



Adeptia Connect - IT User Training Guide



Objectives of Training

- Learn the capabilities of Adeptia Connect
- Train the audience to use Adeptia Connect to implement data integration solutions
- Focused on more advanced IT centric features and functionalities. It covers:
 - Architecture Components of Adeptia Connect
 - Deployment Architecture - Cluster vs Non-Cluster Mode (DR or Failover)
 - Setting up Company / Users / Networks / Partners
 - Templates, Transactions
 - Data Mappings
 - Configuring Process Flows and Activities
 - Events
 - Security – User Management, Encryption/Decryption
 - Application management

Training Schedule – Day 1

Morning Session (9:00 AM - 12:00 PM)

Introduction to Adeptia Connect

- Product Background
- ETL – Data Transformation (Overview)

Architecture of Adeptia Connect

Application Deployment

Overview of Adeptia Connect

- Connect Server
 - Connect Server Kernel
 - Connect Portal WebRunner
- Navigating the Home Page
- Accessing Adeptia Documentation
- Connect Portal
 - Company
 - Users - Add Users
 - Networks - Add Networks
 - Partners - Add Partners

Entities of Adeptia Connect (walkthrough)

- Templates – Types of Templates
- Transactions
- Process Flows and Activities (make sure student can still use traditional ETL/ESB approach)
- Events
- Supported App Connectors

10 Mins Break at 10:30 AM

Working with Templates (Exercise)

- Using Prebuilt Templates
- Exercise 1: Data Integration (File 2 File) – Employee Benefit.
- Introduction to the Schema and Data Mapping
 - Schema
 - Math, String, Conditional Functions, Value Maps
- Build and execute

Afternoon Session (1:00 PM - 4:00 PM)

Create new Template

- Exercise 2: Purchase Order (XML to DB)

Process Designer

- Decision Nodes
- Context Variables
- Sub Process
- Multiple streams and Stream Selector
- Error Intermediate Event

Create a New Template

- Exercise 3: How to Extend Purchase Order using a post process

Training Schedule – Day 2

Morning Session (9:00 AM - 12:00 PM)

Introduction to Custom Template

- Why custom template

Create a Custom Template

Web Mapper

- For Each

10 mins break at 10:30 AM

Create a Custom Template (Exercise)

- Exercise 4: Inventory

Afternoon Session (1:00 PM - 4 PM)

Web Services

- Exercise 5: Order Fulfillment (publish as an API, and consume an API as a post process)

Application Management Overview

- Theme Settings
- Logs Archival & Cleanup
- Performance Management
- System Console
- Monitoring and Dashboard
- Adeptia Connect APIs
- Encryption at Rest



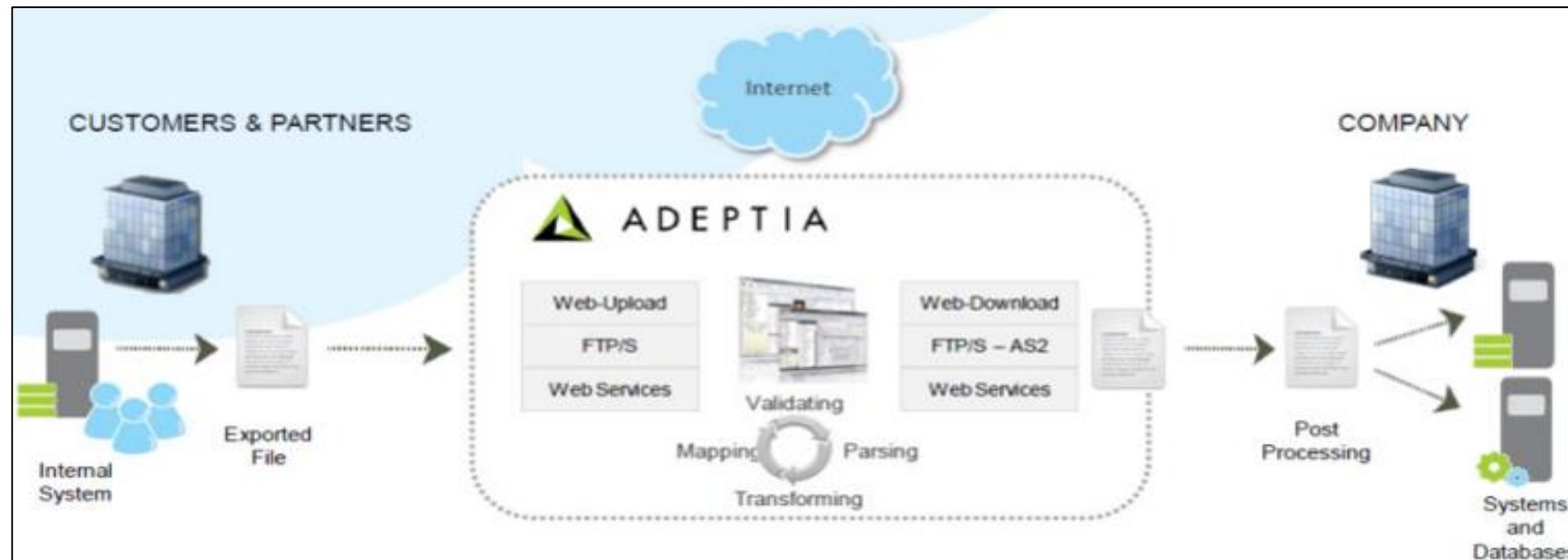
Day 1

Introduction to Adeptia Connect

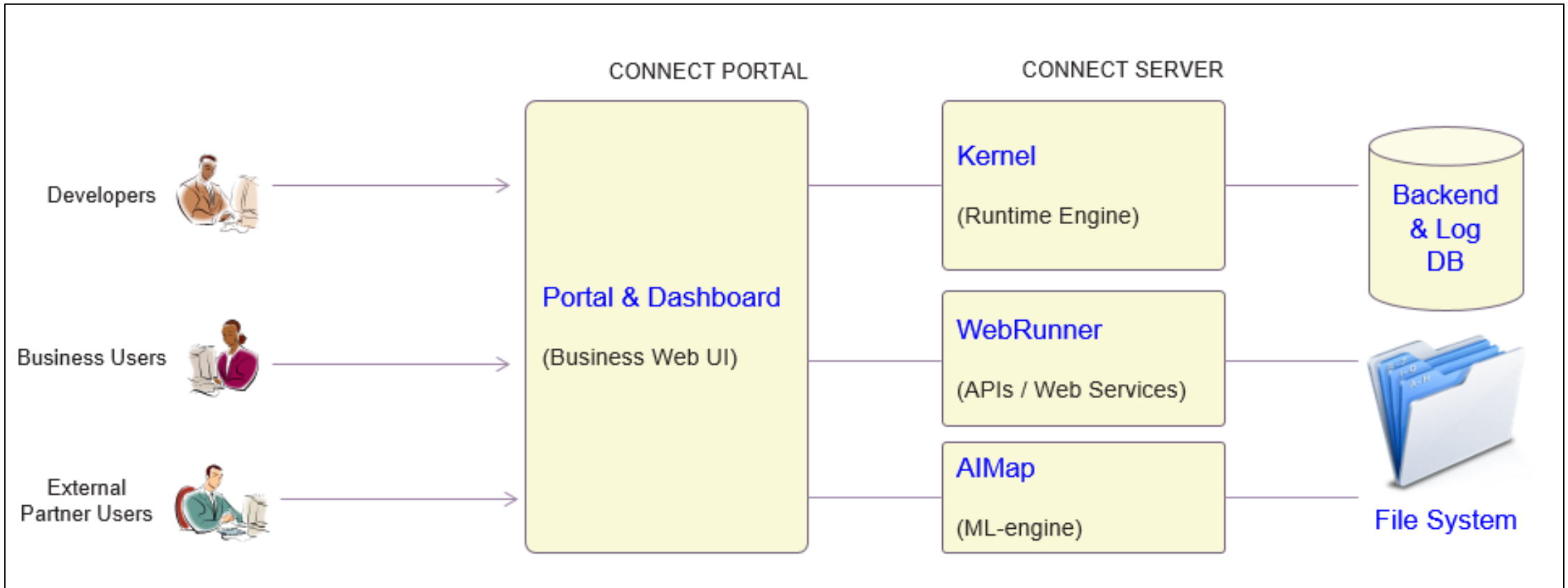
Adeptia Connect is a web-based enterprise product that allows you to:

- Manage
- Automate
- Optimize your business processes

An easy way to access and exchange data with your Partners (Customers, Vendors, or External Organizations), and other cloud-based applications used within your organizations.



Application Architecture



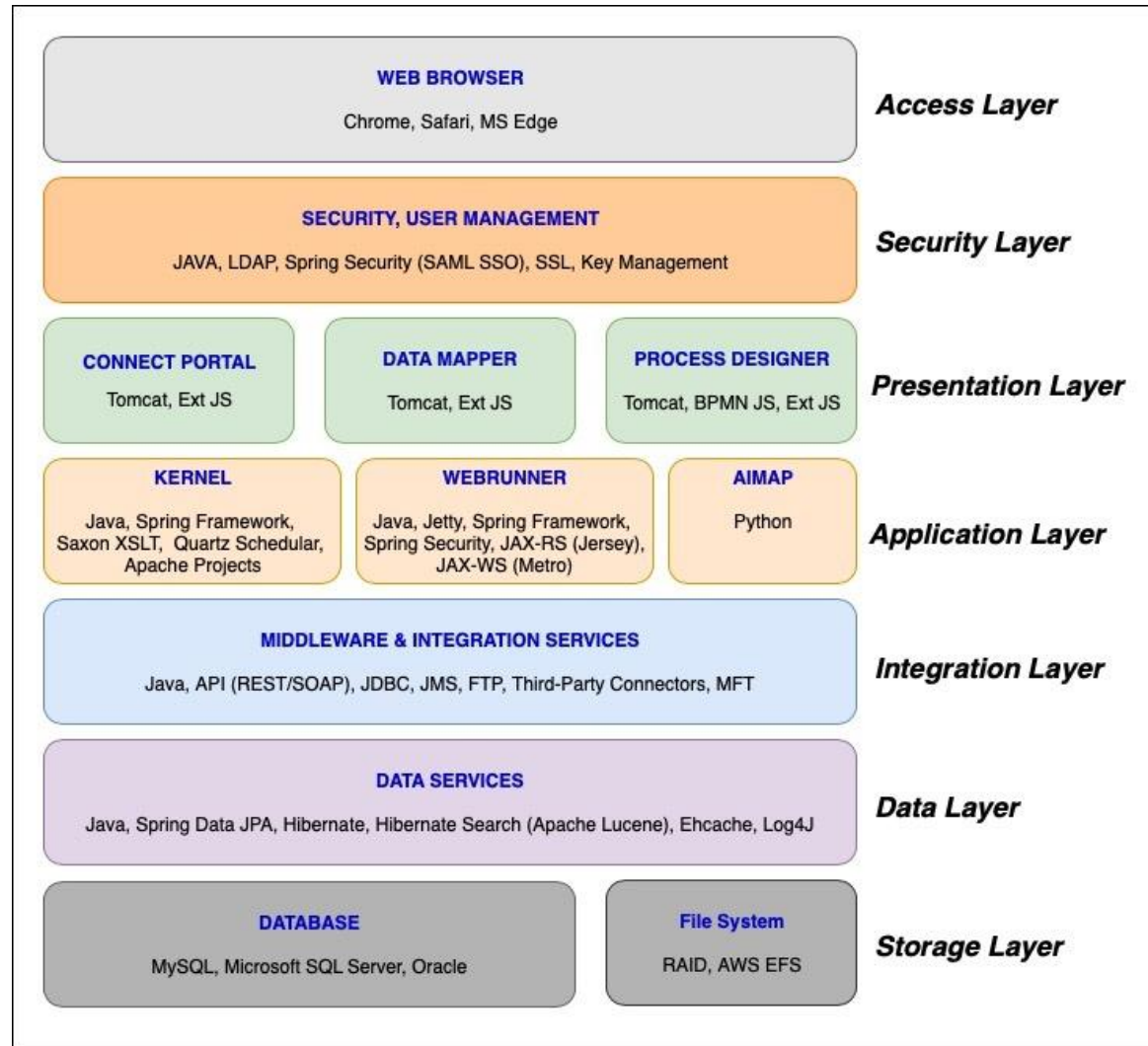
Decoupled, componentized architecture

Architecture – Key Components

- **Connect**
 - Web-based user interface for business and developer users
 - Application to configure transactions (connections), monitor, and manage
- **WebRunner**
 - Web-based user interface for developer users and listener for API/WS calls
 - Interface to create transaction templates, complex processes, validations, mappings etc.
- **Kernel**
 - Run time engine that executes transactions and flows for data processing
- **Backend Database**
 - Stores all metadata related to users, transactions, configurations, partners
- **Log Database**
 - Stores all run time execution details, log information and audit trails

Technology Stack

Based on
Java technology

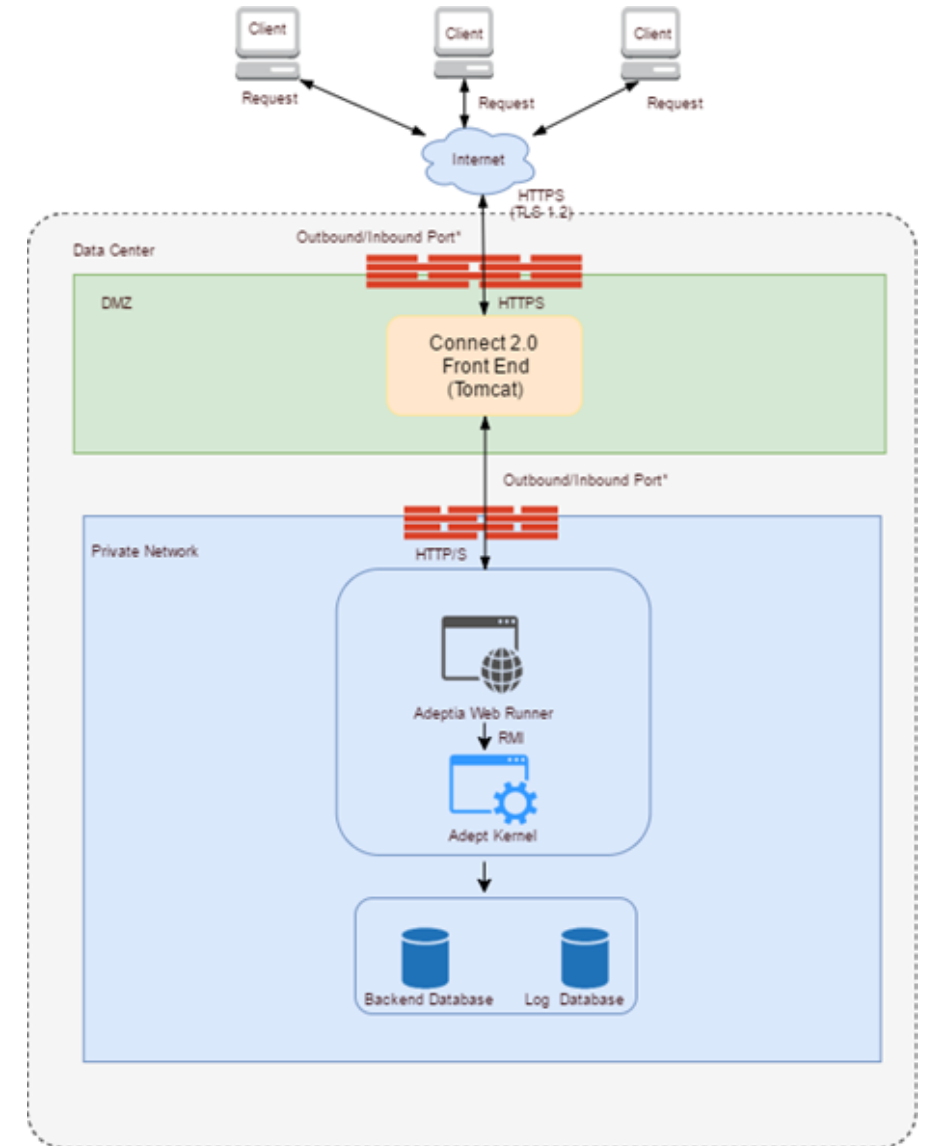


Deployment – Single Node Model

Adeptia Connect can be installed in a clustered and non-clustered environment.

In a non-clustered environment, you need to install Adeptia Connect only on a single node.

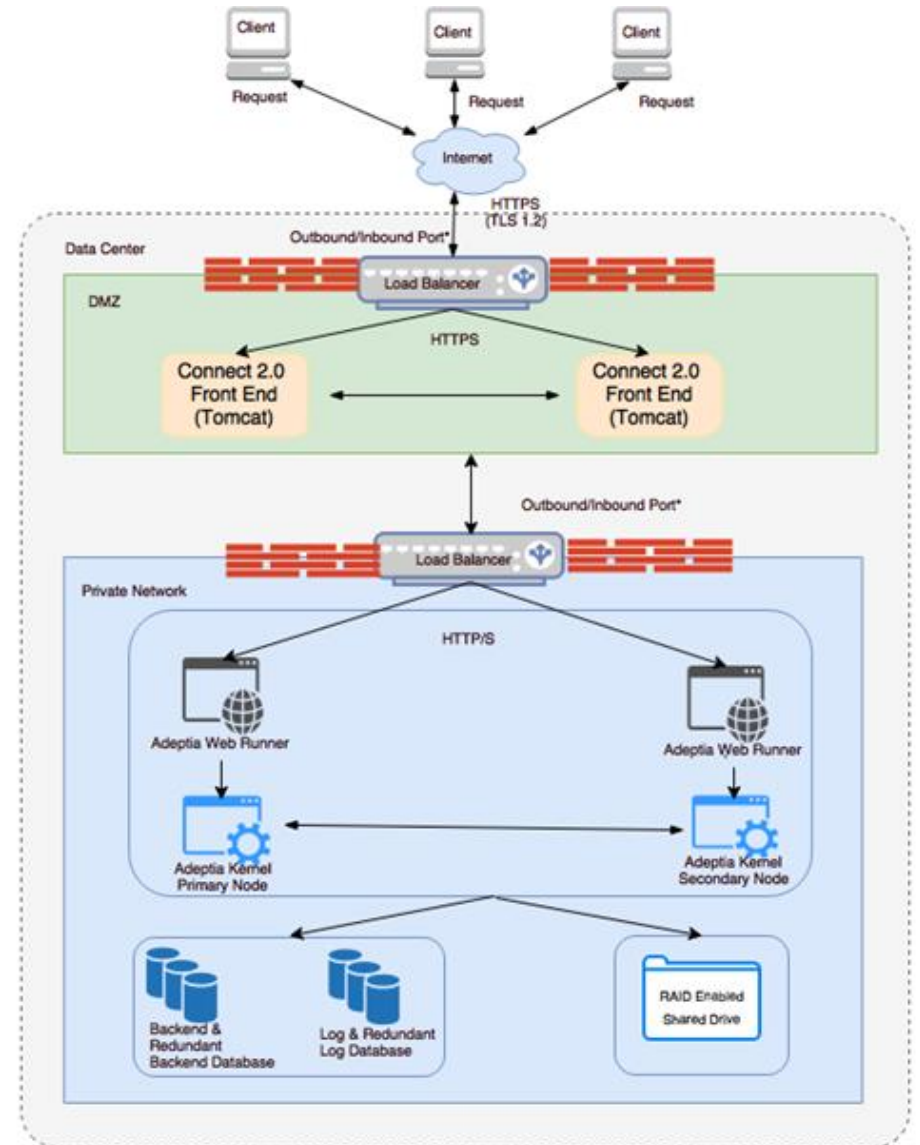
This single node deployment model is recommended for a non-production environment.



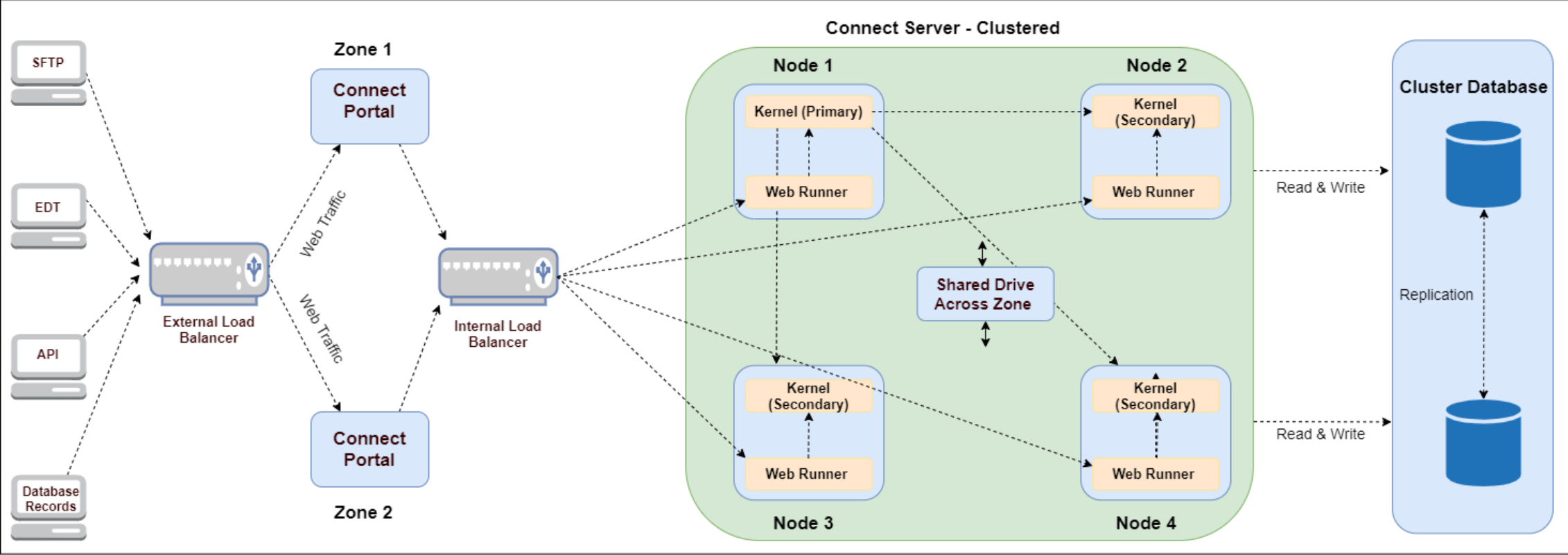
Deployment – Clustered Model

In a clustered environment, all the nodes of a cluster are in the same network.

A clustered deployment is a multi-node deployment and recommended for a production environment.



Deployment - High Availability via Clustered Model



Kernel and WebRunner

Kernel

Kernel is a run time environment of Adeptia Connect. It handles all the jobs that are executing. For example, execution of Process Flows, Scheduling of Events, Queue Processing, and Process flow Recoveries.

