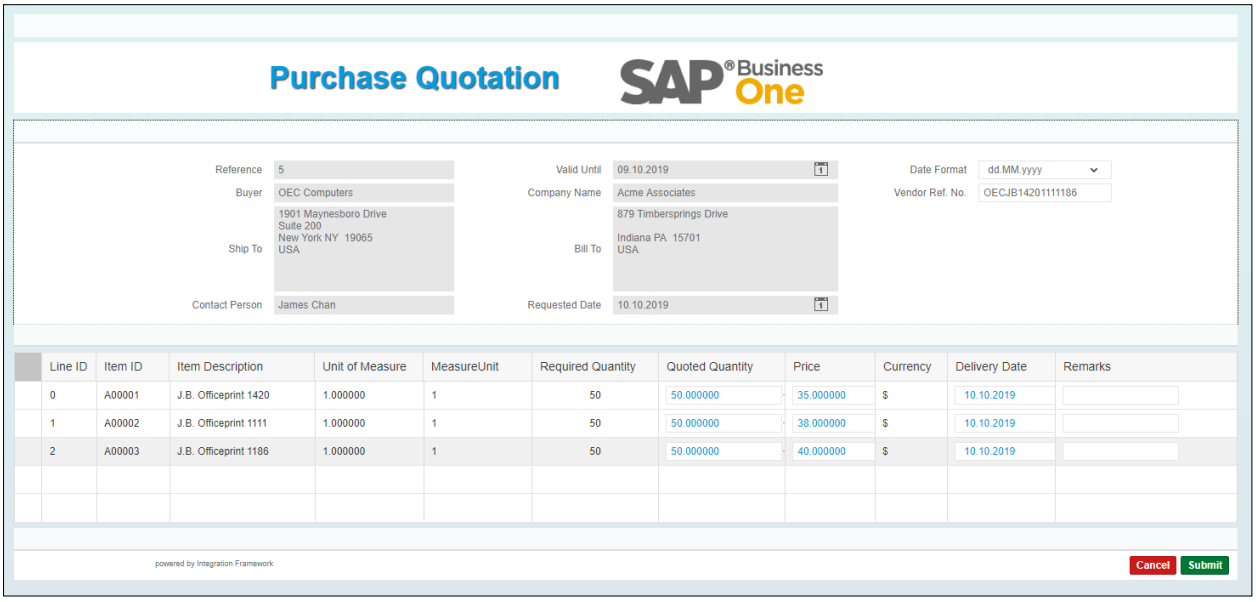
For further clarification, please contact James Chan.

Best regards,

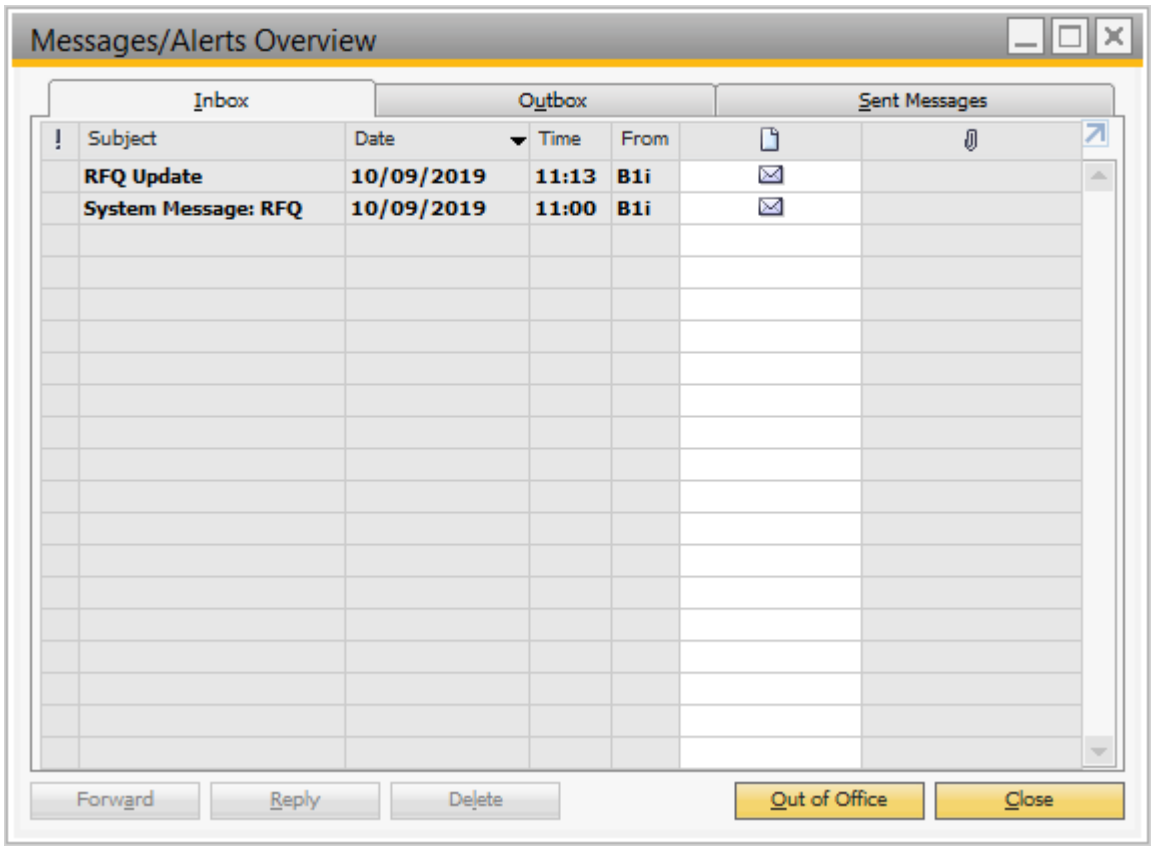
Purchasing Department

OEC Computers

Once the vendor clicks on the web-link provided in the E-mail, purchase quotation detailed information is displayed.



The Vendor either accepts the price in the quotation or can change the quotation price for the items, can update the quoted quantity and delivery date and submit the purchase quotation. A pop up message appears to confirm submission of the Purchase Quotation. Upon confirmation, message for successful submission is displayed and E-mail is automatically sent to the vendor with a web-link. The Message /Alert Overview displays RFQ Update message.



Note

The process remains the same when generating bulk quotations using the Purchase Quotation Generation Wizard.

14 Magento

The Magento is an ecommerce platform which provides online merchants with a flexible shopping cart system, as well as control over the look, content and functionality of their online store. Magento offers powerful marketing, search engine optimization, and catalog-management tools. The integration between Magento and SAP Business One facilitates automated, bi-directional data exchange between Magento and the SAP Business One, eliminating data re-keying while reducing costly errors.

Note

Magento Base Currency must match SAP B1 local currency.

14.1 Setting Up Magento in Integration Hub

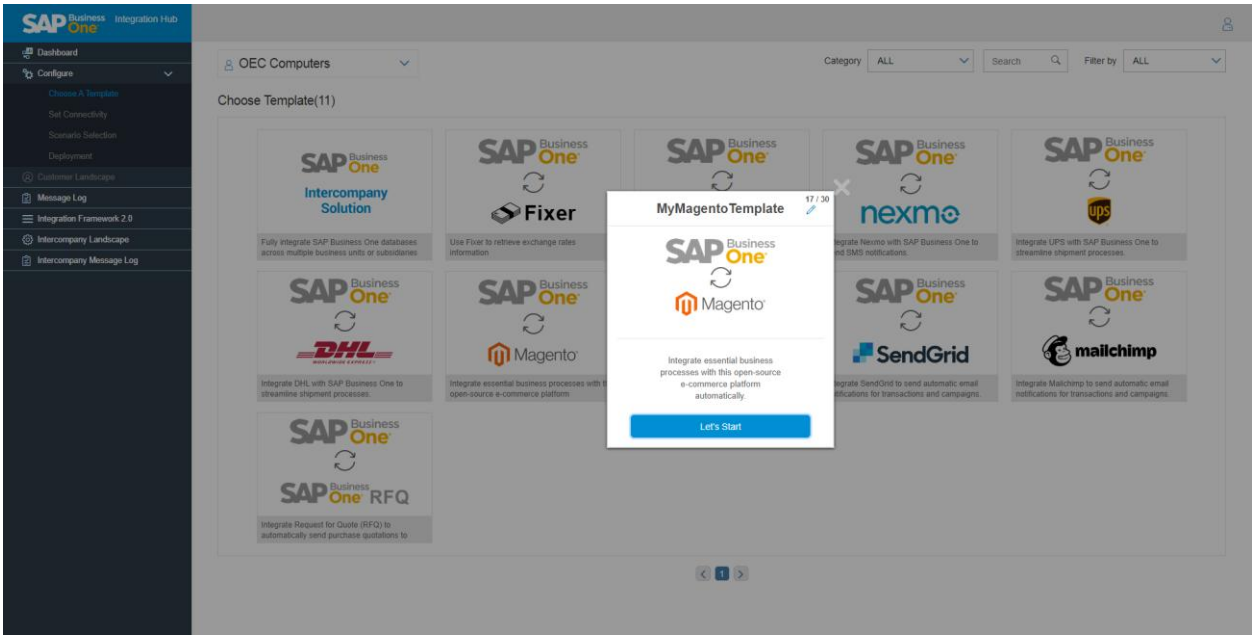
The following are the steps to setup Magento in Administration Console:

1. Add New Customer. Refer to section Add New Customer in the document.
2. Select the *Magento* template to integrate.

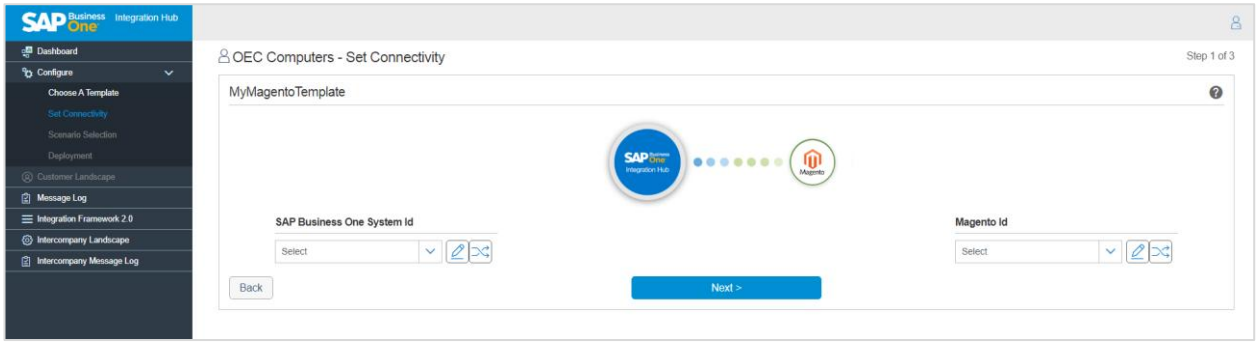
   Upon selecting the template, a message "*Let's Start*" prompts to start configuring the connectivity settings. Change the template name by clicking the Edit button to edit the template name. Otherwise it appears as *MyMagento Template*.

   ### Note

   By default, the name of the template appears as *MyMagento Template* and can be renamed.



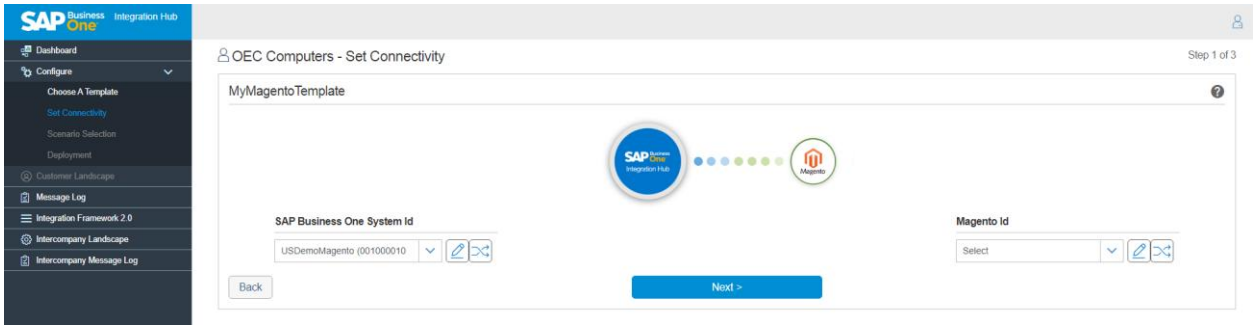
3. Upon choosing the *Let's Start* button, a *Set Connectivity* page appears with the following two steps to complete the configurations for connectivity.



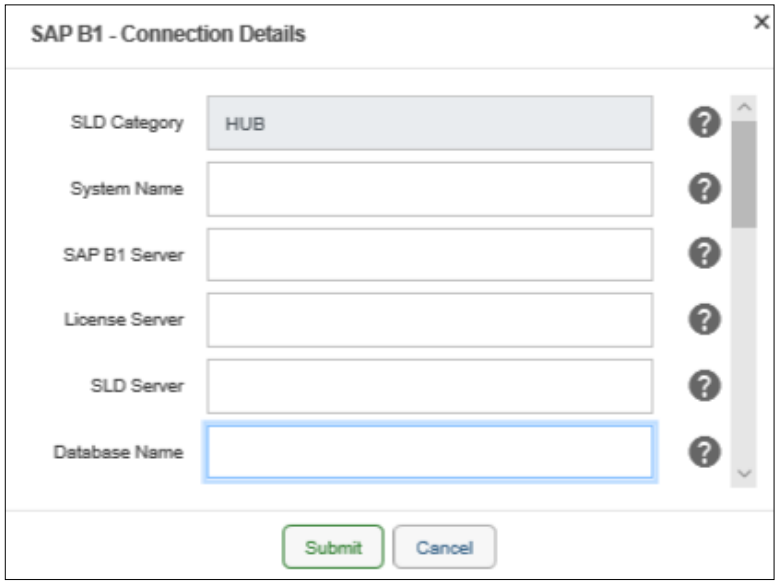
Step 1 – Set Connectivity

4. Choose the SAP Business One SLD to provide the connection between *SAP Business One System Id* and *Magento Id.*

> **Note**
>
> By default, the solution displays all the SAP Business One SLDs available in *SLD Category* selected during customer creation.



5. To add a new SLD or edit existing SAP Business One SLD under SAP Business System Id area, choose *Add / Edit* button.



The *SAP Business One Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. **Note** *System Name* is the mandatory field to add or update SAP Business One SLD.
SAP Business One Server	Enter SAP Business One Server Name / IP Address. **Note** *SAP Business One Server* is the mandatory field to add/update SLD information for SAP Business One.
License Server	Enter *License Server* details. i.e. Server Name or IP Address and port number of the SAP Business One License Server. The default port is 30000.
SLD Server	Enter the valid *SLD Server* details with port. **Note** *SLD Server* details is the mandatory field to add/update SLD information for SAP Business One.
Database Name	Enter the name of the SAP Business One Database. **Note** *Database Name* is the mandatory field to add/update SAP Business One System SLD. **Caution** The *Database Name* must be entered same as SAP Business One Database Name.
Database Type	Currently, only Microsoft SQL Server 2005, 2008, 2012, 2014, 2016, 2017 and SAP Hana DB are supported. Choose the database type from the dropdown list. **Note** *Database Type* is the mandatory field to add/update SAP Business One SLD.

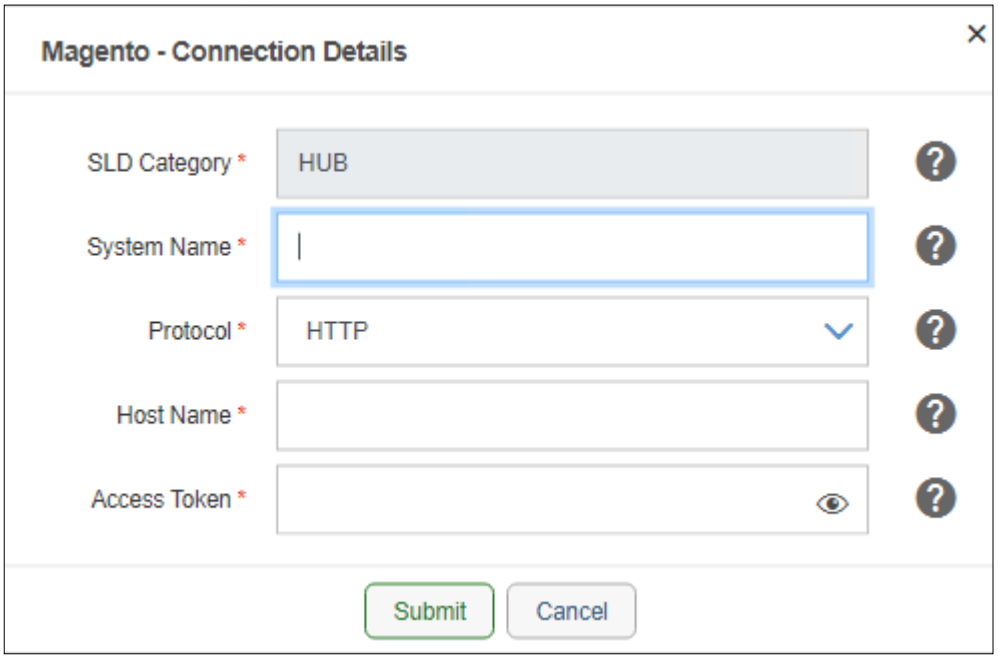
Database User	Enter the user to access the company database using the database connection. *Database User* is the mandatory field to add/update SAP Business One SLD. Caution The *Database User* must be valid. Invalid *Database User* will result in failure to establish the connection.
Database Password	Enter a valid password for database login. Note *Database Password* is the mandatory field to add/update SAP Business One SLD. Caution The *Database Password* must be valid. Invalid *Database Password* will result in failure to establish the connection.
Database Port	Enter the port for database.
Username	Enter `B1i` in this field. Note *Username* is the mandatory field to add/update SAP Business One SLD. It is set as B1i by default and un editable. Caution Ensure that a user with this name exists in the SAP Business One database.
Password	Enter a valid password for B1i user of SAP Business One.
Language	Select the language from the list of languages.
Is Trust	Select *True* or *False*. The default value for this field is *False.* To use a trusted connection, choose *True* from the dropdown list.
JcoPath	Enter path for jco library. Example of Installation path of JCO: C:\Program Files (x86)\SAP\SAP Business One DI API\JCO\LIB
DI ProxyHost	The DI Proxy host must be defined if B1i is installed on a separate server (this is, other than the SAP Business One server). The value in this field must be same as SAP Business One Server address. Example *Proxyhost* can be same as *SAP Business One Server.*
DI ProxyPort	The default value of *DI Proxy Port* is 2099.
Proxy Host	The proxy host is defined in a multi-instance scenario. If the B1i server connects to the SAP Business One server through a proxy server then, enter the address of the proxy server in this field.
Proxy Port	Enter the proxy port in this field.

6. Enter the valid data and choose the *Submit button.* An *SAP Business One SLD* is created.

7. Choose the *Test Connection* icon to test the connection between the SAP Business One System Id in Integration Hub and SAP Business One System Landscape Directory.

   If the connection is successful, a success message appears “Test Connection Successful”. If the connection is unsuccessful, a failure message appears “Test Connection Failed”. Please provide the correct credentials.

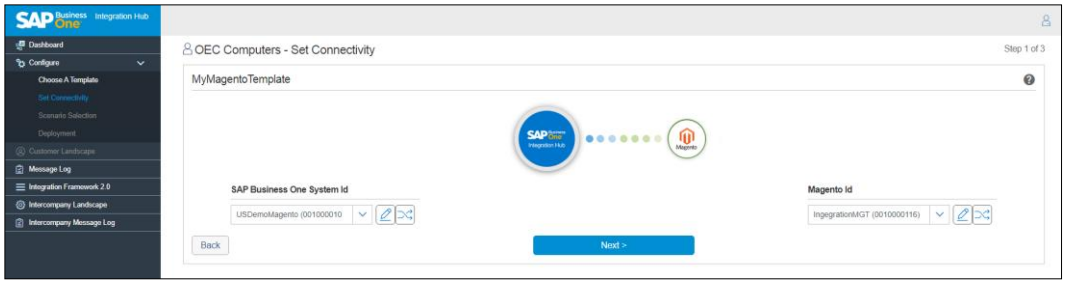
8. To add / edit Magento instance SLD under Magento Id area, choose the Add / Edit button.



The *Magento Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update Magento SLD.
Protocol	Select Protocol from HTTP / HTTPS.
Host Name	Hostname of Magento site. The hostname is fully qualified domain name. For Example if you access Magento site using URL: https://magento-302133-998378.cloudwaysapps.com/admin/ , then the hostname of the Magento site is : magento-302133-998378.cloudwaysapps.com
Access Token	Access Token Key provided by Magento. Note Add New Integration for Integration Hub at location System->Integrations in Magento. Once the integration record is created for Integration Hub, Authorize it. Upon Authorization click on Edit button of the record. Access Token information is visible under Integration Details.

9. Provide the valid information in the fields and choose the *Submit button.* SLD for Magento will be created.

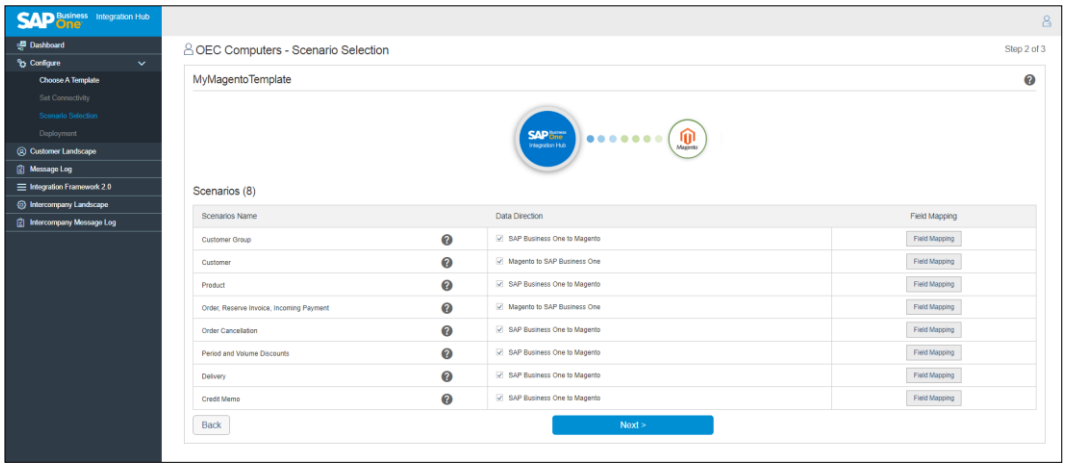


10. Choose the *Test Connection* icon to test the connection between the Integration Hub and Magento.
If the connection is successful, a success message appears “Test Connection Successful”.
If the connection is unsuccessful, a failure message appears “Test Connection Failed”.

11. Choose the *Next* button to proceed to Step2.

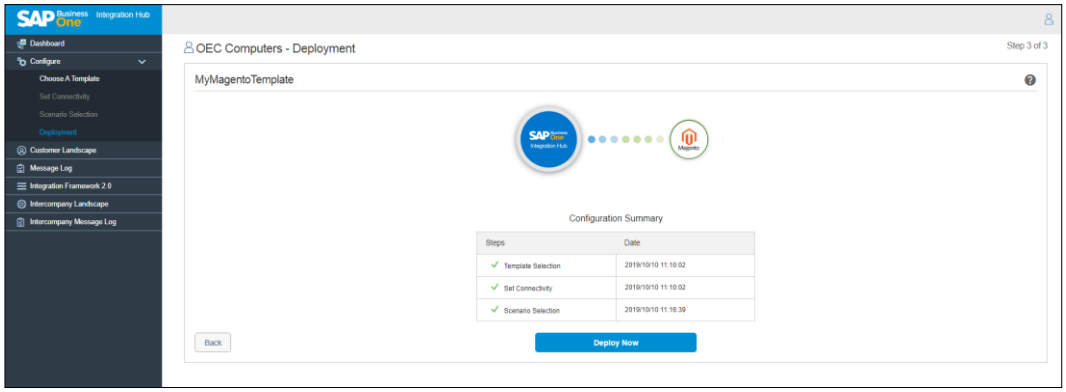
Scenario Selection

12. The Scenario Selection summary displays the *Scenario Name, Data Direction,* and *Field Mapping. The Field Mapping* further displays information of Field *in SAP Business One* and mapped field in *Magento.*



Configuration Summary

13. The Configuration summary displays the *Date* and time for *Template Selection, Set Connectivity steps* and *Scenario Selection*.

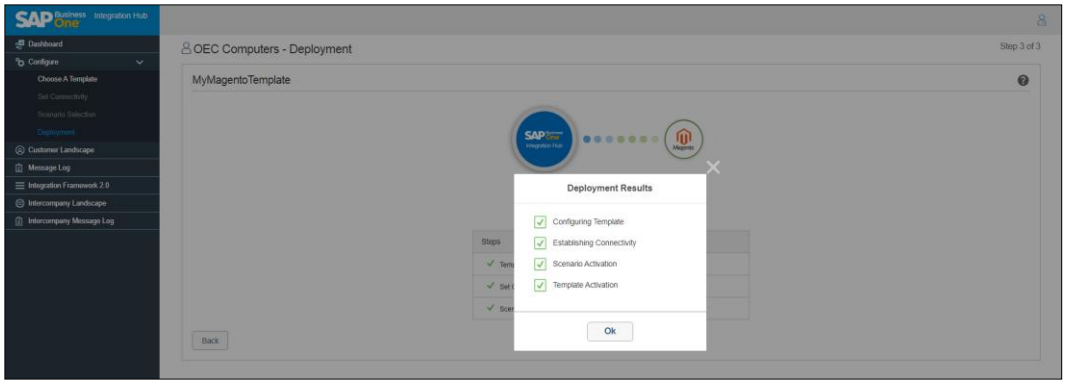


Step 2 – Deployment

14. To deploy the solution, choose the *Deploy Now* button.

15. The application prompts you to provide the license details. For more information, refer to the Assigning the Integration Hub licenses section in this document.

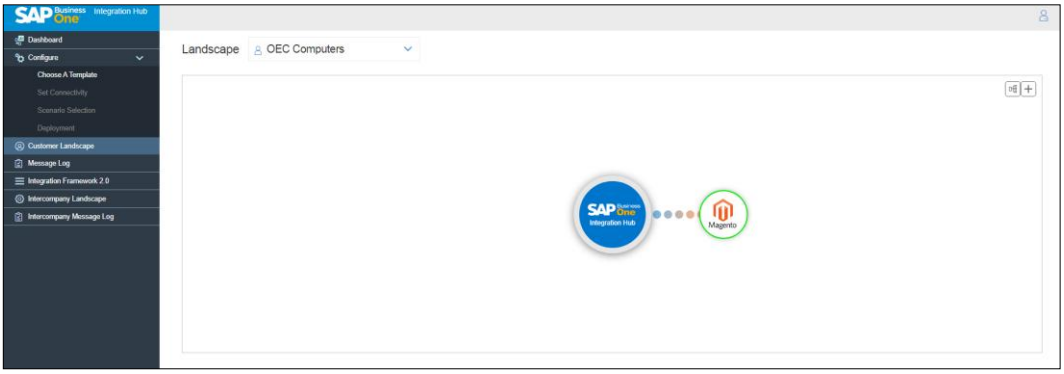
16. The Integration Hub displays the *Deployment Results* whether the deployment is successful or failed. The checkbox in the *Deployment Results* window displays status of each deployment stage.



Note

After you enable the multi-branch function in SAP Business One, you must re-deploy the Magento Template.

17. Once all stages are checked, click the *OK* button on the *Deployment Results* window to proceed. The successful deployment of solution in Integration Hub results in enabling the features in SAP Business One. Customer Landscape displays connection of SAP Business One to Magento.



18. To modify the template after successful feature activation, right click on the logo of the template.

19. Right click on the Magento logo displays window with the following fields:

Field Name	Description
View	Displays the *Set Connectivity* window in view mode.
Edit	Displays the *Set Connectivity* window in Edit mode.
De-activate	Deactivates the Magento deployment.
Deployment Status	Displays the deployment status with date and time.
Delete Template	Choose delete template to delete the template. It is an Irreversible action. **Note** On deleting the template, the template will be marked as Inactive in the application deployment status window in SAP Business One.
Delete Deployment Info.	Choose delete deployment info. to delete the complete deployment information of the template. It is an Irreversible action.

	Note On deleting the deployment information, the template will not be deleted from deployment panel screen, it will be deactivated only.
Manage Licenses	Choose Manage License to Activate/Deactivate the integration Hub License. For more information, see Managing the Integration Hub licenses section in this guide.

14.2 Setup in SAP Business One

1. In the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Application Deployment Status*. The *Deployment Status* field should display 'Active', indicating that the feature is deployed in the Integration Hub. If the status displays 'Inactive', then redeploy the feature in the *Integration Hub.*

   The following are the statuses that can be visible on the *Application Deployment Status* screen:

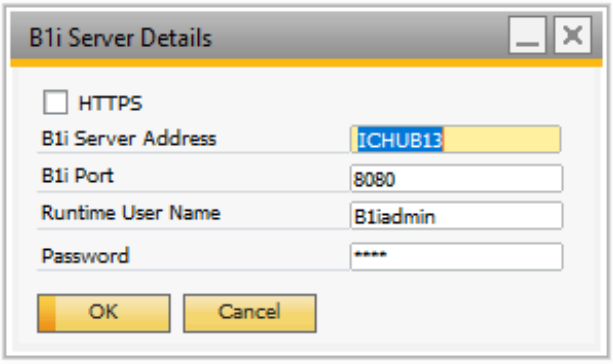
   - *Active*: The status represents the solution is deployed and active.
   - *Inactive*: The status represents the feature template is not inactive.

   For more details, refer the *Application Deployment Status* section in this guide.

   > **Note**
   >
   > You must restart the SAP Business One client after Magento deployment from the Integration HUB. On login, the Add-On script will execute, and the relevant setup window will appear.

   > **Note**
   >
   > You must define the ISO Currency code for the base and all other currencies defined in the database.

2. Enter B1i Server Details in SAP Business One in *Main Menu* → *Administration* → *Integration Hub* → *B1i Server Details* window. This window enables to enter the *B1i Server Details*.



The *B1i Server Details* contains the following fields:

Field Name	Description
B1i Server Address	Enter the server name or IP address of the B1i server.
B1i Port	Enter the port of the B1i Server. The default port for HTTP is 8080
Username	B1i run time
Password	Enter the password for B1i run time user.
HTTPS	Select the checkbox to enable the solution to use HTTPS.

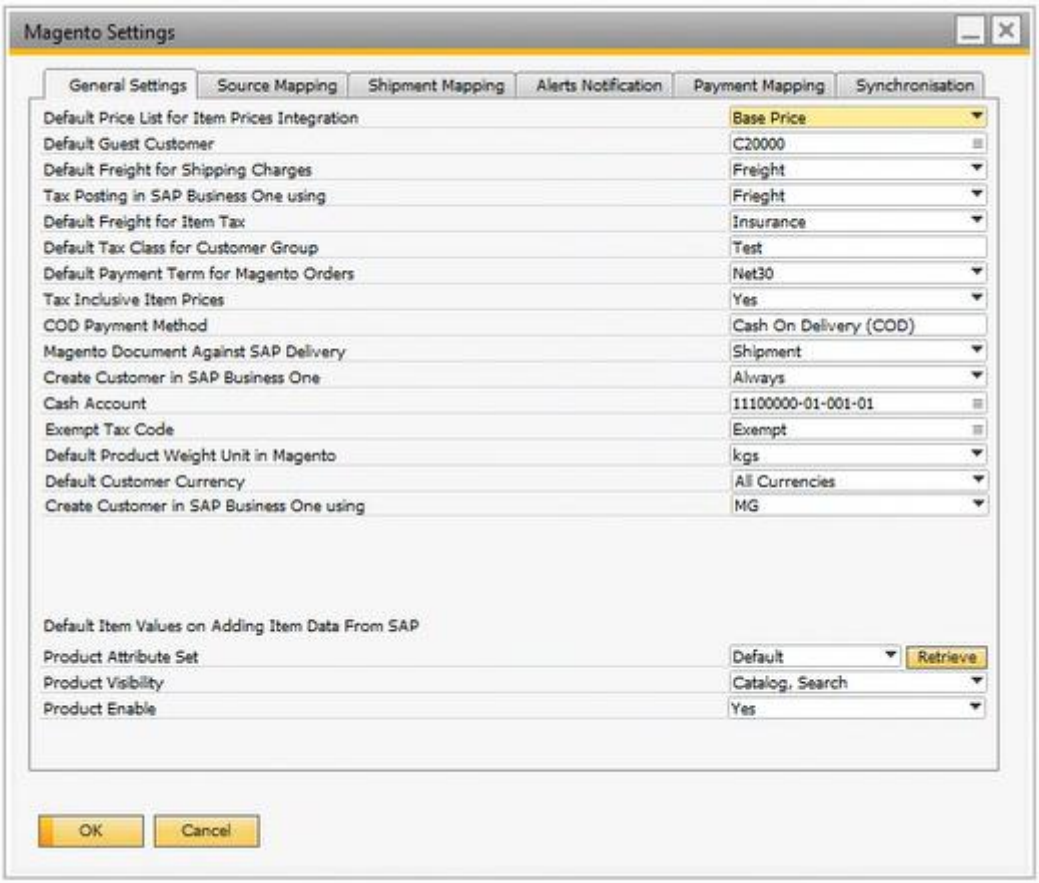
> **Note**
>
> Please ensure that the SLD entry for this company exists in SAP B1if and the solution is properly deployed.

14.2.1 Magento Settings

On the Main Menu go to *Administration* → *Integration Hub* → *Magento Settings* to configure the required Magento settings.

14.2.1.1 General Settings

Configure the general settings in the *General Settings* tab in *Magento Settings* window.



The *General Settings* tab of the *Magento Settings* window contains the following fields:

Field Name	Description
Default Price List used for Items Prices Integration	Select a Price List. The selected price list is used to integrate product prices from SAP Business One to Magento.
Default Guest Customer	Select a Customer. The selected Customer is used to integrate orders of guest customers from SAP Business One to Magento.

Default Freight for Shipping Charges	Select a freight component for Shipping Charges. The selected freight component is used to integrate the header level shipping amount per order in Magento to SAP Business One.
Tax Posting in SAP Business One using	From the dropdown list, select either *Freight* or *Tax Code Determination*. ○ *Freight* – Whenever a Magento Order is integrated to SAP Business One, the Magento Order tax amount is posted to the default freight mapped in the *Default Freight for Item Tax* setting. ○ *Tax Code Determination* – Whenever a Magento Order is integrated into SAP Business One, the Tax code is automatically set in SAP Business One based on the Tax code determination. The Hub application will not post the Magento Order Tax amount in SAP Business One; the transaction tax amount is automatically calculated in SAP Business One based on the applied tax Code. Note You must complete the Tax code determination in SAP Business One based on your requirement and ensure the tax code applied in a transaction by both application i.e. Magento and SAP Business One should be same. otherwise, it may lead to document total inconsistency.
Default freight for Item Tax	Select a freight component for Tax component. The selected freight component is used to integrate the item level tax amount per order in Magento to SAP Business One. Note The value in this field is needed if the *Tax Posting in SAP Business One using* setting value is Freight.
Default Tax class for Customer Group	Enter the Default Tax Class for customer group to which the customer belongs.
Default Payment Term for Magento Orders	Select a payment term from the list of payment terms in SAP Business One The selected payment term is the default payment term for all orders of Magento integrated in SAP Business One.
Tax Inclusive Item Prices	Select *Yes* or *No* depending on your settings in Magento
COD Payment Method	Enter the cash on delivery method name as specified in Magento.
Magento Document Against SAP Delivery	Select the Magento Document Against SAP Delivery. ○ *Shipment and Invoice* option selection is recommended, as this will create both shipment and Invoice in Magento. ○ If *Shipment* option is selected, creates only Shipment in Magento. The invoice will not be created in Magento but Fulfillment can be performed in Magento. However, refund on selection of Shipment option is not possible.
Create Customer in SAP	Select from *Always* or *On First Order*. ○ *Always* - whenever a customer is created in Magento, the customer is also created in SAP. ○ *On First Order* – when the first order is placed by the customer, the customer is created in SAP
Cash Account	Choose an account from the list of accounts. The selected account is used for posting cash transactions in SAP Business One.

Exempt Tax Code	Select a tax code from the list of tax codes. The selected tax code is used in all orders integrated from Magento to SAP Business One. The selected tax code must be of zero rate.
Default Product Weight Unit in Magento	Select the default weight Unit of the Product selected in Magento. If the weight unit in Magento is in lbs., then height, weight, and width will be in inches. If the weight unit in Magento is in Kg, then height, weight, and width will be in centimeters.
Default Customer Currency	Select a currency from the list of currencies The selected currency is used while integrating the customers from Magento to SAP Business One.
Create Customer in SAP Business One Using	Select the option, either the custom numbering series or the Magento Customer ID, that will be used while adding the customer data from Magento to SAP Business One. ○ If the *Magento Customer ID* is selected, the Magento Customer ID will be used to create the customer in both the Card Code in SAP Business One. ○ If a numbering series for the Customer is selected in this field, the Card Code will be auto-generated by *SAP Business One.*
Branch Assignment for Customer	Select the branch that will be used while adding/updating customer data from Magento to SAP Business One. Choose the button of the Branch Assignment for the Customer field. In the Branch Assignment for Customer window, in the Active column, select the required branches. **Note** This field is relevant for the multi-branch function.
Default Item Values On Adding Item Data From SAP	
Product Attribute Set	Select the Product Attribute set retrieved from Magento. Retrieve Product Attribute by clicking on the Retrieve button.
Product Enable	Select the Product Enable option on Magento. Select *Yes* or *No* depending on your settings in Magento
Product Visibility	Select from *"Not Visible Individually, Catalog, Search, Catalog Search"* depending on your settings in Magento

14.2.1.2 Payment Mapping

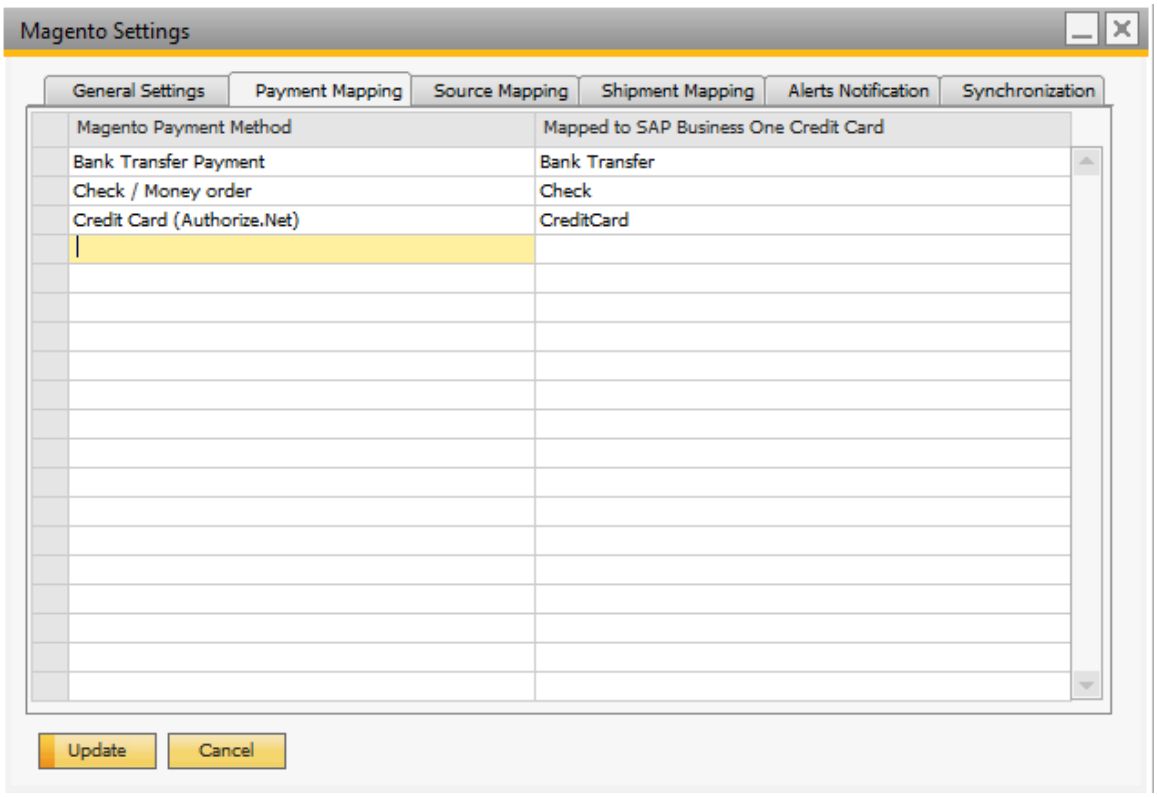
Map the payment methods of Magento in the *Payment Mapping* tab in the *Magento Settings* window in SAP Business One.

To add a Payment method, right click on Magento Payment Method and Add Row to map the payment method from Magento to SAP Credit Card. When adding a new Magento Payment Method, the name of the Magento Payment Method should be the exact name as mentioned in the title of the Magento Payment Method mentioned in Magento.

When a customer checks out in Magento, multiple choices for order payment are available. Payment can be done using any of the methods enabled in the payment provider's area of Magento. There are several ways for customers to pay online in addition to credit cards like American Express, Master, Visa, etc.

The payment methods other than Cash or Cash on Delivery (COD) is mapped with credit cards in SAP Business One. This mapped information is used to post the payment transaction against the order in SAP Business One.

Magento Cash on Delivery (COD) payment method is handled differently in SAP Business One, unlike the other payment methods in Magento. The user needs to specify the COD payment method in the General Settings window. Whenever any payment transactions for the COD payment type is integrated from Magento to SAP Business One, the system generates the incoming payment with reference to the A/R Reserve Invoice and keeps the Order number in the Reference fields available on the Incoming Payment window.



The *Payment Mapping* tab of *Magento* window contains the following fields:

Field Name	Description
Magento Payment Method	Displays the list of payment methods available in Magento.
Mapped to SAP Business One Credit Card	Select the credit card from the list of credit cards. The Magento payment method is mapped to SAP Business One Credit Card; it is used to post the payment transaction in SAP Business One.

14.2.1.3 Source Mapping

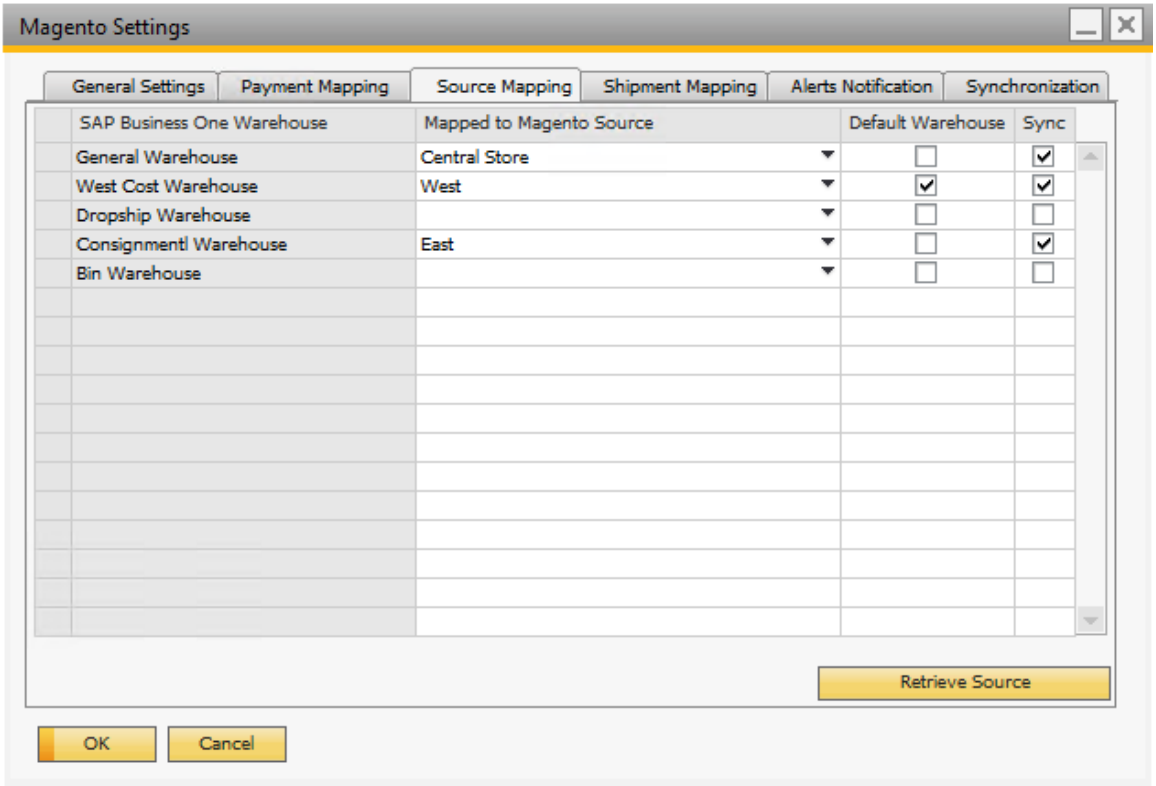
Map the sources of Magento with SAP Warehouse in the *Source Mapping* tab in *Magento Settings* window.

A Magento store can have multiple Sources where inventory can be tracked, and orders can be fulfilled. A Magento Source can be a retail store, warehouse or any place to manage Inventory. It is a physical place or an application where you can sell products, manage inventory and fulfill the orders.

A user needs to map SAP Business One warehouse to Source defined in Magento. One warehouse is connected to one source of Magento.

For example: If four sources are defined in the Magento such as New York, Texas, California, Florida then these four sources need to be mapped with the warehouses in SAP Business One. If there are 01, 02, 03, 04 warehouses in SAP Business One then a user can map 01 warehouse of SAP Business One with New York source of Magento, 02 warehouse of SAP Business One with Texas source of Magento, 03 warehouse of SAP Business One with California and 04 warehouse of SAP Business One with Florida.

The Source Mapping information is used to integrate the Inventory from SAP Business One to Magento.



Note

A Magento source can have only one SAP Business One warehouse set as default. One Magento Source cannot be mapped to multiple SAP Business One warehouses.

Note

When a web order integrates from Magento to SAP Business One, the application uses the default warehouse at the sales order line level.

Note

If the multi-branch function is enabled in SAP Business One, the application uses the mapped warehouse branch at the document header and line-level while integrating the document from Magento to SAP Business One.

The *Source Mapping* tab of *Magento Settings* window contains the following fields:

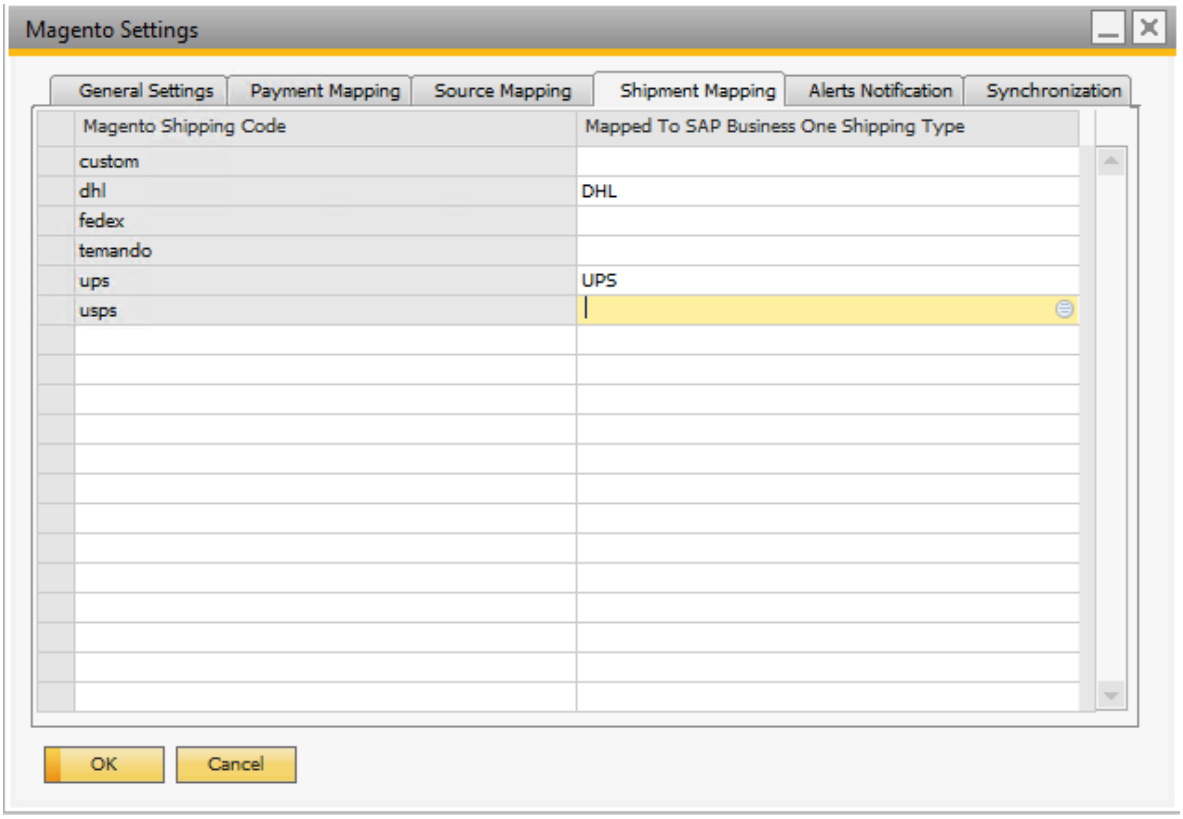
Field Name	Description
SAP Warehouse	Displays the list of SAP Business One warehouses.
Mapped to Magento Source	Select the Source of Magento to map with SAP warehouse. The source mapped is used for updating the Inventory details in Magento from SAP Business One.
Default Warehouse	Select One SAP Business One warehouse as default to any one Magento source.
Retrieve Source	Click on *Retrieve* Button to pull the source from Magento.
Sync	Select the flag to synchronize the SAP Warehouse stock to Magento Source.

14.2.1.4 Shipment Mapping

Map the shipping methods of Magento in the *Shipment Mapping* Tab in *Magento* window.

The *Shipping code* which are available in Magento need to be mapped with the *Shipping Types* of SAP Business One. This mapping is used to integrate the shipping code in the transactions.

To add Shipping code, right click on Magento Shipping Code and select Add Row. Specify the Magento shipping code and map to Shipping Type of SAP Business One.

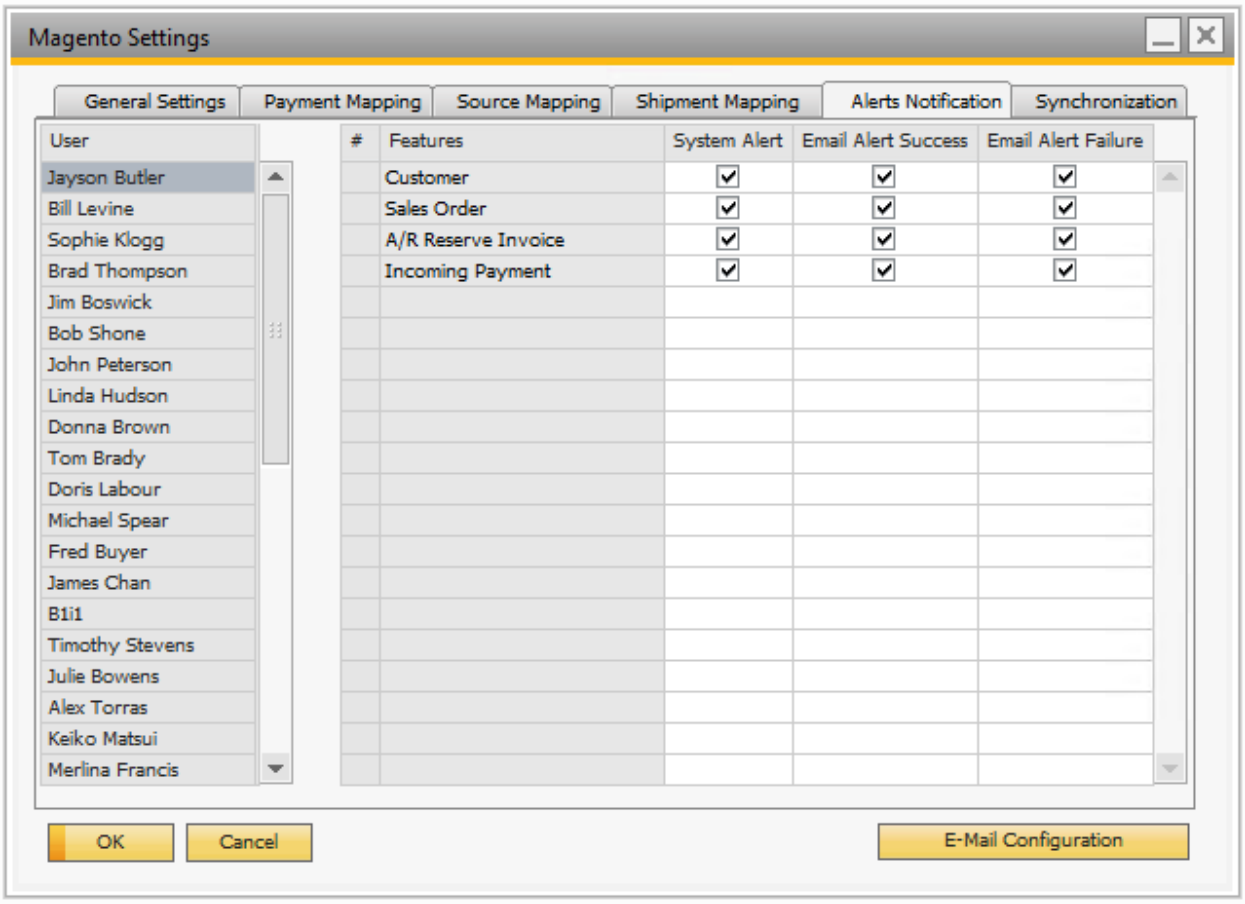


The *Shipment Mapping* tab of *Magento Settings* window contains the following fields:

Field Name	Description
Magento Shipping Code	Enter the shipment Code of Magento. The Shipping Code mapped is used for updating the tracking and shipment details in Magento and SAP Business One.
Mapped to SAP Business One Shipping Types	Displays the list of shipping types in SAP Business One.

14.2.1.5 Alerts Notification

Configure the alert settings in the *Alert Notification* tab in *Magento Settings* window.



The *Alert Notification* tab of the *Magento Settings* window contains the following fields:

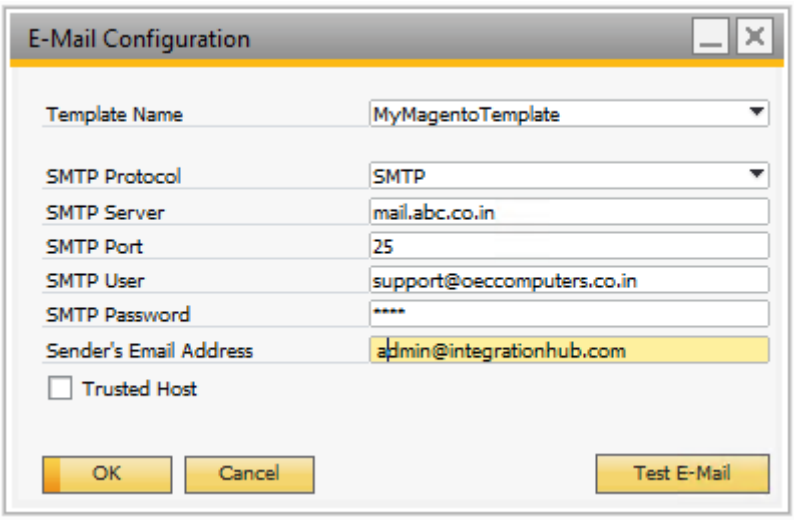
Field Name	Description
User	Displays the list of users in SAP Business One. Choose a user for setting up the alert notification authorizations. This field is read-only.
Features	Displays the list of Integration Hub features for Magento. This field is read-only. The Alert can be set for *Customers, Sales Orders, A/R Reserve Invoices, and Incoming Payments.*
System Alert	Select this checkbox to send notifications as a system alert.
Email Alert Success	Select the checkbox to send email notifications for successful transactions.
Email Alert Failure	Select the checkbox to send email notifications for failed transactions.

> **Note**
>
> In case of an email for failed transactions, the user will receive the failed XML payload as an attachment.

Email Configuration

Click the *Email Configuration* button to set up the SMTP details for email alert notifications.

Alternatively, to display the *Email Configuration* window, choose *Administration → Integration Hub → E-Mail Configuration*.



The *Email Configuration* window contains the following fields:

Field Name	Description
Template Name	Display the active Magento template.
SMTP Protocol	Choose the communication protocol SMTP/SMTPS/TLS.
SMTP Server	Specify the address of the outgoing mail server.
SMTP Port	Specify the port for the outgoing mail server.
SMTP User	Specify the user's name for the outgoing mail server.
SMTP Password	Specify the password for the outgoing mail server.
Sender's Email Address	Specify the email address of the sender.
Trusted Host	Select the checkbox to add the name of the e-mail server to the list of trusted hosts.
Test E-Mail	Click the button to test the connection, The email notification will be sent to the logged-in user in SAP Business One. Note Ensure that the Login User's email ID is correctly specified in the User Setup.

14.2.1.6 Initialization Process

Once the Magento feature is enabled in SAP Business One, it is mandatory to initialize the objects to be integrated between SAP Business One and Magento. The objects include Products, Inventory, Customer, Customer Group, Period and Volume Discount.

.

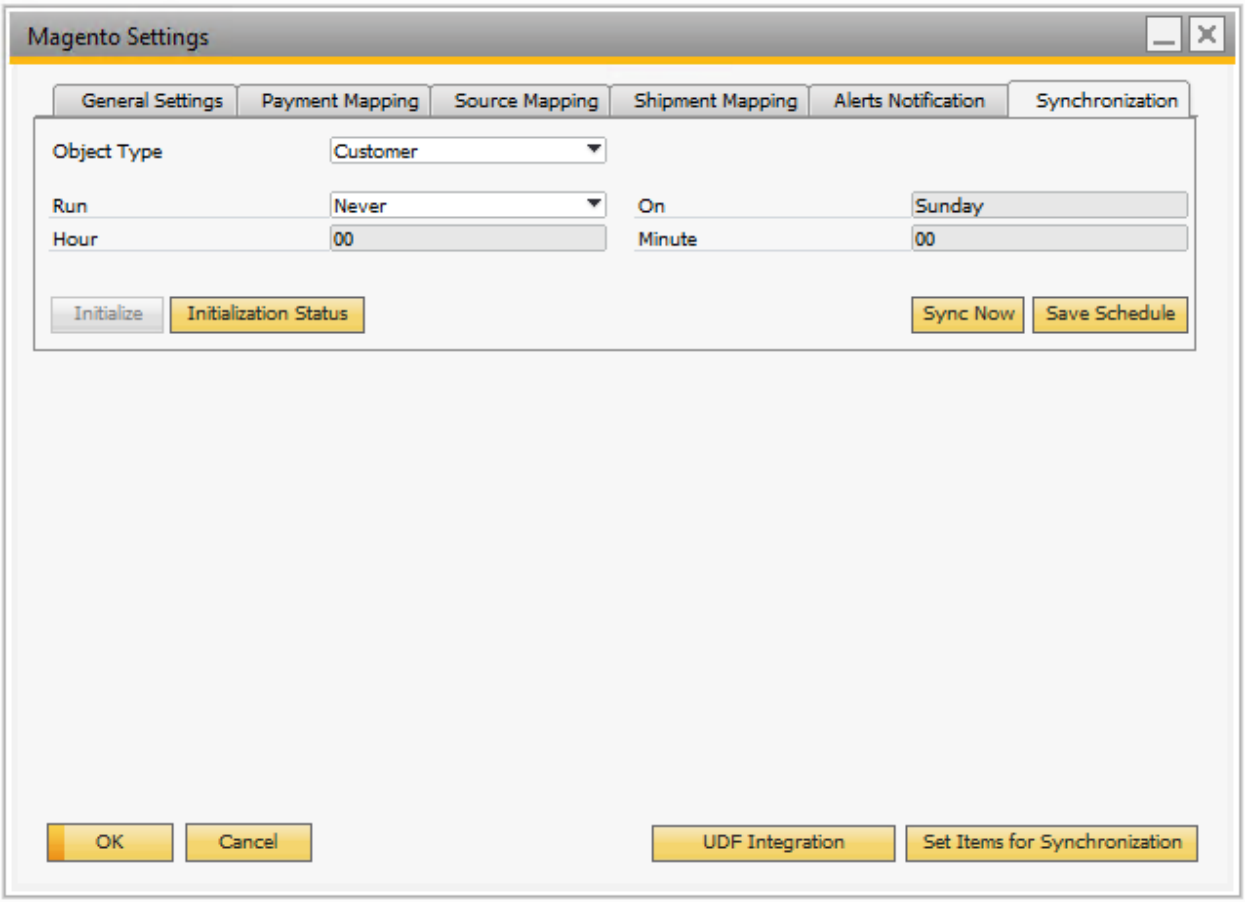
Note

Weight UOM code of Magento and SAP Business One should be same.

Caution

If Customer Groups already exist in Magento, then manually create groups in SAP Business One with same name as in Magento

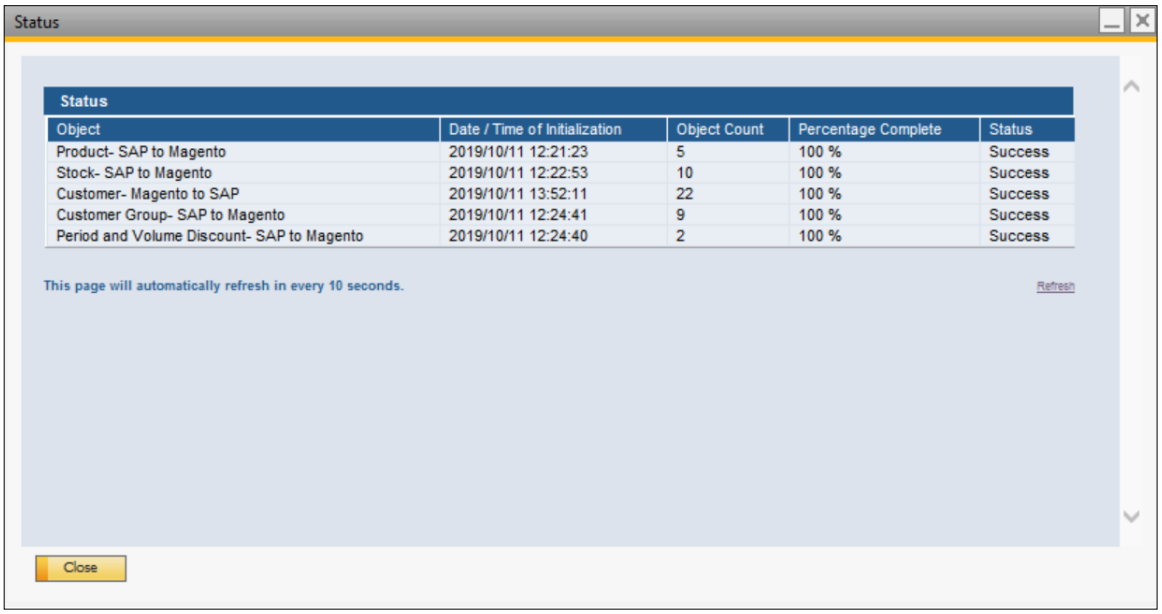
To Initialize Customer, Product and Inventory, choose *Administration* → *Integration Hub* → *Magento Settings* → *Synchronization*. Choose the *Initialize* button on *Synchronization* tab.



The *Synchronization* tab of the *Magento* window contains the following fields:

Field Name	Description
Object Type	Displays the list of objects available for synchronization between SAP Business One and Magento. The list of objects is: • Customer • Inventory • Period and Volume Discount • Sales Order
Run	Select the frequency of automation run from the dropdown i.e. *Daily* or *Weekly* or *Never*.
On	Select the weekday on which the synchronization should run. **Note** The selection is available only for weekly type run only.
Hour	Choose the *Hour* frequency at which the synchronization should run.
Minute	Choose the *Minute* frequency at which the synchronization should run.
Initialize	Choose the *Initialize* button to synchronize the object data between SAP Business One and Magento. **Note** The *Initialize* button is active until clicked for the first time. Once the initialization is done, the *Initialize* button is disabled.
Initialization Status	Select this button to view the Initialization Status.
Set Items for Synchronization	Select this button to mark bulk items synchronization from SAP Business One to Magento.

Click on the *Initialization Status* button to view the initialized status of the data replication between Magento and SAP Business One.



Note

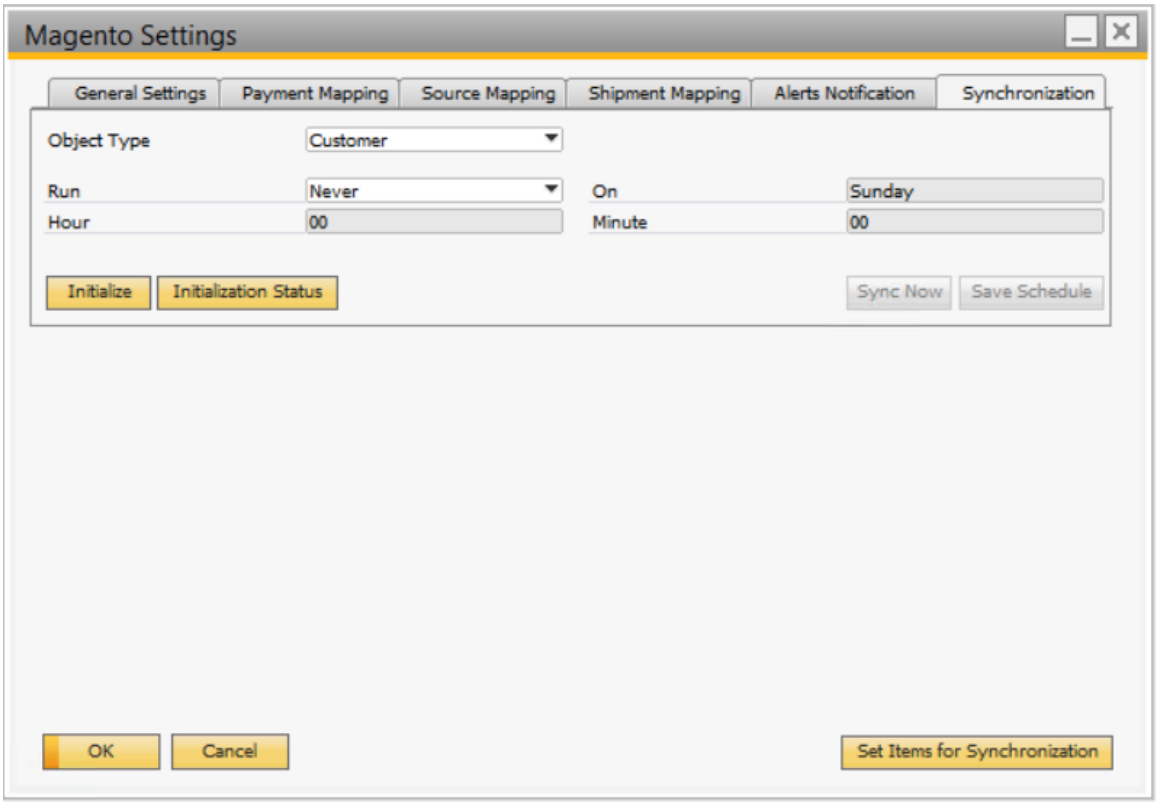
The *Initialize* button is active until the initialization is done for the first time. Once the initialization is done, close the Magento Settings window and reopen it, the *Initialize* button is disabled and the Sync Now and Save Schedule button is enabled. All the products created later will be integrated between both systems based on scheduled synchronization or manual synchronization

14.2.1.7 Synchronization

The following two methods are available for synchronization between SAP Business One and Magento:

- **Manual Synchronization:**
  Whenever a user needs the integrations to be done on an immediate basis (instead of waiting till the Scheduler services run), a user can choose the *Sync Now* button. The synchronization takes an immediate effect on the selected object.

- **Automatic Synchronization:**
  The system enables a user to configure automatic integrations between SAP Business One and Magento at a frequency (either daily or weekly) and at specific intervals. The synchronization runs based on a schedule that is set for the object.



Synchronization is supported for four objects Customer, Product, Order and Inventory.

- **Customer Synchronization**
  The system enables to integrate all the customer master data from Magento to SAP Business One. Scheduling a synchronization enables the system to integrate customer masters automatically as per the schedule by running the Scheduler services.

- **Product Synchronization**
  The system enables to integrate all the item master data between SAP Business One and Magento. Scheduling a synchronization enables the system to integrate item masters automatically as per the schedule by running the Scheduler services.

    - **Set Bulk Items for Synchronization**

      To Synchronize Items from SAP to Magento, select items in bulk using the Set Items for Synchronization menu under Integration Hub.

      1. Choose Administration → Integration Hub → Set Items for Synchronizations.
      2. On clicking the Set Items for Synchronization, Set Items For Synchronization-Selection Criteria window opens.
      3. Select the items range or Item Groups range and click on Ok button.
      4. Set Items for Synchronization window opens, select check box for the Item Codes and Item Name to synchronize.
      5. Click on Update button to mark the items for synchronization from SAP to Magento.

- **Sales Order Synchronization**
  The system enables to integrate all orders from Magento to SAP Business One. Scheduling a synchronization enables the system to integrate sales order automatically as per the schedule by running the Scheduler services.

- **Stock Synchronization**
  The system enables to integrate products Inventory from SAP Business One to Magento. Scheduling a synchronization enables the system to integrate product Inventory automatically as per the schedule by running the Scheduler services.

- **Period and Volume Discount Synchronization**
  The system enables the integration of period and volume discount synchronization from SAP Business One to Magento. Scheduling a synchronization enables the system to integrate period and volume discount automatically as per the schedule by running the Scheduler services.

  Caution

  Customers must set the synchronization time settings on redeployment of the Application.

14.2.2 Master Data Mapping Tool

This tool allows the user to map the already exist customer and product data in Magento and SAP Business one. This is needed in case the same product or customer master already exists in both the application and you would like to map their internal code to prevents the data duplicity between the applications.

To display the Master Data Mapping Tool window, choose Administration → Integration Hub → Master Data Mapping Tool.
Use the following steps to import the mapping data using the master data mapping tool:

1. Select a template from the Template dropdown list.
2. Select the customer or product from the Master Data Type dropdown list.
3. Choose the Download from App button to download the data from the Magento.
4. To check the data download status, choose the Status button.
5. Once the data download is complete, choose the Prepare Template button to generate the Microsoft Excel-based template for the selected master i.e. Customer or Product. The application downloads the data from the Magento.
6. Open the template and provide the relevant information:
   - For the Customer template, you need to provide the SAP B1 Card Code (Customer Code)
   - For the Product template, you need to provide the SAP B1 Item Code
7. Choose the Browse button to navigate to the template path.
8. Choose the Validate button to check the correctness and completeness of the data in the selected template.
9. Choose the Upload button to import the data.

14.2.3 UDF Integration

The Magento connector supports the integration of User Defined Fields (UDFs) between the Magento and SAP Business One applications, allowing businesses to map and synchronize custom data fields between Magento and SAP Business One. This functionality enables users to seamlessly link UDFs that share the same length, data type, and structure across both applications, ensuring a smooth and efficient data exchange.

The Magento connector supports the integration of User Defined Fields (UDFs) on the Products object.

To perform the UDF Integration, follow these steps:

1. Open the UDF Integration window by navigating to Administration → Integration Hub → UDF Integration.
2. The UDF Integration-Selection Criteria window will appear.
3. The active template for the Magento connector will automatically be displayed in the Template Name field.
4. Select the specific object you want to map UDFs for in the Object Type field.
5. Click OK to open the UDF Integration Mapping screen.
6. Click the Retrieve Custom Fields button to fetch the list of Magento custom fields.
7. In the left column titled SAP User Defined Fields (UDF), select the SAP UDFs. In the Mapped to Magento Custom Fields column, select the corresponding Magento custom fields (Attributes).
8. In the Data Type column, choose the data type for the Magento custom fields.

9. Click the Add/Update button to save the data.

The following Magento data types for custom fields (Attributes) are supported for the UDF integration with SAP Business One:

Magento Attribute Type	SAP B1 UDF Type
Text	Alphanumeric
Textarea	Alphanumeric
Price	Price
Select	Valid Values
Boolean	Checkbox

Note

1. The user needs to ensure that they have mapped the correct UDFs with the same data type, length, and structure between the applications.

2. In case you do not want to integrate UDF information between the applications, you may delete the relevant row. Once the row is deleted, the UDF information will no longer be integrated during the initialization and synchronization process.

3. The internal ID of the valid value for the Select attribute in Magento must precisely match the valid value in SAP Business One.

Caution

The SAP Business One UDFs with "Linked to Entities" Validation will not appear in the column *SAP User Defined Fields (UDF)*.

To retrieve the values from the ‘Postman’ application by using the ‘API’ below.

1. Attribute Values in SAP Business One:

- Attributes created in Magento, specifically those with the Select type, must be synchronized with SAP Business One. These attributes will have multiple predefined options or values.
- For example, an attribute like Color can have multiple options (Red, Blue, Green), and if such attributes are created in Magento, these must also exist in SAP Business One to ensure consistency in data and operations between both systems. The select attributes in Magento need to be validated as existing values in SAP Business One.

2. Retrieving Attribute Values Using Postman and Magento API:

To retrieve these attribute values via an API call, you use the Magento REST API. Here's a breakdown of the provided API request:

GET

http://<Host>/rest/default/V1/products/attributes?searchCriteria[filterGroups][0][filters][0][field]=is_user_defined&searchCriteria[filterGroups][0][filters][0][value]=1&searchCriteria[pageSize]=250&searchCriteria[filterGroups][1][filters][0][field]=frontend_input&searchCriteria[filterGroups][1][filters][0][value]=select&searchCriteria[filterGroups][1][filters][0][conditionType]=in HTTP/1.1

Host: <Host>

Authorization: Bearer <Access Token>

Explanation of the Parameters:

- GET /rest/default/V1/products/attributes: This is the endpoint used to retrieve a list of product attributes.
- searchCriteria[filterGroups][0][filters][0][field]=is_user_defined: This is a filter that ensures only user-defined attributes are retrieved. Magento distinguishes between system attributes (predefined by Magento) and user-defined attributes (those created by the store owner).
- searchCriteria[filterGroups][0][filters][0][value]=1: The value of 1 indicates that you are fetching user-defined attributes only (value 0 would be for system attributes).
- searchCriteria[pageSize]=250: This limits the number of attributes fetched to 250. You can adjust the number based on how many attributes you want to retrieve.
- searchCriteria[filterGroups][1][filters][0][field]=frontend_input: This is used to filter attributes based on the input type of the attribute. You want to fetch attributes where the input type is select the value.
- searchCriteria[filterGroups][1][filters][0][value]=select, Boolean: The filter is looking for attributes with input type of select searchCriteria[filterGroups][1][filters][0][conditionType]=in: The in condition type ensures that you're fetching attributes that match any of the input types specified (select, or Boolean).

Authentication:

- Authorization: Bearer <Access Token>: This is a necessary header for the API call, where you need to provide a valid Bearer token. The access token is issued through the OAuth or Admin API authentication process in Magento.
- Host: <Host>: The placeholder <Host> should be replaced with the domain or base URL of your Magento instance. Example: https://example.com.

For more information on product attributes documentation, please refer to the following URL:

https://adobe-commerce.redoc.ly/2.4.7-admin/tag/productsattributes

14.3 Using Magento

14.3.1 Customer Group Data

The customer master Group integration is unidirectional i.e. from SAP Business One to Magento. Customer Group Name in SAP Business One is integrated to Customer Groups in Magento. If Customer Groups already exist in Magento, then manually create groups in SAP Business One with same name as in Magento.

14.3.2 Customer Master Data

The customer master data integration is unidirectional i.e. from Magento to SAP Business One. Customer Information like *Name, E-mail, Billing* and *Shipping Address*, and other details are integrated from Magento to SAP Business One. The customer in SAP Business One is added in the same customer group as in Magento.

When the customer data is integrated from Magento to SAP Business One, the details such as *Magento Customer ID* is updated in both *Card Code* and *Cross Reference Code* in SAP Business One. On adding customer information from Magento to SAP Business One, the application uses currency configured in the *General Settings of Magento*.

The following actions for Customer Master Data are supported:

- *Add Customer-* Add new customer information. The customer master addition is unidirectional i.e. from Magento to SAP Business One.