Kernel in Clustering mode

When you enable clustering, the execution of a flow is distributed among Kernels of each instance of Adeptia Connect server. All the requests first go to the Primary Node, which in turn, distributes the jobs among all other kernels. It is the Primary Node, which manages Scheduling of Events and Queue Processing. If any node goes down, the Primary Node identifies the process flow (running on that node), recovers them, and again distributes the execution among the available nodes.

WebRunner

WebRunner handles all the user's requests submitted through the Adeptia Connect GUI, such as requests for creating, editing, and deleting the activities.

WebRunner in Clustering mode

When you enable clustering in Adeptia Connect, it is enabled only for Kernel, not for WebRunner. If you want to load balance the UI requests, you can use an external load balancer for WebRunners. Make sure that WebRunner runs on all the nodes.

Connect Portal

- Web-based user interface for business and developer users.
- Used to configure, monitor, and manage the templates and transactions.
- User Interface for both design-time and run-time, Dashboard, Web Mapper, Process Designer, Webhooks for REST APIs, and so on.

User Interface

Navigating the Home Page

Contd...

The screenshot shows the Adeptia Connect home page. At the top, there is a navigation bar with four icons: Partners (1), Transactions (2), Dashboard (3), and Configure (4). The Adeptia logo (5) is centered. On the right, the user profile (6) shows 'Hi, Akash Adeptia IT User', a search icon (7), a notification bell (8), and a help icon. Below the navigation bar, there is a 'MESSAGE' section (9) with a yellow background containing a welcome message. To the right of the message is a 'MY SETUP' section (9) with three cards: Networks (82), Partners (151), and Transactions (848). Below the message is a 'FAVORITE TRANSACTIONS' section (11) with a table. The table has columns for NAME, TYPE, PARTNER, and ACTION, and currently shows 'No data to display'. To the right of the table is a 'View All' link. Below the table is a 'MY NETWORKS' section (10) with two cards: 'Fidelity Training' (24 Partners active out of 24) and 'Benefit Enrollments' (9 Partners active out of 9). Each card has a 'View' link and a 'Last 7 Days' filter.

1 Partners 2 Transactions 3 Dashboard 4 Configure

ADEPTIA

5

Hi, Akash Adeptia IT User 6 7 8

9 MESSAGE

WELCOME TO ADEPTIA CONNECT!

Here we can manage all the transactions with customers and partners.

9 MY SETUP

82 Networks 151 Partners 848 Transactions

11 FAVORITE TRANSACTIONS View All

NAME	TYPE	PARTNER	ACTION
No data to display			

10 MY NETWORKS

Fidelity Training Last 7 Days

24 Partners active out of 24 View Data Usage View Transactions executed by Partners

Benefit Enrollments Last 7 Days

9 Partners active out of 9 View Data Usage View Transactions executed by Partners

Navigating the Home Page

Contd...

The number notations in the previous slide represent the following sections in Adeptia Connect home page.

- 1. Partner:** From the Partner section, you can create a Network and then add partners to that network.
- 2. Transactions:** User can create a new transaction by using an existing template. You can also see or search for an existing transaction.
- 3. Dashboard:** On the Dashboard, you can see the logs for various Adeptia services, for example, process flow logs, EDI logs, transaction logs, Spazio logs, audit trail logs, etc. Click [here](#) to know more about the Dashboard.
- 4. Configure:** From the Configure section, you can create, edit, and manage the different services in Adeptia Connect. For example, you can create, edit, and manage templates, process flows, mappings, layouts, web services, etc.
- 5. Home:** Click Home icon to go to the home page as and when you want.
- 6. Account:** From the Account section, you can create roles, users, manage your profile, security settings, system console, and perform application maintenance tasks.
- 7. Message Centre:** Message Center keeps track of your messages and invites. All your sent and received notifications can be viewed from here making it easier to centrally manage all communications within your network.
- 8. Help:** The Help link provides you the information about the current version of Adeptia Connect application you are using. It also takes you to the Adeptia Connect Help documentation.

Navigating the Home Page

9. My Setup: My Setup displays your account details including total number of Networks, Partners, and Transactions.

10. My Networks: My Networks display all the Networks of your account including the total number of Partners activated in a Network, data consumed by the Transactions, and the total number of Transactions executed by the Partners of that Network.

11. Favorite Transactions: Favorite Transactions section displays your favorite Transactions that can be directly accessed from this section.

Accessing Adeptia Documentation

Contd...

You can access Adeptia Connect documentation in two ways, through the documentation URL or through the [Help link](#) given within the application.


- To visit Adeptia documentation help through URL, type <https://docs.adeptia.com> on the browser's address bar.
- On the landing page, click **Adeptia Connect Help v3.3**.

The screenshot shows the Adeptia Help Documentation landing page. The header includes the Adeptia logo and navigation links. The main content area is titled 'Browse for Docs' and contains four cards representing different documentation versions. The 'Adeptia Connect Help v3.3' card is highlighted with a red border, indicating it is the target version for access.

Accessing Adeptia Documentation

From the left panel, you can navigate and explore the topics of your interest. For example,

- Expand **Install** section to access the deployment architecture, system requirements, installation guide, etc.
- Expand **Implement** section to understand how to create template, transaction, process flow, mappings, etc.
- Expand **Monitor** section to access system console and view various logs.



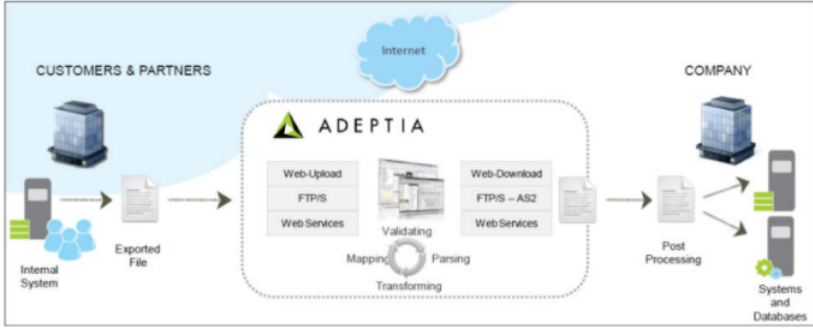
Adeptia Connect Help v3.3

- › **Getting started**
 - What's new
 - › Install
 - › Upgrade
 - › Administer
 - › Implement
 - › Deploy
 - › Monitor
 - › Manage
 - › Best practices
 - › Utilities
 - › Appendices
 - › Application security overview
 - › Training guides
 - › SecureBridge
 - Frequently Asked Questions (FAQs)

Getting started

Adeptia Connect is a business application for data integration and inter-enterprise data exchange. It is a web-browser based, enterprise-class product that is designed for use by both Developer and Business users. It addresses multiple types of integration use-cases ranging from B2B integration, ETL, data aggregation, synchronization, application integration, ESB, and API enablement.

Business data is lifeblood of any company. Ability to efficiently receive, process, validate, send, and utilize data is critical for any organization's success especially as it relates to data exchanges with its ecosystem of customers and partners. Most companies have a spaghetti code of file exports, uploads, email attachments, FTP transfers, EDI, APIs, error reports etc. which is all difficult to manage. Adeptia solves this problem by providing a central place to configure, manage, monitor and track all your business data integrations and data flows from one place.



The diagram illustrates the Adeptia data integration process. It shows data flowing from 'CUSTOMERS & PARTNERS' (via 'Internal System' and 'Exported File') and from the 'Internet' into the 'ADEPTIA' central hub. The hub includes 'Web-Upload', 'FTP/S', 'Web Services', 'Validating', 'Mapping', 'Transforming', 'Web-Download', 'FTP/S - AS2', and 'Web Services'. Data then flows to the 'COMPANY' side, where it undergoes 'Post Processing' and is stored in 'Systems and Databases'.

Adeptia modernizes the onboarding of business data with customers and partners using a self-service approach for business people. With Adeptia Connect, you can access and exchange data with your partners (customers, vendors, or external organizations), as well as internal systems and other cloud-based applications used within the company. It is designed to assist developers and IT staff of your company to enable business users to self-manage their data connectivity allowing data exchange in the simplest possible way.

You may be interested in...

- [What's new](#)
- [Best practices](#)
- [Training guides](#)
- [Frequently asked questions](#)
- [Adeptia Connect APIs](#)
- [Adeptia security report](#)

Entities

Entities – Company

- A Company is an entity that installs Adeptia Connect on premise.
- After setting up the company, new users are invited who can add networks and invite partners for data transaction.
- A company sets up networks and onboards the partners for data exchange.

Entities - Users

Four types of users and each user type has different rights

- Admin User
- IT User
- Business User
- View Only User

User type	Invite users	Create Template	Create Transaction	Add Network	Add Partner	Configure	Change Theme
Admin User	✓	✗	✗	✗	✗	✓	✓
IT User	✓	✓	✓	✓	✓	✓	✗
Business User	✗	✗	✓	✓	✓	✗	✗
View Only User	✗	✗	✗	✗	✗	✗	✗

Entities - Network and Partner

Contd...

The screenshot displays the ADEPTIA dashboard interface. At the top, there is a navigation bar with icons for Partners, Transactions, Dashboard, and Configure. The ADEPTIA logo is centered, and the user profile 'Hi, Admin Adeptia Sys Admin' is on the right. Below the navigation bar, a sidebar menu on the left lists 'Networks', 'Partners', 'Logistics Partners', 'XYZ Accounts', and 'Brokers'. The main content area features a grid of six entity cards: Insurance Carriers, Logistics Partners, XYZ Accounts, Brokers, Healthcare Service Providers, and Spectrum Vendor. Each card shows the number of partners and templates for that entity. A search bar and an 'ADD Network' button are located at the top of the main content area.

Entity	Partners	Templates
Insurance Carriers	8	11
Logistics Partners	4	0
XYZ Accounts	5	1
Brokers	5	9
Healthcare Service Providers	6	7
Spectrum Vendor	2	9

Entities - Network and Partner

Network

- Network is a grouping of customers/partners/vendors that are categorized into a single group.
- Network helps in organizing company's customers and partners through grouping.

Partners

- Partners can be trading partners/vendors/customers of a company that exchange the data.
- A company user typically creates or on-boards a partner.
- A partner must be added to a network.

Entities - Templates

Contd...

Partners Transactions Dashboard **Configure**

ADEPTIA

Hi, Akash Adeptia IT User

All Projects

Projects

Process Flow

Templates

Web Forms

Developer Studio

ACCOUNTS

CUSTOM DASHBOARD

DATA TRANSFORMATION

EDI

EVENTS

EXTENSIONS

LAYOUTS

SECURITY

SOURCES

+ CREATE Template

Search Templates

NAME	TYPE	#TRANSACTION	OWNER	MODIFIED	ACTION
Inventory Items Processing Training 4 Ext CE	CUSTOM Inbound	2	Carlos Escabalzeta	Dec 04 6:15 AM	OFF <input type="checkbox"/> ON <input type="checkbox"/>
Common Purchase Order Post Process Training 3 CE	Pass-Thru Inbound	1	Carlos Escabalzeta	Dec 04 4:26 AM	OFF <input checked="" type="checkbox"/> ON <input type="checkbox"/>
Purchase Order Template Training Exercise 2 CE	Convert Inbound	1	Carlos Escabalzeta	Dec 04 3:03 AM	OFF <input checked="" type="checkbox"/> ON <input type="checkbox"/>
Inventory Items Standalone Custom Training 4 CE	CUSTOM Inbound	0	Carlos Escabalzeta	Dec 03 9:09 AM	Setup
Salesforce Inbound	Convert Inbound	0	Carlos Escabalzeta	Nov 04 11:51 AM	Setup
CE Fidelity Standard Contribution Template	CUSTOM Inbound	0	Training User	Oct 30 11:17 AM	Setup
NB_Outbound_CSV_GoogleSheet	Convert Outbound	1	Nitin BERI IT	Oct 19 11:31 AM	OFF <input checked="" type="checkbox"/> ON <input type="checkbox"/>
JW Fidelity Standard Contribution Template	CUSTOM Inbound	0	Jeff Weller	Jul 12 10:34 AM	Setup
Training_SK_CustomTemplate	CUSTOM Inbound	1	Ryan Lueninghoener	Jun 30 2:22 PM	OFF <input type="checkbox"/> ON <input type="checkbox"/>
Training_SK_FileTemplate_CSVtoExcel	Convert Inbound	0	Ryan Lueninghoener	Jun 29 2:29 PM	Setup
Vish_new_test2	CUSTOM Inbound	0	Vishwanath Katragadda	Jun 18 10:56 AM	Setup
MH_FidelityStandardContributionTemplate	CUSTOM Inbound	0	Madhunika Hariharasudhan	Jun 18 10:56 AM	Setup

Displaying 1 - 12 of 188

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Entities - Templates

- Templates are preconfigured transaction sets or process flows that can be used to create a new transaction for data exchange.
- Only IT users of a company can create templates. After creating a template, IT user grants the partner access to the created templates.
- There are four types of templates available in Adeptia connect:
 - **Convert:** This type of template governs both business and files application data transfer to and from a partner. You can create one of this type to convert CSV, Excel, Fixed Length, XML or Business application data into another format and transfer them.
 - **Pass-thru:** A pass-thru template is useful when you want to send or receive business or file application data without any conversion.
 - **EDI:** This template is used when partner wants to send or receive EDI files.
 - **Custom:** By using this template, you can use customized process flows. Also, this template type is used to transfer the data between partners (P2P templates).

Entities - Transactions

Contd...

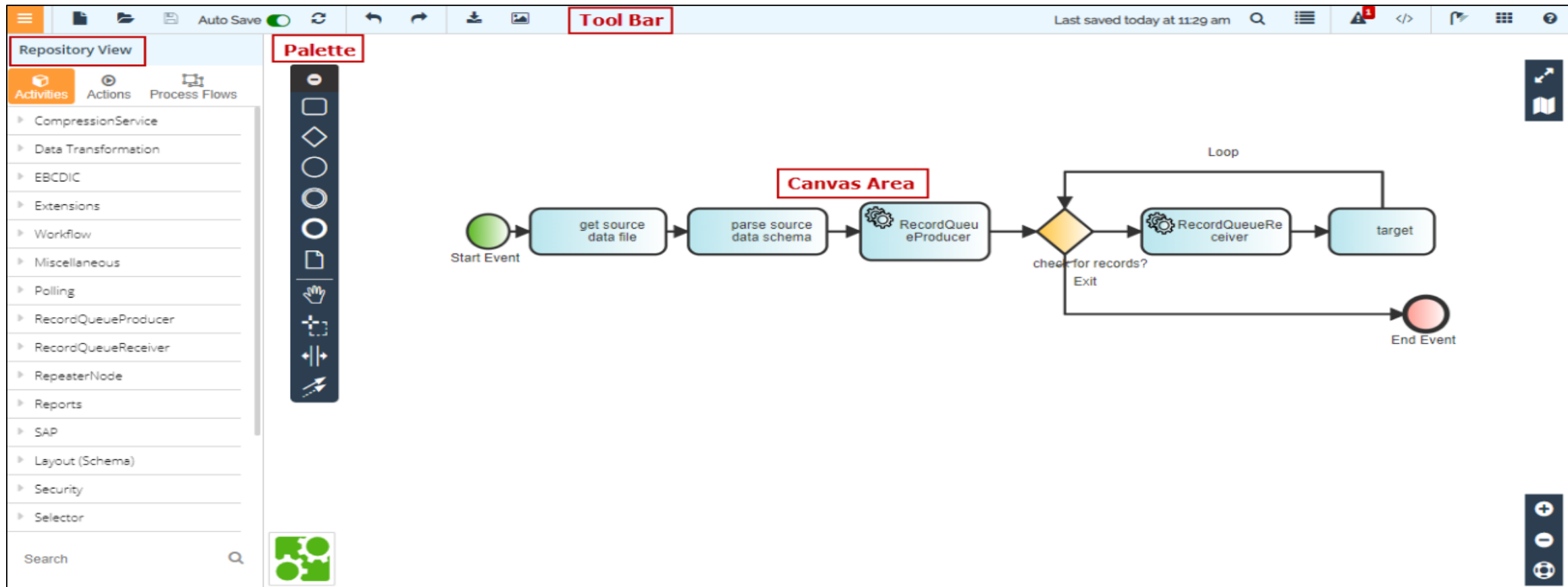
The screenshot displays the ADEPTIA Transactions interface. At the top, there is a navigation bar with icons for Partners, Transactions (highlighted with a red box), Dashboard, and Configure. The ADEPTIA logo is centered, and the user profile 'Hi, Akash Adeptia IT User' is on the right. Below the navigation bar, there is a search bar for 'Search Transactions' and a refresh icon. On the left, a 'Templates' dropdown menu is open, showing 'Transactions' selected. Below this is a donut chart titled 'Transactions' showing a total of 848 transactions. A legend below the chart lists the following categories: CUSTOM: 44, Convert: 89, DATA INTERFACE: 72, EDI: 583, and Pass-Thru: 60. The main area contains a grid of eight transaction cards, each with a title, a visual representation of the transaction flow, a partner name, a date and time, and a toggle switch. The cards are: 1. Purchase Order Transaction Training Exercise 2 CE (Partner: Training Partner CE, Today 3:55 AM, OFF). 2. Employee Benefits Transaction Training Exercise 1 CE (Partner: Adeptia, Today 2:04 AM, ON). 3. Inventory Items Processing Training Partner 4 Ext CE... (Partner: Training Partner CE, Dec 04 6:22 AM, ON). 4. Common Purchase Order Post Process Training Partner 3 CE (Partner: Training Partner CE, Dec 04 4:36 AM, ON). 5. Inventory Items Processing Training 4 Ext CE Transaction (Partner: Training Partner CE, Dec 03 9:55 AM, ON). 6. EmployeeBenefitsTransaction (Partner: Adeptia, Oct 26 9:48 AM, Setup button). 7. Training_SK_CustomTemplate Transaction (Partner: TrainingPartner, Jun 30 2:34 PM, OFF). 8. Training_SK_CSVtoExcelTransaction (Partner: Adeptia, Jun 29 10:41 AM, OFF).

Entities - Transactions

- Transactions are data exchange relationship between a company and the partners.
- Transactions can be only created using pre configured templates.
- Company's IT users, Business user, or partner users can create the transactions provided they relevant access to use a template.

Entities – Process Flow

Contd...

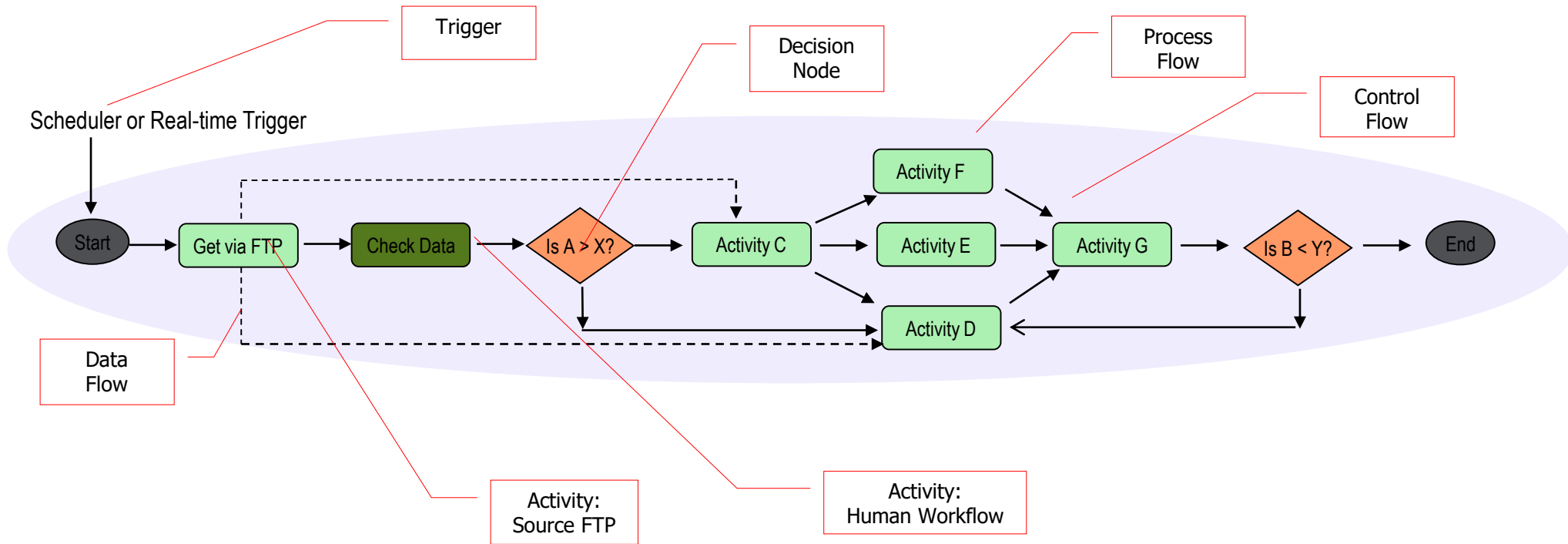


Entities – Process Flow

- Adeptia Connect offers a graphical process design interface, use this web-based process designer to create process flow for Custom templates
- Simple to use, drag and drop interface for business managers
- Includes a powerful, full-featured engine for process execution
- Process engine logs all runtime information

Key Concepts

Contd...



Key Concepts - Explained

- **IT Users:** These are IT staff or consultants who use the Adeptia Connect to create templates, and design and implement process flows.
- **Business Users:** These are end-users who benefit from the automation of business processes and interact with flows using workflow tasks. A business user typically uses the pre-configured templates to create transactions.
- **Design time:** This is the phase when the process flows when an IT user implements the flows.
- **Run time:** This is the phase when the process flows that have been implemented are run in production environment.
- **Service:** This is a type of feature or specific business task or action.
- **Activity:** This is an instance of a service which is actually executed in a flow.
- **Process Flow:** This is a set of activities that combine together to create a business process.