  Caution

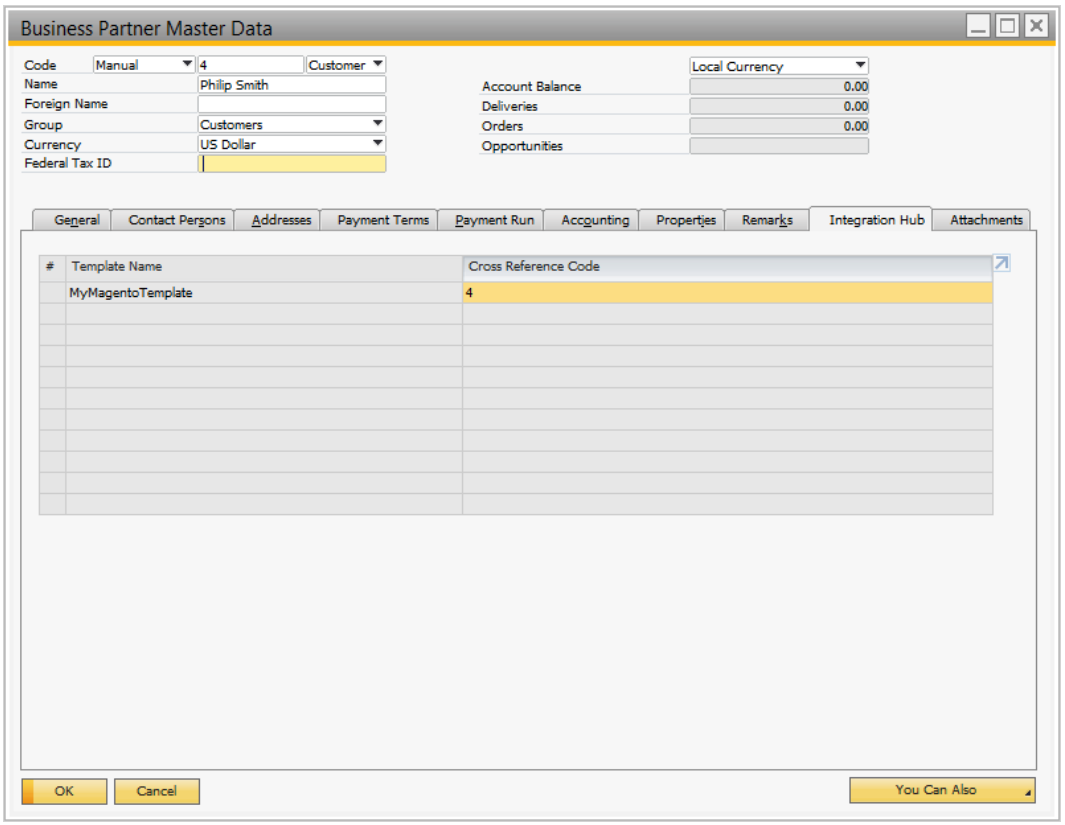
  Only those address will be integrated or updated which are edited through Magento Admin Panel.

- *Update Customers*- Edit existing customer information. The customer master update is unidirectional i.e. from Magento to SAP Business One.

  Caution

  Customer deletion from Magento will not be integrated to SAP Business One.

To display the customer data which are synchronized from Magento to SAP Business One, choose SAP Business One *Main Menu* →*Business Partners* →*Business Partner Master Data* →*Integration Hub.*



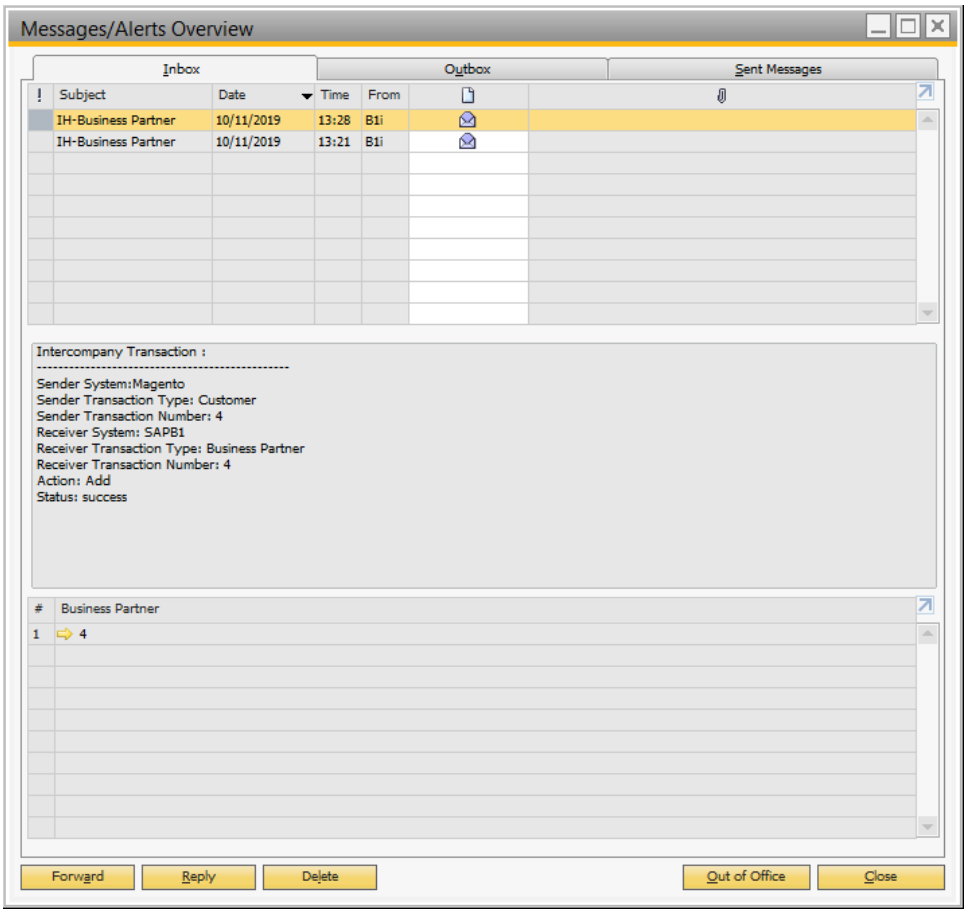
The following fields has been added to the window and is relevant to the Integration Hub. For details of other fields on the *Customer Master Data* window, refer to the SAP Business One Online Help.

Field Name	Description
Template Name	Displays the name of the Magento template.
Cross Reference Code	Displays the Magento customer id.

Message /Alert Overview

Once the customer data is synchronized, Message /Alert Overview Inbox displays the transaction information in SAP Business One. The following information is displayed on the screen:

- Sender System
- Sender Transaction Type
- Sender Transaction Number
- Receiver System
- Receiver Transaction Type
- Receiver Transaction Number
- Action
- Status



14.3.3 Product Master Data

The System supports the integration of existing product data from Business One to Magento. Product add & update operations are supported from SAP Business One to Magento.

For non-inventory item synchronization, the manage stock in Magento should be set to No.

The *Item Code* in SAP Business One is mapped with Stock Keeping Unit (SKU) in Magento for integration.

Product Synchronization from SAP Business One and Magento is uni-directional.

To synchronize the product from SAP Business One to Magento, choose *Main Menu* →*Inventory* → *Item Master Data*. Choose *Sync* in the Integration Hub Tab.

The following field has been added to the window and is relevant to the Integration Hub. For details of other fields on the *Item Master Data* window, refer to the SAP Business One Online Help.

Field Name	Description
Template Name	Displays the Name of the Magento Template.
Cross Reference Code	Displays the Magento Product ID for Normal product or Variant Product ID for Variant product.
Sync	Select this checkbox to synchronize the product information from SAP Business One to Magento.

Caution

Product deletion from Magento and SAP Business One is not supported. If deleted product is used in transaction, then inconsistency in data will be observed.

14.3.3.1 Simple Product

The integration of simple products is Unidirectional between SAP Business One and Magento.

14.3.3.2 Product Prices

The prices integration is uni-directional from SAP Business One to Magento. The application uses the default price list defined in the *General Settings* of Magento to integrate the prices from SAP Business One to Magento.

To open *General Settings* of Magento, go to *Administration* → *Integration Hub* → *Magento Settings* → *General Settings*.

The selected price list for *Default Price list used for Items Prices Integration* is the integrated price list from SAP Business One to Magento.

Period and Volume discounts from SAP Business One integrates to Advance Pricing in Magento.

14.3.3.3 Product Inventory

The Inventory integration is unidirectional i.e. from SAP Business One to Magento. The Inventory status is updated from SAP Business One to Magento.

From SAP Business One, the Inventory information is integrated from the warehouse that is mapped with the Magento Sources. To map the SAP Warehouse to Magento Sources, choose *Administration* → *Integration Hub* → *Magento Settings* → *Source Mapping*.

The Inventory can be synchronized from *synchronization* tab of *Magento settings*. To synchronize Inventory, choose *Administration* → *Integration Hub* → *Magento Settings* → *Synchronization*.

There are two ways for synchronization of Inventory.

- Whenever required, click on *Sync Now* button this will synchronize the Inventory from SAP Business One to Magento.
- Automatic synchronization of Inventory -
  Select the parameters *Object Type*, *Run, On, Hour, and Minutes* to schedule synchronization and then click on *Save Schedule* button to schedule Inventory synchronization at predefined day and time.

Field Name	Description
Object Type	Select Stock from the drop down list.
Run	Select the option from Daily / Weekly option
On	Upon selection of Weekly option, Select the day of the week.
Hour	Select the Hour when synchronization is scheduled to run
Minutes	Select the Minutes when synchronization is scheduled to run
Synch Now	Click on this button will start synchronization at time when the button is clicked.
Save Schedule	Click on this button will schedule the time when synchronization will run.

- On Item Master Data Sync Checkbox is added to integrate Item Master and Inventory with Magento.

14.4 Magento Transactions

The following Magento transactions are supported:

- Sales Order
- Payment
- Order Cancellation
- Shipment
- Refund

14.4.1 Windows Enhancements in SAP Business One

New fields that are relevant to the Integration Hub have been added to different document windows in SAP Business One. The fields provide additional information regarding the Magento integration transactions.

14.4.1.1 Sales Order

Sales order integrates from Magento to SAP Business One. New fields in the *Sales Order* document window:

Field Name	Description
Customer Reference Number	This is the Order number Generated in Magento .
Template Name	Name of the Magento template.
External Order ID	Order ID generated from Magento

14.4.1.2 A/R Reserve Invoice

A/R Reserve Invoice integrates from Magento to SAP Business One. New fields in the *A/R Reserve Invoice* document window:

Field Name	Description
Customer Reference Number	This is the Order number Generated in Magento .
Template Name	Name of the Magento template.
External Order ID	Order ID generated from Magento

14.4.1.3 Delivery

Delivery integrates from SAP Business One to Magento. New fields in the *Delivery* document window:

Field Name	Description
Customer Reference Number	This is the Order number Generated in Magento .
Template Name	Name of the Magento template.
External Order ID	Order ID generated from Magento
External Delivery ID	Delivery ID generated from Magento

14.4.1.4 A/R Credit Memo

A/R Credit Memo is created on SAP Business One when Refund is initiated. New fields in the A/R Credit Memo document window.

Field Name	Description
Customer Reference Number	This is the Order number Generated in Magento .
Template Name	Name of the Magento template.
External Order ID	Order ID generated from Magento

14.4.2 Orders with Payment

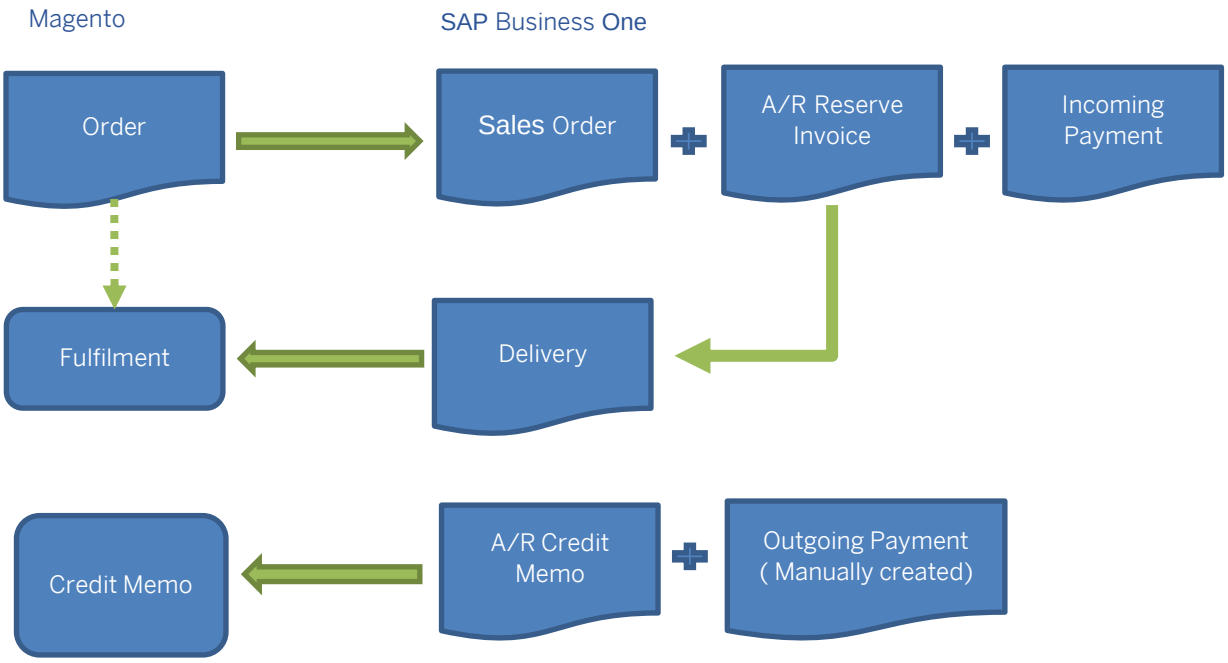
The Information related to orders created in Magento is synchronized to SAP Business One. The payment for the order can be made

- At time of booking the order
- Cash On Delivery.

The Application handles these scenarios differently as per payment/order types. For instance, all Magento orders for which payment is made at the time of placing the order is handled in SAP Business One by posting a *Sales Order*, corresponding *A/R Reserve Invoice* and *Incoming Payment* for that *A/R Reserve Invoice*.

The following illustration shows the data flow between Magento and SAP Business One based for Orders with Payment:

Order with Payments



Magento also supports guest users to place orders online. When a guest user places the order in Magento, the same is synchronized to SAP Business One with a default customer which is mapped in the *General Settings* of Magento.

For all Magento orders, the payment terms in SAP Business One is the default payment term which is set in *General Settings* of Magento in SAP Business One

Note

Magento has the flexibility to have the item prices as gross prices, including taxes. If tax inclusive pricing is enabled in Magento, then the user must enable the *Tax Inclusive Item Prices* as *Yes* in *General Settings* of Magento in SAP Business One.

The following is the list of combination of documents in the overall transaction flow in Magento and its corresponding integration documents in the SAP Business One.

14.4.3 Document Combinations

The following is the list of combination of documents in the overall transaction flow in Magento and its corresponding integration documents in SAP Business One

14.4.3.1 Order with Payment and Shipment

1. On Magento, log in as Customer, select mode of payment Pay with Credit Card.
2. An order in Magento is synchronized as a sales order in SAP Business One and generates an A/R Reserve Invoice with an Incoming Payment against the A/R Reserve Invoice.

   The order can be fulfilled only from SAP business One.

   - Order Fulfillment from SAP Business One

1. Once an order is created in Magento, the information of the order can be viewed in SAP Business One.
2. The replication information between Magento and SAP Business One can be checked by observing the alert message for Sales Order, A/R Reserve Invoice, and Incoming Payment.
   The *Sales Order* information reflects at location *Main Menu → Sales A/R → Sales Order.*
   The *A/R Reserve Invoice* reflects at location *Main Menu → Sales A/R → A/R Reserve Invoice.*
   The *Incoming Payment* reflects at location *Main Menu → Banking → Incoming Payments → Incoming Payments*.
3. On A/R Reserve Invoice, copy the *A/R Reserve Invoice* to *Delivery*, In the Delivery click on *Add* button this will ship the order. The order is marked as *Shipped* in Magento.

14.4.3.2 Order Cancellation after Payment

1. On Magento, log in as Customer, selects mode of payment Pay with Credit Card.
2. Order from Magento is synchronized as Sales Order in SAP Business One and generates A/R Reserve Invoice with an Incoming Payment against the A/R Reserve Invoice.
3. The Sales Order is cancelled in SAP B1.
4. The Order will be cancelled in Magento.

   Note

   If any Order is cancelled from Magento then it will not cancel the Order in SAP Business One. In this scenario, User need to manually handle the order cancellation in SAP Business One.

14.4.3.3 Refund for Shipped Order

1. On Magento, log in as Customer, selects mode of payment *Pay with Credit Card*.
2. An order in Magento is synchronized as a *Sales order* in SAP Business One and generates *A/R Reserve Invoice* with an *Incoming Payment* against the *A/R Reserve Invoice*.
3. The order shipment is made from SAP Business One.
4. The *Delivery Document* against the *A/R Reserve Invoice* is generated in SAP Business One.
5. Refund can only be initiated from SAP Business One on clicking Refund button on Delivery document. The system copies the Delivery items information to A/R Credit Memo.

   Note

   The freight detail will not be copied to Credit Memo.
6. The creation of credit memo in SAP B1 will create the credit memo in Magento.

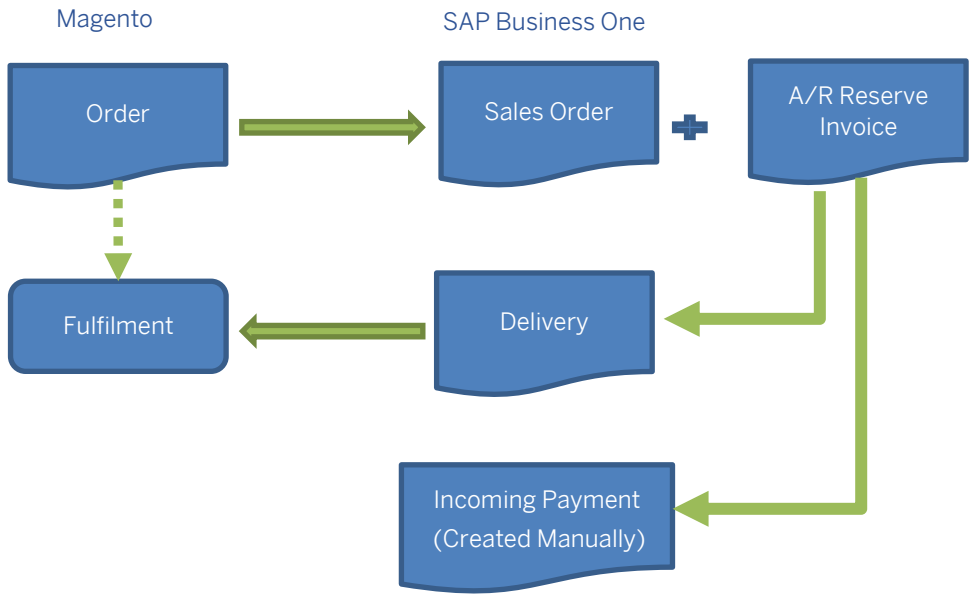
   Note

   Manually Create Outgoing Payments for Refund in SAP Business One.
7. Based on settings “Automatically Return Credit Memo Item to Stock” on Magento at path: *Stores>Configuration>Catalog>Inventory>Product Stock Options,* the stock movement of the refunded items takes place in Magento against the credit memos.

14.4.4 Orders with Cash on Delivery

For Cash on Delivery orders in SAP Business One a Sales Order, Corresponding A/R Reserve Invoice is posted. Later, when the customer makes the cash payment, an incoming payment is to be posted manually with reference to the A/R Reserve Invoice.

The following illustration shows the data flow between Magento and SAP Business One based on Orders with Cash on Delivery:



The following are the scenarios for Cash on Delivery Orders:

14.4.4.1 Order with Cash On Delivery Payment with fulfillment in SAP Business One

1. On Magento, log in as Customer, select mode of payment *Cash On Delivery*.
2. An order in Magento is synchronized as a *Sales Order* in SAP Business One and generates an *A/R Reserve Invoice.*
3. In the A/R Reserve Invoice, copy the *A/R Reserve Invoice* to *Delivery*, On Delivery click on *Add* button. This will be displayed as shipped order in Magento.
4. Manually create *Incoming Payments* document against the A/R Reserve Invoice.

14.4.4.2 Order Cancellation

1. On Magento, log in as Customer, select mode of payment Cash On Delivery.
2. An order in Magento is synchronized as a Sales Order in SAP Business One and generates an A/R Reserve Invoice.
3. Cancel the Sales Order in SAP B1. This will cancel the Order in Magento.

   Note

   If any Order is cancelled from Magento then it will not cancel the Order in SAP Business One. In this scenario, User need to manually handle the order cancellation in SAP Business One.

14.4.4.3 Refund for Shipped Order

1. On Magento, log in as Customer, selects mode of payment Cash On Delivery.
2. An order in Magento is synchronized as a Sales Order in SAP Business One and generates A/R Reserve Invoice.
3. Perform the Order Shipment in SAP Business One.
4. Manually create Incoming Payments document against the A/R Reserve Invoice in SAP Business One.
5. Refund can only be initiated from SAP Business One on clicking Refund button on Delivery document. The system copies the Delivery items information to A/R Credit Memo.

   Note

   The freight detail will not be copied to Credit Memo.
6. The creation of credit memo in SAP B1 will create the credit memo in Magento.

   Note

   Manually Create Outgoing Payments for Refund in SAP Business One.
7. Based on settings “Automatically Return Credit Memo Item to Stock” on Magento at path: *Stores>Configuration>Inventory>Product Stock Options,* the stock movement of the refunded items takes place in Magento against the credit memos.

14.4.5 Tax Handling

The application handles the Tax integration either by posting the Magento Tax amount to the default freight mapped in the *General Settings* of Magento or by using the SAP Business One Tax Code Determination.

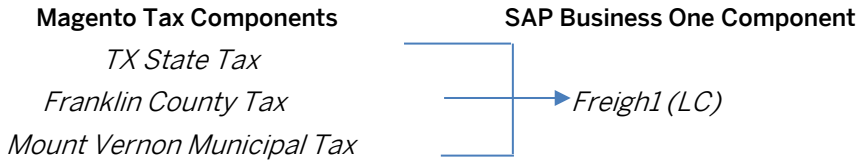
14.4.5.1 Tax Handling using Freight

In the Magento *General Settings,* if the value selected in the *Tax Posting in SAP Business One using* setting is *Freight* then the synchronization of the tax amounts between Magento and SAP Business One is handled by saving the tax amounts in a default freight mapped in the *General Settings* of Magento.

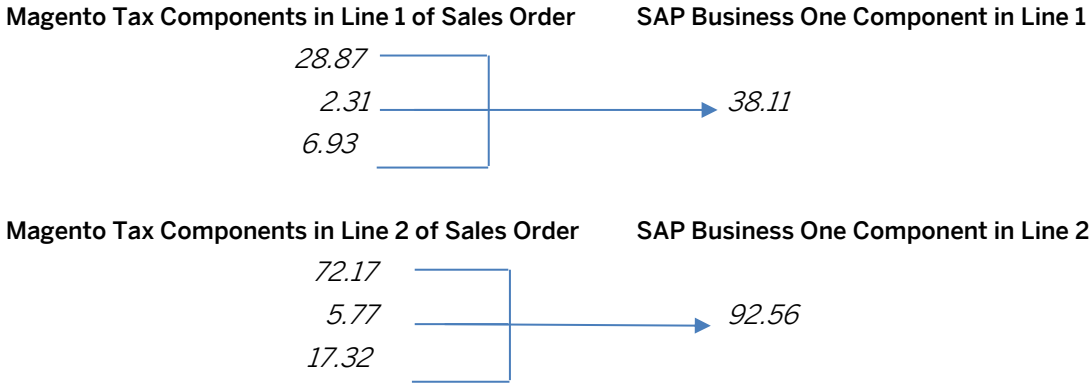
Map a freight component in SAP Business One *General Settings* to all tax components in Magento.

Example

For example: A Sales Order in Magento with three items has three tax components per line.



All the above taxes of Magento per line are summarized and updated in Freight 1 (LC) field in respective lines of SAP Business One Sales Order.



Default Tax code in SAP Business One

For all orders that are integrated from Magento to SAP Business One, a default exempt tax code is set defined in the *General Settings*. The same tax code is used in the freight as well.

14.4.5.2 Tax Handling using Tax Code Determination

In the Magento *General Settings,* if the value selected in the *Tax Posting in SAP Business One using* setting is *Tax Code Determination,* then whenever a Magento Order is integrated into SAP Business One, the Tax code is automatically set in SAP Business One based on the Tax code determination.

When any Order is downloaded from Magento to SAP Business One, the hub application posts the Items, quantity, discount and freight. The line level tax code and on header level freight is automatically applied by SAP Business One using Tax Code Determination, The Magento Order Tax amount will not be posted; the tax amount is automatically calculated in SAP Business One based on the applied tax Code.

Note

You must complete the Tax code determination in SAP Business One based on your requirement and ensure the tax code applied in a transaction by both application i.e. Magento and SAP Business One should be same. otherwise, it may lead to document total inconsistency

14.4.6 Freight Handling

The shipping amounts that are calculated in Magento irrespective of shipping components are synchronized as a single freight component in SAP Business One. The shipping amounts of Magento are mapped to a single freight component in header level of the sales order in SAP Business One.

For shipping charges, the application uses the default freight defined in the *General Settings*.

Example

Example 1: A Sales Order in Magento with any kind of shipping type such as Standard Shipping is mapped to single freight component in SAP Business One.

Magento Shipping Component		SAP Business One Component
Standard Shipping	→	Shipping

Example 2: A Sales Order in Magento with any kind of shipping type such as Free Shipping is mapped to single freight component in SAP Business One.

Magento Shipping Component		SAP Business One Component
Free Shipping	→	Shipping

Example 3: A Sales Order in Magento with any kind of shipping type such as Custom Shipping is mapped to single freight component in SAP Business One.

Magento Shipping Component		SAP Business One Component
Custom Shipping	→	Shipping

15 Deutsche Post DHL

DHL International GmbH is an international courier, parcel, and express mail which is a division of the German logistics company Deutsche Post DHL. Deutsche Post DHL is the world's largest logistics company, now in over 220 countries and territories worldwide, particularly in sea and air mail.

The integration of DHL and SAP Business One achieve the following objectives:

1. Business Partner Address Validation.
2. Freight Rates.
3. Shipment tracking Number.

> **Note**
>
> The Integration Hub is currently integrated with DHL Express only.

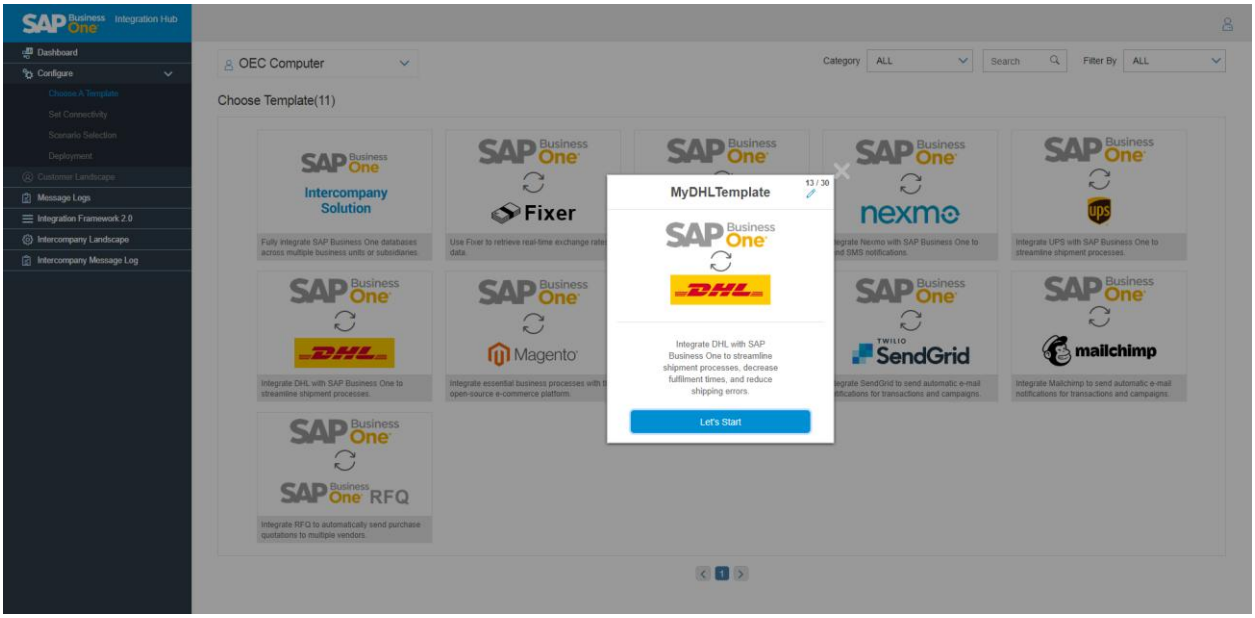
15.1 DHL Setup in Administration Console

The following are the steps to setup DHL in Administration Console:

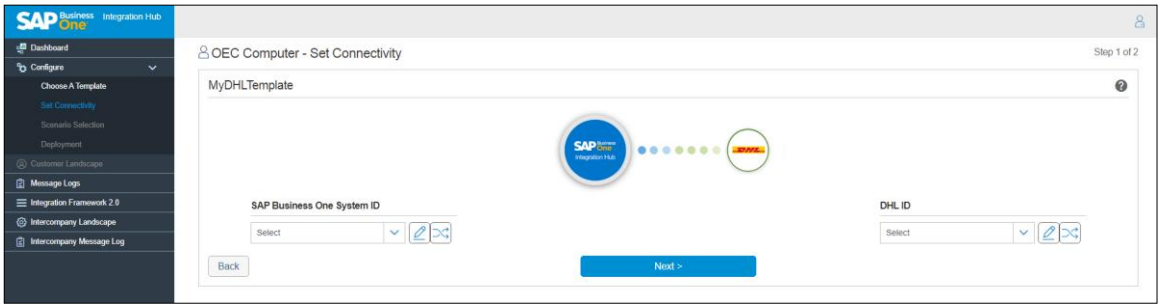
1. Add New Customer. Refer to section Add New Customer in the document.
2. Select the *DHL* template to integrate.

   Upon selecting the template, a message "*Let's Start*" prompts to start configuring the connectivity settings. Change the template name by clicking the Edit button to edit the template name. Otherwise it appears as *MyDHL Template.*

> **Note**
>
> By default, the name of the template appears as *MyDHL Template* and can be renamed.



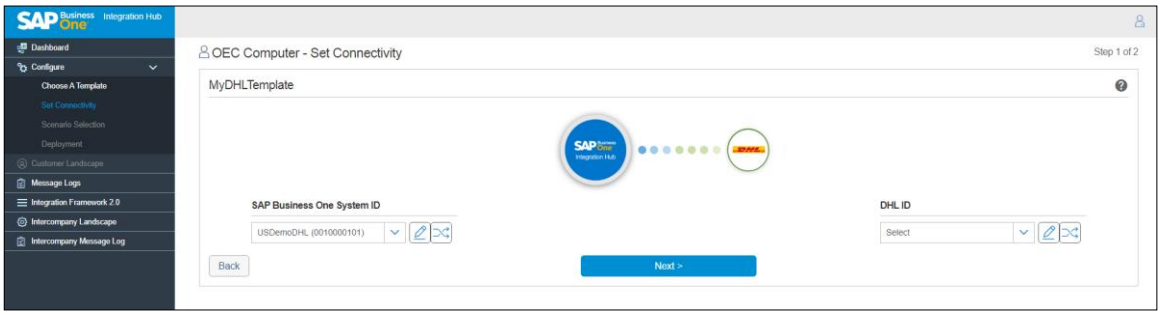
3. Upon choosing the Let's Start button, a Set Connectivity page appears with the following two steps to complete the configurations for connectivity.



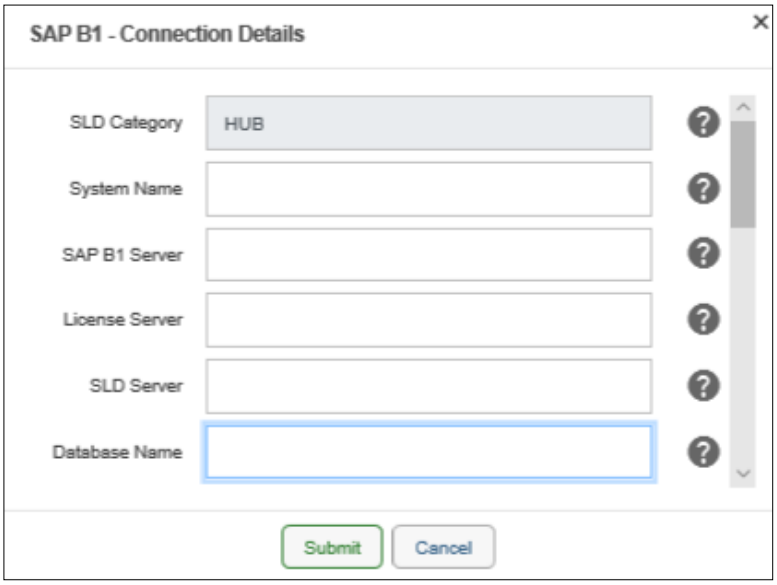
Step 1 – Set Connectivity

4. Choose the SAP Business One SLD to provide the connection between *SAP Business One System Id* and DHL Id.

> **Note**
>
> By default, the solution displays all the SAP Business One SLDs available in *SLD Category* selected during customer creation.



5. To add a new SLD or edit existing SAP Business One SLD under *SAP Business One System Id* area, choose Add / Edit button.



The *SAP Business One Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. **Note** *System Name* is the mandatory field to add or update SAP Business One SLD.
SAP Business One Server	Enter SAP Business One Server Name / IP Address. **Note** *SAP Business One Server* is the mandatory field to add/update SLD information for SAP Business One.
License Server	Enter *License Server* details. i.e. Server Name or IP Address and port number of the SAP Business One License Server. The default port is 30000.
SLD Server	Enter the valid *SLD Server* details with port. **Note** *SLD Server* details is the mandatory field to add/update SLD information for SAP Business One.
Database Name	Enter the name of the SAP Business One Database. **Note** *Database Name* is the mandatory field to add/update SAP Business One System SLD. **Caution** The *Database Name* must be entered same as SAP Business One Database Name.
Database Type	Currently, only Microsoft SQL Server 2005, 2008, 2012, 2014, 2016, 2017 and SAP Hana DB are supported. Choose the database type from the dropdown list.

	Note *Database Type* is the mandatory field to add/update SAP Business One SLD.
Database User	Enter the user to access the company database using the database connection. *Database User* is the mandatory field to add/update SAP Business One SLD. Caution The *Database User* must be valid. Invalid *Database User* will result in failure to establish the connection.
Database Password	Enter a valid password for database login. Note *Database Password* is the mandatory field to add/update SAP Business One SLD. Caution The *Database Password* must be valid. Invalid *Database Password* will result in failure to establish the connection.
Database Port	Enter the port for database.
Username	Enter **`B1i`** in this field. Note *Username* is the mandatory field to add/update SAP Business One SLD. It is set as B1i by default and un editable. Caution Ensure that a user with this name exists in the SAP Business One database.
Password	Enter a valid password for B1i user of SAP Business One.
Language	Select the language from the list of languages.
Is Trust	Select *True* or *False*. The default value for this field is *False.* To use a trusted connection, choose *True* from the dropdown list.
JcoPath	Enter path for jco library. Example of Installation path of JCO: C:\Program Files (x86)\SAP\SAP Business One DI API\JCO\LIB
DI ProxyHost	The DI Proxy host must be defined if B1i is installed on a separate server (this is, other than the SAP Business One server). The value in this field must be same as SAP Business One Server address. Example *Proxyhost* can be same as *SAP Business One Server*.
DI ProxyPort	The default value of *DI Proxy Port* is 2099.
Proxy Host	The proxy host is defined in a multi-instance scenario. If the B1i server connects to the SAP Business One server through a proxy server then, enter the address of the proxy server in this field.
Proxy Port	Enter the proxy port in this field.

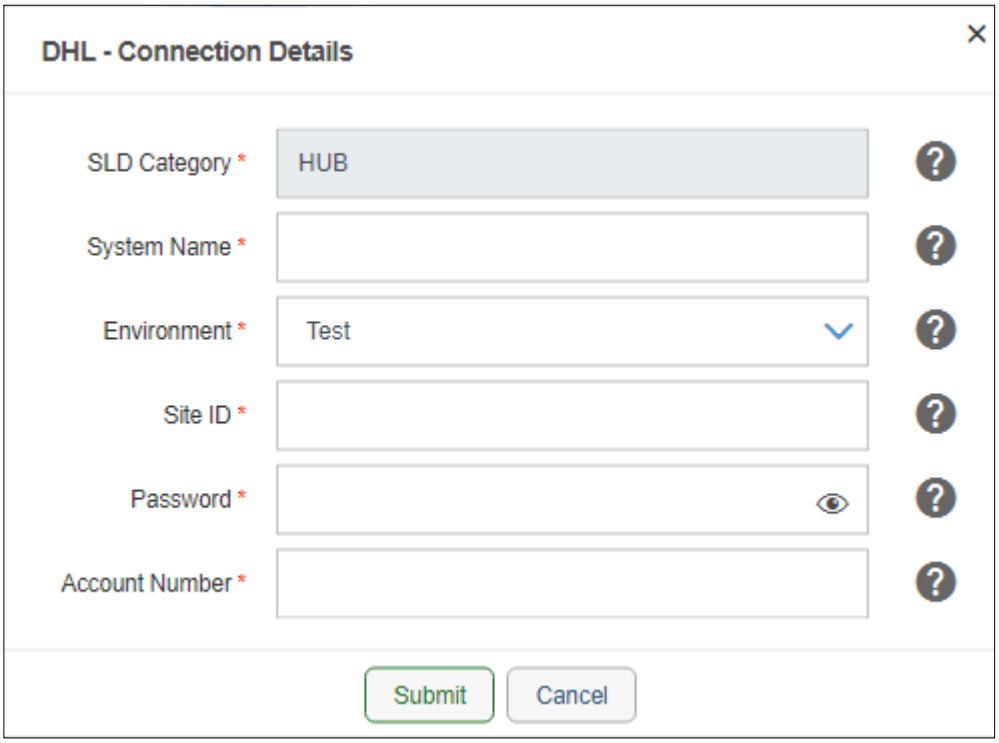
6. Enter the valid data and choose the *Submit* button. An SAP Business One SLD is created.

Choose the *Test Connection* icon to test the connection between the SAP Business One System Id in Integration Hub and the SAP Business One System Landscape Directory.

If the connection is successful, a success message appears “Test Connection Successful”. If the connection is unsuccessful, a failure message appears “Test Connection Failed”. Please provide the correct credentials.

7. To add / edit DHL instance SLD under DHL Id area, choose the *Add / Edit* button.

DHL Connection Details window appears.



The *DHL Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update DHL SLD.
Environment	Select from the Test or Production environment.
Site ID	Enter the Site Id provided by DHL
Password	Enter the password for the login to DHL site.
Account Number	Enter the DHL Account number provided by DHL

8. Provide the valid information in the fields and choose the *Submit button.* SLD for DHL is created.

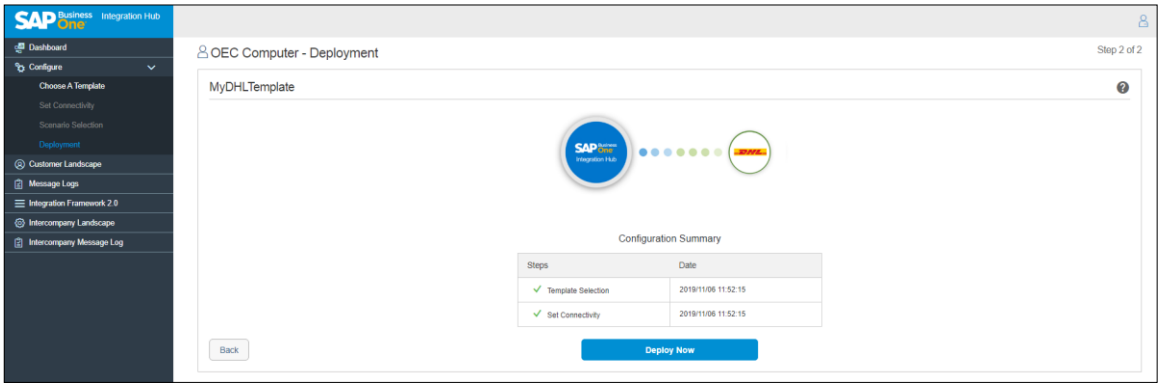


9. Choose the *Test Connection* icon to test the connection between the Integration Hub and DHL.
If the connection is successful, a success message appears “Test Connection Successful”.
If the connection is unsuccessful, a failure message appears “Test Connection Failed”.

10. Choose the *Next* button to proceed to Step2.

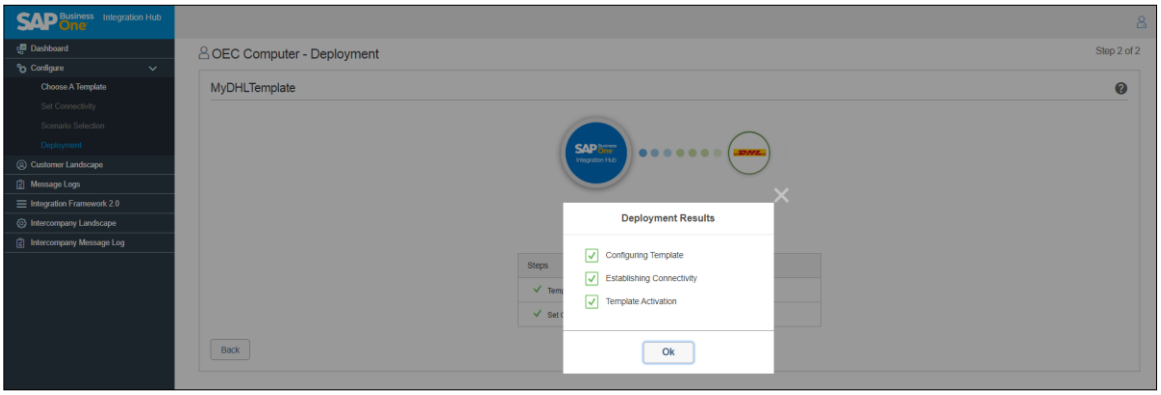
Configuration Summary

11. The Configuration summary displays the *Date* and time for *Template Selection* and *Set Connectivity steps*.

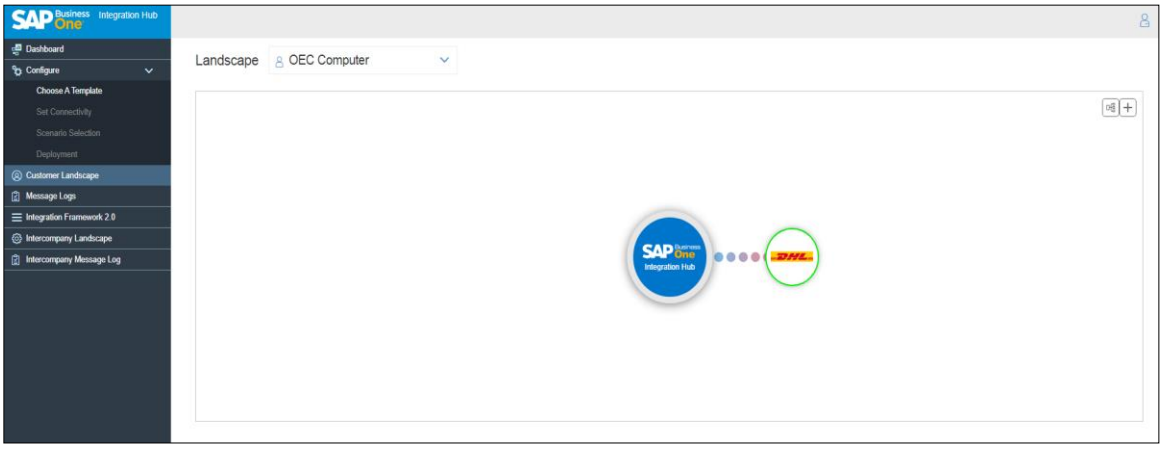


Step 2 – Deployment

12. To deploy the solution, choose the *Deploy Now* button.
13. The application prompts you to provide the license details. For more information, refer to the Assigning the Integration Hub licenses section in this document.
14. The Integration Hub displays the *Deployment Results* whether the deployment is successful or failed. The checkbox in the *Deployment Results* window displays status of each deployment stage.



15. Once all stages are checked, click the *OK* button on the *Deployment Results* window to proceed. The successful deployment of solution in Integration Hub results in enabling the features in SAP Business One. Customer Landscape displays connection of SAP Business One to DHL.



16. To modify the template after successful feature activation, right-click on the logo of the template.

17. Right click on the DHL logo displays window with the following fields:

Field Name	Description
View	Displays the *Set Connectivity* window in view mode.
Edit	Displays the *Set Connectivity* window in Edit mode.
De-activate	Deactivates the DHL deployment.
Deployment Status	Displays the deployment status with date and time.
Delete Template	Choose delete template to delete the template. It is an Irreversible action.

	Note On deleting the template, the template will be marked as Inactive in the application deployment status window in SAP Business One.
Delete Deployment Info.	Choose delete deployment info. to delete the complete deployment information of the template. It is an Irreversible action. Note On deleting the deployment information, the template will not be deleted from deployment panel screen, it will be deactivated only.
Manage Licenses	Choose Manage License to Activate/Deactivate the integration Hub License. For more information, see Managing the Integration Hub licenses section in this guide.

15.2 Setup in SAP Business One

1. In the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Application Deployment Status*. The *Deployment Status* field should display 'Active', indicating that the feature is deployed in the Integration Hub. If the status displays 'Inactive', then redeploy the feature in the *Integration Hub.*

   The following are the statuses that can be visible on the *Application Deployment Status* screen:

   - *Active*: The status represents the solution is deployed and active.
   - *Inactive*: The status represents the feature template is not inactive.

   For more details, refer to the *Application Deployment Status* section in this guide.

   > **Note**
   >
   > You must restart the SAP Business One client after Magento deployment from the Integration HUB. On login, the Add-On script will execute, and the relevant setup window will appear.

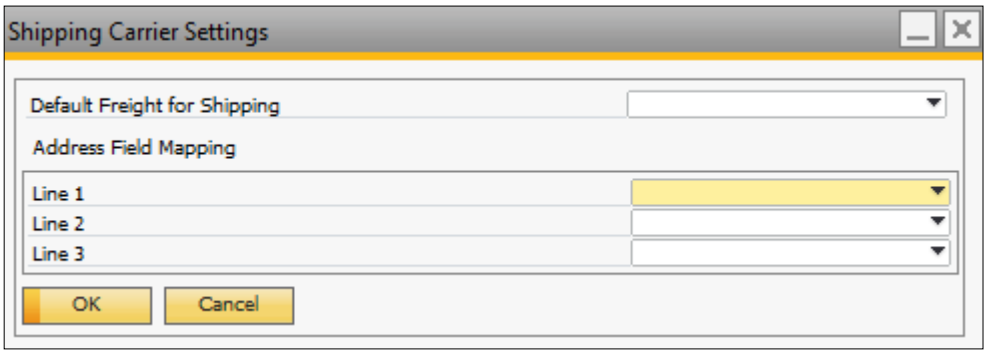
2. *In* SAP Business One, choose *Main Menu* → *Administration* → *Integration Hub* → *B1i Server Details* to enter the B1i Server details. This window enables us to enter the B1i Server Details.

The *B1i Server Details* window contains the following fields:

Field Name	Description
B1i Server Address	Enter the server name or IP address of B1i server.
B1i Port	Enter the port of the B1i Server. The default port for HTTP is 8080
Username	B1i run time user
Password	Enter the password for B1i run time user.
HTTPS	Select the checkbox to enable the solution to use HTTPS.

> **Note**
>
> Please ensure that the SLD entry for this company exists in SAP B1if and the solution is properly deployed.

3. In SAP Business One, choose *Main Menu* → *Administration* → *Integration Hub*→ *Shipping Carrier Settings* to configure the shipping carrier settings for DHL.



Note

- You must define the ISO Currency code for base and all other currencies defined in database.
- The Shipping Carrier Settings are mandatory settings for integrating with SAP Business One.

The *Shipping Carrier Settings* window contains the following mandatory fields:

Field Name	Description
Default Freight for Shipping	For shipping amounts, the application uses default freight defined in shipping carrier settings which is picked from SAP.
Address Field Mapping – Line 1	Select the address line 1 item from the list of address line items. The following is list of optional address line items: • Address Name 1 • Address Name 2 • Street/ PO Box • Block • Street No. • Building/Floor/Room
Address Field Mapping – Line 2	Select the address line 2 item from the list of address line items. The following is list of optional address line items: • Address Name 1 • Address Name 2 • Street/ PO Box • Block • Street No. • Building/Floor/Room
Address Field Mapping – Line 3	Select the address line 3 item from the list of address line items. The following is list of optional address line items: • Address Name 1 • Address Name 2 • Street/ PO Box • Block • Street No. • Building/Floor/Room

15.3 Using DHL

15.3.1 Address Validation

Address Validation helps in validating the *Ship To* and *Bill To* addresses to avoid any address related issues in later stages. The address validation API from DHL is used to request general validation of city, state and zip code.

The validate address functionality in SAP Business One is available in the:

- Business Partner Master Data
- Delivery Document

15.3.1.1 Business Partner Master Data

The addresses in SAP Business One can be validated according to the DHL address format in the customer master data.

In SAP Business One, choose *Main Menu* → *Business Partner* → *Business Partner Master Data* → *Addresses.*

To validate the *Bill To* and *Ship To* addresses of a customer, choose the icon in the *Addresses* Tab in *Business Partner Master Data*.

Note

The validate address functionality in *Business Partner Master Data* works only if the *Shipping Type* in the *General* tab is DHL.

15.3.1.2 Delivery Document

Addresses in SAP Business One can be validated according to DHL address format in delivery document. To validate the *Bill To* and *Ship To* addresses of a customer, choose the icon in the *Logistics* tab in the delivery document.

Note

The validate address functionality in *Delivery Document* works only if the *Shipping Type* in the *Logistics* tab is DHL.

15.3.1.3 Windows Enhancement

New fields that are relevant to the DHL have been added to the Delivery Document. The fields provide additional information regarding the DHL transactions.

Field Name	Description
Get Tracking Number	Fetches the tracking number from DHL. User can use this button when the tracking number is not fetched at the time of adding the document.
Logistics	
Service	Displays the DHL services based on Ship from country. Note The application uses the first line warehouse country as ship from country.
Integration Hub	
Payer	Payer may be Shipper, Receiver, or Third Party.
Bill Account Number	Bill Account number given by freight carrier.
Dutiable	If customs duty applicable select Y(Dutiable), else select N(Non-Dutiable)
Customs Value	Goods value disclosed to customs
Insurance Amount	Amount insured for the goods.
Ready Time(hh:mm)	Time for picking up the items.
Global Product	Select applicable DHL Service
Language Code	Select applicable language code Note The language code list comes based on the country code of the warehouse and it uses the warehouse of the first line.
Contents	Specify the package contents

15.3.1.4 Address Validation Result

Address Validation Result enables to validate the addresses as per DHL address format with the help of API and notifies the user with the error message or successful message. SAP Business One displays the result with specific colors having a particular meaning as per the color result.

Example

If the address validation is

- **Successful**, the system displays the address in green color, along with the message in the status bar.
- **Unsuccessful** or failed, the system displays the address in red color, along with the message in the status bar.

15.3.2 Freight Quote

Freight Quote helps in getting a list of all the shipping services and rates based on the package's specification. The *Freight Quote* functionality in SAP Business One is available in *Packing Slip* window of *Delivery Document* only.

Prerequisite

The following are the prerequisite for getting Freight Quotes from DHL:

- The *Shipping Type* in the *Logistics* tab should be **DHL** and DHL service should be selected.
- The item used in delivery document must have *Length, Width, Height, and Weight* defined.
- Customer *Tel1, Fax Number* and *Mobile Phone* must be defined in *Main Menu* → *Business Partner* → *Business Partner Master Data* →*General* Tab.
- *Mobile Phone* and *Fax Number* must also be defined for the logged in user in the *Users-Setup* window.

15.3.2.1 Get Freight Quote

Get Freight Quote checks for freight quote through API based on the package type selected in the *Packing Slip* in *Delivery Document*.

To get the freight quote:

1. In the Delivery document, choose *Main Menu* → *Sales A/R* → *Delivery* → *Logistics tab.*
2. Select the customer and validate the *Bill To* and *Ship To* addresses of a customer, using the icon.
3. On Integration Hub Tab. Based on the requirement, specify the values in the Payer, Bill Account Number, Dutiable, Customs Value, Insurance Amount, Ready Time, Global Product, and Language Code. If Payer is third Party, then specify the Third Party Address and Third Party Contact Person.
4. Right-click on the *Delivery* window and select *Packaging Slip*.
5. Provide the *Package No., Type* and *Weight (lbs./kg)* unit.

> **Note**
> The DHL package type used in packing slip must have *Length, Width, Height defined* in *package type s- setup window.*

6. In Line level move the item from *Available Items* list to *Package Contents* list and choose *Get Freight Rate* button.
7. The freight quote from DHL is updated into the packing slip. Click on *Ok* button to close Packaging Slip.
8. The amount in the freight field of delivery document displays the Freight amount.

15.3.3 Shipment Tracking Number

Shipping Tracking Number automatically updates the tracking number from DHL when the delivery document is added. If the solution fails to update the tracking number while updating the freight amount, the solution provides the flexibility to fetch the tracking number by choosing *Get Tracking No.* button in the *Delivery* window.

To get the Tracking Number:

1. In SAP Business One, choose *Main Menu* → *Sales A/R* → *Delivery.* Complete the Delivery document and click on the *Add* Button.
   Specify all the information as mentioned in the steps of *Get Freight Quote*.
2. A pop-up displays a message *You cannot change this document after you have added it. Continue?* Click on *Yes* to continue.
3. A tracking number is generated.
4. Alternatively, click on *Get Tracking Number* button on the Delivery document if the delivery document is already added.
5. Copy the tracking number and track the Package in the DHL site.

Note

The *Tracking Number* is generated only when the customer phone number is updated for in the *Business Partner Master Data* and the address is verified

16 Salesforce

Salesforce is a cloud computing service as a software (SaaS) company that specializes in customer relationship management (CRM). Salesforce's customer relationship management software instantly streamlines and automates an enterprise's business processes. By creating infrastructure-as-a-service, the enterprise's business allows sales, marketing, and support teams to work in sync and see important sales and customer data with more width and breadth, freeing them up to generate new clients and better service existing ones.

Caution

Salesforce integration with SAP Business One is supported for the following Salesforce editions: Enterprise Edition, Unlimited Edition, Developer Edition, and Performance Edition.

Note

Salesforce Sandbox environments are supported.

Note

Salesforce Currency Locale must match SAP B1 local currency.

16.1 Salesforce Setup in Administration Console

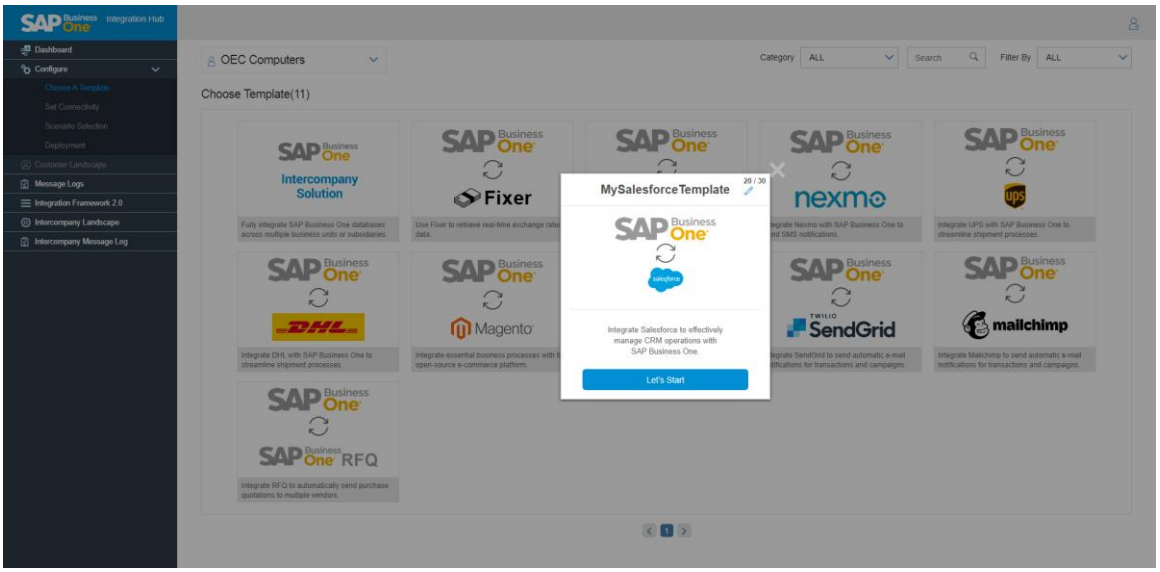
The following are the steps to setup Salesforce in Administration Console:

1. Add New Customer. Refer to section Add New Customer in the document.
2. Select the *Salesforce* template to integrate.

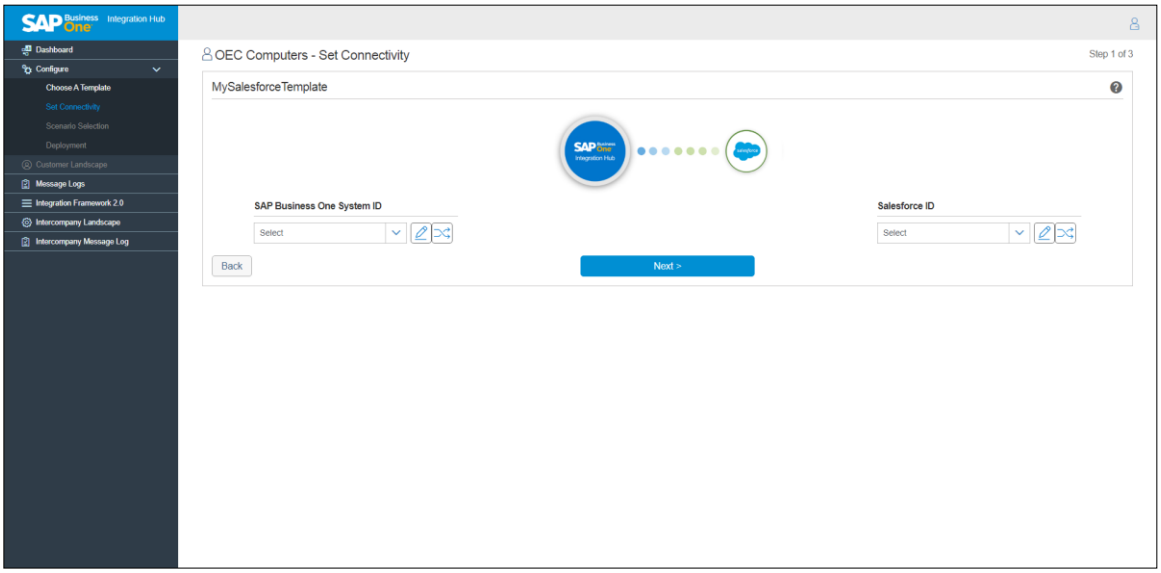
   Upon selecting the template, a message "*Let's Start*" prompts to start configuring the connectivity settings. Change the template name by clicking the Edit button to edit the template name. Otherwise it appears as *MySalesforce Template.*

   Note

   By default, the name of the template appears as *MySalesforce Template* and can be renamed.


SAP Business One Integration Hub
Dashboard
Configure
Choose A Template
Set Connectivity
Scenario Selection
Deployment
Customer Landscape
Message Logs
Integration Framework 2.0
Intercompany Landscape
Intercompany Message Log
OEC Computers
Category
ALL
Search
Filter By
ALL
Choose Template(11)
Intercompany Solution
Fixer
nexmo
DHL
Magento
SendGrid
mailchimp
SAP Business One RFQ
MySalesforceTemplate
20 / 30
Integrate Salesforce to effectively manage CRM operations with SAP Business One.
Let's Start

3. Upon choosing the Let's Start button, a Set Connectivity page appears with the following two steps to complete the configurations for connectivity.



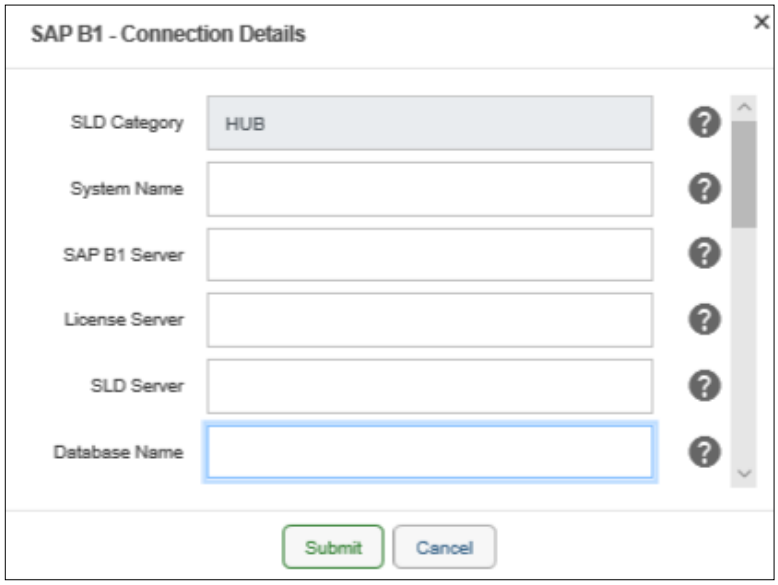
Step 1 – Set Connectivity

4. Choose the SAP Business One SLD to provide the connection between *SAP Business One System Id* and Salesforce Id.

> **Note**
>
> By default, the solution displays all the SAP Business One SLDs available in *SLD Category* selected during customer creation.



5. To add a new SLD or edit existing SAP Business One SLD under *SAP Business One System Id* area, choose Add / Edit button.



The *SAP Business One Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update SAP Business One SLD.
SAP Business One Server	Enter SAP Business One Server Name / IP Address. Note *SAP Business One Server* is the mandatory field to add/update SLD information for SAP Business One.
License Server	Enter *License Server* details. i.e. Server Name or IP Address and port number of the SAP Business One License Server. The default port is 30000.
SLD Server	Enter the valid *SLD Server* details with port. Note *SLD Server* details is the mandatory field to add/update SLD information for SAP Business One.
Database Name	Enter the name of the SAP Business One Database. Note *Database Name* is the mandatory field to add/update SAP Business One System SLD. Caution The *Database Name* must be entered same as SAP Business One Database Name.
Database Type	Currently, only Microsoft SQL Server 2005, 2008, 2012, 2014, 2016, 2017 and SAP Hana DB are supported. Choose the database type from the dropdown list.

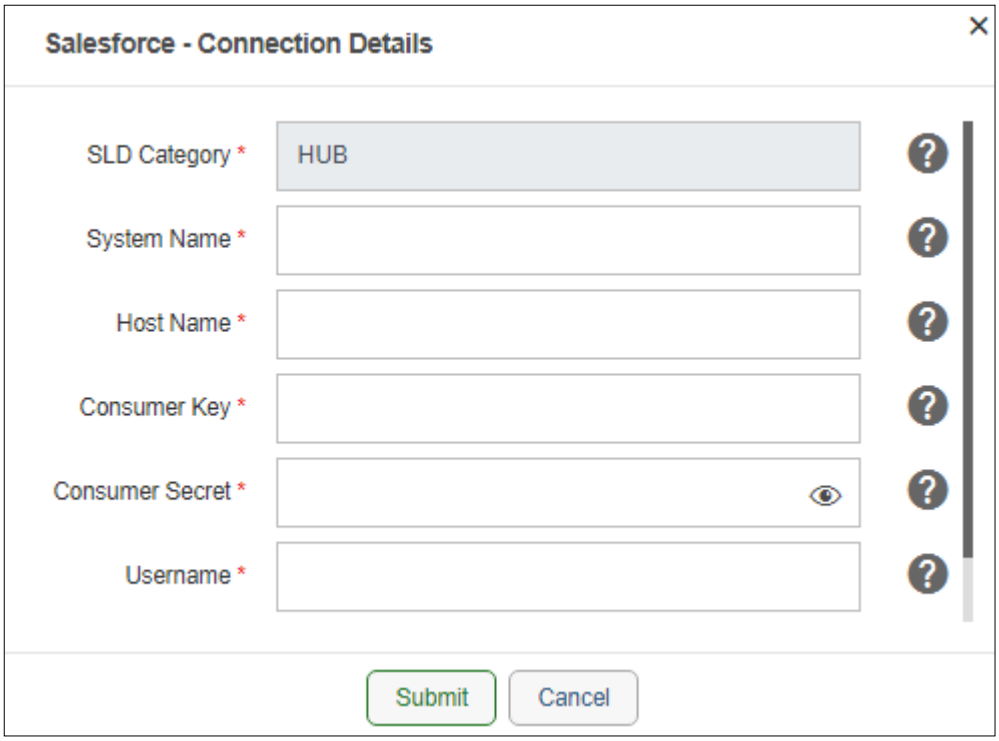
	Note *Database Type* is the mandatory field to add/update SAP Business One SLD.
Database User	Enter the user to access the company database using the database connection. *Database User* is the mandatory field to add/update SAP Business One SLD. Caution The *Database User* must be valid. Invalid *Database User* will result in failure to establish the connection.
Database Password	Enter a valid password for database login. Note *Database Password* is the mandatory field to add/update SAP Business One SLD. Caution The *Database Password* must be valid. Invalid *Database Password* will result in failure to establish the connection.
Database Port	Enter the port for database.
Username	Enter `B1i` in this field. Note *Username* is the mandatory field to add/update SAP Business One SLD. It is set as B1i by default and un editable. Caution Ensure that a user with this name exists in the SAP Business One database.
Password	Enter a valid password for B1i user of SAP Business One.
Language	Select the language from the list of languages.
Is Trust	Select *True* or *False*. The default value for this field is *False.* To use a trusted connection, choose *True* from the dropdown list.
JcoPath	Enter path for jco library. Example of Installation path of JCO: C:\Program Files (x86)\SAP\SAP Business One DI API\JCO\LIB
DI ProxyHost	The DI Proxy host must be defined if B1i is installed on a separate server (this is, other than the SAP Business One server). The value in this field must be same as SAP Business One Server address. Example *Proxyhost* can be same as *SAP Business One Server.*
DI ProxyPort	The default value of *DI Proxy Port* is 2099.
Proxy Host	The proxy host is defined in a multi-instance scenario. If the B1i server connects to the SAP Business One server through a proxy server then, enter the address of the proxy server in this field.
Proxy Port	Enter the proxy port in this field.

6. Enter the valid data and choose the *Submit* button. An SAP Business One SLD is created.

Choose the *Test Connection* icon to test the connection between the SAP Business One System Id in Integration Hub and the SAP Business One System Landscape Directory.

If the connection is successful, a success message appears “Test Connection Successful”. If the connection is unsuccessful, a failure message appears “Test Connection Failed”. Please provide the correct credentials.

7. To add / edit Salesforce instance SLD under Salesforce Id area, choose the *Add / Edit* button. *Salesforce Connection Details* window appears.



The *Salesforce Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update Salesforce SLD.
Host Name	Enter the Host name of the Salesforce. The hostname is fully qualified domain name. Click on View Profile in Lightning Experience view and copy the Sales force hostname given below your login name. For example the hostname is ap15.salesforce.com.
Consumer Key	In Salesforce Integration Hub connected App instance go to *API (Enable OAuth Settings)* and take a note of the *Consumer Key.*
Consumer Secret	In Salesforce Integration Hub connected App instance go to *API (Enable OAuth Settings)* and take a note of the *Consumer Secret.*
Username	Enter the user name to login to Salesforce
Password	Enter the password for the entered username.

Note

"Allow OAuth Username-Password Flows" and "Allow OAuth User-Agent Flows" in "OAuth and OpenID Connect Settings" should be On in Salesforce account.

The following are configurations that are required to be configured in Salesforce:

a. **Hostname**
The hostname is fully qualified domain name. Click on View Profile in Lightning Experience view and copy the Salesforce hostname given below your login name. For example, the hostname is ap15.salesforce.com.

b. **Connected Apps**
Create Intercompany App on Salesforce for Integration Hub. To create Integration Hub App, go to *Build> Create > Apps*. Go to *Connected Apps* on the page and click on *New* button to Create New Connected App for Integration Hub.

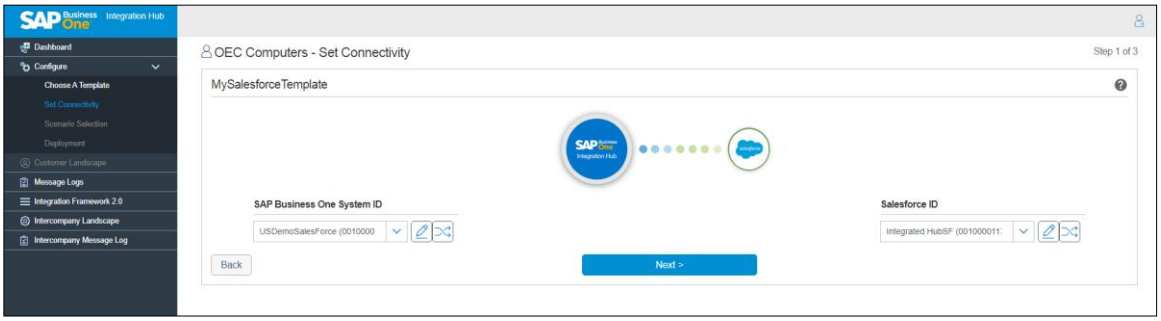
c. **Consumer Key and Consumer Secret**
On the Connected App page enter the basic Information. On *API Enable OAuth Settings*, Select the check-box *Enable for Device Flow* if *Callback URL* is not available. Select and transfer all scopes from *Available OAuth Scope* to *Selected OAuth Scopes* and *Save* the changes in Sales force. This creates a *Connected App* for Integration Hub. Click on the Integration Hub connected App instance and from *API (Enable OAuth Settings)* and take a note of the *Consumer Key* and *Consumer Secret*.

d. **Configure API polices**
Configure the policies for the API keys created above. Go to *Setup> Manage App> Connected Apps.* Open the Connected App for Intercompany Hub and *Edit Policies >OAuth Policies* for *IP Relaxation* select "*Relax IP Restrictions for activated Devices*" and *Refresh Token Policy* to "*Expire refresh token if not used for*'' to number of days as per your company policy. *Save* the Changes.

Caution

If the token remains unused and the number of days configured for the *Refresh Token Policy* to "*Expire refresh token if not used for*'' lapses, then redeploy the Salesforce template with the updated regenerated Consumer Key and Consumer Secret.

8. Provide the valid information in the fields and choose the *Submit button.* SLD for Salesforce is created.

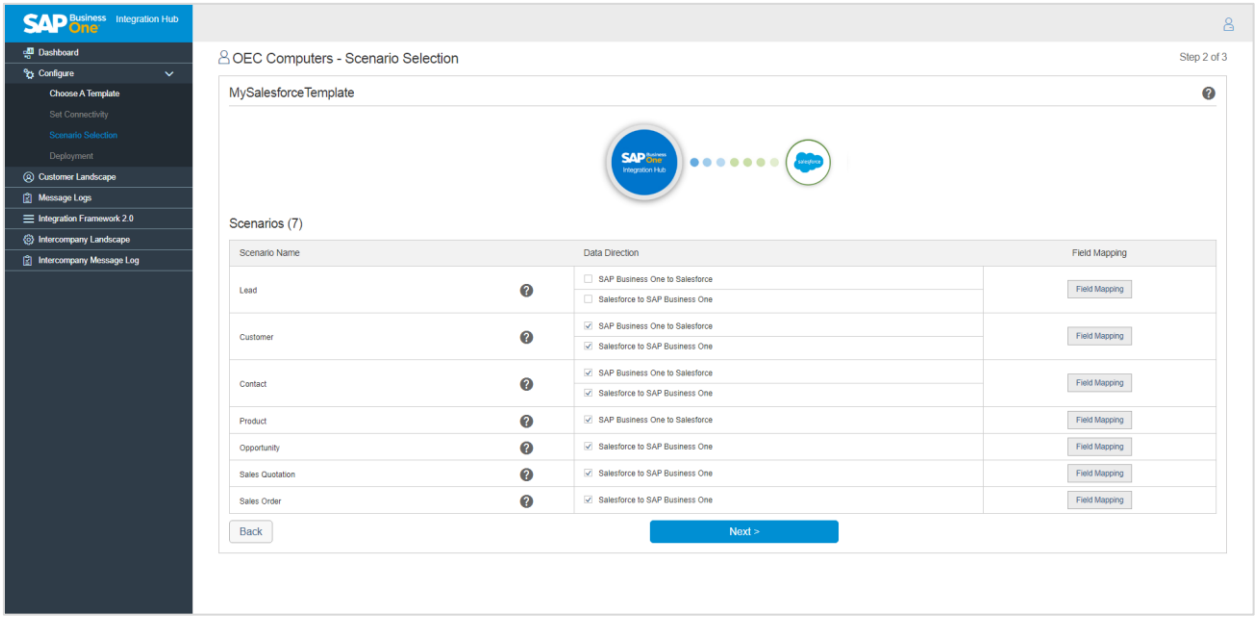


9. Choose the *Test Connection* icon to test the connection between the Integration Hub and Salesforce.
If the connection is successful, a success message appears "Test Connection Successful".
If the connection is unsuccessful, a failure message appears "Test Connection Failed".

10. Choose the *Next* button to proceed to Step2.

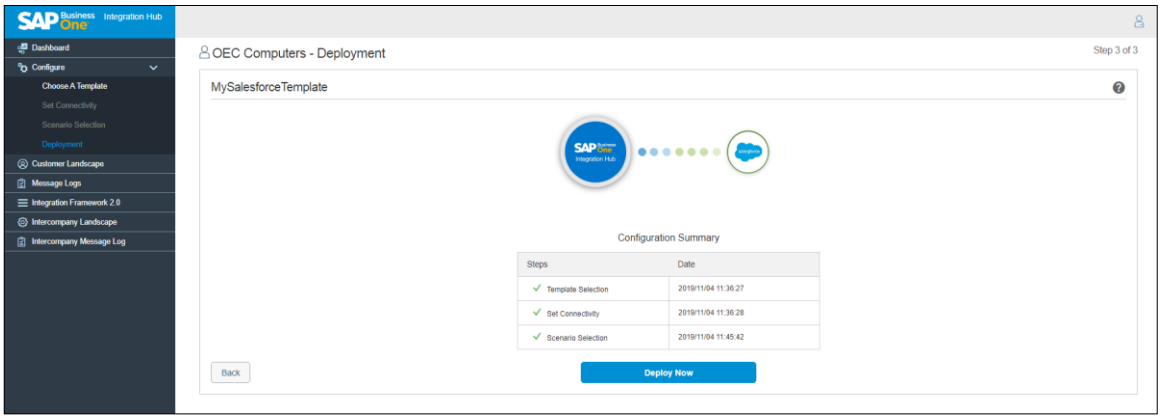
Step 2 – Scenario Selection

11. The Scenario Selection displays the *Scenario, Data Direction, and Field Mapping.* By Default, the Data Direction for Lead is not selected. You can select the data direction as per your company policies.