Events

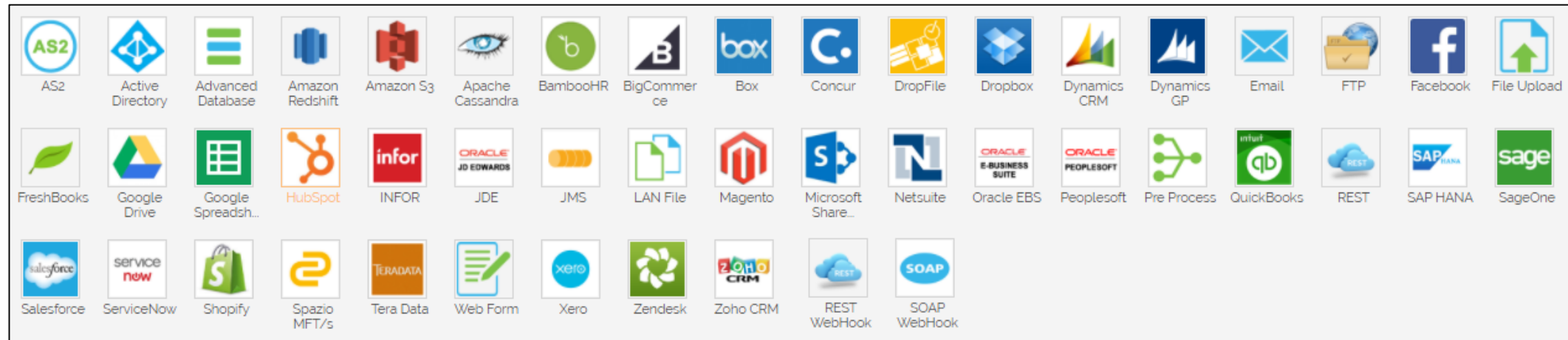
Events are used to schedule and trigger a process flow. They enable you to specify when and how frequently the process flow should be executed on a recurring basis. By default, an event remains deactivated after its creation. To trigger a process flow using the events, you must bind it with appropriate events and then activate those events. The types of events are outlined as:

- Calendar Event
- Complex Event
- Database Event
- File Event
- FTP Event
- HTTP Event
- JMS Event
- Mail Event
- Timer Event

Supported App Connectors

Adeptia Connect supports following two types of applications:

- Business-based applications
- File-based applications



If you want to add a new or upgrade an existing CDATA connector, contact support@adeptia.com. They will provide you the relevant zip file which you can deploy on your system using migration utility ([installing accelerators](#)) and enable the connector at your end.

Exercise 1: Employee Benefits Data Conversion

Exercise 1

- Consider a scenario where an employee of an HR company has to pick a file of employee benefits' details from one folder and transfer it to another folder on same or other machine.
- The source file is received by the insurance provider (at a specified location/folder) and has employees' policy numbers. At the destination folder, the same file has to be placed but with a slightly different data format that would be used by the company's local HR.
- An out of the box template can help the employee of this company that can automatically pick the data from source file and place it in the destination folder after converting it in a required format.
- For this, Data Integration template of Adeptia Connect can be used and configured to transfer the data in aforementioned use case.

Let's see the steps to do it...

Exercise 1

Create a Transaction using Data Integration Template.

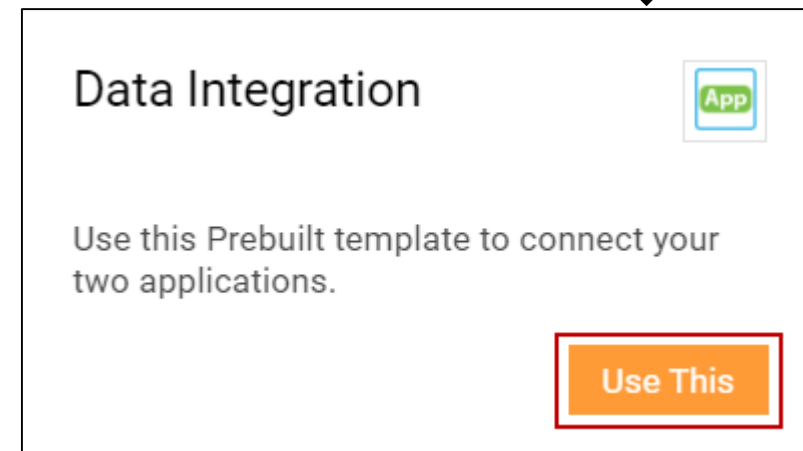
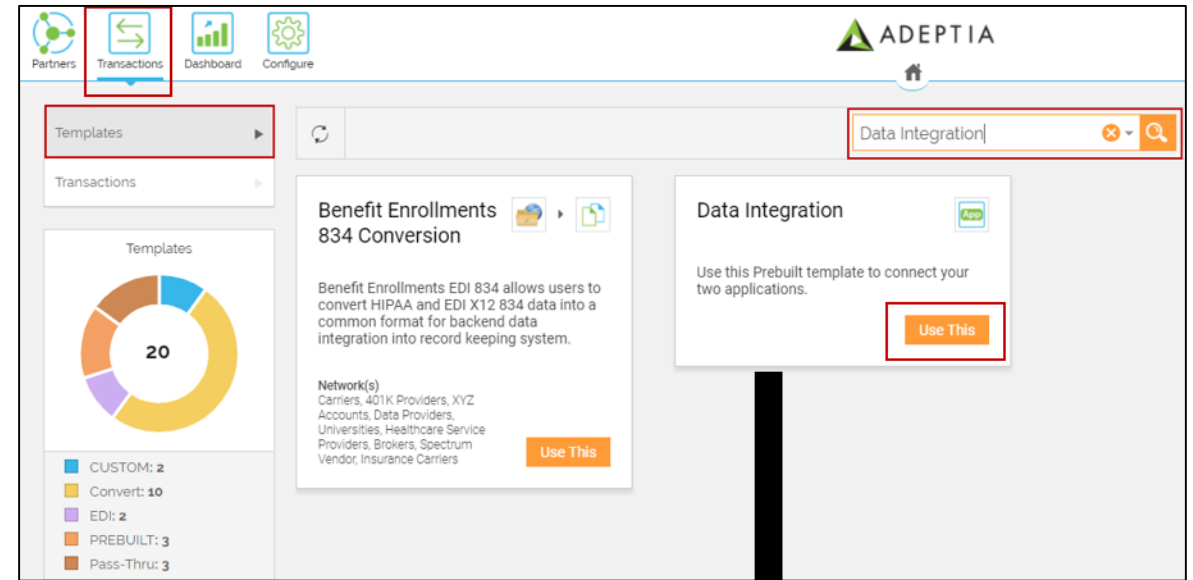
This is an out of the box template that is ready to use if you need to transact the data with a basic pre-defined process flow.

To use this template:

- On the home page, click **Transactions**.
- On the **Templates** page, search for a **Data Integration** template.

This page shows a list of pre-configured and out of the box templates that are bundled with the product.

- Click **Use This** on the Data Integration template tile to create a transaction.



Exercise 1

- Provide a name for this Transaction followed by a brief description and click **Continue**.
- Keep **Create transaction to be used internally by your company** option selected.
- Select a Project you have access to or keep the default one that is listed and click **Next**.

Create New Transaction Template : Data Integration

Define Transaction ^

Employee Benefits Data T...

Choose Partner

Transaction Settings

Set Source ^

Provide a name for this transaction

Employee Benefits Data Transaction

Briefly describe this transaction

Use this template to transact employee benefit data

Create transaction to be used internally by your company

Create transaction to be used by your partner

Select Project

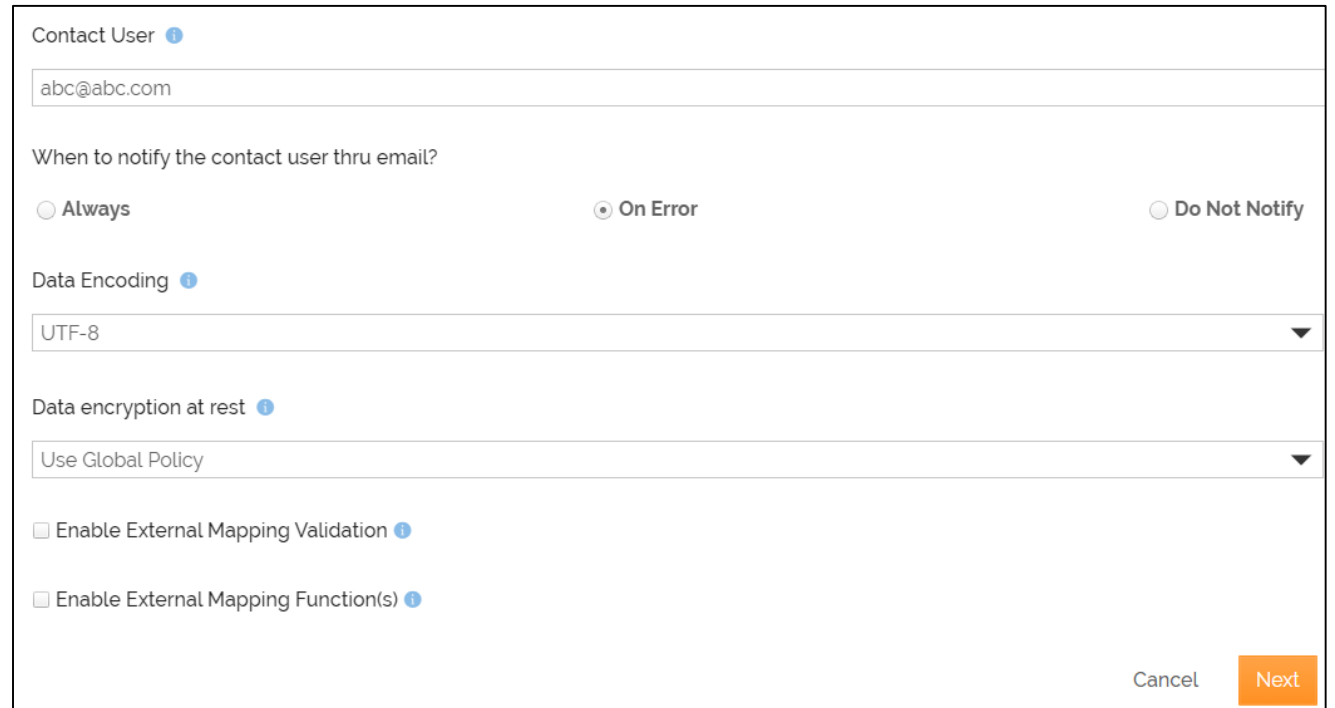
Default

Exercise 1

- On the **Transactions Settings** page, in the **Contact User** field, the email address is automatically pulled from your user profile that you log in with. You can change or add multiple email addresses separated by comma.

This is the email address where you receive the notification email when the transaction is executed successfully or if there is an error during the execution.

- Keep the rest of the fields as they are.
- Click **Next**.



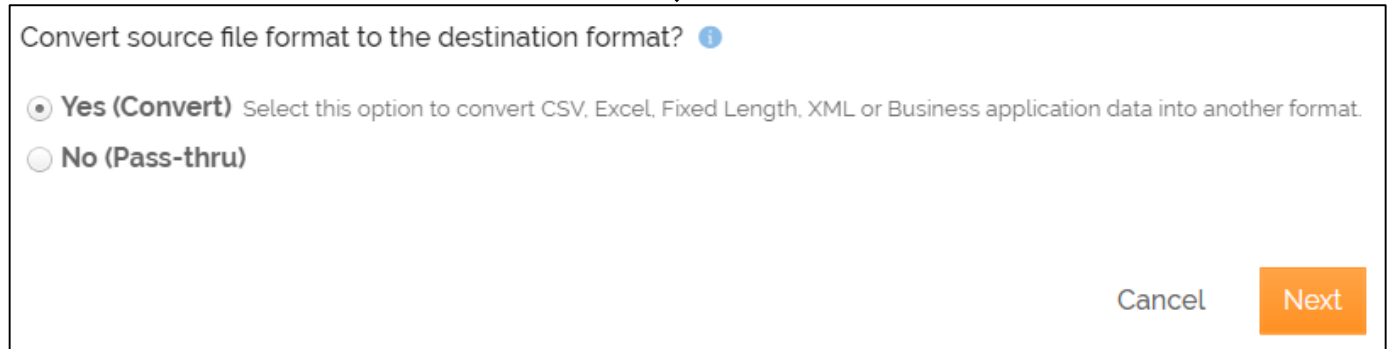
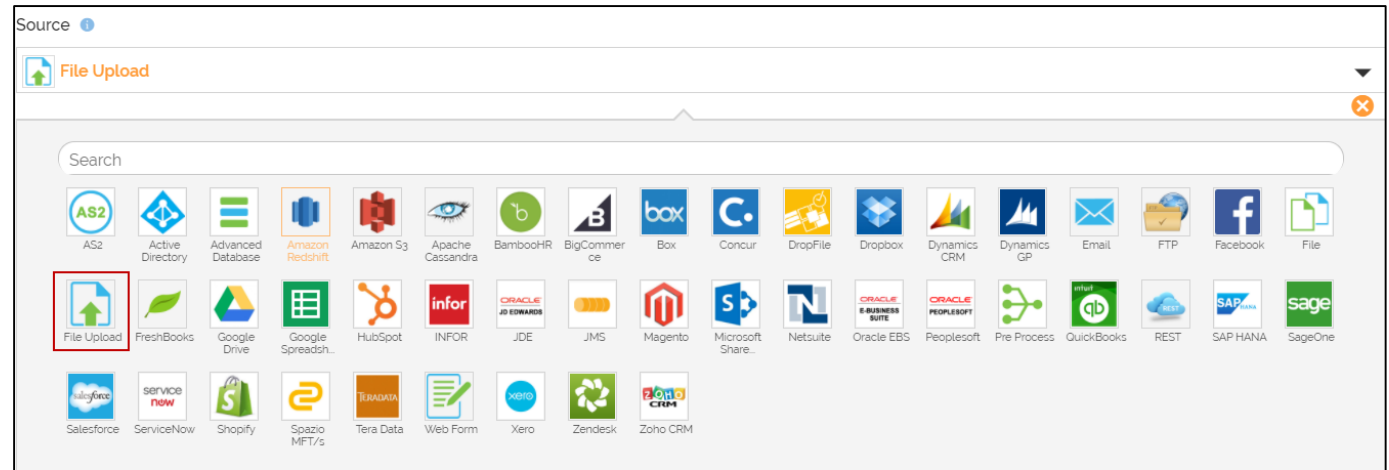
The screenshot shows a form titled "Contact User" with the following fields and options:

- Contact User**: A text input field containing "abc@abc.com".
- When to notify the contact user thru email?**: Three radio button options: "Always", "On Error" (selected), and "Do Not Notify".
- Data Encoding**: A dropdown menu showing "UTF-8".
- Data encryption at rest**: A dropdown menu showing "Use Global Policy".
- Enable External Mapping Validation**: An unchecked checkbox.
- Enable External Mapping Function(s)**: An unchecked checkbox.

At the bottom right of the form, there are two buttons: "Cancel" and "Next".

Exercise 1

- On the **Choose App** page, in the **Source** field, select **File Upload**.
- Click **Next**.
- Select one of the options for the conversion of the source file data format to the destination format.
 - **Yes (Convert)**: Select this option to convert the data from one format to other. Data Mapping between source and destination format is required.
 - **No (Pass-thru)**: Select this option to transfer the file as is from the source to destination.
- Click **Next**.



Exercise 1

- Set the Trigger to execute this transaction.

By default, only one option “On File Upload” is available to be selected.

- Click **Next** to define the Source file layout.

Which event should trigger the data transfer?

On File Upload

Cancel Next

Exercise 1

- In **Define Source Layout** page, select the format of the source data in the **source data format** field. For example, select **Excel** as source data format.
- In the **Select your source data layout** field, click + icon to create an excel layout.
 - In **Create Layout** window, keep **Default** selected in the **Select Layout UI Type** field.
 - Click **Next**.
 - In **Create Layout** window, do the following:
 - In the **Name** and **Description** fields, enter the excel layout's name and description respectively.
 - Select the **Data Header Present** check box.
 - Select the **Import Definition File** option as the Definition Mode.
 - In the **Definition File** field, click **Upload file** to upload an excel file.
 - In the **Sheet Name** field, select the specific sheet.
 - Leave the rest of the fields as they are.
 - Click **Save**.
- Click **Next**.
- On the **Data Decryption** page, click **Next**.

Select your source data format ⓘ

Excel

Select your source data layout ⓘ

EmployeeBenefitsLayout_CE

Cancel Next

Create Layout

Standard Properties

Name*

Description*

Secure

Password

Confirm Password

Data Header Present

Definition Mode* Import Definition File Enter the Fields Sequentially

Definition File Data Upload File

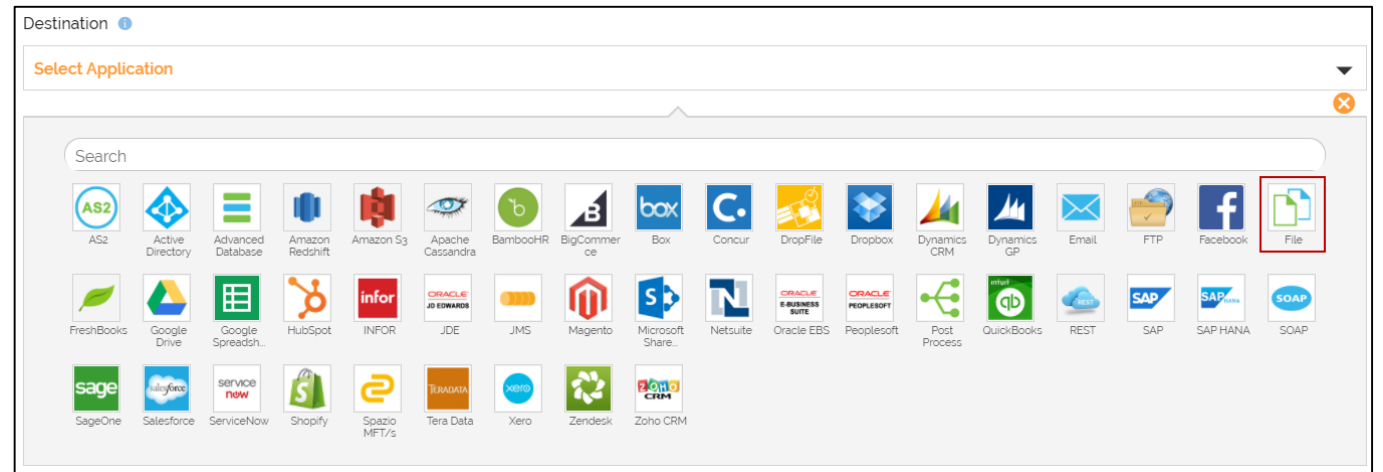
Sheet Name*

#	Field Name	Type	Format	Sub Format	Data Mode
---	------------	------	--------	------------	-----------

Save

Exercise 1

- On the **Choose App** page, in the **Destination** field, select **File**.
- Click **Next**.
- On **Choose Action** page, click **Next**.
- On the **Select File Location** page, in the **Select the LAN File target** field, click + icon to create a new LAN file target.
- On the **Create LAN File Target** page, do the following steps:
 - In the **Name** and **Description** field, enter the LAN file target's name and description respectively.
 - In the **File Path** field, enter the network path of the source file, for example: *D:/Training/Target*.
 - In the **File Name** field, enter the name of the source file, for Example: *EmployeeBenefitsOutput*.
 - In the **File Extension** field, enter **XML**.
 - In the **File System** field, select **WINDOWS**.
 - Clear the **Secure** check box.
 - Leave the rest of the fields as they are.
 - Click **Save**.
- Click **Next**.

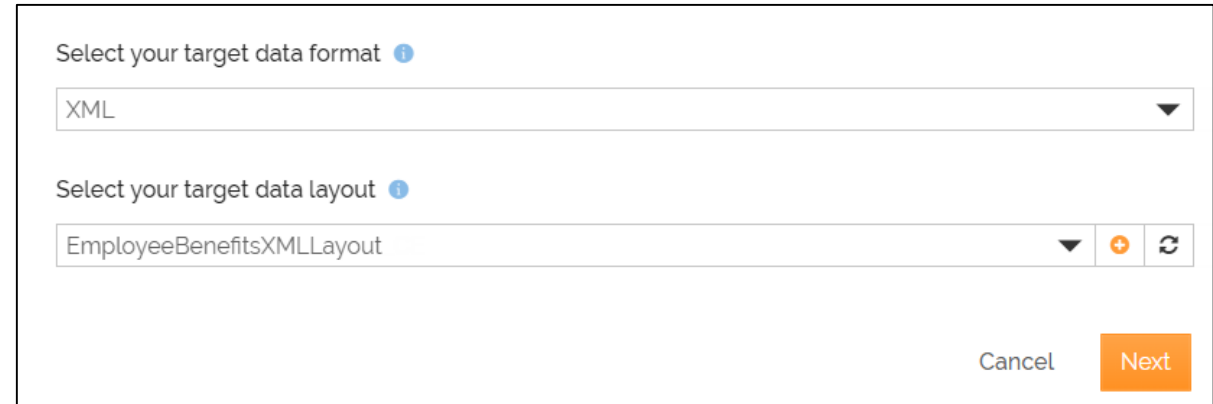
A screenshot of the 'Create LAN File Target' form. The form is titled 'Create LAN File Target' and has a close button in the top right corner. Under the 'Standard Properties' section, there are several input fields and dropdown menus:

- Name***: An empty text input field.
- Description***: An empty text input field with a small icon in the bottom right corner.
- File Path***: An empty text input field.
- File Name***: An empty text input field.
- Time Stamp**: Two dropdown menus, both currently set to 'Select One'.
- Create Unique File**: An unchecked checkbox.
- File Extension**: An empty text input field.
- File System***: A dropdown menu currently set to 'WINDOWS'.
- Use VFS***: An unchecked checkbox.
- Secure**: An unchecked checkbox.

At the bottom right of the form, there are two buttons: 'Save' and 'Test'.

Exercise 1

- On the **Define Target Layout** page, in the **Select your target data format** field, select **XML**.
- In the **Select your target data layout** field, click **+** icon to create a new XML layout.
- On the **Create Layout** page, do the following steps:
 - In the **Name** and **Description** fields, enter the layout's name and description respectively.
 - In the **File Path** field, click **Choose File** to Browse and select the XSD file.
 - Click **Validate XSD** to validate the path of the file in the File Path.
 - Leave the rest of the fields as they are.
 - Click **Save**.
- Click **Next**.
- On the **Data Encryption** page, click **Next**.



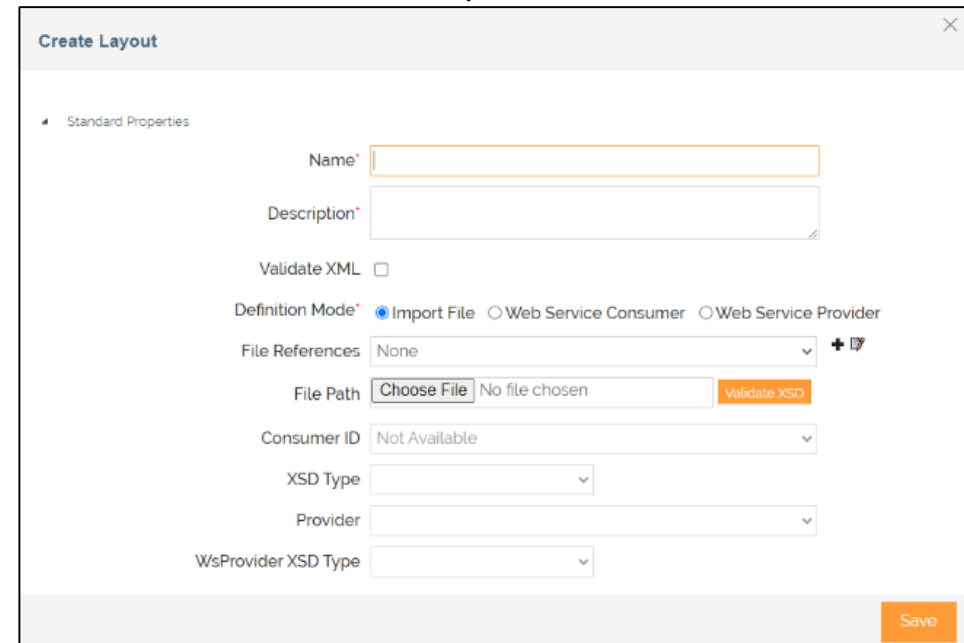
Select your target data format ⓘ

XML

Select your target data layout ⓘ

EmployeeBenefitsXMLLayout

Cancel Next



Create Layout

Standard Properties

Name*

Description*

Validate XML

Definition Mode* Import File Web Service Consumer Web Service Provider

File References None

File Path Choose File No file chosen Validate XSD

Consumer ID Not Available

XSD Type

Provider

WsProvider XSD Type

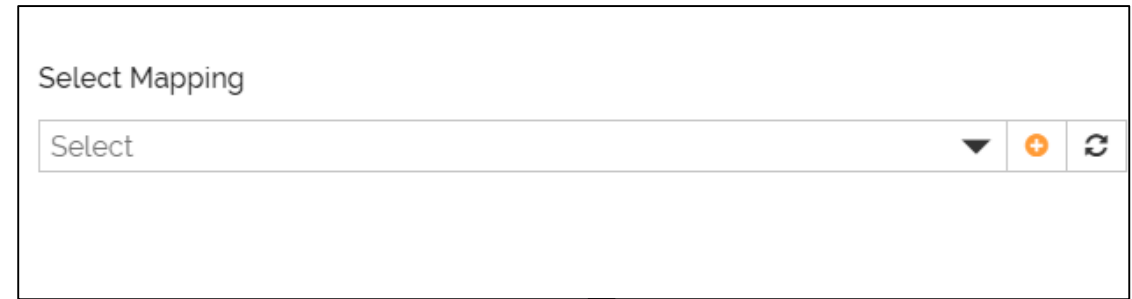
Save

Exercise 1

- On the **Define Mapping** page, in the **Select Mapping** field, click + icon.

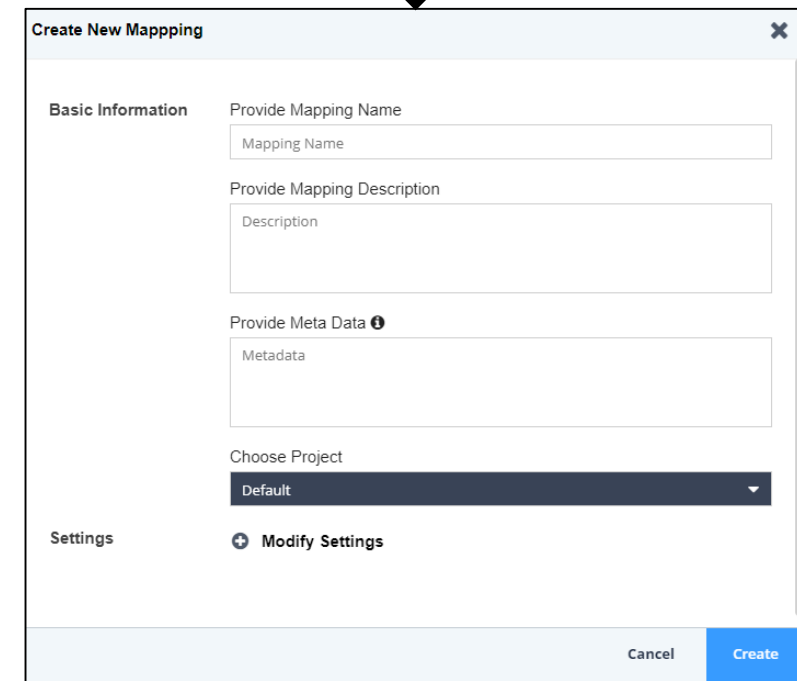
Refer to [Help](#) for detailed information for creating the mapping.

- In the **Create New Mapping** window:
 - Type the mapping name and description of the new mapping activity in the **Name** and **Description** fields respectively.
 - Leave the rest of the fields as they are.
 - Click **Create**.



Select Mapping

Select



Create New Mapping

Basic Information

Provide Mapping Name

Mapping Name

Provide Mapping Description

Description

Provide Meta Data ⓘ

Metadata

Choose Project

Default

Settings

+ Modify Settings

Cancel Create

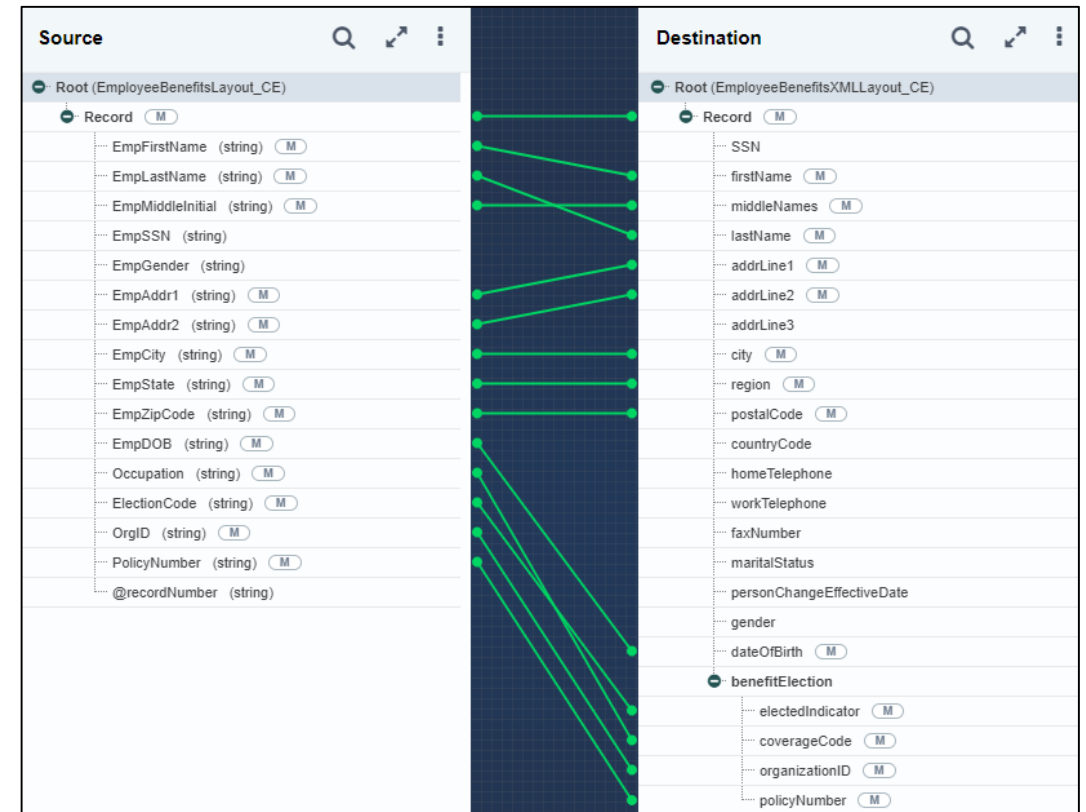
Exercise 1

- After you click **Create**, it opens a **Data Mapper** page in a new tab.

Note: Ensure that your browser has not blocked the pop-up.

In the Web Mapper, the Source and the Destination layout are loaded automatically.

- To map the elements, use the drag and drop approach. Click and drag the Source element and drop it to the Destination element.
 - For example, click **EmpFirstName** element in Source layout and drag it to the **firstName** element in the Destination.
 - Likewise, you can do for rest of the source elements to map with related destination elements.



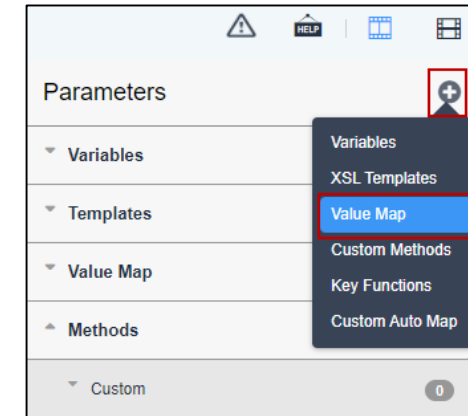
Exercise 1

- You can also create a value map as the Value Map feature enables you to define a Map set for a particular value of an element. A Map set enables you to define the mapping values that will be used in the destination layout against the values of the elements present in the source layout.
- To create a value map, click + in the **Parameters** panel and then select **Value Map**.
- On the **Create New Value Map** window:
 - Enter the name in the **Name** field.
 - Enter the value for both **Value** and **Map** fields.






For instance, at source, the **EmpState** element has “CO”, “CA” as values. You may want to map “CO”, “CA” to the respective number for these states. This can be done using the value map feature.

For the other values (OH, SC, and VA), provide the default value in the **Default Value** field. If you provide the default value, then the same value will be mapped to other values.

- Click **Save**.
- Once mapping is done, save the mapping (though by default mapping is autosaved) and close the Web Mapper.
- After the mapping is created, it will be automatically selected in the **Select Mapping** field.
- Click **Save & Exit** on the **Define Mapping** page to save the transaction.



Name: StateNumberValueMap Upload CSV

Value	Map	
CO	1	
SC	2	
CA	3	
VA	4	
OH	5	


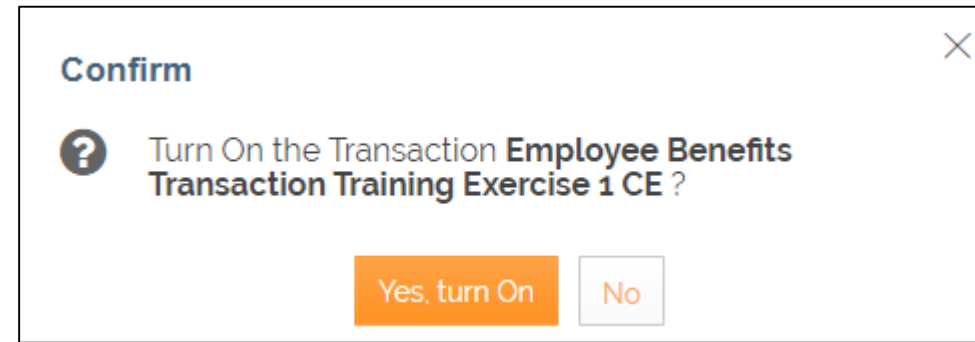
+ Add Row















Default Value: 9 Pick From Source

Save

Exercise 1

- You have created your transaction successfully. You will be prompted to turn on the transaction. Click **Yes, turn on**.
- You can view the transaction on the **Transactions** home page.
- On the **Transactions** page, locate the transaction and click **Run Now**.
- As this is a file upload transaction, you will be asked to browse and upload the XML file.
- After you have uploaded the file, you get a confirmation message about the successful execution of the transaction.
- You can check the status of the transaction on the Dashboard.



TYPE	PARTNER	OWNER	MODIFIED	ACTION
DATA INTERFACE	Adeptia	Carlos Escabalzeta	Today 2:04 AM	OFF <input checked="" type="checkbox"/> ON 
CUSTOM Inbound	Training Partner CE	Carlos Escabalzeta		 Run Now  View
Pass-Thru Inbound	Training Partner CE	Carlos Escabalzeta		 Edit  Delete
Convert Inbound	Training Partner CE	Carlos Escabalzeta		 Check-in  Replace With
CUSTOM Inbound	Training Partner CE	Akash Jaiswal		 Revision History  View References
DATA INTERFACE	Adeptia	Training User		 Add to Favorite  Run History
CUSTOM Inbound	TrainingPartner	Ryan Lueninghoener		 Create Copy  Template Used
				 Edit Contact User

Exercise 2: Purchase Order Data Transformation

Exercise 2

- In Exercise 2, we will take an example of a Purchase Order (PO) received for the internal usage of a company. For example, a Project Management Office (PMO) team of a company receives several POs with various details in an XML format from their partners.
- The PO details should be saved in a local database of the company that is used to generate relevant information for the finance team.
- A regular member of a PMO team may not be able to convert XML to database in the required format. Also, this is a repetitive task so help of an IT person cannot be taken every time.
- An out of the box template can help the PMO of this company to automatically convert the XML data from source PO file and place it in the required database after converting it in a required format.
- For this, a template can be used and configured to transfer the data in aforementioned use case.

Let's see the steps to do it...

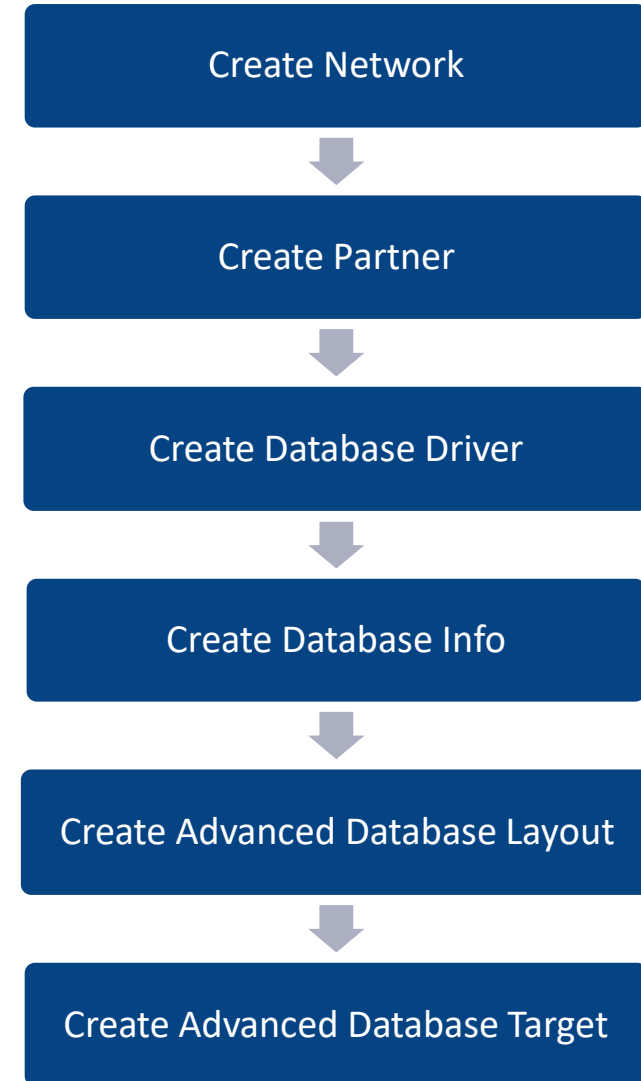
Exercise 2

Prerequisites:

- Available sample XML or XSD file with same fields received in PO XML.
- Access to the database where the data of PO XML should be placed.
- Destination Database has the tables created with desired columns.
 - You should be able to map the data from XML layout to these columns while doing mapping.

Exercise 2

- As required in this use case, you need to use a Database at the target end.
- For this, while setting up a Database at destination, you are required to create a Database Location (i.e. to provide the database location and information of the table where the XML data after transformation will be placed).
- Before you can create a transaction, you need to create the following activities in the given sequence:
 1. Create a Network.
 2. Create a Partner.
 3. Create a Database Driver.
 4. Create a Database Info using the Database Driver.
 5. Create an Advanced Database Layout using the Database info.
 6. Create an Advanced Database Target using the Database Info and Layout.

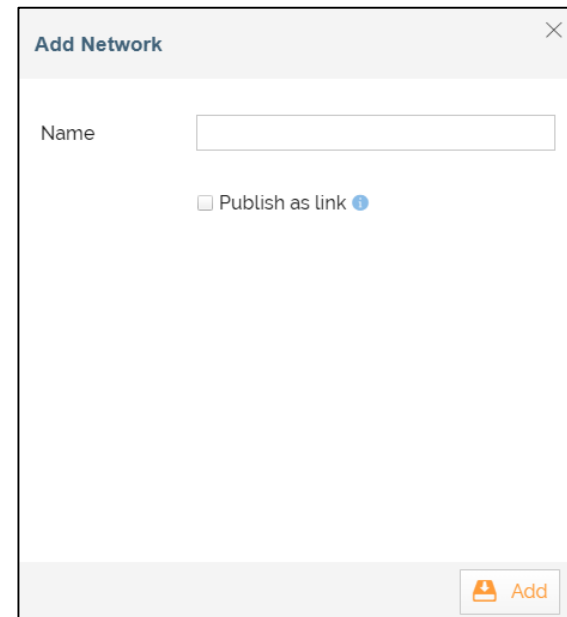
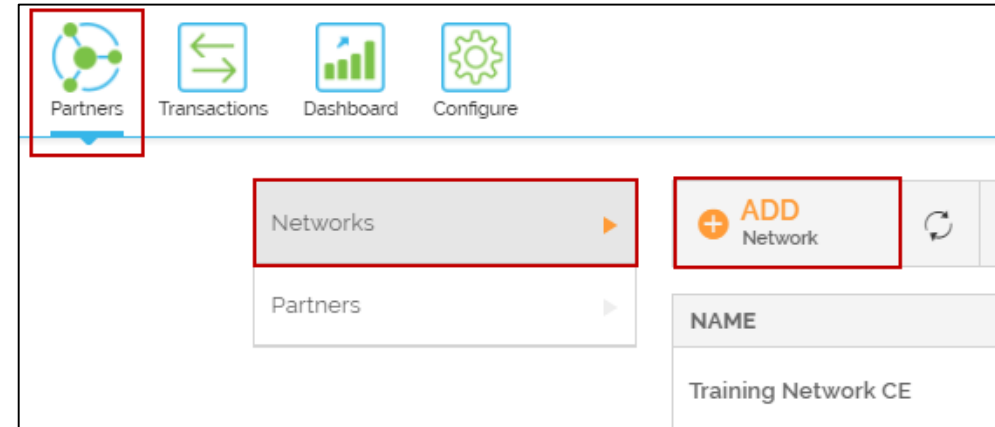


Exercise 2

Creating a Network

- On the home page, click **Partners**.
- Click **Networks** > **ADD Network**.
- On the **Add Network** page, in the **Name** field, enter the network name.
- Leave the rest of the fields as they are.
- Click **Add**.

Refer to the [Help](#) documentation for more details.



Exercise 2

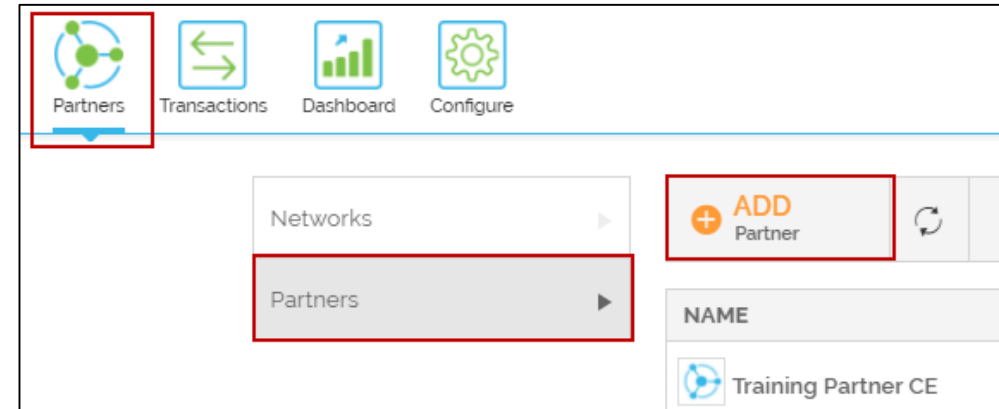
Creating a Partner

Before creating a Partner, ensure that you have [created a Network](#).

To create a partner:

- On the home page, click **Partners** > **Partners** > **Add Partner**.
- On the **Add Partner** page, do the following steps:
 - In the **Partner Name** field, enter the partner name.
 - In the **Network(s)** field, select the network that you have created in the previous step.
 - Leave the rest of the fields as they are.
 - Click **Next**.
- On the next page, click **Add**.

Refer to the [Help](#) documentation for more details.

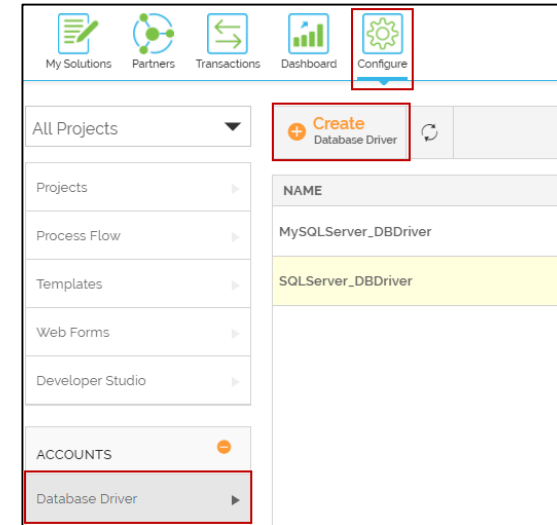
A screenshot of a form titled 'Add Partner' with a close button (X) in the top right corner. The form contains three input fields: 'Partner Name' with a placeholder text 'Provide the name here.', 'Network(s)' with a dropdown menu showing 'Select', and 'Email (Optional)' with a small blue information icon. At the bottom right of the form, there is an orange button labeled 'Next' with a right-pointing arrow.

Exercise 2

Creating a Database Driver

- On the home page, click **Configure > ACCOUNTS > Database Driver**.
- Click **Create Database Driver**.
- On the **Create Database Driver** page, do the following steps:
 - In the **Name** and **Description** fields, enter the database driver's name and description respectively.
 - In the **Upload Driver JAR File(s)** field, click **Browse**.
 - On the **Upload Jar Files** window, do the following steps:
 - Click on **Browse/Choose File** button to choose the file.
 - Click on the **Upload JAR** button.
Repeat the process to upload other JAR files.
 - Click **Finish**.
The uploaded jar file(s) is displayed in the **Upload Driver Jar File(s)** field.
 - In the **Driver Main Class Name** field, enter the main class name of the database.
Driver Main Class Name is a fully qualified Java class name for the main database driver class. The driver class name typically starts with a com., net. or org. followed by the company domain.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Refer to the [Help](#) documentation for more details.