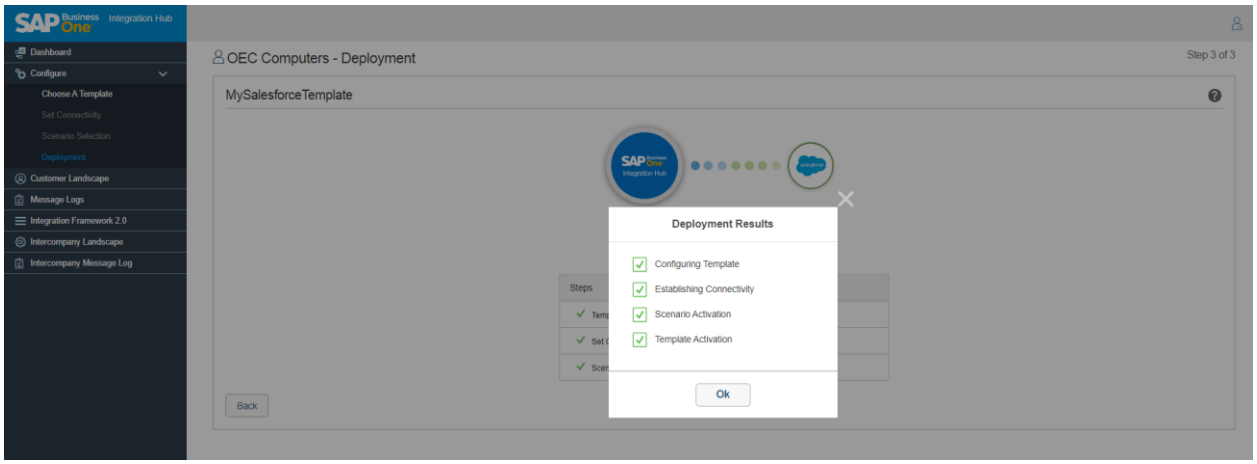
Configuration Summary

12. The Configuration summary displays the *Date* and time for *Template Selection* and *Set Connectivity steps*.



Step 3 – Deployment

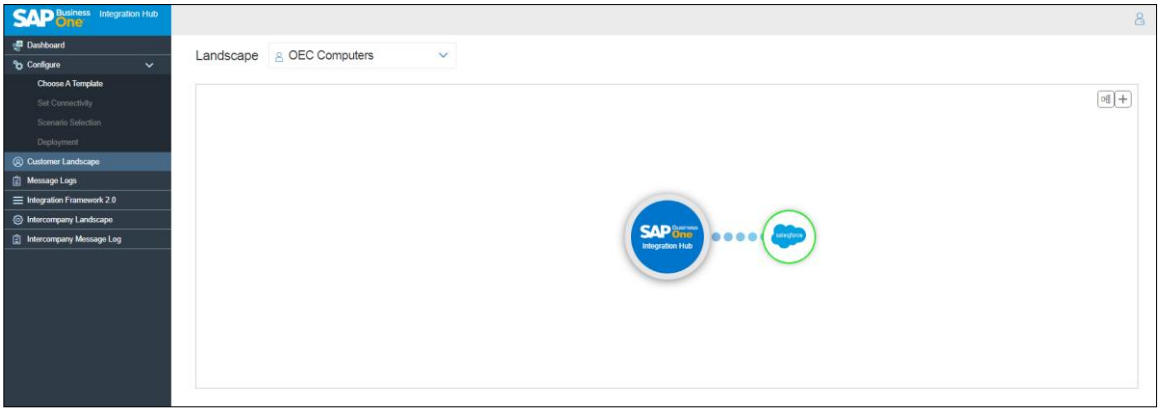
13. To deploy the solution, choose the *Deploy Now* button.
14. The application prompts you to provide the license details. For more information, refer to the Assigning the Integration Hub licenses section in this document
15. The Integration Hub displays the *Deployment Results* whether the deployment is successful or failed. The checkbox in the *Deployment Results* window displays status of each deployment stage.



Note

After you enable the multi-branch function in SAP Business One, you must re-deploy the Salesforce Template.

16. Once all stages are checked, click the *OK* button on the *Deployment Results* window to proceed. The successful deployment of the solution in Integration Hub results in enabling the features in SAP Business One. Customer Landscape displays the connection of SAP Business One to Salesforce.



17. To modify the template after successful feature activation, right-click on the logo of the template.

18. Right-click on the Salesforce logo to display the window with the following fields:

Field Name	Description
View	Displays the *Set Connectivity* window in view mode.
Edit	Displays the *Set Connectivity* window in Edit mode.
De-activate	Deactivates the Salesforce deployment.
Deployment Status	Displays the deployment status with date and time.
Delete Template	Choose delete template to delete the template. It is an Irreversible action. **Note** On deleting the template, the template will be marked as Inactive in the application deployment status window in SAP Business One.

Delete Deployment Info.	Choose delete deployment info. to delete the complete deployment information of the template. It is an Irreversible action. Note On deleting the deployment information, the template will not be deleted from the deployment panel screen, it will be deactivated only.
Manage Licenses	Choose Manage License to Activate/Deactivate the integration Hub License. For more information, see Managing the Integration Hub licenses section in this guide.

16.2 Setup in SAP Business One

1. In the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Application Deployment Status*. The *Deployment Status* field should display 'Active', indicating that the feature is deployed in the Integration Hub. If the status displays 'Inactive', then redeploy the feature in the *Integration Hub.*

   The following are the statuses that can be visible on the *Application Deployment Status* screen:

   - *Active*: The status represents the solution is deployed and active.
   - *Inactive*: The status represents the feature template is not inactive.

   For more details, refer to the *Application Deployment Status* section in this guide.

2. *In* SAP Business One, choose *Main Menu* → *Administration* → *Integration Hub* → *B1i Server Details* to enter the B1i Server details. This window enables us to enter the B1i Server Details.

The *B1i Server Details* window contains the following fields:

Field Name	Description
B1i Server Address	Enter the server name or IP address of the B1i server.
B1i Port	Enter the port of B1i Server. The default port for HTTP is 8080
Username	B1i run time user
Password	Enter the password for B1i run time user.
HTTPS	Select the checkbox to enable the solution to use HTTPS.

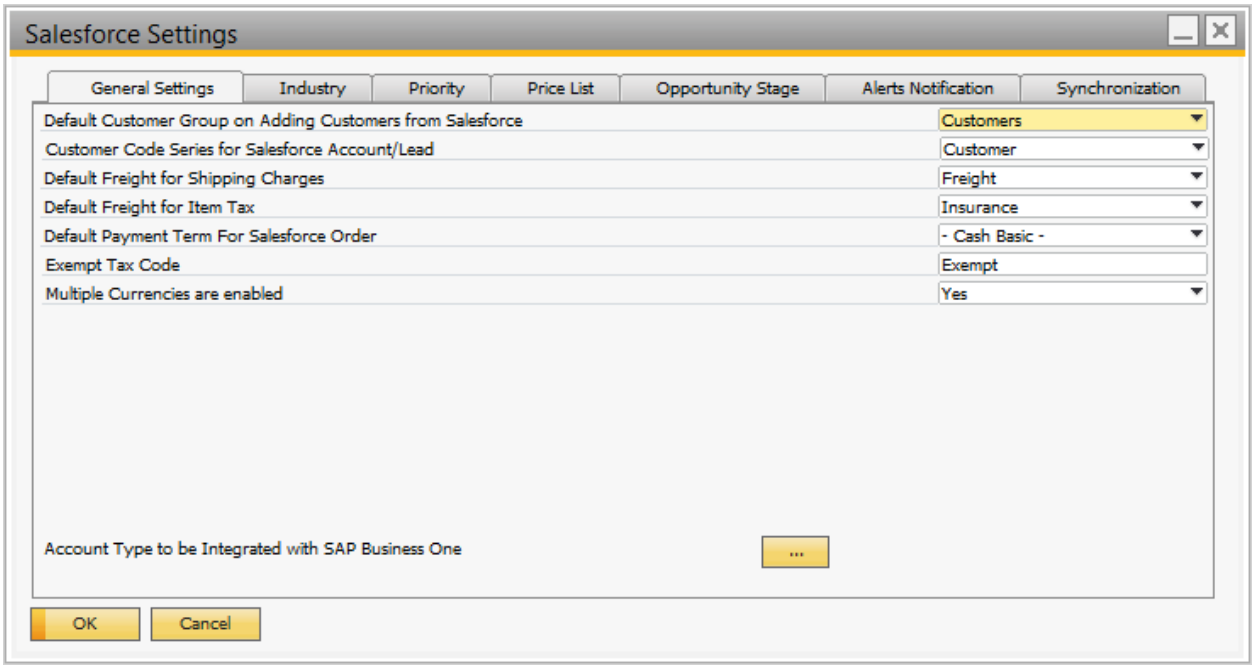
> **Note**
>
> Please ensure that the SLD entry for this company exists in SAP B1if and the solution is properly deployed.

16.2.1 Salesforce Settings

On the Main Menu go to *Administration* → *Integration Hub* → *Salesforce Settings* to configure the required Salesforce settings

16.2.1.1 General Settings

Configure the general settings in the *General Settings* tab in *Salesforce Settings* window.



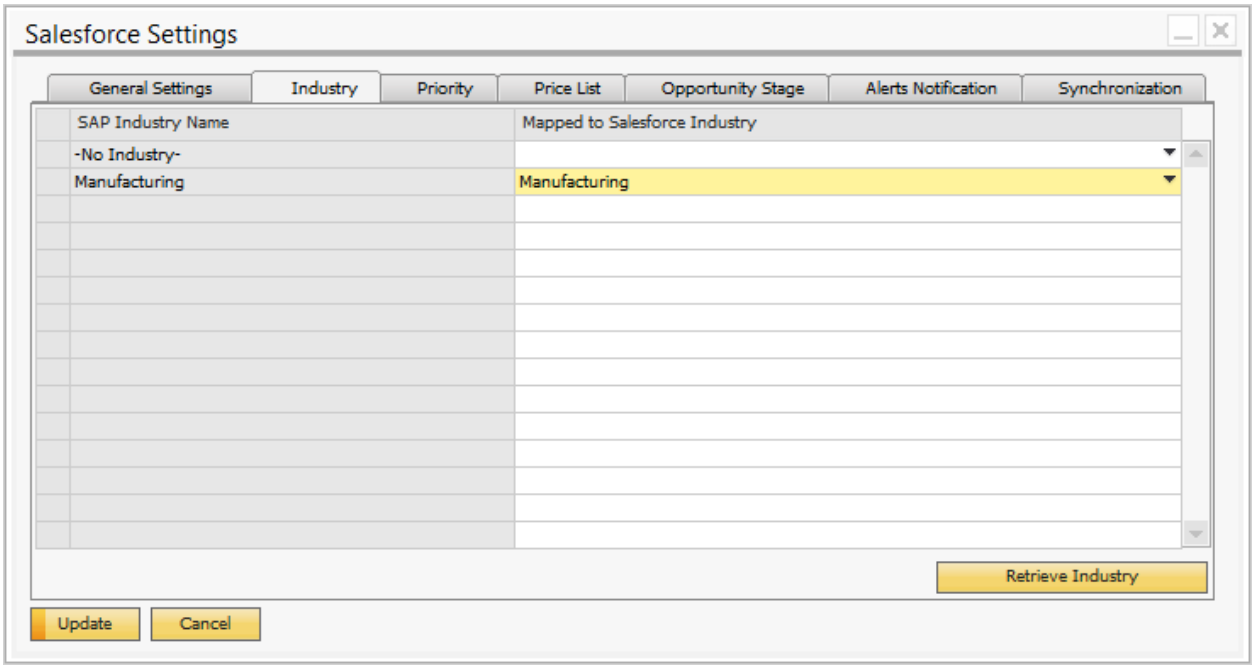
The *General Settings* tab of *Salesforce* window contains the following fields:

Field Name	Description
Default Customer Group on Adding Customers from Salesforce	Select the Customer Group, the customer will be created in SAP Business One based on the customer group selected. The selected Customer Group is used to add customers from Salesforce.
Customer Code Series for Salesforce Account/Lead	Select the Customer Code Series The Selected Customer Code Series is used to create Business Partners in Business One.
Default Freight for Shipping Charges	Select a freight component for Shipping Charges. The selected freight component is used to integrate the header level shipping amount per order in Salesforce to SAP Business One.
Default Freight for Item Tax	Select a freight component for Tax component. The selected freight component is used to integrate the item level tax amount per order in Salesforce to SAP Business One.
Default Payment Term for Salesforce Order	Select a payment term from the list of payment terms in SAP Business One. The selected payment term is the default payment term for all orders of Salesforce integrated in SAP Business One.

Exempt Tax Code	Select a tax code from the list of tax codes. The selected tax code is used in all orders integrated from Salesforce to SAP Business One. The selected tax code must be of zero rate.
Multiple Currencies are enabled	Select whether Multiple currencies are enabled in Salesforce.
Default Branch for Document	Select the branch that will be used while adding document from Salesforce to SAP Business One. **Note** This field is relevant for the multi-branch function.
Branch Assignment for Customer	Select the branch that will be used while adding/updating customer data from Salesforce to SAP Business One. Choose the button of the Branch Assignment for the Customer field. In the Branch Assignment for Customer window, in the Active column, select the required branches. **Note** This field is relevant for the multi-branch function.
Account Type to be Integrated with SAP Business One	Click on the ellipsis button to open Account Type window. Retrieve Account type from Salesforce using Retrieve button. Choose the Account type to be integrated with SAP Business One.

16.2.1.2 Industry

Configure the Industry in the *Industry* tab in *Salesforce Settings* window.

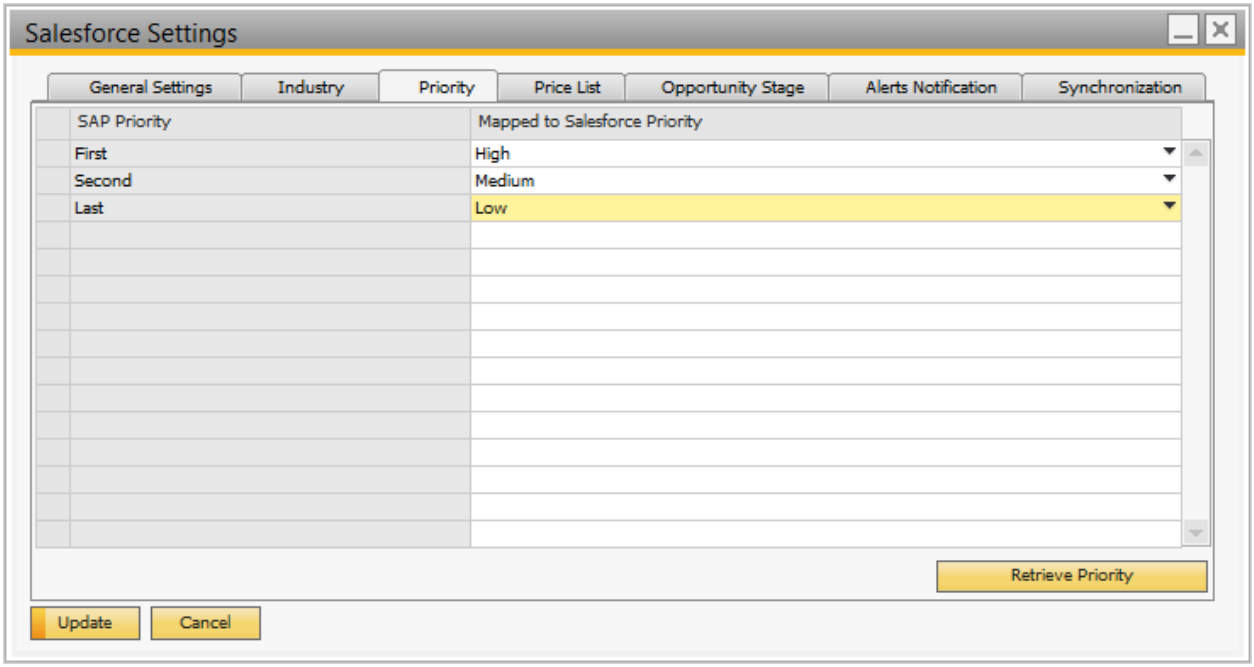


The *Industry* tab of *Salesforce* window contains the following fields:

Field Name	Description
SAP Industry Name	Industry name in SAP Business One
Mapped to Salesforce Industry	Select Industry name in Salesforce that is mapped to SAP Industry Name
Retrieve Industry	Click on Retrieve button to retrieve Industry name from Salesforce.

16.2.1.3 Priority

Configure the Priority in the *Priority* tab in *Salesforce Settings* window.

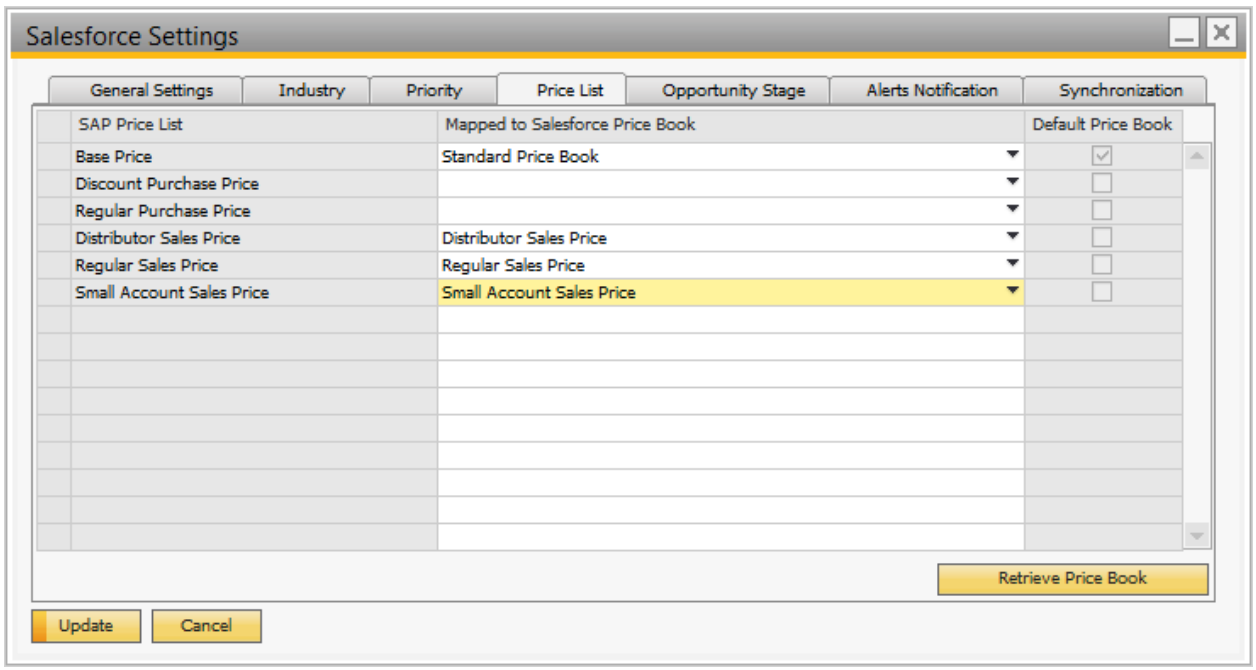


The *Priority* tab of *Salesforce* window contains the following fields:

Field Name	Description
SAP Priority	Priority name in SAP business one
Mapped to Salesforce Priority	Select Priority name in Salesforce that is mapped to SAP Priority Name
Retrieve Industry	Click on Retrieve button to retrieve Priority name from Salesforce.

16.2.1.4 Price List

Configure the Price List in the *Price List* tab in *Salesforce Settings* window.

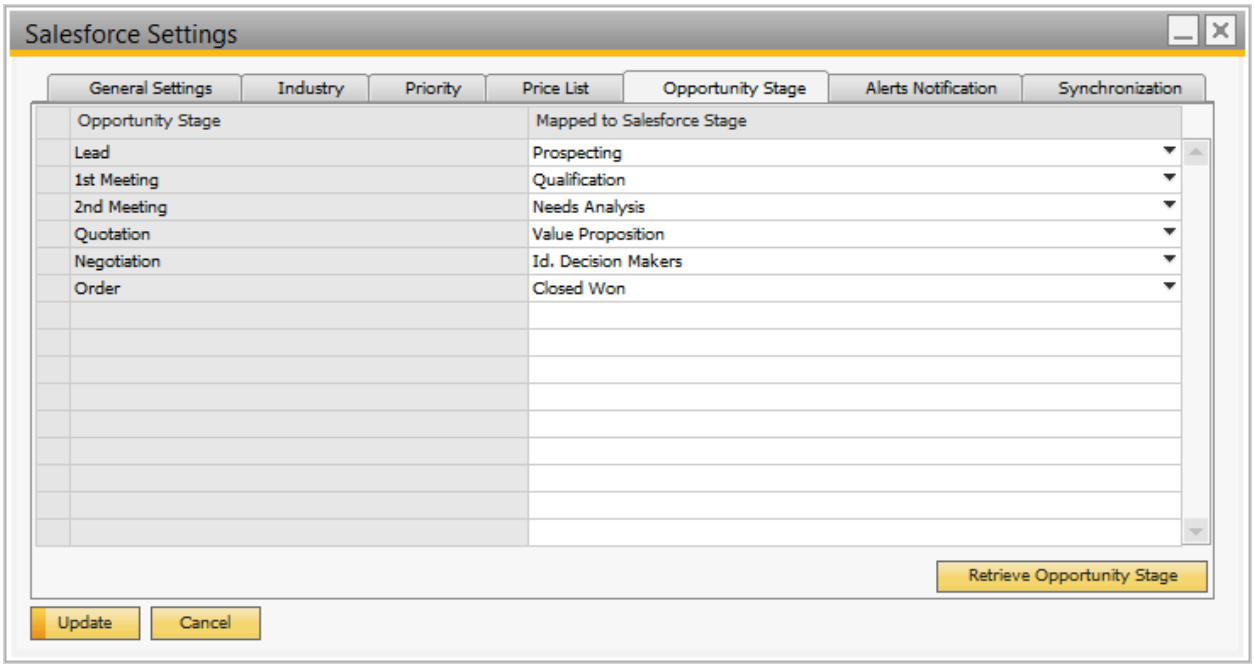


The *Price List* tab of *Salesforce* window contains the following fields:

Field Name	Description
SAP Price List	Price List name in SAP Business One
Mapped to Salesforce Price Book	Select Price Book name in Salesforce that is mapped to SAP Price List
Retrieve Industry	Click on Retrieve button to retrieve Price Book from Salesforce.

16.2.1.5 Opportunity Stage

Configure the Opportunity Stage in the *Opportunity Stage* tab in *Salesforce Settings* window.

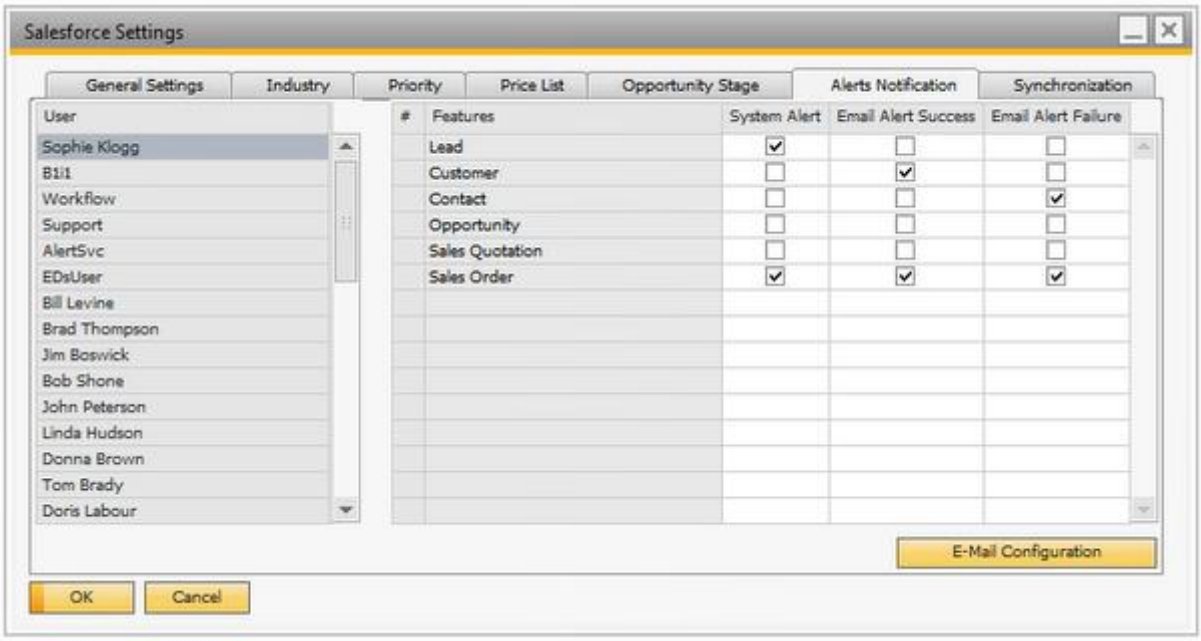


The *Opportunity Stage* tab of *Salesforce* window contains the following fields:

Field Name	Description
Opportunity Stage	Opportunity Stage name in SAP business one
Mapped to Salesforce Stage	Opportunity Stage name in Salesforce that is mapped to SAP Opportunity Stage
Retrieve Industry	Click on Retrieve button to retrieve Opportunity Stage from Salesforce.

16.2.1.6 Alerts Notification

Configure the alert settings in the *Alert Notification* tab in *Salesforce* window.



The *Alert Notification* tab of *Salesforce* window contains the following fields:

Field Name	Description
User	Displays the list of users in SAP Business One. Choose a user for setting up the alert notification authorizations. This field is read only.
Features	Displays the list of Integration Hub features for Salesforce. This field is read only. The Alert can be set for *Lead, Customer, Contact, Opportunity, Sales Quotation, and Sales Order.*
System Alert	Select this checkbox to send notifications as a system alert.
Email Alert Success	Select the checkbox to send email notifications for successful transactions.
Email Alert Failure	Select the checkbox to send email notifications for failed transactions.

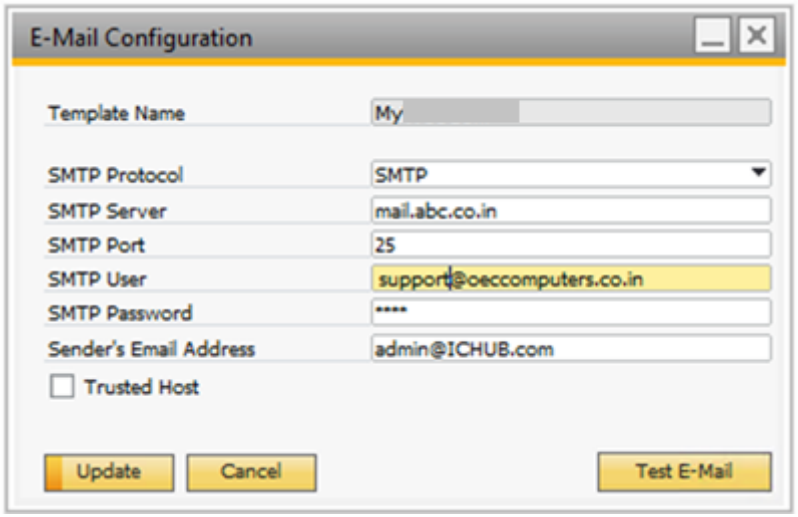
Note

In case of an email for failed transactions, the user will receive the failed XML payload as an attachment.

Email Configuration

Click the *Email Configuration* button to set up the SMTP details for email alerts notification.

Alternatively, to display the *Email Configuration* window, choose *Administration → Integration Hub → E-Mail Configuration*.



The *Email Configuration* window contains the following fields:

Field Name	Description
Template Name	Display the active Salesforce template.
SMTP Protocol	Choose the communication protocol SMTP/SMTPS/TLS.
SMTP Server	Specify the address of the outgoing mail server.
SMTP Port	Specify the port for the outgoing mail server.
SMTP User	Specify the user's name for the outgoing mail server.
SMTP Password	Specify the password for the outgoing mail server.
Sender's Email Address	Specify the email address of the sender.
Trusted Host	Select the checkbox to add the name of the e-mail server to the list of trusted hosts.
Test E-Mail	Click the button to test the connection. The email notification will be sent to the logged-in user in SAP Business One. Note Ensure that the Login User's email ID is correctly specified in the User Setup.

16.2.1.7 Initialization Process

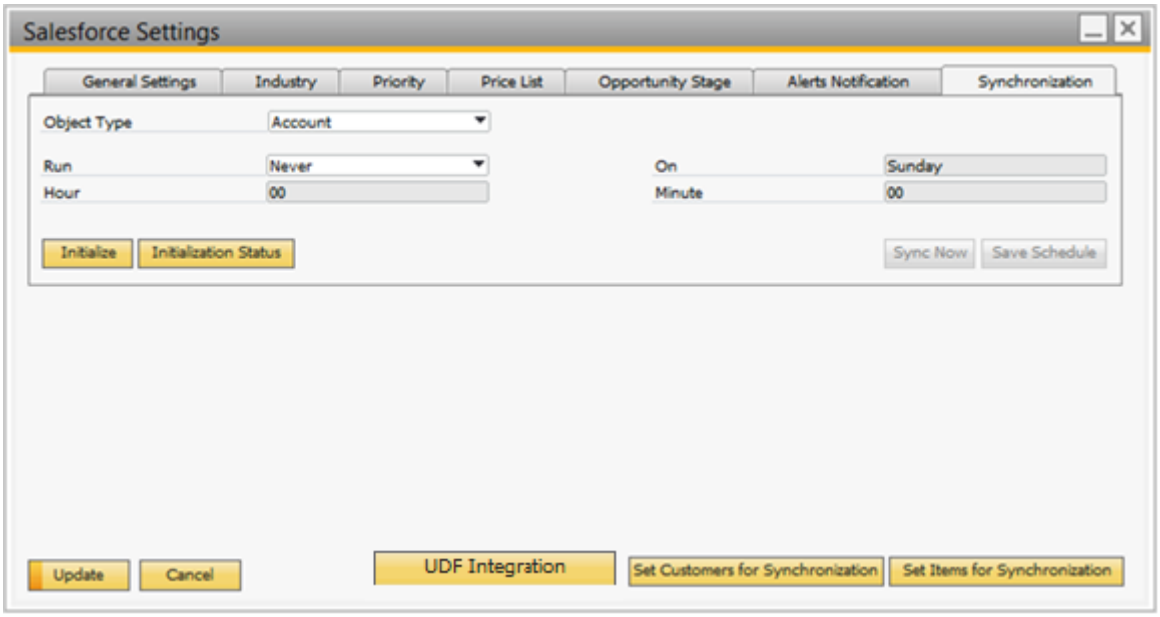
Once the Salesforce feature is enabled in SAP Business One, it is mandatory to initialize the objects to be integrated between SAP Business One and Salesforce. The objects include Account, Contact, Product, and Lead.

Note

Account Type settings in *Account Type to be Integrated with SAP Business One* in General Settings Tab should be configured in SAP Business One before initiating the initialization.

If Account, Contact, Product, and Lead data already exists in both applications before initialization, then you need to map their internal codes in SAP Business One. Use the Master Data Mapping Tool to map the Salesforce master data internal codes.

To Initialize Account, Contact, Product, and Lead, choose *Administration* → *Integration Hub* → *Salesforce Settings* → *Synchronization.* Choose the *Initialize* button on the *Synchronization* tab.

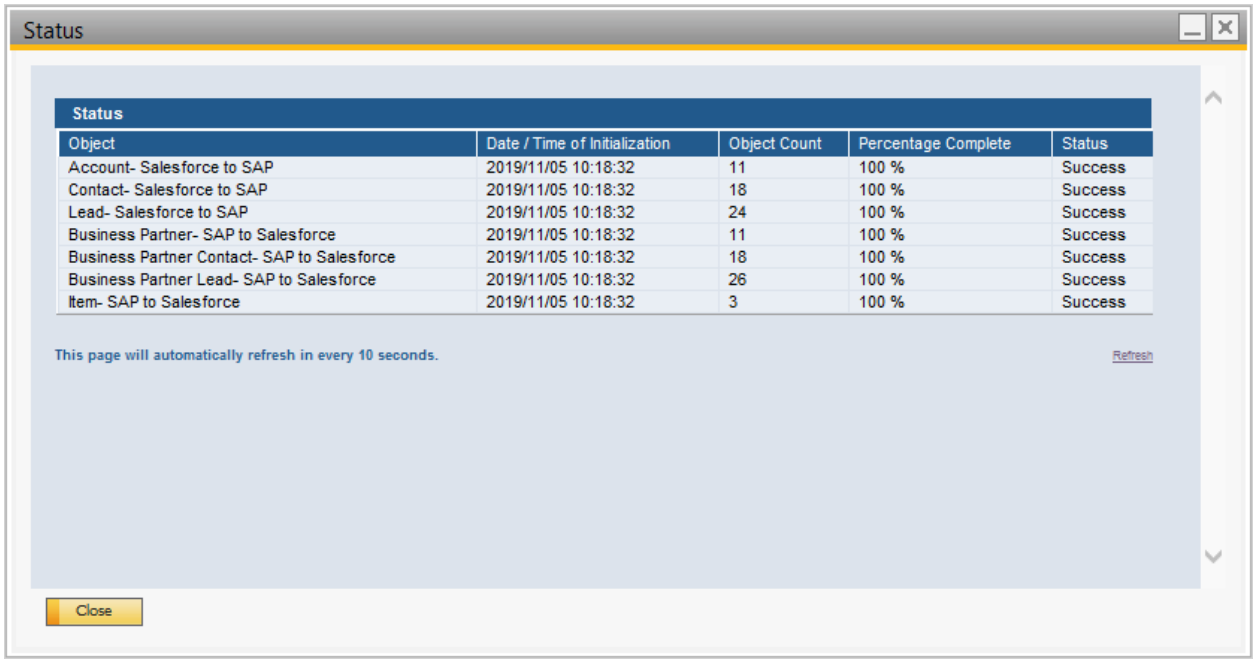


The *Synchronization* tab of the *Salesforce* window contains the following fields:

Field Name	Description
Object Type	Displays the list of objects available for synchronization between SAP Business One and Salesforce. The list of objects is: • Account • Contact • Lead • Opportunity • Sales Quotation • Sales Order
Run	Select the frequency of automation run from the dropdown i.e. *Daily* or *Weekly* or *Never.*
On	Select the weekday on which the synchronization should run.

	Note The selection is available only for weekly type run only.
Hour	Choose the *Hour* frequency at which the synchronization should run.
Minute	Choose the *Minute* frequency at which the synchronization should run.
Initialize	Choose the *Initialize* button to synchronize the object data between SAP Business One and Salesforce. **Note** *Initialize* button is active until it is clicked for the first time. Once the initialization is done, the *Initialize* button is disabled.
Set Customers for Synchronization	Select this button to mark Customers' synchronization from SAP business One to Salesforce.
Set Items for Synchronization	Select this button to mark bulk items synchronization from SAP business One to Salesforce.

Click on the *Initialization Status* button to view the initialized status of the data replication between Salesforce and SAP Business One.



Note

The *Initialize* button is active until the initialization is done for the first time. Once the initialization is done, close the Salesforce Settings window and reopen it, the *Initialize* button is disabled and the Sync Now and Save Schedule button is enabled. All the products created later will be integrated between both the systems based on scheduled synchronization or manual synchronization

16.2.1.8 Synchronization

The following two methods are available for synchronization between SAP Business One and Salesforce:

- **Manual Synchronization:**
  Whenever a user needs the integration to be done on the immediate basis (instead of waiting till the Scheduler services to run), a user can choose the *Sync Now* button. The synchronization takes an immediate effect for the selected object.

- **Automatic Synchronization:**

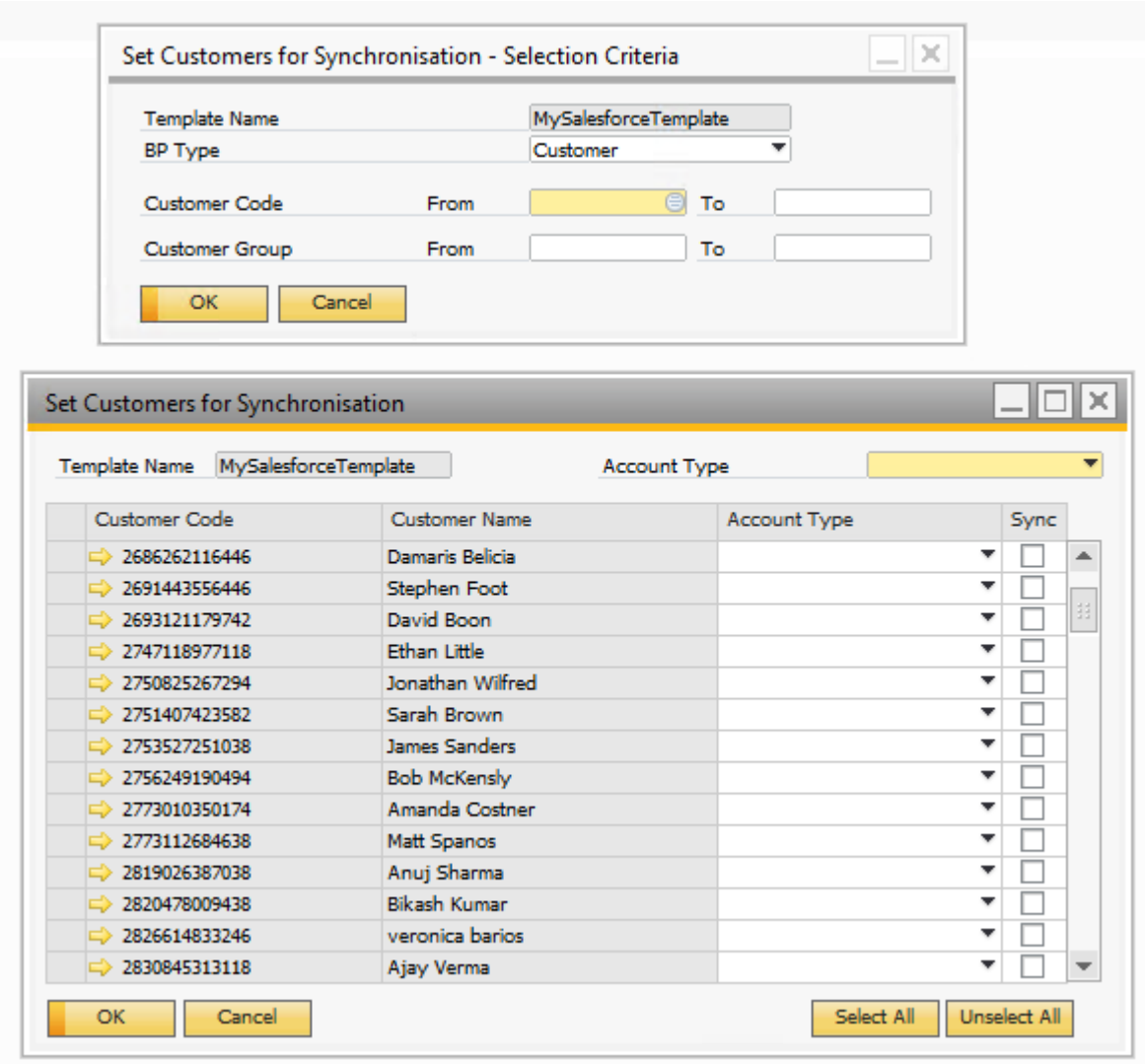
  The system enables a user to configure automatic integration between SAP Business One and Salesforce at a frequency (either daily or weekly) and on specific intervals. The synchronization runs based on schedule that is set for the object.

Synchronization is supported for six objects: Account, Contact, Lead, Opportunity, Sales Quotation, and Sales Order.

- **Customer Synchronization**
  The system enables the integrate all the customer master data between Salesforce and SAP Business One. Scheduling a synchronization enables the system to integrate customer masters automatically as per the schedule by running the Scheduler services.
    - **Set Bulk Customers for Synchronization**

      To Synchronize Customers from SAP to Salesforce, select items in bulk using the Set Customers for Synchronization menu under Integration Hub.

      1. Choose Administration → Integration Hub → Set Customers for Synchronizations.
      2. On clicking the Set Customers for Synchronization, the Set Customers For Synchronization-Selection Criteria window opens.
      3. Select the Customers range and Customers Group range and click on the Ok button.
      4. Set Customers for Synchronization window opens, select the Customer Codes and BP Name to synchronize. It is mandatory to select the Account Type for Customers for synchronization.
      5. Click on the Ok button to mark the items for synchronization from SAP to Salesforce.



- **Product Synchronization**
  The system enables to integrate all the item master data along with Product Prices from SAP Business One to Salesforce. Scheduling a synchronization enables the system to integrate item masters automatically as per the schedule by running the Scheduler services.

    - **Set Bulk Items for Synchronization**

      To Synchronize Items from SAP to Salesforce, select items in bulk using the Set Items for Synchronization menu under Integration Hub.

      1. Choose Administration → Integration Hub → Set Items for Synchronizations.
      2. On clicking the Set Items for Synchronization, Set Items for Synchronization-Selection Criteria window opens.
      3. Select the items range and Item Groups range and click on Ok button.
      4. Set Items for Synchronization window opens, select check box for the Item Codes and Item Name to synchronize.
      5. Click on Ok button to mark the items for synchronization from SAP to Salesforce.

- **Contact Synchronization**
  The system enables to integrate all Contacts from Salesforce to SAP Business One and Vice Versa. Scheduling a synchronization enables the system to integrate Contacts automatically as per the schedule by running the Scheduler services.

- **Lead Synchronization**
  The system enables to integrate all Leads from Salesforce to SAP Business One and Vice Versa. Scheduling a synchronization enables the system to integrate Lead automatically as per the schedule by running the Scheduler services.


Caution

Customers must set the synchronization time settings on the redeployment of the Application.

16.2.2 Master Data Mapping Tool

This tool allows the user to map the already existing Account, Contact, Lead, and product data in Salesforce and SAP Business One. This is needed in case the same Account or Contact or Lead or product master already exists in both applications and you would like to map their internal code to prevent data duplicity between the applications.

To display the *Master Data Mapping Tool* window, choose *Administration* → *Integration Hub* → *Master Data Mapping Tool*.

Use the following steps to import the mapping data using the master data mapping tool:

1. Select a template from the *Template* dropdown list.
2. Select the Account or Contact or Lead or Product from the *Master Data Type* dropdown list.
3. Choose the *Download from App* button to download the data from Salesforce.
4. To check the data download status, choose the *Status* button.
5. Once the data download is complete, choose the *Prepare Template* button to generate the Microsoft Excel-based template for the selected master i.e. Account or Contact or Lead or product. The application downloads the data from Salesforce.
6. Open the template and provide the relevant information:
   - For the Customer template, you need to provide the *SAP B1 Card Code (*Customer Code*)*
   - For the Lead template, you need to provide the *SAP B1 Card Code (*Lead Code*)*
   - For Contact, you need to provide the *SAP B1 Card Code* and *SAP B1 Contact ID (*Customer Code and Contact ID*)*
   - For Product template, you need to provide the *SAP B1 Item Code*
7. Choose *Browse* button to navigate to the template path.
8. Choose the *Validate* button to check the correctness and completeness of the data in the selected template.
9. Choose the *Upload* button to import the data.

16.2.3 UDF Integration

The Salesforce connector now supports the integration of User Defined Fields (UDFs) between the Salesforce and SAP Business One applications. This functionality allows users to map and synchronize custom fields between both applications, ensuring that all relevant data is accurately and seamlessly shared. This enhancement improves data consistency and helps businesses maintain a comprehensive view of their operations across different platforms.

The Salesforce connector supports the integration of User Defined Fields (UDFs) on the following masters:

1. Customer (Accounts)
   - Business Partners Header
   - Business Partners Addresses
2. Lead
   - Business Partners Header
   - Business Partners Addresses
3. Contact Persons
   - Contact Persons Header
4. Items (Products)

- Items Header

To perform the UDF Integration, follow these steps:

10. Open the UDF Integration window by navigating to *Administration → Integration Hub → UDF Integration*.
11. The *UDF Integration-Selection Criteria* window will appear.
12. The active template for the Salesforce connector will automatically be displayed in the Template Name field.
13. Select the specific object you want to map UDFs for in the *Object Type* field.
14. Click *OK* to open the UDF Integration Mapping screen.
15. Click the *Retrieve Custom Fields* button to fetch the list of Salesforce custom fields.
16. In the left column titled *SAP User Defined Fields (UDF)*, select the SAP UDFs. In the *Mapped to Salesforce Custom Fields* column, select the corresponding Salesforce custom fields.
17. In the *Data Type* column, choose the data type for the Salesforce custom fields.
18. Click the *Add/Update* button to save the data.

> **Note**
>
> - In case, you do not want to integrate UDF information between the applications, you may delete the relevant row. Once the row is deleted, the UDF information will no longer be integrated during the initialization and synchronization process.
> - Ensure the decimal places of Salesforce custom fields and SAP B1 UDFs must be matched between both applications.

The following Salesforce data types for custom fields are supported for the UDF integration:

Salesforce Data Type	Type	SAP B1 UDF Type	Remarks
Phone	String	Alphanumeric	
Number	Number	Numeric	
AutoNumber	Number	Numeric	
Checkbox	Bool	Checkbox	
Currency	Number	Amounts	For Currency type custom fields in Salesforce, create the UDF with Type “Units and Totals” and Structure “Amounts” in SAP Business One.
Email	String	Alphanumeric	
Percent	Number	Percents	For Percent type custom fields in Salesforce, create the UDF with Type “Units and Totals” and Structure “Percents” in SAP Business One.
Picklist	String	Valid Values	For Picklist type custom fields in Salesforce, create the UDF with Validation “Valid Values” in SAP Business One.
Picklist_Multi_Select	String	Valid Values	For Picklist_Multi_Select type custom fields in Salesforce, create the UDF with Validation “Valid Values” in SAP Business One.
Text	String	Alphanumeric	
Text_Area	String	Alphanumeric	
Text_Area_Long	String	Alphanumeric	
URI	String	Alphameric	

The following Salesforce data types for custom fields are not supported for the UDF integration:

Salesforce Data Type	Type	Remarks
Date	String	
Date_Time	String	
Geolocation	Number	
Text_Area_Rich	String	
Text_Encrypted	String	
Time	String	


Caution

- The SAP Business One UDFs with "Linked to Entities" Validation will not appear in the column *SAP User Defined Fields (UDF)*.

16.3 Using Salesforce

16.3.1 Lead

The integration of Lead is bidirectional between SAP Business One and Salesforce.

The Lead integration is bidirectional between Salesforce and SAP Business One. Lead Information like *Name, E-mail, Billing* and *Shipping Address*, and other details are integrated from Salesforce to SAP Business One and vice-versa.

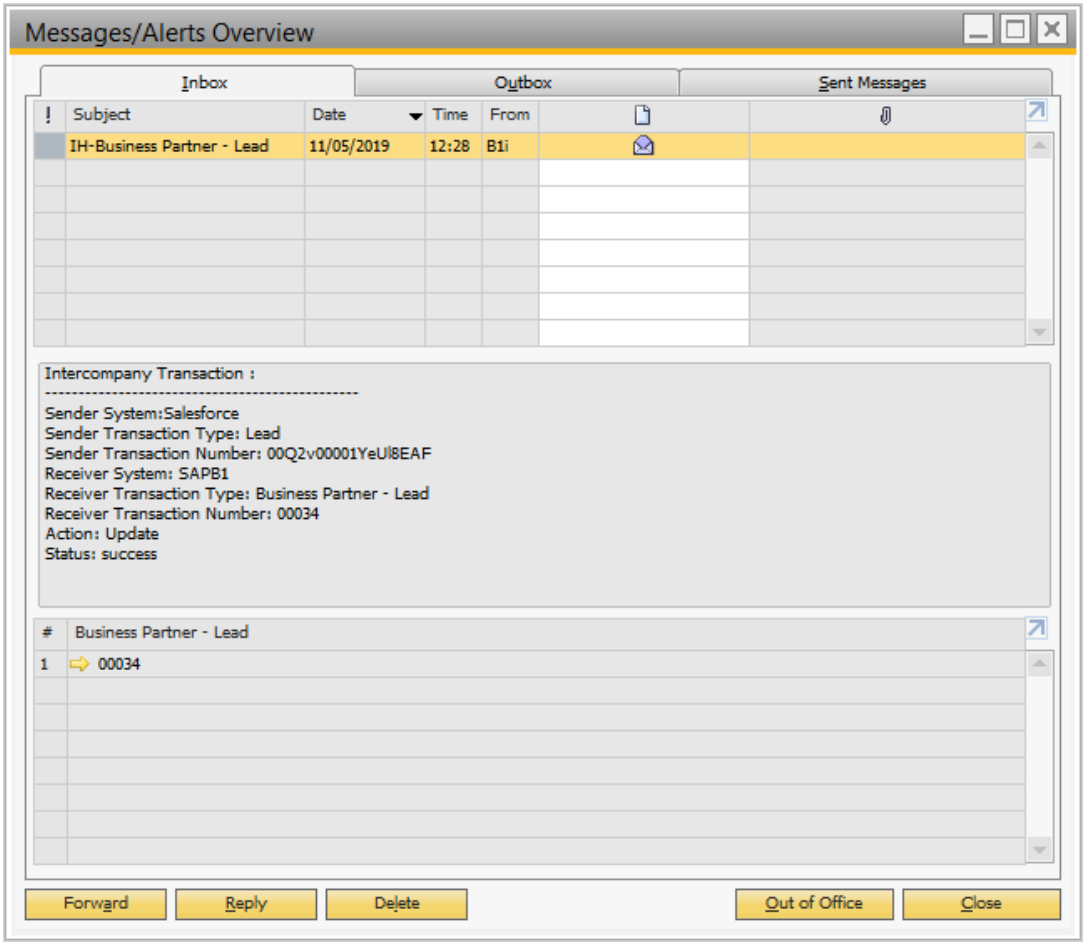
When the Lead is integrated from Salesforce to SAP Business One, the details such as *Salesforce Lead ID* is updated in *Cross Reference Code* in SAP Business One.

The following actions for Lead are supported:

- *Add Lead-* Add New Lead information. The Lead addition is bidirectional between Salesforce and SAP Business One.
- *Update Lead*- Edit Existing Lead information. The Lead is bidirectional between Salesforce and SAP Business One.

   Caution

  Lead deletion from Salesforce will not be integrated into SAP Business One and vice-versa.
  When Lead is converted into Accounts in Salesforce, the user has to manually select Type in Accounts details. Upon synchronization with sap Business One, this will be created as new Customer in SAP Business One. This will not convert the existing lead (synchronized as a lead earlier from Salesforce) to Customer.



16.3.2 Customer Master Data

The customer master data integration is bidirectional between Salesforce and SAP Business One. Customer Information like *Name, E-mail, Billing, Shipping Address and Contacts*, and other details are integrated from Salesforce to SAP Business One and vice-versa.

When the Account is integrated from Salesforce to SAP Business One, the details such as *Salesforce Account ID* is updated in *Cross Reference Code* in SAP Business One. *Salesforce Account Type* is updated in *Account Type* in SAP Business One.

The following actions for Customer Master Data are supported:

- *Add Customer*- Add new customer information. The customer master addition is bidirectional between Salesforce and SAP Business One.

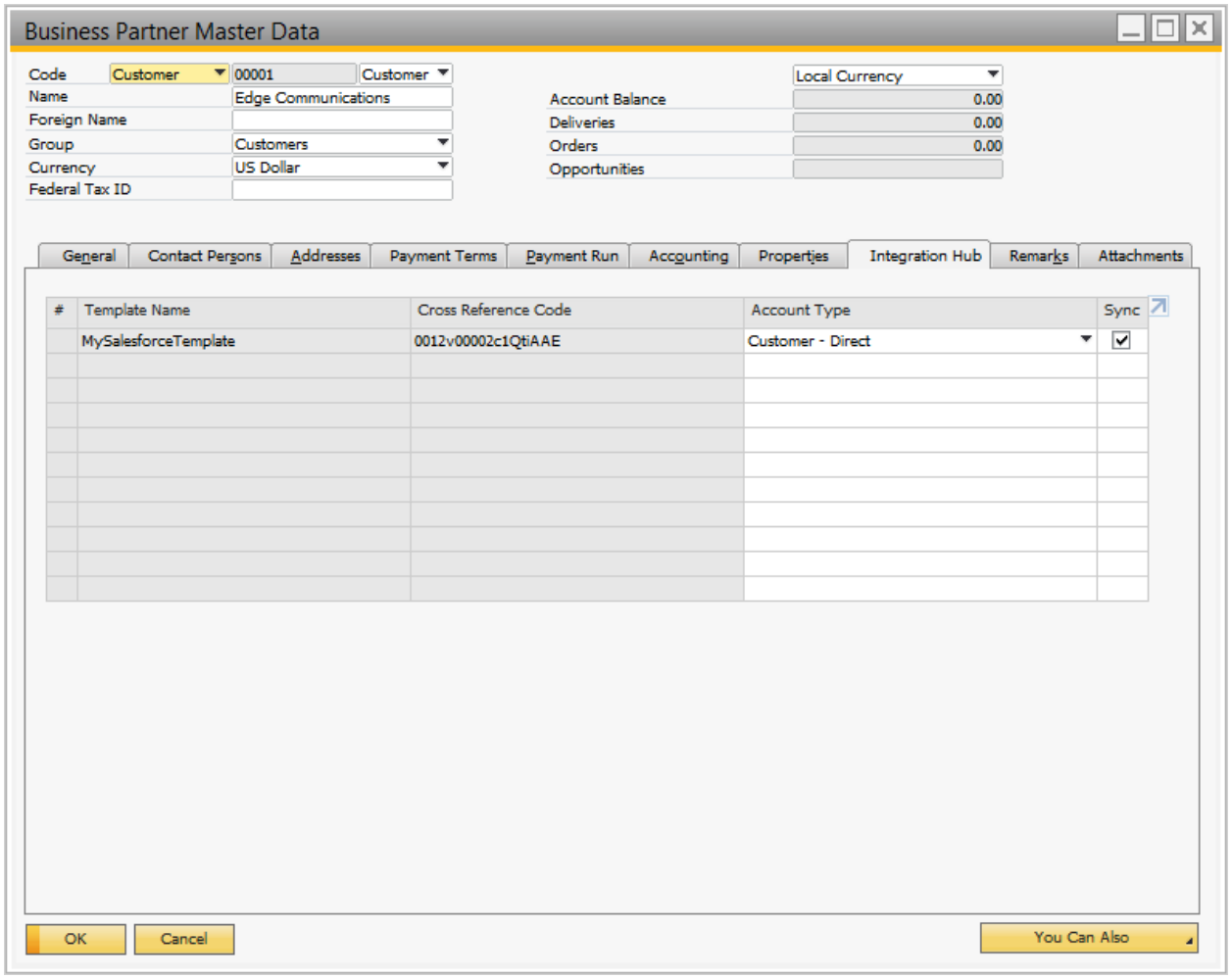
- *Update Customers*- Edit existing customer information. The customer master update is bidirectional between Salesforce and SAP Business One.

Caution

Customer deletion from Salesforce will not be integrated to SAP Business One and vice-versa.

To display the customer data which are synchronized from Salesforce to SAP Business One, choose SAP Business One *Main Menu* →*Business Partners* →*Business Partner Master Data* →*Integration Hub*.

The customers from Salesforce will have *Template Name* as defined for Salesforce.



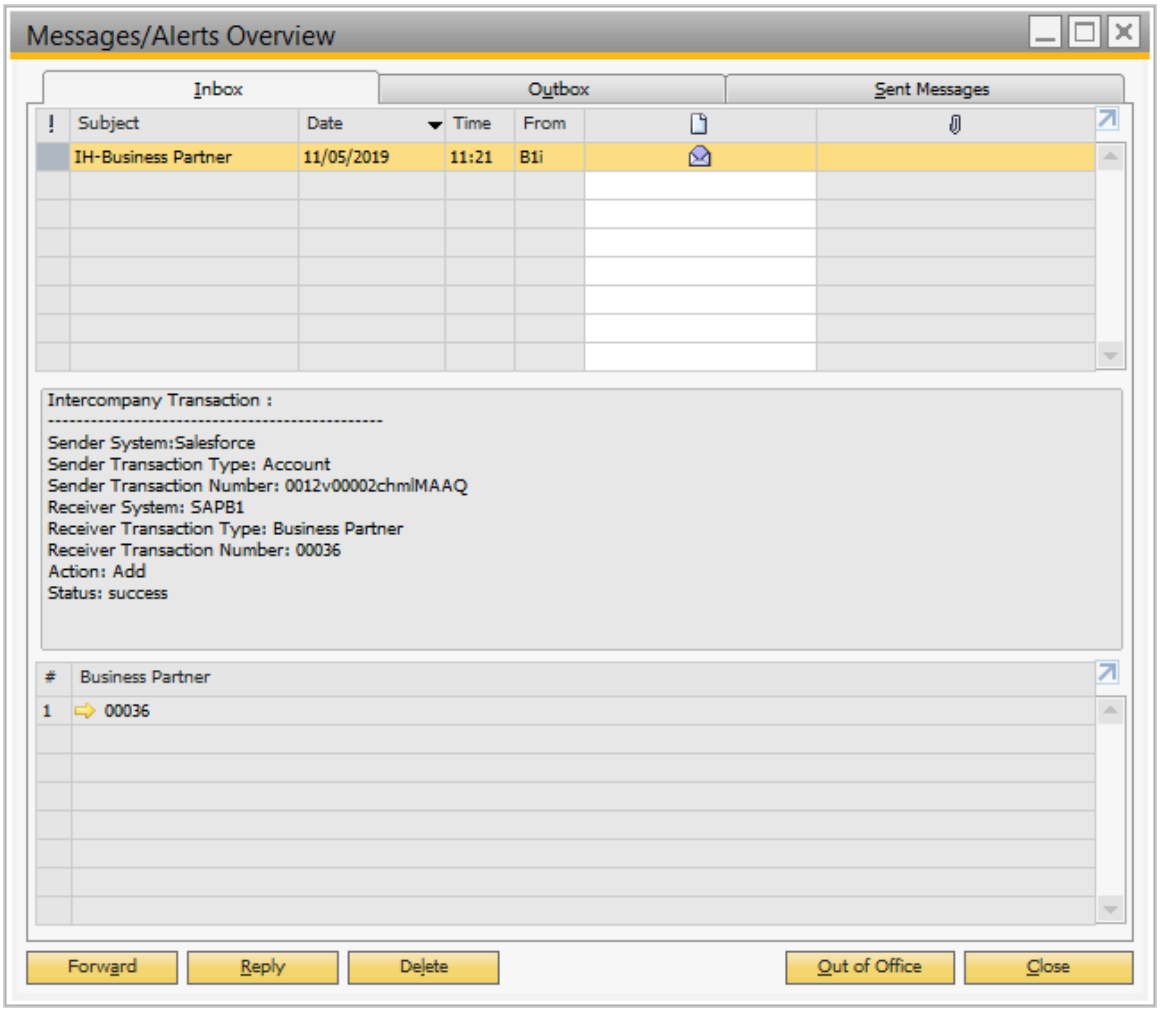
The following fields has been added to the window and is relevant to the Integration Hub. For details of other fields on the *Customer Master Data* window, refer to the SAP Business One Online Help.

Field Name	Description
Template Name	Displays the name of the Salesforce template.
Cross Reference Code	Displays the Salesforce customer id.
Account Type	Displays the Salesforce Account Type
Sync	Select Check-box to synchronize.

Message /Alert Overview

Once the customer data is synchronized, Message /Alert Overview Inbox displays the transaction information in SAP Business One. The following information is displayed on the screen:

- Sender System
- Sender Transaction Type
- Sender Transaction Number
- Receiver System
- Receiver Transaction Type
- Receiver Transaction Number
- Action
- Status



16.3.3 Contact Master Data

The Contact is bi-directional between Salesforce and SAP Business One. The Contact assigned to the Account in the salesforce is integrated to SAP Business One. Contact Information like *First Name, Last Name, E-mail, Phone Number, Address*, and other details are integrated between Salesforce and SAP Business One.

Caution

The Contact should be assigned to an Account for Integration.

Note

In Salesforce contact, the first name and last name of two contact persons cannot be same for an account.

16.3.4 Products Master Data

The System supports the integration of existing product data from Business One to Salesforce. Product add & update operations are supported from SAP Business One to Salesforce.

The *Item Code* in SAP Business One is mapped with Stock Keeping Unit (SKU), Prices and Product Code in Salesforce for integration. Product Synchronization from SAP Business One and Salesforce is uni-directional.

To synchronize the product from SAP Business One to Salesforce, choose *Main Menu* →*Inventory* → *Item Master Data*. Choose *Sync* in the Integration Hub Tab.

The following field has been added to the window and is relevant to the Integration Hub. For details of other fields on the *Item Master Data* window, refer to the SAP Business One Online Help.

Field Name	Description
Template Name	Displays the Name of the Salesforce Template.
Cross Reference Code	Displays the Salesforce Product ID for the product.
Sync	Select this checkbox to synchronize the product information from SAP Business One to Salesforce.

Caution

Product deletion from Salesforce and SAP Business One is not supported. If deleted product is used in transaction, then inconsistency in data will be observed.

16.3.4.1 Product

The integration of products is Unidirectional from SAP Business One to Salesforce.

16.3.4.2 Product Prices

The prices integration is uni-directional from SAP Business One to Salesforce. The application uses the price list defined in the *Price list* tab of Salesforce to integrate the prices from SAP Business One to Salesforce. *Retrieve Price Book* button retrieves the list of *Salesforce Price Books* from Salesforce to SAP Business One.

To open *Price List* Tab in Salesforce, go to *Administration* → *Integration Hub* → *Salesforce Settings* → *Price List.*

The mapped price list prices for the item is the integrated from SAP Business One to Salesforce.

Note

- If Multiple currencies are enabled in salesforce setting screen, three prices mapped in Item Master will be updated/replicated in Salesforce product master.

  For example - Primary currency –USD, Additional currency 1 – EUR and Additional Currency 2-CAD will be mapped under the price book of Salesforce as per the mapping done in Salesforce settings screen.

16.4 Salesforce Transactions

16.4.1 Windows Enhancements in SAP Business One

New fields that are relevant to the Integration Hub have been added to different document windows in SAP Business One. The fields provide additional information regarding the Salesforce integration transactions.

16.4.1.1 Opportunity

Opportunity integrates from Salesforce to SAP Business One. New fields in the *Opportunity* document window:

Field Name	Description
Template Name	Name of the Salesforce template.
External Opportunity ID	Opportunity ID generated from Salesforce

16.4.1.2 Sales Quotation

Sales Quotation integrates from Salesforce to SAP Business One. New fields in the *Sales Quotation* document window:

Field Name	Description
Template Name	Name of the Salesforce template.
External Quote ID	Quote ID generated in Salesforce.
External Opportunity ID	Opportunity ID generated from Salesforce.

16.4.1.3 Sales Order

Sales Order integrates from Salesforce to SAP Business One. New fields in the *Sales Order* document window:

Field Name	Description
Template Name	Name of the Salesforce template.
External Opportunity ID	Opportunity ID generated from Salesforce.
External Quote ID	Quote ID generated in Salesforce.
External Order ID	Order ID generated in Salesforce.

16.4.2 Opportunity

Opportunity from Salesforce integrates to SAP Business One on entering the *Expected Revenue* for an *Opportunity* in Salesforce. The integration is unidirectional from Salesforce to SAP Business One.

The following are the steps to integrated Opportunity from Salesforce to SAP Business One:

1. Create *Account* in Salesforce and integrate to SAP Baseness One.
2. Create *Opportunity* in Salesforce and enter the Amount in Opportunity Information in Salesforce.
3. Save the information in Salesforce.
4. On SAP Business One got to *Administration> Integration Hub> Salesforce Settings> Synchronization tab*.
5. Select Object type as *Opportunity* and click on *Sync Now* button.
6. Alert Message is generated and displays information about the synchronized Opportunity.

> **Note**
>
> If the salesforce Opportunity Stage is not mapped with Opportunity Stage in SAP Business One in Salesforce settings screen, then that opportunity will not be integrated to SAP Business One.

16.4.3 Sales Quotation

Sales Quotation from Salesforce integrates to SAP Business One on enabling the *Quotes* on *Quote Settings* window in Salesforce. The integration is unidirectional from Salesforce to SAP Business One.

The following are the steps to integrated Sales Quotes from Salesforce to SAP Business One:

1. *Enable Quotes*. On Salesforce go to *Build> Customize> Quotes> Quotes Settings*. Select the check-box *Enable Quotes* and save the settings. On Page Layout Selection page in Salesforce select the *Opportunity Layout* and save the settings.
2. On Salesforce, select *Opportunity* from *Recent Opportunities*. On the Opportunity page go to Quotes and create a new Quote. On created Quote, Add Line Item.
3. On SAP Business One go to *Administration> Integration Hub> Salesforce Settings> Synchronization tab*.
4. Select Object type as *Sales Quotation* and click on *Sync Now* button.
5. Alert Message is generated and displays information about the synchronized Sales Quotation.

> **Note**

If Line Item is not added in the Quote in Salesforce, then that Quote will not integrate with Sales Quotation in SAP Business One.

If the Quote status is Draft, then that quote will not integrate to Sales Quotation in SAP Business One. All Status other than Draft will integrate from Salesforce to SAP Business One.

16.4.4 Sales Order

Orders from Salesforce integrates to Sales Order SAP Business One. The integration is unidirectional from Salesforce to SAP Business One.

The following are the steps to integrate Orders from Salesforce to SAP Business One:

1. Create *New Order* with a Contract Number and Product in Salesforce.

2. Change the Status of Contract from Draft to Activated on Contract page by clicking on *Activate* button in Salesforce.
3. Change the Order Status from Draft to Activated on Order page by clicking on *Activate* button in Salesforce.
4. On SAP Business One got to *Administration> Integration Hub> Salesforce Settings> Synchronization tab*.
5. Select Object type as *Sales Order* and click on *Sync Now* button.
6. Alert Message is generated and displays information about the synchronized Sales Order.

Note

If Line Item is not added in the Orders in Salesforce, then that Orders will not integrate with Sales Order in SAP Business One.

If the Orders status is Draft, then that Orders will not integrate to Sales Order in SAP Business One. Only the Orders with status Activated will integrate with Sales Order in Sap Business One.

17 Expensify

Expensify is a cloud-based business accounting system designed to manage expenses and transactions using real-time data processing. Expensify automates the receipt and expense management process.

Caution

Expensify integration with SAP Business One is supported for the Collect and Control group policies.

Note

Expensify Report Currency of Policy Group must match with SAP B1 local currency.

17.1 Setting Up Expensify in Integration Hub

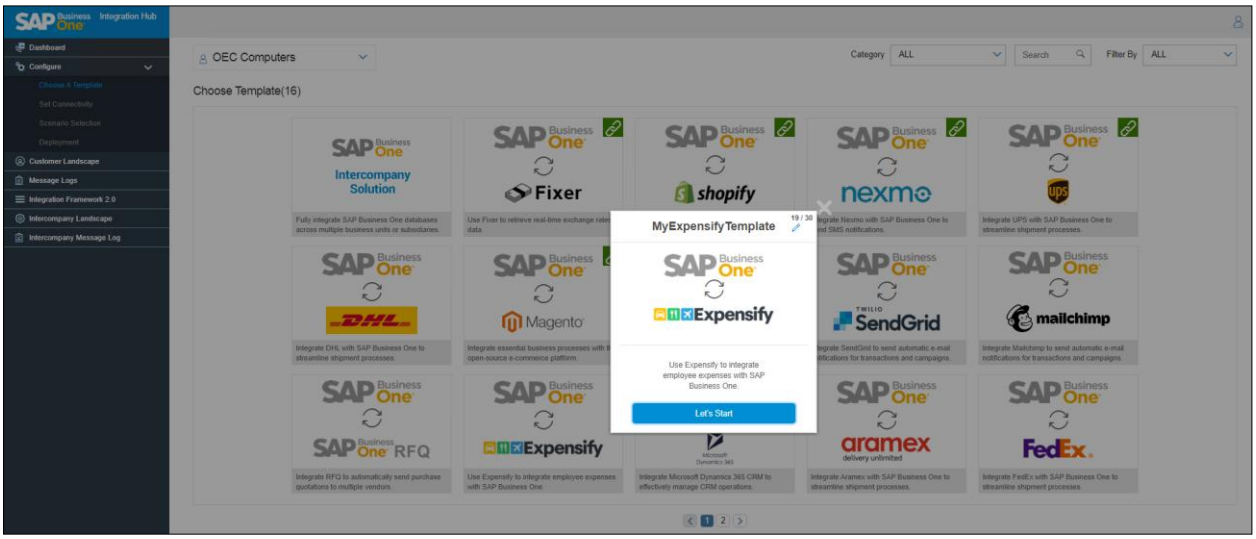
The following are the steps to setup Expensify in Administration Console:

1. Add New Customer. Refer to the section Add New Customer in the document.
2. Select the *Expensify* template to integrate.

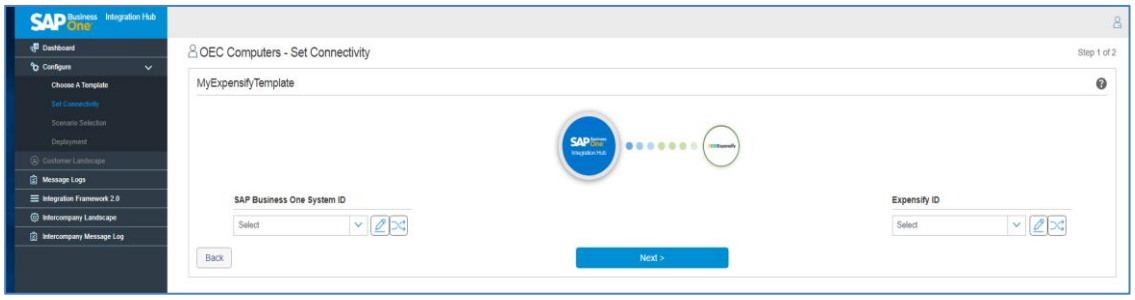
   Upon selecting the template, a message "*Let's Start*" prompts to start configuring the connectivity settings. Change the template name by clicking the Edit button to edit the template name. Otherwise, it appears as *MyExpensifyTemplate.*

   Note

   By default, the name of the template appears as *MyExpensifyTemplate* and can be renamed.



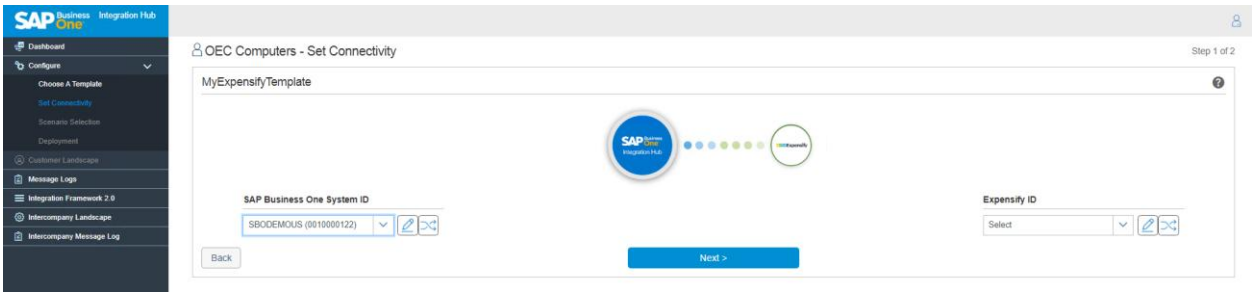
3. Upon choosing the *Let's Start* button, a *Set Connectivity* page appears with the following two steps to complete the configurations for connectivity.



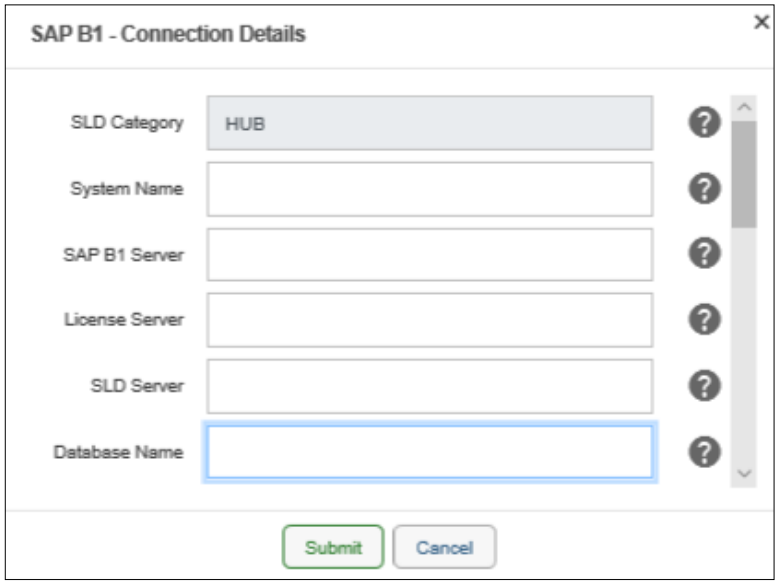
Step 1 – Set Connectivity

4. Choose the SAP Business One SLD to provide the connection between *SAP Business One System Id* and *Expensify Id.*

> **Note**
>
> By default, the solution displays all the SAP Business One SLDs available in *SLD Category* selected during customer creation.



5. To add a new SLD or edit existing SAP Business One SLD under SAP Business System Id area, choose *Add / Edit* button.



The *SAP Business One Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. **Note** *System Name* is the mandatory field to add or update SAP Business One SLD.
SAP Business One Server	Enter SAP Business One Server Name / IP Address. **Note** *SAP Business One Server* is the mandatory field to add/update SLD information for SAP Business One.
License Server	Enter *License Server* details. i.e. Server Name or IP Address and port number of the SAP Business One License Server. The default port is 30000.
SLD Server	Enter the valid *SLD Server* details with port. **Note** *SLD Server* details is the mandatory field to add/update SLD information for SAP Business One.
Database Name	Enter the name of the SAP Business One Database. **Note** *Database Name* is the mandatory field to add/update SAP Business One System SLD. **Caution** The *Database Name* must be entered same as SAP Business One Database Name.
Database Type	Currently, only Microsoft SQL Server 2005, 2008, 2012, 2014, 2016, 2017 and SAP Hana DB are supported. Choose the database type from the dropdown list. **Note** *Database Type* is the mandatory field to add/update SAP Business One SLD.

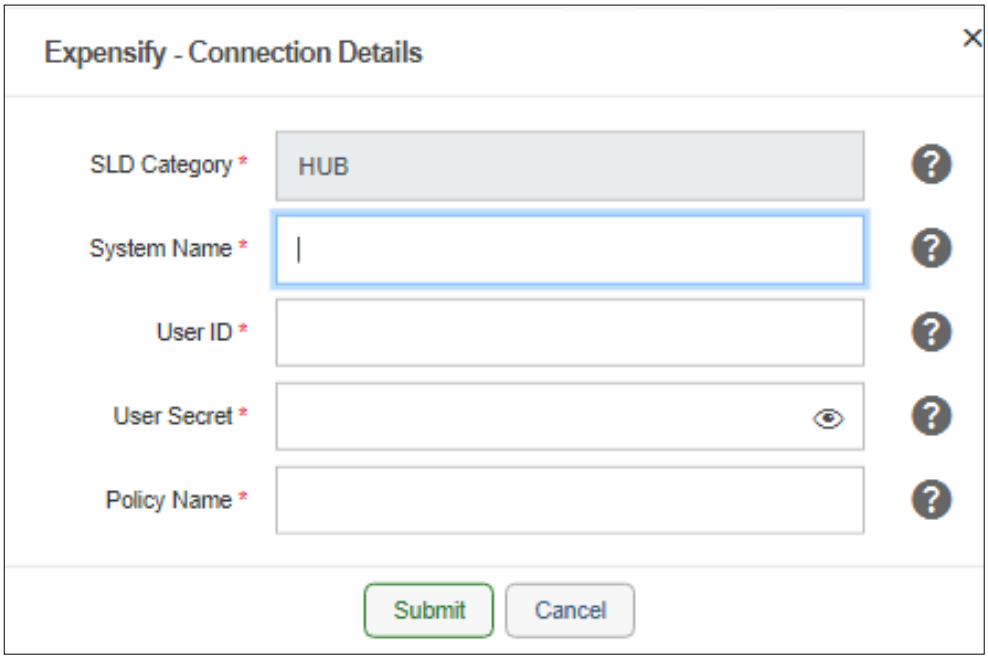
Database User	Enter the user to access the company database using the database connection. *Database User* is the mandatory field to add/update SAP Business One SLD. Caution The *Database User* must be valid. Invalid *Database User* will result in failure to establish the connection.
Database Password	Enter a valid password for database login. Note *Database Password* is the mandatory field to add/update SAP Business One SLD. Caution The *Database Password* must be valid. Invalid *Database Password* will result in failure to establish the connection.
Database Port	Enter the port for database.
Username	Enter `B1i` in this field. Note *Username* is the mandatory field to add/update SAP Business One SLD. It is set as B1i by default and un editable. Caution Ensure that a user with this name exists in the SAP Business One database.
Password	Enter a valid password for B1i user of SAP Business One.
Language	Select the language from the list of languages.
Is Trust	Select *True* or *False*. The default value for this field is *False*. To use a trusted connection, choose *True* from the dropdown list.
JcoPath	Enter path for jco library. Example of Installation path of JCO: C:\Program Files (x86)\SAP\SAP Business One DI API\JCO\LIB
DI ProxyHost	The DI Proxy host must be defined if B1i is installed on a separate server (this is, other than the SAP Business One server). The value in this field must be same as SAP Business One Server address. Example *Proxyhost* can be same as *SAP Business One Server*.
DI ProxyPort	The default value of *DI Proxy Port* is 2099.
Proxy Host	The proxy host is defined in a multi-instance scenario. If the B1i server connects to the SAP Business One server through a proxy server then, enter the address of the proxy server in this field.
Proxy Port	Enter the proxy port in this field.