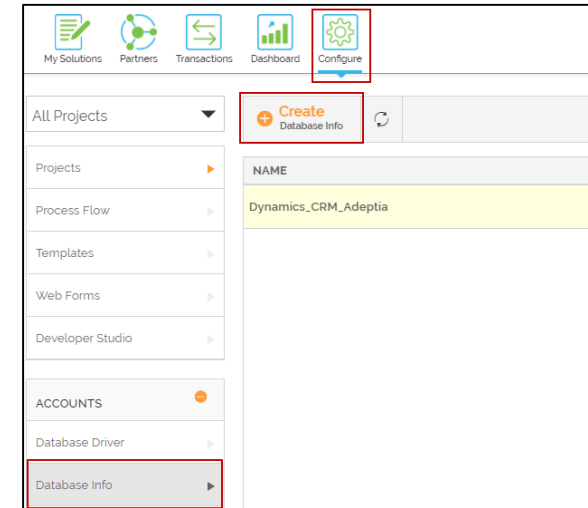
A screenshot of the 'Create Database Driver' form. The form is titled 'Create Database Driver' and has a close button (X) in the top right corner. It is divided into two sections: 'Standard Properties' and 'Advanced Properties'. Under 'Standard Properties', there are four fields: 'Name' (with an empty text box), 'Description' (with an empty text area), 'Upload Driver JAR File(s)' (with an empty text box and a 'Browse' button), and 'Driver Main Class Name' (with an empty text box and a 'Get Driver Class' button). Under 'Advanced Properties', there is a section for 'Mandatory fields' which is currently empty. A 'Save' button is located at the bottom right of the form.

Exercise 2

Creating a Database Info

- On the home page, click **Configure** > **ACCOUNTS** > **Database Info**.
- Click **Create Database Info**.
- On the **Create Database Info** page, do the following steps:
 - In the **Name** and **Description** fields, enter the database Info's name and description respectively.
 - In the **Select JDBC Driver** field, select the driver that you have created in the previous step.
 - In the **Server URL** field, enter the Server URL.
 - Click **Help** adjacent to the **Server URL** field to get help in defining the Server URL.
 - In the **User** field, enter the username of the database server.
 - In the **Password** and **Confirm Password** fields, enter the password.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Refer to the [Help](#) documentation for more details.



Standard Properties

Name:

Description:

Select JDBC Driver: -- SELECT --

Server URL: [Help](#)

User:

Password:

Confirm Password:

Select Schema Name:

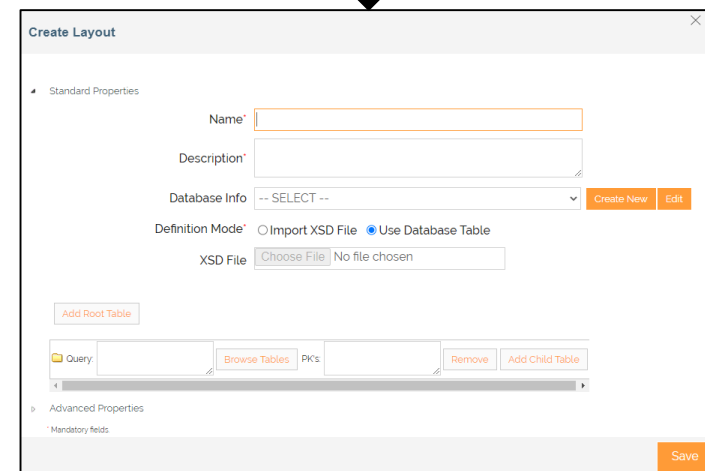
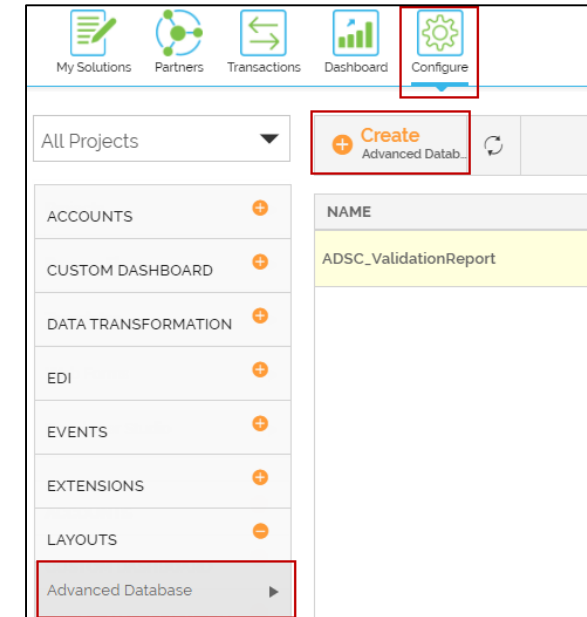
Enable Connection Pooling

Exercise 2

Creating an Advanced Database Layout

- On the home page, click **Configure** > **LAYOUTS** > **Advanced Database**.
- Click **Create Advanced Database Layout**.
- On the **Create Layout** page, do the following steps:
 - In the **Name** and **Description** fields, enter the database layout's name and description respectively.
 - In the **Database Info** field, select the database info that you have created earlier in the previous slide.
 - Click **Browse Tables** and perform the steps as described below:
 - Select **dbo** and then click **Get Tables**.
 - Select Table **POS** and then click **Get Columns**.
 - Select the required columns and click **Generate Query** and also click **Add Primary key**.
 - Click **OK**.
 - Click **Add Child Table** of the Parent table and do the following:
 - Click **Browse Tables**.
 - Select **dbo** and then click **Get Tables**.
 - Select Table **POS** and then click **Get Columns**.
 - Select the required columns and click **Generate Query** and also click **Add Primary key** and **Add Related key**.
 - Click **OK**.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Refer to the [Help](#) documentation for more details.

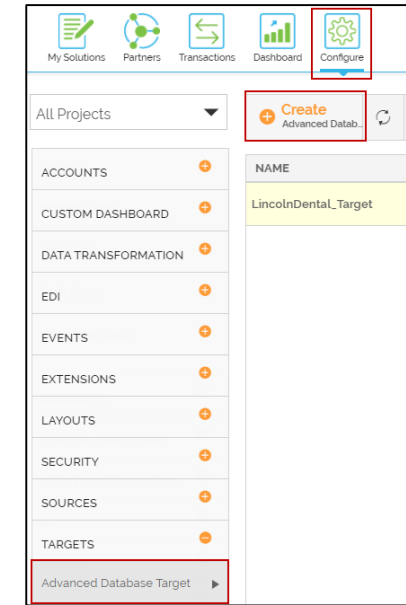


Exercise 2

Creating an Advanced Database Target

- On the home page, click **Configure** > **TARGETS** > **Advanced Database Target**.
- Click **Create Advanced Database Target**.
- On the **Create Advanced Database Target** page, do the following steps:
 - In the **Name** and **Description** fields, enter the database target's name and description respectively.
 - In the **Database Info** field, select the database info that you have created in this exercise.
 - In the **Schema Name** field, select the advanced database layout that you have created in the previous step.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Refer to [Help](#) documentation for more details.

A screenshot of the 'Create Advanced Database Target' configuration page. The page title is 'Create Advanced Database Target'. Under the 'Standard Properties' section, there are four fields: 'Name*' (a text input field), 'Description*' (a text area), 'Database Info*' (a dropdown menu with '-- SELECT --' selected), and 'Schema Name*' (a dropdown menu with '-- SELECT --' selected). Below these fields, there is a 'Database Operation*' section with four radio buttons: 'Insert' (selected), 'Update', 'Insert/Update', and 'Update/Insert'. At the bottom of the page, there is a section for 'Advanced Properties' and a note that '*' indicates mandatory fields.

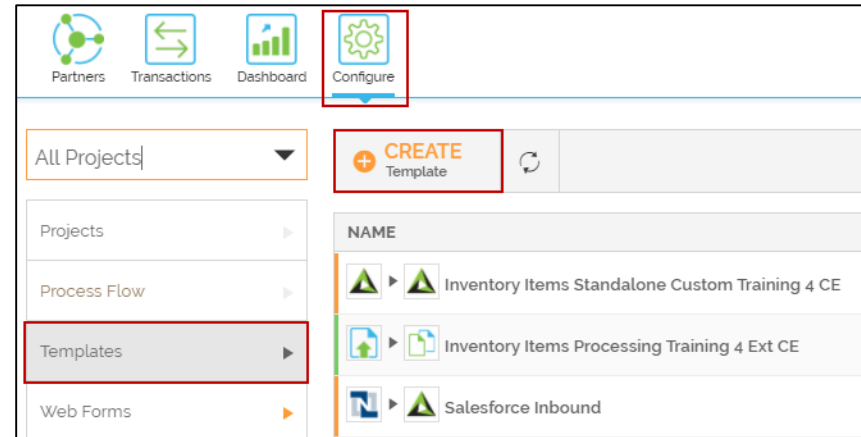
Exercise 2

Create a template of type 'Convert'.

This type of template governs both business and files application data transfer to and from a partner. You can create one of this type to convert CSV, Excel, Fixed Length, XML or Business application data into another format and transfer them.

To create the template:

- Click **Configure > Templates > Create Template**.
- On the **Create New Template** screen, provide the name and description of the Template.
- Select the project from the **Select Project** field.
- Click **Continue**.



Provide a name for this template

Briefly describe this template

Select Project

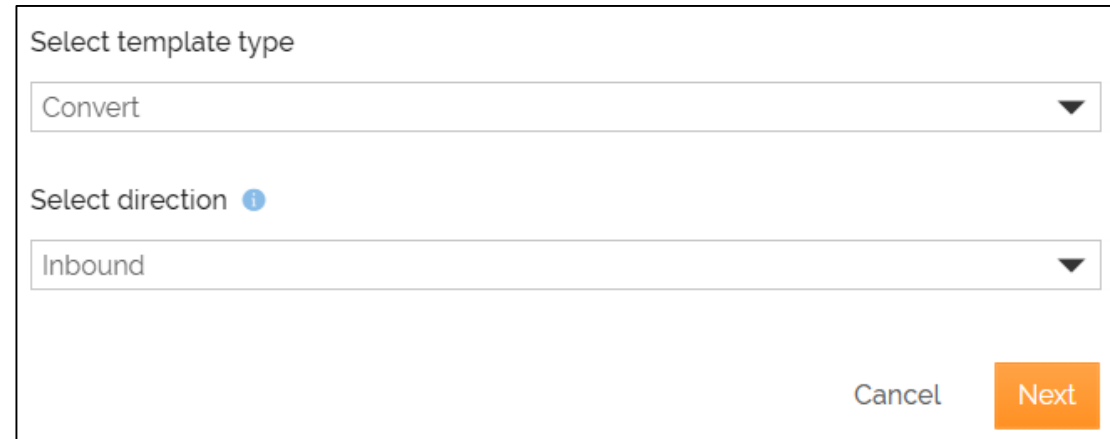
Cancel Continue

Exercise 2

- Select **Convert** in **Select template type** field.
- Select **Inbound** in **Select direction** field.
- Click **Next**.
- Select the Network in **Select Network** field.

Only the Partners of the selected Network will be able to access this Template.

- Keep the rest of the fields as they are.
- Click **Next**.
- On the **Define Parameters** page, click **Next**.



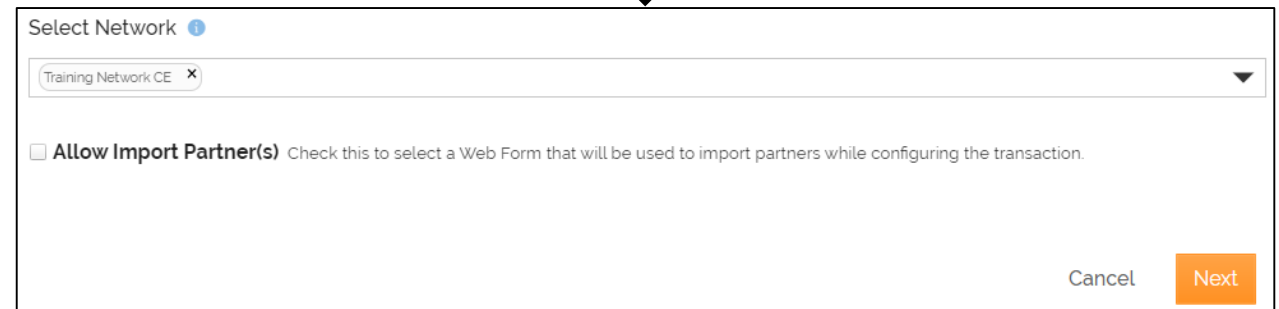
Select template type

Convert

Select direction ⓘ

Inbound

Cancel Next



Select Network ⓘ

Training Network CE x

Allow Import Partner(s) Check this to select a Web Form that will be used to import partners while configuring the transaction.

Cancel Next

Exercise 2

- On the **Routing Type** page, click **Next**.
- On the **Settings** page, in the **Contact User** field, the email address is automatically pulled from your user profile that you log in with. You can change or add multiple email addresses separated by comma.

This is the email address where you receive the notification email when the transaction is executed successfully or if there is an error during the execution.

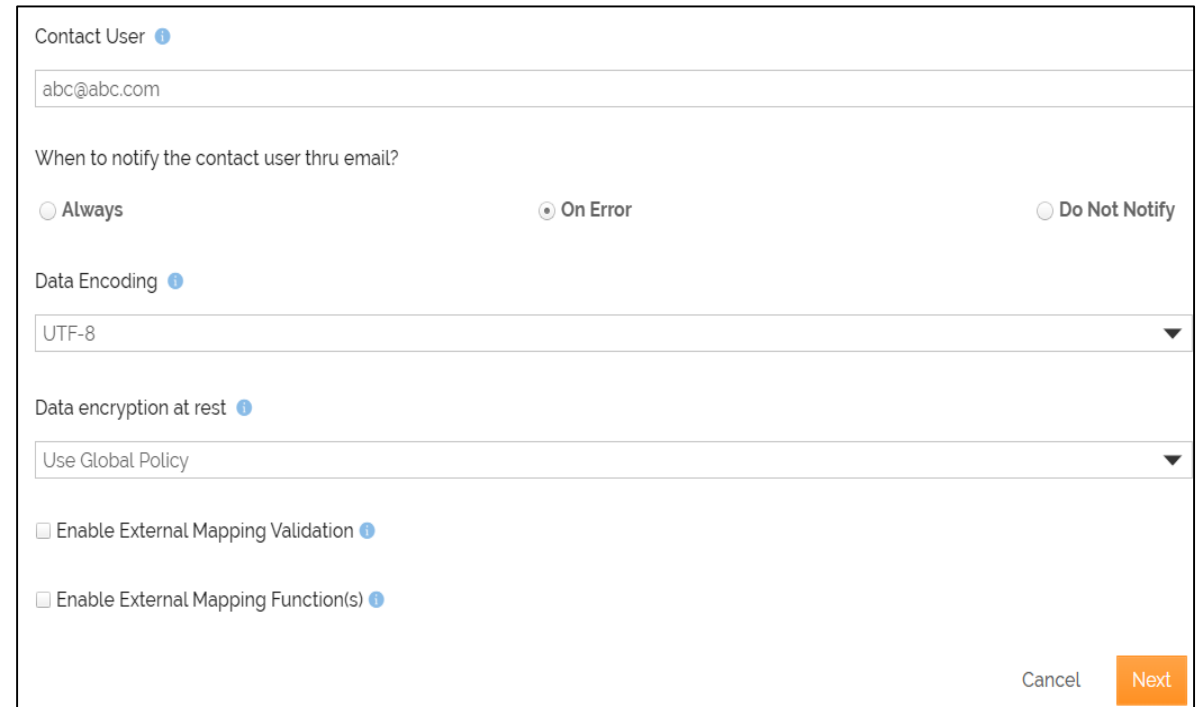
- Keep the rest of the fields as they are.
- Click **Next**.



Select Routing Type

None

Cancel Next



Contact User ⓘ

abc@abc.com

When to notify the contact user thru email?

Always On Error Do Not Notify

Data Encoding ⓘ

UTF-8

Data encryption at rest ⓘ

Use Global Policy

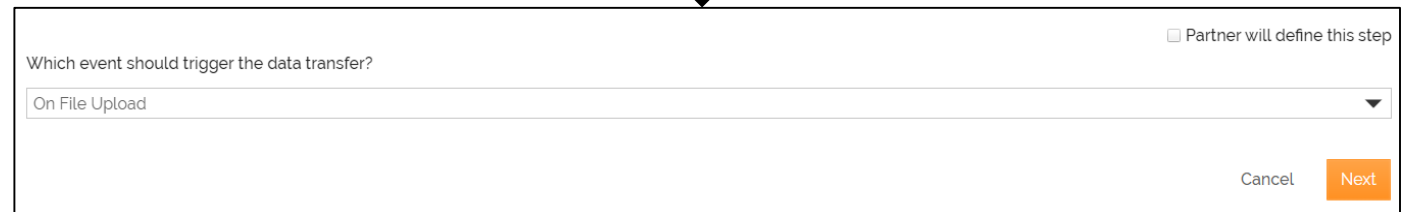
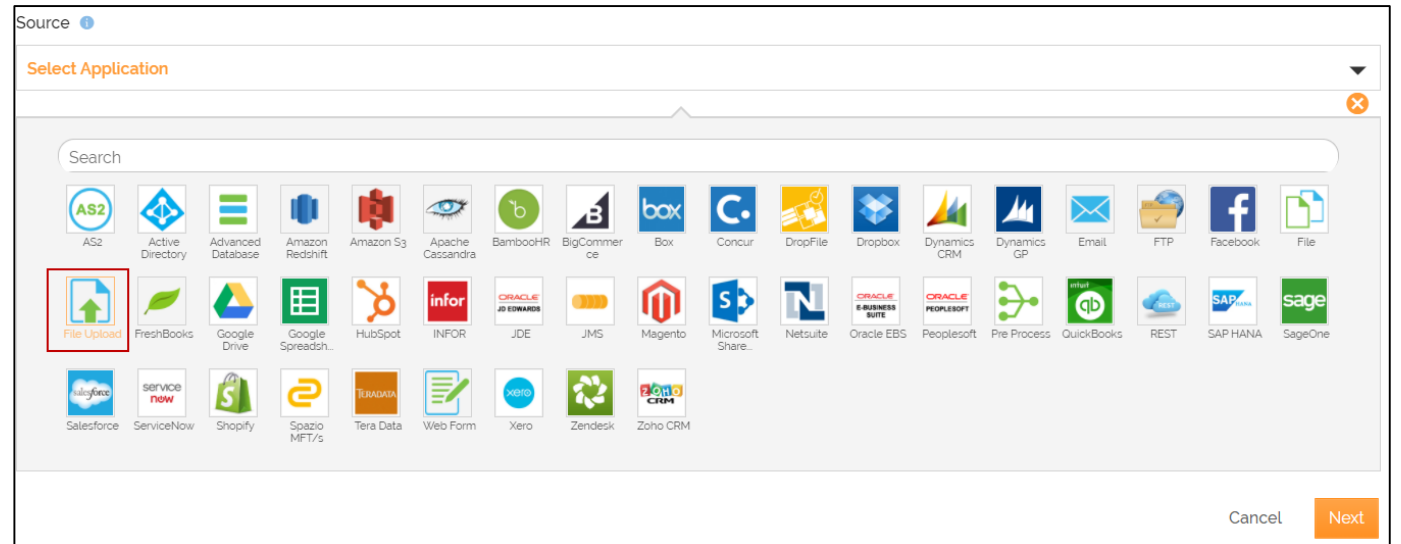
Enable External Mapping Validation ⓘ

Enable External Mapping Function(s) ⓘ

Cancel Next

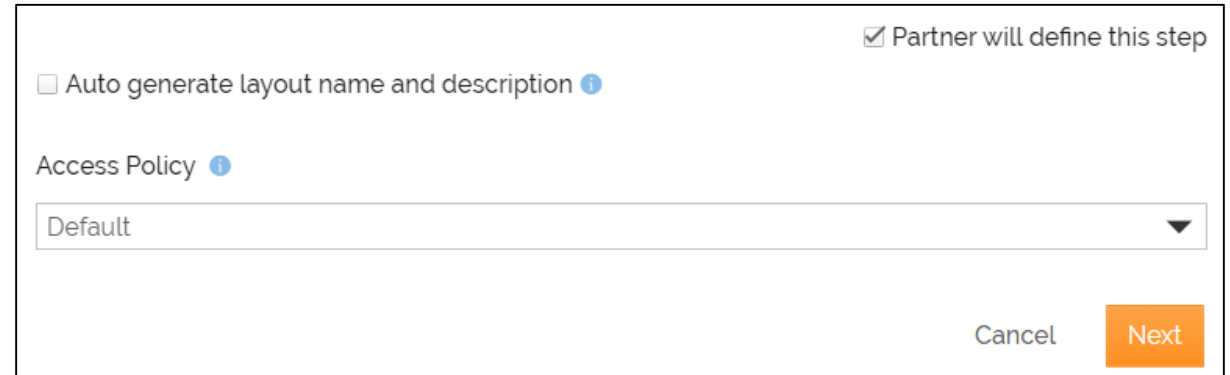
Exercise 2

- On the **Choose App** page, select **File Upload** and click **Next**.
- On the **Choose Trigger** page, click **Next**.



Exercise 2

- On the **Source_Layout** page:
 - Select the **Partner will define this step** check box.
 - Keep the rest of the fields as they are.
 - Click **Next**.
- On the **Data_Decryption** page, click **Next**.



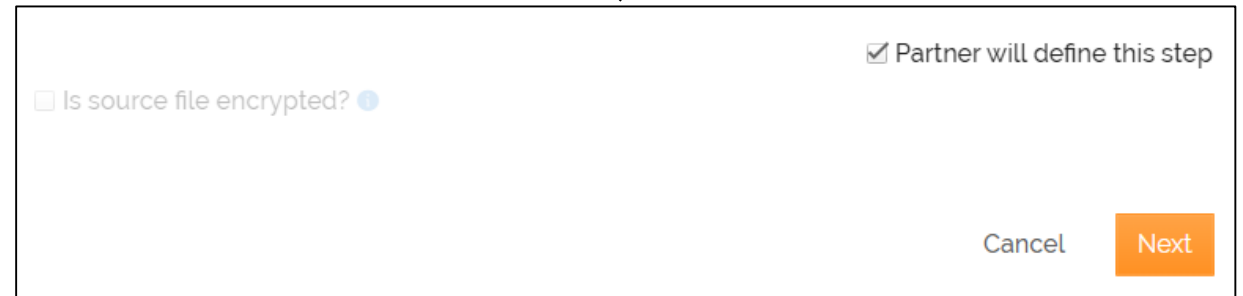
Partner will define this step

Auto generate layout name and description ⓘ

Access Policy ⓘ

Default ▾

Cancel Next



Partner will define this step

Is source file encrypted? ⓘ

Cancel Next

Exercise 2

- On **Choose App** page, select **Advanced Database** and click **Next**.
- On the **Select Database Location** page, in the **Select the Advanced Database target** field, select the Advanced Database target that you had created earlier in this exercise.
- Keep the **Partner will define this step** check box unchecked.
- Click **Next**.
- On the **Data_Encryption** page, click **Next**.

Destination: Advanced Database

Select Application

Search

Advanced Database

Cancel Next

Partner will define this step

Select the Advanced Database target

PurchaseOrder_DBTarget_TrainingExercise2_CE

Cancel Next

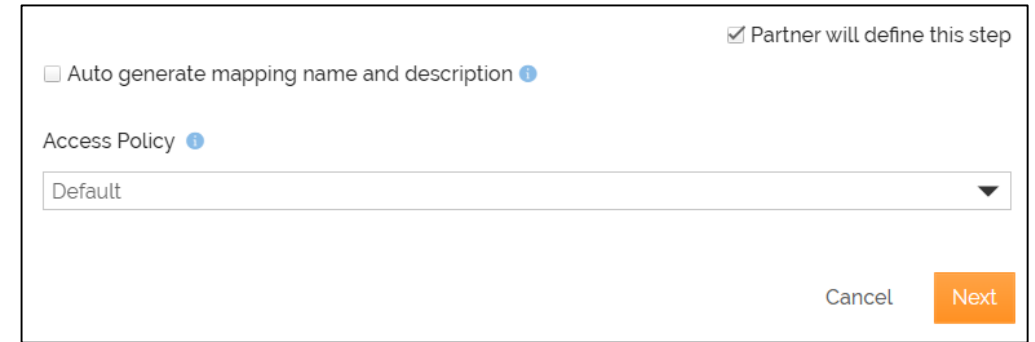
Partner will define this step

Want to encrypt target file? ⓘ

Cancel Next

Exercise 2

- In the **Define Mapping** page, keep all the fields as they are and click **Next**.
- On the **Documentation** page, click **Save & Exit**.
- Click **Yes, Turn On** to activate the template.



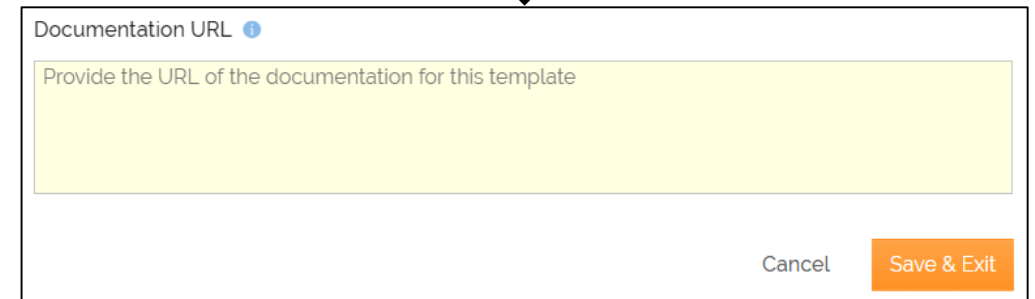
Auto generate mapping name and description ⓘ

Partner will define this step

Access Policy ⓘ

Default

Cancel Next



Documentation URL ⓘ

Provide the URL of the documentation for this template

Cancel Save & Exit



Confirm














Turn On the Template Purchase Order Template Training Exercise 2 CE ?

Yes, turn On No

Exercise 2

Do the following to grant the partner (already created) access to the template:

1. Click **More** and select **Grant Access**.

#TRANSACTION	OWNER	MODIFIED	ACTION
1	Carlos Escab...	Today 3:03 AM	OFF <input checked="" type="checkbox"/> ON 
2	Carlos Escab...		 View  Edit
0	Carlos Escab...		 Delete  Check-in
1	Carlos Escab...		 Replace With  Revision History
0	Carlos Escab...		 Grant Access  Revoke Access
0	Carlos Escab...		 Create Copy  Edit Contact User
0	Training Use		 View References  View Dependencies

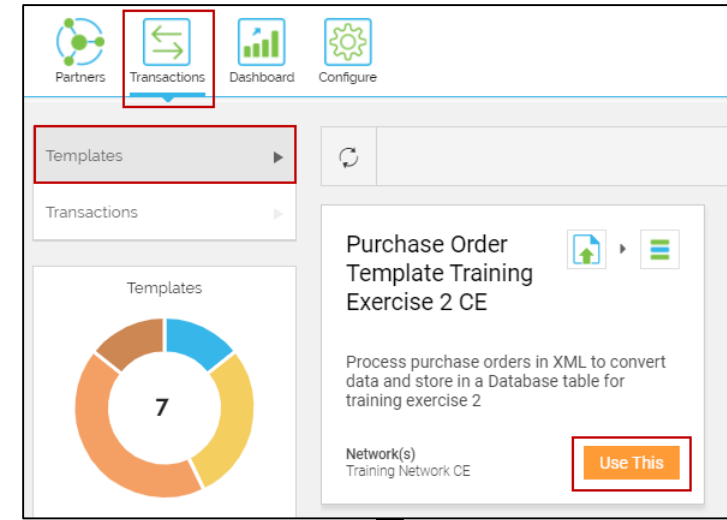
2. Select the partner that you had created earlier in this exercise.
3. Click **Grant Access**.

Exercise 2

Now you are going to create a transaction based on this template to convert the XML data from the source a to a format that can go into a database at the target.

To create the transaction:

- Click **Transactions > Templates**.
- On the **Template** screen, search for the template that you have created.
- Click **Use This** on the template tile.
- Provide the name and description for the transaction.
- Click **Continue**.



Provide a name for this transaction

Briefly describe this transaction

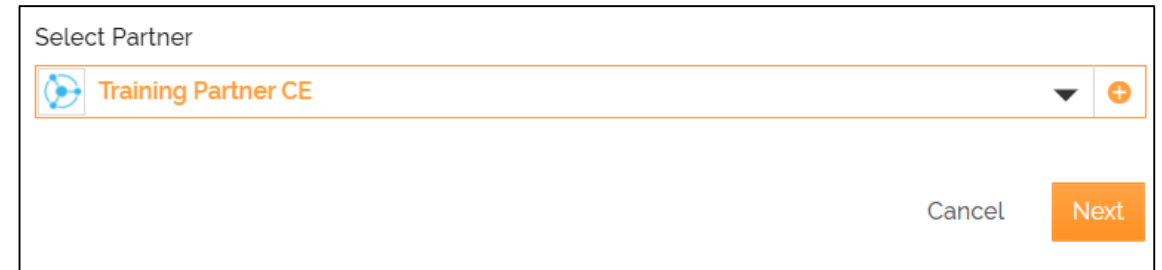
Cancel

Exercise 2

- Select the partner that you have created in the **Select Partner** field.
- Click **Next**.
- On the **Transactions Settings** page, in the **Contact User** field, the email address is automatically pulled from your user profile that you log in with. You can change or add multiple email addresses separated by comma.

This is the email address where you receive the notification email when the transaction is executed successfully or if there is an error during the execution.

- Click **Next**.



Select Partner

Training Partner CE

Cancel Next




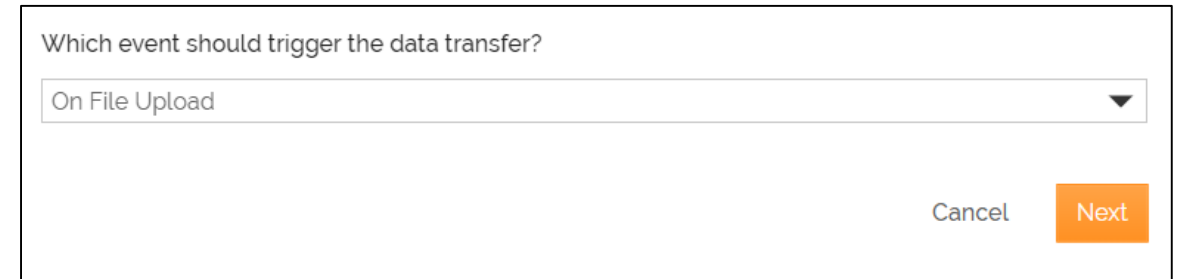
Contact User ⓘ

akash.jaiswal@adeptia.com

Cancel Next

Exercise 2

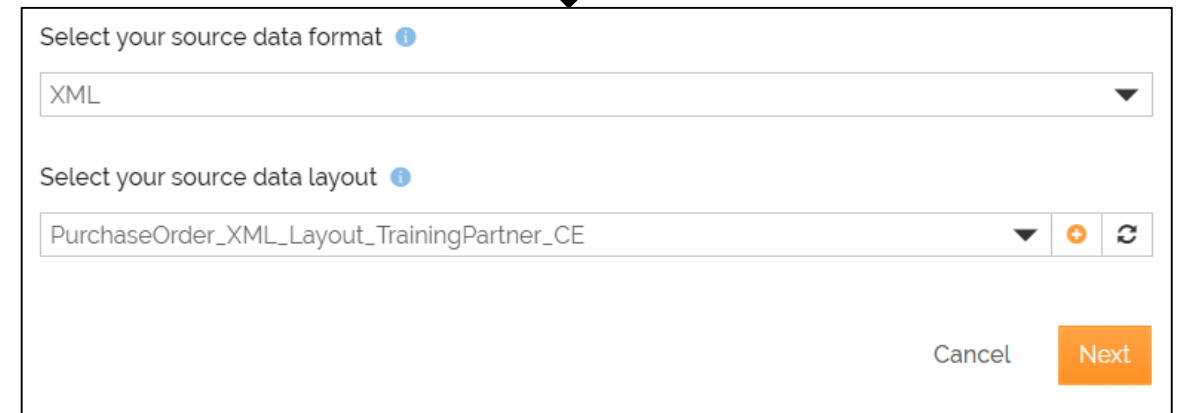
- Keep **On File Upload** selected in the **Which event should trigger the data transfer?** field.
- Click **Next**.
- Select **XML** from the drop-down list of the **Select your source data format** field.
- In the **Select your source data layout** field, click  to create a new XML layout.
- On the **Create Layout** page, do the following steps:
 - In the **Name** and **Description** fields, enter the layout's name and description respectively.
 - In the **File Path** field, click **Choose File** to Browse and select the XSD file.
 - Click **Validate XSD** to validate the path of the file in the File Path.
 - Leave the rest of the fields as they are.
 - Click **Save**.
- After the XML layout is created, it will be automatically selected in the **Select your source data layout** field.
- Click **Next**.



Which event should trigger the data transfer?

On File Upload

Cancel Next



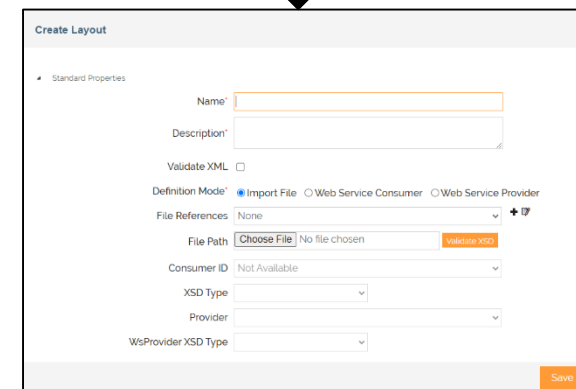
Select your source data format ⓘ

XML

Select your source data layout ⓘ

PurchaseOrder_XML_Layout_TrainingPartner_CE

Cancel Next



Create Layout

Standard Properties

Name:

Description:

Validate XML

Definition Mode: Import File Web Service Consumer Web Service Provider

File References: None

File Path: Choose File No file chosen Validate XSD

Consumer ID: Not Available

XSD Type:

Provider:

WsProvider XSD Type:

Save

Exercise 2

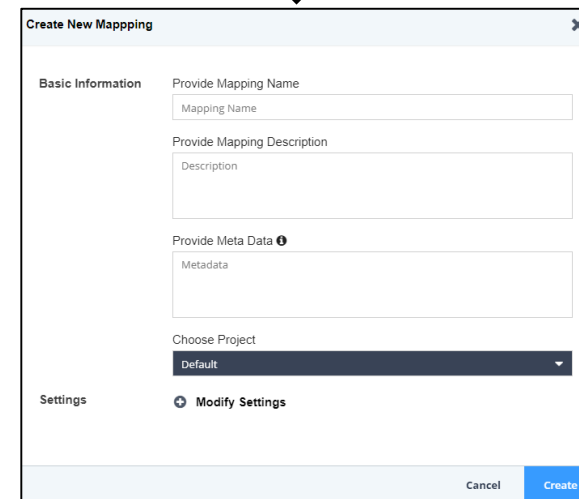
- On the **Data_Decryption** page, keep the **Is source file encrypted?** check box unchecked.
- Click **Next**.
- On the **Define Mapping** page, click + icon.
- In the **Create New Mapping** window:
 - Type the mapping name and description of the new mapping activity.
 - Leave the rest of the fields as they are.
 - Click **Create**.



A screenshot of a form element with a checkbox labeled "Is source file encrypted?". The checkbox is unchecked. To the right of the checkbox is a blue information icon. At the bottom right of the form are two buttons: "Cancel" and "Next".



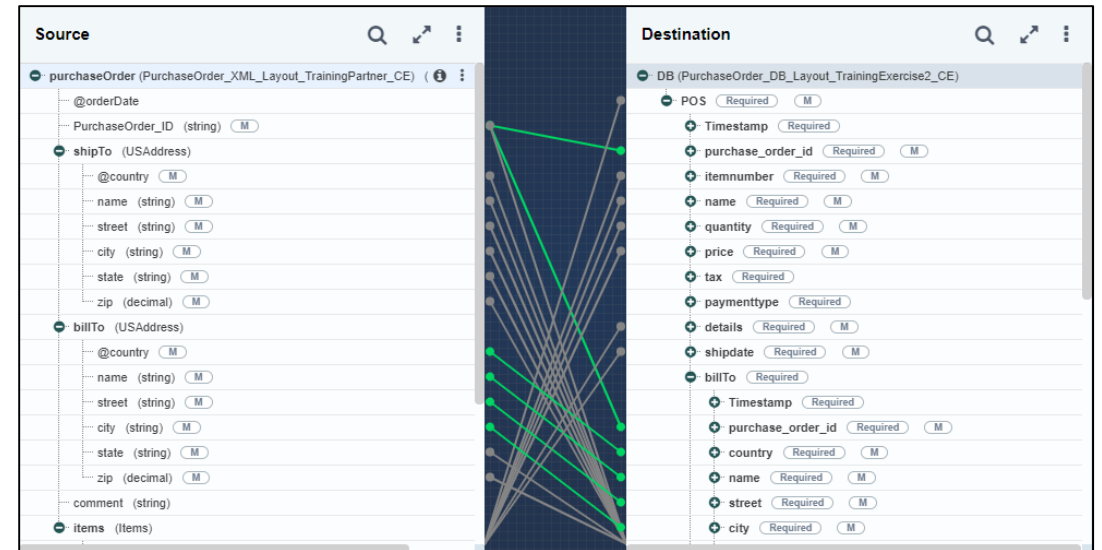
A screenshot of a "Select Mapping" dropdown menu. The menu is currently closed, showing the word "Select" in a light gray box. To the right of the box are three icons: a downward arrow, a plus sign, and a refresh symbol.



A screenshot of the "Create New Mapping" dialog box. The dialog has a title bar with a close button. It is divided into two main sections: "Basic Information" and "Settings". Under "Basic Information", there are three text input fields: "Provide Mapping Name" (with "Mapping Name" entered), "Provide Mapping Description" (with "Description" entered), and "Provide Meta Data" (with "Metadata" entered). Below these is a "Choose Project" dropdown menu with "Default" selected. Under "Settings", there is a "Modify Settings" button. At the bottom right of the dialog are "Cancel" and "Create" buttons.

Exercise 2

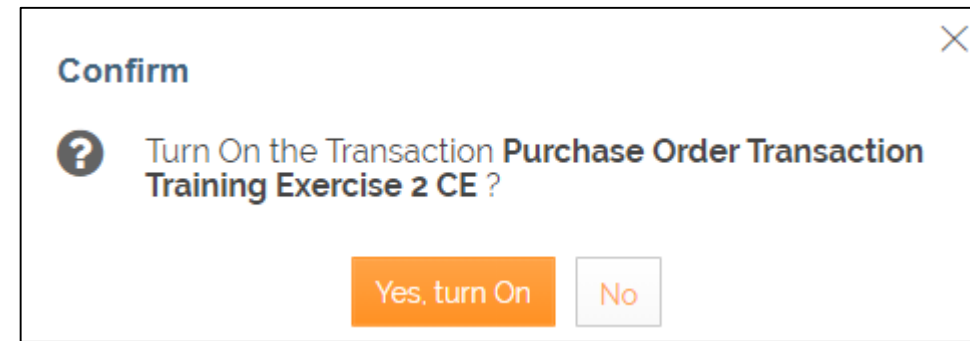
- After you click **Create**, it opens a **Data Mapper** page in a new tab.
Note: Ensure that your browser has not blocked the pop-up.
- In the Web Mapper, the Source and the Destination layout are loaded automatically based on the Layout you had selected while creating Source Layout and Advanced Database Target.
- To map the elements, use the drag and drop approach. Click and drag the Source element and drop it to the Destination element.
 - For example, click name element in Source layout and drag it to the name element in the Destination.
 - Likewise, you can do for rest of the source elements to map with related destination elements.
- Once mapping is done, save the mapping (though by default mapping is autosaved) and close the Web Mapper.
- After the mapping is created, it will be automatically selected in the Select Mapping field.
- Click **Save & Exit** on the **Select Mapping** page to save the transaction.



The 'Select Mapping' dialog box shows a dropdown menu with the selected mapping 'PurchaseOrder_XMLtoDB_TrainingPartner_Map_CE'. There are plus and refresh icons to the right of the dropdown. At the bottom right, there are 'Cancel' and 'Save & Exit' buttons.

Exercise 2

- You have created your transaction successfully. You will be prompted to turn on the transaction. Click **Yes, turn on**.
- You can view the transaction on the **Transactions** home page.
- On the **Transactions** page, locate the transaction and click **Run Now**.
- As this is a file upload transaction, you will be asked to browse and upload the XML file.
- After you have uploaded the file, you get a confirmation message about the successful execution of the transaction.
- You can check the status of the transaction on the Dashboard.



A screenshot of a web application interface showing a table of transactions. A context menu is open over the first row, which is highlighted in yellow. The table has columns: NAME, TYPE, PARTNER, OWNER, MODIFIED, and ACTION. The first row is "Purchase Order Transaction Training Exercise 2 CE" with a status of "OFF" and a toggle switch set to "ON". The context menu includes options like "Run Now", "View", "Edit", "Delete", "Check-in", "Replace With", "Revision History", "View References", "Add to Favorite", "Run History", "Create Copy", "Template Used", and "Edit Contact User".

NAME	TYPE	PARTNER	OWNER	MODIFIED	ACTION
Purchase Order Transaction Training Exercise 2 CE	Convert I.	Training Part..	Carlos Esca..	Today 3:39 AM	OFF <input checked="" type="checkbox"/> ON
Inventory Items Processing Training Partner 4 Ext CE Tr..	CUSTOM..	Training Part..	Carlos Esca..		
Inventory Items Processing Training 4 Ext CE Transaction	CUSTOM..	Training Part..	Akash Jaisv		
Common Purchase Order Post Process Training Partner..	Pass-Thr..	Training Part..	Carlos Esca..		
Employee Benefits Transaction Training Exercise 1 CE	DATA INT..	Adeptia	Carlos Esca..		
EmployeeBenefitsTransaction	DATA INT..	Adeptia	Training Us		

Process Designer

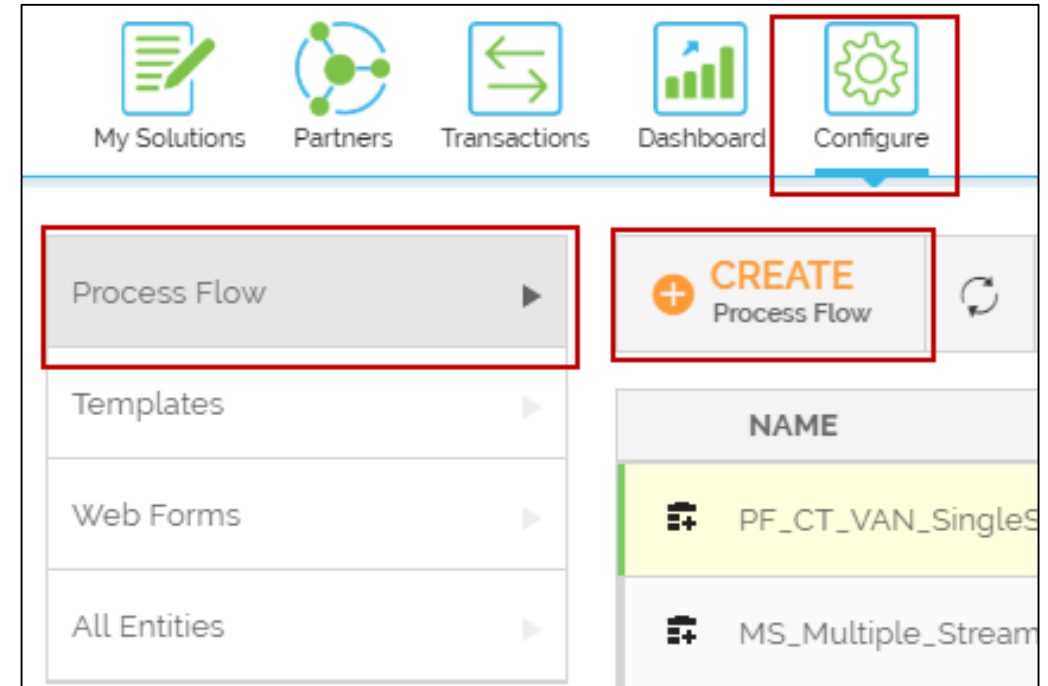
Process Designer

Combining various activities such as Source, Destination, Layout, Mapping creates a process flow. A Process Engine controls the execution of a process by starting the execution of process flow instances and all the activities present in a process flow. When the process flow is executed, data from the source is converted to the intermediate form and dispatched to the destination.