6. Enter the valid data and choose the *Submit button.* An *SAP Business One SLD* is created.

7. Choose the *Test Connection* icon to test the connection between the SAP Business One System Id in Integration Hub and SAP Business One System Landscape Directory.

   If the connection is successful, a success message appears “Test Connection Successful”. If the connection is unsuccessful, a failure message appears “Test Connection Failed”. Please provide the correct credentials.

8. To add / edit Expensify instance SLD under Expensify Id area, choose the Add / Edit button.



The *Expensify Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. **Note** *System Name* is the mandatory field to add or update Expensify SLD.
User ID	The user ID provided by Expensify when your account is set up to access the Expensify Integration Server at location *https://www.expensify.com/tools/integrations/*
User Secret	The partnerUserSecret provided by Expensify when your account is set up to access the Expensify Integration Server at location *https://www.expensify.com/tools/integrations/*
Policy Name	The Group policy name given at location *https://www.expensify.com/admin_policies* . **Note** Application supports only Group Policy. The Individual policy are not supported.

9. Provide the valid information in the fields and choose the *Submit button.* SLD for Expensify will be created.

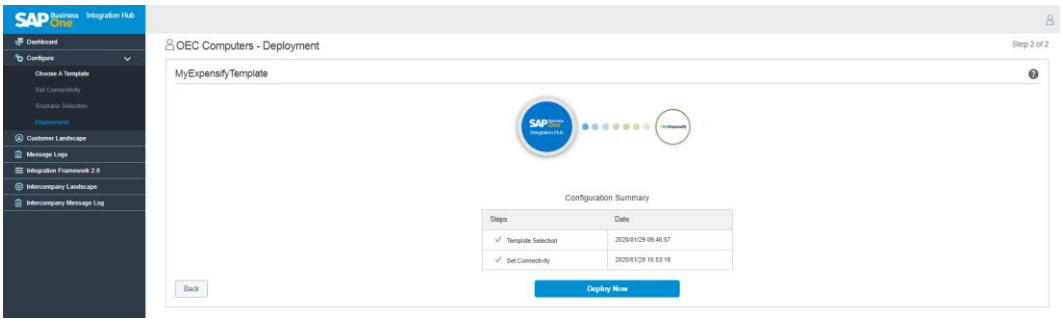


10. Choose the *Test Connection*  icon to test the connection between the Integration Hub and Expensify.
If the connection is successful, a success message appears “Test Connection Successful”.
If the connection is unsuccessful, a failure message appears “Test Connection Failed”.

11. Choose the *Next* button to proceed to Step2.

Configuration Summary

12. The Configuration summary displays the *Date* and time for *Template Selection,* and *Set Connectivity steps.*

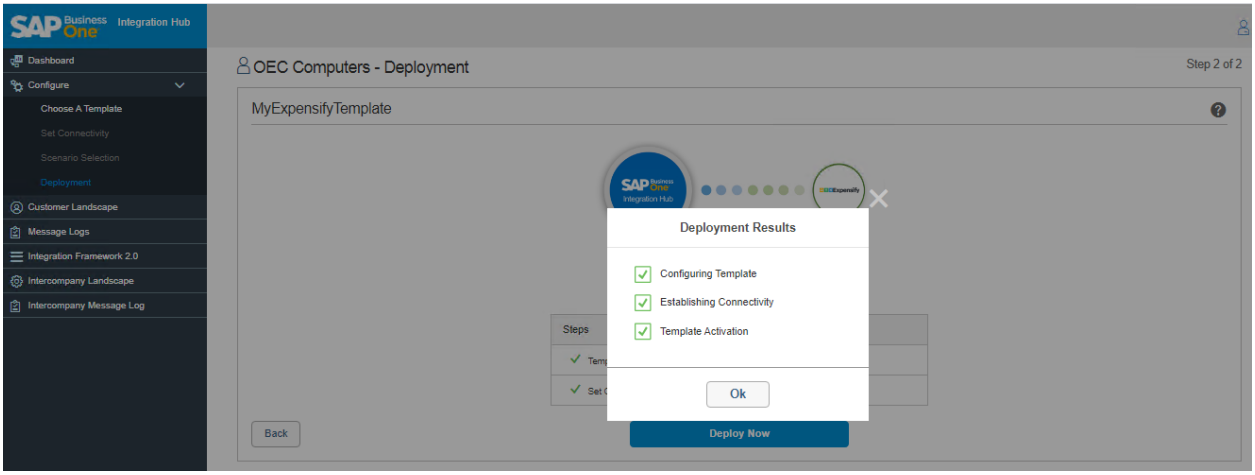


Step 2 – Deployment

13. To deploy the solution, choose the *Deploy Now* button.

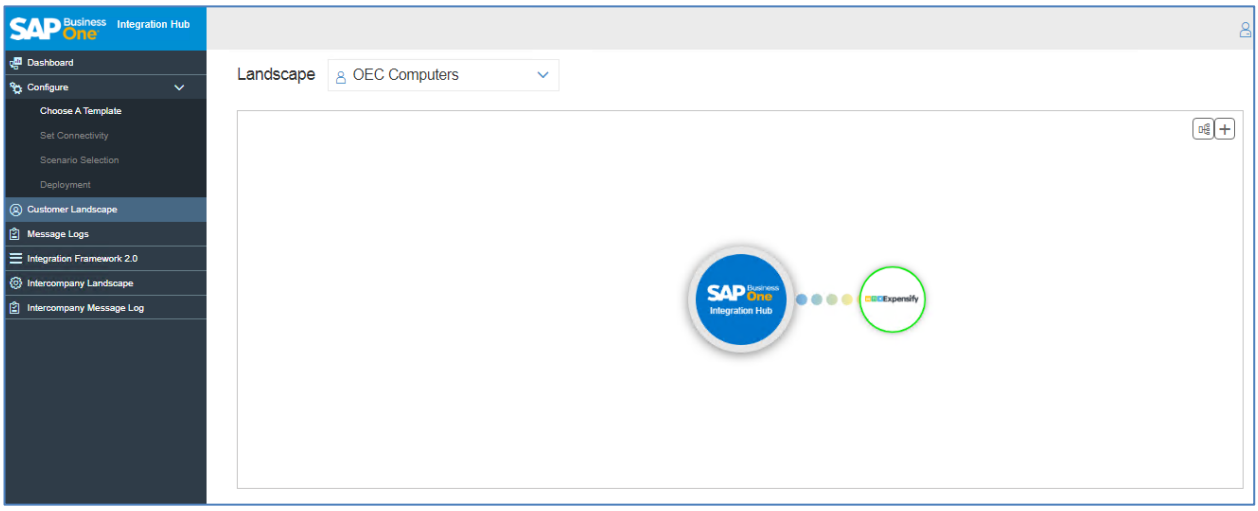
14. The application prompts you to provide the license details. For more information, refer to the Assigning the Integration Hub licenses section in this document.

15. The Integration Hub displays the *Deployment Results* whether the deployment is successful or failed. The checkbox in the *Deployment Results* window displays status of each deployment stage.



> **Note**
>
> After you enable the multi-branch function in SAP Business One, you must re-deploy the Expensify Template.

16. Once all stages are checked, click the *OK* button on the *Deployment Results* window to proceed. The successful deployment of solution in Integration Hub results in enabling the features in SAP Business One. Customer Landscape displays connection of SAP Business One to Expensify.



17. To modify the template after successful feature activation, right click on the logo of the template.

18. Right click on the Expensify logo displays window with the following fields:

Field Name	Description
View	Displays the *Set Connectivity* window in view mode.
Edit	Displays the *Set Connectivity* window in Edit mode.
De-activate	Deactivates the Expensify deployment.
Deployment Status	Displays the deployment status with date and time.
Delete Template	Choose delete template to delete the template. It is an Irreversible action. Note On deleting the template, the template will be marked as Inactive in the application deployment status window in SAP Business One.
Delete Deployment Info.	Choose delete deployment info. to delete the complete deployment information of the template. It is an Irreversible action. Note On deleting the deployment information, the template will not be deleted from deployment panel screen, it will be deactivated only.
Manage Licenses	Choose Manage License to Activate/Deactivate the integration Hub License. For more information, see Managing the Integration Hub licenses section in this guide.

17.2 Setup in SAP Business One

1. In the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Application Deployment Status*. The *Deployment Status* field should display 'Active', indicating that the feature is deployed in the Integration Hub. If the status displays 'Inactive', then redeploy the feature in the *Integration Hub.*

   The following are the statuses that can be visible on the *Application Deployment Status* screen:

   - *Active*: The status represents the solution is deployed and active.
   - *Inactive*: The status represents the feature template is not inactive.

   For more details, refer to the *Application Deployment Status* section in this guide.

   > **Note**
   >
   > You must restart the SAP Business One client after application deployment from the Integration HUB. On login, the Add-On script will execute, and the relevant setup window will appear.

2. *In* SAP Business One, choose *Main Menu* → *Administration* → *Integration Hub* → *B1i Server Details* to enter the B1i Server details. This window enables to enter the B1i Server Details.

The *B1i Server Details* window contains the following fields:

Field Name	Description
B1i Server Address	Enter the server name or IP address of B1i server.
B1i Port	Enter the port of the B1i Server. The default port for HTTP is 8080
Username	B1i run time user
Password	Enter the password for B1i run time user.
HTTPS	Select the checkbox to enable the solution to use HTTPS.

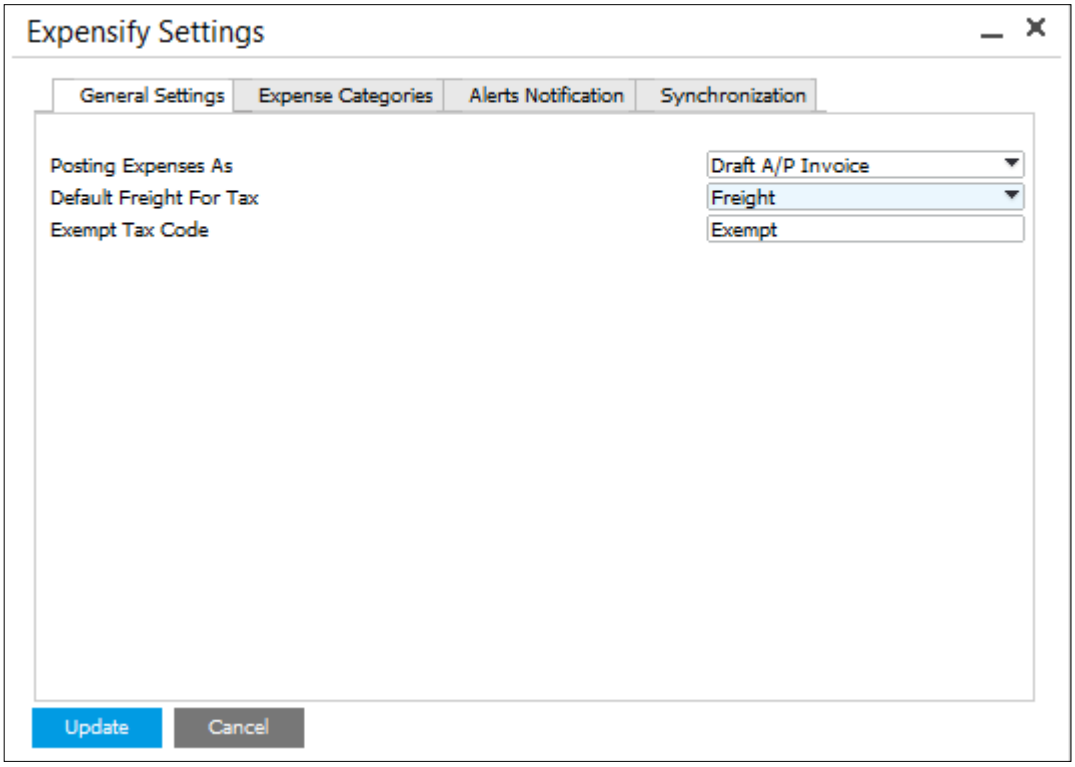
> **Note**
>
> Please ensure that the SLD entry for this company exists in SAP B1if and the solution is properly deployed.

17.2.1 Expensify Settings

On the Main Menu go to *Administration* → *Integration Hub* → *Expensify Settings* to configure the required Expensify Settings.

17.2.1.1 General Settings

Configure the general settings in the *General Settings* tab in *Expensify Settings* window.



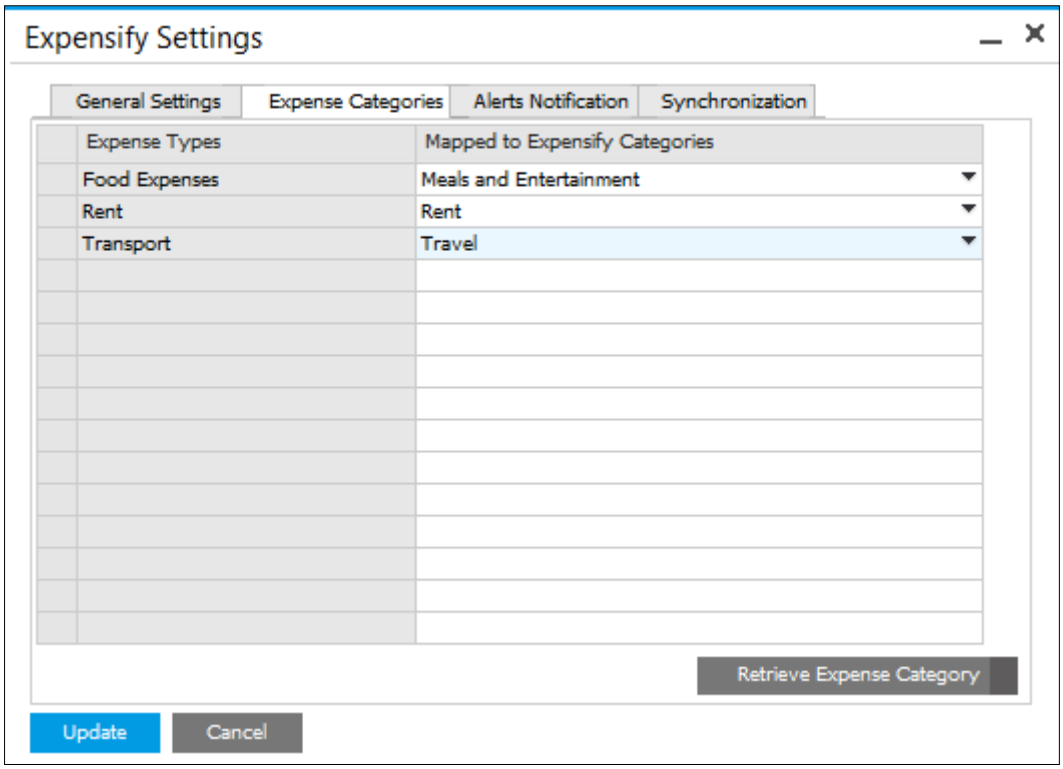
The *General Settings* tab of *Expensify Settings* window contains the following fields:

Field Name	Description
Posting Expenses As	Select Draft A/P Invoice Select Draft A/P Invoice if draft invoice document is required to be created. Select Firm A/P Invoice if invoice document is required to be added directly.
Default Freight for Tax	Select a freight component for the tax component. The selected freight component is used to integrate the expense tax amount from Expensify to SAP Business One
Exempt Tax Code	Select a tax code from the list of tax codes. The selected tax code is used in all expenses integrated from Expensify to SAP Business One. The selected tax code must be of zero rate.
Default Branch for Document	Select the branch that will be used while adding document from Expensify to SAP Business One.

	Note This field is relevant for the multi-branch function.

17.2.1.2 Expense Category Settings

Configure the *Expense Category Settings* tab in *Expensify Settings* window. Click on *Retrieve Expense Category* to map SAP B1 Expense Types to Expensify Categories.



Note

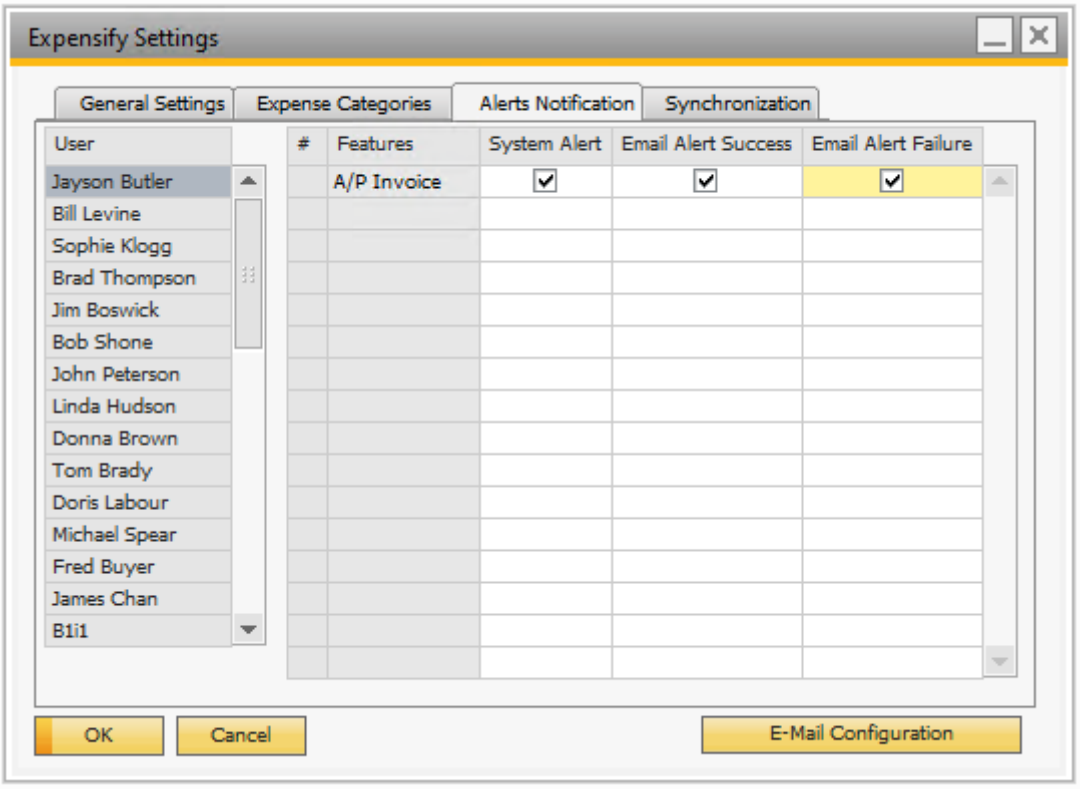
The Expense Type Setup in SAP Business One must be created prior to clicking on *Retrieve Expense Category* button.

Note

1. In the "Expense Types" setup within SAP Business One, the "Paid by Company" checkbox is deselected for expenses that are mapped to Expensify Categories in the Expensify Settings. If the "Paid by Company" checkbox is already selected for expenses mapped to Expensify Categories in the Expensify settings, it will be automatically deselected once the add-on is connected.
2. It is recommended to map Single Expensify Category to Single Expense Type of SAP Business One.

17.2.1.3 Alert Notification Settings

Configure the *Alert Notification Settings* tab in the *Expensify Settings* window. Select the User name from the list for A/P Invoice notification and check the checkbox for system Alert.



The *Alert Notification* tab of *Expensify Settings* window contains the following fields:

Field Name	Description
User	Displays the list of users in SAP Business One. Choose a user for setting up the alert notification authorizations. This field is read-only.
Features	Displays the list of Integration Hub features for Expensify. This field is read-only. The Alert can be set for *Customers, Products, Sales Order, A/R Reserve Invoice, and Incoming Payment.*
System Alert	Select this checkbox to send notifications as a system alert.
Email Alert Success	Select the checkbox to send email notifications for successful transactions.
Email Alert Failure	Select the checkbox to send email notifications for failed transactions.

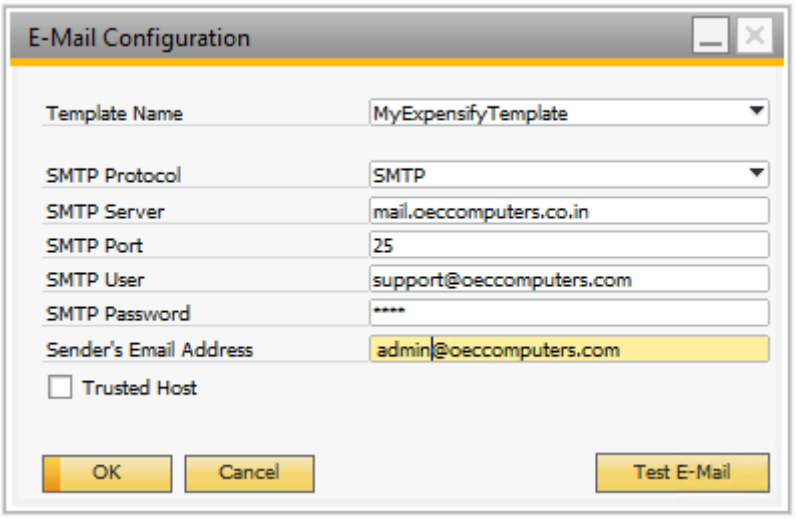
Note

In case of an email for failed transactions, the user will receive the failed XML payload as an attachment.

Email Configuration

Click the *Email Configuration* button to set up the SMTP details for email alert notifications.

Alternatively, to display the *Email Configuration* window, choose *Administration → Integration Hub → E-Mail Configuration*.



The *Email Configuration* window contains the following fields:

Field Name	Description
Template Name	Display the active Expensify template.
SMTP Protocol	Choose the communication protocol SMTP/SMTPS/TLS.
SMTP Server	Specify the address of the outgoing mail server.
SMTP Port	Specify the port for the outgoing mail server.
SMTP User	Specify the user's name for the outgoing mail server.
SMTP Password	Specify the password for the outgoing mail server.
Sender's Email Address	Specify the email address of the sender.
Trusted Host	Select the checkbox to add the name of the e-mail server to the list of trusted hosts.
Test E-Mail	Click the button to test the connection, The email notification will be sent to the logged-in user in SAP Business One. **Note** Ensure that the Login User's email ID is correctly specified in the User Setup.

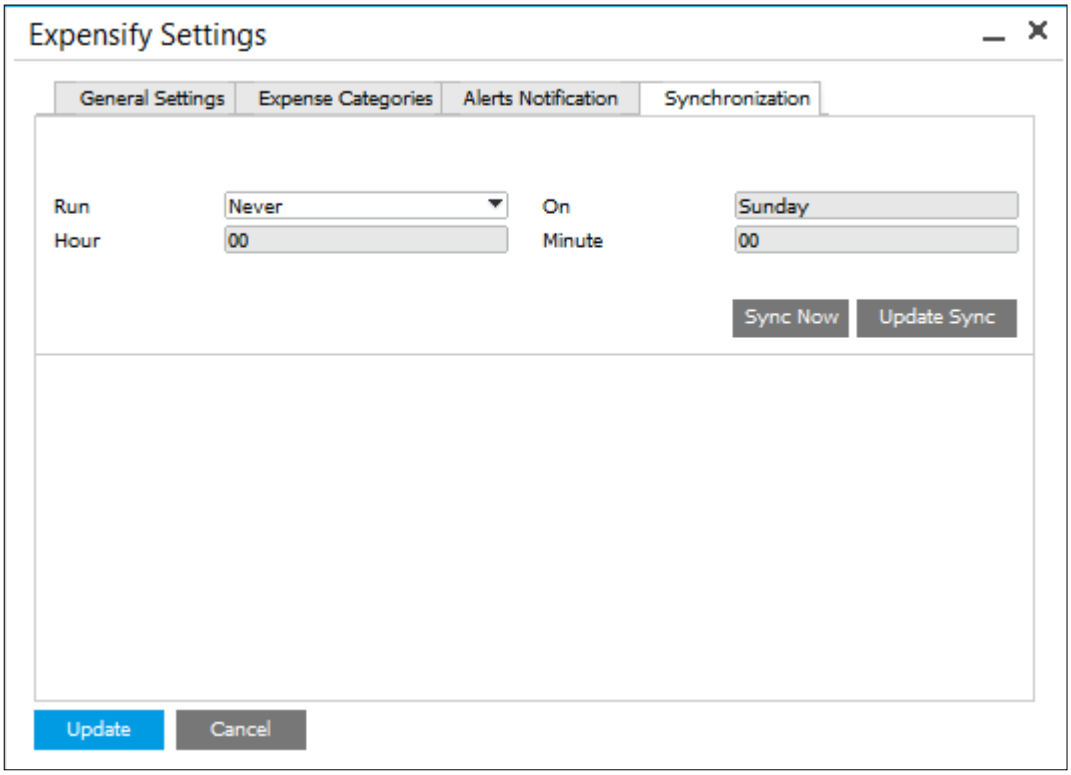
17.2.1.4 Synchronization

The following two methods are available for synchronizing data between SAP Business One and Expensify:

- **Manual Synchronization:**
  If you want integrations to be performed immediately (instead of waiting for the SCHEDULER services to run), choose the *Sync Now* button to immediately synchronize data for the selected object.

- **Automatic Synchronization:**
  You can configure automatic integrations between SAP Business One and Expensify at a specified frequency (daily or weekly) and at specific intervals. The synchronization runs based on the schedule setting.

  Click on the Update button to save the settings.



17.3 Using Expensify

17.3.1 Expense Data

The Expense data integration is unidirectional (in other words, from Expensify to SAP Business One). On creation of an expense under a category in Expensify, the expense selected in Expensify integrates as A/P Invoice (service) in SAP Business One. The expense belonging to group policy which is used at the time of deployment, will only be integrated to SAP Business One.

Note

The email id of the employee in employee master data in SAP Business One should match the employee email id in Expensify. The Business Partner master data code should be vendor, and Business Partner type should be employee. This employee should be linked to vendor.

18 Aramex

Aramex provide customized logistics solutions anywhere in the world effectively and reach more businesses and consumers regionally and globally. Aramex is an international express, mail delivery and logistics services company.

The integration of Aramex and SAP Business One achieve the following objectives:

1. Business Partner Address Validation.
2. Freight Rates.
3. Shipment tracking Number.

18.1 Aramex Setup in Administration Console

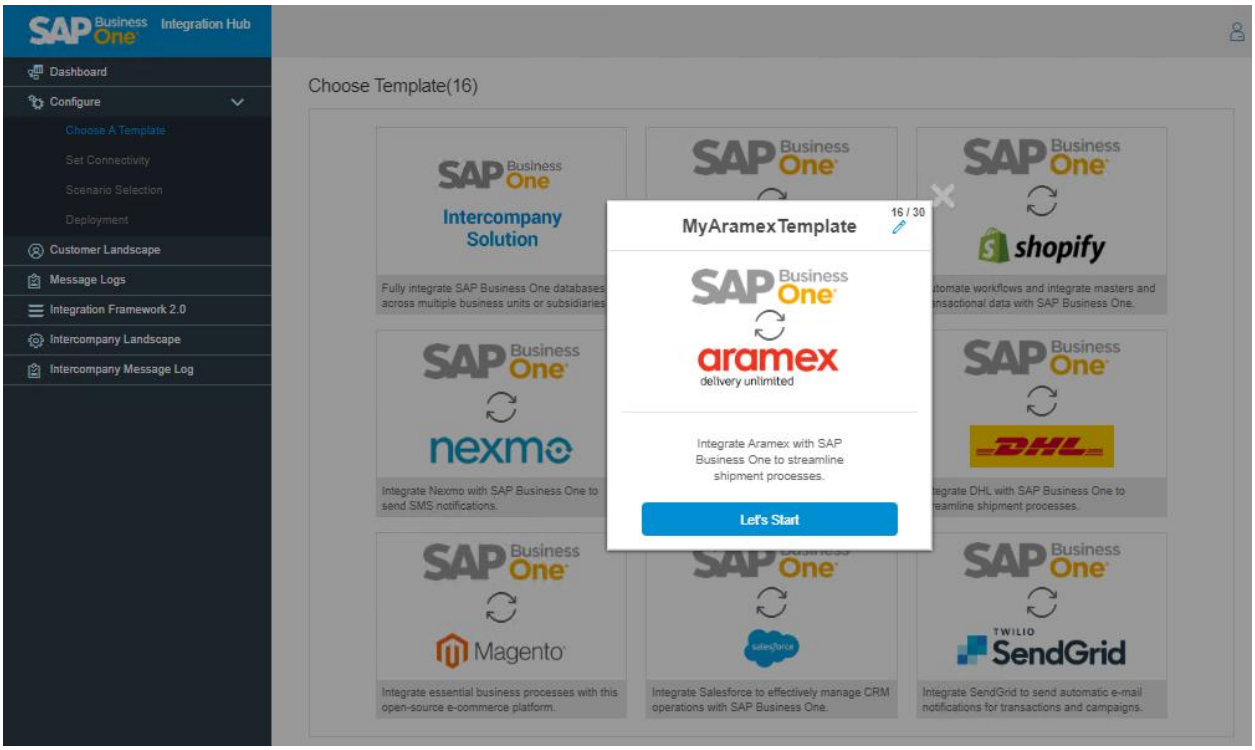
The following are the steps to setup Aramex in Administration Console:

1. Add New Customer. Refer to section Add New Customer in the document.
2. Select the *Aramex* template to integrate.

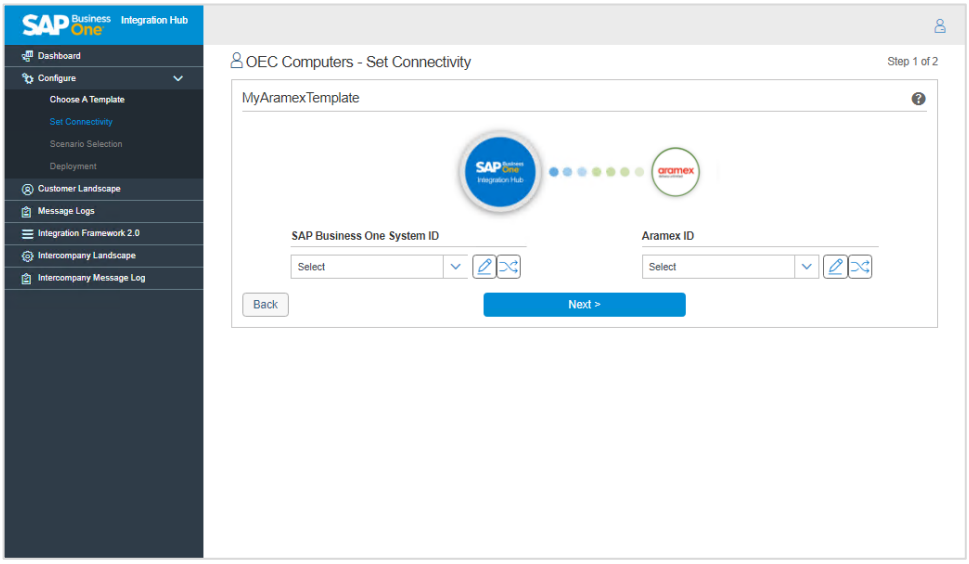
   Upon selecting the template, a message "*Let's Start*" prompts to start configuring the connectivity settings. Change the template name by clicking the Edit button to edit the template name. Otherwise it appears as *MyAramexTemplate.*

Note

By default, the name of the template appears as *MyAramexTemplate* and can be renamed.



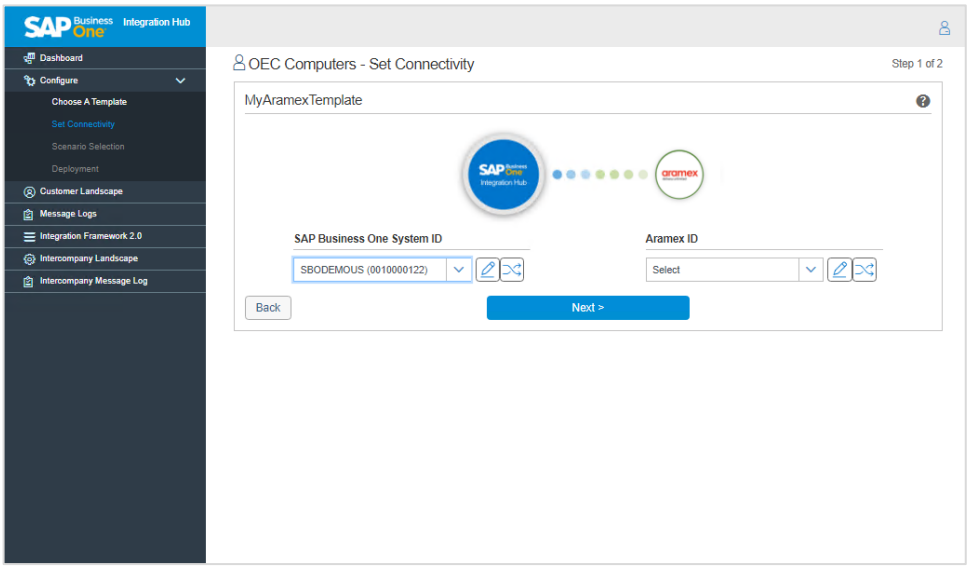
3. Upon choosing the Let's Start button, a Set Connectivity page appears with the following two steps to complete the configurations for connectivity.



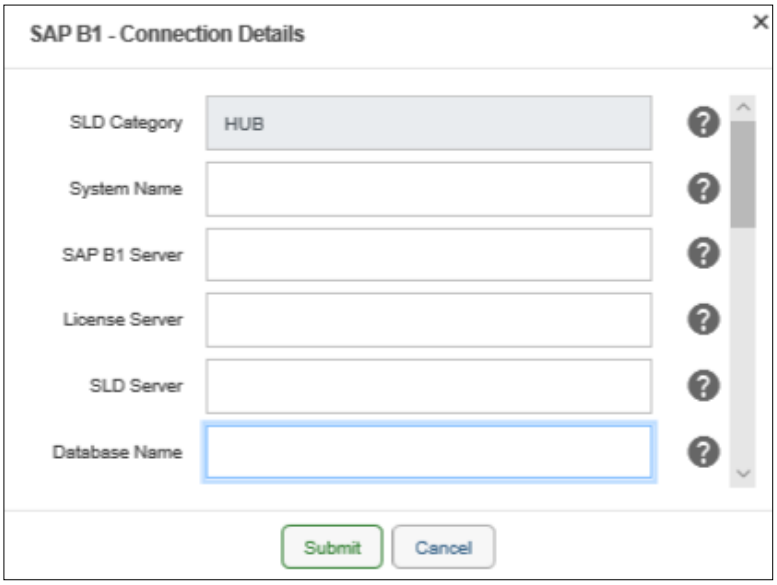
Step 1 – Set Connectivity

4. Choose the SAP Business One SLD to provide the connection between *SAP Business One System Id* and Aramex Id.

> **Note**
>
> By default, the solution displays all the SAP Business One SLDs available in *SLD Category* selected during customer creation.



5. To add a new SLD or edit existing SAP Business One SLD under *SAP Business One System Id* area, choose Add / Edit button.



The *SAP Business One Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update SAP Business One SLD.
SAP Business One Server	Enter SAP Business One Server Name / IP Address. Note *SAP Business One Server* is the mandatory field to add/update SLD information for SAP Business One.
License Server	Enter *License Server* details. i.e. Server Name or IP Address and port number of the SAP Business One License Server. The default port is 30000.
SLD Server	Enter the valid *SLD Server* details with port. Note *SLD Server* details is the mandatory field to add/update SLD information for SAP Business One.
Database Name	Enter the name of the SAP Business One Database. Note *Database Name* is the mandatory field to add/update SAP Business One System SLD. Caution The *Database Name* must be entered same as SAP Business One Database Name.
Database Type	Currently, only Microsoft SQL Server 2005, 2008, 2012, 2014, 2016, 2017 and SAP Hana DB are supported. Choose the database type from the dropdown list.

	Note *Database Type* is the mandatory field to add/update SAP Business One SLD.
Database User	Enter the user to access the company database using the database connection. *Database User* is the mandatory field to add/update SAP Business One SLD. Caution The *Database User* must be valid. Invalid *Database User* will result in failure to establish the connection.
Database Password	Enter a valid password for database login. Note *Database Password* is the mandatory field to add/update SAP Business One SLD. Caution The *Database Password* must be valid. Invalid *Database Password* will result in failure to establish the connection.
Database Port	Enter the port for database.
Username	Enter **B1i** in this field. Note *Username* is the mandatory field to add/update SAP Business One SLD. It is set as B1i by default and un editable. Caution Ensure that a user with this name exists in the SAP Business One database.
Password	Enter a valid password for B1i user of SAP Business One.
Language	Select the language from the list of languages.
Is Trust	Select *True* or *False*. The default value for this field is *False.* To use a trusted connection, choose *True* from the dropdown list.
JcoPath	Enter path for jco library. Example of Installation path of JCO: C:\Program Files (x86)\SAP\SAP Business One DI API\JCO\LIB
DI ProxyHost	The DI Proxy host must be defined if B1i is installed on a separate server (this is, other than the SAP Business One server). The value in this field must be same as SAP Business One Server address. Example *Proxyhost* can be same as *SAP Business One Server*.
DI ProxyPort	The default value of *DI Proxy Port* is 2099.
Proxy Host	The proxy host is defined in a multi-instance scenario. If the B1i server connects to the SAP Business One server through a proxy server then, enter the address of the proxy server in this field.
Proxy Port	Enter the proxy port in this field.

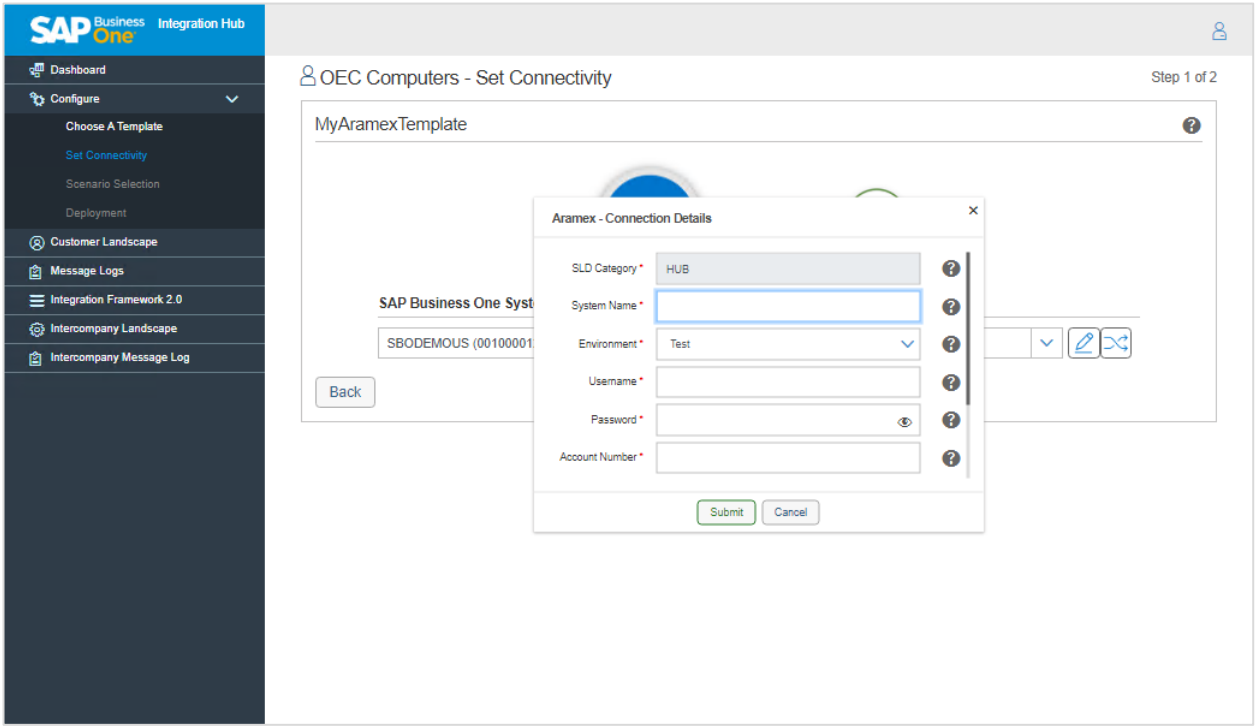
6. Enter the valid data and choose the *Submit* button. An SAP Business One SLD is created.

Choose the *Test Connection* icon to test the connection between the SAP Business One System Id in Integration Hub and the SAP Business One System Landscape Directory.

If the connection is successful, a success message appears “Test Connection Successful”. If the connection is unsuccessful, a failure message appears “Test Connection Failed”. Please provide the correct credentials.

7. To add / edit Aramex instance SLD under Aramex Id area, choose the *Add / Edit* button.

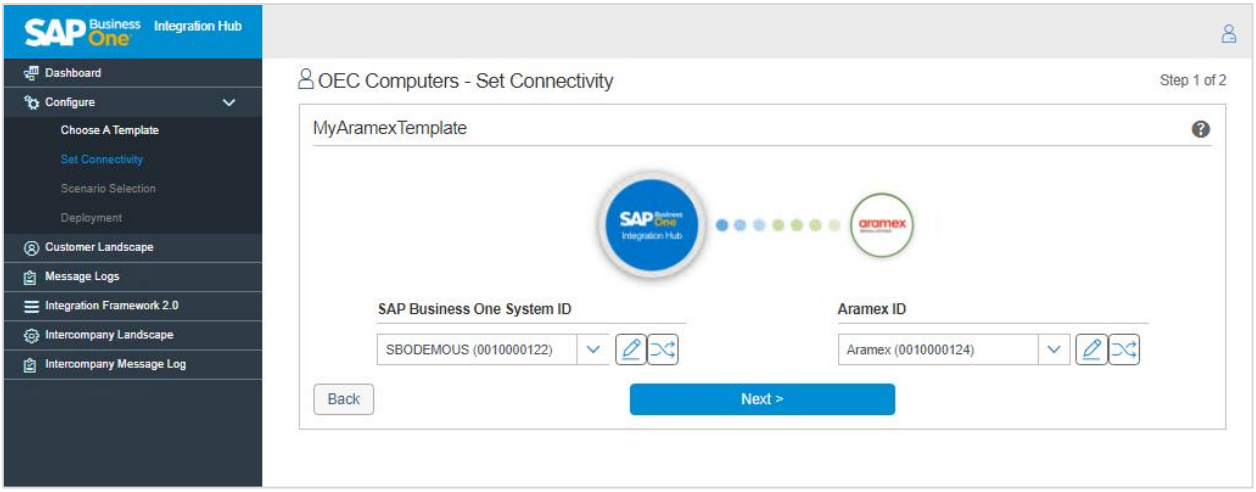
Aramex Connection Details window appears.



The *Aramex Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. **Note** *System Name* is the mandatory field to add or update Aramex SLD.
Environment	Select from the Test or Production environment.
Username	Enter the Site Id provided by Aramex
Password	Enter the password for the login to Aramex site.
Account Number	Enter the Aramex Account number provided by Aramex
Account Pin	Enter the Account Pin
Account Entity	Enter the Account Entity
Country Code	Enter Country code

8. Provide the valid information in the fields and choose the *Submit button.* SLD for Aramex is created.

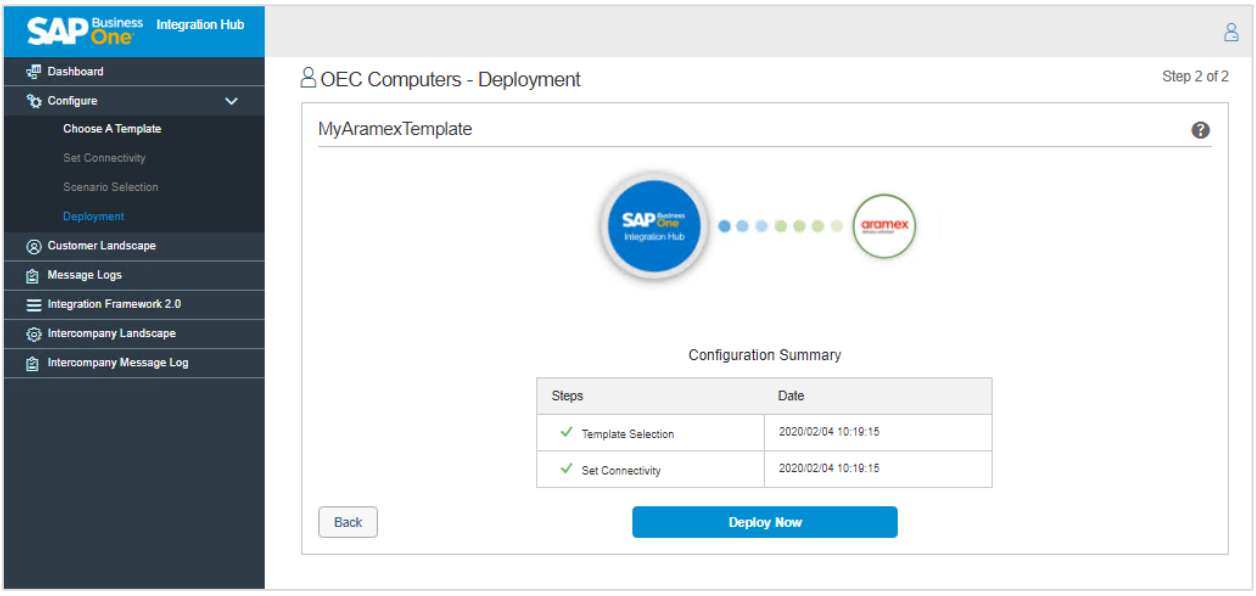


9. Choose the *Test Connection* icon to test the connection between the Integration Hub and Aramex.
If the connection is successful, a success message appears “Test Connection Successful”.
If the connection is unsuccessful, a failure message appears “Test Connection Failed”.

10. Choose the *Next* button to proceed to Step2.

Configuration Summary

11. The Configuration summary displays the *Date* and time for *Template Selection* and *Set Connectivity steps*.

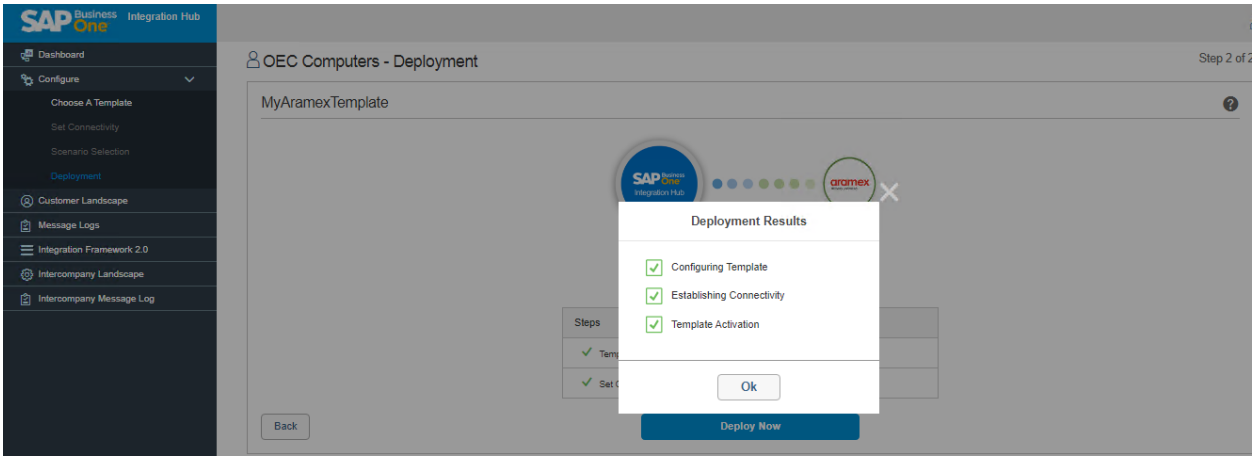


Step 2 – Deployment

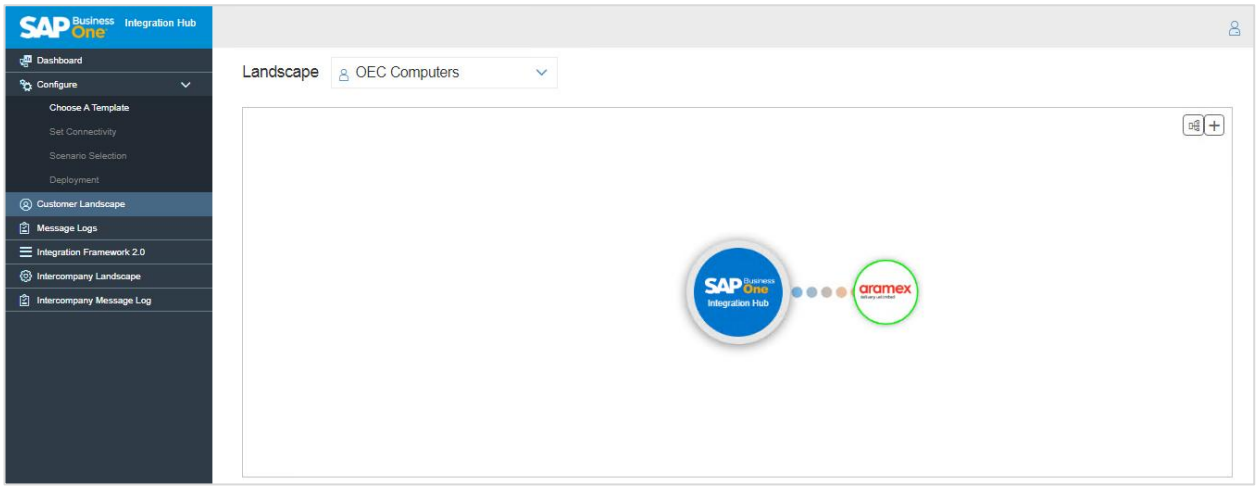
12. To deploy the solution, choose the *Deploy Now* button.

13. The application prompts you to provide the license details. For more information, refer to the Assigning the Integration Hub licenses section in this document.

14. The Integration Hub displays the *Deployment Results* whether the deployment is successful or failed. The checkbox in the *Deployment Results* window displays status of each deployment stage.



15. Once all stages are checked, click the *OK* button on the *Deployment Results* window to proceed. The successful deployment of solution in Integration Hub results in enabling the features in SAP Business One. Customer Landscape displays connection of SAP Business One to Aramex.



16. To modify the template after successful feature activation, right-click on the logo of the template.

17. Right click on the Aramex logo displays window with the following fields:

Field Name	Description
View	Displays the *Set Connectivity* window in view mode.
Edit	Displays the *Set Connectivity* window in Edit mode.
De-activate	Deactivates the Aramex deployment.
Deployment Status	Displays the deployment status with date and time.

Delete Template	Choose delete template to delete the template. It is an Irreversible action. Note On deleting the template, the template will be marked as Inactive in the application deployment status window in SAP Business One.
Delete Deployment Info.	Choose delete deployment info. to delete the complete deployment information of the template. It is an Irreversible action. Note On deleting the deployment information, the template will not be deleted from deployment panel screen, it will be deactivated only.
Manage Licenses	Choose Manage License to Activate/Deactivate the integration Hub License. For more information, see Managing the Integration Hub licenses section in this guide.

18.2 Setup in SAP Business One

1. In the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Application Deployment Status*. The *Deployment Status* field should display 'Active', indicating that the feature is deployed in the Integration Hub. If the status displays 'Inactive', then redeploy the feature in the *Integration Hub.*

   The following are the statuses that can be visible on the *Application Deployment Status* screen:

   - *Active*: The status represents the solution is deployed and active.
   - *Inactive*: The status represents the feature template is not inactive.

   For more details, refer the *Application Deployment Status* section in this guide.

   > **Note**
   >
   > You must Re-start the SAP Business One client after Aramex deployment from the Integration HUB. On login, the Add-On script will execute and relevant setup window appears.

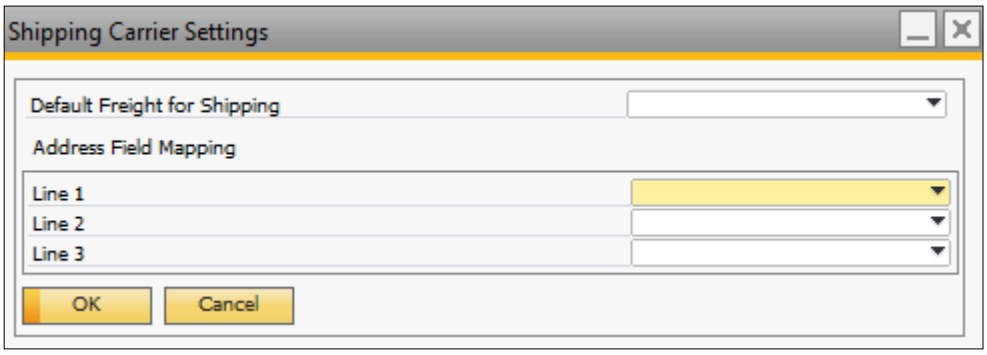
2. *In* SAP Business One, choose *Main Menu* → *Administration* → *Integration Hub* → *B1i Server Details* to enter the B1i Server details. This window enables to enter the B1i Server Details.

The *B1i Server Details* window contains the following fields:

Field Name	Description
B1i Server Address	Enter the server name or IP address of B1i server.
B1i Port	Enter the port of B1i Server. The default port for HTTP is 8080
Username	B1i run time user
Password	Enter the password for B1i run time user.
HTTPS	Select the checkbox to enable the solution to use HTTPS.

> **Note**
>
> Please ensure that the SLD entry for this company exists in SAP B1if and the solution is properly deployed.

3. In SAP Business One, choose *Main Menu* → *Administration* → *Integration Hub*→ *Shipping Carrier Settings* to configure the shipping carrier settings for Aramex.



Note

- You must define the ISO Currency code for base and all other currencies defined in database.
- The Shipping Carrier Settings are mandatory settings for integrating with SAP Business One.

The *Shipping Carrier Settings* window contains the following mandatory fields:

Field Name	Description
Default Freight for Shipping	For shipping amounts, the application uses default freight defined in shipping carrier settings which is picked from SAP.
Address Field Mapping – Line 1	Select the address line 1 item from the list of address line items. The following is list of optional address line items: • Address Name 1 • Address Name 2 • Street/ PO Box • Block • Street No. • Building/Floor/Room
Address Field Mapping – Line 2	Select the address line 2 item from the list of address line items. The following is list of optional address line items: • Address Name 1 • Address Name 2 • Street/ PO Box • Block • Street No. • Building/Floor/Room
Address Field Mapping – Line 3	Select the address line 3 item from the list of address line items. The following is list of optional address line items: • Address Name 1 • Address Name 2 • Street/ PO Box • Block • Street No. • Building/Floor/Room

18.3 Using Aramex

18.3.1 Address Validation

Address Validation helps in validating the *Ship To* and *Bill To* addresses to avoid any address related issues in later stages. The address validation API from Aramex is used to request general validation of city, state and zip code.

The validate address functionality in SAP Business One is available in the:

- Business Partner Master Data
- Delivery Document

18.3.1.1 Business Partner Master Data

The addresses in SAP Business One can be validated according to the Aramex address format in the customer master data.

In SAP Business One, choose *Main Menu* → *Business Partner* → *Business Partner Master Data* → *Addresses.*

To validate the *Bill To* and *Ship To* addresses of a customer, choose the icon in the *Addresses* Tab in *Business Partner Master Data*.

Note

The validate address functionality in *Business Partner Master Data* works only if the *Shipping Type* in the *General* tab is Aramex.

18.3.1.2 Delivery Document

Addresses in SAP Business One can be validated according to Aramex address format in delivery document. To validate the *Bill To* and *Ship To* addresses of a customer, choose the icon in the *Logistics* tab in the delivery document.

Note

The validate address functionality in *Delivery Document* works only if the *Shipping Type* in the *Logistics* tab is Aramex.

18.3.1.3 Windows Enhancement

New fields that are relevant to the Aramex have been added to the Delivery Document. The fields provide additional information regarding the Aramex transactions.

Field Name	Description
Get Tracking Number	Fetches the tracking number from Aramex. User can use this button when the tracking number is not fetched at the time of adding the document.
Logistics	
Service	Displays the Aramex services based on Ship from country. Note The application uses the first line warehouse country as ship from country.
Integration Hub	
Payer	Payer may be Shipper, Receiver, or Third Party.
Bill Account Number	Bill Account number given by freight carrier.
Customs Value	Goods value disclosed to customs
Insurance Amount	Amount insured for the goods.
Product Type	Feature Type of the product
Payment options	Method of payment for shipment
Third Party Address	Third Party Address

18.3.1.4 Address Validation Result

Address Validation Result enables to validate the addresses as per Aramex address format with the help of API and notifies the user with the error message or successful message. SAP Business One displays the result with specific colors having a particular meaning as per the color result.

Example

If the address validation is

- **Successful**, the system displays the address in green color, along with the message in the status bar and suggestions in the grid.
- **Unsuccessful** or failed, the system displays the address in red color, along with the message in the status bar and suggestions in the grid.

18.3.2 Freight Quote

Freight Quote helps in getting a list of all the shipping services and rates based on the package's specification. The *Freight Quote* functionality in SAP Business One is available in *Packing Slip* window of *Delivery Document* only.

Prerequisite

The following are the prerequisites for getting Freight Quotes from Aramex:

- The *Shipping Type* in the *Logistics* tab should be **Aramex** and Aramex service should be selected.
- The item used in delivery document must have *Length, Width, Height, and Weight* defined.
- Customer *Tel1, Fax Number* and *Mobile Phone* must be defined in *Main Menu* → *Business Partner* → *Business Partner Master Data* →*General* Tab.
- *Mobile Phone* and *Fax Number* must also be defined for the logged in user in the *Users-Setup* window.

18.3.2.1 Get Freight Quote

Get Freight Quote checks for freight quote through API based on the package type selected in the *Packing Slip* in *Delivery Document*.

To get the freight quote:

1. In the Delivery document, choose *Main Menu* → *Sales A/R* → *Delivery* → *Logistics tab.*
2. Select the customer and validate the *Bill To* and *Ship To* addresses of a customer, using the icon.
3. On Integration Hub Tab. Based on the requirement, specify the values in the Payer, Bill Account Number, Customs Value, Insurance Amount, Product Type, Payment options. If Payer is third Party, then specify the Third Party Address and Third Party Contact Person.
4. Right-click on the *Delivery* window and select *Packaging Slip*.
5. Provide the *Package No., Type* and *Weight (lbs./kg)* unit.

> **Note**
> The Aramex package type used in packing slip must have *Length, Width, Height defined* in *Package Types-Setup* window.

6. In Line level move the item from *Available Items* list to *Package Contents* list and choose *Get Freight Rate* button.
7. The freight quote from Aramex is updated into the packing slip. Click on *Ok* button to close Packaging Slip.
8. The amount in the freight field of delivery document displays the Freight amount.

18.3.3 Shipment Tracking Number

Shipping Tracking Number automatically updates the tracking number from Aramex when the delivery document is added. If the solution fails to update the tracking number while updating the freight amount, the solution provides the flexibility to fetch the tracking number by choosing *Get Tracking No.* button in the *Delivery* window.

To get the Tracking Number:

1. In SAP Business One, choose *Main Menu* → *Sales A/R* → *Delivery.* Complete the Delivery document and click on *Add* Button.
   Specify all the information as mentioned in the steps of *Get Freight Quote*.

2. A pop up displays a message *You cannot change this document after you have added it. Continue?* Click on *Yes* to continue.
3. A tracking number is generated.
4. Alternatively Click on *Get Tracking Number* button on the Delivery document, if delivery document is already added.
5. Copy the tracking number and track the Package in Aramex site.

Note

The *Tracking Number* is generated only when customer phone number is updated for in *Business Partner Master Data* and address is verified

18.3.4 Print Labels

Once shipment tracking number is generated, the user can create the labels from the Aramex site.

https://www.aramex.com/help/Content/Topics/Shipping/Shipments/Print_a_shipment_label.htm

To print a shipment label:

1. Log in and on the Dashboard page, go to Shipments.
2. Search for the shipment you want to edit.

   In the Status menu, select Ready for pickup, so the results contain the ready for pickup shipments only.
3. In the list of ready for pickup shipments, click Label near the required shipment.

   The label is downloaded to your device as a .pdf file.

19 FedEx

"FedEx" is a syllabic abbreviation of the name of the company's original air division, Federal Express. FedEx is the industry's global leader, providing rapid, reliable, time-definite delivery to more than 220 countries and territories.

The integration of FedEx and SAP Business One achieves the following objectives:

1. Business Partner Address Validation.
2. Freight Rates.
3. Shipment tracking Number.

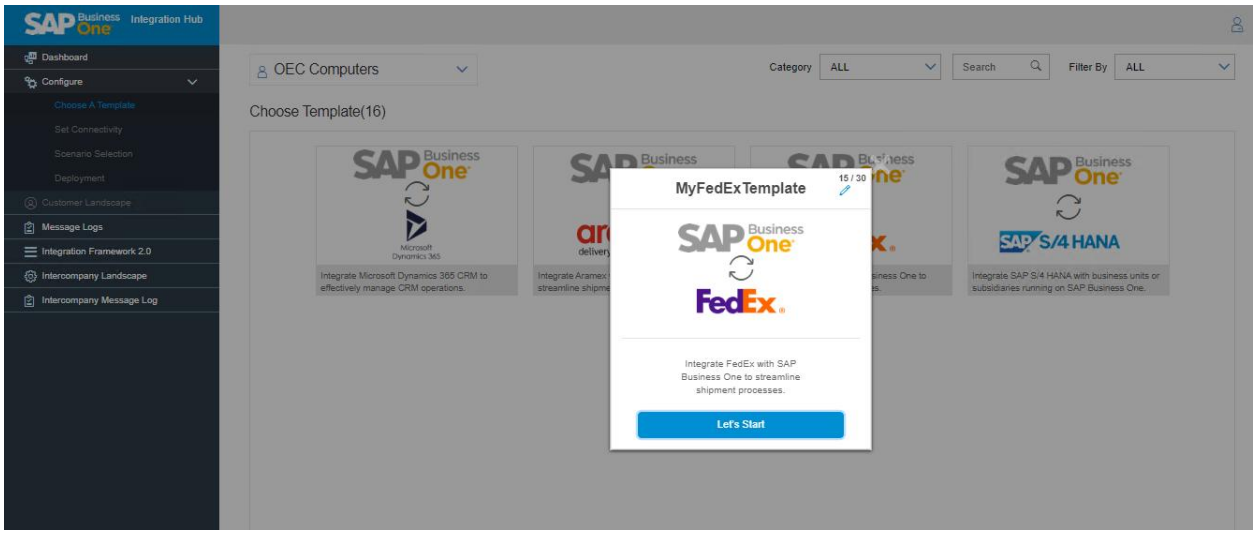
19.1 FedEx Setup in Administration Console

The following are the steps to setup FedEx in Administration Console:

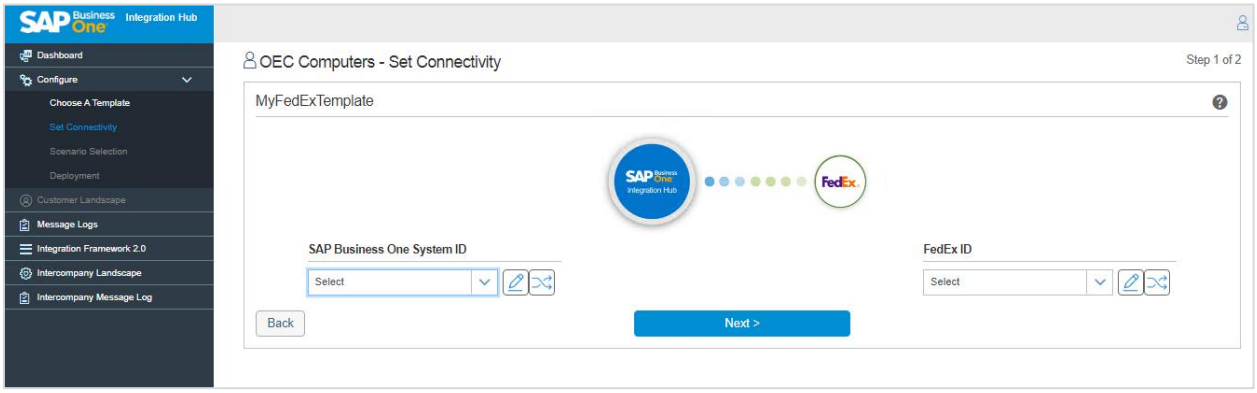
1. Add New Customer. Refer to section Add New Customer in the document.
2. Select the *FedEx* template to integrate.

   Upon selecting the template, a message "*Let's Start*" prompts to start configuring the connectivity settings. Change the template name by clicking the Edit button to edit the template name. Otherwise it appears as *MyFedEx Template.*

   > **Note**
   >
   > By default, the name of the template appears as *MyFedEx Template* and can be renamed.



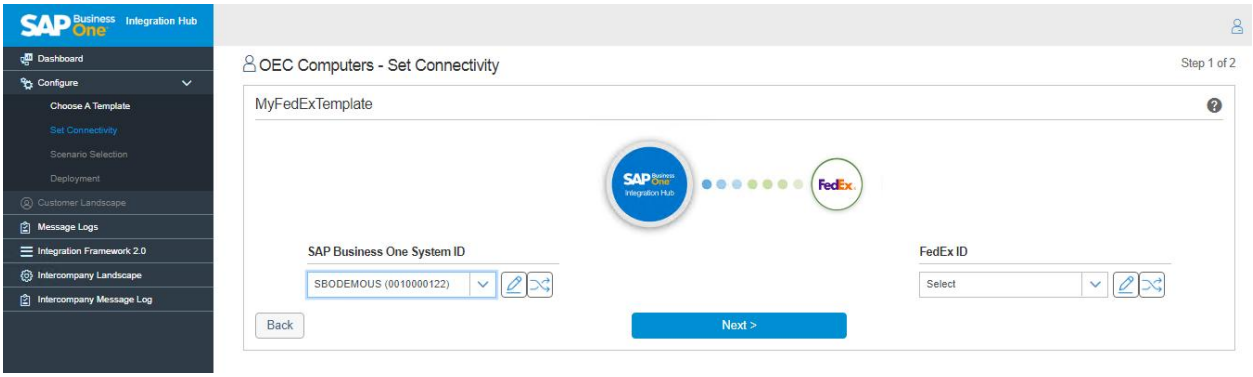
3. Upon choosing the Let's Start button, a Set Connectivity page appears with the following two steps to complete the configurations for connectivity.



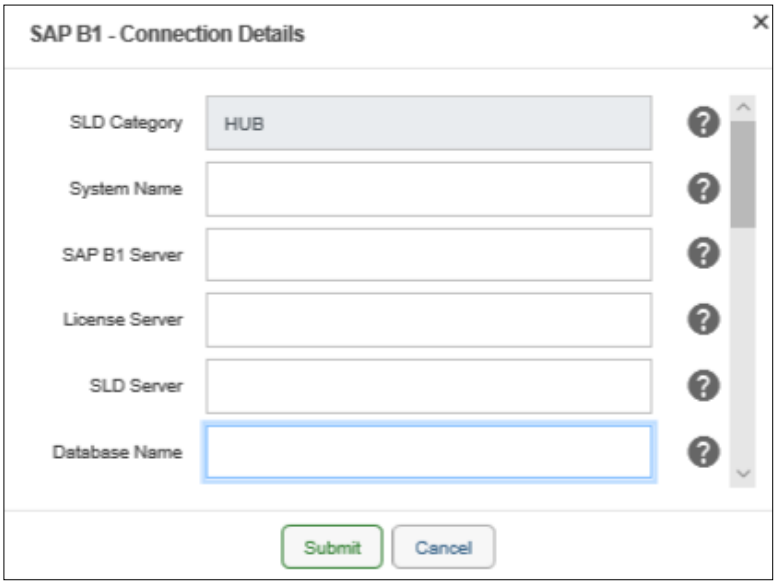
Step 1 – Set Connectivity

4. Choose the SAP Business One SLD to provide the connection between *SAP Business One System Id* and FedEx Id.

> **Note**
>
> By default, the solution displays all the SAP Business One SLDs available in *SLD Category* selected during customer creation.



5. To add a new SLD or edit existing SAP Business One SLD under *SAP Business One System Id* area, choose Add / Edit button.



The *SAP Business One Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update SAP Business One SLD.
SAP Business One Server	Enter SAP Business One Server Name / IP Address. Note *SAP Business One Server* is the mandatory field to add/update SLD information for SAP Business One.
License Server	Enter *License Server* details. i.e. Server Name or IP Address and port number of the SAP Business One License Server. The default port is 30000.
SLD Server	Enter the valid *SLD Server* details with the port. Note *SLD Server* details is the mandatory field to add/update SLD information for SAP Business One.
Database Name	Enter the name of the SAP Business One Database. Note *Database Name* is the mandatory field to add/update SAP Business One System SLD. Caution The *Database Name* must be entered same as SAP Business One Database Name.
Database Type	Currently, only Microsoft SQL Server 2005, 2008, 2012, 2014, 2016, 2017 and SAP Hana DB are supported. Choose the database type from the dropdown list.

	Note *Database Type* is the mandatory field to add/update SAP Business One SLD.
Database User	Enter the user to access the company database using the database connection. *Database User* is the mandatory field to add/update SAP Business One SLD. Caution The *Database User* must be valid. Invalid *Database User* will result in failure to establish the connection.
Database Password	Enter a valid password for database login. Note *Database Password* is the mandatory field to add/update SAP Business One SLD. Caution The *Database Password* must be valid. Invalid *Database Password* will result in failure to establish the connection.
Database Port	Enter the port for database.
Username	Enter **B1i** in this field. Note *Username* is the mandatory field to add/update SAP Business One SLD. It is set as B1i by default and un editable. Caution Ensure that a user with this name exists in the SAP Business One database.
Password	Enter a valid password for B1i user of SAP Business One.
Language	Select the language from the list of languages.
Is Trust	Select *True* or *False*. The default value for this field is *False.* To use a trusted connection, choose *True* from the dropdown list.
jcoPath	Enter path for jco library. Example of Installation path of JCO: C:\Program Files (x86)\SAP\SAP Business One DI API\JCO\LIB
DI ProxyHost	The DI Proxy host must be defined if B1i is installed on a separate server (this is, other than the SAP Business One server). The value in this field must be same as SAP Business One Server address. Example *Proxyhost* can be same as *SAP Business One Server.*
DI ProxyPort	The default value of *DI Proxy Port* is 2099.
Proxy Host	The proxy host is defined in a multi-instance scenario. If the B1i server connects to the SAP Business One server through a proxy server then, enter the address of the proxy server in this field.
Proxy Port	Enter the proxy port in this field.

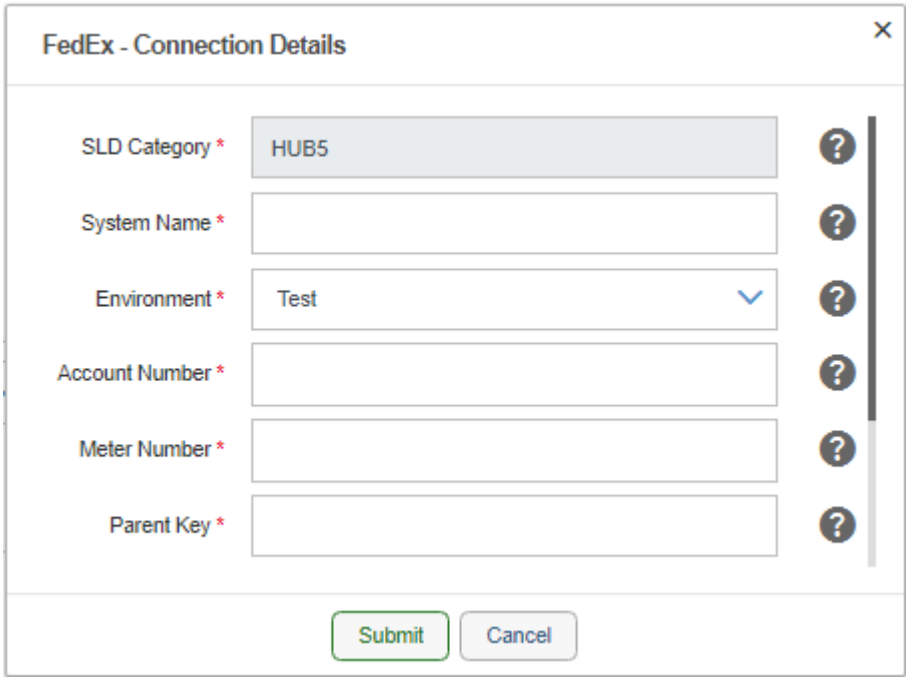
6. Enter the valid data and choose the *Submit* button. An SAP Business One SLD is created.

Choose the *Test Connection* icon to test the connection between the SAP Business One System Id in Integration Hub and the SAP Business One System Landscape Directory.

If the connection is successful, a success message appears “Test Connection Successful”. If the connection is unsuccessful, a failure message appears “Test Connection Failed”. Please provide the correct credentials.

7. To add / edit FedEx instance SLD under FedEx Id area, choose the *Add / Edit* button.

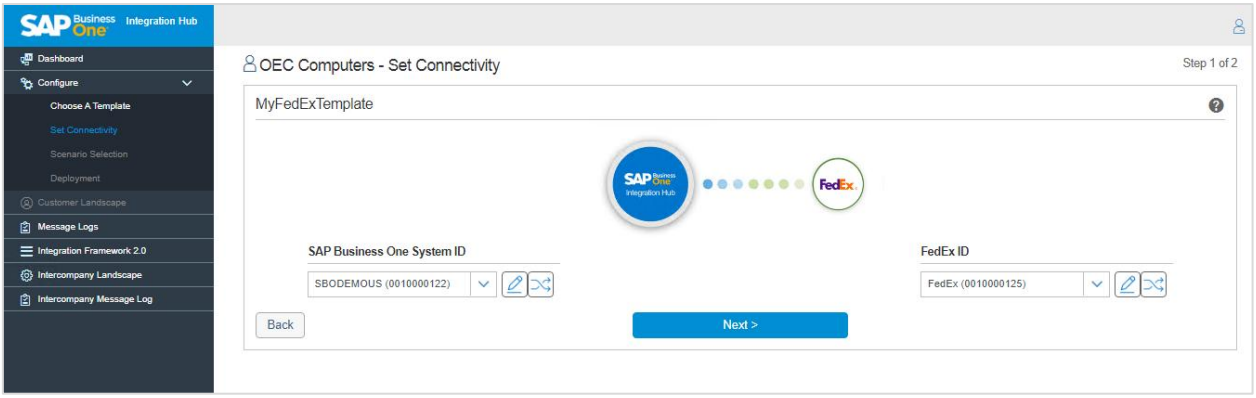
FedEx Connection Details window appears.



The *FedEx Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update FedEx SLD.
Environment	Select the environment from the dropdown – Test or Production.
Account Number	Enter the FedEx Account number provided by FedEx
Meter Number	Enter the Meter Number provided by FedEx
Parent Key	Enter the Parent key provided by FedEx. If parent key is not available, then enter the User Key in this field.
Parent Password	Enter the parent password provided by FedEx. If parent password is not available, then enter the User Password in this field.
User Key	Enter the User Key provided by FedEx
User Password	Enter the user password provided by FedEx

8. Provide the valid information in the fields and choose the *Submit button.* SLD for FedEx is created.

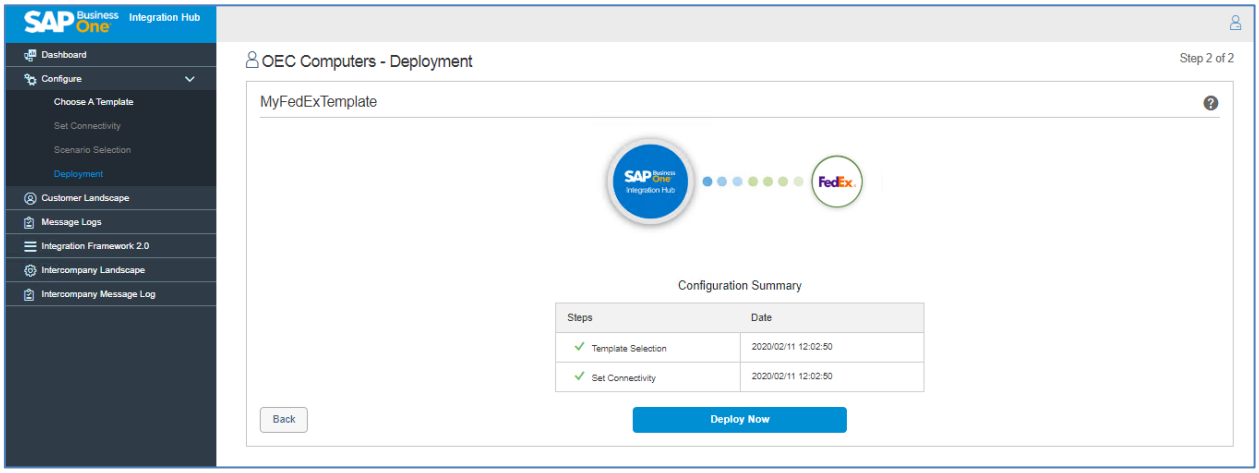


9. Choose the *Test Connection* icon to test the connection between the Integration Hub and FedEx.
If the connection is successful, a success message appears “Test Connection Successful”.
If the connection is unsuccessful, a failure message appears “Test Connection Failed”.

10. Choose the *Next* button to proceed to Step2.

Configuration Summary

11. The Configuration summary displays the *Date* and time for *Template Selection* and *Set Connectivity steps*.

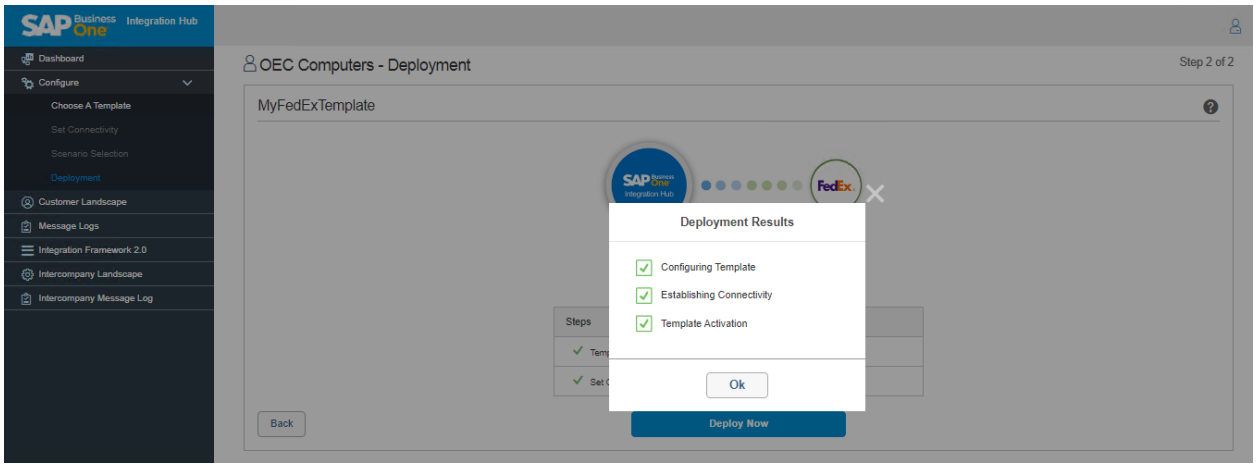


Step 2 – Deployment

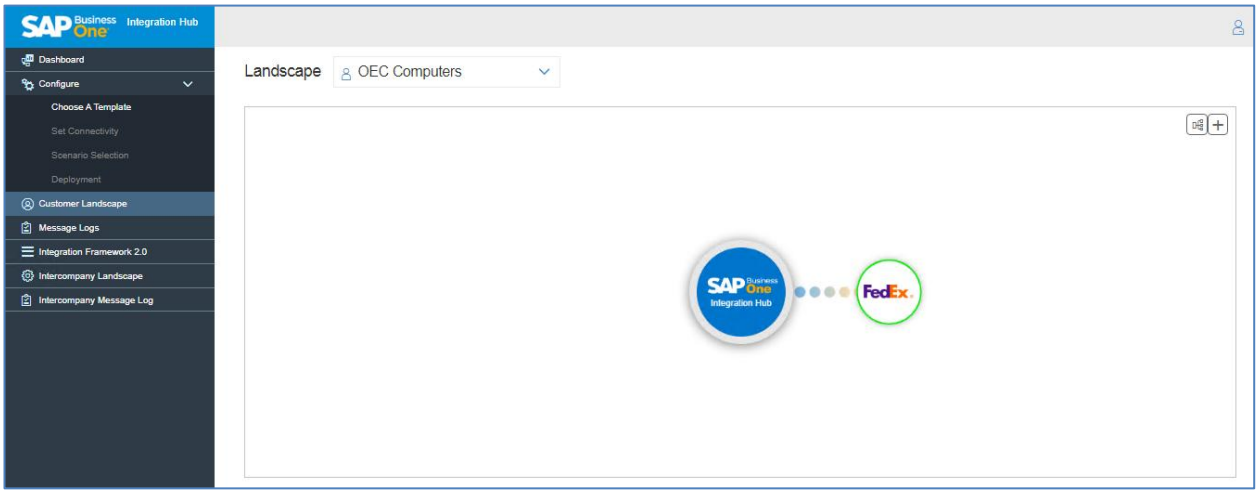
12. To deploy the solution, choose the *Deploy Now* button.

13. The application prompts you to provide the license details. For more information, refer to the Assigning the Integration Hub licenses section in this document.

14. The Integration Hub displays the *Deployment Results* whether the deployment is successful or failed. The checkbox in the *Deployment Results* window displays status of each deployment stage.



15. Once all stages are checked, click the *OK* button on the *Deployment Results* window to proceed. The successful deployment of solution in Integration Hub results in enabling the features in SAP Business One. Customer Landscape displays connection of SAP Business One to FedEx.



16. To modify the template after successful feature activation, right-click on the logo of the template.

17. Right click on the FedEx logo displays window with the following fields:

Field Name	Description
View	Displays the *Set Connectivity* window in view mode.
Edit	Displays the *Set Connectivity* window in Edit mode.
De-activate	Deactivates the FedEx deployment.

Deployment Status	Displays the deployment status with date and time.
Delete Template	Choose delete template to delete the template. It is an Irreversible action. Note On deleting the template, the template will be marked as Inactive in the application deployment status window in SAP Business One.
Delete Deployment Info.	Choose delete deployment info. to delete the complete deployment information of the template. It is an Irreversible action. Note On deleting the deployment information, the template will not be deleted from deployment panel screen, it will be deactivated only.
Manage Licenses	Choose Manage License to Activate/Deactivate the integration Hub License. For more information, see Managing the Integration Hub licenses section in this guide.

19.2 Setup in SAP Business One

1. In the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Application Deployment Status*. The *Deployment Status* field should display 'Active', indicating that the feature is deployed in the Integration Hub. If the status displays 'Inactive', then redeploy the feature in the *Integration Hub.*

   The following are the statuses that can be visible on the *Application Deployment Status* screen:

   - *Active*: The status represents the solution is deployed and active.
   - *Inactive*: The status represents the feature template is not inactive.

   For more details, refer the *Application Deployment Status* section in this guide.

   > **Note**
   >
   > You must Re-start the SAP Business One client after FedEx deployment from the Integration HUB. On login, the Add-On script will execute and relevant setup window appears.

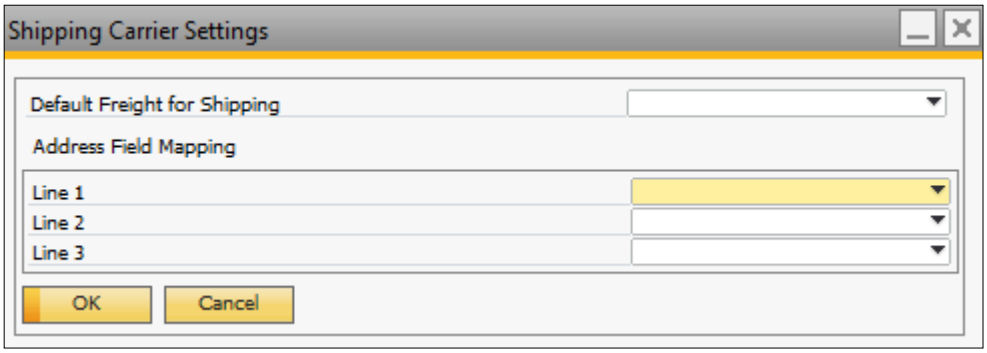
2. *In* SAP Business One, choose *Main Menu* → *Administration* → *Integration Hub* → *B1i Server Details* to enter the B1i Server details. This window enables to enter the B1i Server Details.

The *B1i Server Details* window contains the following fields:

Field Name	Description
B1i Server Address	Enter the server name or IP address of B1i server.
B1i Port	Enter the port of B1i Server. The default port for HTTP is 8080
Username	B1i run time user
Password	Enter the password for B1i run time user.
HTTPS	Select the checkbox to enable the solution to use HTTPS.

> **Note**
>
> Please ensure that the SLD entry for this company exists in SAP B1if and the solution is properly deployed.

3. In SAP Business One, choose *Main Menu* → *Administration* → *Integration Hub*→ *Shipping Carrier Settings* to configure the shipping carrier settings for FedEx.



Note

- You must define the ISO Currency code for base and all other currencies defined in database.
- The Shipping Carrier Settings are mandatory settings for integrating with SAP Business One.

The *Shipping Carrier Settings* window contains the following mandatory fields:

Field Name	Description
Default Freight for Shipping	For shipping amounts, the application uses default freight defined in shipping carrier settings which is picked from SAP.
Address Field Mapping – Line 1	Select the address line 1 item from the list of address line items. The following is the list of optional address line items: • Address Name 1 • Address Name 2 • Street/ PO Box • Block • Street No. • Building/Floor/Room
Address Field Mapping – Line 2	Select the address line 2 item from the list of address line items. The following is the list of optional address line items: • Address Name 1 • Address Name 2 • Street/ PO Box • Block • Street No. • Building/Floor/Room
Address Field Mapping – Line 3	Select the address line 3 item from the list of address line items. The following is the list of optional address line items: • Address Name 1 • Address Name 2 • Street/ PO Box • Block • Street No. • Building/Floor/Room

19.3 Using FedEx

19.3.1 Address Validation

Address Validation helps in validating the *Ship To* and *Bill To* addresses to avoid any address related issues in later stages. The address validation API from FedEx is used to request general validation of city, state, and zip code.

The validate address functionality in SAP Business One is available in the:

- Business Partner Master Data
- Delivery Document

19.3.1.1 Business Partner Master Data

The addresses in SAP Business One can be validated according to the FedEx address format in the customer master data.

In SAP Business One, choose *Main Menu* → *Business Partner* → *Business Partner Master Data* → *Addresses.*

To validate the *Bill To* and *Ship To* addresses of a customer, choose the icon in the *Addresses* Tab in *Business Partner Master Data*.

Note

The validate address functionality in *Business Partner Master Data* works only if the *Shipping Type* in the *General* tab is FedEx.

19.3.1.2 Delivery Document

Addresses in SAP Business One can be validated according to the FedEx address format in the delivery document. To validate the *Bill To* and *Ship To* addresses of a customer, choose the icon in the *Logistics* tab in the delivery document.

Note

The validate address functionality in the *Delivery Document* works only if the *Shipping Type* in the *Logistics* tab is FedEx.

19.3.1.3 Windows Enhancement

New fields that are relevant to FedEx have been added to the Delivery Document. The fields provide additional information regarding the FedEx transactions.

Field Name	Description
Get Tracking Number	Fetches the tracking number from FedEx. User can use this button when the tracking number is not fetched at the time of adding the document.
Logistics	
Service	Displays the FedEx services based on Ship from country. Note The application uses the first line warehouse country as ship from country.
Integration Hub	
Payer	Payer may be Shipper, Receiver, or Third Party.
Bill Account Number	Bill Account number given by freight carrier.
Customs Value	Goods value disclosed to customs
Insurance Amount	Amount insured for the goods.
Third Party Address	Is Third party address

19.3.1.4 Address Validation Result

The *Address Validation Result* enables to validate the addresses as per the FedEx address format with the help of API and notifies the user with the error message or successful message. SAP Business One displays the result with specific colors having a particular meaning as per the color result.

Example

If the address validation is

- **Successful**, the system displays the address in green color, along with the message in the status bar.
- **Unsuccessful** or failed, the system displays the address in red color, along with the message in the status bar.

19.3.2 Freight Quote

Freight Quote helps in getting a list of all the shipping services and rates based on the package's specifications. The *Freight Quote* functionality in SAP Business One is available in the *Packing Slip* window of the *Delivery Document* only.

Prerequisite

The following are the prerequisites for getting Freight Quotes from FedEx:

- The *Shipping Type* in the *Logistics* tab should be FedEx, and FedEx service should be selected.
- The item used in the delivery document must have *Length, Width, Height, and Weight* defined.
- Customer *Tel1, Fax Number* and *Mobile Phone* must be defined in *Main Menu* → *Business Partner* → *Business Partner Master Data* →*General* Tab.
- *Mobile Phone* and *Fax Number* must also be defined for the logged-in user in the *Users-Setup* window.

19.3.2.1 Get Freight Quote

Get Freight Quote checks for freight quote through API based on the package type selected in the *Packing Slip* in *Delivery Document*.

To get the freight quote:

1. In the Delivery document, choose *Main Menu* → *Sales A/R* → *Delivery* → *Logistics tab.*
2. Select the customer and validate the *Bill To* and *Ship To* addresses of a customer, using the icon.
3. On Integration Hub Tab. Based on the requirement, specify the values in the Payer, Bill Account Number, Customs Value, Insurance Amount. If Payer is third Party, then specify the Third Party Address and Third Party Contact Person.
4. Right-click on the *Delivery* window and select *Packaging Slip*.
5. Provide the *Package No., Type* and *Weight (lbs./kg)* unit.

> **Note**
> The FedEx package type used in the packing slip must have *Length, Width, Height defined* in *package type s-setup window.*

6. In Line level move the item from the *Available Items* list to *Package Contents* list and choose *Get Freight Rate* button.
7. The freight quote from FedEx is updated in the packing slip. Click on *Ok* button to close Packaging Slip.
8. The amount in the freight field of the delivery document displays the Freight amount.

19.3.3 Shipment Tracking Number

Shipping Tracking Number automatically updates the tracking number from FedEx when the delivery document is added. If the solution fails to update the tracking number while updating the freight amount, the solution provides the flexibility to fetch the tracking number by choosing *Get Tracking No.* button in the *Delivery* window.

To get the Tracking Number:

1. In SAP Business One, choose *Main Menu* → *Sales A/R* → *Delivery.* Complete the Delivery document and click on *Add* Button.
   Specify all the information as mentioned in the steps of *Get Freight Quote*.
2. A pop up displays a message *You cannot change this document after you have added it. Continue?* Click on *Yes* to continue.

3. A tracking number is generated.
4. Alternatively Click on *Get Tracking Number* button on the Delivery document, if delivery document is already added.
5. Copy the tracking number and track the Package in FedEx site.

Note

The *Tracking Number* is generated only when customer phone number is updated for in *Business Partner Master Data* and address is verified

20 Dynamics 365 Sales

Dynamics 365 Sales is a cloud computing service as a software (SaaS) company that specializes in customer relationship management (CRM). Dynamics 365 Sales's customer relationship management software instantly streamlines and automates enterprise's business processes. By creating infrastructure-as-a-service, enterprise's business allows sales, marketing, and support teams to work in sync and see important sales and customer data with more width and breadth, freeing them up to generate new clients and better service existing ones.

Note

The Dynamics 365 Sales Currency Locale must match the SAP B1 local currency.

20.1 Dynamics 365 Sales Setup in Administration Console

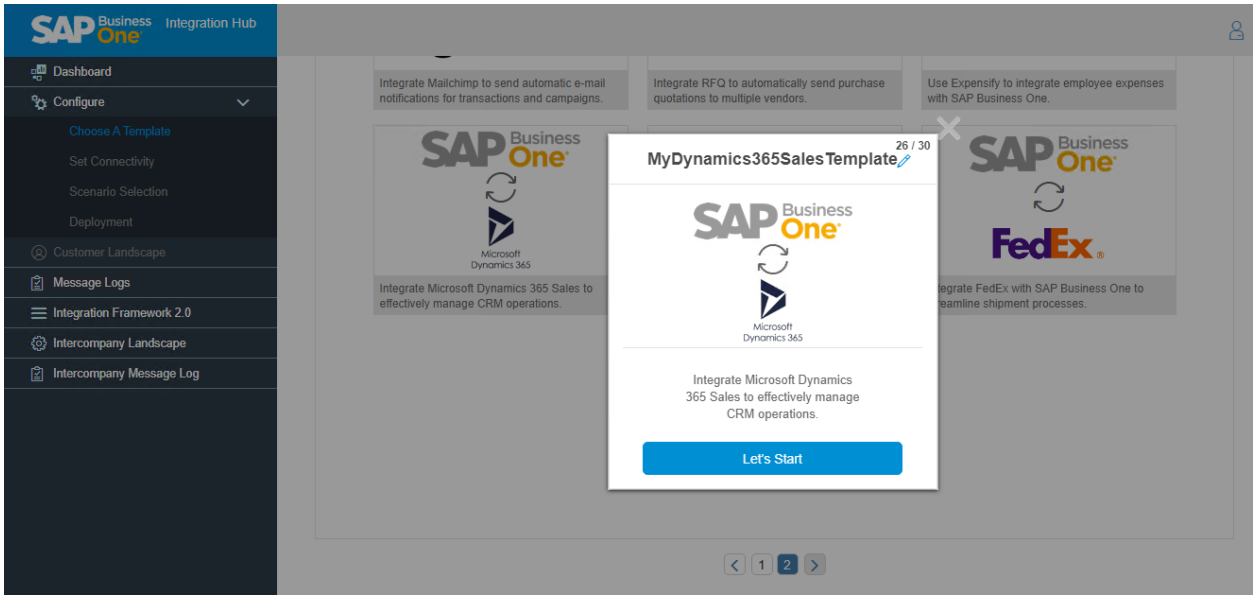
The following are the steps to set up Dynamics 365 Sales in Administration Console:

1. Add New Customer. Refer to the section Add New Customer in the document.
2. Select the *Dynamics 365 Sales* template to integrate.

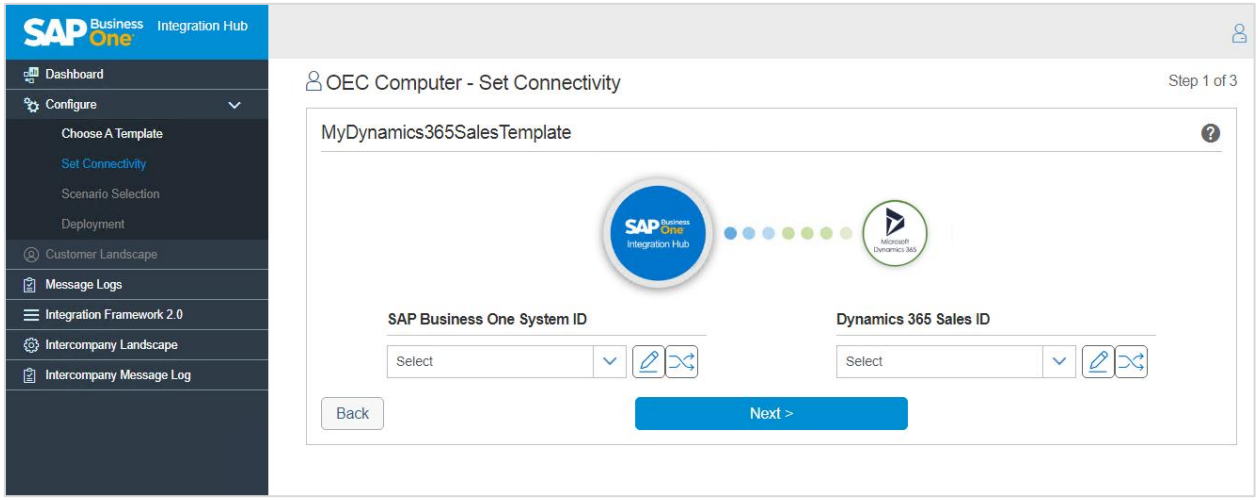
   Upon selecting the template, a message "*Let's Start*" prompts to start configuring the connectivity settings. Change the template name by clicking the Edit button to edit the template name. Otherwise, it appears as *MyDynamicCRMTemplate.*

Note

By default, the name of the template appears as *MyDynamicCRMTemplate* and can be renamed.



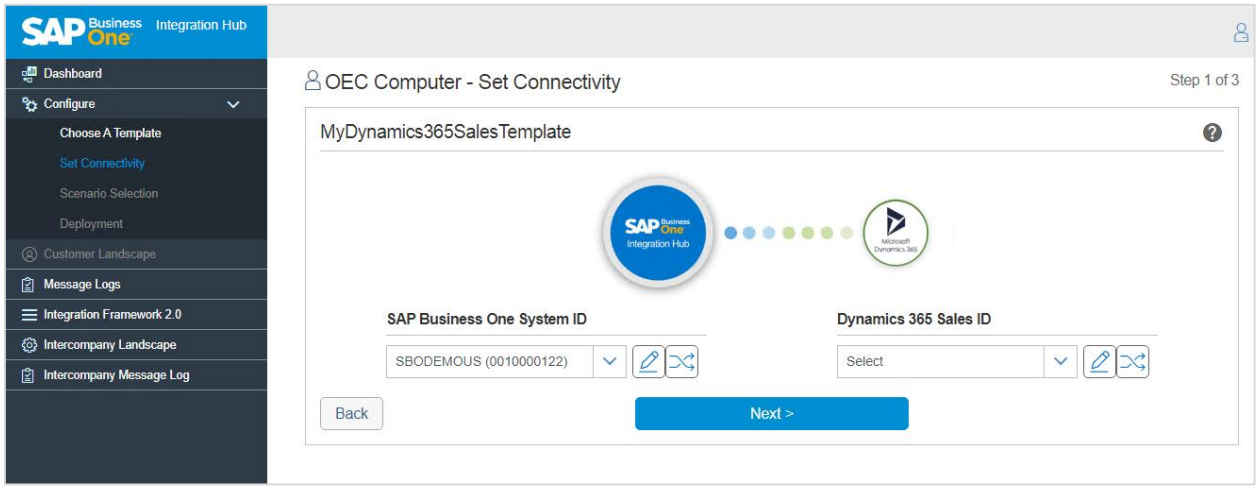
3. Upon choosing the Let's Start button, a Set Connectivity page appears with the following two steps to complete the configurations for connectivity.



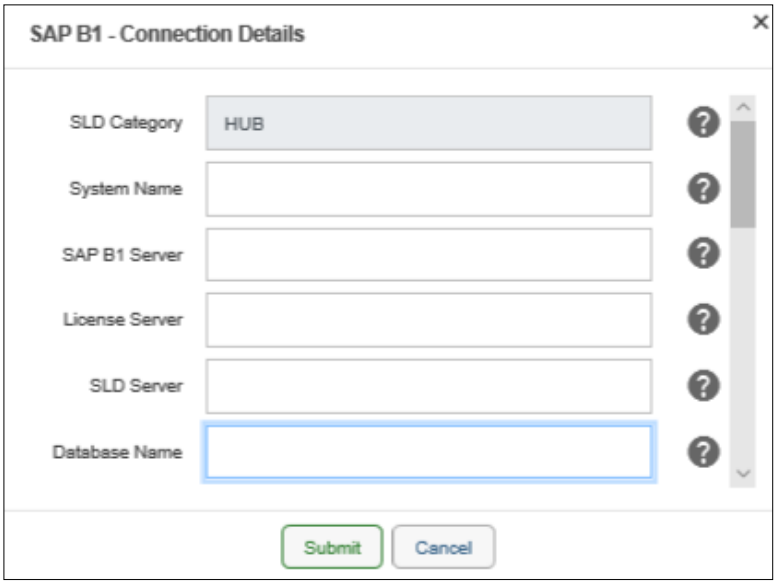
Step 1 – Set Connectivity

4. Choose the SAP Business One SLD to provide the connection between *SAP Business One System Id* and the Dynamics 365 Sales Id.

> **Note**
>
> By default, the solution displays all the SAP Business One SLDs available in *SLD Category* selected during customer creation.



To add a new SLD or edit existing SAP Business One SLD under *SAP Business One System Id* area, choose Add / Edit button.



The *SAP Business One Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update SAP Business One SLD.
SAP Business One Server	Enter SAP Business One Server Name / IP Address. Note *SAP Business One Server* is the mandatory field to add/update SLD information for SAP Business One.
License Server	Enter *License Server* details. i.e. Server Name or IP Address and port number of the SAP Business One License Server. The default port is 30000.
SLD Server	Enter the valid *SLD Server* details with port. Note *SLD Server* details is the mandatory field to add/update SLD information for SAP Business One.
Database Name	Enter the name of the SAP Business One Database. Note *Database Name* is the mandatory field to add/update SAP Business One System SLD. Caution The *Database Name* must be entered same as SAP Business One Database Name.
Database Type	Currently, only Microsoft SQL Server 2005, 2008, 2012, 2014, 2016, 2017 and SAP Hana DB are supported. Choose the database type from the dropdown list. Note *Database Type* is the mandatory field to add/update SAP Business One SLD.

Database User	Enter the user to access the company database using the database connection. *Database User* is the mandatory field to add/update SAP Business One SLD. Caution The *Database User* must be valid. Invalid *Database User* will result in failure to establish the connection.
Database Password	Enter a valid password for database login. Note *Database Password* is the mandatory field to add/update SAP Business One SLD. Caution The *Database Password* must be valid. Invalid *Database Password* will result in failure to establish the connection.
Database Port	Enter the port for database.
Username	Enter `B1i` in this field. Note *Username* is the mandatory field to add/update SAP Business One SLD. It is set as B1i by default and un editable. Caution Ensure that a user with this name exists in the SAP Business One database.
Password	Enter a valid password for B1i user of SAP Business One.
Language	Select the language from the list of languages.
Is Trust	Select *True* or *False*. The default value for this field is *False*. To use a trusted connection, choose *True* from the dropdown list.
JcoPath	Enter path for jco library. Example of Installation path of JCO: C:\Program Files (x86)\SAP\SAP Business One DI API\JCO\LIB
DI ProxyHost	The DI Proxy host must be defined if B1i is installed on a separate server (this is, other than the SAP Business One server). The value in this field must be same as SAP Business One Server address. Example *Proxyhost* can be same as *SAP Business One Server*.
DI ProxyPort	The default value of *DI Proxy Port* is 2099.
Proxy Host	The proxy host is defined in a multi-instance scenario. If the B1i server connects to the SAP Business One server through a proxy server then, enter the address of the proxy server in this field.
Proxy Port	Enter the proxy port in this field.

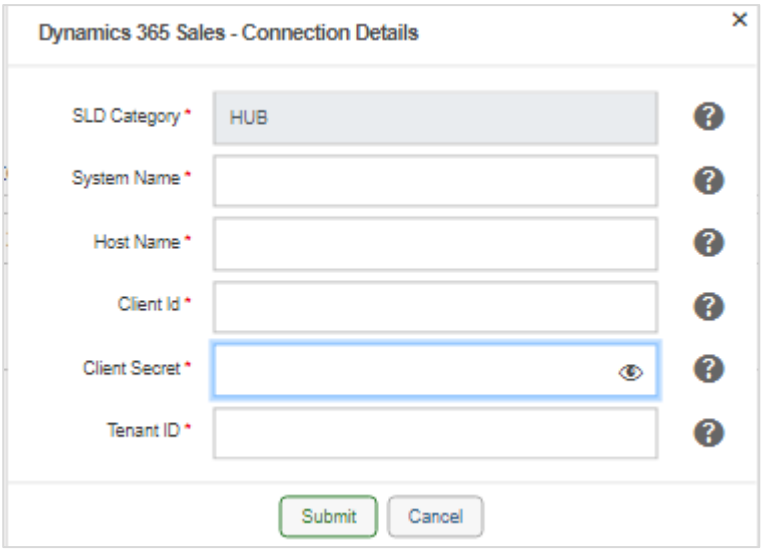
5. Enter the valid data and choose the *Submit* button. An SAP Business One SLD is created.

   Choose the *Test Connection* icon to test the connection between the SAP Business One System Id in Integration Hub and the SAP Business One System Landscape Directory.

   If the connection is successful, a success message appears “Test Connection Successful”. If the connection is unsuccessful, a failure message appears “Test Connection Failed”. Please provide the correct credentials.

6. To add / edit Dynamics 365 Sales instance SLD under Dynamics 365 Sales Id area, choose the *Add / Edit* button.

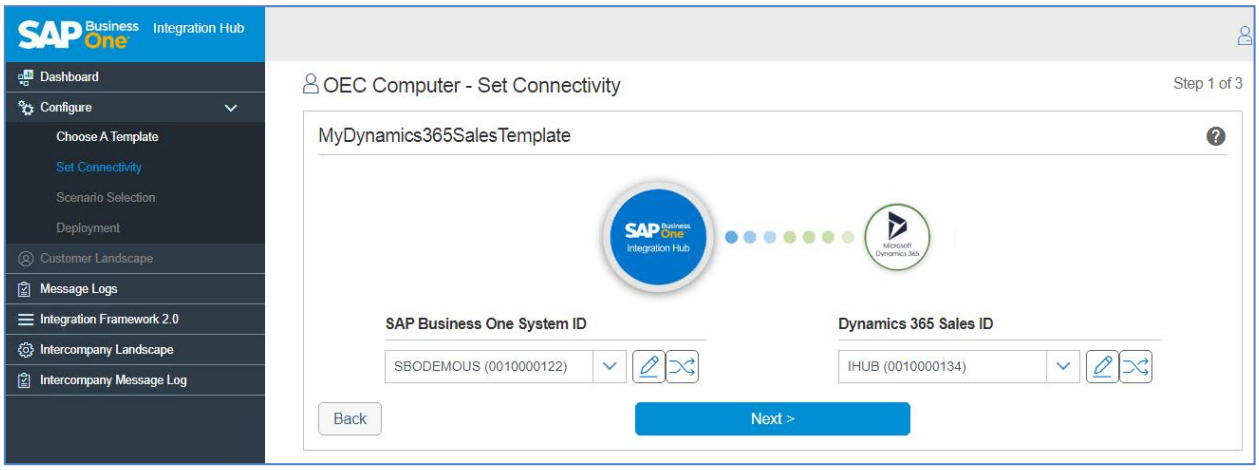
Dynamics 365 Sales Connection Details window appears.



The *Dynamics 365 Sales Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update Dynamics 365 Sales SLD.
Host Name	Enter the Host name of the Dynamics 365 Sales. The hostname is fully qualified domain name. Click on View Profile in Lightning Experience view and copy the Dynamics 365 Sales hostname given below your login name. For example the hostname is oce110.crm.dynamics.com
Client ID	Dynamics 365 Sales Client ID provided. Refer to the following URL to get the Client ID https://community.dynamics.com/crm/b/magnetismsolutionscrmblog/posts/dynamics-365-online-authenticate-with-client-credentials
Client Secret	Dynamics 365 Sales Client Secret provided. Refer to the following URL to get the Client Secret https://community.dynamics.com/crm/b/magnetismsolutionscrmblog/posts/dynamics-365-online-authenticate-with-client-credentials
Tenant ID	Dynamics 365 Sales Tenant ID provided. Refer to the following URL to get the Tenant ID https://community.dynamics.com/crm/b/magnetismsolutionscrmblog/posts/dynamics-365-online-authenticate-with-client-credentials

7. Provide the valid information in the fields and choose the *Submit button.* SLD for Dynamics 365 Sales is created.



8. Choose the *Test Connection* icon to test the connection between the Integration Hub and Dynamics 365 Sales.

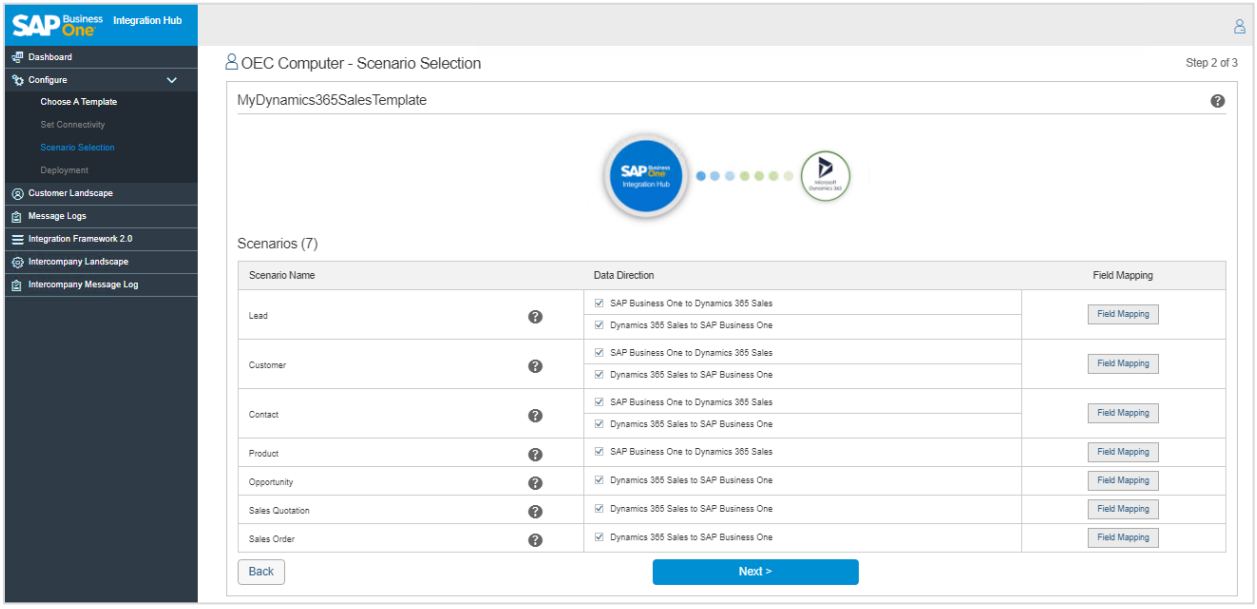
If the connection is successful, a success message appears “Test Connection Successful”.

If the connection is unsuccessful, a failure message appears “Test Connection Failed”.

9. Choose the *Next* button to proceed to Step2.

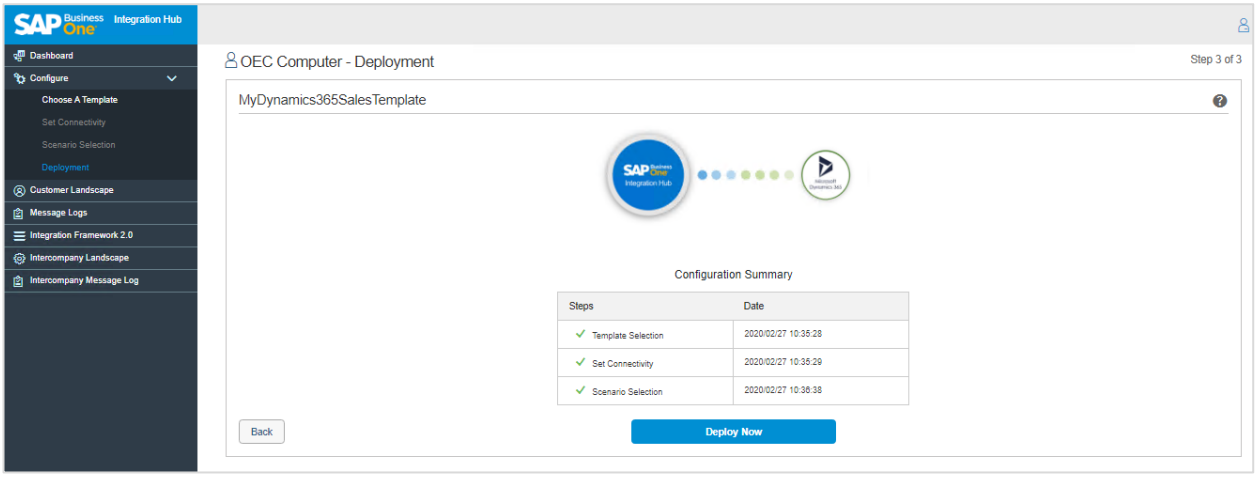
Step 2 – Scenario Selection

10. The Scenario Selection displays the *Scenario, Data Direction, and Field Mapping.* By Default, the Data Direction for Lead is not selected. You can select the data direction as per your company policies.



Configuration Summary

11. The Configuration summary displays the *Date* and time for *Template Selection* and *Set Connectivity steps*.

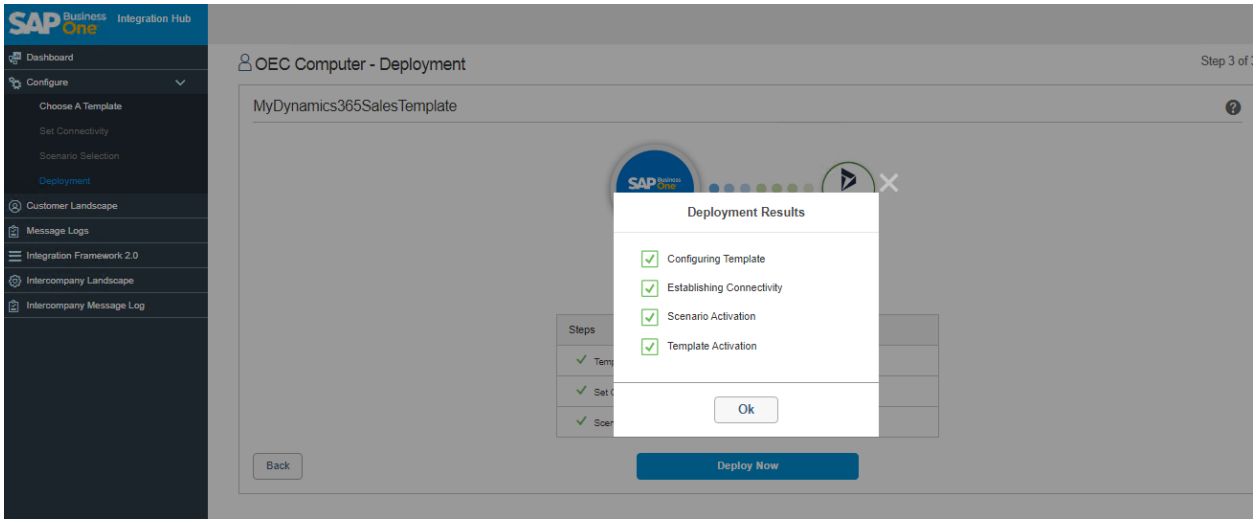


Step 3 – Deployment

12. To deploy the solution, choose the *Deploy Now* button. The Integration Hub starts deploying the solution.

13. The application prompts you to provide the license details. For more information, refer to the Assigning the Integration Hub licenses section in this document.

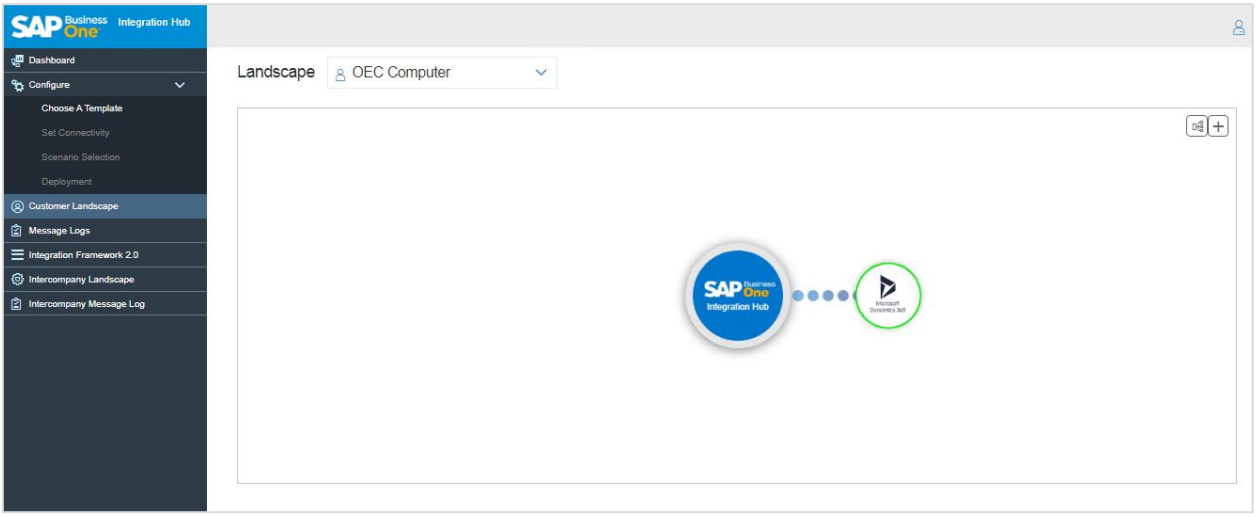
14. The Integration Hub displays the *Deployment Results* whether the deployment is successful or failed. The checkbox in the *Deployment Results* window displays status of each deployment stage.



Note

After you enable the multi-branch function in SAP Business One, you must re-deploy the Dynamics 365 Sales Template.

15. Once all stages are checked, click the *OK* button on the *Deployment Results* window to proceed. The successful deployment of solution in Integration Hub results in enabling the features in SAP Business One. Customer Landscape displays connection of SAP Business One to Dynamics 365 Sales.



16. To modify the template after successful feature activation, right-click on the logo of the template.
17. Right click on the Dynamics 365 Sales logo displays window with the following fields:

Field Name	Description
View	Displays the *Set Connectivity* window in view mode.
Edit	Displays the *Set Connectivity* window in Edit mode.
De-activate	Deactivates the Dynamics 365 Sales deployment.
Deployment Status	Displays the deployment status with date and time.
Delete Template	Choose delete template to delete the template. It is an Irreversible action. **Note** On deleting the template, the template will be marked as Inactive in the application deployment status window in SAP Business One.
Delete Deployment Info.	Choose delete deployment info. to delete the complete deployment information of the template. It is an Irreversible action. **Note** On deleting the deployment information, the template will not be deleted from deployment panel screen, it will be deactivated only.
Manage Licenses	Choose Manage License to Activate/Deactivate the integration Hub License. For more information, see Managing the Integration Hub licenses section in this guide.

20.2 Setup in SAP Business One

1. In the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Application Deployment Status*. The *Deployment Status* field should display 'Active', indicating that the feature is deployed in the Integration Hub. If the status displays 'Inactive', then redeploy the feature in the *Integration Hub.*

   The following are the statuses that can be visible on the *Application Deployment Status* screen:

   - *Active*: The status represents the solution is deployed and active.
   - *Inactive*: The status represents the feature template is not inactive.

   For more details, refer to the *Application Deployment Status* section in this guide.

   > **Note**
   >
   > You must restart the SAP Business One client after the Dynamics 365 Sales deployment from the Integration HUB. On login, the Add-On script will execute, and the relevant setup window will appear.

2. *In* SAP Business One, choose *Main Menu* → *Administration* → *Integration Hub* → *B1i Server Details* to enter the B1i Server details. This window enables to enter the B1i Server Details.

The *B1i Server Details* window contains the following fields:

Field Name	Description
B1i Server Address	Enter the server name or IP address of B1i server.
B1i Port	Enter the port of the B1i Server. The default port for HTTP is 8080
Username	B1i run time user
Password	Enter the password for B1i run time user.
HTTPS	Select the checkbox to enable the solution to use HTTPS.

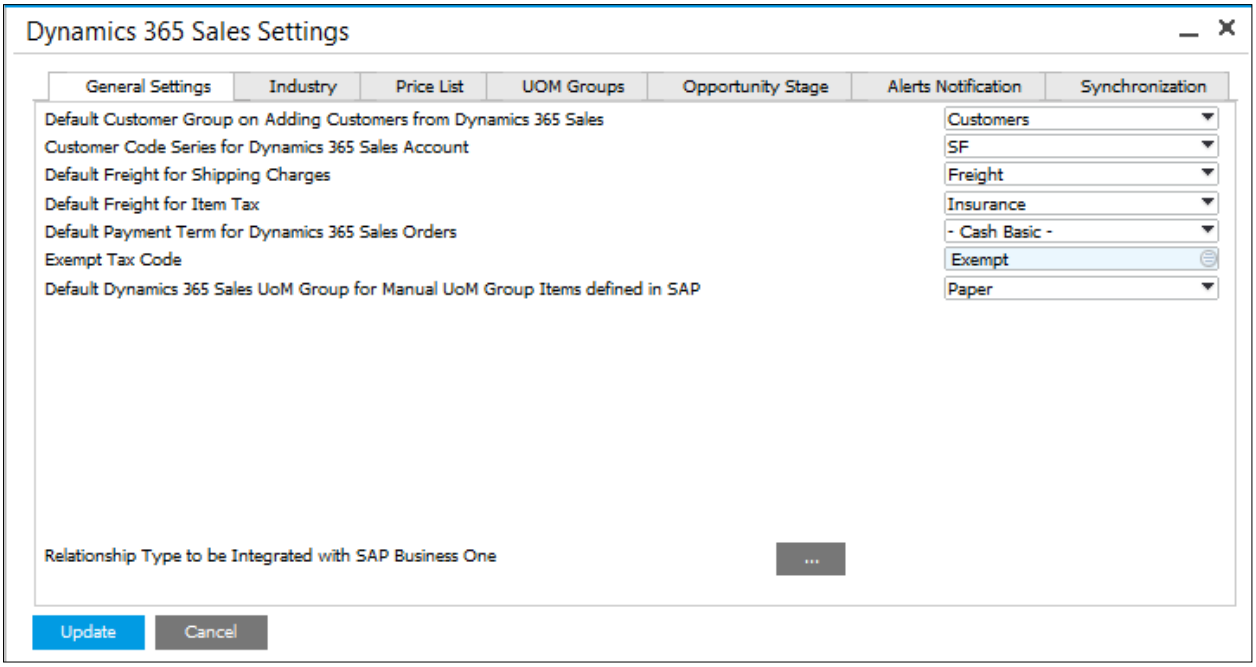
> **Note**
>
> Please ensure that the SLD entry for this company exists in SAP B1if and the solution is properly deployed.

20.2.1 Dynamics 365 Sales Settings

On the Main Menu go to *Administration* → *Integration Hub* → *Dynamics 365 Sales Settings* to configure the required Dynamics 365 Sales settings

20.2.1.1 General Settings

Configure the general settings in the *General Settings* tab in *Dynamics 365 Sales Settings* window.



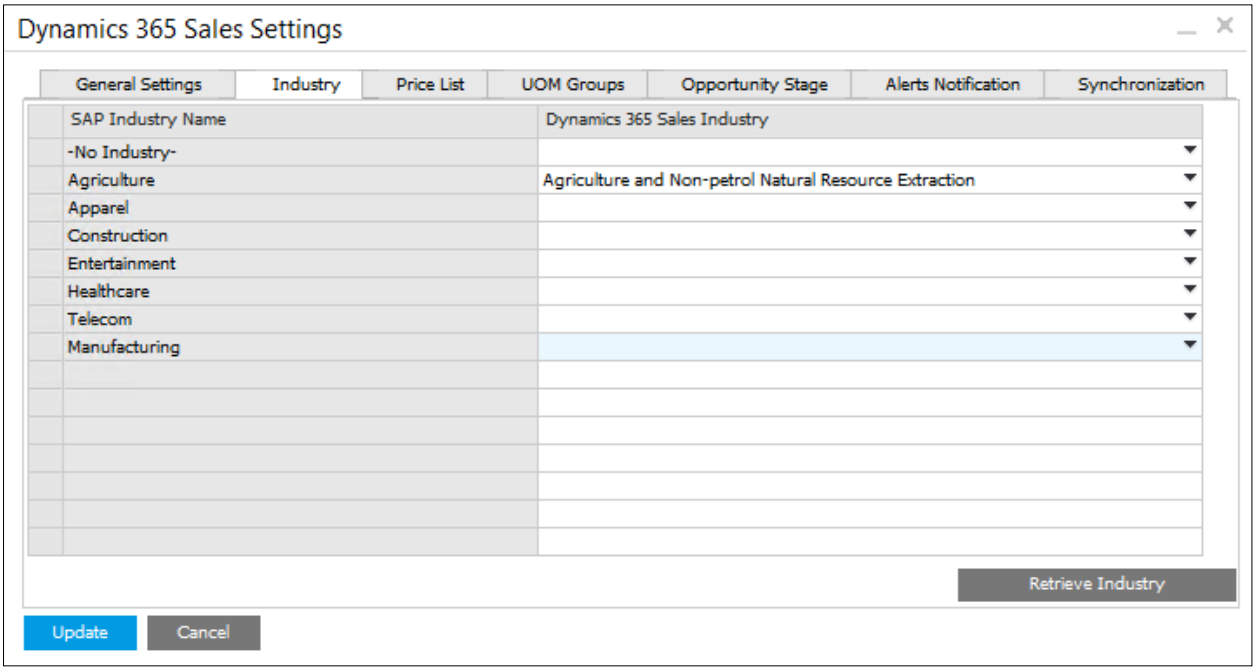
The *General Settings* tab of *Dynamics 365 Sales* window contains the following fields:

Field Name	Description
Default Customer Group on Adding Customers from Dynamic CRM	Select the Customer Group, the customer will be created in SAP Business One based on the customer group selected. The selected Customer Group is used to add customers from Dynamics 365 Sales.
Customer Code Series for Dynamic CRM Account/Lead	Select the Customer Code Series The Selected Customer Code Series is used to create Business Partners in Business One.
Freight for Shipping Charges	Select a freight component for Shipping Charges. The selected freight component is used to integrate the header level shipping amount per order in Dynamics 365 Sales to SAP Business One.
Default Freight for Item Tax	Select a freight component for Tax component. The selected freight component is used to integrate the item level tax amount per order in Dynamics 365 Sales to SAP Business One.

Default Payment Term for Dynamics 365 Sales Order	Select a payment term from the list of payment terms in SAP Business One. The selected payment term is the default payment term for all orders of Dynamics 365 Sales integrated in SAP Business One.
Exempt Tax Code	Select a tax code from the list of tax codes. The selected tax code is used in all orders integrated from Dynamics 365 Sales to SAP Business One. The selected tax code must be of zero rate.
Multiple Currencies are enabled	Select whether Multiple currencies are enabled in Dynamics 365 Sales.
Unit of Measure groups for Non-UOM group Item	Select the Unit of Measure groups for Non-UOM group Item.
Default Branch for Document	Select the branch that will be used while adding document from Dynamics 365 Sales to SAP Business One. Note This field is relevant for the multi-branch function.
Branch Assignment for Customer	Select the branch that will be used while adding/updating customer data from Dynamics 365 Sales to SAP Business One. Choose the button of the Branch Assignment for the Customer field. In the Branch Assignment for Customer window, in the Active column, select the required branches. Note This field is relevant for the multi-branch function.
Relationship Type to be Integrated with SAP Business One	Click on the ellipsis button to open Relationship Type window. Retrieve Account type from Dynamics 365 Sales using Retrieve button. Choose the Account type to be integrated with SAP Business One.

20.2.1.2 Industry

Configure the Industry in the *Industry* tab in *Dynamics 365 Sales Settings* window.

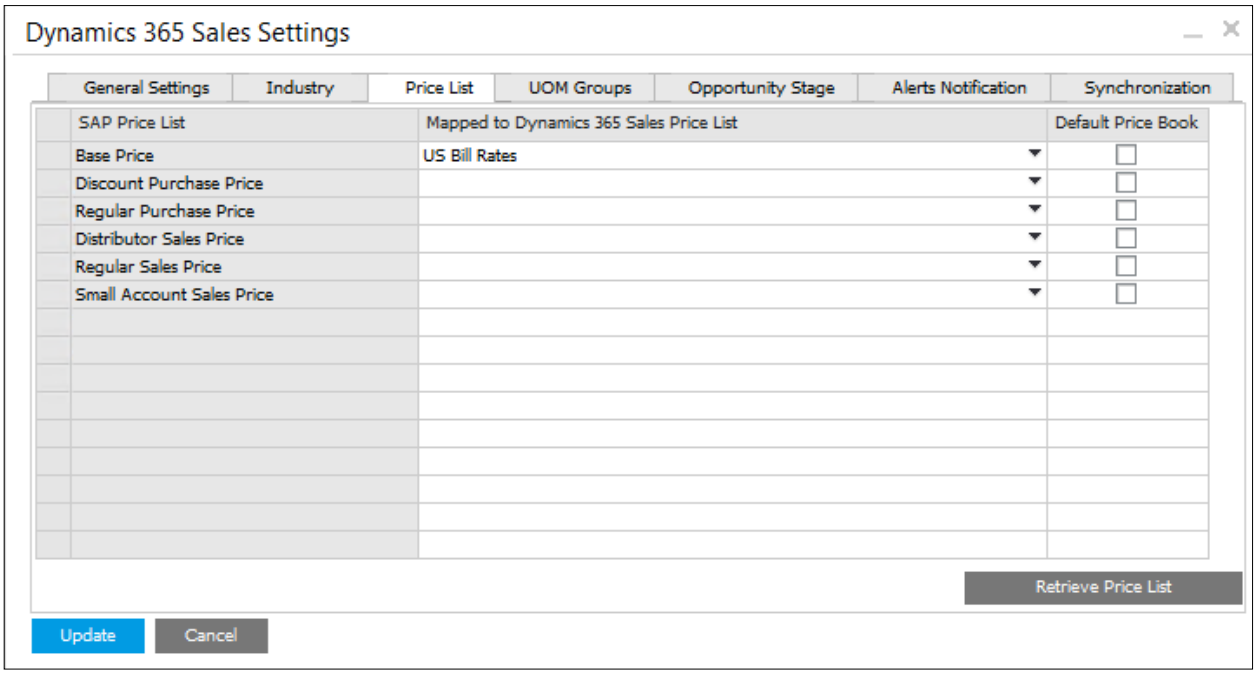


The *Industry* tab of *Dynamics 365 Sales* window contains the following fields:

Field Name	Description
SAP Industry Name	Industry name in SAP Business One
Mapped to Dynamics 365 Sales Industry	Select Industry name in Dynamics 365 Sales that is mapped to SAP Industry Name
Retrieve Industry	Click on Retrieve button to retrieve Industry name from Dynamics 365 Sales.

20.2.1.3 Price List

Configure the Price List in the *Price List* tab in *Dynamics 365 Sales Settings* window.

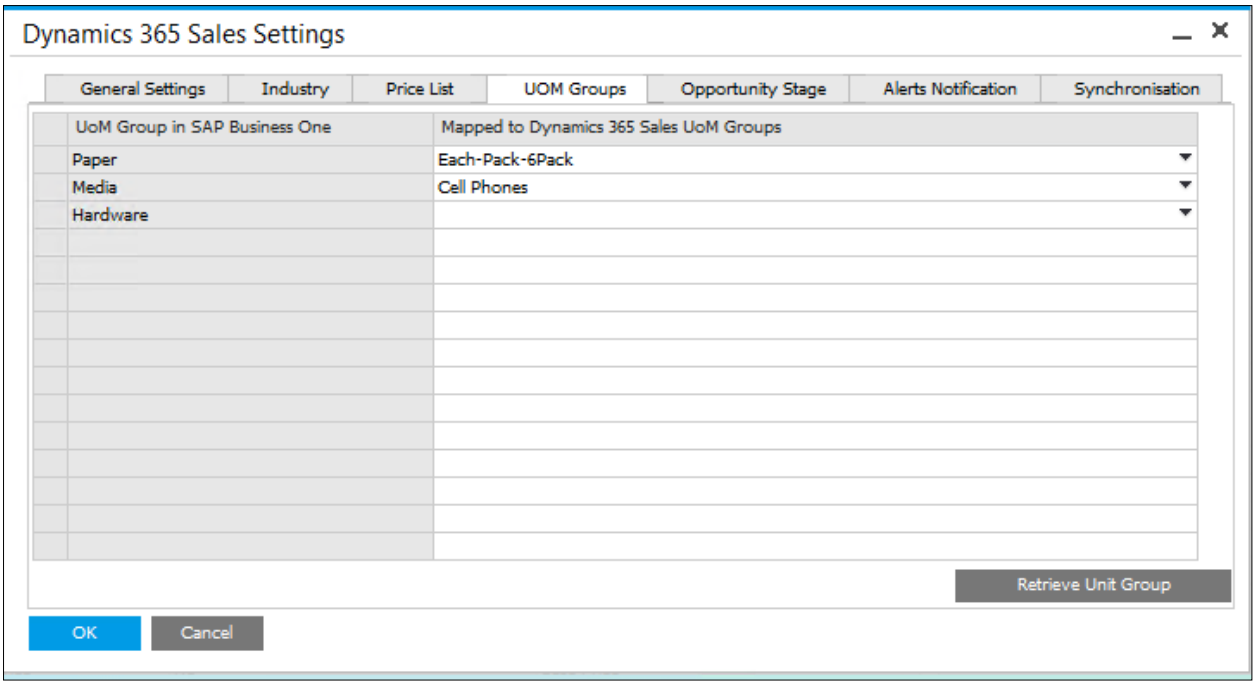


The *Price List* tab of *Dynamics 365 Sales* window contains the following fields:

Field Name	Description
SAP Price List	Price List name in SAP Business One
Mapped to Dynamics 365 Sales Price Book	Select Price List name in Dynamics 365 Sales that is mapped to SAP Price List
Retrieve Industry	Click on Retrieve button to retrieve Price Book from Dynamics 365 Sales.

20.2.1.4 UOM Groups

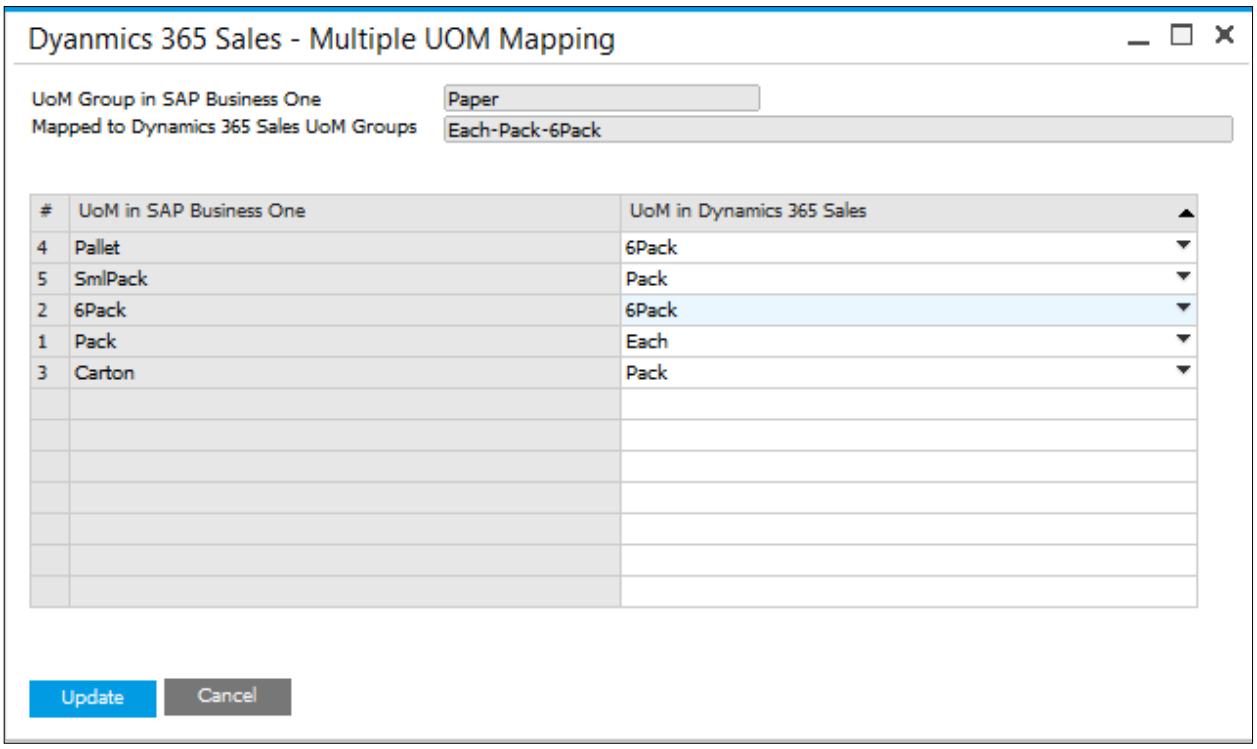
Configure Unit Of Measure (UOM) in the *UOM Groups* Tab in *Dynamics 365 Sales Settings* window. The Unit of Measure subgroups in SAP Business One can have one to one mapping with multiple sub UOM defined in Dynamics 365 Sales.



The *UOM Group* tab of *Dynamics 365 Sales* window contains the following fields:

Field Name	Description
UOM Group in SAP Business One	UOM Group name in SAP Business One
Mapped to Dynamics 365 Sales UoM Group	Select UOM Unit Group name in Dynamics 365 Sales that is mapped to SAP
Retrieve Industry	Click on Retrieve button to retrieve Unit Group from Dynamics 365 Sales.

Double click on the UOM group name to open *Multiple UOM mapping* screen.

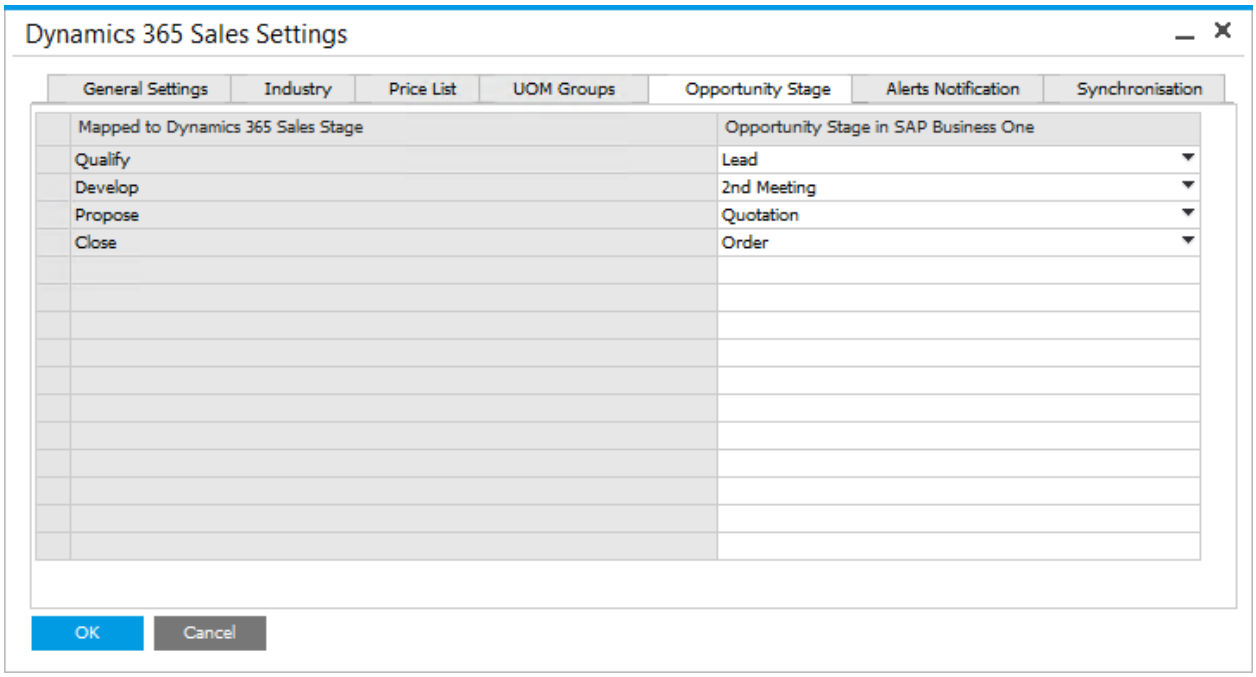


The *Multiple UOM Mapping screen* of *Dynamics 365 Sales* window contains the following fields:

Field Name	Description
UoM Group in SAP Business One	UoM Group name in SAP Business One
Mapped to Dynamics 365 Sales UoM Group	UoM Unit Group name in Dynamics 365 Sales that is mapped to SAP
UoM in SAP Business One	UoM in SAP Business One
UoM in Dynamics 365 Sales	Corresponding UoM in Dynamics 365 Sales.

20.2.1.5 Opportunity Stage

Configure the Opportunity Stage in the *Opportunity Stage* tab in *Dynamics 365 Sales Settings* window. All Dynamic 365 Sales Stages should be mapped to Opportunity Stages in SAP Business One.

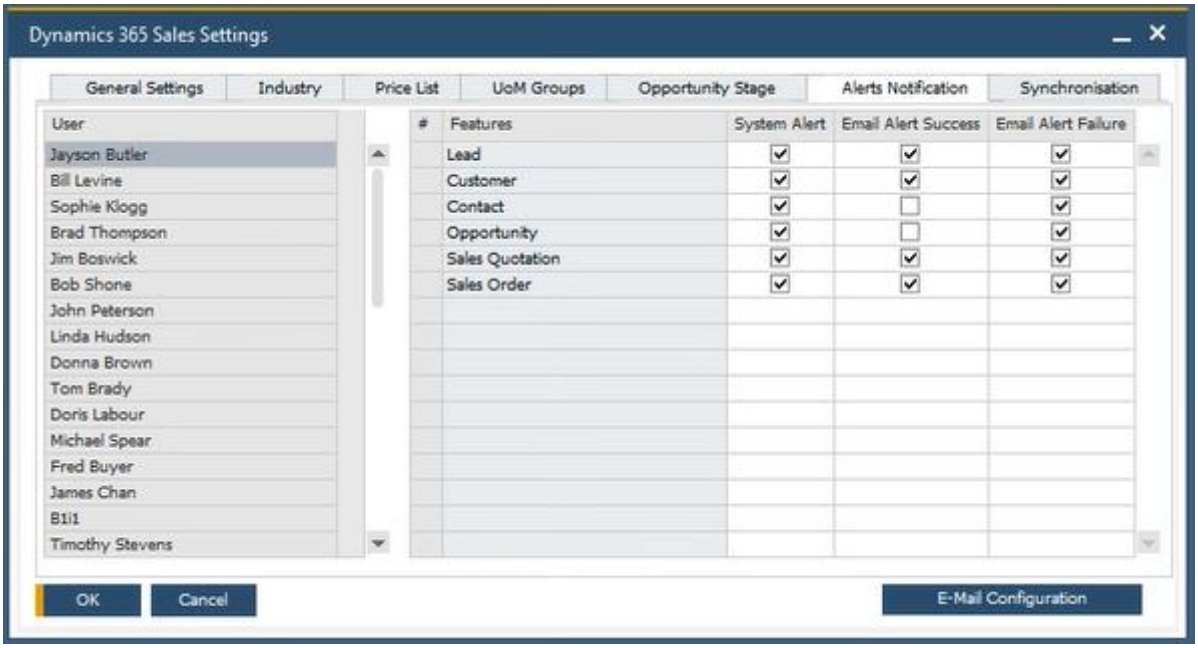


The *Opportunity Stage* tab of *Dynamics 365 Sales* window contains the following fields:

Field Name	Description
Opportunity Stage	Opportunity Stage name in SAP business one
Mapped to Dynamics 365 Sales Stage	Opportunity Stage name in Dynamics 365 Sales that is mapped to SAP Opportunity Stage
Retrieve Industry	Click on Retrieve button to retrieve Opportunity Stage from Dynamics 365 Sales.

20.2.1.6 Alerts Notification

Configure the alert settings in the *Alert Notification* tab in *Dynamics 365 Sales* window.



The *Alert Notification* tab of *Dynamics 365 Sales* window contains the following fields:

Field Name	Description
User	Displays the list of users in SAP Business One. Choose a user for setting up the alert notification authorizations. This field is read only.
Features	Displays the list of Integration Hub features for Dynamics 365 Sales. This field is read only. The Alert can be set for *Lead, Customer, Contact, Opportunity, Sales Quotation, and Sales Order.*
System Alert	Select this checkbox to send notifications as a system alert.
Email Alert Success	Select the checkbox to send email notifications for successful transactions.
Email Alert Failure	Select the checkbox to send email notifications for failed transactions.

Note

In case of an email for failed transactions, the user will receive the failed XML payload as an attachment.

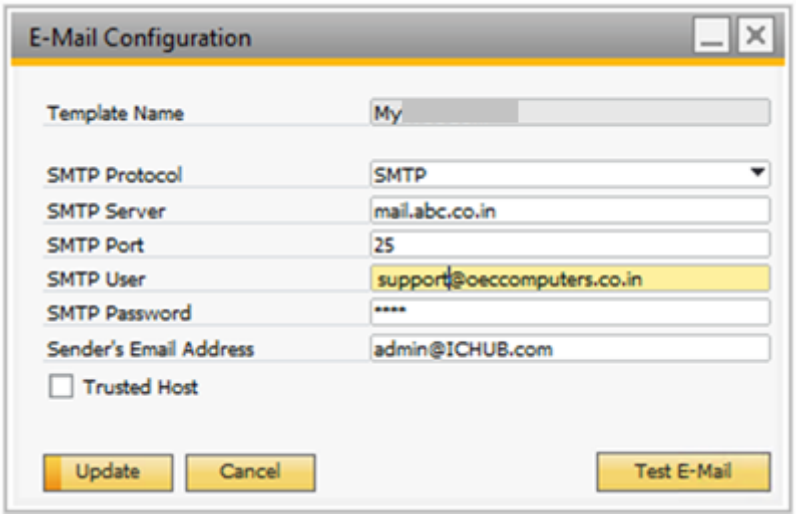
Caution

To Save the changes in the settings, click on *Update* button.

Email Configuration

Click the *Email Configuration* button to set up the SMTP details for email alerts notification.

Alternatively, to display the *Email Configuration* window, choose *Administration → Integration Hub → E-Mail Configuration*.



The *Email Configuration* window contains the following fields:

Field Name	Description
Template Name	Display the active MS Dynamics 365 Sales template.
SMTP Protocol	Choose the communication protocol SMTP/SMTPS/TLS.
SMTP Server	Specify the address of the outgoing mail server.
SMTP Port	Specify the port for the outgoing mail server.
SMTP User	Specify the user's name for the outgoing mail server.
SMTP Password	Specify the password for the outgoing mail server.
Sender's Email Address	Specify the email address of the sender.
Trusted Host	Select the checkbox to add the name of the e-mail server to the list of trusted hosts.
Test E-Mail	Click the button to test the connection. The email notification will be sent to the logged-in user in SAP Business One. Note Ensure that the Login User's email ID is correctly specified in the User Setup.

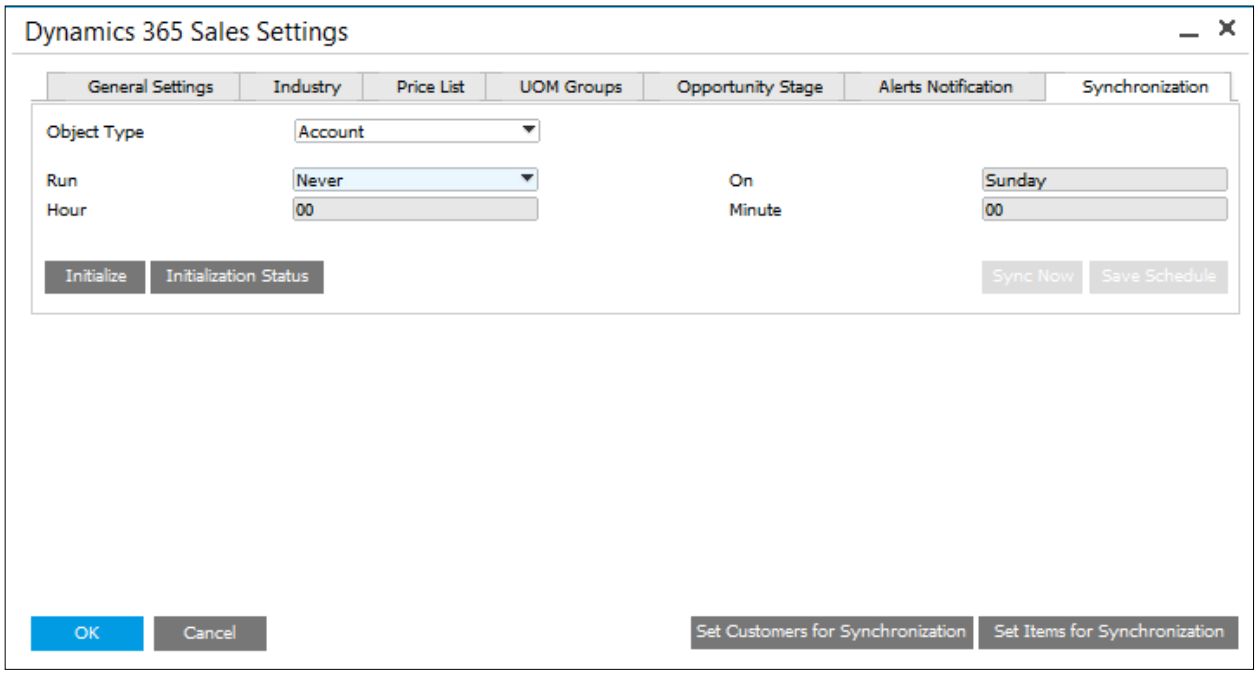
20.2.1.7 Initialization Process

Once the Dynamics 365 Sales feature is enabled in SAP Business One, it is mandatory to initialize the objects to be integrated between SAP Business One and Dynamics 365 Sales. The objects include Account, Contact, Product and Lead.

Note

Account Type settings in *Account Type to be Integrated with SAP Business One* in General Settings Tab should be configured in SAP Business One before initiating the initialization.

To Initialize Account, Contact, Product and Lead, choose *Administration* → *Integration Hub* → *Dynamics 365 Sales Settings* → *Synchronization.* Choose the *Initialize* button on *Synchronization* tab.

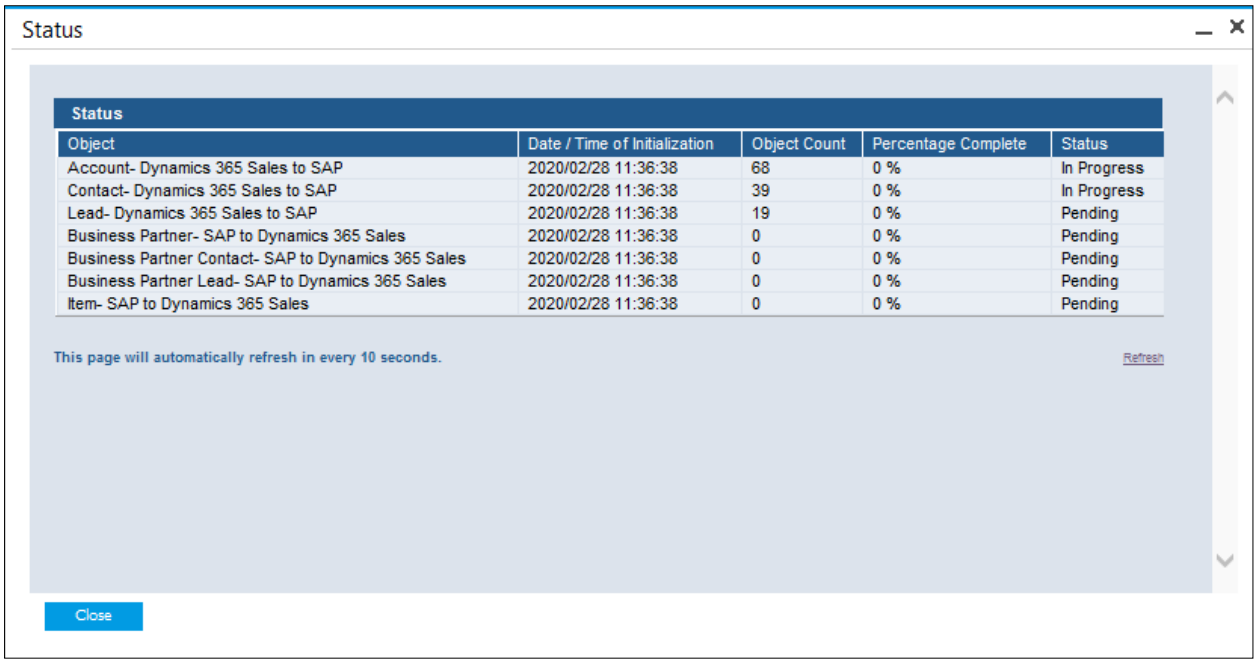


The *Synchronization* tab of *Dynamics 365 Sales* window contains the following fields:

Field Name	Description
Object Type	Displays the list of objects available for synchronization between SAP Business One and Dynamics 365 Sales. The list of objects is: • Account • Contact • Lead • Opportunity • Sales Quotation • Sales Order
Run	Select the frequency of automation run from the dropdown i.e. *Daily* or *Weekly* or *Never.*
On	Select the weekday on which the synchronization should run. **Note** The selection is available only for weekly type run only.

Hour	Choose the *Hour* frequency at which the synchronization should run.
Minute	Choose the *Minute* frequency at which the synchronization should run.
Initialize	Choose the *Initialize* button to synchronize the object data between SAP Business One and Dynamics 365 Sales. **Note** *Initialize* button is active until clicked for the first time. Once the initialization is done, the *Initialize* button is disabled.
Set Customers for Synchronization	Select this button to mark Customers synchronization from SAP business One to Dynamics 365 Sales.
Set Items for Synchronization	Select this button to mark bulk items synchronization from SAP business One to Dynamics 365 Sales.

Click on the *Initialization Status* button to view the initialized status of the data replication between Dynamics 365 Sales and SAP Business One.



Note

The *Initialize* button is active until the initialization is done for the first time. Once the initialization is done, close the Dynamics 365 Sales Settings window and reopen it, the *Initialize* button is disabled and Sync Now and Save Schedule button is enabled. All the products created later will be integrated between both the systems based on scheduled synchronization or manual synchronization

20.2.1.8 Synchronization

The following two methods are available for synchronization between SAP Business One and Dynamics 365 Sales:

- **Manual Synchronization:**
  Whenever a user needs the integration to be done on the immediate basis (instead of waiting till the Scheduler services to run), a user can choose the *Sync Now* button. The synchronization takes an immediate effect for the selected object.