- Adeptia Connect offers a web-based graphical process design interface
- It is a simple to use, drag and drop interface to build a flow
- It allows both “top-down” and “bottom-up” approach for building processes
- Includes a powerful, full-featured engine for process execution
- Process engine logs all runtime information

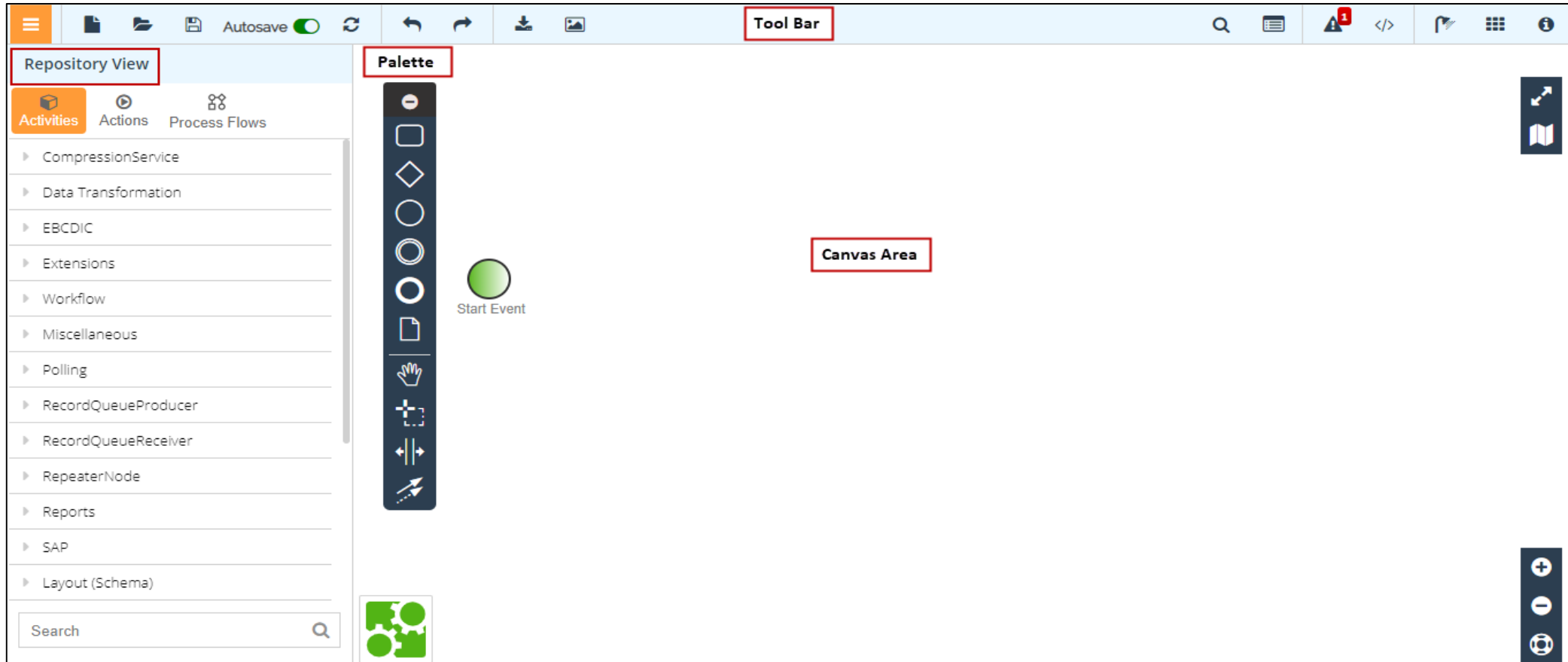
To access process designer or existing process flows, log in to Adeptia Connect.

1. Go to the **Configure** tab.
2. Click **Process Flows** from the Left Pane.
3. Click **Create Process Flow**.
4. A new tab in your browser asking for PF’s name and description.



Process Designer

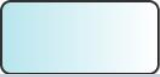









Process Designer Canvas Overview



Refer to the [help page](#) for detailed information on various options available in the process designer.

Process Designer

Palette: The Palette contains a list of BPMN graphical elements that are used to define the flow of business processes.

Element	Description	Notation
Activity	An activity is a work that is performed within a business process. The rectangle image displayed in the next column is used to depict an activity in a process flow.	
Gateways	A Gateway is used to control the divergence and convergence of a sequence flow. Thus, it determines branching, forking, merging, and joining of paths.	
Start Event	A start event starts the execution of a process.	
Error Intermediate Event	Error Intermediate Event is used to redirect Process Flow execution to an alternate path in case of failure of any activity during process flow execution.	
End Event	An end event, ends the flow of a process flow.	
Data Object	Data Objects do not have any direct effect on the sequence flow of the process. They are used to provide additional information for the reader of the process flow diagram. You can add any amount of information in this element.	
Hand Tool	A Hand tool is used to move all the activities in the Canvas area.	
Lasso Tool	Lasso tool helps to select multiple BPMN elements from the Canvas Area and move them to another location.	
Create/Remove Space Tool	Space tool is used to increase the space between the two BPMN elements.	
Global Connect Tool	Global Connect Tool used to connect the BPMN elements in Canvas area and it shows the order that activities are performed in a business process.	

Process Designer

Top-down approach: Pull in the activity shapes or notation from the Palette to design a process flow.

- First, design the process
- Second, configure it by attaching activities from the repository, making the design a functional process flow

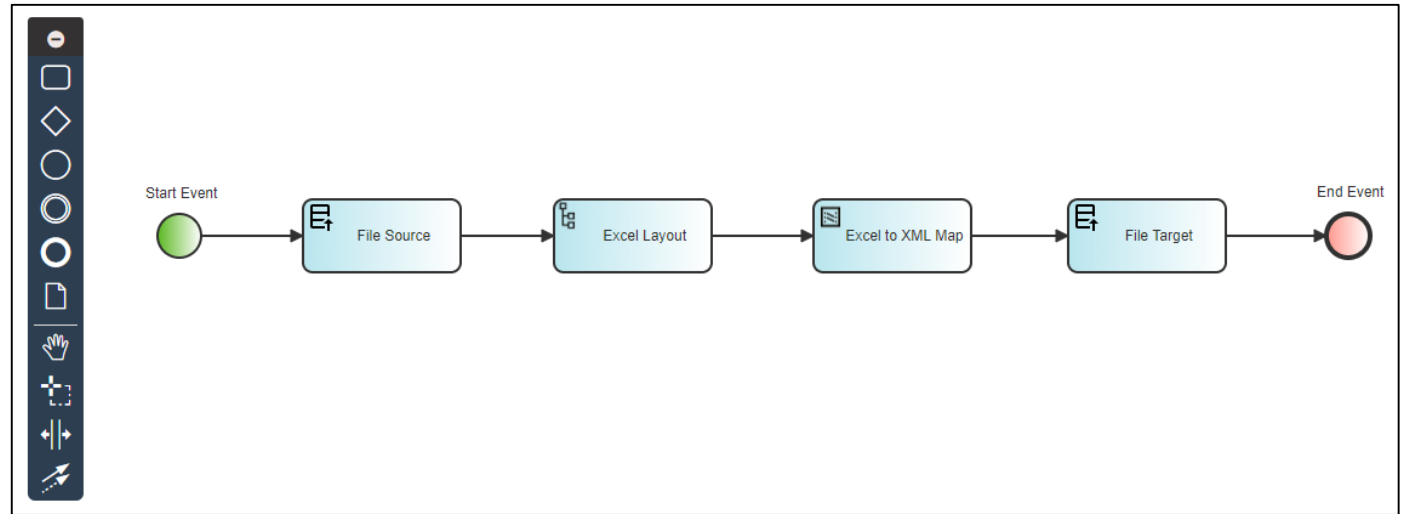
Advantage of using Top-down approach is that Users can first design and finalize the flow before starting to configure it.

Bottom-up approach: Pull in the activities that are already configured from the Repository View and use for designing the process.

Process Designer

To design a flow, simply click on the desired box from the palette and connect these with the arrows and finish the flow with an End Event.

Process flow typically begins with a Start Event, followed by other activities. As mentioned in the previous slides, in a Top-down approach you should place the blank placeholders using palatte and complete the process flow. Once done, you can start attaching the activities from the repositories by clicking on Options on each of the box.

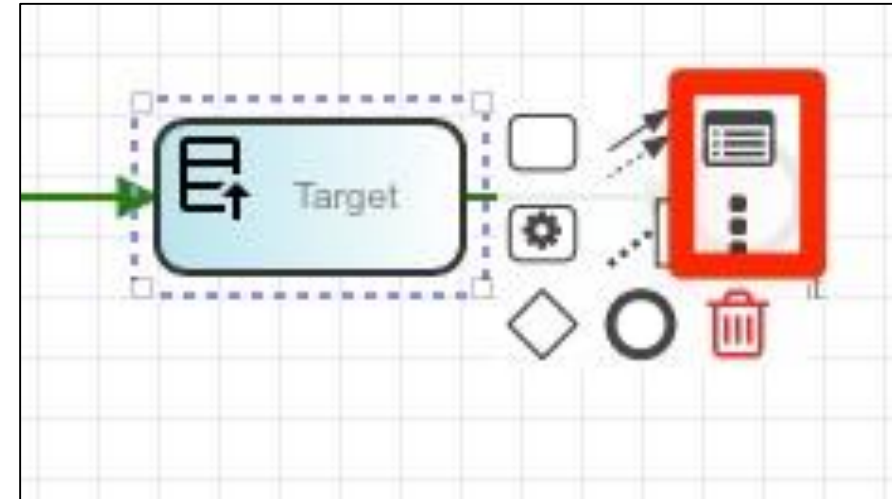


Process Designer

Attaching preconfigured activity to a Process Flow

After you have created the design of your process flow in a Top down approach you may need to attach required activities from the repository. To do this:

- Double click on the activity box to view the menu options.
- From Properties and Options you can attach a pre-configured activity from the repository.



Process Designer

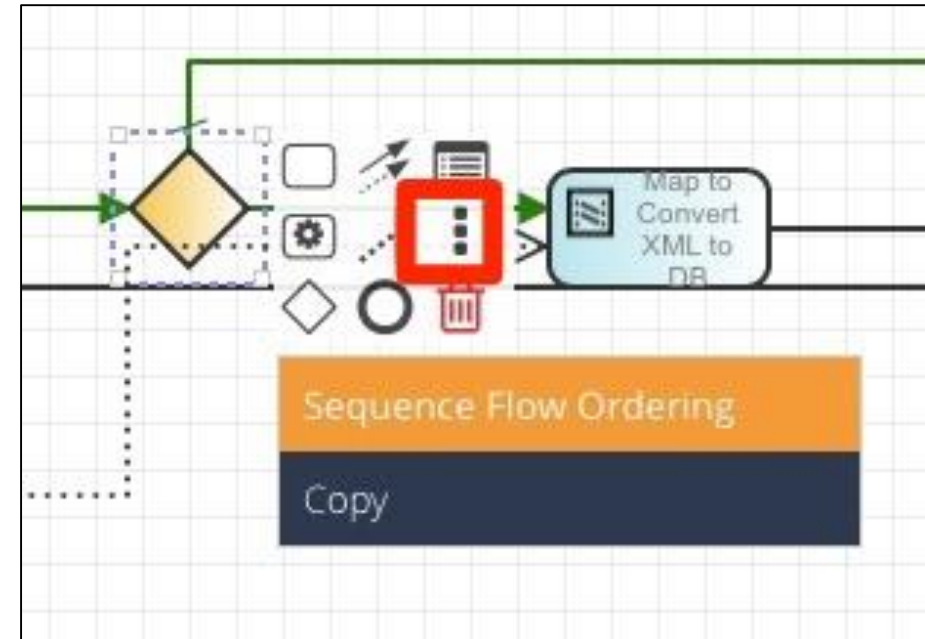
Gateways

A Gateway is used to control the divergence and convergence of a sequence flow. Thus, it determines branching, forking, merging, and joining of paths.

You can add a Gateway while designing a Process Flow by using a **decision box like image** from the menu.

After you have appended activities to the more than one side of the Gateway, you can click the connecting arrow to choose the default flow from the Gateway. To do this:

Click on appended arrow to decide the default or sequence flow.



Process Designer

Using Variables

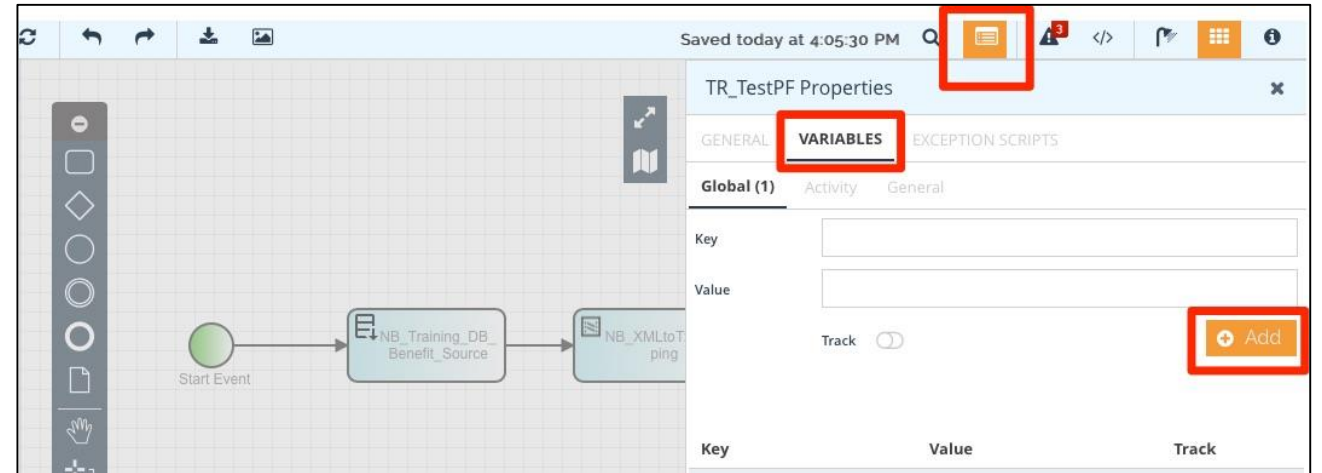
A variable is declared when the action is executed while running the process flow. Variable is generally used to set the value of any field of an activity used in a process flow, during the execution of the process flow.

You can create variables at mainly two levels:

- Process Flow Variable: Variables set at the process flow level
- Activity Variable: Variables that are set at an activity level, these are of types:
 - Input Variables
 - Output Variables

To set a process flow variable:

1. Go to the top banner of an opened process flow and click on View Process Flow Properties to open the Properties pane.
2. On the Properties pane, click Variables and go to Global.
3. Give the Variable Key and Value.
4. Click Add to add the variable.

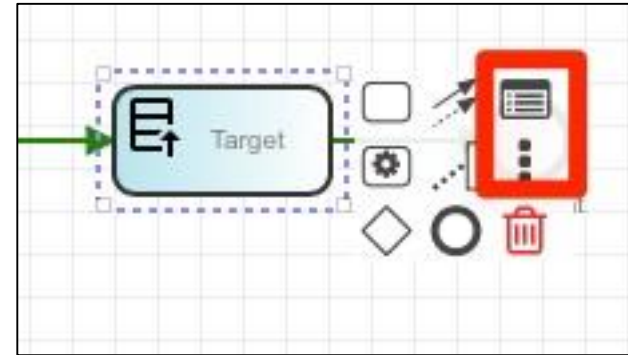


Process Designer

Activity Variables

To set variable at an activity:

1. Double click on the activity, where you want to create a variable.
2. From the Menu, click on View Properties option to open Activity Properties pane.
3. In the Activity Properties Pane, go to VARIABLES.
4. Choose the Input or Output Variable.
5. Give the Variable Key and Value.
6. Click Add to add the variable.

A screenshot of the 'Activity Properties' dialog box. The title bar says 'Activity Properties' with a close button. There are four tabs: 'GENERAL', 'COMMENTS', 'STREAMS', and 'VARIABLES'. The 'VARIABLES' tab is selected. Underneath, there are two sub-tabs: 'Input' and 'Output'. The 'Input' sub-tab is selected. Below the sub-tabs, there are two radio buttons: 'Process' (unselected) and 'Activity' (selected). Below the radio buttons, there is a 'Name' field with a dropdown arrow and a 'Value' field. At the bottom right, there is an orange 'Add' button with a plus icon.

Process Designer

Multiple Streams

Stream represents the flow of data in a process flow. Multiple streams are used when the output of an activity needs to be sent to two or more activities in a process flow. To create multiple streams:

1. Double click the activity in area for which you want to create multiple streams.
2. Click on the properties option from the menu.
3. In the Activity Properties panel, go to **STREAMS > Output**. The existing stream is displayed.
4. To create a new Stream, enter the name for the Stream in the **Name** field and select the consumer from **Consumer** drop-down list.
5. Click **Add** to add the stream.

Process Designer

Stream Selector

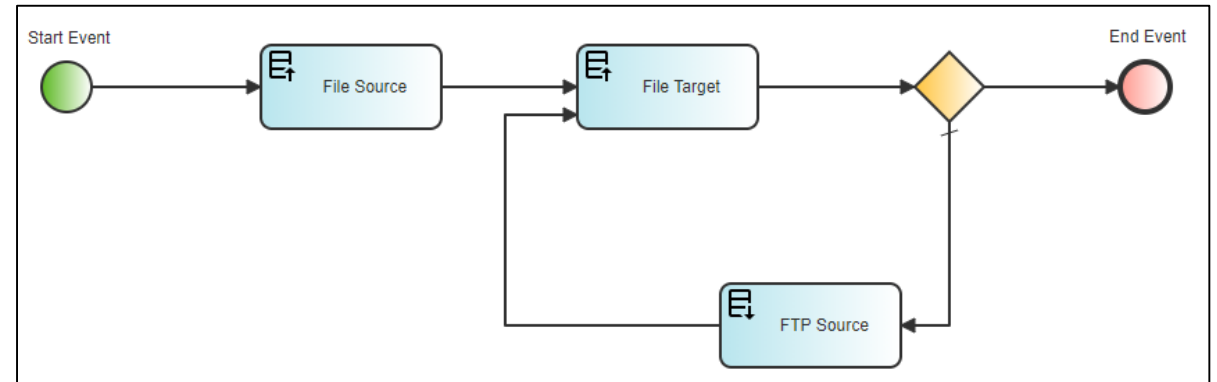
When you have used more than one input stream in an activity, Stream Selector is used to specify the input stream to be consumed by the activity. To understand the use of Stream Selector, consider the following process flow.

In this process flow, there are two input streams are passed to the *File_Target*. The default execution sequence is that first *File_Source* will be executed then *File_Target* and thereafter the *Gateway*. Now, if the condition specified at the *Gateway* is satisfied, the process flow will be finished.

If the condition specified at *Gateway* is not satisfied, the control will be passed to the *FTP_Source* and further to *File_Target*. Practically, when this process flow will be executed, the *File_Target* activity will get confused whether to take input from *File_Source* or from *FTP_Source*. Thus, this process flow will fail.

To avoid such situation, **Stream Selector** is used. Streams from *File_Source* and *FTP_Source* are passed to the Stream Selector and then from the Stream Selector to the *File_Target*.

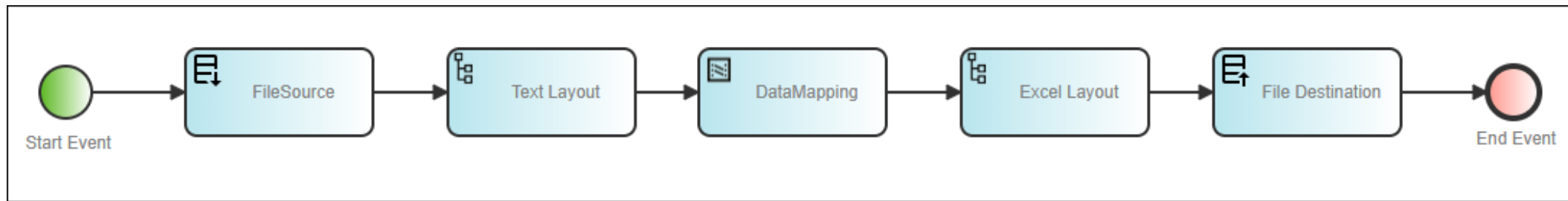
Refer to the [help page](#) to know how use a stream selector in this example.



Process Designer

Error Intermediate Event

Error Intermediate Event is used to redirect process flow execution to an alternate path in case of failure of any activity during process flow execution. To understand the use of Error Intermediate Event, consider the following process flow:



In this process flow, data from a text file is converted to an excel file using schema and mapping activities. You may want to be notified if the mapping activity fails during process flow execution.

To handle this situation, you can attach **Error Intermediate Event** with the mapping activity so that in case mapping activity fails, a notification activity is executed and sends an email to the specified email address. Use of Error Intermediate Event is displayed in the following figure.

Refer to the [help page](#) to know how to apply an Error intermediate Event with this example.

Exercise 3: Purchase Order Data Transformation Using a Post Process

Exercise 3

Prerequisites

- Available sample XML or XSD file with same fields received in PO XML.
- Access to the database where the data of PO XML should be placed.
- Destination Database has the tables created with desired columns.
 - You should be able to map the data from XML layout to these columns when you do mapping.

Exercise 3

This process flow integrates Purchase Order data into a back-end Point of Sales Database.

Design:

Design this process in the Process Designer using the bottom up approach. Apply a rule that will check for the Item Quantity in the source file and if it is greater than 100, process will not load the data into Database and instead it will email the Source file to a User as an Email attachment. If the Quantity is less than 100 then the process will load the data into the database.

Configure:

Configure the process by creating below services and attaching them to the appropriate steps in the process flow:

- Create LAN File Source
- Use Advanced Database target from exercise 2
- Use XML layout from exercise 2
- Use Advanced Database layout from exercise 2
- Update XML to Adv Database Mapping
- Create Mail target

Exercise 3

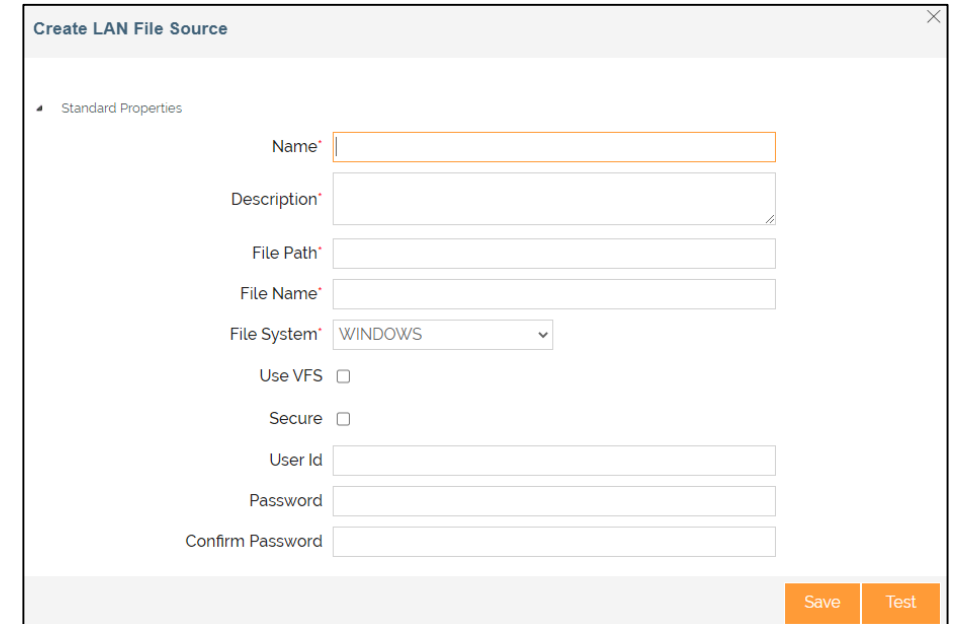
Creating a LAN file source

- On the home page, click **Configure > SOURCES > LAN File Source**.
- Click **Create LAN File Source**.
- On the **Create LAN File Source** page, do the following steps:
 - In the **Name** and **Description** fields, enter the LAN file source's name and description respectively.
 - In the **File Path** field, enter the network path of the source file in the following format:
`\\hostname\folder name`.
 - In the **File Name** field, enter the name of the source file, for Example:
Employee_Info.xls.
 - In the **File System** field, select **WINDOWS**.
 - Clear the **Secure** check box.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Refer to [Help](#) documentation for more details.