- **Automatic Synchronization:**

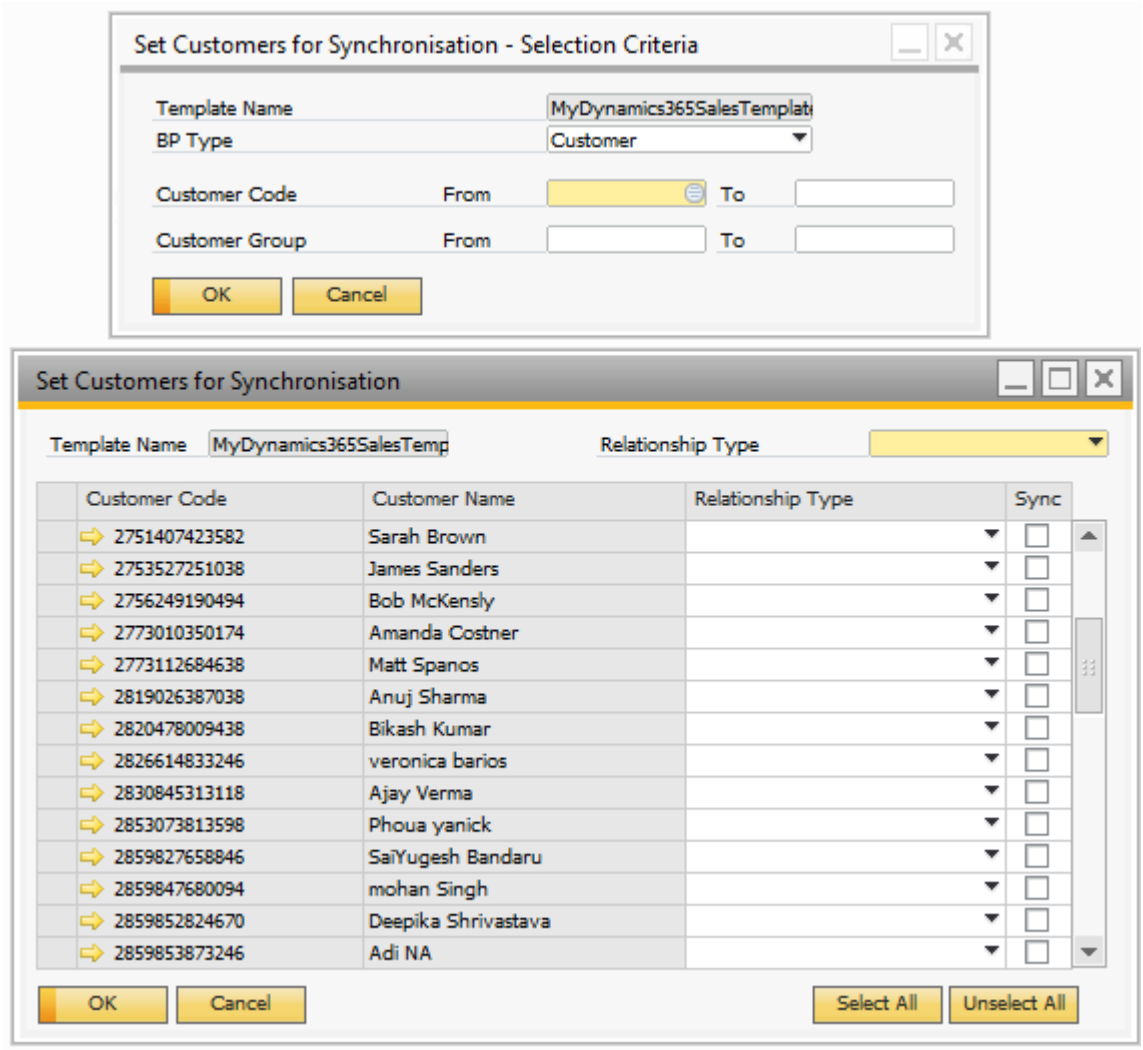
  The system enables a user to configure automatic integration between SAP Business One and Dynamics 365 Sales at a frequency (either daily or weekly) and on specific intervals. The synchronization runs based on schedule that is set for the object.

Synchronization is supported for six objects Account, Contact, Lead, Opportunity, Sales Quotation, Sales Order.

- **Customer Synchronization**
  The system enables to integrate all the customer master data between Dynamics 365 Sales and SAP Business One. Scheduling a synchronization enables the system to integrate customer masters automatically as per the schedule by running the Scheduler services.
    - **Set Bulk Customers for Synchronization**

      To Synchronize Customers from SAP to Dynamics 365 Sales, select items in bulk using the Set Customers for Synchronization menu under Integration Hub.

      1. Choose Administration → Integration Hub → Set Customers for Synchronizations.
      2. On clicking the Set Customers for Synchronization, Set Customers For Synchronization-Selection Criteria window opens.
      3. Select the Customers range and Customers Group range and click on Ok button.
      4. Set Customers for Synchronization window opens, select the Customer Codes and BP Name to synchronize. It is mandatory to select Account Type for Customers for synchronization.
      5. Click on Ok button to mark the items for synchronization from SAP to Dynamics 365 Sales.



- **Product Synchronization**
  The system enables to integrate all the item master data along with Product Prices from SAP Business One to Dynamics 365 Sales. Scheduling a synchronization enables the system to integrate item masters automatically as per the schedule by running the Scheduler services.

    - **Set Bulk Items for Synchronization**

      To Synchronize Items from SAP to Dynamics 365 Sales, select items in bulk using the Set Items for Synchronization menu under Integration Hub.

      1. Choose Administration → Integration Hub → Set Items for Synchronizations.
      2. On clicking the Set Items for Synchronization, Set Items for Synchronization-Selection Criteria window opens.
      3. Select the items range and Item Groups range and click on Ok button.
      4. Set Items for Synchronization window opens, select check box for the Item Codes and Item Name to synchronize.
      5. Click on Ok button to mark the items for synchronization from SAP to Dynamics 365 Sales.

- **Contact Synchronization**
  The system enables to integrate all Contacts from Dynamics 365 Sales to SAP Business One and Vice Versa. Scheduling a synchronization enables the system to integrate Contacts automatically as per the schedule by running the Scheduler services.

- **Lead Synchronization**
  The system enables to integrate all Leads from Dynamics 365 Sales to SAP Business One and Vice Versa. Scheduling a synchronization enables the system to integrate Lead automatically as per the schedule by running the Scheduler services.


Caution

Customers must set the synchronization time settings on redeployment of the Application.

20.2.2 Master Data Mapping Tool

This tool allows the user to map the already exist Account, Contact, Lead, and product data in Dynamics 365 Sales and SAP Business one. This is needed in case the same Account or Contact or Lead or product master is already existing in both the application and you would like to map their internal code to prevents the data duplicity between the applications.

To display the *Master Data Mapping Tool* window, choose *Administration* → *Integration Hub* → *Master Data Mapping Tool.*

Use the following steps to import the mapping data using the master data mapping tool:

1. Select a template from the Template dropdown list.
2. Select the Account or Contact or Lead or product from the *Master Data Type* dropdown list.
3. Choose the *Download from App* button to download the data from the Dynamics 365 Sales.
4. To check the data download status, choose the *Status* button.
5. Once the data download is complete, choose the *Prepare Template* button to generate the Microsoft Excel-based template for selected master i.e. Account or Contact or Lead or product. The application downloads the data from the Dynamics 365 Sales.
6. Open the template and provide the relevant information:
   - For Customer template, you need to provide the *SAP B1 Card Code (*Customer Code*)*
   - For Lead template, you need to provide the *SAP B1 Card Code (*Lead Code*)*
   - For Contact, you need to provide the *SAP B1 Card Code* and *SAP B1 Contact ID (*Customer Code and Contact ID*)*
   - For Product template, you need to provide the *SAP B1 Item Code*
7. Choose *Browse* button to navigate to the template path.
8. Choose the *Validate* button to check the correctness and completeness of the data in the selected template.
9. Choose the *Upload* button to import the data.

20.3 Using Dynamics 365 Sales

20.3.1 Lead

The integration of Lead is bidirectional between SAP Business One and Dynamics 365 Sales.

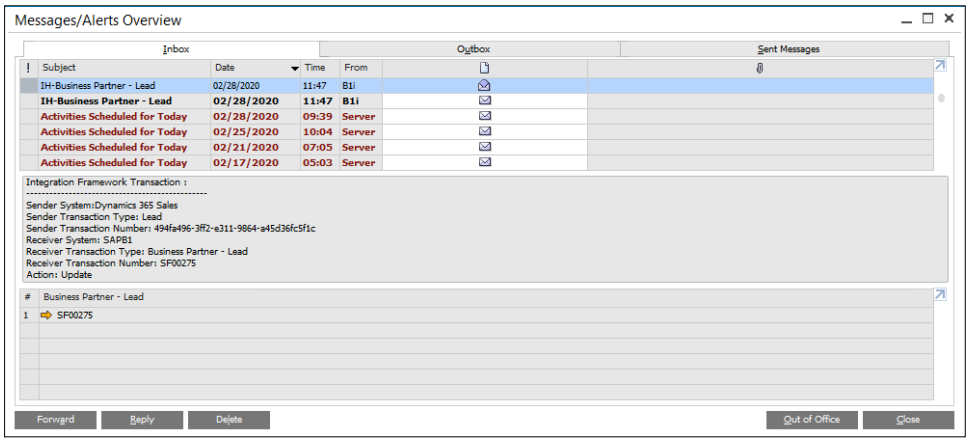
The Lead integration is bidirectional between Dynamics 365 Sales and SAP Business One. Lead Information like *Name, E-mail, Billing*, and other details are integrated from Dynamics 365 Sales to SAP Business One and vice-versa.

When the Lead is integrated from Dynamics 365 Sales to SAP Business One, the details such as *Dynamics 365 Sales Lead ID* is updated in *Cross Reference Code* in SAP Business One.

The following actions for Lead are supported:

- *Add Lead*- Add New Lead information. The Lead addition is bidirectional between Dynamics 365 Sales and SAP Business One.
- *Update Lead*- Edit Existing Lead information. The Lead is bidirectional between Dynamics 365 Sales and SAP Business One.

> **Caution**
>
> Lead deletion from Dynamics 365 Sales will not be integrated to SAP Business One and vice-versa. When Lead is converted into Accounts in Dynamics 365 Sales, user has to manually select Type in Accounts details. Upon synchronization with sap Business One, this will be created as new Customer in SAP Business One. This will not convert the existing lead (synchronized as lead earlier from Dynamics 365 Sales) to Customer.



20.3.2 Customer Master Data

The customer master data integration is bidirectional between Dynamics 365 Sales and SAP Business One. Customer Information like *Name, E-mail, Billing, Shipping Address and Contacts*, and other details are integrated from Dynamics 365 Sales to SAP Business One and vice-versa.

When the Account is integrated from Dynamics 365 Sales to SAP Business One, the details such as *Dynamics 365 Sales Account ID* is updated in *Cross Reference Code* in SAP Business One. *Dynamics 365 Sales Account Type* is updated in *Account Type* in SAP Business One.

The following actions for Customer Master Data are supported:

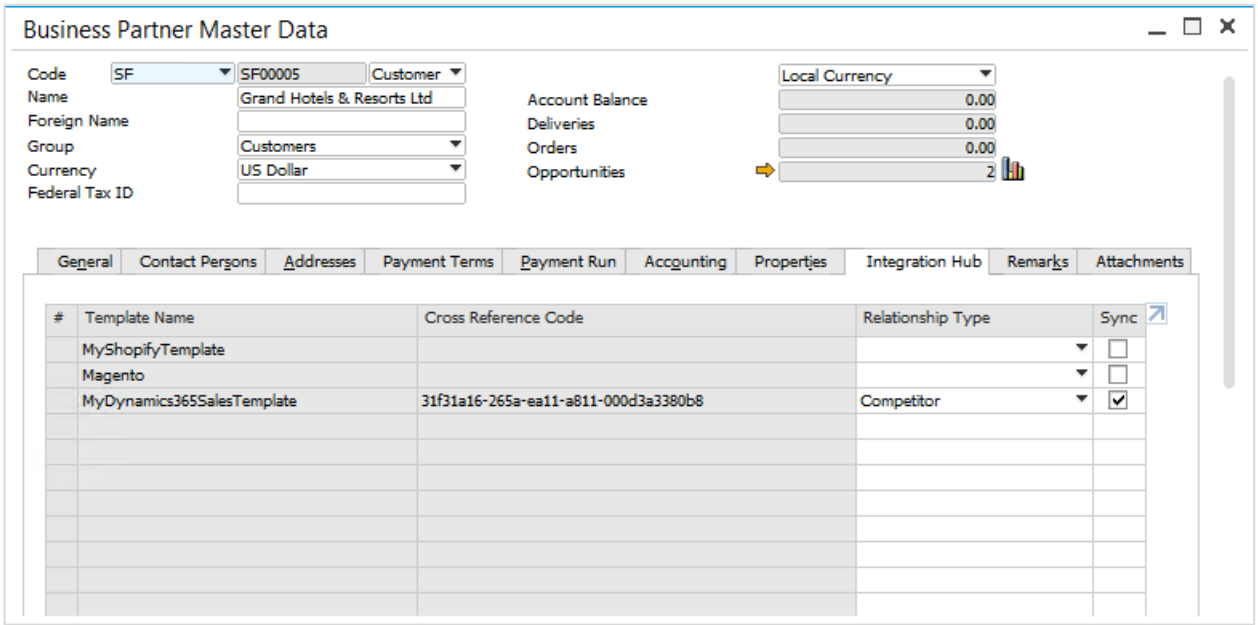
- *Add Customer*- Add new customer information. The customer master addition is bidirectional between Dynamics 365 Sales and SAP Business One.

- *Update Customers*- Edit existing customer information. The customer master update is bidirectional between Dynamics 365 Sales and SAP Business One.

> **Caution**
>
> Customer deletion from Dynamics 365 Sales will not be integrated to SAP Business One and vice-versa.

To display the customer data which are synchronized from Dynamics 365 Sales to SAP Business One, choose SAP Business One *Main Menu* →*Business Partners* →*Business Partner Master Data* →*Integration Hub.*

The customers from Dynamics 365 Sales will have *Template Name* as defined for Dynamics 365 Sales.



The following fields has been added to the window and is relevant to the Integration Hub. For details of other fields on the *Customer Master Data* window, refer to the SAP Business One Online Help.

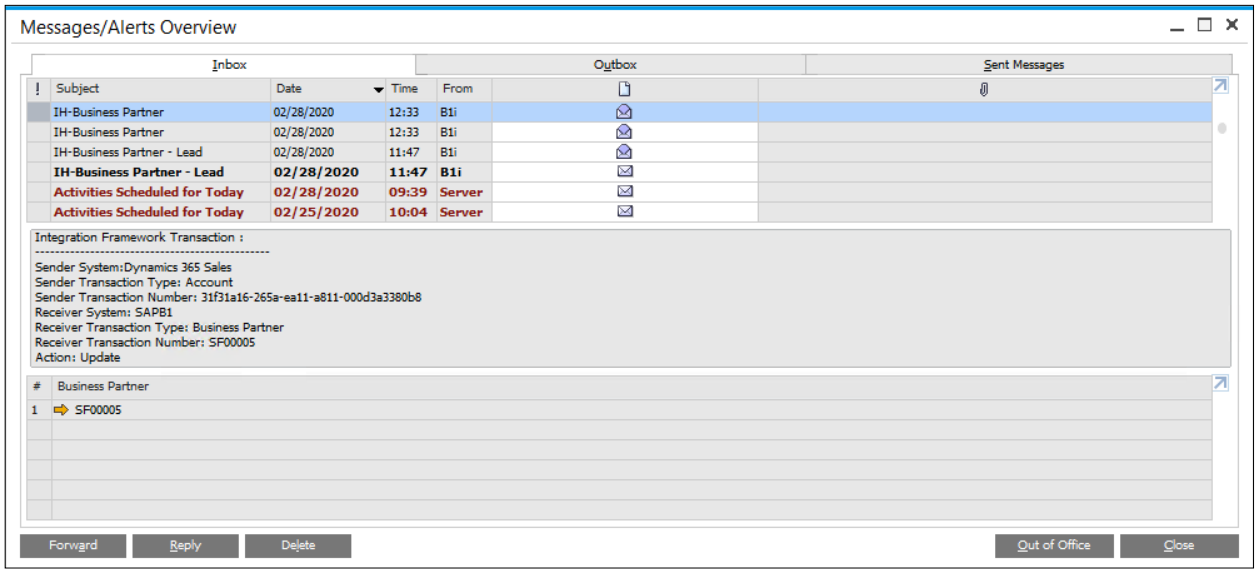
Field Name	Description
Template Name	Displays the name of the Dynamics 365 Sales template.
Cross Reference Code	Displays the Dynamics 365 Sales customer id.

Account Type	Displays the Dynamics 365 Sales Account Type
Sync	Select Check-box to synchronize.

Message /Alert Overview

Once the customer data is synchronized, Message /Alert Overview Inbox displays the transaction information in SAP Business One. The following information is displayed on the screen:

- Sender System
- Sender Transaction Type
- Sender Transaction Number
- Receiver System
- Receiver Transaction Type
- Receiver Transaction Number
- Action
- Status



20.3.3 Contact Master Data

The Contact is bi-directional between Dynamics 365 Sales and SAP Business One. The Contact assigned to the Account in the Dynamics 365 Sales is integrated to SAP Business One. Contact Information like *First Name, Last Name, E-mail, Phone Number, Address*, and other details are integrated between Dynamics 365 Sales and SAP Business One.

Caution

The Contact should be assigned to an Account for Integration.

Note

In Dynamics 365 Sales contact, the first name and last name of two contact persons cannot be same for an account.

20.3.4 Products Master Data

The System supports the integration of existing product data from Business One to Dynamics 365 Sales. Product add & update operations are supported from SAP Business One to Dynamics 365 Sales.

The *Item Code* in SAP Business One is mapped with Stock Keeping Unit (SKU), Prices and Product Code in Dynamics 365 Sales for integration. Product Synchronization from SAP Business One and Dynamics 365 Sales is uni-directional.

To synchronize the product from SAP Business One to Dynamics 365 Sales, choose *Main Menu* →*Inventory* → *Item Master Data*. Choose *Sync* in the Integration Hub Tab.

The following field has been added to the window and is relevant to the Integration Hub. For details of other fields on the *Item Master Data* window, refer to the SAP Business One Online Help.

Field Name	Description
Template Name	Displays the Name of the Dynamics 365 Sales Template.
Cross Reference Code	Displays the Dynamics 365 Sales Product ID for the product.
Sync	Select this checkbox to synchronize the product information from SAP Business One to Dynamics 365 Sales.



Caution

Product deletion from Dynamics 365 Sales and SAP Business One is not supported. If deleted product is used in transaction, then inconsistency in data will be observed.

20.3.4.1 Product

The integration of products is Unidirectional from SAP Business One to Dynamics 365 Sales.

20.3.4.2 Product Prices

The price integration is uni-directional from SAP Business One to Dynamics 365 Sales. The application uses the price list defined in the *Price list* tab of Dynamics 365 Sales to integrate the prices from SAP Business One to Dynamics 365 Sales. *Retrieve Price List* button retrieves the list of *Dynamics 365 Sales Price Books* from Dynamics 365 Sales to SAP Business One.

To open the *Price List* Tab in Dynamics 365 Sales, go to *Administration* → *Integration Hub* → *Dynamics 365 Sales Settings* → *Price List.*

The mapped price list prices for the item is the integrated from SAP Business One to Dynamics 365 Sales.

Note

- If Multiple currencies are enabled in Dynamics 365 Sales setting screen, three prices mapped in Item Master will be updated/replicated in Dynamics 365 Sales product master.

  For example - Primary currency –USD, Additional currency 1 – EUR and Additional Currency 2-CAD will be mapped under the Price List of Dynamics 365 Sales as per the mapping done in Dynamics 365 Sales settings screen.

- Re-Deploy the solution whenever you add Currency on Dynamics CRM.

20.4 Dynamics 365 Sales Transactions

20.4.1 Windows Enhancements in SAP Business One

New fields that are relevant to the Integration Hub have been added to different document windows in SAP Business One. The fields provide additional information regarding the Dynamics 365 Sales integration transactions.

20.4.1.1 Opportunity

Opportunity integrates from Dynamics 365 Sales to SAP Business One. New fields in the *Opportunity* document window:

Field Name	Description
Template Name	Name of the Dynamics 365 Sales template.
External Opportunity ID	Opportunity ID generated from Dynamics 365 Sales

20.4.1.2 Sales Quotation

Sales Quotation integrates from Dynamics 365 Sales to SAP Business One. New fields in the *Sales Quotation* document window:

Field Name	Description
Template Name	Name of the Dynamics 365 Sales template.
External Quote ID	Quote ID generated in Dynamics 365 Sales.
External Opportunity ID	Opportunity ID generated from Dynamics 365 Sales.

20.4.1.3 Sales Order

Sales Order integrates from Dynamics 365 Sales to SAP Business One. New fields in the *Sales Order* document window:

Field Name	Description
Template Name	Name of the Dynamics 365 Sales template.
External Opportunity ID	Opportunity ID generated from Dynamics 365 Sales.
External Quote ID	Quote ID generated in Dynamics 365 Sales.
External Order ID	Order ID generated in Dynamics 365 Sales.

20.4.2 Opportunity

Opportunity from Dynamics 365 Sales integrates to SAP Business One on entering the *Expected Revenue* for an *Opportunity* in Dynamics 365 Sales. The integration is unidirectional from Dynamics 365 Sales to SAP Business One.

The following are the steps to integrated Opportunity from Dynamics 365 Sales to SAP Business One:

1. Create *Account* in Dynamics 365 Sales and integrate to SAP Baseness One.
2. Create *Opportunity* in Dynamics 365 Sales and enter the Amount in Opportunity Information in Dynamics 365 Sales.
3. Save the information in Dynamics 365 Sales.
4. On SAP Business One got to *Administration> Integration Hub> Dynamics 365 Sales Settings> Synchronization tab*.
5. Select Object type as *Opportunity* and click on *Sync Now* button.
6. Alert Message is generated and displays information about the synchronized Opportunity.

> **Note**
>
> If the Dynamics 365 Sales Opportunity Stage is not mapped with Opportunity Stage in SAP Business One in Dynamics 365 Sales settings screen, then that opportunity will not be integrated to SAP Business One.

20.4.3 Sales Quotation

Sales Quotation from Dynamics 365 Sales integrates to SAP Business One on enabling the *Quotes* on *Quote Settings* window in Dynamics 365 Sales. The integration is unidirectional from Dynamics 365 Sales to SAP Business One.

The following are the steps to integrated Sales Quotes from Dynamics 365 Sales to SAP Business One:

1. *Enable Quotes*. On Dynamics 365 Sales go to *Build> Customize> Quotes> Quotes Settings*. Select the check-box *Enable Quotes* and save the settings. On Page Layout Selection page in Dynamics 365 Sales select the *Opportunity Layout* and save the settings.
2. On Dynamics 365 Sales, select *Opportunity* from *Recent Opportunities*. On the Opportunity page go to Quotes and create a new Quote. On created Quote, Add Line Item.
3. On SAP Business One go to *Administration> Integration Hub> Dynamics 365 Sales Settings> Synchronization tab*.
4. Select Object type as *Sales Quotation* and click on *Sync Now* button.
5. Alert Message is generated and displays information about the synchronized Sales Quotation.

> **Note**
>
> If Line Item is not added in the Quote in Dynamics 365 Sales, then that Quote will not integrate with Sales Quotation in SAP Business One.
>
> If the Quote status is Draft, then that quote will not integrate to Sales Quotation in SAP Business One. All Status other than Draft will integrate from Dynamics 365 Sales to SAP Business One.

20.4.4 Sales Order

Orders from Dynamics 365 Sales integrates to Sales Order SAP Business One. The integration is unidirectional from Dynamics 365 Sales to SAP Business One.

The following are the steps to integrate Orders from Dynamics 365 Sales to SAP Business One:

1. Create *New Order* with Product in Dynamics 365 Sales.
2. Change the Status of Contract from Draft to Activated on Contract page by clicking on *Activate* button in Dynamics 365 Sales.
3. Change the Order Status from Draft to Activated on Order page by clicking on *Activate* button in Dynamics 365 Sales.
4. On SAP Business One got to *Administration> Integration Hub> Dynamics 365 Sales Settings> Synchronization tab*.
5. Select Object type as *Sales Order* and click on *Sync Now* button.
6. Alert Message is generated and displays information about the synchronized Sales Order.

> **Note**
>
> If Line Item is not added in the Orders in Dynamics 365 Sales, then that Orders will not integrate with Sales Order in SAP Business One.
>
> If the Orders status is Draft, then that Orders will not integrate to Sales Order in SAP Business One. Only the Orders with status Activated will integrate with Sales Order in Sap Business One.

21 SAP S/4 HANA

The integration package for integration with SAP S/4 HANA provides you with sample integration content and is addressing partners to rapidly build up their demo and development system.

The sample integration content must not be applied as-is into the customer's productive environment. It is not possible to configure and run the sample integration content as-is, because it is delivered per default in a sample namespace, starting with prefix "OE.HUB". You have to copy the sample integration content from the sample sap-namespace to the customer's Z-namespace.

Furthermore, you can utilize this copied content for your enhancements or changes; the delivered sample integration content will stay unchanged in its sap-namespace and can be re-used as copy templates again.

Note

SAP S/4 HANA Integration with SAP Business One does not require the Integration Solutions Add-On Installation in the Subsidiaries companies running on SAP Business One.

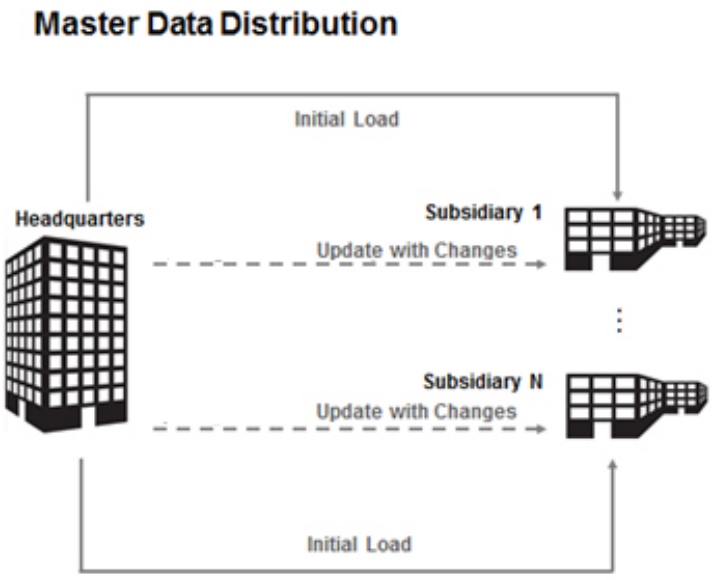
The following business scenarios are supported in the SAP S/4 HANA Integration with SAP Business One.

- Master Data Distribution (Product and Customer) – OE.HUB.Masterdata
- Intercompany Purchasing (Sales from Local Stock and Sales from Central Stock) OE.HUB.ICPurchasing

  For information on setting up the S/4 HANA integration with SAP Business One, see *Administrator Guide for SAP S4 HANA and SAP ECC Integration*

21.1 Master Data (Item and Business Partner)

Master Data Distribution (OE.HUB.Masterdata) Product and Customer distributes product and customer master data that are centrally available in SAP S/4 HANA system to Subsidiaries running on SAP Business One. This scenario provides consistent master data to your integrated SAP Business One companies.



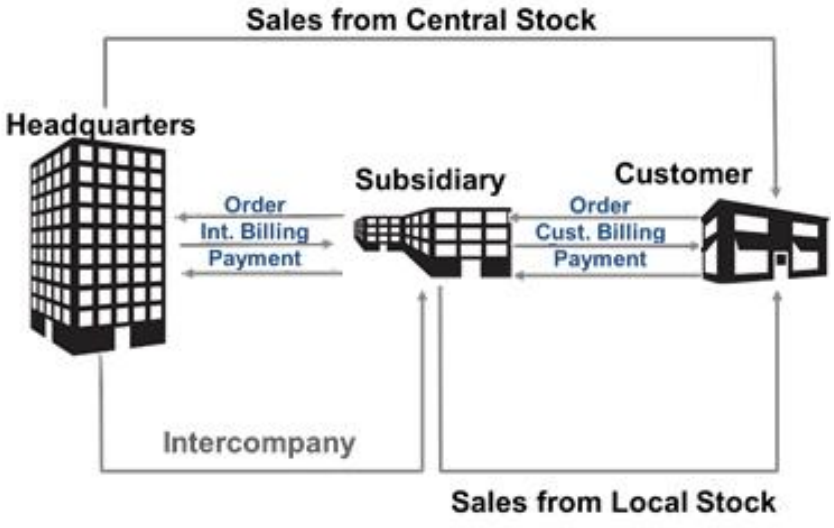
Master data distribution is the foundation and prerequisite for all other business integration scenarios.

The scenario provides:

- The initial load of product and customer master data
- Regular, ongoing master data updates during the complete lifecycle of master data records
- Unidirectional inserts and updates for product and customer master data records from the headquarters SAP S/4 HANA system to the subsidiary SAP Business One system or systems
- Synchronization of all changes to master data records except for deletions

For information on Master Data Distribution, see the *Configuration Guide for Master Data Distribution in S4 HANA and SAP ECC Landscape*

21.2 Intercompany Purchasing (Sales from Central Stock and Sales from Local Stock)



Intercompany Purchasing (Sales from Central Stock)

This scenario packages covers two different subsidiary processes, the drop-shipment and the replenishment business scenario.

Intercompany Purchasing –(OE.HUB.ICPurchasing) Sales from Central Stock (drop-shipment) is intended for large enterprises with several sales and distribution subsidiaries and branches in different locations or countries. SAP S/4 HANA runs at headquarters and SAP Business One runs in the subsidiary locations.

The subsidiaries or branches are mainly responsible for selling products that the headquarters produces centrally and stores at its location. Although a subsidiary does not have its own stock in its local warehouse, the stock it sells belongs, in terms of value, to the assets of the subsidiary.

The subsidiary orders the products from the S/4 HANA headquarters, whose central warehouse distributes the products directly to the subsidiary's or branch's end customer. Subsequently, the headquarters sends an invoice for the products to the subsidiary to account for inter-company revenue and inventory valuation. The subsidiary is responsible for sending invoices for the products to the end customer.

Intercompany Purchasing (Sales from Local Stock)

Intercompany Purchasing (OE.HUB.ICPurchasing) - Sales from Local Stock (replenishment) is intended for large enterprises with several sales and distribution subsidiaries or branches in different locations or countries. The scenario assumes that the headquarters runs SAP S/4 HANA and the subsidiaries run SAP Business One as their ERP system. The subsidiaries keep their own stock in their local warehouses. The stock is part of the assets of the subsidiary.

The subsidiary sells the headquarters products from its local stock. The subsidiary replenishes its stock with orders to the S/4 HANA headquarters.

For information on Intercompany Purchasing, see the *Configuration Guide for Intercompany Purchasing in S4 HANA and SAP ECC Landscape*

22 SAP ECC

The integration package for integration with SAP ECC provides you with sample integration content and is addressing partners to rapidly build up their demo and development system.

The sample integration content must not be applied as-is into the customer's productive environment. It is not possible to configure and run the sample integration content as-is, because it is delivered per default in a sample namespace, starting with prefix "OE.HUB". You have to copy the sample integration content from the sample sap-namespace to the customer's Z-namespace.

Furthermore, you can utilize this copied content for your enhancements or changes; the delivered sample integration content will stay unchanged in its sap-namespace and can be re-used as copy templates again.

> **Note**
>
> SAP ECC Integration with SAP Business One does not require the Integration Solutions Add-On Installation in the Subsidiaries companies running on SAP Business One.

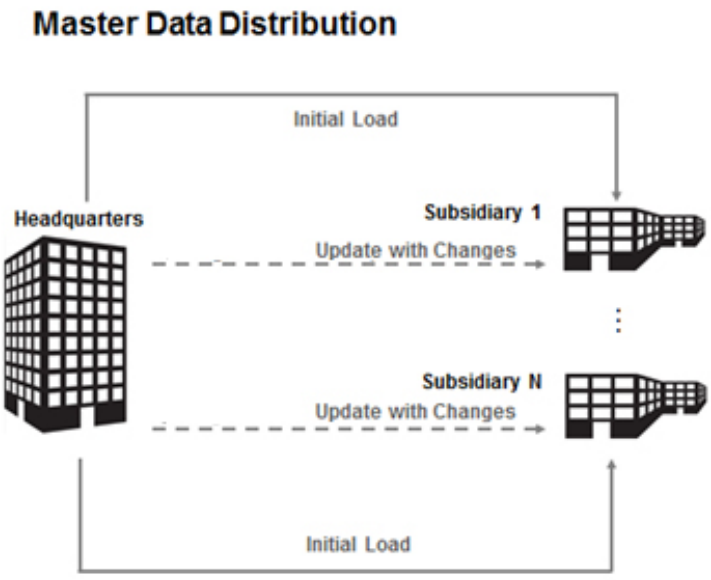
The following business scenarios are supported in the SAP ECC Integration with SAP Business One.

- Master Data Distribution (Product and Customer) – OE.HUB.Masterdata
- Intercompany Purchasing (Sales from Local Stock and Sales from Central Stock) OE.HUB.ICPurchasing

For information on setting up the SAP ECC integration with SAP Business One, see *Administrator Guide for SAP S4 HANA and SAP ECC Integration*

22.1 Master Data (Item and Business Partner)

Master Data Distribution (OE.HUB.Masterdata) Product and Customer distributes product and customer master data that are centrally available in SAP ECC system to Subsidiaries running on SAP Business One. This scenario provides consistent master data to your integrated SAP Business One companies.



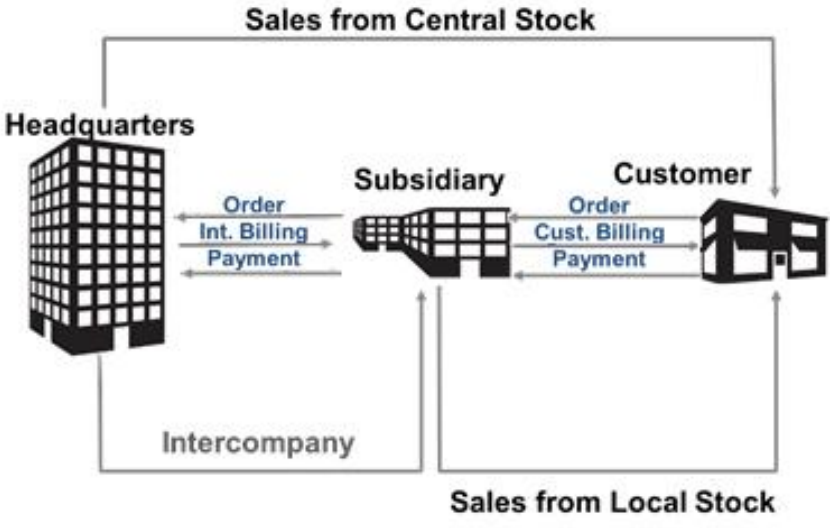
Master data distribution is the foundation and prerequisite for all other business integration scenarios.

The scenario provides:

- The initial load of product and customer master data
- Regular, ongoing master data updates during the complete lifecycle of master data records
- Unidirectional inserts and updates for product and customer master data records from the headquarters SAP ECC system to the subsidiary SAP Business One system or systems
- Synchronization of all changes to master data records except for deletions

For information on Master Data Distribution, see the *Configuration Guide for Master Data Distribution in S4 HANA and SAP ECC Landscape*

22.2 Intercompany Purchasing (Sales from Central Stock and Sales from Local Stock)



Intercompany Purchasing (Sales from Central Stock)

This scenario packages covers two different subsidiary processes, the drop-shipment and the replenishment business scenario.

Intercompany Purchasing –(OE.HUB.ICPurchasing) Sales from Central Stock (drop-shipment) is intended for large enterprises with several sales and distribution subsidiaries and branches in different locations or countries. SAP ECC runs at headquarters and SAP Business One runs in the subsidiary locations.

The subsidiaries or branches are mainly responsible for selling products that the headquarters produces centrally and stores at its location. Although a subsidiary does not have its own stock in its local warehouse, the stock it sells belongs, in terms of value, to the assets of the subsidiary.

The subsidiary orders the products from the SAP ECC headquarters, whose central warehouse distributes the products directly to the subsidiary's or branch's end customer. Subsequently, the headquarters sends an invoice for the products to the subsidiary to account for inter-company revenue and inventory valuation. The subsidiary is responsible for sending invoices for the products to the end customer.

Intercompany Purchasing (Sales from Local Stock)

Intercompany Purchasing (OE.HUB.ICPurchasing) - Sales from Local Stock (replenishment) is intended for large enterprises with several sales and distribution subsidiaries or branches in different locations or countries. The scenario assumes that the headquarters runs SAP ECC and the subsidiaries run SAP Business One as their ERP system. The subsidiaries keep their own stock in their local warehouses. The stock is part of the assets of the subsidiary.

The subsidiary sells the headquarters' products from its local stock. The subsidiary replenishes its stock with orders to the SAP ECC headquarters.

For information on Intercompany Purchasing, see the *Configuration Guide for Intercompany Purchasing in S4 HANA and SAP ECC Landscape*

23 WooCommerce

WooCommerce is an open-source e-commerce plugin for WordPress. It is designed for small to large-sized online merchants using WordPress. The integration between WooCommerce and SAP Business One facilitates automated, bi-directional data exchange between WooCommerce and the SAP Business One, eliminating data re-keying while reducing costly errors.

Note

- WooCommerce Currency must match SAP B1 local currency.
- The Thousand Separator, Decimal Separator, and Number of Decimals should be the same in both systems.

23.1 Setting Up WooCommerce in Integration Hub

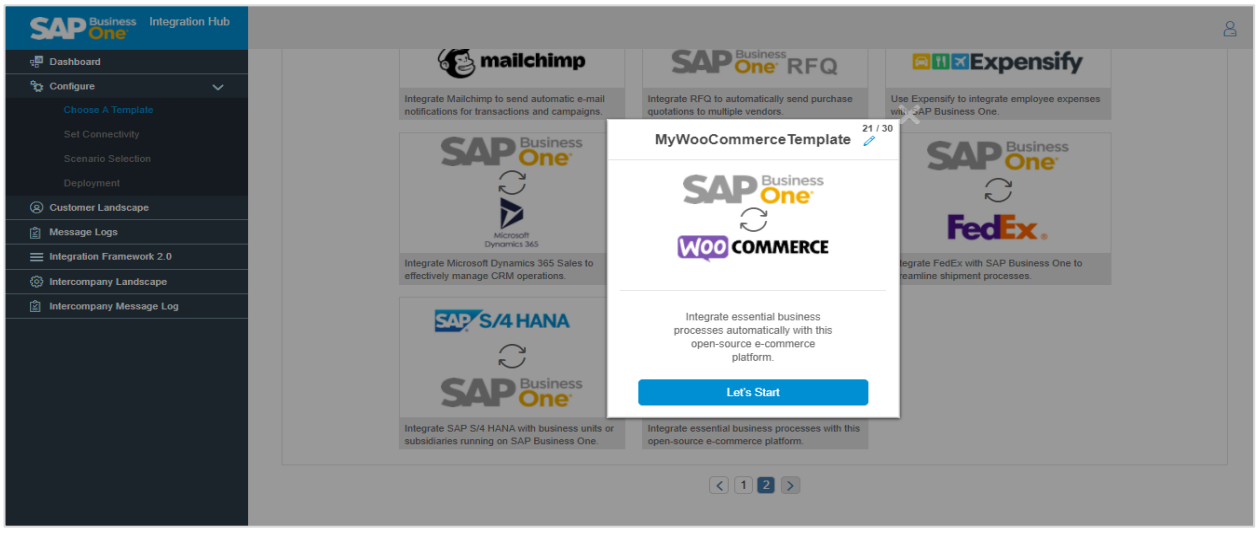
The following are the steps to set up WooCommerce in the Administration Console:

1. Add New Customer. Refer to the section Add New Customer in the document.
2. Select the *WooCommerce* template to integrate.

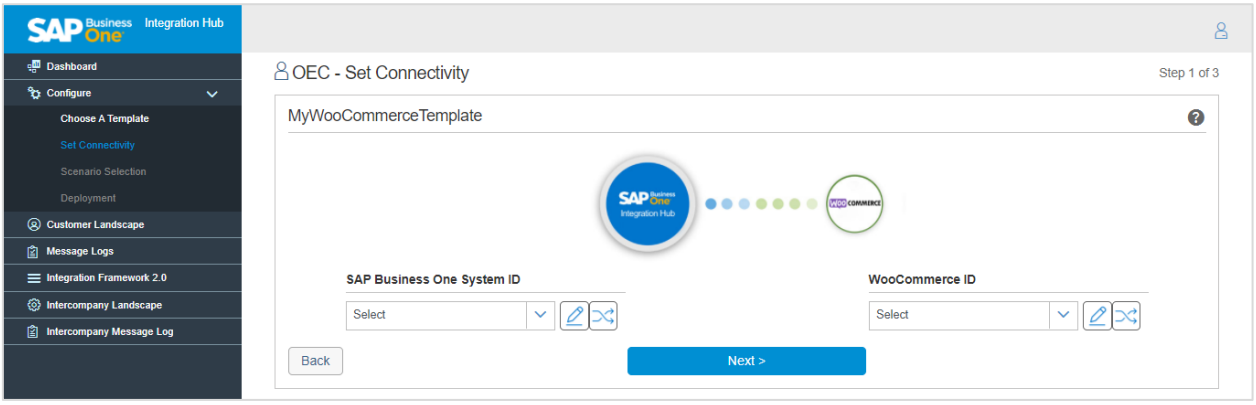
   Upon selecting the template, a message "*Let's Start*" prompts to start configuring the connectivity settings. Change the template name by clicking the Edit button to edit the template name. Otherwise, it appears as *My MyWooCommerceTemplate.*

Note

By default, the name of the template appears as *MyWooCommerceTemplate* and can be renamed.



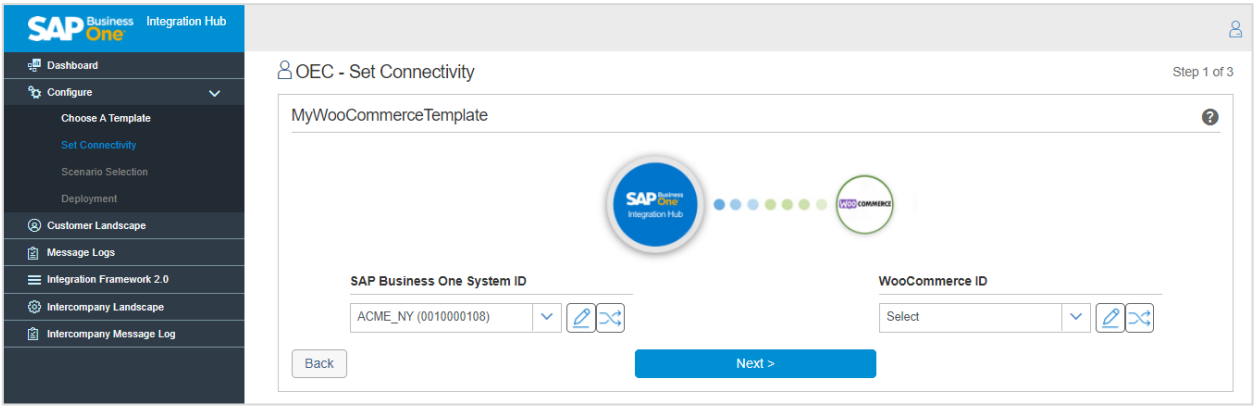
3. Upon choosing the *Let's Start* button, a *Set Connectivity* page appears with the following two steps to complete the configurations for connectivity.



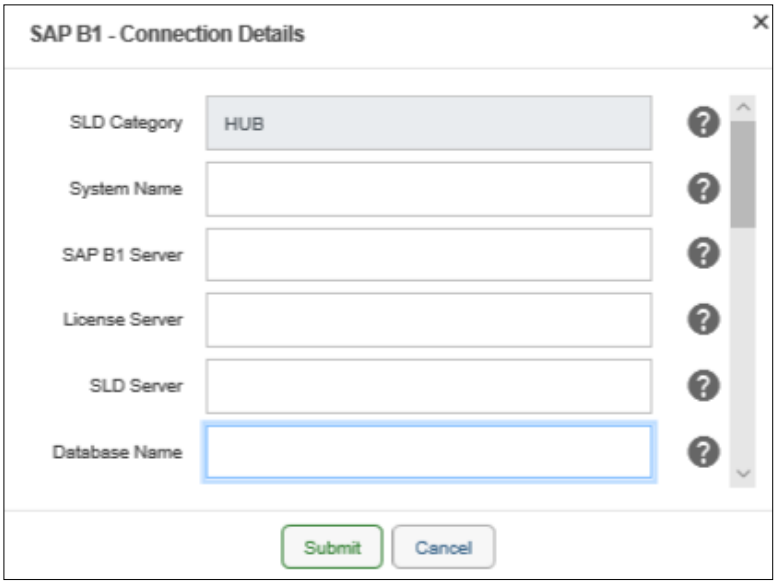
Step 1 – Set Connectivity

4. Choose the SAP Business One SLD to provide the connection between the *SAP Business One System Id* and *WooCommerce Id*.

> **Note**
>
> By default, the solution displays all the SAP Business One SLDs available in the *SLD Category* selected during customer creation.



5. To add a new SLD or edit an existing SAP Business One SLD under the SAP Business System ID area, choose *Add / Edit* button.



The *SAP Business One Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. **Note** *System Name* is the mandatory field to add or update SAP Business One SLD.
SAP Business One Server	Enter SAP Business One Server Name / IP Address. **Note** *SAP Business One Server* is the mandatory field to add/update SLD information for SAP Business One.
License Server	Enter *License Server* details. i.e. Server Name or IP Address and port number of the SAP Business One License Server. The default port is 30000.
SLD Server	Enter the valid *SLD Server* details with port. **Note** *SLD Server* details is the mandatory field to add/update SLD information for SAP Business One.
Database Name	Enter the name of the SAP Business One Database. **Note** *Database Name* is the mandatory field to add/update SAP Business One System SLD. **Caution** The *Database Name* must be entered the same as the SAP Business One Database Name.
Database Type	Currently, only Microsoft SQL Server 2005, 2008, 2012, 2014, 2016, 2017, and SAP Hana DB are supported. Choose the database type from the dropdown list. **Note** *Database Type* is the mandatory field to add/update SAP Business One SLD.

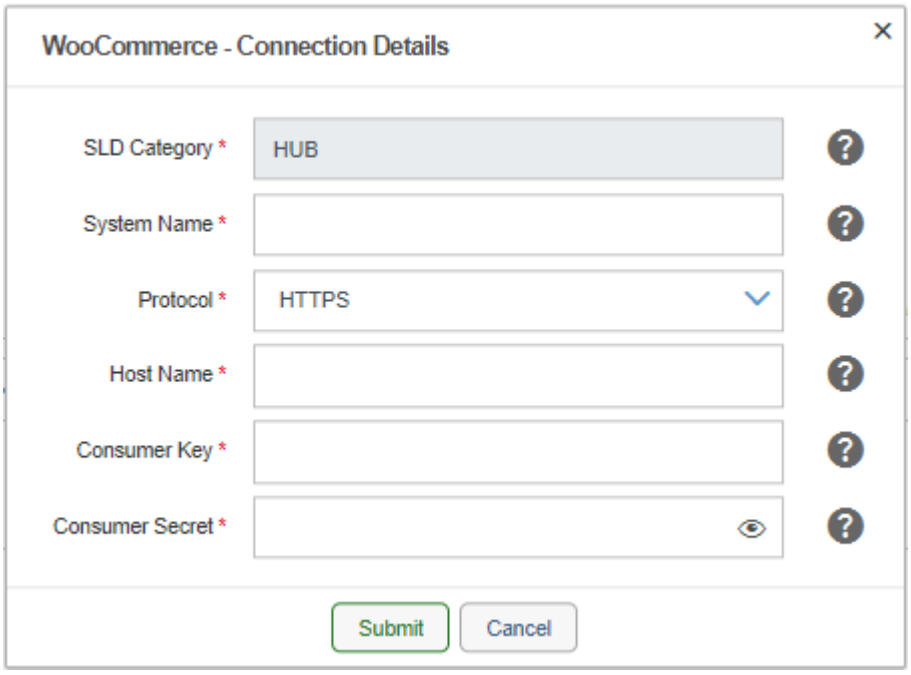
Database User	Enter the user to access the company database using the database connection. *Database User* is the mandatory field to add/update SAP Business One SLD. Caution The *Database User* must be valid. Invalid *Database User* will result in failure to establish the connection.
Database Password	Enter a valid password for database login. Note *Database Password* is the mandatory field to add/update SAP Business One SLD. Caution The *Database Password* must be valid. Invalid *Database Password* will result in failure to establish the connection.
Database Port	Enter the port for database.
Username	Enter `B1i` in this field. Note *Username* is the mandatory field to add/update SAP Business One SLD. It is set as B1i by default and un editable. Caution Ensure that a user with this name exists in the SAP Business One database.
Password	Enter a valid password for B1i user of SAP Business One.
Language	Select the language from the list of languages.
Is Trust	Select *True* or *False*. The default value for this field is *False.* To use a trusted connection, choose *True* from the dropdown list.
JcoPath	Enter path for jco library. Example of Installation path of JCO: C:\Program Files (x86)\SAP\SAP Business One DI API\JCO\LIB
DI ProxyHost	The DI Proxy host must be defined if B1i is installed on a separate server (this is, other than the SAP Business One server). The value in this field must be the same as the SAP Business One Server address. Example *Proxyhost* can be same as *SAP Business One Server.*
DI ProxyPort	The default value of *DI Proxy Port* is 2099.
Proxy Host	The proxy host is defined in a multi-instance scenario. If the B1i server connects to the SAP Business One server through a proxy server then, enter the address of the proxy server in this field.
Proxy Port	Enter the proxy port in this field.

6. Enter the valid data and choose the *Submit button.* An *SAP Business One SLD* is created.

7. Choose the *Test Connection* icon to test the connection between the SAP Business One System Id in Integration Hub and the SAP Business One System Landscape Directory.

   If the connection is successful, a success message appears “Test Connection Successful”. If the connection is unsuccessful, a failure message appears “Test Connection Failed”. Please provide the correct credentials.

8. To add/edit WooCommerce instance SLD under the WooCommerce Id area, choose the Add / Edit button.

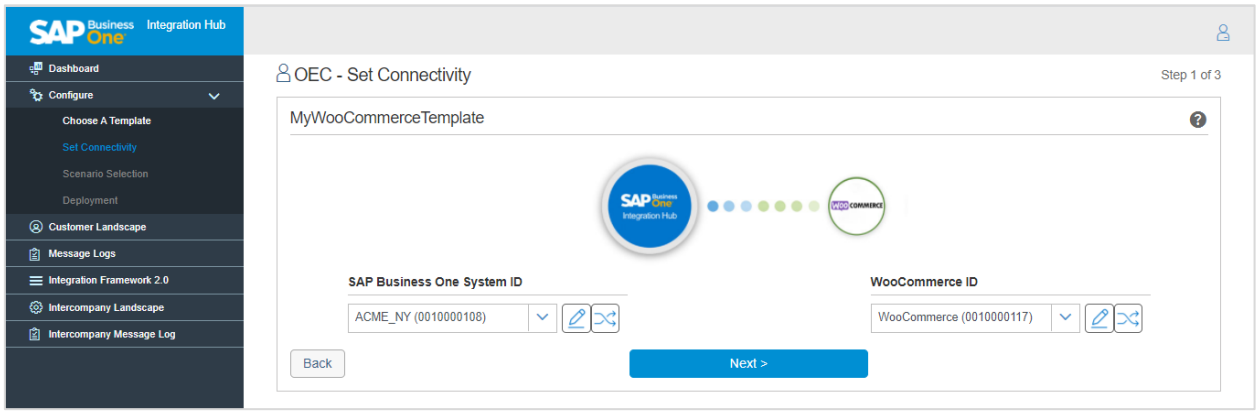


The *WooCommerce Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update WoCommerce SLD.
Protocol	Select Protocol from HTTP / HTTPS.
Host Name	Hostname of WooCommerce site. The hostname is the fully qualified domain name. For Example, if you access the WooCommerce site using URL: https://myhubstore.wpcomstaging.com/wp-admin/, then the hostname of the WooCommerce site is : myhubstore.wpcomstaging.com
Consumer Key	Enter the Consumer Key generated by WooCommerce. Note To create keys for a specific WordPress user: 1.Go to: WooCommerce > Settings > Advanced > REST API. Select Add Key. You are taken to the Key Details screen. 2. Add a Description. 3. Select the User you would like to generate a key for in the dropdown. 4. Select a level of access for this API key — Read/Write access. 5. Select Generate API Key, and WooCommerce creates API keys for that user.

	6. you should see Consumer Key and Consumer Secret keys
Consumer Secret	Enter the Consumer Secret Key generated by WooCommerce.

9. Provide the valid information in the fields and choose the *Submit button.* SLD for WooCommerce will be created.



10. Choose the *Test Connection* icon to test the connection between the Integration Hub and WooCommerce.

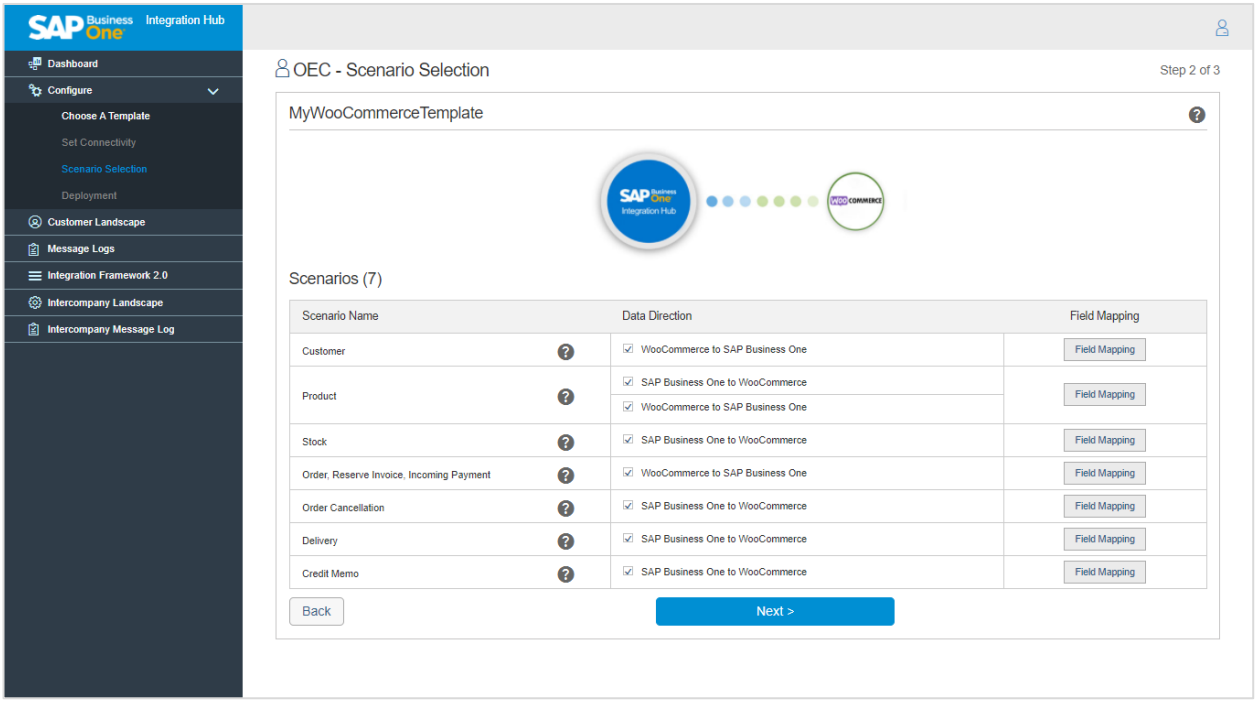
If the connection is successful, a success message appears “Test Connection Successful”.

If the connection is unsuccessful, a failure message appears “Test Connection Failed”.

11. Choose the *Next* button to proceed to Step 2.

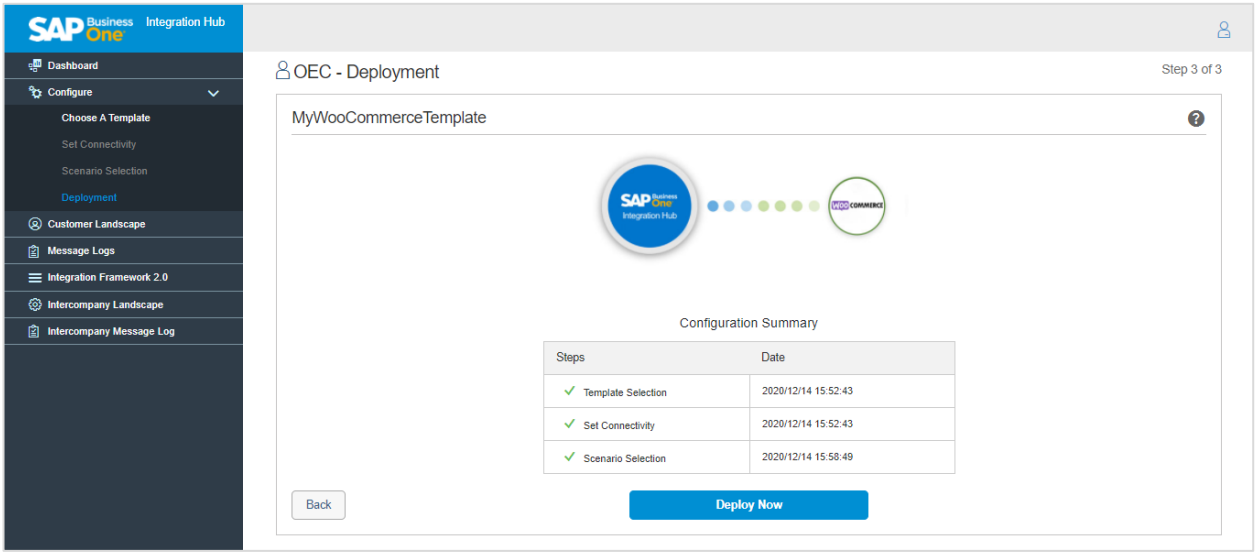
Scenario Selection

12. The Scenario Selection summary displays the *Scenario Name, Data Direction,* and *Field Mapping. The Field Mapping* further displays information of Fields i*n SAP Business One* and mapped fields in *WooCommerce.*



Configuration Summary

13. The Configuration summary displays the *Date* and time for *Template Selection, Set Connectivity steps* and *Scenario Selection*.

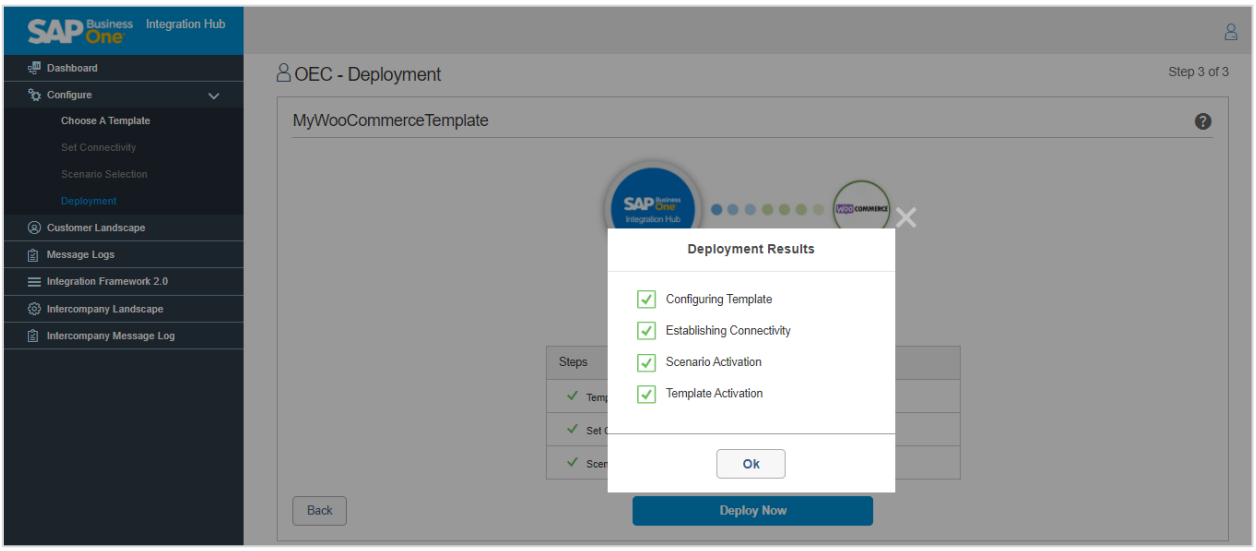


Step 2 – Deployment

14. To deploy the solution, choose the *Deploy Now* button.

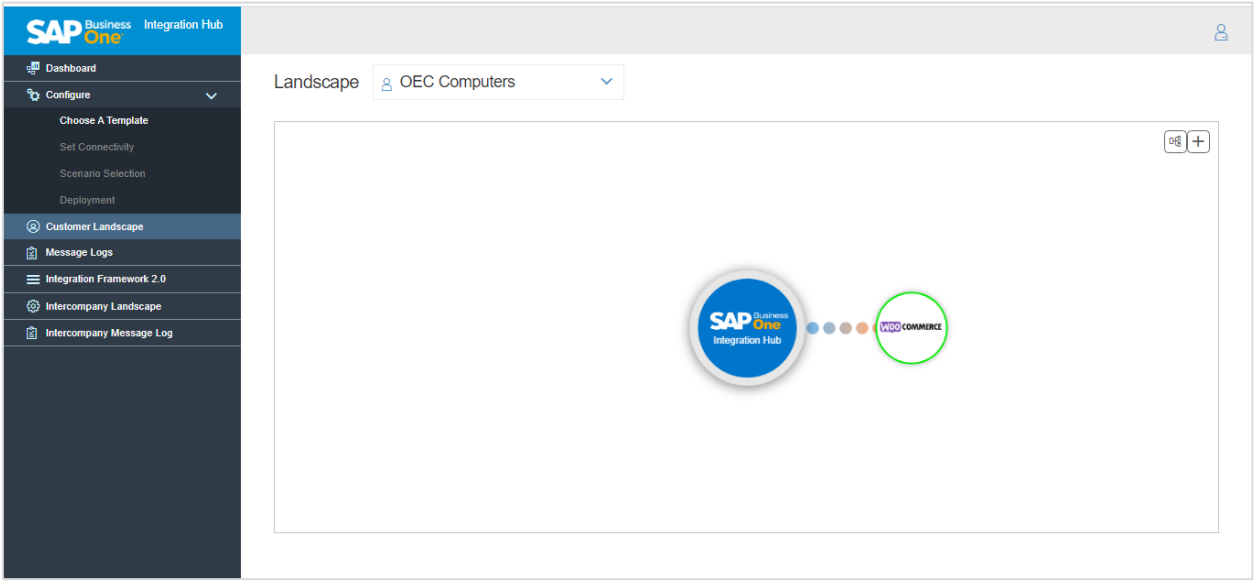
15. The application prompts you to provide the license details. For more information, refer to the Assigning the Integration Hub licenses section in this document.

16. The Integration Hub displays the *Deployment Results* whether the deployment is successful or failed. The checkbox in the *Deployment Results* window displays status of each deployment stage.



> **Note**
>
> After you enable the multi-branch function in SAP Business One, you must re-deploy the WooCommerce Template.

17. Once all stages are checked, click the *OK* button on the *Deployment Results* window to proceed. The successful deployment of the solution in Integration Hub results in enabling the features in SAP Business One. Customer Landscape displays the connection of SAP Business One to WooCommerce.



18. To modify the template after successful feature activation, right-click on the logo of the template.

19. Right click on the WooCommerce logo displays window with the following fields:

Field Name	Description
View	Displays the *Set Connectivity* window in view mode.
Edit	Displays the *Set Connectivity* window in Edit mode.
De-activate	Deactivates the WooCommerce deployment.
Deployment Status	Displays the deployment status with date and time.
Delete Template	Choose delete template to delete the template. It is an Irreversible action. Note On deleting the template, the template will be marked as Inactive in the application deployment status window in SAP Business One.
Delete Deployment Info.	Choose delete deployment info. to delete the complete deployment information of the template. It is an Irreversible action. Note On deleting the deployment information, the template will not be deleted from deployment panel screen, it will be deactivated only.
Manage Licenses	Choose Manage License to Activate/Deactivate the integration Hub License. For more information, see Managing the Integration Hub licenses section in this guide.

23.2 Setup in SAP Business One

1. In the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Application Deployment Status*. The *Deployment Status* field should display 'Active', indicating that the feature is deployed in the Integration Hub. If the status displays 'Inactive', then redeploy the feature in the *Integration Hub.*

   The following are the statuses that can be visible on the *Application Deployment Status* screen:

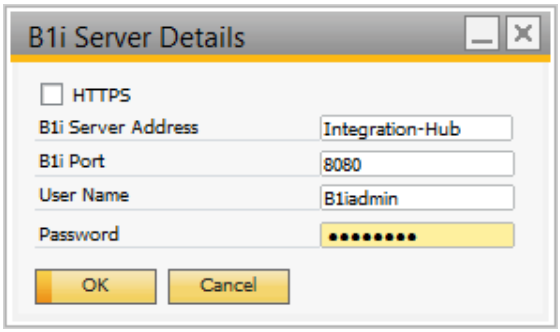
   - *Active*: The status represents the solution is deployed and active.
   - *Inactive*: The status represents the feature template is not inactive.

   For more details, refer the *Application Deployment Status* section in this guide.

   > **Note**
   >
   > You must restart the SAP Business One client after WooCommerce deployment from the Integration HUB. On login, the Add-On script will execute, and the relevant setup window will appear.

   > **Note**
   >
   > You must define the ISO Currency code for local and all other currencies defined in the database.

2. Enter B1i Server Details in SAP Business One in *Main Menu* → *Administration* → *Integration Hub* → *B1i Server Details* window. This window enables to enter the *B1i Server Details*.



The *B1i Server Details* contains the following fields:

Field Name	Description
B1i Server Address	Enter the server name or IP address of B1i server.
B1i Port	Enter the port of the B1i Server. The default port for HTTP is 8080
Username	B1i run time
Password	Enter the password for B1i run time user.
HTTPS	Select the checkbox to enable the solution to use HTTPS.

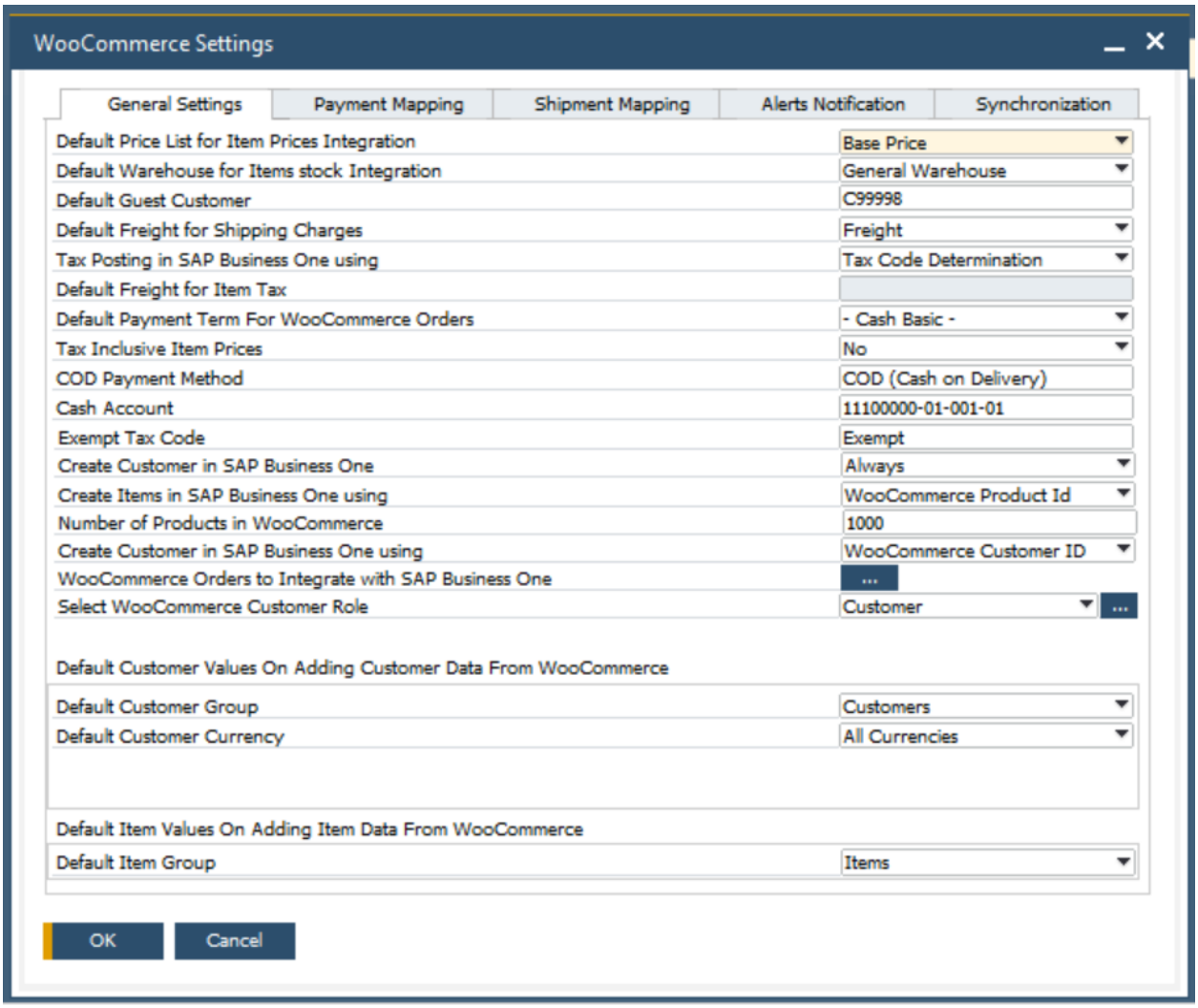
> **Note**
>
> Please ensure that the SLD entry for this company exists in SAP B1if and the solution is properly deployed.

23.2.1 WooCommerce Settings

On the Main Menu, go to *Administration* → *Integration Hub* → *WooCommerce Settings* to configure the required WooCommerce settings.

23.2.1.1 General Settings

Configure the general settings in the *General Settings* tab in *WooCommerce Settings* window.



The *General Settings* tab of *WooCommerce Settings* window contains the following fields:

Field Name	Description
Default Price List used for Items Prices Integration	Select a Price List. The selected price list is used to integrate product prices from SAP Business One to WooCommerce.

Default Warehouse for Items stock Integration	Select a Warehouse. The selected warehouse is used to integrate product stock from SAP Business One to WooCommerce.
Default Guest Customer	Select a customer. The selected customer is used to integrate orders of guest customers from WooCommerce to SAP Business One.
Default Freight for Shipping Charges	Select a freight component for Shipping Charges. The selected freight component is used to integrate the header level shipping amount per order in WooCommerce to SAP Business One.
Tax Posting in SAP Business One using	From the dropdown list, select either *Freight* or *Tax Code Determination*. ○ *Freight* – Whenever a WooCommerce Order is integrated to SAP Business One, the WooCommerce Order tax amount is posted to the default freight mapped in the *Default Freight for Item Tax* setting. ○ *Tax Code Determination* – Whenever a WooCommerce Order is integrated into SAP Business One, the Tax code is automatically set in SAP Business One based on the Tax code determination. The Hub application will not post the WooCommerce Order Tax amount in SAP Business One, the transaction tax amount is automatically calculated in SAP Business One based on the applied tax Code, Note You must complete the Tax code determination in SAP Business One based on your requirement and ensure the tax code applied in a transaction by both application i.e. WooCommerce and SAP Business One should be same. otherwise, it may lead to document total inconsistency.
Default Freight for Item Tax	Select a freight component for the tax component. The selected freight component is used to integrate the item level tax amount per order in WooCommerce to SAP Business One. Note The value in this field is needed if the Tax Posting in SAP Business One setting is having value as Freight.
Default Payment Term for WooCommerce Orders	Select a payment term from the list of payment terms in SAP Business One The selected payment term is the default payment term for all orders of WooCommerce integrated in SAP Business One.
Tax Inclusive Item Prices	Select *Yes* or *No* depending on your settings in WooCommerce.
COD Payment Method	Enter the cash on delivery method name as specified in WooCommerce.
Cash Account	Choose an account from the list of accounts. The selected account is used for posting cash transactions in SAP Business One.
Exempt Tax Code	Select a tax code from the list of tax codes. The selected tax code is used in all orders integrated from WooCommerce to SAP Business One. The selected tax code must be of zero rate.
Create Customer in SAP Business One	Select from *Always* or *On First Order*. ○ *Always* - whenever a customer is created in WooCommerce, the customer is also created in SAP. ○ *On First Order* – when the first order is placed by the customer, the customer is created in SAP

Create Items in SAP Business One using	From the dropdown list, select either *WooCommerce SKU* or *WooCommerce Product Id*. ○ *WooCommerce SKU* – When product is downloaded from WooCommerce and created in SAP Business One. It will be created using WooCommerce SKU code as *Item No*. Note You must ensure that SKU is defined for all products in WooCommerce, and there is no duplication of SKU. ○ *WooCommerce Product ID* – When the product is downloaded from WooCommerce and created in SAP Business One. It will be created using WooCommerce Product ID as *Item No*. Caution This setting is irreversible. You cannot change it after initialization.
Number of Products in WooCommerce	Enter the number of items you want to sync from the WooCommerce application. Note Leave this field blank if you want to sync all items.
WooCommerce Orders to Integrate with SAP Business One	Select or deselect the WooCommerce order statuses based on which sales orders should be synchronized from WooCommerce. Only sales orders with the selected order statuses will be synchronized. Note By default, all available WooCommerce order statuses in the list are selected.
Select WooCommerce Customer Role	Select the customer role as **All** or choose an individual role. Users can also add custom roles as required. Customers from WooCommerce will be initialized and synchronized based on the selected customer role. Note By default, the Customer role is selected. Caution Ensure that the custom role defined matches exactly with the role configured in the WooCommerce application.
Default Customer Values on Adding Customer Data from WooCommerce	
Default Customer Group	Select a customer group from the list of customer groups. The selected customer group is used as the default customer group while integrating customer master data from WooCommerce to SAP Business One.
Default Customer Currency	Select a currency from the list of currencies The selected currency is used while integrating the customers from WooCommerce to SAP Business One.
Create Customer in SAP Business One Using	Select the option, either the custom numbering series or the WooCommerce Customer ID that will be used while adding the customer data from WooCommerce to SAP Business One. ○ If the *Magento Customer ID* is selected, the WooCommerce Customer ID will be used to create the customer in both the Card Code in SAP Business One. ○ If a numbering series for the Customer is selected in this field, the Card Code will be auto-generated by *SAP Business One*.
Branch Assignment for Customer	Select the branch that will be used while adding/updating customer data from WooCommerce to SAP Business One. Choose the button of the Branch Assignment for the Customer field. In the Branch Assignment for Customer window, in the Active column, select the required branches.

	Note This field is relevant for the multi-branch function.
Default Item Values On Adding Item Data from WooCommerce	
Default Item Group	Select an item group from the list of values. The selected item group is used as the default item group while integrating items from WooCommerce to SAP Business One.

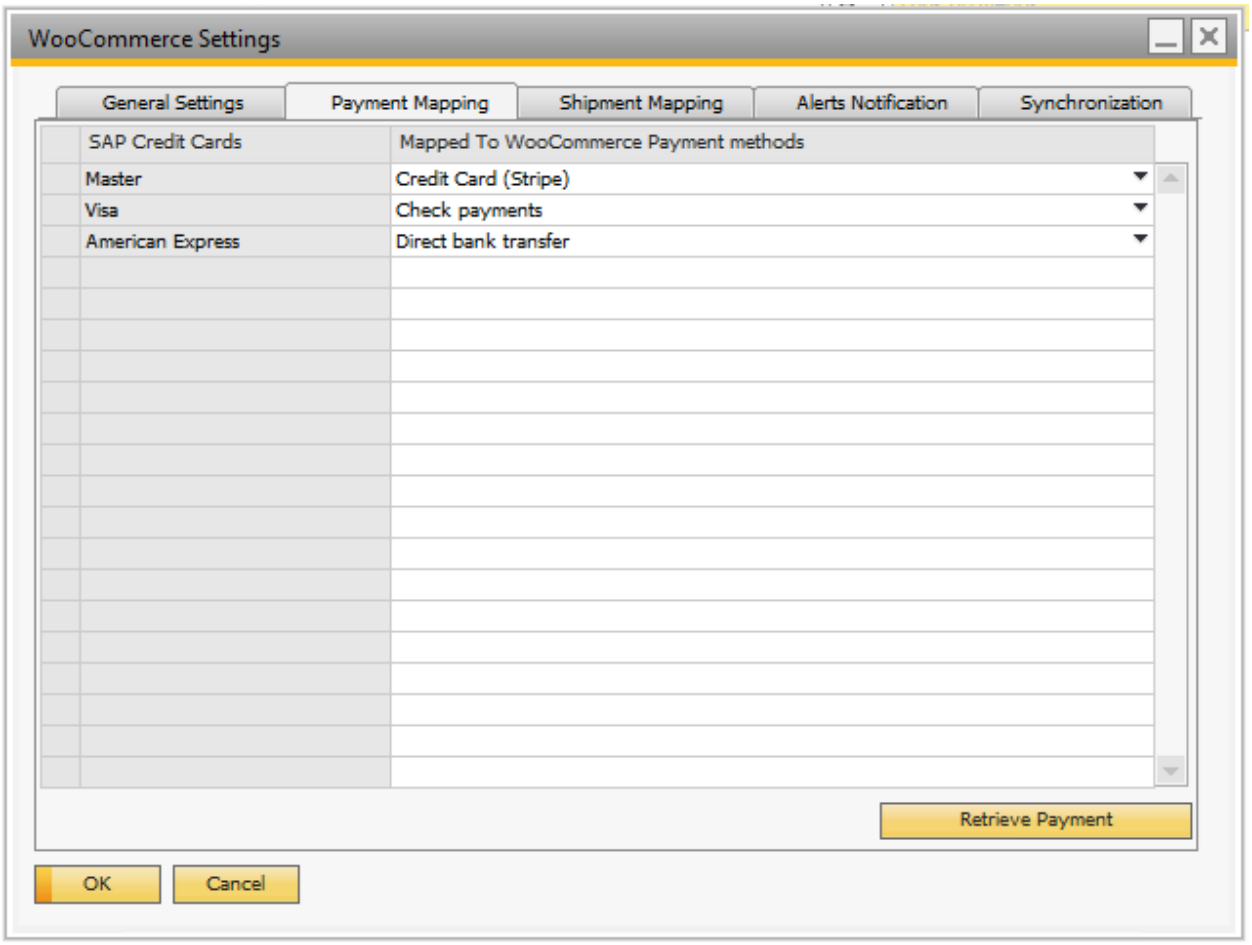
23.2.1.2 Payment Mapping

Map the payment methods of WooCommerce in the *Payment Mapping* tab in the *WooCommerce Settings* window in SAP Business One.

A user needs to map WooCommerce Payment methods with the SAP Business One Credit Cards.

The payment methods other than Cash or Cash on Delivery (COD) need to be mapped with credit cards in SAP Business One. This mapped information is used to post the payment transaction against the order in SAP Business One.

WooCommerce Cash on Delivery (COD) payment method is handled differently in SAP Business One unlike the other payment methods in WooCommerce. The user needs to specify the COD payment method in the *General Settings* window. Whenever any payment transactions for COD payment type is integrated from WooCommerce to SAP Business One, the system generates the incoming payment with reference to the A/R Reserve Invoice and keeps the Order number in the Reference fields available on Incoming Payment window.



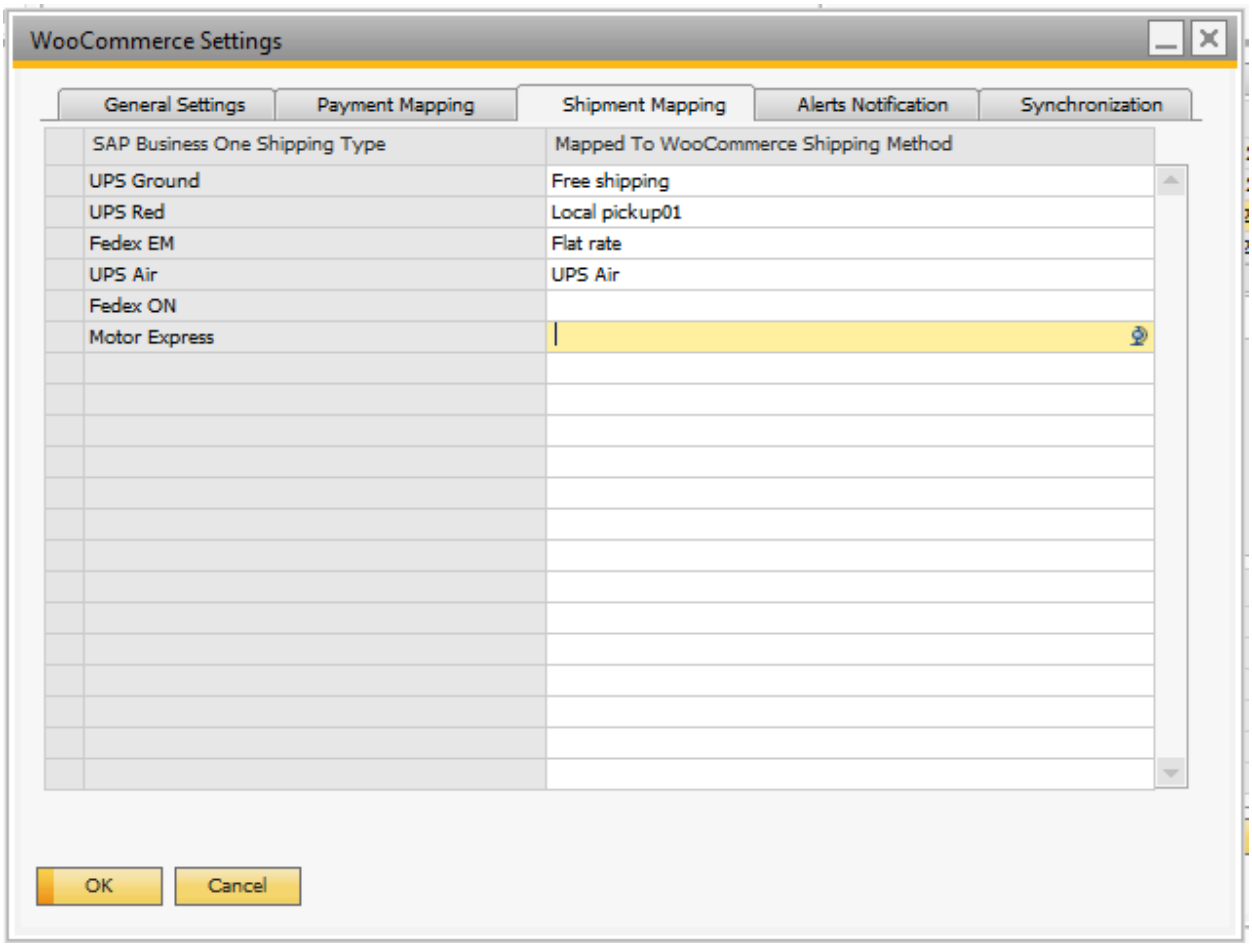
The *Payment Mapping* tab of *WooCommerce Settings* window contains the following fields:

Field Name	Description
SAP Credit Cards	Displays the list of Credit Cards available in SAP Business one.
Mapped to WooCommerce Payment methods	Select the WooCommerce Payment methods to map with SAP credit cards. The mapped credit card is used for posting the payment transactions from WooCommerce to SAP Business One.
Retrieve Payment	Click on *Retrieve* payment button to pull the payment methods from WooCommerce.

23.2.1.3 Shipment Mapping

Map the shipping methods of WooCommerce in the *Shipment Mapping* tab in the *WooCommerce Settings* window in SAP Business One. Shipment mapping is used to integrate the shipping method in transactions.

The shipping methods defined in WooCommerce orders are seamlessly integrated with SAP Business One sales orders.

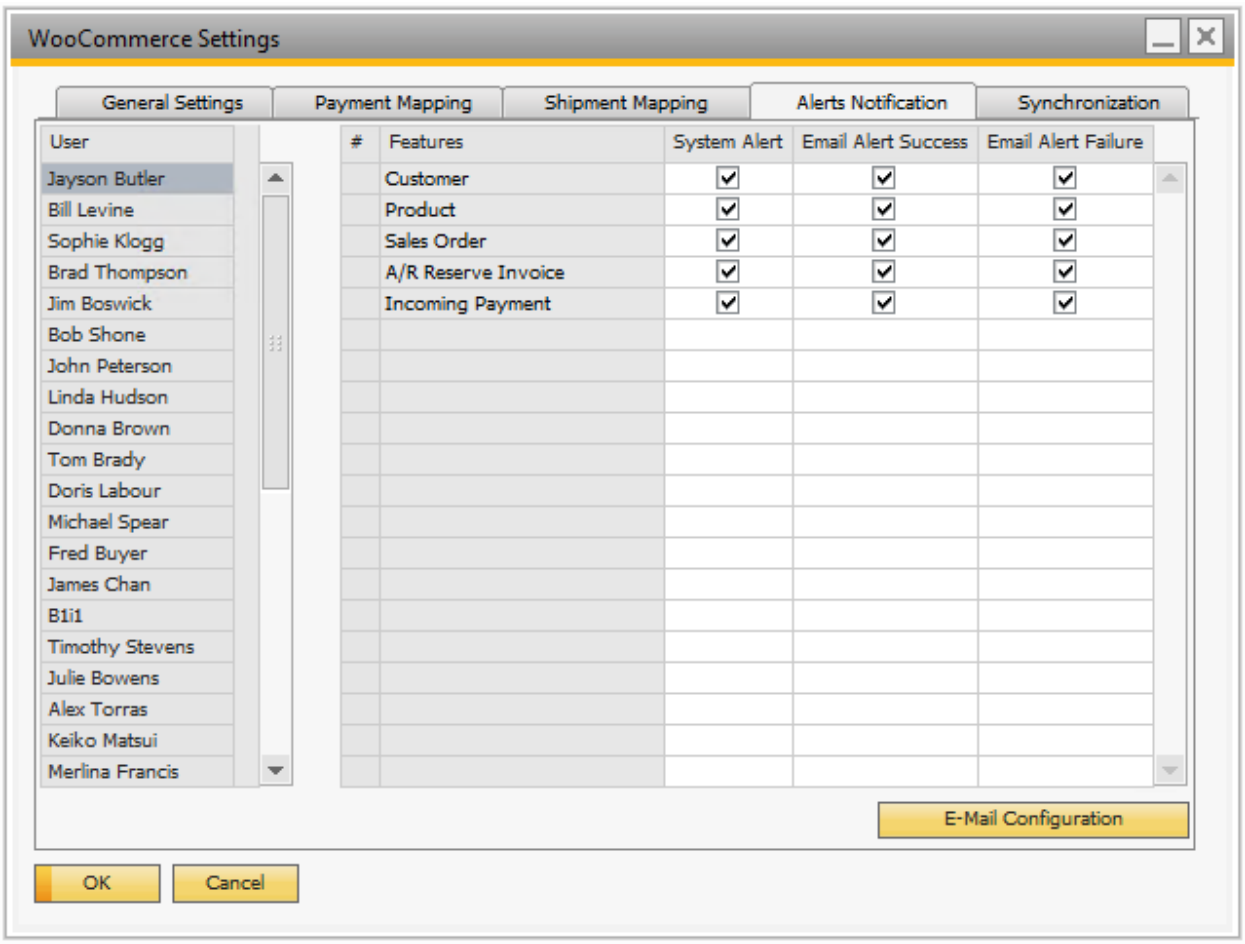


The *Shipment Mapping* tab of the *WooCommerce Settings* window contains the following fields:

Field Name	Description
SAP Business One Shipping Types	Displays the list of shipping types in SAP Business One. Note Only shipping types with the “Active” checkbox selected in the "Shipping Types-Setup" in SAP B1 will be displayed in the Shipment Mapping tab of WooCommerce settings.
Mapped to WooCommerce Shipping methods	Manually enter the shipment method details supported by WooCommerce. Please ensure to enter the same name of the WooCommerce Shipping Method (method_title).

23.2.1.4 Alerts Notification

Configure the alert settings in the *Alert Notification* tab in the *WooCommerce Settings* window.



The *Alert Notification* tab of the *WooCommerce Settings* window contains the following fields:

Field Name	Description
User	Displays the list of users in SAP Business One. Choose a user for setting up the alert notification authorizations. This field is read-only.
Features	Displays the list of Integration Hub features for WooCommerce. This field is read-only. The Alert can be set for *Customers, Products, Sales Order, A/R Reserve Invoice, and Incoming Payment.*
System Alert	Select this checkbox to send notifications as a system alert.
Email Alert Success	Select the checkbox to send email notifications for successful transactions.
Email Alert Failure	Select the checkbox to send email notifications for failed transactions.

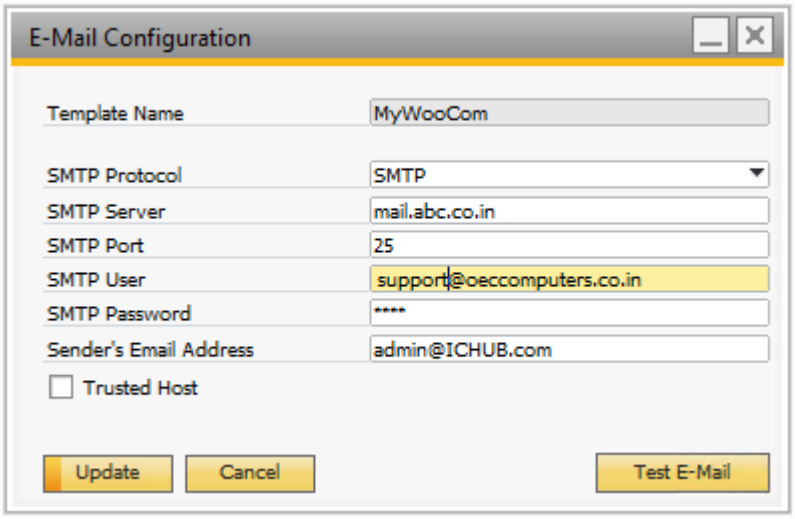
Note

In case of an email for failed transactions, the user will receive the failed XML payload as an attachment.

Email Configuration

Click the *Email Configuration* button to set up the SMTP details for email alerts notification.

Alternatively, to display the *Email Configuration* window, choose *Administration → Integration Hub → E-Mail Configuration*.



The *Email Configuration* window contains the following fields:

Field Name	Description
Template Name	Display the active WooCommerce template.
SMTP Protocol	Choose the communication protocol SMTP/SMTPS/TLS.
SMTP Server	Specify the address of the outgoing mail server.
SMTP Port	Specify the port for the outgoing mail server.
SMTP User	Specify the user's name for the outgoing mail server.
SMTP Password	Specify the password for the outgoing mail server.
Sender's Email Address	Specify the email address of the sender.
Trusted Host	Select the checkbox to add the name of the e-mail server to the list of trusted hosts.
Test E-Mail	Click the button to test the connection. The email notification will be sent to the logged-in user in SAP Business One. **Note** Ensure that the Login User's email ID is correctly specified in the User Setup.

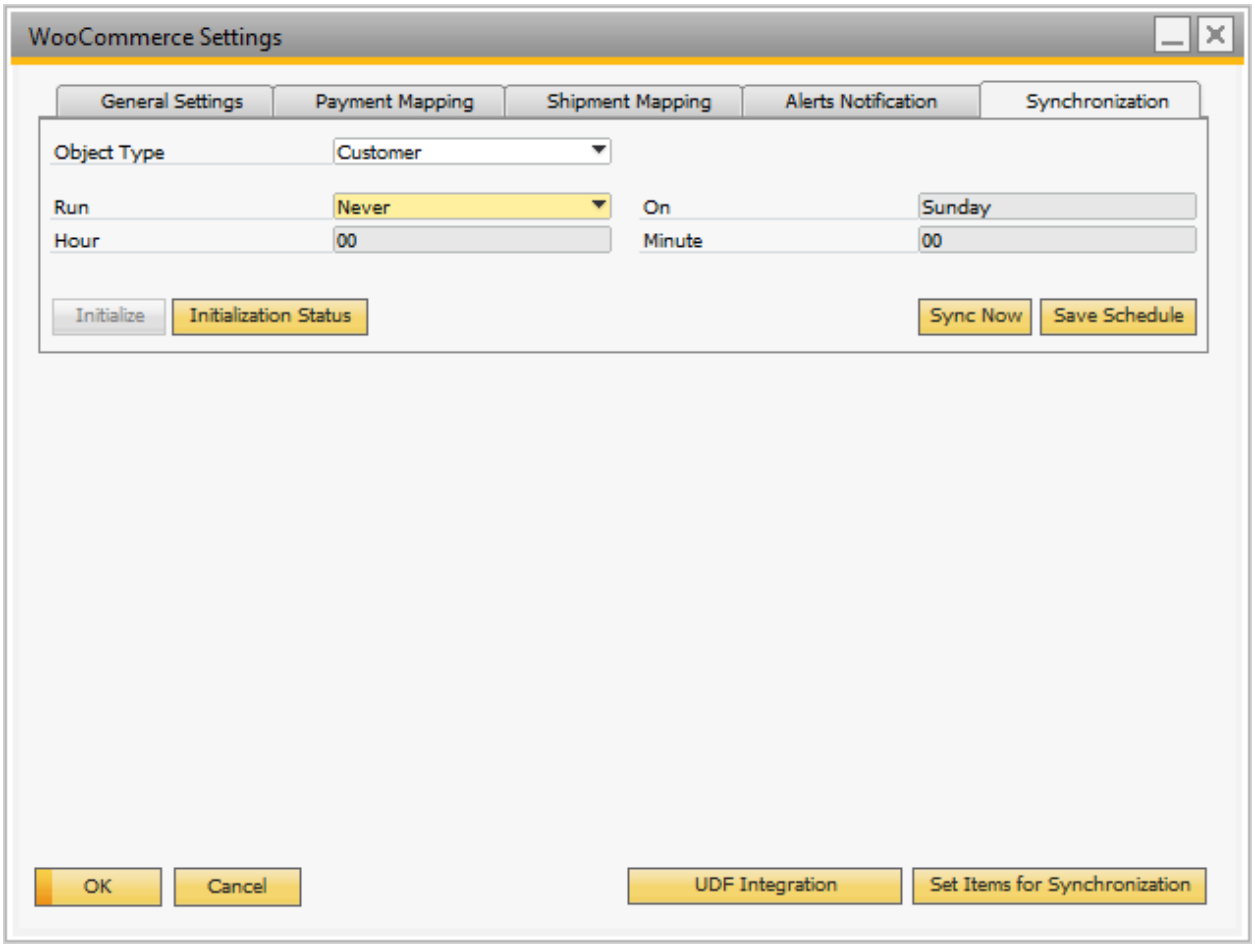
23.2.1.5 Initialization Process

Once the WooCommerce feature is enabled in SAP Business One, it is mandatory to initialize the objects to be integrated between SAP Business One and WooCommerce. The objects include Products, Inventory, and Customers.

Note

1. Ensure that the Weight Unit and Dimensions Unit defined for the product in SAP Business One is the same as the default Measurement unit defined in WooCommerce.
2. If product or customer data already exists in both applications before initialization, then you need to map their internal codes in SAP Business One. Use the Master Data Mapping Tool to map the WooCommerce customer or Products internal codes.

To Initialize Customer, Product and Inventory, choose *Administration* → *Integration Hub* → *WooCommerce Settings* → *Synchronization.* Choose the *Initialize* button on *Synchronization* tab.

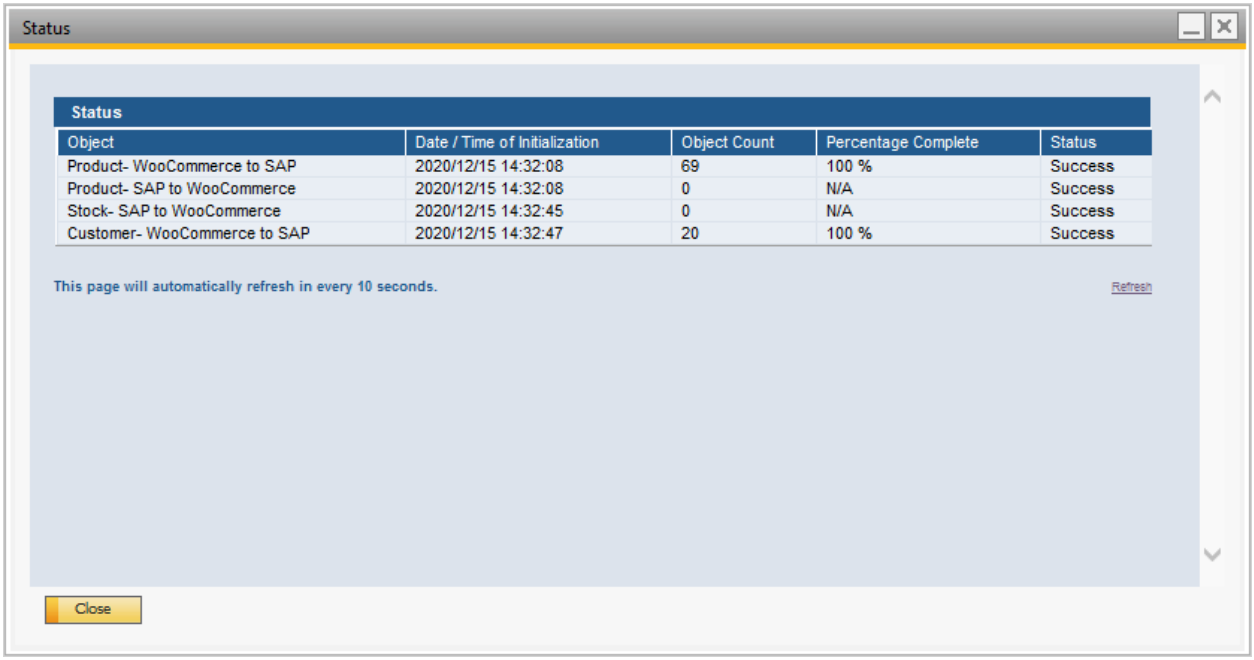


The *Synchronization* tab of *WooCommerce* window contains the following fields:

Field Name	Description

Object Type	Displays the list of objects available for synchronization between SAP Business One and WooCommerce. The list of objects is: • Customer • Product • Inventory • Sales Order
Run	Select the frequency of automation run from the dropdown i.e. *Daily* or *Weekly* or *Never*.
On	Select the weekday on which the synchronization should run. Note The selection is available only for weekly type run only.
Hour	Choose the *Hour* frequency at which the synchronization should run.
Minute	Choose the *Minute* frequency at which the synchronization should run.
Initialize	Choose the *Initialize* button to synchronize the object data between SAP Business One and WooCommerce. Note *Initialize* button is active until clicked for the first time. Once the initialization is done, the *Initialize* button is disabled.
Initialization Status	Select this button to view the Initialization Status.
Set Items for Synchronization	Select this button to mark bulk items synchronization from SAP business One to WooCommerce.

Click on the *Initialization Status* button to view the initialized status of the data replication between WooCommerce and SAP Business One.



Note

The *Initialize* button is active until the initialization is done for the first time. Once the initialization is done, close the WooCommerce Settings window and reopen it, the *Initialize* button is disabled and Sync Now and

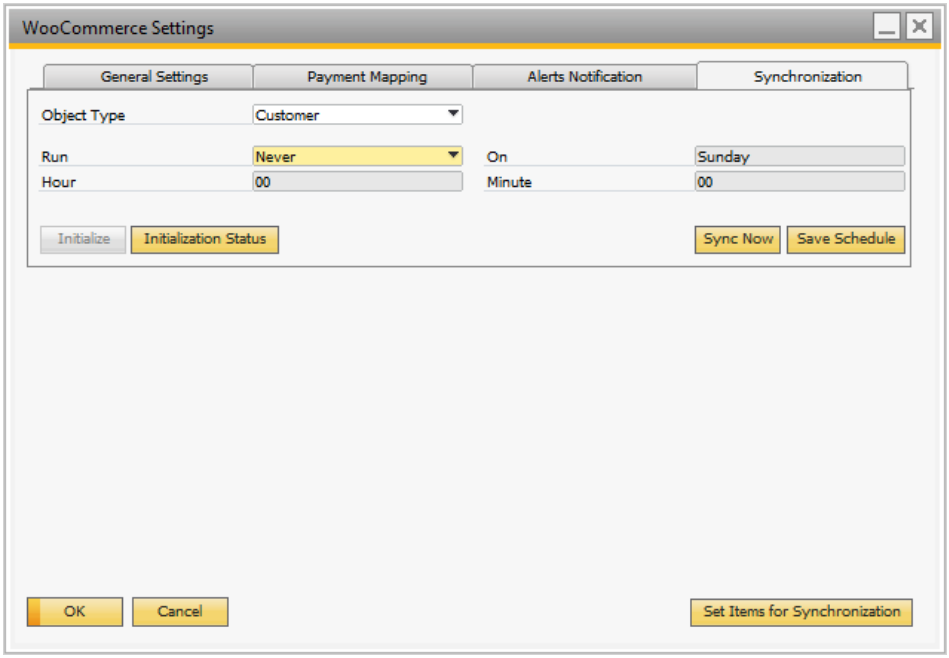
Save Schedule button is enabled. All the products created later will be integrated between both the systems based on scheduled synchronization or manual synchronization

23.2.1.6 Synchronization

The following two methods are available for synchronization between SAP Business One and WooCommerce:

- **Manual Synchronization:**
  Whenever a user needs the integrations to be done on the immediate basis (instead of waiting till the Scheduler services run), a user can choose the *Sync Now* button. The synchronization takes an immediate effect for the selected object.

- **Automatic Synchronization:**
  The system enables a user to configure automatic integrations between SAP Business One and WooCommerce at a frequency (either daily or weekly) and on specific intervals. The synchronization runs based on schedule that is set for the object.



Synchronization is supported for four objects Customer, Product, Order and Inventory.

- **Customer Synchronization**
  The system enables to integrate all the customer master data from WooCommerce to SAP Business One. Scheduling a synchronization enables the system to integrate customer masters automatically as per the schedule by running the Scheduler services.

Note

1. Whenever you click the Sync Now button, all customer data will be downloaded from WooCommerce, regardless of the last updated timestamp, as WooCommerce does not provide an API to retrieve customers based on a modified timestamp. Therefore, a complete customer master data synchronization should be performed weekly, monthly, or at a higher frequency.

2. Customers from WooCommerce will be initialized and synchronized based on the selected customer role. By default, the Customer role is selected.

- **Product Synchronization**
  The system enables to integrate all the item master data between SAP Business One and WooCommerce. Scheduling a synchronization enables the system to integrate item masters automatically as per the schedule by running the Scheduler services.

    - **Set Bulk Items for Synchronization**

    To Synchronize Items from SAP Business One to WooCommerce, select items in bulk using the Set Items for Synchronization menu under Integration Hub.

    1. Choose Administration → Integration Hub → Set Items for Synchronizations.
    2. On clicking the Set Items for Synchronization, Set Items For Synchronization-Selection Criteria window opens.
    3. Select the items range or Item Groups range and click on Ok button.
    4. Set Items for Synchronization window opens, select check box for the Item Codes and Item Name to synchronize.
    5. Click on Update button to mark the items for synchronization from SAP to WooCommerce.

- **Sales Order Synchronization**
  The system enables to integrate all orders from WooCommerce to SAP Business One. Scheduling a synchronization enables the system to integrate sales order automatically as per the schedule by running the Scheduler services.

  Note

  1. Sales Orders are synchronized to SAP Business One based on the WooCommerce Sales Order statuses selected in WooCommerce Settings in SAP Business One. By default, all available WooCommerce Sales Order statuses are selected in WooCommerce Orders to Integrate with SAP Business One setting.

  2. Customer creation during Sales Order synchronization depends on the WooCommerce customer role selected in the WooCommerce Settings in SAP Business One. If a Sales Order is created for a customer whose role is not selected, the order is synchronized using the Guest Customer.

- **Stock Synchronization**
  The system enables to integrate products Inventory from SAP Business One to WooCommerce. Scheduling a synchronization enables the system to integrate product Inventory automatically as per the schedule by running the Scheduler services.

Caution

Customers must set the synchronization time settings on redeployment of the Application.

23.2.2 Master Data Mapping Tool

This tool allows the user to map the already existing customer and product data in WooCommerce and SAP Business One. This is needed in case the same product or customer master already exists in both the applications and you would like to map their internal code to prevent the data duplicity between the applications.

To display the *Master Data Mapping Tool* window, choose *Administration → Integration Hub → Master Data Mapping Tool.*

Use the following steps to import the mapping data using the master data mapping tool:

1. Select a template from the *Template* dropdown list.
2. Select the customer or product from the *Master Data Type* dropdown list.

   Note

   - For downloading the product, specify the exact product count in *No. of Products in WooCommerce* available in the WooCommerce application. If the product count is not specified, the solution will download the product master using WooCommerce API product count.
   - For the Customer object, the Customer Role option is available to select the customer role based on which customers are downloaded. By default, the Customer role is selected.

3. Choose the Download from App button to download the data from the WooCommerce.
4. To check the data download status, choose the Status button.
5. Once the data download is complete, choose the Prepare Template button to generate the Microsoft Excel-based template for the selected master i.e., Customer or Product. The application downloads the data from the WooCommerce.
6. Open the template and provide the relevant information:
   - For the Customer template, you need to provide the *SAP B1 Card Code (*Customer Code*)*
   - For the Product template, you need to provide the *SAP B1 Item Code*
7. Choose the *Browse* button to navigate to the template path.
8. Choose the *Validate* button to check the correctness and completeness of the data in the selected template.

   Choose the *Upload* button to import the data.

23.2.3 UDF Integration

This functionality allows users to integrate the *User Defined Fields (UDFs)* at the *Product* master between the *WooCommerce* and *SAP Business One* applications. The users are allowed to map and synchronize custom fields between both applications, ensuring that all relevant data is accurately and seamlessly shared.

> **Note**
>
> The UDF integration in the WooCommerce Connector is supported only for the "Simple Product" type in the WooCommerce application.

To perform the UDF Integration, follow these steps:

1. Open the UDF Integration window by navigating to *Administration → Integration Hub → UDF Integration*.
2. The *UDF Integration-Selection Criteria* window is appeared.
3. The active template for the *WooCommerce Connector* is automatically displayed in the *Template Name* field.
4. Select the specific object you want to map UDFs in the *Object Type* field.
5. Click *OK* to open the *UDF Integration Mapping* screen.
6. In the left column titled *SAP User Defined Fields (UDF)*, select the SAP UDFs. In the *Mapped to WooCommerce Custom Fields* column, enter the custom field name manually.
7. Click the *Add/Update* button to save the data.

> **Note**
>
> - In case, you do not want to integrate UDF information between the applications, you may delete the relevant row. Once the row is deleted, the UDF information will no longer be integrated during the initialization and synchronization process.
> - User Defined Fields (UDFs) with a 'Type' of "Alphanumeric" and a 'Structure' of "Regular" or "Text" will only be available for selection in the SAP User Defined Fields (UDF) column.

> **Caution**
>
> Please ensure there are no duplicate custom fields in the WooCommerce product master. If a user adds a duplicate custom field to a product in WooCommerce, it may cause data inconsistencies between applications.

23.3 Using WooCommerce

23.3.1 Customer Master Data

The customer master data integration is unidirectional i.e. from WooCommerce to SAP Business One. Customer Information like *Name, E-mail, Billing* and *Shipping Address*, and other details are integrated from WooCommerce to SAP Business One.

When the customer data is integrated from WooCommerce to SAP Business One, the details such as *WooCommerce Customer ID* is updated in both *Card Code* and *Cross Reference Code* in SAP Business One. On adding customer information from WooCommerce to SAP Business One, the application uses currency configured in the *General Settings of WooCommerce*.

The following actions for Customer Master Data are supported:

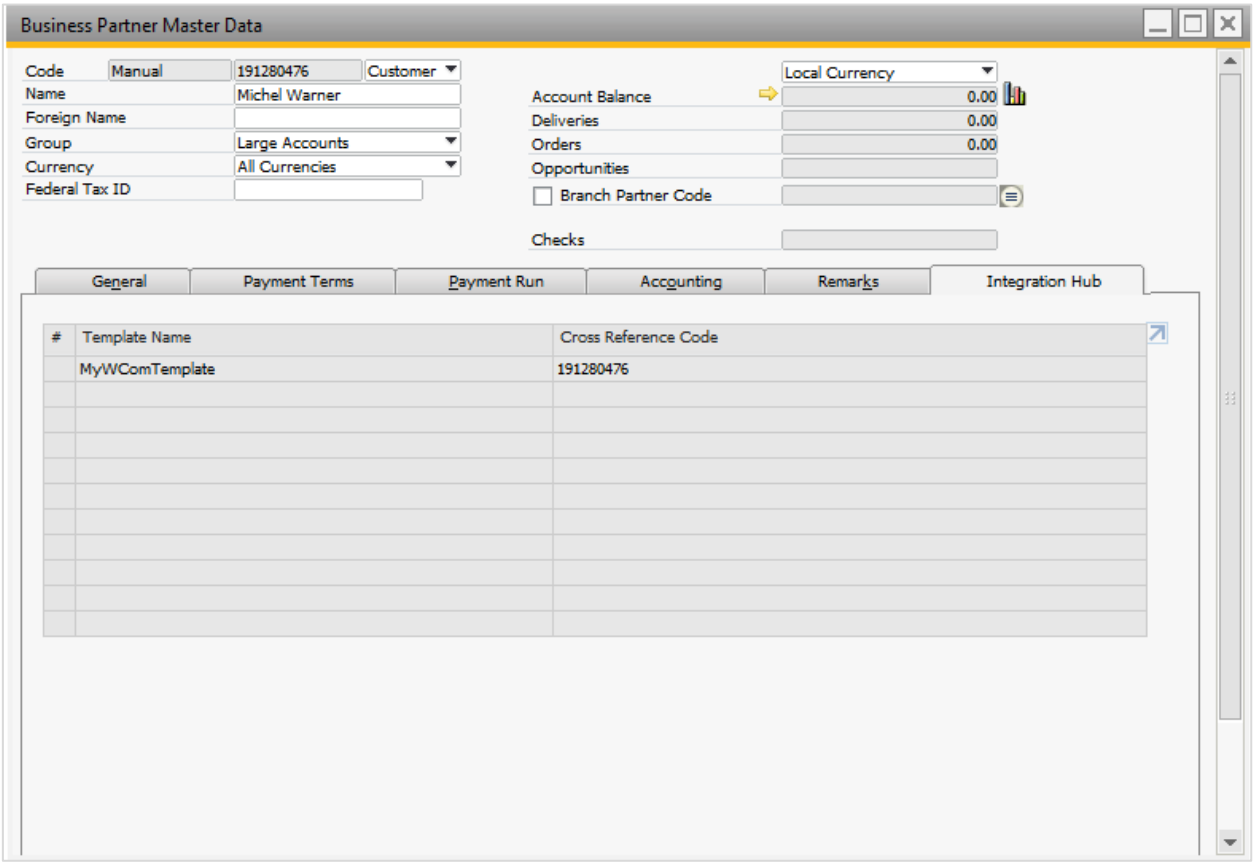
- *Add Customer-* Add new customer information. The customer master addition is unidirectional i.e. from WooCommerce to SAP Business One.

- *Update Customers-* Edit existing customer information. The customer master update is unidirectional i.e. from WooCommerce to SAP Business One.

  Caution

  Customer deletion from WooCommerce will not be integrated to SAP Business One.

To display the customer data which are synchronized from WooCommerce to SAP Business One, choose SAP Business One *Main Menu* →*Business Partners* →*Business Partner Master Data* →*Integration Hub.*



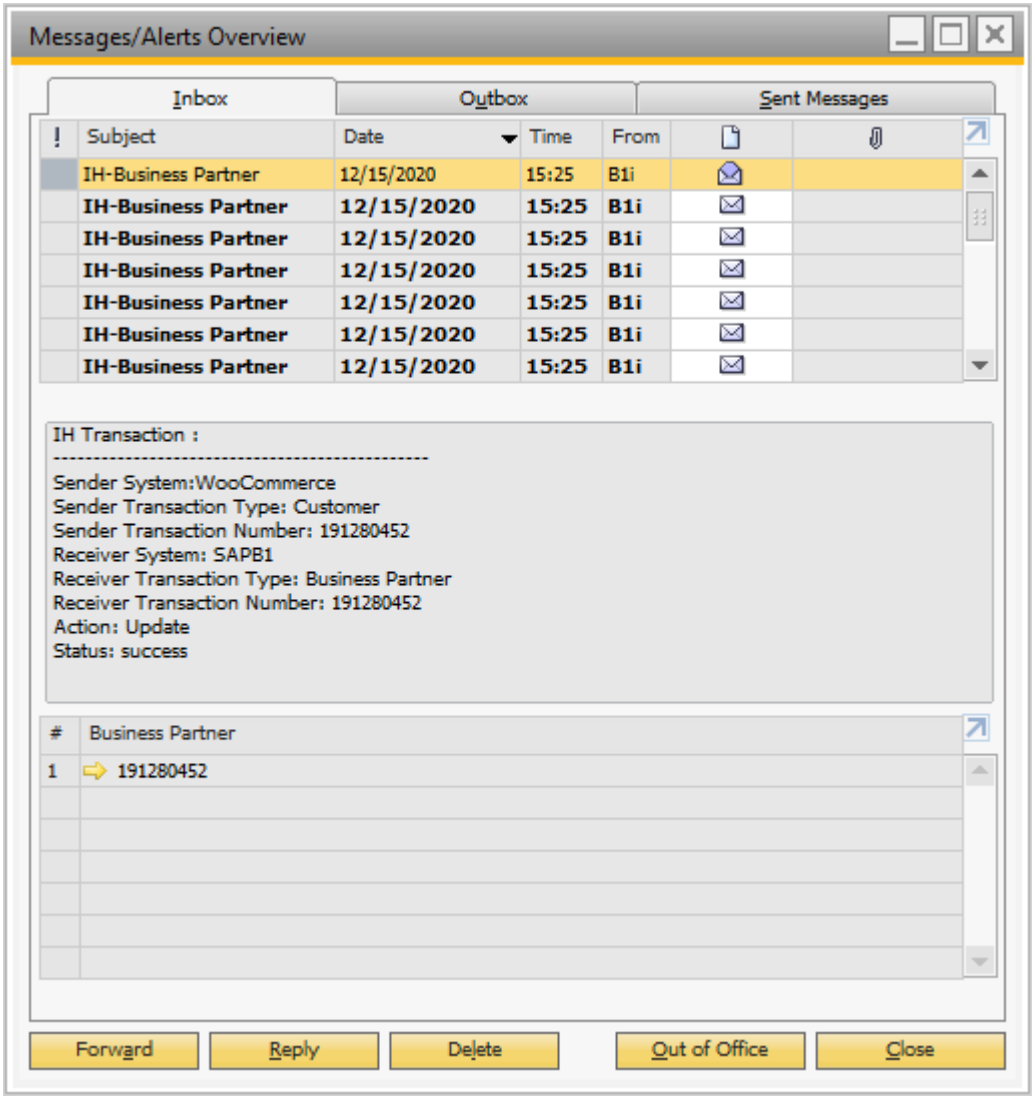
The following fields has been added to the window and is relevant to the Integration Hub. For details of other fields on the *Customer Master Data* window, refer to the SAP Business One Online Help.

Field Name	Description
Template Name	Displays the name of the WooCommerce template.
Cross Reference Code	Displays the WooCommerce customer id.

Message /Alert Overview

Once the customer data is synchronized, Message /Alert Overview Inbox displays the transaction information in SAP Business One. The following information is displayed on the screen:

- Sender System
- Sender Transaction Type
- Sender Transaction Number
- Receiver System
- Receiver Transaction Type
- Receiver Transaction Number
- Action
- Status



23.3.2 Product Master Data

The Integration Hub supports the integration of existing product data as well as new product data between both applications. In other words, product synchronization between SAP Business One and WooCommerce is bidirectional.

All products added to WooComerce or updated in WooCommerce are synchronized in SAP Business One with the default item group configured in the WooCommerce *General Settings*.

WooCommerce products for which the *Manage Stock* is not selected are marked as non-inventory items in SAP Business One.

The *Item Code* in SAP Business One is mapped with the Stock Keeping Unit (SKU) in WooCommerce for integration.

To synchronize products from SAP Business One to WooCommerce, in the SAP Business One *Main Menu*, choose *Inventory* → *Item Master Data.* On the *Integration Hub* tab, choose the *Sync* button.

The following fields have been added to the *Item Master Data* window and is relevant to the Integration Hub. For details of other fields on the *Item Master Data* window, refer to the SAP Business One online help.

Field Name	Description
Template Name	Displays the name of the WooCommerce template.
Cross Reference Code	Displays the WooCommerce product ID for normal products or the variant product ID for variant products.
Sync	Select this checkbox to synchronize the product information from SAP Business One to WooCommerce.

Caution

You cannot delete products from WooCommerce and SAP Business One. If a deleted product is used in a transaction, then data inconsistency will occur.

Note

Ensure that the Weight Unit and Dimensions Unit defined for product in SAP Business One is the same as the default Measurement unit defined in WooCommerce.

Note

Only Simple and Variable Products type are downloaded from WooCommerce.

23.3.2.1 Simple Products

The integration of Simple products is bidirectional between WooCommerce and SAP Business One.

23.3.2.2 Variable Products

The integration of variable products is unidirectional (in other words, from WooCommerce to SAP Business One). Variants can be added to a product that comes in more than one attribute, such as size or color. Each combination of attributes for a product is a variant of that product.

For example, a user sells t-shirts with two attribute: size and color. The size attribute has three values: small, medium, and large. The color attribute has two values: blue and green. One specific variant from these attribute is a small, blue t-shirt.

Each variant is integrated as a separate item in SAP Business One.

23.3.2.3 Product Prices

The prices integration between SAP Business One and Woocommerce is bidirectional. The application uses the default price list defined in the *General Settings* for WooCommerce to integrate the prices from SAP Business One to WooCommerce.

To open the WooCommerce *General Settings*, in the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *WooCommerce Settings* → *General Settings* tab.

The price list selected in the *Default Price List for Items Prices Integration* field is the integrated price list from SAP Business One to WooCommerce.

23.3.2.4 Product Inventory

The inventory integration is unidirectional (in other words, from SAP Business One to WooCommerce). The inventory status is updated from SAP Business One to WooCommerce.

From SAP Business One, inventory data is integrated from the warehouse that is defined in the *Default Warehouse for Items stock Integration* in the WooCommerce *General Settings*.

To open the WooCommerce *General Settings*, in the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *WooCommerce Settings* → *General Settings* tab.

The inventory can be synchronized from the *Synchronization* tab of the *WooCommerce* window. To synchronize inventory, choose *Administration* → *Integration Hub* → *WooCommerce Settings* → *Synchronization*.

There are two ways to synchronize inventory:

- Manual Synchronization of Inventory:
  Whenever required, choose the *Sync Now* button to synchronize the inventory from SAP Business One to WooCommerce.

- Automatic Synchronization of Inventory:
  Select the parameters for *Object Type*, *Run, On, Hour,* and *Minutes* to schedule synchronization and then choose the *Save Schedule* button to schedule inventory synchronization at the predefined day and time.

Field Name	Description
Object Type	Select *Stock* from the dropdown list.
Run	Specify if you want to run the synchronization daily or weekly.
On	If you chose the *Weekly* option, select the day of the week.
Hour	Select the hour on which you want the synchronization to run.
Minutes	Select the minutes on which you want the synchronization to run.
Sync Now	Choose this button to start the synchronization immediately.
Save Schedule	Choose this button to implement the selected schedule for the synchronization.

23.4 WooCommerce Transactions

The following WooCommerce transactions are supported:

- Sales Order
- Payment
- Order Cancellation
- Delivery
- Refund

23.4.1 Windows Enhancements in SAP Business One

New fields that are relevant to the Integration Hub have been added to different document windows in SAP Business One. The fields provide additional information regarding the WooCommerce integration transactions.

23.4.1.1 Sales Order

Sales order integrates from WooCommerce to SAP Business One. New fields in the *Sales Order* document window:

Field Name	Description
Customer Reference Number	This is the Order number generated in WooCommerce .
Template Name	Name of the WooCommerce template.
External Order ID	Order ID generated from WooCommerce

23.4.1.2 A/R Reserve Invoice

A/R Reserve Invoice integrates from WooCommerce to SAP Business One. New fields in the *A/R Reserve Invoice* document window:

Field Name	Description
Customer Reference Number	This is the Order number generated in WooCommerce .
Template Name	Name of the WooCommerce template.
External Order ID	Order ID generated from WooCommerce

23.4.1.3 Delivery

Delivery integrates from SAP Business One to WooCommerce. New fields in the *Delivery* document window:

Field Name	Description
Customer Reference Number	This is the Order number generated in WooCommerce .
Template Name	Name of the WooCommerce template.
External Order ID	Order ID generated from WooCommerce
External Delivery ID	Delivery ID generated from WooCommerce

23.4.1.4 A/R Credit Memo

A/R Credit Memo is created on SAP Business One when Refund is initiated. New fields in the A/R Credit Memo document window.

Field Name	Description
Customer Reference Number	This is the Order number generated in WooCommerce .
Template Name	Name of the WooCommerce template.
External Order ID	Order ID generated from WooCommerce

23.4.2 Orders with Payment

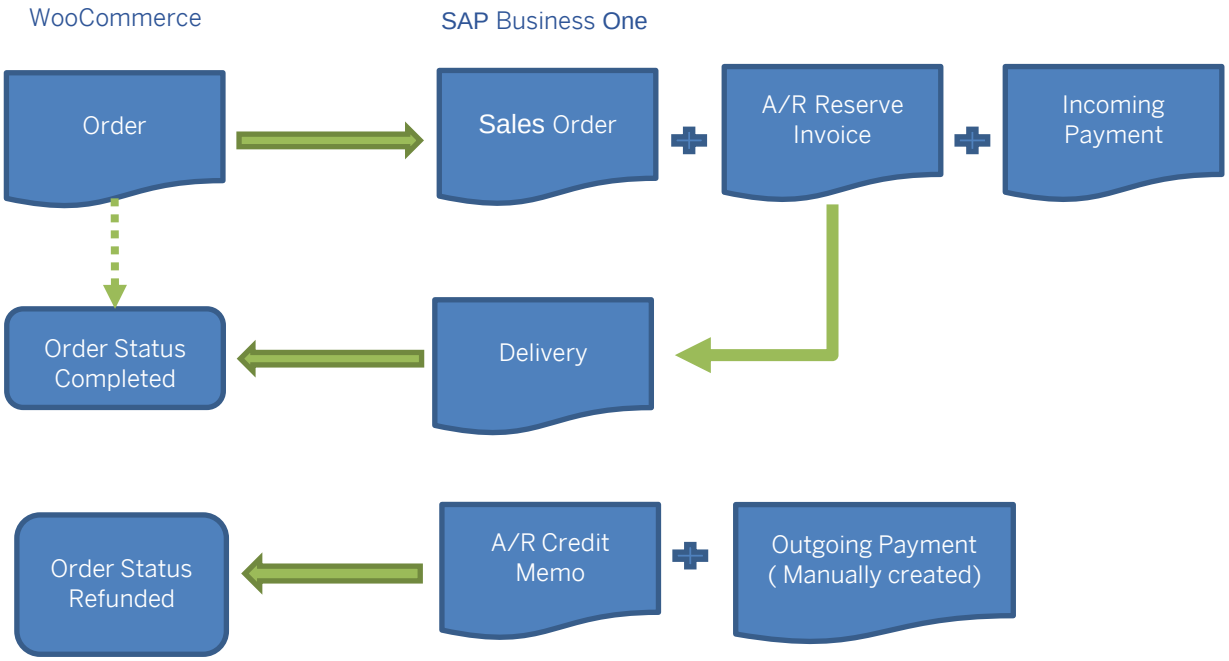
The Information related to orders created in WooCommerce is synchronized to SAP Business One. The payment for the order can be made

- At time of booking the order
- Cash On Delivery.

The Application handles these scenarios differently as per payment/order types. For instance, all WooCommerce orders for which payment is made at the time of placing the order is handled in SAP Business One by posting a *Sales Order*, corresponding *A/R Reserve Invoice* and *Incoming Payment* for that *A/R Reserve Invoice*.

The following illustration shows the data flow between WooCommerce and SAP Business One based for Orders with Payment:

Order with Payments



WooCommerce also supports guest users to place orders online. When a guest user places the order in WooCommerce, the same is synchronized to SAP Business One with a default customer which is mapped in the *General Settings* of WooCommerce.

For all WooCommerce orders, the payment terms in SAP Business One is the default payment term which is set in *General Settings* of WooCommerce in SAP Business One

Note

WooCommerce has the flexibility to have the item prices as Inclusive of tax or Exclusive of tax, if tax inclusive pricing is enabled in WooCommerce, then the user must enable the *Tax Inclusive Item Prices* as *Yes* in *General Settings* of WooCommerce in SAP Business One.

The following is the list of combination of documents in the overall transaction flow in WooCommerce and its corresponding integration documents in the SAP Business One.

23.4.3 Document Combinations

The following is the list of combination of documents in the overall transaction flow in WooCommerce and its corresponding integration documents in SAP Business One

23.4.3.1 Order with Payment and Shipment

1. On WooCommerce, log in as Customer, select mode of payment Pay with Credit Card.
2. An order in WooCommerce is synchronized as a sales order in SAP Business One and generates an A/R Reserve Invoice with an Incoming Payment against the A/R Reserve Invoice.

   The order can be fulfilled only from SAP business One.

   - Order Fulfillment from SAP Business One

3. Once an order is created in WooCommerce, the information of the order can be viewed in SAP Business One.
4. The replication information between WooCommerce and SAP Business One can be checked by observing the alert message for Sales Order, A/R Reserve Invoice, and Incoming Payment.
   The *Sales Order* information reflects at location *Main Menu → Sales A/R → Sales Order.*
   The *A/R Reserve Invoice* reflects at location *Main Menu → Sales A/R → A/R Reserve Invoice.*
   The *Incoming Payment* reflects at location *Main Menu → Banking → Incoming Payments → Incoming Payments*.
5. On A/R Reserve Invoice, copy the *A/R Reserve Invoice* to *Delivery*, In the Delivery click on *Add* button this will ship the order. The order is marked as *Complete* in WooCommerce.

23.4.3.2 Order Cancellation after Payment

1. On WooCommerce, log in as Customer, selects mode of payment Pay with Credit Card.
2. Order from WooCommerce is synchronized as Sales Order in SAP Business One and generates A/R Reserve Invoice with an Incoming Payment against the A/R Reserve Invoice.
3. The Sales Order is cancelled in SAP B1.
4. The Order will be cancelled in WooCommerce.

   Note

   If any Order is cancelled from WooCommerce then it will not cancel the Order in SAP Business One. In this scenario, User need to manually handle the order cancellation in SAP Business One.

23.4.3.3 Refund for Shipped Order

1. On WooCommerce, log in as Customer, selects mode of payment *Pay with Credit Card*.
2. An order in WooCommerce is synchronized as a *Sales order* in SAP Business One and generates *A/R Reserve Invoice* with an *Incoming Payment* against the *A/R Reserve Invoice*.
3. The order shipment is made from SAP Business One.
4. The *Delivery Document* against the *A/R Reserve Invoice* is generated in SAP Business One.
5. Refund can only be initiated from SAP Business One on clicking Refund button on Delivery document. The system copies the Delivery items information to A/R Credit Memo.

   Note

   The freight detail will not be copied to credit memo.
6. The creation of credit memo in SAP B1 will mark the order as refunded in WooCommerce.

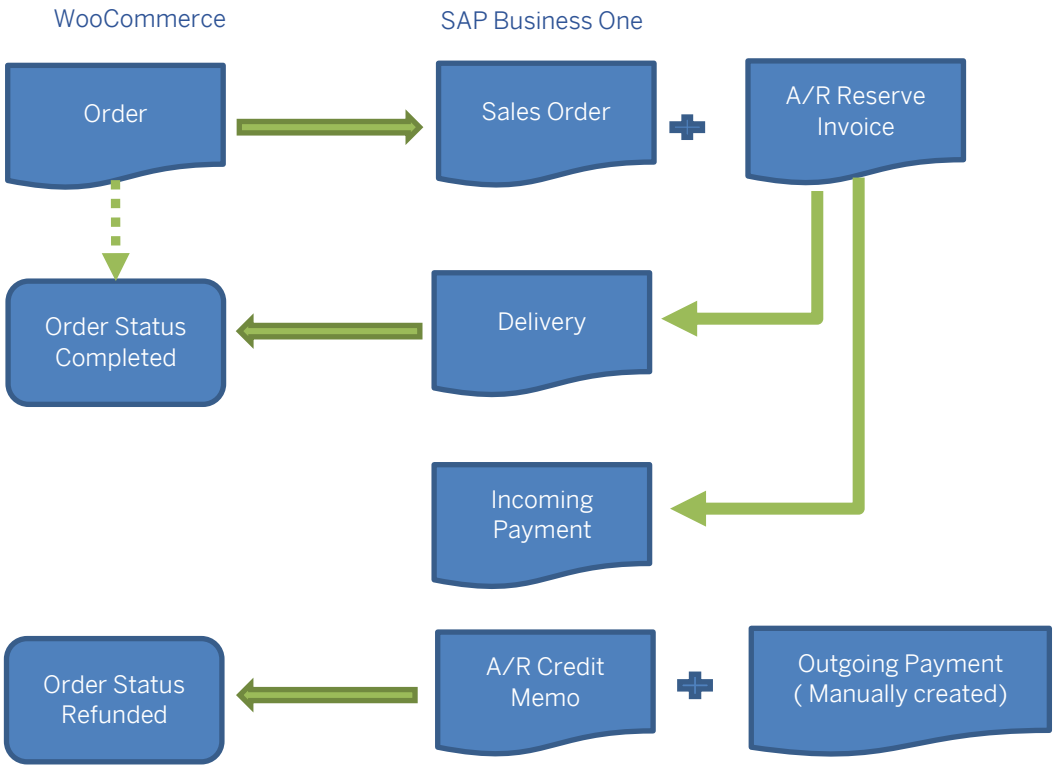
   Note

   Manually Create Outgoing Payments for Refund in SAP Business One.

23.4.4 Orders with Cash on Delivery

For Cash on Delivery orders in SAP Business One a Sales Order, Corresponding A/R Reserve Invoice is posted. Later, when the customer makes the cash payment, an incoming payment is to be posted manually with reference to the A/R Reserve Invoice.

The following illustration shows the data flow between WooCommerce and SAP Business One based on Orders with Cash on Delivery:



The following are the scenarios for Cash on Delivery Orders:

23.4.4.1 Order with Cash On Delivery Payment with fulfillment in SAP Business One

1. On WooCommerce, log in as Customer, select mode of payment *Cash On Delivery*.
2. An order in WooCommerce is synchronized as a *Sales Order* in SAP Business One and generates an *A/R Reserve Invoice.*

3. In the A/R Reserve Invoice, copy the *A/R Reserve Invoice* to *Delivery*, On Delivery click on *Add* button. This will be displayed as completed order in WooCommerce.
4. Manually create *Incoming Payments* document against the A/R Reserve Invoice.

23.4.4.2 Order Cancellation

1. On WooCommerce, log in as Customer, select mode of payment Cash On Delivery.
2. An order in WooCommerce is synchronized as a Sales Order in SAP Business One and generates an A/R Reserve Invoice.
3. Cancel the Sales Order in SAP B1. This will cancel the Order in WooCommerce.

   Note

   If any Order is cancelled from WooCommerce then it will not cancel the Order in SAP Business One. In this scenario, User need to manually handle the order cancellation in SAP Business One.

23.4.4.3 Refund for Shipped Order

1. On WooCommerce, log in as Customer, selects mode of payment Cash On Delivery.
2. An order in WooCommerce is synchronized as a Sales Order in SAP Business One and generates A/R Reserve Invoice.
3. Perform the Order Shipment in SAP Business One.
4. Manually create Incoming Payments document against the A/R Reserve Invoice in SAP Business One.
5. Refund can only be initiated from SAP Business One on clicking Refund button on Delivery document. The system copies the Delivery items information to A/R Credit Memo.

   Note

   The freight detail will not be copied to Credit Memo.
6. The creation of credit memo in SAP B1 will mark the order as refunded in WooCommerce

   Note

   Manually Create Outgoing Payments for Refund in SAP Business One.

23.4.5 Tax Handling

The application handles the Tax integration either by posting the WooCommerce Tax amount to the default freight mapped in the *General Settings* of WooCommerce or by using the SAP Business On Tax Code Determination.

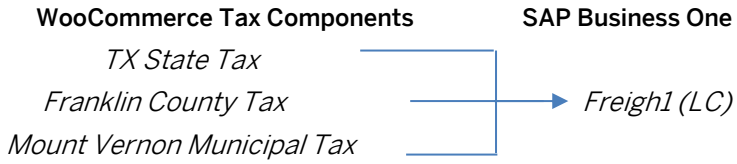
23.4.5.1 Tax Handling using Freight

In the WooCommerce *General Settings*, if the value selected in the *Tax Posting in SAP Business One using* setting is *Freight* then the synchronization of the tax amounts between WooCommerce and SAP Business One is handled by saving the tax amounts in a default freight mapped in the *General Settings* of WooCommerce.

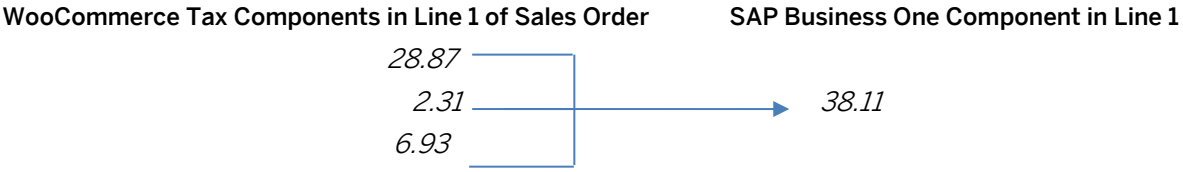
The tax amounts that are calculated in WooCommerce irrespective of tax components are integrated as a single component in SAP Business One i.e. the tax amounts per line item of WooCommerce are summarized and are mapped to a freight in line item of the sales order in SAP Business One.

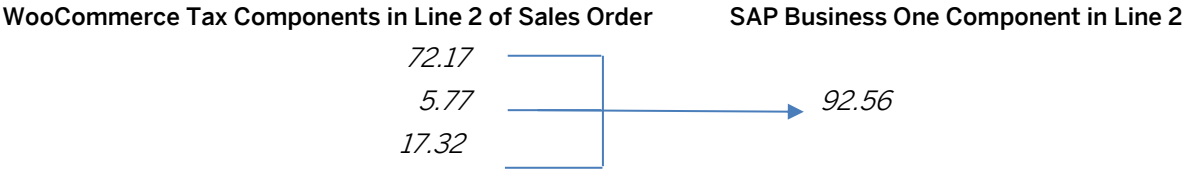
Example

For example: A Sales Order in WooCommerce with three items has three tax components per line.



All the above taxes of per line are summarized and updated in Freight 1 (LC) field in respective lines of SAP Business One Sales Order.





Default Tax code in SAP Business One

For all orders that are integrated from WooCommerce to SAP Business One, a default exempt tax code is set defined in the *General Settings*. The same tax code is used in the freight as well.

23.4.5.2 Tax Handling using Tax Code Determination

In the WooCommerce *General Settings,* if the value selected in the *Tax Posting in SAP Business One using* setting is *Tax Code Determination,* then whenever a WooCommerce Order is integrated into SAP Business One, the Tax code is automatically set in SAP Business One based on the Tax code determination.

When any Order is downloaded from WooCommerce to SAP Business One, the hub application posts the Items, quantity, discount and freight. The line level tax code and on header level freight is automatically applied by SAP Business One using Tax Code Determination, The WooCommerce Order Tax amount will not be posted; the tax amount is automatically calculated in SAP Business One based on the applied tax Code.

Note

You must complete the Tax code determination in SAP Business One based on your requirement and ensure the tax code applied in a transaction by both application i.e. WooCommerce and SAP Business One should be same. otherwise, it may lead to document total inconsistency

23.4.6 Freight Handling

The shipping amounts that are calculated in WooCommerce irrespective of shipping components are synchronized as a single freight component in SAP Business One. The shipping amounts of WooCommerce are mapped to a single freight component in header level of the sales order in SAP Business One.

For shipping charges, the application uses the default freight defined in the *General Settings*.

Example

Example 1: A Sales Order in WooCommerce with any kind of shipping type such as Standard Shipping is mapped to single freight component in SAP Business One.

WooCommerce Shipping Component		SAP Business One Component
Standard Shipping	→	Shipping

Example 2: A Sales Order in WooCommerce with any kind of shipping type such as Free Shipping is mapped to single freight component in SAP Business One.

WooCommerce Shipping Component		SAP Business One Component
Free Shipping	→	Shipping

Example 3: A Sales Order in WooCommerce with any kind of shipping type such as Custom Shipping is mapped to single freight component in SAP Business One.

WooCommerce Shipping Component		SAP Business One Component
Custom Shipping	→	Shipping

24 Tagrain POS

Tagrain POS is an easy-to-use, plug-and-play cloud-based point-of-sale software. A complete POS solution to manage everyday sales, refunds, products, and customers. The integration between Tagrain POS and SAP Business One facilitates automated, bi-directional data exchange between Tagrain POS and the SAP Business One, eliminating data re-keying while reducing costly errors.

> **Note**
>
> - Tagrain Trading Currency must match SAP B1 local currency.
> - Display Decimal Places settings like Number of Decimals, Quantity Decimals, Price Decimals must be the same in both the system.

Before setting up Tagrain Integration with SAP Business One, you must create an account in the Tagrain. To create an account in the Tagrain, Go to Tagrain website (https://tagrain.com/) and create an account.

Refer to the below knowledge article to create an account in the Tagrain.

https://help.tagrain.com/s/article/Start-Your-Free-Tagrain-Trial-Account

For more details on getting started with Tagrain, refer to the knowledge articles available on this page. https://help.tagrain.com/s/topic/0TO2w0000004joVGAQ/getting-started-articles

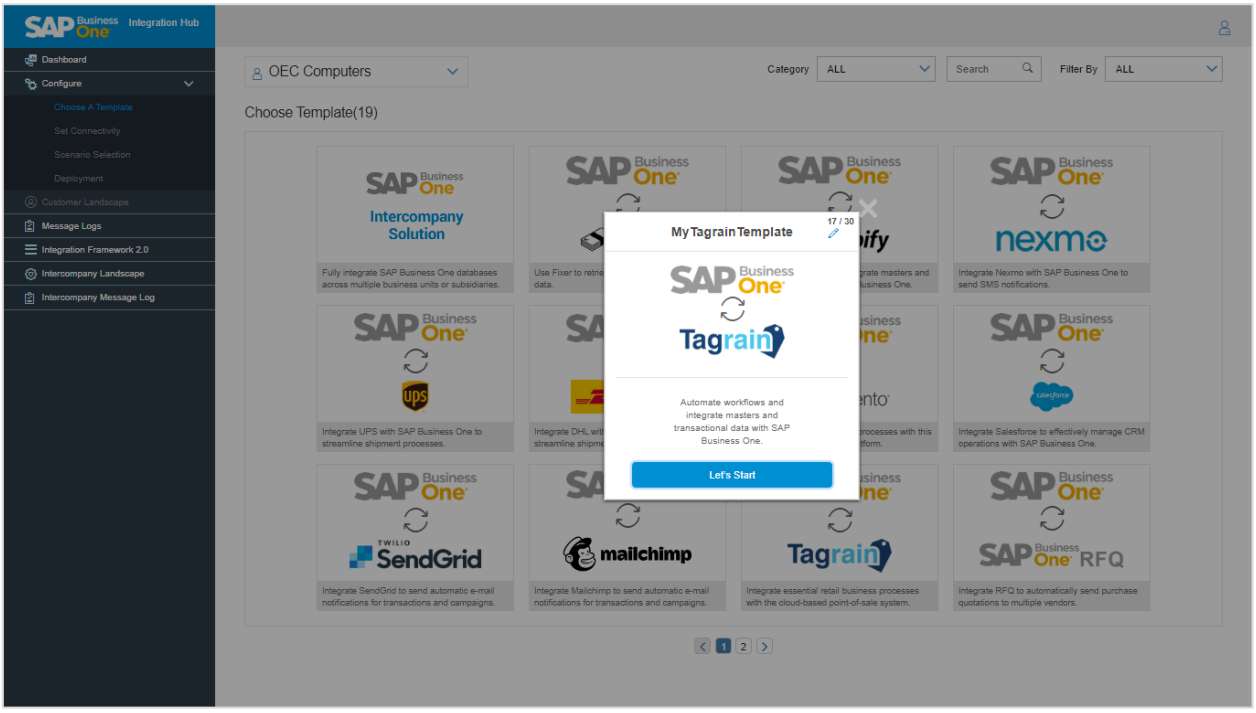
24.1 Setting Up Tagrain POS in Integration Hub

The following are the steps to setup Tagrain in Administration Console:

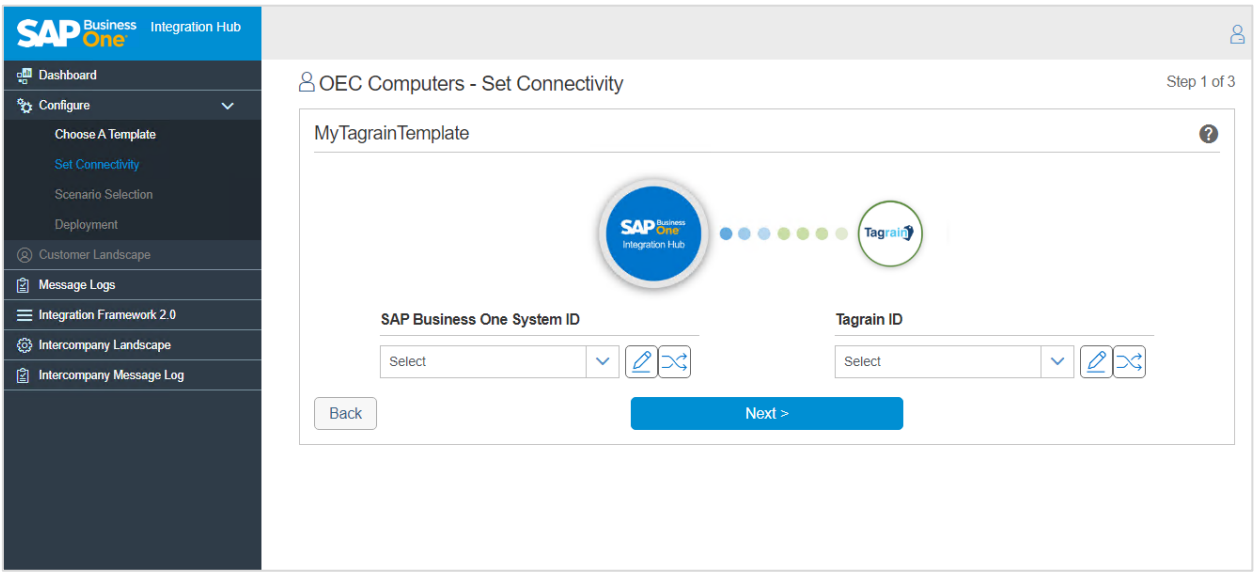
1. Add New Customer. Refer to section Add New Customer in the document.
2. Select the *Tagrain* template to integrate.

   Upon selecting the template, a message "*Let's Start*" prompts to start configuring the connectivity settings. Change the template name by clicking the Edit button to edit the template name. Otherwise, it appears as *MyTagrainTemplate*.

   > **Note**
   >
   > By default, the name of the template appears as *MyTagrainTemplate* and can be renamed.



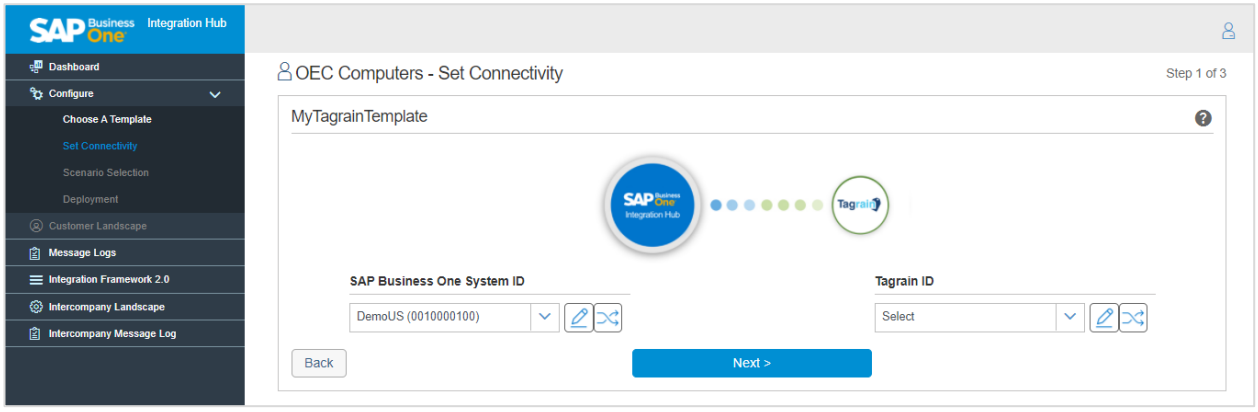
3. Upon choosing the *Let's Start* button, a *Set Connectivity* page appears with the following three steps to complete the configurations for connectivity.



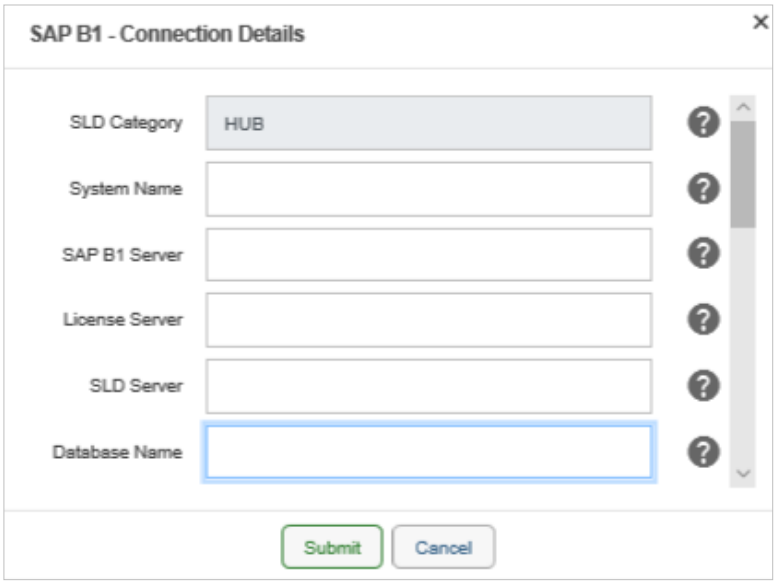
Step 1 – Set Connectivity

4. Choose the SAP Business One SLD to provide the connection between *SAP Business One System Id* and *Tagrain Id.*

> **Note**
>
> By default, the solution displays all the SAP Business One SLDs available in *SLD Category* selected during customer creation.



5. To add a new SLD or edit existing SAP Business One SLD under SAP Business System Id area, choose *Add / Edit* button.



The *SAP Business One Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read-only.
System Name	Enter the name of the system. **Note** *System Name* is the mandatory field to add or update SAP Business One SLD.
SAP Business One Server	Enter SAP Business One Server Name / IP Address. **Note** *SAP Business One Server* is the mandatory field to add/update SLD information for SAP Business One.
License Server	Enter *License Server* details. i.e. Server Name or IP Address and port number of the SAP Business One License Server. The default port is 30000.

SLD Server	Enter the valid *SLD Server* details with port. Note *SLD Server* details are the mandatory field to add/update SLD information for SAP Business One.
Database Name	Enter the name of the SAP Business One Database. Note *Database Name* is the mandatory field to add/update SAP Business One System SLD. Caution The *Database Name* must be entered the same as SAP Business One Database Name.
Database Type	Currently, only Microsoft SQL Server 2005, 2008, 2012, 2014, 2016, 2017, and SAP Hana DB are supported. Choose the database type from the dropdown list. Note *Database Type* is the mandatory field to add/update SAP Business One SLD.
Database User	Enter the user to access the company database using the database connection. *Database User* is the mandatory field to add/update SAP Business One SLD. Caution The *Database User* must be valid. Invalid *Database User* will fail to establish the connection.
Database Password	Enter a valid password for database login. Note *Database Password* is the mandatory field to add/update SAP Business One SLD. Caution The *Database Password* must be valid. Invalid *Database Password* will fail to establish the connection.
Database Port	Enter the port for the database.
Username	Enter `B1i` in this field. Note *Username* is the mandatory field to add/update SAP Business One SLD. It is set as B1i by default and un-editable. Caution Ensure that a user with this name exists in the SAP Business One database.
Password	Enter a valid password for B1i user of SAP Business One.
Language	Select the language from the list of languages.
Is Trust	Select *True* or *False*. The default value for this field is *False.* To use a trusted connection, choose *True* from the dropdown list.
jcoPath	Enter the path for jco library. Example of Installation path of JCO: C:\Program Files (x86)\SAP\SAP Business One DI API\JCO\LIB
DI ProxyHost	The DI Proxy host must be defined if B1i is installed on a separate server (this is, other than the SAP Business One server). The value in this field must be the same as the SAP Business One Server address.

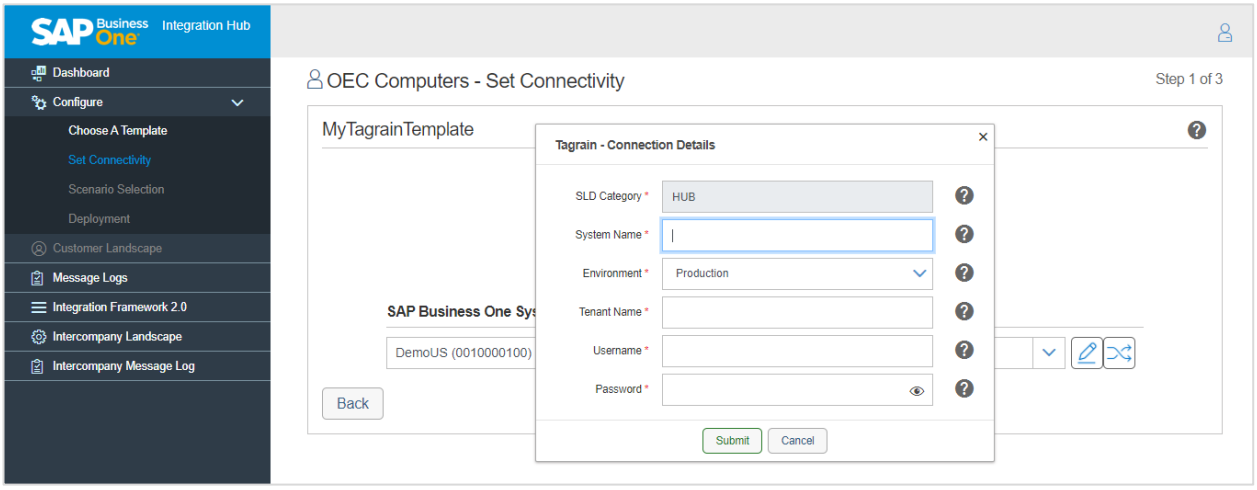
	Example *Proxyhost* can be the same as *SAP Business One Server.*
DI ProxyPort	The default value of *DI Proxy Port* is 2099.
Proxy Host	The proxy host is defined in a multi-instance scenario. If the B1i server connects to the SAP Business One server through a proxy server then, enter the address of the proxy server in this field.
Proxy Port	Enter the proxy port in this field.

6. Enter the valid data and choose the *Submit button.* An *SAP Business One SLD* is created.

7. Choose the *Test Connection* icon to test the connection between the SAP Business One System Id in Integration Hub and SAP Business One System Landscape Directory.

   If the connection is successful, a success message appears “Test Connection Successful”. If the connection is unsuccessful, a failure message appears “Test Connection Failed”. Please provide the correct credentials.

8. To add / edit Tagrain instance SLD under Tagrain Id area, choose the Add / Edit button.

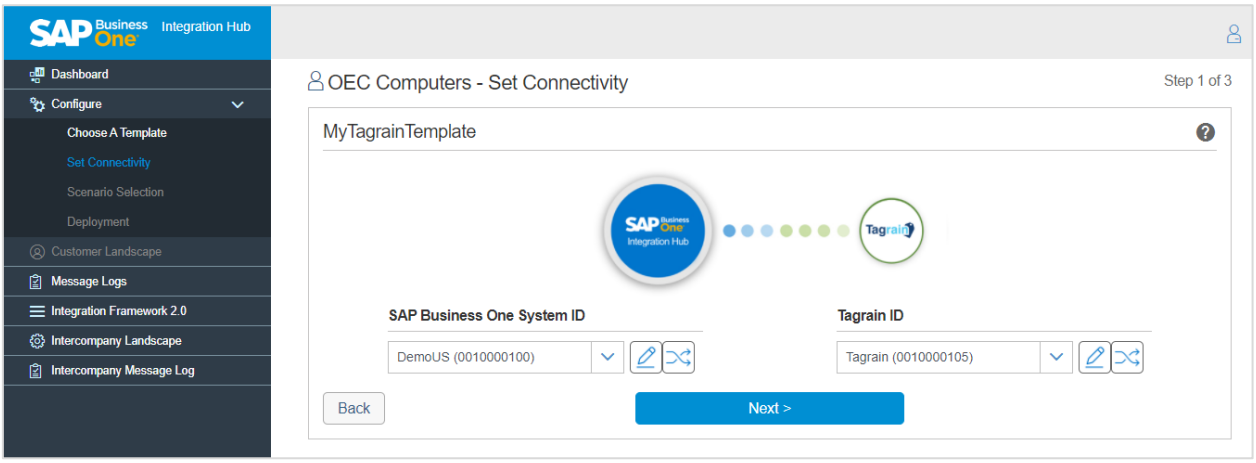


The *Tagrain Connection Details* window contains the following fields:

Field Name	Description
SLD Category	Displays the *SLD Category* selected during customer creation. This field is read-only.
System Name	Enter the name of the system. Note *System Name* is the mandatory field to add or update Tagrain SLD.
Environment	Select the *Production* or *Test* environment from the dropdown.
Tenant Name	Enter the Tagrain Tenant Name. If your Tagrain store URL is https://oeccomputers.tagrain.net/ then your tenant name is “oeccomputers”.
User Name	Enter the Tagrain account user name.

Password	Enter the Tagrain account password.

9. Provide the valid information in the fields and choose the *Submit button.* SLD for Tagrain will be created.

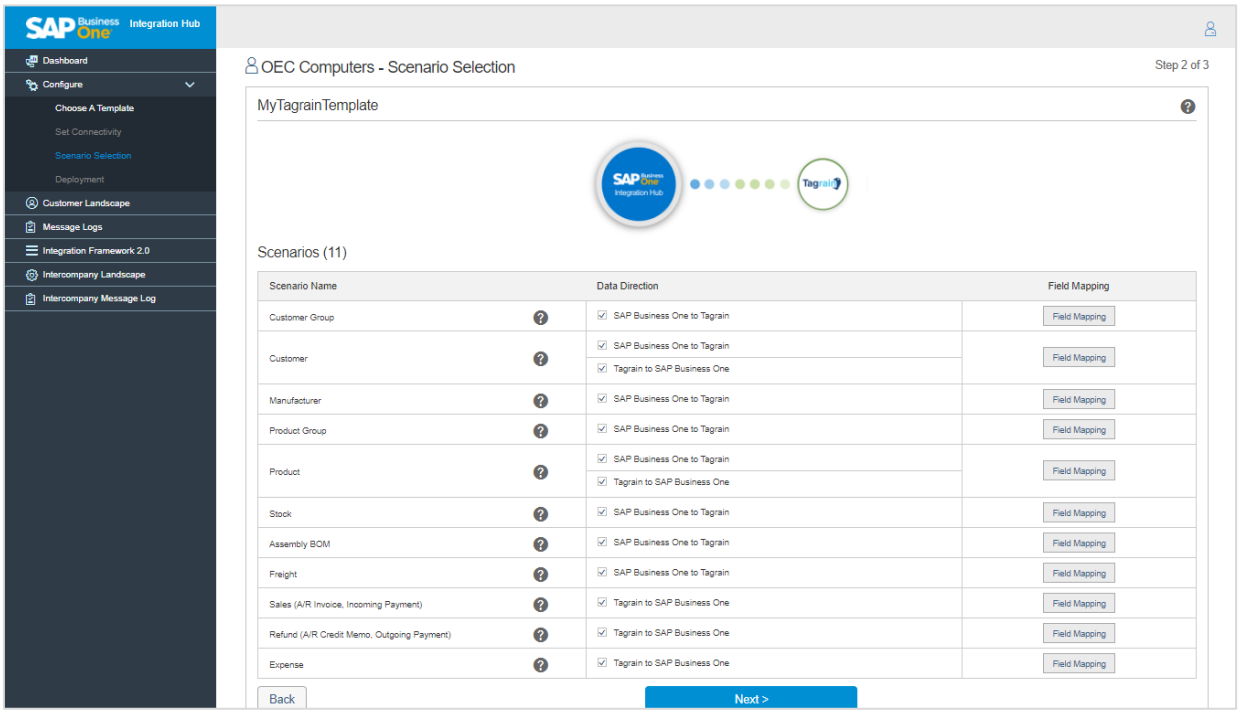


10. Choose the *Test Connection* icon to test the connection between the Integration Hub and Tagrain.
If the connection is successful, a success message appears “Test Connection Successful”.
If the connection is unsuccessful, a failure message appears “Test Connection Failed”.

11. Choose the *Next* button to proceed to Step2.

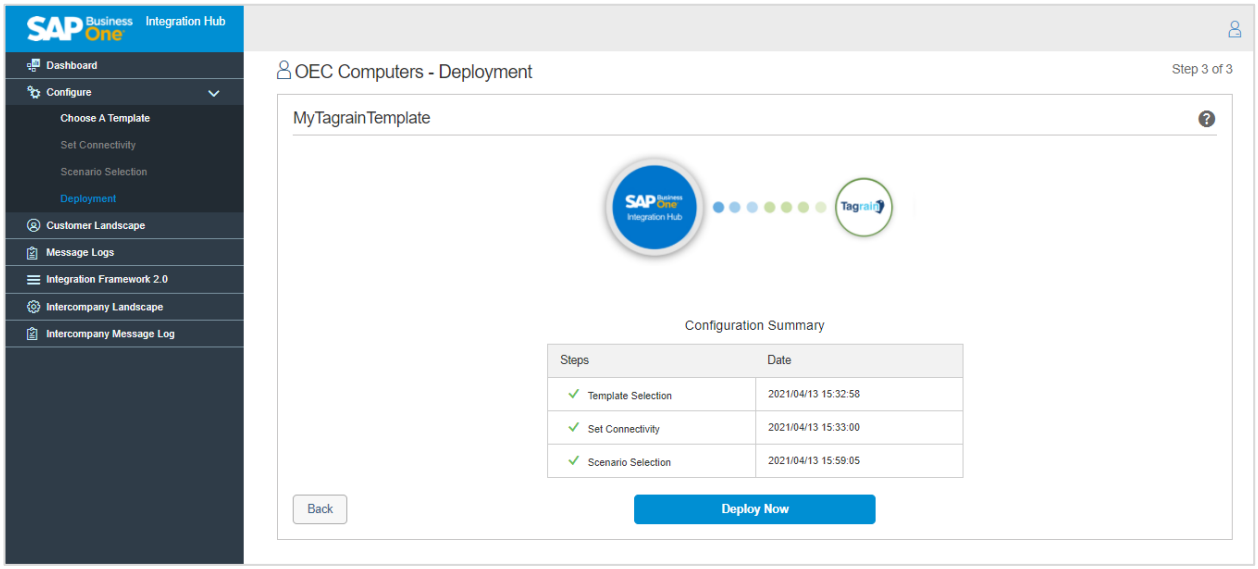
Step 2 – Scenario Selection

12. The Scenario Selection summary displays the *Scenario Name, Data Direction,* and *Field Mapping.* The *Field Mapping* further displays information of the field in *SAP Business One* and mapped field in *Tagrain.*



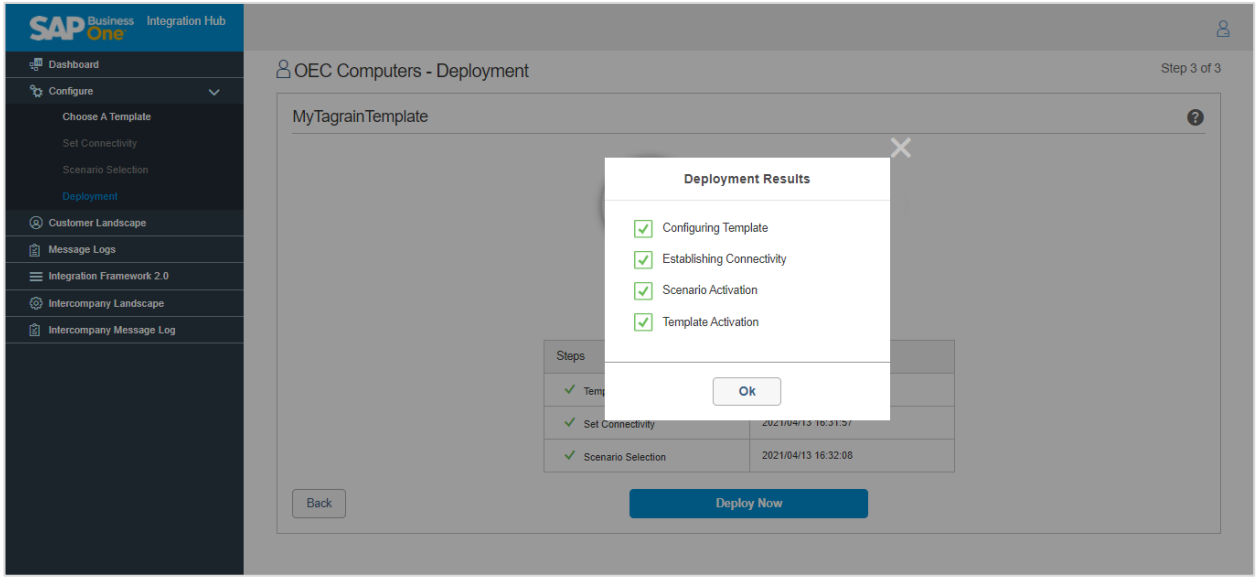
Step 3 – Deployment

13. The Configuration summary displays the *Date* and time for *Template Selection, Set Connectivity steps,* and *Scenario Selection*.



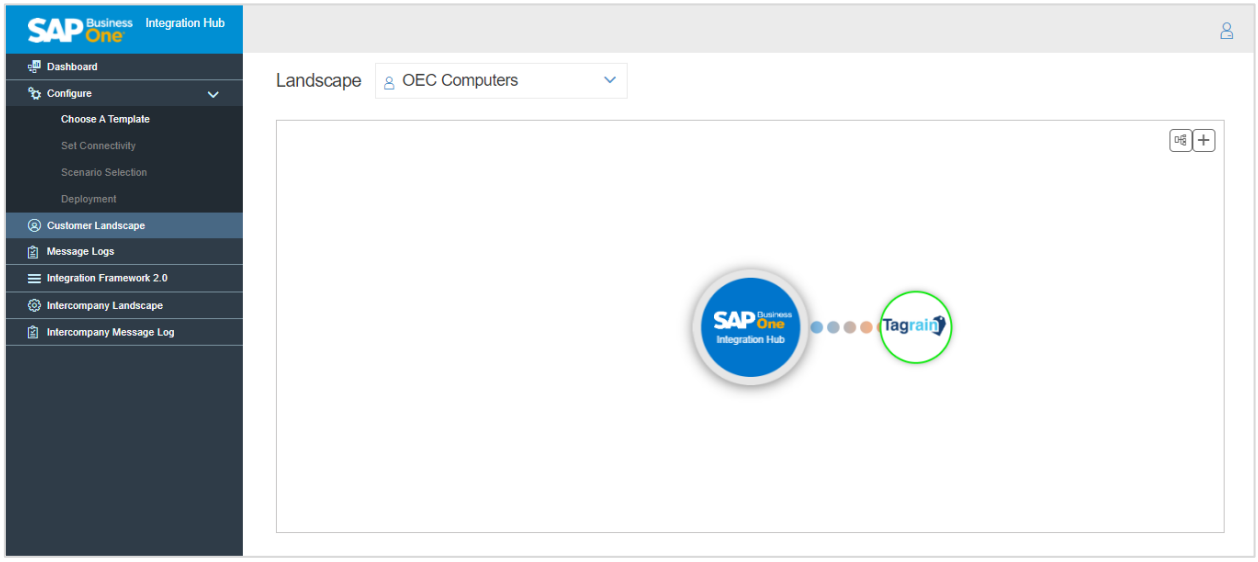
14. To deploy the solution, choose the *Deploy Now* button. The Integration Hub starts deploying the solution.

15. On deploying the solution, the Integration Hub displays the *Deployment Results* whether the deployment is successful or failed. The checkbox in the *Deployment Results* window displays status of each deployment stage.



> **Note**
>
> After you enable the multi-branch function in SAP Business One, you must re-deploy the Tagrain Template.

16. Once all stages are checked, click the *OK* button on the *Deployment Results* window to proceed. The successful deployment of the solution in Integration Hub results in enabling the features in SAP Business One.
17. Customer Landscape displays connection of SAP Business One to Tagrain.



18. To modify the template after successful feature activation, right-click on the logo of the template.
19. Right-click on the Tagrain logo, displays window with the following fields:

Field Name	Description
View	Displays the *Set Connectivity* window in view mode.
Edit	Displays the *Set Connectivity* window in Edit mode.
De-activate	Deactivates the Tagrain deployment.
Deployment Status	Displays the deployment status with date and time.
Delete Template	Choose delete template to delete the template. It is an Irreversible action. Note On deleting the template, the template will be marked as Inactive in the application deployment status window in SAP Business One.
Delete Deployment Info.	Choose delete deployment info. to delete the complete deployment information of the template. It is an Irreversible action. Note On deleting the deployment information, the template will not be deleted from deployment panel screen, it will be deactivated only.
Manage Licenses	Choose Manage License to Activate/Deactivate the integration Hub License. For more information, see Managing the Integration Hub licenses section in this guide.

24.2 Setup in SAP Business One

1. In the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Application Deployment Status*. The *Deployment Status* field should display 'Active', indicating that the feature is deployed in the Integration Hub. If the status displays 'Inactive', then redeploy the feature in the *Integration Hub.*

   The following are the statuses that can be visible on the *Application Deployment Status* screen:

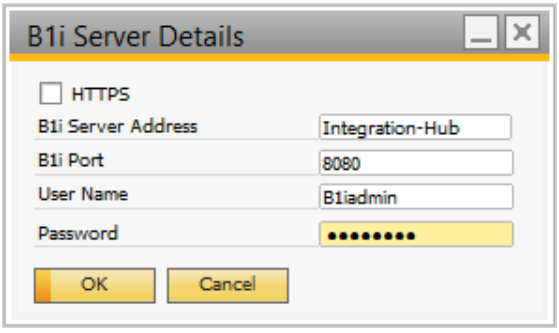
   - *Active*: The status represents the solution is deployed and active.
   - *Inactive*: The status represents the feature template is not inactive.

   For more details, refer the *Application Deployment Status* section in this guide.

   > **Note**
   >
   > You must restart the SAP Business One client after Tagrain deployment from the Integration HUB. On login, the Add-On script will execute, and the relevant setup window will appear.

   > **Note**
   >
   > You must define the ISO Currency code for local and all other currencies defined in the database.

2. Enter B1i Server Details in SAP Business One in *Main Menu* → *Administration* → *Integration Hub* → *B1i Server Details* window. This window enables to enter the *B1i Server Details*.



The *B1i Server Details* contains the following fields:

Field Name	Description
B1i Server Address	Enter the server name or IP address of the B1i server.
B1i Port	Enter the port of the B1i Server. The default port for HTTP is 8080
Username	B1i run time user name.
Password	Enter the password for B1i run time user.
HTTPS	Select the checkbox to enable the solution to use HTTPS.

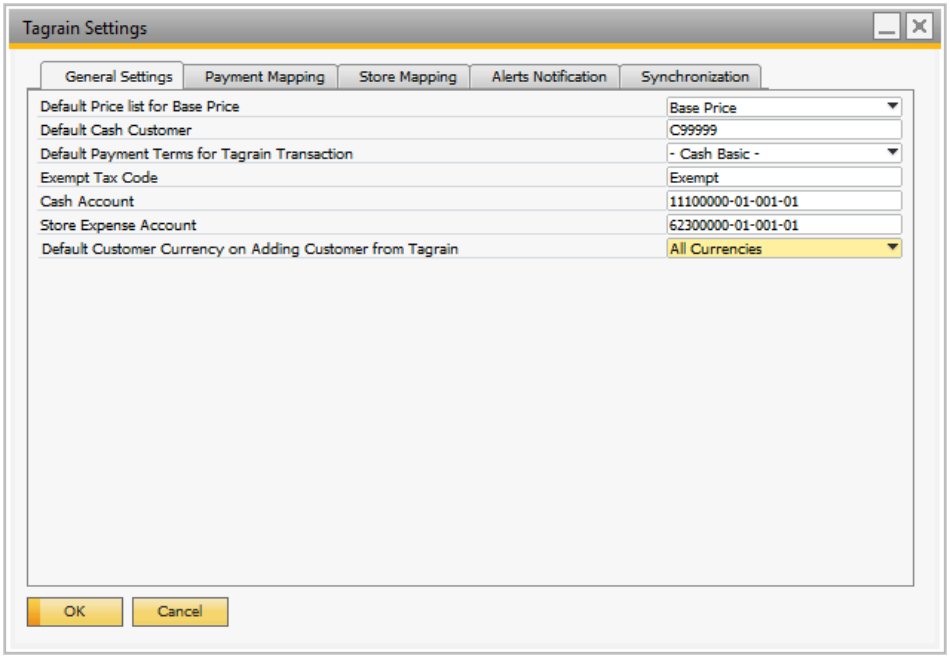
> **Note**
>
> Please ensure that the SLD entry for this company exists in SAP B1if and the solution is properly deployed.

24.2.1 Tagrain Settings

On the Main Menu, go to *Administration* → *Integration Hub* → *Tagrain Settings* to configure the required Tagrain settings.

24.2.1.1 General Settings

Configure the general settings in the *General Settings* tab in *Tagrain Settings* window.



The *General Settings* tab of the *Tagrain Settings* window contains the following fields:

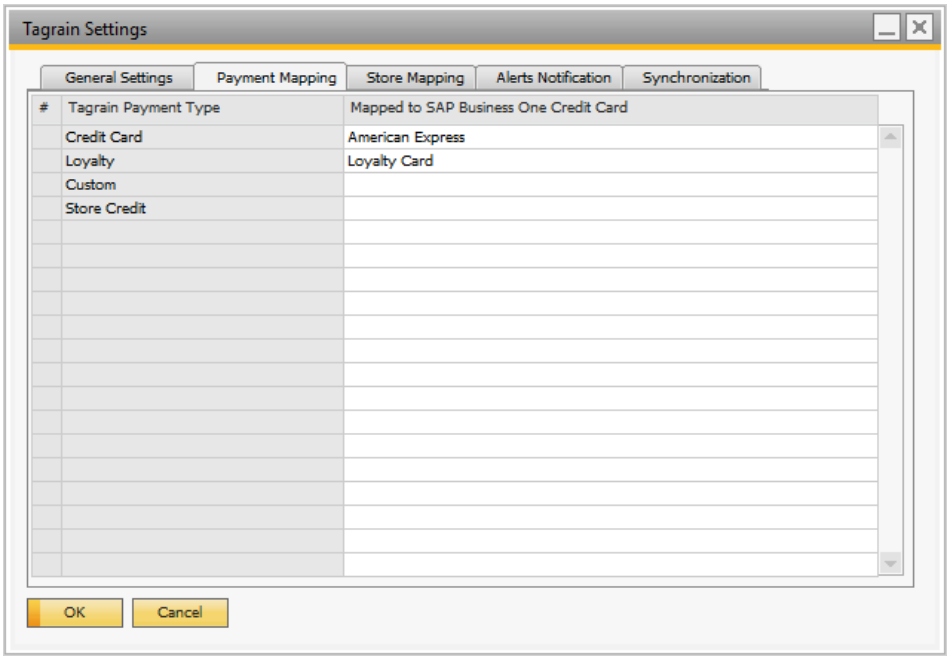
Field Name	Description
Default Price List for Base Price	Select a Price List. The selected price list is used to integrate product-based prices from SAP Business One to Tagrain.
Default Cash Customer	Select a Customer. The selected customer is used to integrate cash customer transactions from Tagrain to SAP Business One.
Default Payment Term for Tagrain Transactions	Select a payment term from the list of payment terms in SAP Business One The selected payment term is the default payment term for all transactions of Tagrain integrated into SAP Business One.
Exempt Tax Code	Select a tax code from the list of tax codes. The selected tax code must be of zero value.
Cash Account	Choose an account from the list of accounts. The selected account is used for posting cash transactions in SAP Business One.
Default Customer Currency on Adding Customer from Tagrain	Select a currency from the list of currencies The selected currency is used while integrating the customers from Tagrain to SAP Business One.

Branch Assignment for Customer	Select the branch that will be used while adding/updating customer data from Tagrain to SAP Business One. Choose the button of the Branch Assignment for the Customer field. In the Branch Assignment for Customer window, in the Active column, select the required branches. **Note** This field is relevant for the multi-branch function.

24.2.1.2 Payment Mapping

Map the payment types of Tagrain in the *Payment Mapping* tab in the *Tagrain Settings* window in SAP Business One.

The payment types other than Cash need to be mapped with credit cards in SAP Business One. This mapped information is used to post the payment transaction in SAP Business One.



The *Payment Mapping* tab of *Tagrain Settings* window contains the following fields:

Field Name	Description
Tagrain Payment Type	Displays the list of payment type available in Tagrain. **Note** The Gift Card added in Tagrain will appear in the payment type list. User need to map the credit card against the Gift Card.
Mapped to SAP Business One Credit Card	Select the credit card from the list of credit cards. The mapped credit card is used for posting the payment transactions from Tagrain to SAP Business One.

24.2.1.3 Store Mapping

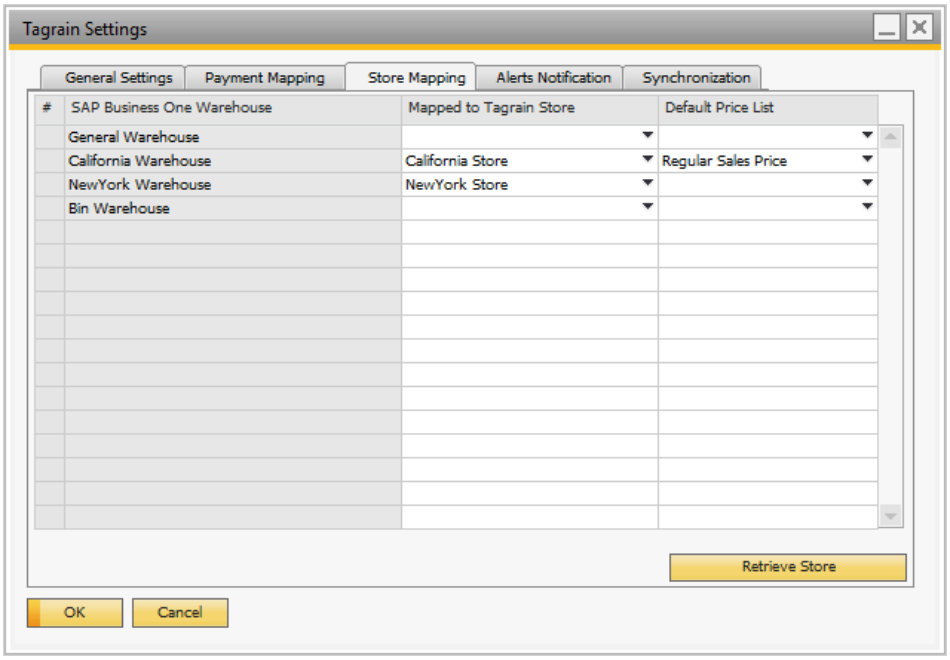
Map the store of Tagrain with SAP Warehouse and Price list in the *Store Mapping* tab in *Tagrain Settings* window.

The Store Mapping information is used to integrate the Inventory from SAP Business One to Tagrain. A user can map the price list against the store to have the store-wise pricing in Tagrain.

A Tagrain can have multiple stores where inventory can be tracked, and sales can be booked.

A user needs to map SAP Business One warehouse to the Store defined in Tagrain. One warehouse is connected to one store of Tagrain.

For example: If two stores are defined in the Tagrain such as New York and California then these two stores need to be mapped with the warehouses in SAP Business One. If there are 01, 02 warehouses in SAP Business One then a user can map 01 warehouse of SAP Business One with New York store of Tagrain and 02 warehouse of SAP Business One with California store.



Note

One Tagrain Store cannot be mapped to multiple SAP Business One warehouses.

Note

If the multi-branch function is enabled in SAP Business One, the application uses the mapped warehouse branch at the document header and line-level while integrating the document from Tagrain to SAP Business One.

The *Store Mapping* tab of *Tagrain Settings* window contains the following fields:

Field Name	Description

SAP Business One Warehouse	Displays the list of SAP Business One warehouse.
Mapped to Tagrain Store	Select the Store of Tagrain to map with SAP Business One warehouse. The store mapped is used for updating the Inventory details in Tagrain from SAP Business One.
Default Price List	Select the Price list against the mapped Store. Note The Mapped price list will be used to integrate store-wise pricing.
Retrieve Store	Click on the *Retrieve Store* button to pull the store from Tagrain.

24.2.1.4 Alerts Notification

Configure the alert settings in the *Alert Notification* tab in *Tagrain Settings* window.

The *Alert Notification* tab of *Tagrain Settings* window contains the following fields:

Field Name	Description
User	Displays the list of users in SAP Business One. Choose a user for setting up the alert notification authorizations. This field is read-only.
Features	Displays the list of Integration Hub features for Tagrain. This field is read-only. The Alert can be set for *Customer*, *Product*, *A/R Invoice*, *Incoming Payment*, *A/R Credit Memo*, *Outgoing Payment*, and *Journal Entry*.
System Alert	Select this checkbox to send notifications as a system alert.

24.2.1.5 Initialization Process

Once the Tagrain application is enabled in SAP Business One, it is mandatory to initialize the objects to be integrated between SAP Business One and Tagrain.

The object integrate on initialization are as follows:

- **Customer Group**

  All customer groups defined in the SAP Business One will integrate to Tagrain on initialization. If any customer group is already defined in the Tagrain, you must define the same customer group in SAP Business One as well. Ensure the customer group name should be the same in both the system.

- **Customer**
  All the customer's masters for which the "Sync" checkbox is checked for Tagrain template in SAP Business One will be Initialized to Tagrain. However, from Tagrain all customers will be downloaded to SAP Business One.

  > **Note**
  > Customer will be initialized based on customer scenario selection data direction (SAP Business One to Tagrain or Tagrain to SAP Business One or both) in the Integration Hub administration console.

- **Manufacturer**
  All manufacturers defined in the SAP Business One will integrate to Tagrain on initialization. If any manufacturer is already defined in the Tagrain, you must define the same manufacturer in SAP Business One as well. Ensure the manufacturer name should be the same in both the system.

- **Product Group**
  All product groups defined in the SAP Business One will integrate to Tagrain on initialization. If any product group is already defined in the Tagrain, you must define the same product group in SAP Business One as well. Ensure the product group name should be the same in both the system.

- **Product**
  All the item masters for which the "Sync" checkbox is checked for Tagrain template in SAP Business One will be Initialized to Tagrain.

  Standard Items, Serial Items, and Batch Items will be Integrated in both directions i.e. from SAP Business One to Tagrain and from Tagrain to SAP Business One. However, the Variant Items and Gift Card products will be integrated from Tagrain to SAP Business One only.

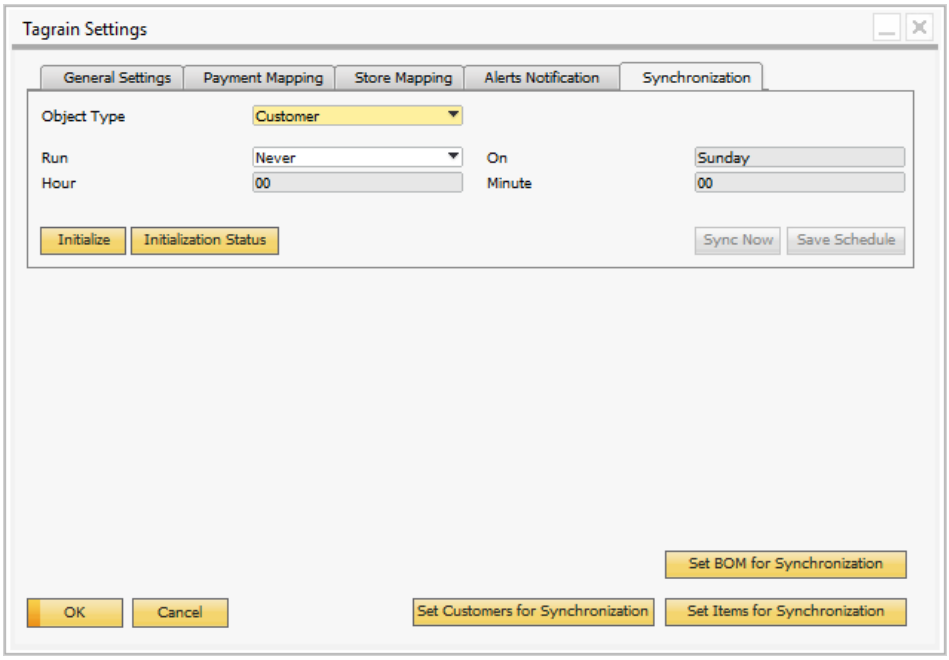
  > **Note**
  > Items will be initialized based on Items scenarios selection data direction (SAP Business One to Tagrain or Tagrain to SAP Business One or both) in the Integration Hub administration console.

- **Inventory**
  The product stock balances (snapshot) in the warehouse that is mapped with Tagrain stores in SAP Business One will be integrated into Tagrain on initialization.

- **Assembly BOM**
  All the assembly bill of materials for which the "Sync" checkbox is checked for Tagrain template in SAP Business One will be Initialized to Tagrain. All assembly bill of materials will integrate as a composite product in Tagrain.

- **Freight**
  All freight defined in the SAP Business One will integrate to Tagrain as a surcharge on initialization. If any freight is already defined in the Tagrain, you must define the same freight in SAP Business One as well. Ensure the freight name should be the same in both the system.

To Initialize the Tagrain, choose *Administration* → *Integration Hub* → *Tagrain Settings* → *Synchronization.* Choose the *Initialize* button on the *Synchronization* tab.

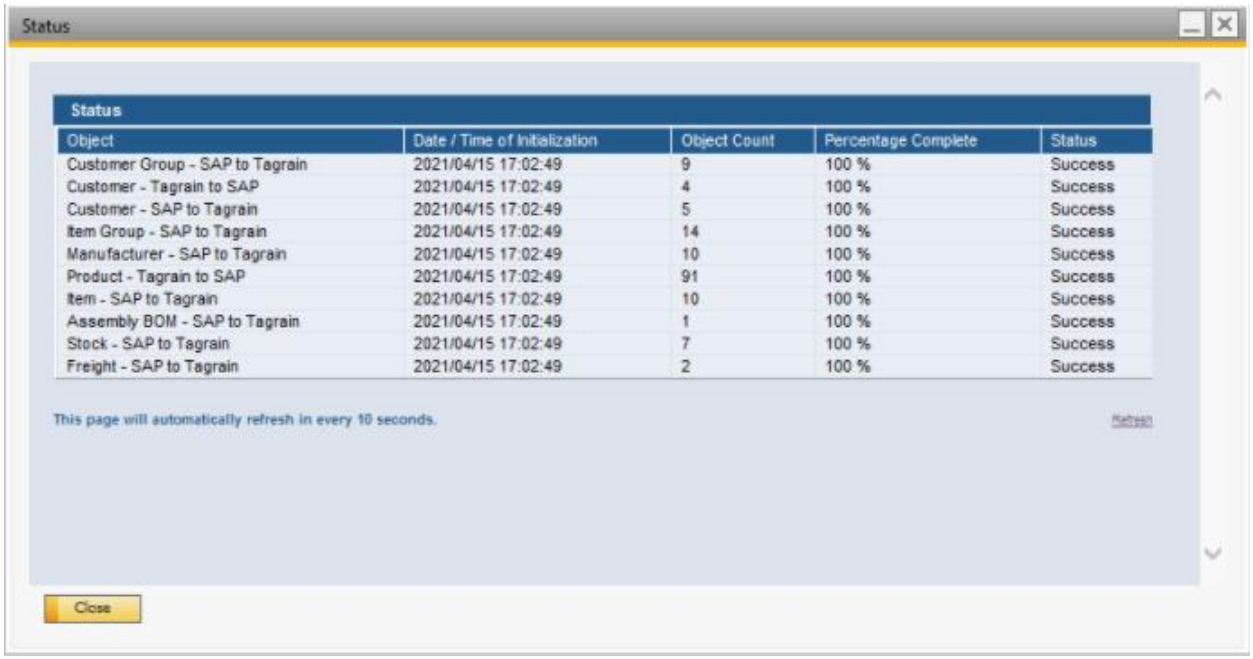


The *Synchronization* tab of *Tagrain Settings* window contains the following fields:

Field Name	Description
Object Type	Displays the list of objects available for synchronization between SAP Business One and Tagrain. The list of objects is: • Customer • Product • Sales • Refund • Expense • Inventory
Run	Select the frequency of automation run from the dropdown i.e. *Daily* or *Weekly* or *Never.*
On	Select the weekday on which the synchronization should run. **Note** The selection is available only for weekly type run only.
Hour	Choose the *Hour* frequency at which the synchronization should run.
Minute	Choose the *Minute* frequency at which the synchronization should run.
Initialize	Choose the *Initialize* button to synchronize the object data between SAP Business One and Tagrain. **Note** *Initialize* button is active until clicked for the first time. Once the initialization is done, the *Initialize* button is disabled.

Initialization Status	Select this button to view the Initialization Status.
Set Items for Synchronization	Select this button to mark bulk items synchronization from SAP business One to Tagrain.
Set Customers for Synchronization	Select this button to mark bulk customer synchronization from SAP business One to Tagrain.
Set BOM for Synchronization	Select this button to mark bulk Assembly BOM synchronization from SAP business One to Tagrain.

Click on the *Initialization Status* button to view the initialized status of the data replication between Tagrain and SAP Business One.



> **Note**
>
> The *Initialize* button is active until the initialization is done for the first time. Once the initialization is done, close the Tagrain Settings window and reopen it, the *Initialize* button is disabled and *Sync Now* and *Save Schedule* button is enabled. All the data created later will be integrated between both the systems based on scheduled synchronization or manual synchronization

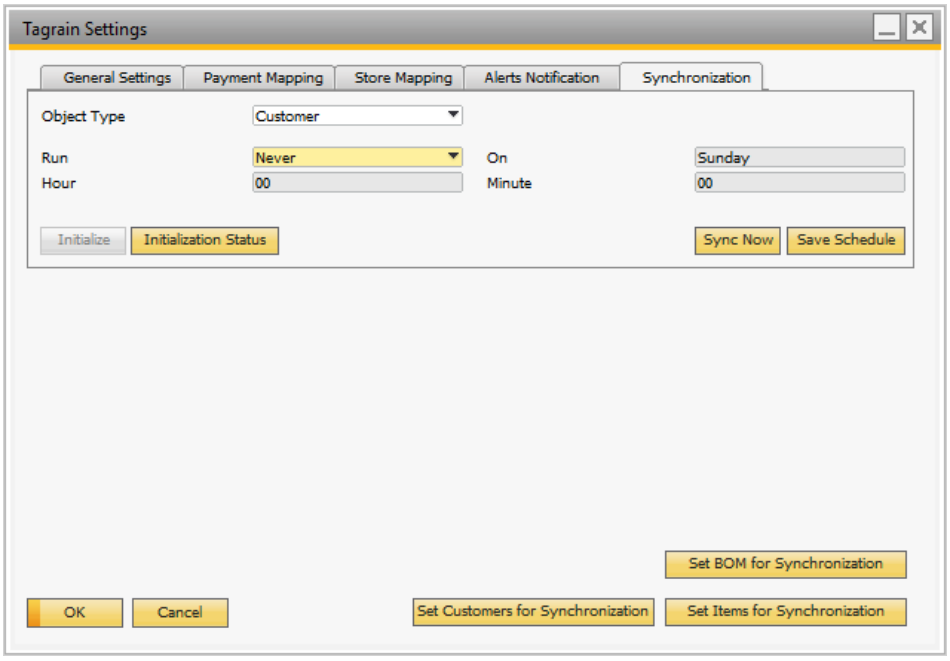
24.2.1.6 Synchronization

The following two methods are available for synchronization between SAP Business One and Tagrain:

- **Manual Synchronization:**
  Whenever a user needs the integrations to be done on an immediate basis (instead of waiting till the Scheduler services run), a user can choose the *Sync Now* button. The synchronization takes an immediate effect on the selected object.

- **Automatic Synchronization:**

The system enables a user to configure automatic integrations between SAP Business One and Tagrain at a frequency (either daily or weekly) and at specific intervals. The synchronization runs based on the schedule that is set for the object.



Synchronization is supported for four objects Customer, Product, Sales, Refund, Expense, and Inventory.

- **Customer Synchronization**
  The system enables to integrate all the customer master data from Tagrain to SAP Business One. Scheduling a synchronization enables the system to integrate customer masters automatically as per the schedule by running the Scheduler services.

    - **Set Bulk Customers for Synchronization**

      To Synchronize Customers from SAP to Tagrain, select customers in bulk using the Set Customers for Synchronization menu under Integration Hub.

      1. Choose Administration → Integration Hub → Set Customers for Synchronizations.
      2. On clicking the Set Customers for Synchronization, Set Customers For Synchronization-Selection Criteria window opens.
      3. Select the Tagrain Template, Customers range, and Customers Group range and click on the Ok button.
      4. Set Customers for Synchronization window opens, select Sync check box for the Customer Codes and BP Name to synchronize.
      5. Click on the Ok button to mark the customer for synchronization from SAP to Tagrain.

      Note

      Whenever you click the Sync Now button, all Customer Data will be downloaded from Tagrain irrespective of the last updated timestamp.

- **Product Synchronization**
  The system enables to integrate all the item master data between SAP Business One and Tagrain. Scheduling a synchronization enables the system to integrate item masters automatically as per the schedule by running the Scheduler services.

    - **Set Bulk Items for Synchronization**

      To Synchronize Items from SAP Business One to Tagrain, select items in bulk using the Set Items for Synchronization menu under Integration Hub.

      1. Choose Administration → Integration Hub → Set Items for Synchronizations.
      2. On clicking the Set Items for Synchronization, Set Items For Synchronization-Selection Criteria window opens.
      3. Select the Tagrain Template, items range or Item Groups range and click on the Ok button.
      4. Set Items for Synchronization window opens, select Sync check box for the Item Codes and Item Name to synchronize.
      5. Click on the Update button to mark the items for synchronization from SAP to Tagrain.

- **Sales Synchronization**
  The system enables to integrate all sales transactions from Tagrain to SAP Business One. Scheduling a synchronization enables the system to integrate sales transactions automatically as per the schedule by running the Scheduler services.

- **Refund Synchronization**
  The system enables to integrate all refund transactions from Tagrain to SAP Business One. Scheduling a synchronization enables the system to integrate refund transactions automatically as per the schedule by running the Scheduler services.

- **Expense Synchronization**
  The system enables to integrate all expense transactions from Tagrain to SAP Business One. Scheduling a synchronization enables the system to integrate expense transactions automatically as per the schedule by running the Scheduler services.

- **Inventory Synchronization**
  The system enables to integrate products Inventory snapshots from SAP Business One to Tagrain. Scheduling a synchronization enables the system to integrate product Inventory automatically as per the schedule by running the Scheduler services.

  
  Caution

  Customers must set the synchronization time settings on the redeployment of the Application.

24.3 Using Tagrain

24.3.1 Customer Group Data

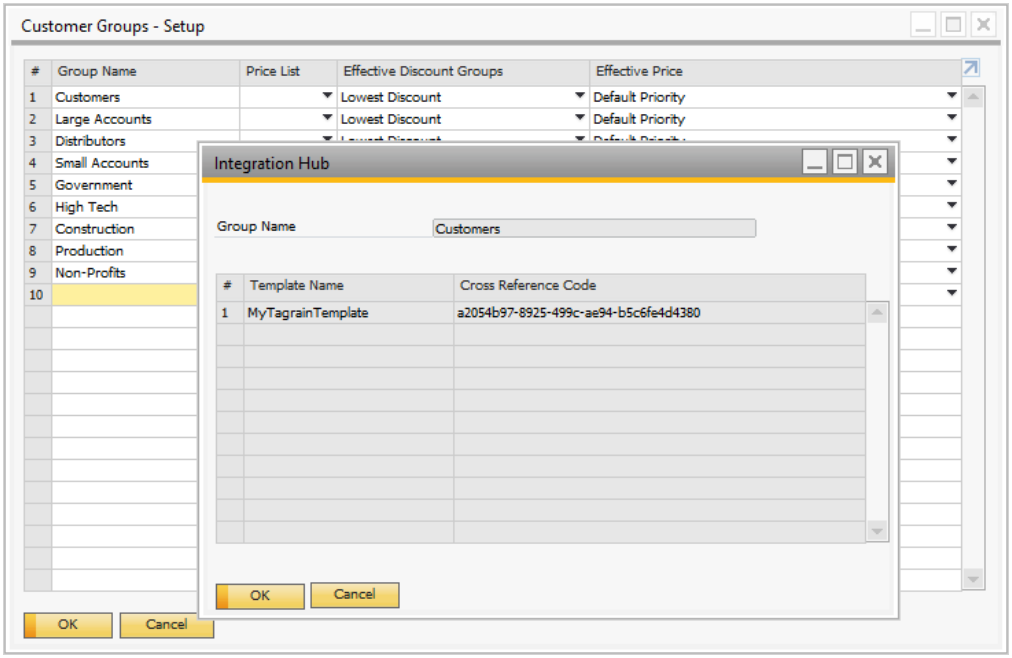
The customer group master data integration is unidirectional i.e. from SAP Business One to Tagrain.

The application supports the add/update operation on the customer group master.

If any customer group is already defined in the Tagrain, you must define the same customer group in SAP Business One as well. Ensure the customer group name should be the same in both the system.

On adding the customer group data in SAP Business One, the customer group is integrated to Tagrain, and the Tagrain customer group internal id is saved in *Cross Reference Code* field.

You can view the Tagrain customer group internal id by double-clicking the "row no#" fields in the *Customer Groups – setup* screen.



The following fields have been added to the Integration Hub window and are relevant to the Integration Hub.

Field Name	Description
Template Name	Displays the name of the Tagrain template.
Cross Reference Code	Displays the Tagrain customer group internal id.

24.3.2 Customer Master Data

The customer master data integration is bidirectional i.e. from Tagrain to SAP Business One and from SAP Business One to Tagrain. Customer Information like *Name, E-mail, Customer Group, Address*, and other details are integrated from Tagrain to SAP Business One and vice-versa.

When the customer data is integrated from Tagrain to SAP Business One, the Tagrain customer code is updated in *Card Code* and Tagrain *Customer Internal ID* is updated in *Cross Reference Code* in SAP Business One. Similarly, when the customer data is integrated from SAP Business One to Tagrain, the SAP Business One *Card Code* is updated in the Tagrain Customer Code and Tagrain *Customer Internal ID* is updated back in *Cross Reference Code* in SAP Business One.

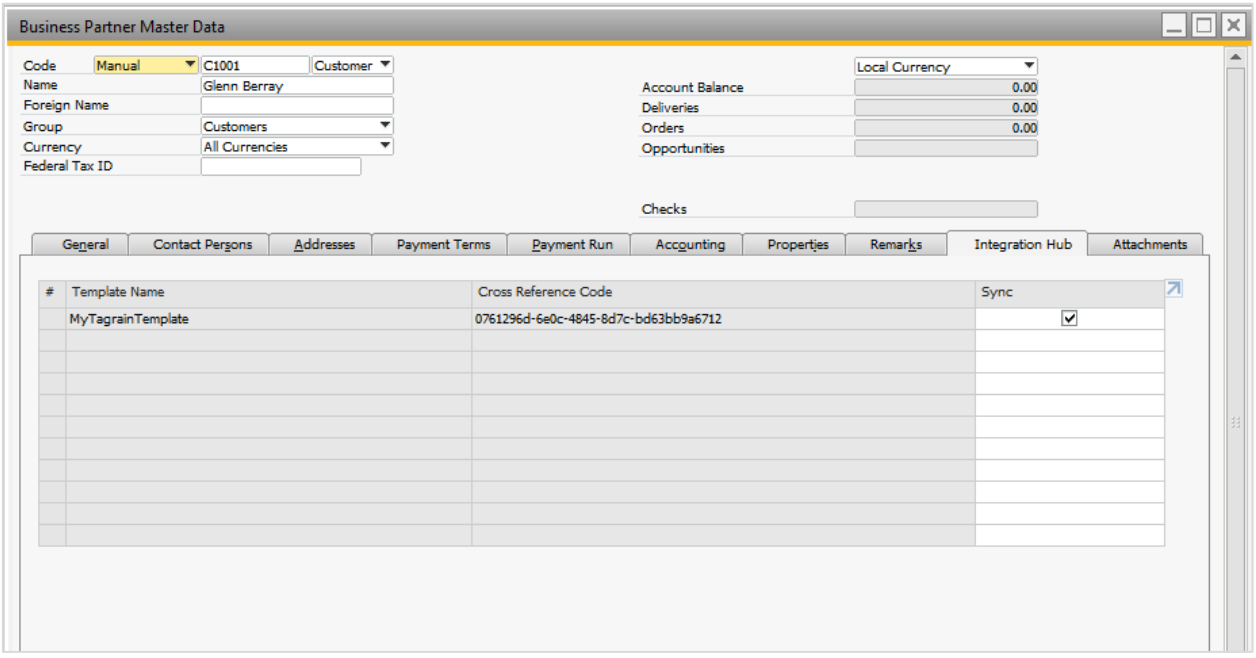
On adding customer information from Tagrain to SAP Business One, the application uses currency configured in the *General Settings* of *Tagrain*.

The following actions for Customer Master Data are supported:

- *Add Customer*- Add new customer information. The customer master addition is Bidirectional i.e. from Tagrain to SAP Business One and from SAP Business One to Tagrain.
  From SAP Business One, the customer masters for which the *Sync* checkbox is checked for Tagrain template in SAP Business One will integrate to Tagrain. However, whenever the customer is added in Tagrain it will be downloaded to SAP Business One.
- *Update Customers*- Edit existing customer information. The customer master update is Bidirectional i.e. from Tagrain to SAP Business One and from SAP Business One to Tagrain.

> **Caution**
>
> Customer master deletion is not supported between both the system.

To display the customer data which are synchronized from Tagrain to SAP Business One, choose SAP Business One *Main Menu* →*Business Partners* →*Business Partner Master Data* →*Integration Hub.*



The following fields have been added to the window and are relevant to the Integration Hub. For details of other fields on the *Customer Master Data* window, refer to the SAP Business One Online Help.

Field Name	Description
Template Name	Displays the name of the Tagrain template.
Cross Reference Code	Displays the Tagrain customer internal id.
Sync	Select Check-box to synchronize customer data from SAP Business One to Tagrain.

Message /Alert Overview

Once the customer data is synchronized, Message /Alert Overview Inbox displays the transaction information in SAP Business One. The following information is displayed on the screen:

- Sender System
- Sender Transaction Type
- Sender Transaction Number
- Receiver System
- Receiver Transaction Type
- Receiver Transaction Number
- Action
- Status

24.3.3 Manufacturer (Brand)

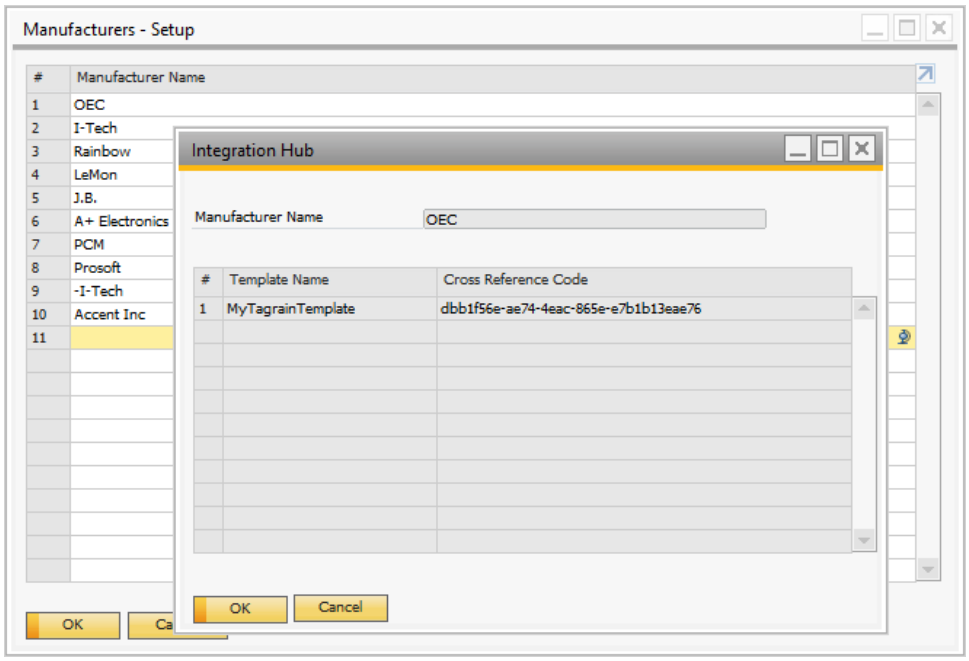
The manufacturer master data integration is unidirectional i.e. from SAP Business One to Tagrain.

The application supports the add/update operation on manufacturer master.

If any manufacturer is already defined in the Tagrain, you must define the same manufacturer in SAP Business One as well. Ensure the manufacturer name should be the same in both the system.

On adding the manufacturer data in SAP Business One, the manufacturer is integrated to Tagrain and the Tagrain manufacturer internal id is saved in *Cross Reference Code* field.

You can view the Tagrain manufacturer internal id by double-clicking the “row no#” fields in the *Manufacturers – setup* screen.



The following fields have been added to the Integration Hub window and are relevant to the Integration Hub.

Field Name	Description
Template Name	Displays the name of the Tagrain template.
Cross Reference Code	Displays the Tagrain manufacturer internal id.

24.3.4 Item Group

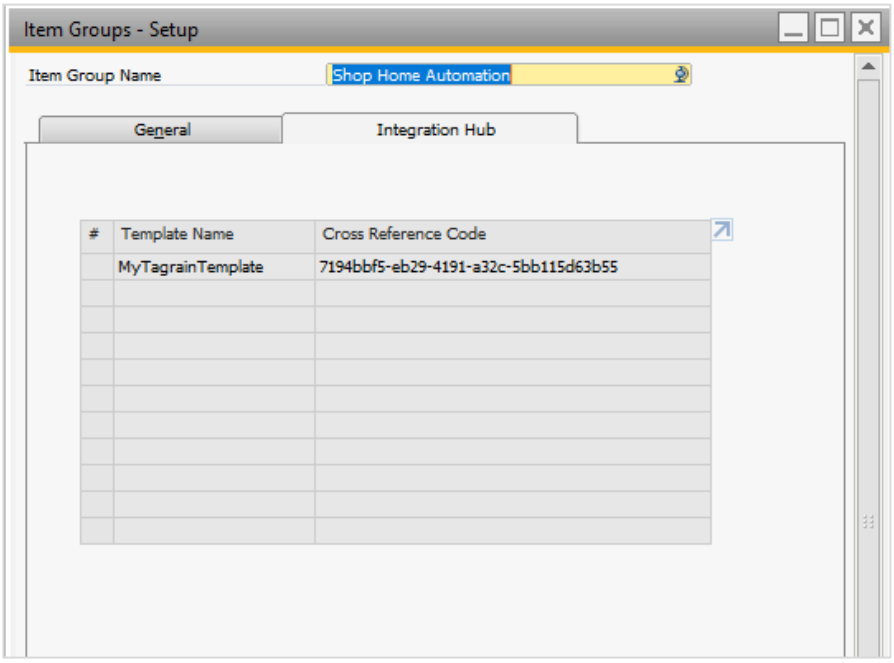
The item group master data integration is unidirectional i.e. from SAP Business One to Tagrain.

The application supports the add/update operation on the item group master.

If any item group is already defined in the Tagrain, you must define the same item group in SAP Business One as well. Ensure the item group name should be the same in both the system.

On adding the item group data in SAP Business One, the item group is integrated to Tagrain, and the Tagrain item group internal id is saved in *Cross Reference Code* field.

You can view the Tagrain item group internal id on Integration Hub Tab available on the *Item Groups - Setup* window.



The following fields have been added to the Integration Hub Tab and are relevant to the Integration Hub.

Field Name	Description
Template Name	Displays the name of the Tagrain template.
Cross Reference Code	Displays the Tagrain item group internal id.

24.3.5 Product Master Data

The Integration Hub supports the integration of existing product data as well as new product data between both applications. In other words, product synchronization between SAP Business One and Tagrain is bidirectional.

Tagrain products for which the *Non Stock* is selected are marked as non-inventory items in SAP Business One.

The *Item Code* in SAP Business One is mapped with the product code in Tagrain for integration.

The application supports the add/update operation on the product master.

To synchronize products from SAP Business One to Tagrain, in the SAP Business One *Main Menu*, choose *Inventory* → *Item Master Data.* On the *Integration Hub* tab, choose the *Sync* button.

The following fields have been added to the *Item Master Data* window and are relevant to the Integration Hub. For details of other fields on the *Item Master Data* window, refer to the SAP Business One online help.

Field Name	Description
Template Name	Displays the name of the Tagrain template.
Cross Reference Code	Displays the Tagrain product internal id.
Sync	Select this checkbox to synchronize the product information from SAP Business One to Tagrain.

Caution

You cannot delete products from Tagrain and SAP Business One. If a deleted product is used in a transaction, then data inconsistency will occur.

24.3.5.1 Standard Products

The integration of standard products is bidirectional between Tagrain and SAP Business One. The SAP Business One product other than serial and batch managed are considered as a Standard product in Tagrain.

24.3.5.2 Serial Products

The integration of serial products is bidirectional between Tagrain and SAP Business One. In SAP Business One, the serial product has *Manage Item by* field values as *Serial Numbers* and in Tagrain the serial product has *Product Type* field value as *Serial.* The corresponding values are set on replication between both the application.

24.3.5.3 Batch Products

The integration of batch products is bidirectional between Tagrain and SAP Business One. In SAP Business One, the batch product has *Manage Item by* field values as *batch* and in Tagrain the batch product has *Product Type* field value as *Batch.* The corresponding values are set on replication between both the application.

24.3.5.4 Variant Products

The integration of variant products is unidirectional (in other words, from Tagrain to SAP Business One). Variants can be added to a product that comes in more than one attribute, such as size or color. Each combination of attributes for a product is a variant of that product.

For example, a user sells t-shirts with two attributes: size and color. The size attribute has three values: small, medium, and large. The color attribute has two values: blue and green. One specific variant from these attributes is a small, blue t-shirt.

Each variant is integrated as a separate item in SAP Business One.

24.3.5.5 Gift Card

A gift card can also be sold to a customer via Tagrain (in other words, a customer can purchase a gift card like a regular item). The customer is emailed a gift voucher that can be given to someone or redeemed next time while making payment.

Whenever a gift card is added in Tagrain, it is integrated as a non-inventory item in SAP Business One and also, a new gift card entry is added in the *Payment Mapping* window.

In the *Payment Mapping* window, the user needs to map the relevant credit card against the gift card. This credit card will be used for posting the gift card payments in SAP Business One.

24.3.5.6 Product Prices

The price integration between SAP Business One and Tagrain is bidirectional. The application uses the default price list defined in the *General Settings* for Tagrain to integrate the product base prices from SAP Business One to Tagrain.

To open the Tagrain *General Settings*, in the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Tagrain Settings* → *General Settings* tab.

The price list selected in the *Default Price List for Base Price* field is the integrated price list to update product base prices from SAP Business One to Tagrain.

The Store wise pricing is managed by mapping the prices list against each store in the *Store Mapping* window in SAP Business One.

To open the Tagrain *Store Mapping* window, in the SAP Business One *Main Menu*, choose *Administration* → *Integration Hub* → *Tagrain Settings* → *Store Mapping* tab.

Note

You must manually ensure that the price list currency must be matched with Tagrain Store currency.

24.3.5.7 Product Inventory

The inventory integration is unidirectional (in other words, from SAP Business One to Tagrain). The inventory status is updated from SAP Business One to Tagrain.

The application always sends the current stock status (Inventory Snapshot) from SAP Business One to Tagrain.

From SAP Business One, inventory data is integrated from the warehouse that is mapped with the Tagrain store. To map the SAP Business One warehouse to a Tagrain store, choose *Administration* → *Integration Hub* → *Tagrain Settings* → *Store Mapping*.

The inventory can be synchronized from the *Synchronization* tab of the *Tagrain Settings* window. To synchronize inventory, choose *Administration* → *Integration Hub* → *Tagrain Settings* → *Synchronization.*

There are two ways to synchronize inventory:

- Manual Synchronization of Inventory:
  Whenever required, choose the *Sync Now* button to synchronize the inventory from SAP Business One to Tagrain.
- Automatic Synchronization of Inventory:
  Select the parameters for *Object Type*, *Run, On, Hour,* and *Minutes* to schedule synchronization and then choose the *Save Schedule* button to schedule inventory synchronization at the predefined day and time.

Field Name	Description
Object Type	Select *Stock* from the dropdown list.
Run	Specify if you want to run the synchronization daily or weekly.
On	If you chose the *Weekly* option, select the day of the week.
Hour	Select the hour on which you want the synchronization to run.
Minutes	Select the minutes on which you want the synchronization to run.
Sync Now	Choose this button to start the synchronization immediately.
Save Schedule	Choose this button to implement the selected schedule for the synchronization.

24.3.6 Composite Products - Assembly Bill of Materials

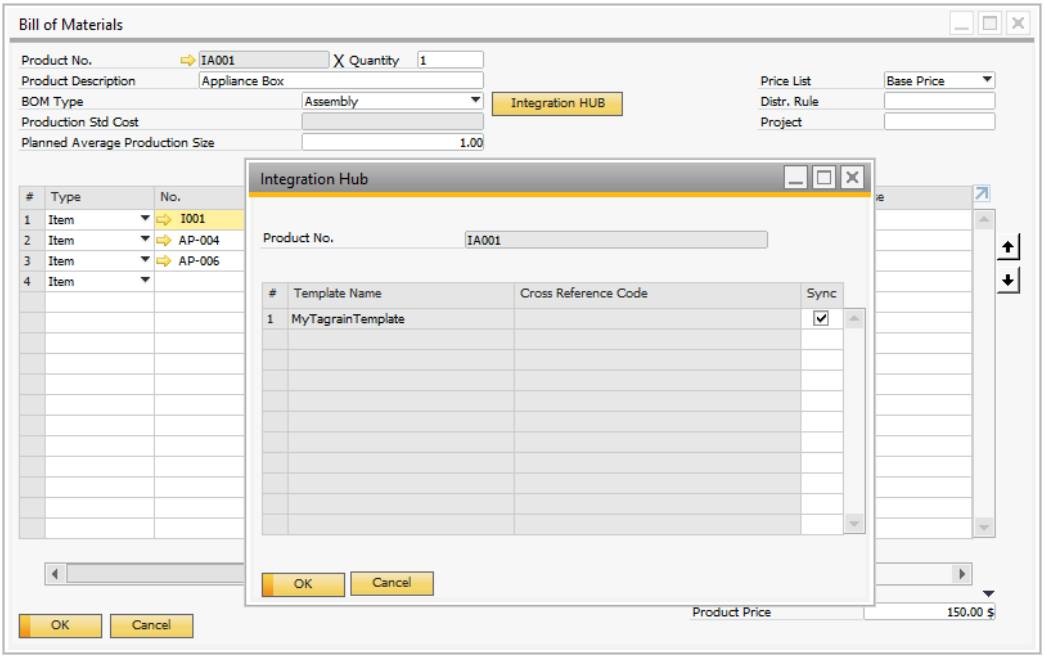
Composite Products are created by combining more than one product and are sold as one single unit. These products are not stocked and the inventory of the products contained in them is reduced at the point of sale. For example, an evening dress composite could have an evening gown + a nice watch + a coat. Whenever this Composite Product is sold at the Web Register, the stock of the gown, the watch, and the coat is reduced by one each.

The assembly bill of materials in SAP Business One will integrate as a Composite product in Tagrain. The integration of composites products is unidirectional (in other words, from SAP Business One to Tagrain).

The application supports the add/update operation on the assembly bill of materials.

To synchronize the assembly bill of materials from SAP Business One to Tagrain, in the SAP Business One *Main Menu*, choose *Production* → *Bill of Materials.*

On *BOM Type* as *Assembly,* press *Integration HUB* button. On the *Integration Hub* window, choose the *Sync* button.



The following fields have been added to the *Integration Hub* window and are relevant to the Integration Hub.

Field Name	Description
Template Name	Displays the name of the Tagrain template.
Cross Reference Code	Displays the Tagrain composite product internal id.
Sync	Select this checkbox to synchronize the assembly bill of material from SAP Business One to Tagrain.

- **Set Bulk assembly BOM for Synchronization**

  To Synchronize bulk assembly BOM from SAP Business One to Tagrain, select assembly BOM in bulk using the Set BOM for Synchronization menu under Integration Hub.

  1. Choose Administration → Integration Hub → Set BOM for Synchronization.
  2. On clicking the Set BOM for Synchronization, Set BOM for Synchronization-Selection Criteria window opens.
  3. Select the Tagrain Template and product range and click on the Ok button.
  4. Set BOM for Synchronization window opens, select Sync check box for the Product No. and Product Description to synchronize.
  5. Click on the Update button to mark the BOM for synchronization from SAP to Tagrain.

24.3.7 Freight (Surcharge)

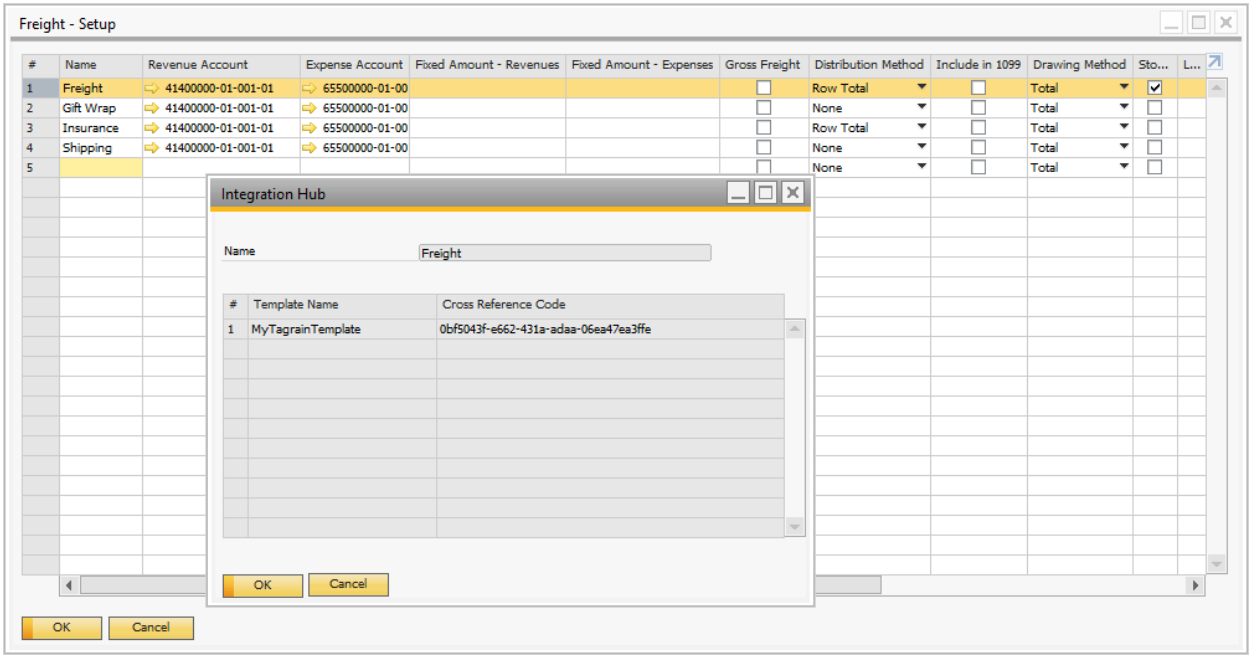
The freight master data integration is unidirectional i.e. from SAP Business One to Tagrain.

The application supports the add/update operation on freight master.

If any surcharge is already defined in the Tagrain, you must define the same freight in SAP Business One as well. Ensure the freight name should be same in both the system.

On adding the freight data in SAP Business One, the freight is integrated to Tagrain and the Tagrain surcharge internal id is updated in *Cross Reference Code* field.

You can view the Tagrain freight internal id by double-clicking the “row no#” fields in the *Freights – setup* screen.



The following fields have been added to the Integration Hub window and are relevant to the Integration Hub.

Field Name	Description
Template Name	Displays the name of the Tagrain template.
Cross Reference Code	Displays the Tagrain surcharge internal id.

24.3.8 Tax codes

The user must manually ensure that the Tax code with the same Name and Rates must exist in both systems i.e. SAP Business One and Tagrain.

While integrating the transaction from Tagrain to SAP Business One, the application uses the Tagrain tax code name to identify the same tax code in SAP Business One and apply the same tax code in the line level in SAP Business One.

24.4 Tagrain Transactions

The following Tagrain transactions are supported:

- Sales
- Refund
- Expense

24.4.1 Windows Enhancements in SAP Business One

New fields that are relevant to the Integration Hub have been added to different document windows in SAP Business One. The fields provide additional information regarding the Tagrain integration transactions.

24.4.1.1 A/R Invoice

Sales integrate from Tagrain to SAP Business One. The following fields have been added to the Integration Hub Tab and are relevant to the Integration Hub:

Field Name	Description
Template Name	Name of the Tagrain template.
External Sales ID	Sales ID generated from Tagrain.

24.4.1.2 A/R Credit Memo

Refund integrates from Tagrain to SAP Business One. The following fields have been added to the Integration Hub Tab and are relevant to the Integration Hub:

Field Name	Description
Template Name	Name of the Tagrain template.
External Refund ID	Refund ID generated from Tagrain.

24.4.1.3 Incoming Payment

Sales Payments integrates from Tagrain to SAP Business One. The following fields have been added to the Integration Hub Tab and are relevant to the Integration Hub:

Field Name	Description
Template Name	Name of the Tagrain template.
External Sales ID	Sales ID generated from Tagrain.

24.4.1.4 Outgoing Payment

Refund Payments integrates from Tagrain to SAP Business One. The following fields have been added to the Integration Hub Tab and are relevant to the Integration Hub:

Field Name	Description
Template Name	Name of the Tagrain template.
External Refund ID	Refund ID generated from Tagrain.

24.4.1.5 Journal Entry

Expenses integrate from Tagrain to SAP Business One. The following fields have been added to the Integration Hub Tab and are relevant to the Integration Hub:

Field Name	Description
Template Name	Name of the Tagrain template.
External Expense ID	Expense ID generated from Tagrain.

24.4.2 Sales Transactions

When a product is sold at a retail store then a Sales transaction takes place. The payment is received either by cash or different available payment types like a credit card, loyalty card, gift card, etc. The number of products sold, the amount of cash received, the date and time of purchase, the employee handling the sale, and the customer information are recorded in the Tagrain POS system in order to monitor these factors for future predictions.

All sales transactions are integrated from Tagrain to SAP Business One. Transactions details like payment types, products, discounts, tax amounts, surcharges, and all other required information are available in SAP Business One.

The Information related to Sales created in Tagrain is synchronized to SAP Business One. The payment for the Sales can be made

- At the time of booking the sale
- On Account Sales

The Application handles these scenarios differently as per payment types. For instance, all Tagrain sales for which payment is made at the time of booking the sale are handled in SAP Business One by posting an *A/R Invoice* and *Incoming Payment*.

For On Account Sales in SAP Business One, an A/R Invoice is posted. Later, when the customer makes the payment, an incoming payment is posted with reference to the A/R Invoice.

For posting cash transactions in SAP Business One, the application uses the *Cash Account* defined in the *General Settings* of Tagrain in SAP Business One. For payment types other than cash, the *Payment Mapping* window is used to determine the payment means in SAP Business One.

For all Tagrain Sales, the payment terms in SAP Business One is the default payment term which is set in *General Settings* of Tagrain in SAP Business One.

Tagrain supports cash customer sales. Whenever any Sales transaction is posted to a Walk-In (Not registered) customer in Tagrain, the same is integrated to SAP Business One using a *Default Cash Customer* which is set in the *General Settings* of Tagrain in SAP Business One.

24.4.2.1 Sales with Payment

1. On Tagrain, log in as Cashier and add the products to your sale transaction.
2. After all the products have been added to the transaction list with appropriate discounts, surcharges, and notes, click on Pay to proceed to the Payment screen.
3. Select the tender and complete the payment.
4. The transaction will automatically print on the printer attached to the Web Register.
5. Sale in Tagrain is synchronized as an A/R invoice and Incoming Payment in SAP Business One.

6. The replication information between Tagrain and SAP Business One can be checked by observing the alert message for A/R Invoice, and Incoming Payment.
   The *A/R Invoice* reflects at location *Main Menu → Sales A/R → A/R Invoice.*
   The *Incoming Payment* reflects at location *Main Menu → Banking → Incoming Payments → Incoming Payments*.

24.4.2.2 On Account Sale

1. On Tagrain, log in as Cashier and select the customer for sale transaction.
2. Add the products to your sale transaction.
3. After all the products have been added to the transaction list with appropriate discounts, surcharges, and notes, click on Pay to proceed to the Payment screen.
4. Select the tender type as On Account and complete the payment.

   Note

   Ensure you have defined the credit Limit for the customer and it is more than the sale transaction total. Otherwise, the On Account payment type remains disabled.
5. The transaction will automatically print on the printer attached to the Web Register.
6. Sale in Tagrain is synchronized as an A/R invoice in SAP Business One.
7. The replication information between Tagrain and SAP Business One can be checked by observing the alert message for the A/R Invoice.
   The *A/R Invoice* reflects at location *Main Menu → Sales A/R → A/R Invoice.*
8. Later, when the customer gives the payment against the Sale in Tagrain, an Incoming payment is created against the A/R Invoice added in Step 7.

24.4.2.3 Gift Card Sale

1. On Tagrain, log in as Cashier and add the Gift Card product to your sale transaction.
2. Click on Pay to proceed to the Payment screen.
3. Select the tender and complete the payment.
4. The transaction will automatically print on the printer attached to the Web Register.
5. Gift card Sale in Tagrain is synchronized as an A/R invoice and Incoming Payment in SAP Business One.

   Note

   In A/R Invoice, the application uses the G/L account of the credit card which is mapped against a Gift Card in the *Payment Mapping* window of Tagrain Settings.

6. The replication information between Tagrain and SAP Business One can be checked by observing the alert message for A/R Invoice, and Incoming Payment.
   The *A/R Invoice* reflects at location *Main Menu → Sales A/R → A/R Invoice.*
   The *Incoming Payment* reflects at location *Main Menu → Banking → Incoming Payments → Incoming Payments*.

24.4.3 Refund Transactions

Sometimes cashier may require to execute a Refund transaction, in a scenario wherein a customer is willing to return a product already purchased earlier. In case of a refund, the total amount of the product returned is refunded. This amount can be returned in cash or be credited to the customer's credit card, depending upon the type of sale transaction that occurred earlier at the Point of Sale.

On creating Refund in Tagrain, the application creates the following documents in SAP Business One:

- A/R Credit Memo – This adjusts the inventory and customer balances.
- Outgoing Payment – This will debit the customer account and adjust the customer payment amount.

24.4.3.1 Refund with Payment

1. On Tagrain, log in as a Cashier.
2. Click on the Recent Sales Tile to bring up the Recent Sales window.
3. Select the transaction from which products need to be selected for refund.
4. Select the item that needs to be refunded and click on the Action button to select Refund.
5. The products marked for refund are listed with a negative (–) sign on the Transaction screen. Click the Pay button to proceed to the Payment screen.
6. Select the tender and complete the refund payment.
7. The transaction will automatically print on the printer attached to the Web Register.
8. Refund in Tagrain is synchronized as an A/R Credit Memo and Outgoing Payment in SAP Business One.
9. The replication information between Tagrain and SAP Business One can be checked by observing the alert message for A/R Credit Memo, and Outgoing Payment.
   The *A/R Credit Memo* reflects at location *Main Menu → Sales A/R → A/R Credit Memo.*
   The *Outgoing Payment* reflects at location *Main Menu → Banking → Outgoing Payments → Outgoing Payments*.

24.4.3.2 On Account Refund

1. On Tagrain, log in as a Cashier.
2. Click on the Recent Sales Tile to bring up the Recent Sales window.
3. Select the Sales transaction from which products need to be selected for refund.
4. Select the item that needs to be refunded and click on the Action button to select Refund.
5. The products marked for refund are listed with a negative (–) sign on the Transaction screen. Click the Pay button to proceed to the Payment screen.
6. Select the tender type as On Account and complete the refund.
7. The transaction will automatically print on the printer attached to the Web Register.
8. On Account Refund in Tagrain is synchronized as an A/R Credit Memo in SAP Business One.

> **Note**
>
> User need to manually reconcile the credit memo created using On Account Refund.

9. The replication information between Tagrain and SAP Business One can be checked by observing the alert message for A/R Credit Memo.
   The *A/R Credit Memo* reflects at location *Main Menu → Sales A/R → A/R Credit Memo.*

24.4.3.3 Gift Card issue on Refund

1. On Tagrain, log in as a Cashier.
2. Click on the Recent Sales Tile to bring up the Recent Sales window.
3. Select the Sales transaction from which product need to be selected for refund.
4. Select the item that needs to be refunded and click on the Action button to select Refund.
5. The products marked for refund are listed with a negative (–) sign on the Transaction screen. Click the Pay button to proceed to the Payment screen.
6. Select the tender type as Gift Card and specify the Gift Card number and complete the refund.
7. The refund transaction is synchronized in SAP Business One as follows:
   a. A/R Credit Memo and Outgoing Payment for a refund transaction.
   b. A/R Invoice and Incoming Payment for Gift Card issue.

   The following are the journal entry created by transactions in SAP Business One:

   A/R Credit Memo and Outgoing Payment for a refund transaction

   In A/R Credit Memo, the following journal entry is created:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	C0002	John sheena		$ 200.00
2	22220000-01-001-01	Sales Tax Accrual - State (HO, USA, GA)		$ 0.00
3	41100000-01-001-01	Sales Revenues - Domestic (HO, USA, GA)	$ 200.00	

   In Outgoing Payment, the following journal entry is created:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	11200000-01-001-01	Cash at Bank - Checking (HO, USA, GA)		$ 200.00
2	C0002	John sheena	$ 200.00	

   A/R Invoice and incoming payment for Gift Card issue.

   In A/R Invoice, the application uses the G/L account of the credit card which is mapped against a Gift Card in the *Payment Mapping* window of Tagrain Settings.

   In the A/R Invoice, the following journal entry is created:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	C0002	John sheena	$ 200.00	
2	22220000-01-001-01	Sales Tax Accrual - State (HO, USA, GA)		$ 0.00
3	42400000-01-001-01	Gift Certificates		$ 200.00

   In Incoming Payment, the following journal entry is created:

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	11200000-01-001-01	Cash at Bank - Checking (HO, USA, GA)	$ 200.00	
2	C0002	John sheena		$ 200.00

24.4.4 Tax Handling

The user needs to manually ensure the same Tax code with the same rates must exist in both the application.

On integrating the transaction from Tagrain to SAP Business One, the application checks the tax code applied in the Sales transaction is available in SAP Business One or not and if available then applies the same in transaction posted in SAP Business One.

The Tagrain Tax Name should match with the SAP Business One Tax code.

24.4.5 Freight Handling

The surcharge amounts applied in the sale transaction are integrated into a freight amount in SAP Business One. In Tagrain, the cashier can apply the header level surcharge amount in the Sales transaction, the same surcharge amount will be applied in the freight in SAP Business One.

24.4.6 Expense Transactions

In Tagrain, user can post the expenses occurred at the store from the available cash at the cash drawer, such as a Coffee and snacks expenses.

The expenses posted in Tagrain are integrated as a Journal entry in the SAP Business One.

#	G/L Acct/BP Code	G/L Acct/BP Name	Debit	Credit
1	11100000-01-001-01	Cash		100.00 $
2	66200000-01-001-01	Store Expense	100.00 $	
3				

In the journal entry, the application uses the cash account and store expense account defined in the *General Settings* of Tagrain in SAP Business One.