Note:

- File name in this activity will be overwritten by the actual XML file that will be passed by the File Event to this activity.
- If File Event is not used to run the process then user must enter the actual source file name in this field. At run-time Source file names can vary and in order to handle this scenario we use File Event which would pass those files to the LAN File Source.
- LAN File Source will ignore the hard-coded file name given in the activity and instead will use the one passed by the trigger.



The screenshot shows a web-based configuration window titled "Create LAN File Source". The window contains a section for "Standard Properties" with the following fields and options:

- Name***: A text input field.
- Description***: A text input field with a small icon in the bottom right corner.
- File Path***: A text input field.
- File Name***: A text input field.
- File System***: A dropdown menu currently set to "WINDOWS".
- Use VFS**: A checkbox, currently unchecked.
- Secure**: A checkbox, currently unchecked.
- User Id**: A text input field.
- Password**: A text input field.
- Confirm Password**: A text input field.

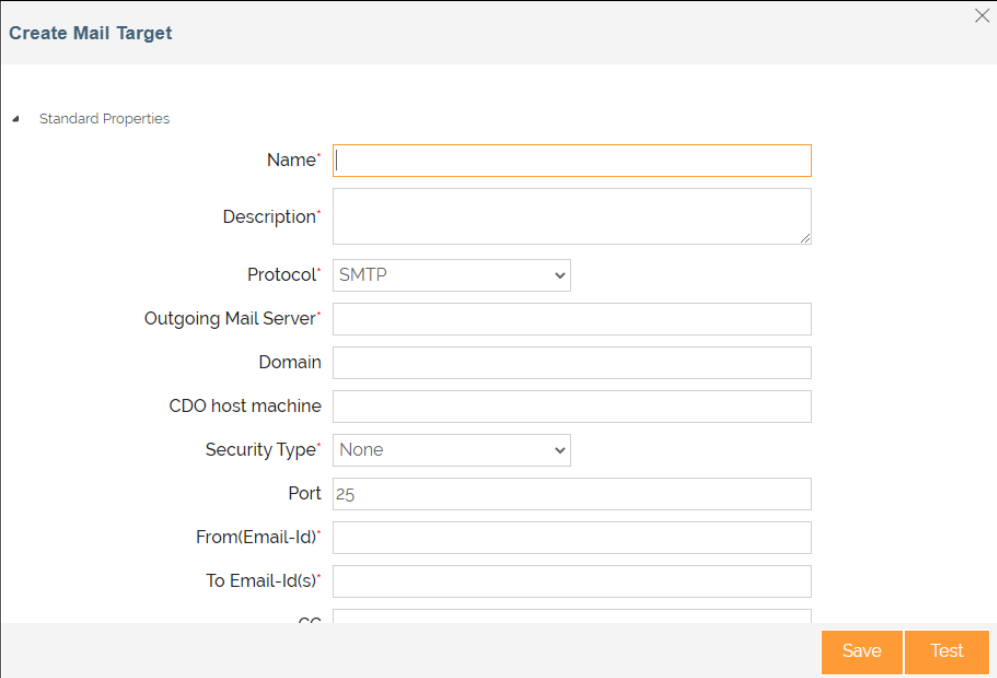
At the bottom right of the window, there are two buttons: "Save" and "Test".

Exercise 3

Creating a Mail target

- On the home page, click **Configure > TARGETS > Mail Target**.
- Click **Create Mail Target**.
- On the **Create Mail Target** page, do the following steps:
 - In the **Name** and **Description** fields, enter the mail target's name and description respectively.
 - In the **Outgoing Mail Server** field, enter the SMTP server address.
Note: Make sure you have the SMTP server settings available to setup the Email Target activity. You can get this information from your email service provider.
 - In the **Security Type** field, select **SSL**.
 - In the **Port** field, enter the port number.
 - In the **From(Email-Id)** field, enter the sender's email id.
 - In the **To Email-Id(s)** field, enter the email-Id(s) of the recipients separated by commas.
 - In the **Subject** field, enter the subject of the Target email.
 - In the **File Name** field, enter the name of the file, if the data is to be sent in the email as an attachment.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Refer to [Help](#) documentation for more details.



The screenshot shows a 'Create Mail Target' dialog box with the following fields and options:

- Name:** Text input field.
- Description:** Text input field.
- Protocol:** Dropdown menu with 'SMTP' selected.
- Outgoing Mail Server:** Text input field.
- Domain:** Text input field.
- CDO host machine:** Text input field.
- Security Type:** Dropdown menu with 'None' selected.
- Port:** Text input field with '25' entered.
- From(Email-Id):** Text input field.
- To Email-Id(s):** Text input field.
- CC:** Text input field.

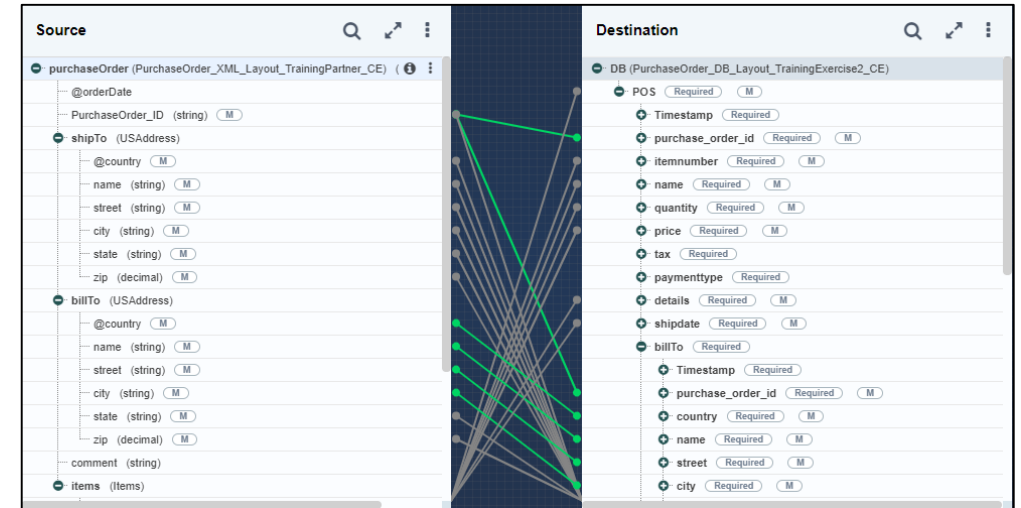
At the bottom right, there are two buttons: 'Save' and 'Test'.

Exercise 3

Contd...

Mapping between XML and Advanced Database layout

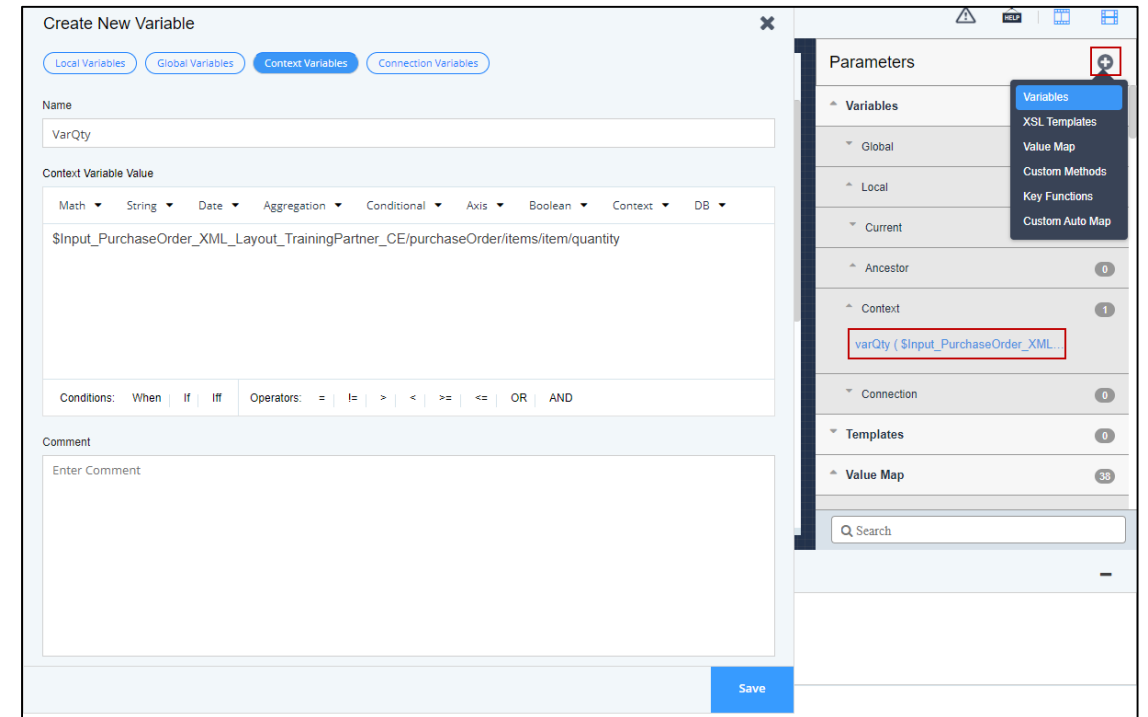
- On the home page, click **Configure > DATA TRANSFORMATION > Mapping**.
- Click **Create Mapping**.
- In the **Create New Mapping** window:
 - Type the name and description for the new mapping service.
 - Click **Create**.
- After you click **Create**, it opens a **Data Mapper** page in a new tab.
Note: Ensure that your browser has not blocked the pop-up.
- On **Select Layout** screen,
 - Select the **XML layout** that you have created as a **source**.
 - Select the **Advanced Database layout** that you have created as a **destination**.
 - Click **Load**.



Exercise 3

Mapping between XML and Advanced Database layout

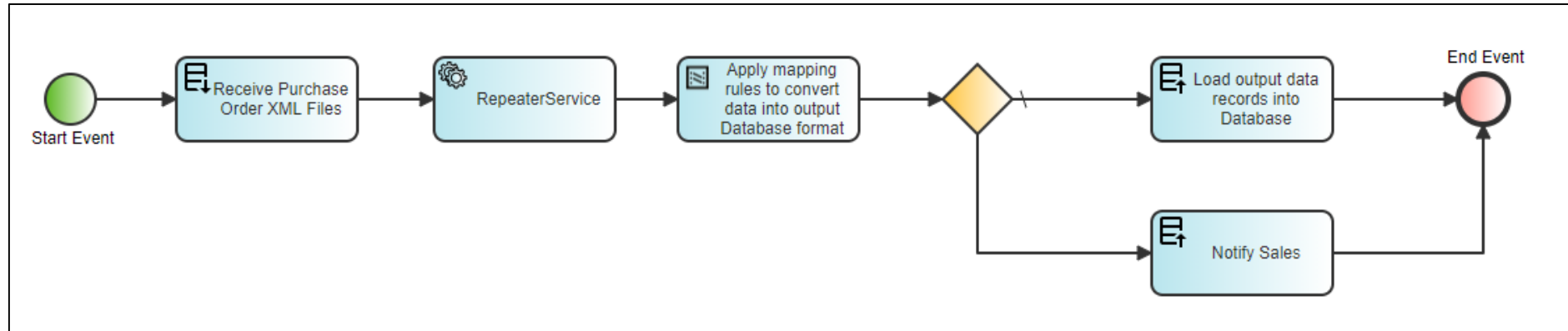
- To map the elements, use the drag and drop approach. Click and drag the Source element and drop it to the Destination element.
 - For example, click **name** element in Source layout and drag it to the **name** element in the Destination.
 - Likewise, you can do for rest of the source elements to map with related destination elements.
 - Click on the Record node of the Target layout.
 - Click **Add Parameters** icon in the **Parameters** panel and select **Variables**.
 - In the **Create New Variable** window, select the **Context Variable**.
 - In the **Name** field, enter the variable name, for example, **varQty**.
 - Place the cursor inside the **Context Variable Value** editor and double click the quantity field in the source layout.
 - Click **Save**.
- Once mapping is done, save the mapping (though by default mapping is autosaved) and close the Web Mapper.



Exercise 3

Contd...

Using the activities that you have just created, design a process flow as illustrated below:



To create the process flow:

- Click **Configure > Process Flow > Create Process Flow**.
- On **Create New Process Flow** screen, enter the details in the **Name** and **Description** fields.
- Leave the rest of the fields as they are.
- Click **Done**.

Process Designer window opens in a new tab. You can design the process flow using the pre-defined activities.

Exercise 3

Contd...

- Pull in the activities that you have already configured from the **Repository View**.
- Connect all the activities using the sequence flow and connect the activities as shown in the previous slide.
- Place the **Repeater service** between the source and mapping activity and connect the activities as shown in the previous slide.

The Repeater service creates a clone of a data stream which we can map to different activities in the flow. Here one stream will be consumed by the NotifySales email target and the other by the mapping activity.

- Place a **Gateway** condition and connect the **NotifySales** with Sequence flow arrow and the **Database target** with Default Sequence flow arrow as shown in the previous slide.

A Gateway in a process flow is where you define a condition to be satisfied before an output can proceed to the next stage. Based on a set of conditions, the Gateway decides and directs the output from the previous service to the next stage in the process flow. For example, the Gateway (decision node) as shown in the flow connects the NotifySales with Sequence flow arrow and the Database target with Default Sequence flow arrow.

- Click **Repeater Service** and select **View Properties** icon from the **Context Pad** menu and perform the following steps:
 - On the **Activity Properties** panel, select **STREAMS** tab.
 - Click **Output** tab.
 - In the **Name** field, enter the name of the stream.
 - In the **Consumer** field, select the service.
 - Click **Add**.

The screenshot shows a BPMN process flow on the left and the Activity Properties panel on the right. The process flow includes a Start Event, a 'Receive Purchase Order XML Files' activity, a 'RepeaterService' activity (highlighted with a red box), and a 'Apply mapping to convert data into output database format' activity. The Activity Properties panel is open to the 'STREAMS' tab, with the 'Output' sub-tab selected. The 'Streams' table is visible below.

Name	Error	Consumer	Visible	
RepeaterService	<input type="checkbox"/>	PurchaseOrder_XMLtoD	<input type="checkbox"/>	
2	<input type="checkbox"/>	PurchaseOrder_NotifySa	<input type="checkbox"/>	

Exercise 3

Contd...

- Click on the **Sequence Flow** arrow that is connecting the Decision node to the Notify Sales and perform the following steps:
 - Click **Options** icon and select **Edit Condition**.
 - In the **Sequence Flow Condition** window, click **Add** under **Rule Information** tab.
 - In the **Name** field, enter the name of the rule.
 - In the **Reason** field, enter the specific reason for this rule.
 - In the **Expression** field, enter the rule (**\$\$varQty\$\$>100**).
 - Click **Done** to save the rule.
 - Click **Done** to close the window.
- Click on the **Decision Node** and perform the following steps:
 - Select **Options** icon from the context pad menu and then **Sequence Flow Ordering**.
 - In the **Sequence Flow Ordering** window, order the **NotifySales** condition to the top, since this is the condition which will be evaluated first.
 - Click **Done**.

Sequence Flow Condition

Process Variable Java Expression

Rule Information Edit Quantity Rule

Name: Quantity Rule Reason: Quantity rule to notify sales for large quantities

Declare Activity Attribute/Variable to build Expression

Existing Activity: Activity Attribute/Variable: Operand Type: Number Operator: = Value: Add

Declare Operator to build Expression

Operator: && || Add

Expression: (\$\$varQty\$\$>100)

Cancel Done

Sequence Flow Ordering

#	Sequence Flow	Target	Reorder
1		Notify Sales	⬆ ⬇ ⬆
2		Load output data recor...	⬆ ⬇ ⬆

Cancel Done

Exercise 3

- Perform the following steps on the mapping service:
 - Click the **Mapping** service and select **View Properties** icon from the context pad menu.
 - On the **Activity Properties** panel, select **STREAMS** tab.
 - Click **Output** tab.
 - In the **Name** field, enter the name of the stream.
 - In the **Consumer** field, select the database target service.
- Click **Add**.

This is required is because the Database Target needs a data stream to consume and Mapping's output needs to be mapped to this target activity. If the condition is not met (if qty <= 100) then the data will be loaded into the Database.

- **Save** the process flow.
- Publish this process flow as **Post Process** by clicking **More** menu and selecting **Publish as Post Process**.
- Click **Yes, Publish it** on the confirmation message.

The screenshot displays a BPMN editor interface. On the left, a process flow diagram shows an activity 'Apply mapping rules to convert data into output Database format' connected to a gateway, which then branches into two parallel activities: 'Load output data records into Database' and 'Notify Sales'. Both activities lead to an 'End Event'. The 'Apply mapping rules...' activity is highlighted with a red box. On the right, the 'Activity Properties' panel is open, with the 'STREAMS' tab selected. The 'Output' sub-tab is active. The 'Name' field is empty, and the 'Consumer' dropdown menu is open, showing 'PurchaseOrder_DBTarget' selected. The 'Error' and 'Visible' checkboxes are unchecked. An 'Add' button is visible at the bottom right of the panel. Below the 'Streams' section, a table lists the configured stream:

Name	Error	Consumer	Visible	
Applymappingrulest...	<input type="checkbox"/>	PurchaseOrder_DBTarget	<input type="checkbox"/>	

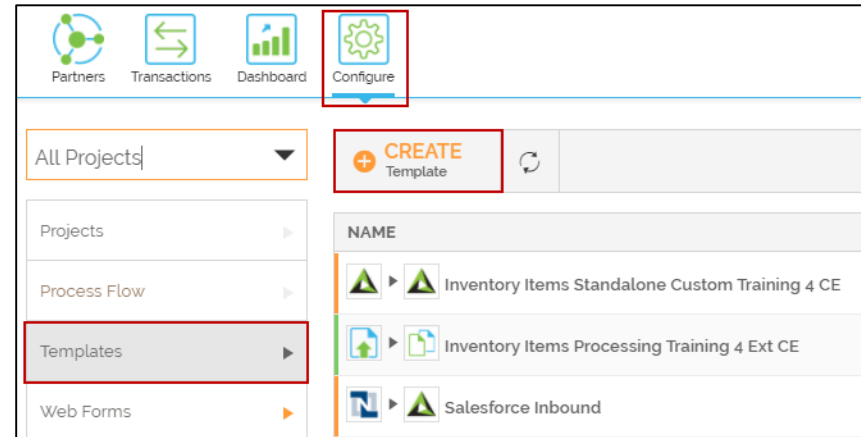
Exercise 3

Create a template of type 'Pass-Thru'.

A Pass-Thru template is useful when you want to send or receive business or file application data without any conversion.

To create the template:

- Click **Configure > Templates > Create Template**.
- On the **Create New Template** screen, provide the name and description of the Template.
- Select the project from the **Select Project** field.
- Click **Continue**.



The screenshot shows the 'Create New Template' form with the following fields and options:

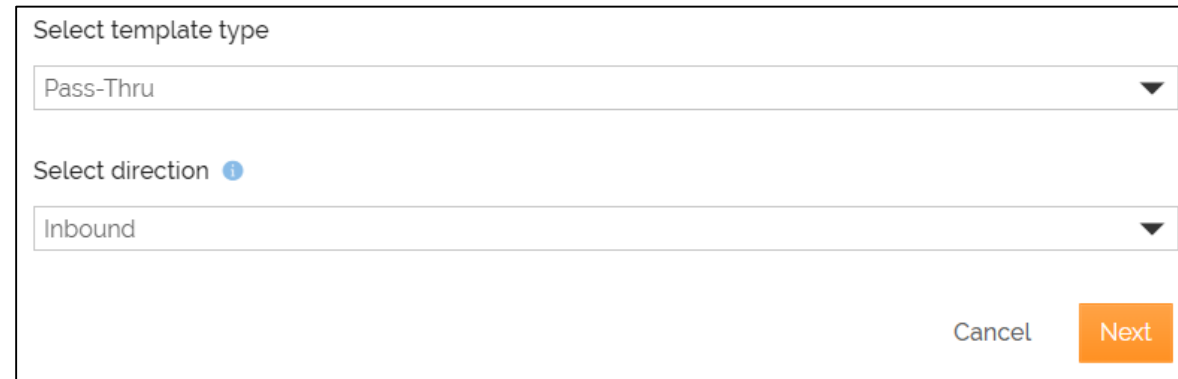
- Provide a name for this template:** A text input field containing 'Common Purchase Order Post Process Training 3 CE'.
- Briefly describe this template:** A text input field containing 'Process purchase orders with extended post processing to internal DB with custom notifications'.
- Select Project:** A dropdown menu with 'Project_1' selected.
- Buttons:** 'Cancel' and 'Continue' buttons at the bottom right.

Exercise 3

- Select **Pass-Thru** in the **Select template type** field.
- Select **Inbound** in the **Select direction** field.
- Click **Next**.
- Select Network in the **Select Network** field.

Only the Partners of the selected Network will be able to access this Template.

- Keep the **Allow Import Partner(s)** check box unchecked.
- Click **Next**.
- On the **Define Parameters** page, click **Next**.



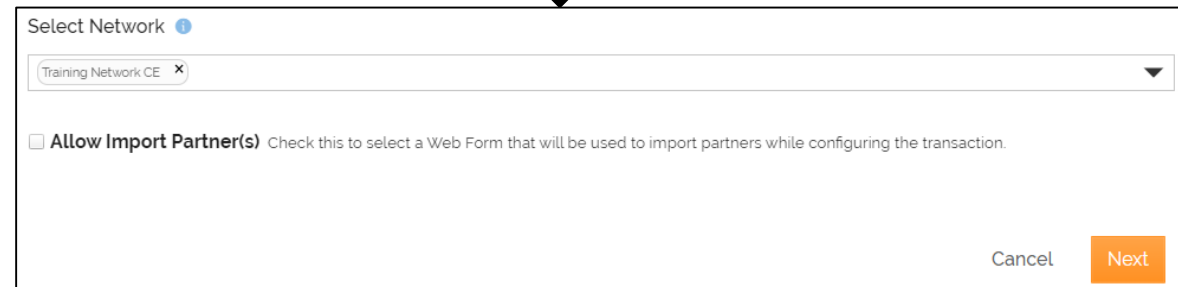
Select template type

Pass-Thru

Select direction ⓘ

Inbound

Cancel Next



Select Network ⓘ

Training Network CE x

Allow Import Partner(s) Check this to select a Web Form that will be used to import partners while configuring the transaction.

Cancel Next

Exercise 3

- On the **Routing Type** page, click **Next**.
- On the **Settings** page, in the **Contact User** field, the email address is automatically pulled from your user profile that you log in with. You can change or add multiple email addresses separated by comma.

This is the email address where you receive the notification email when the transaction is executed successfully or if there is an error during the execution.

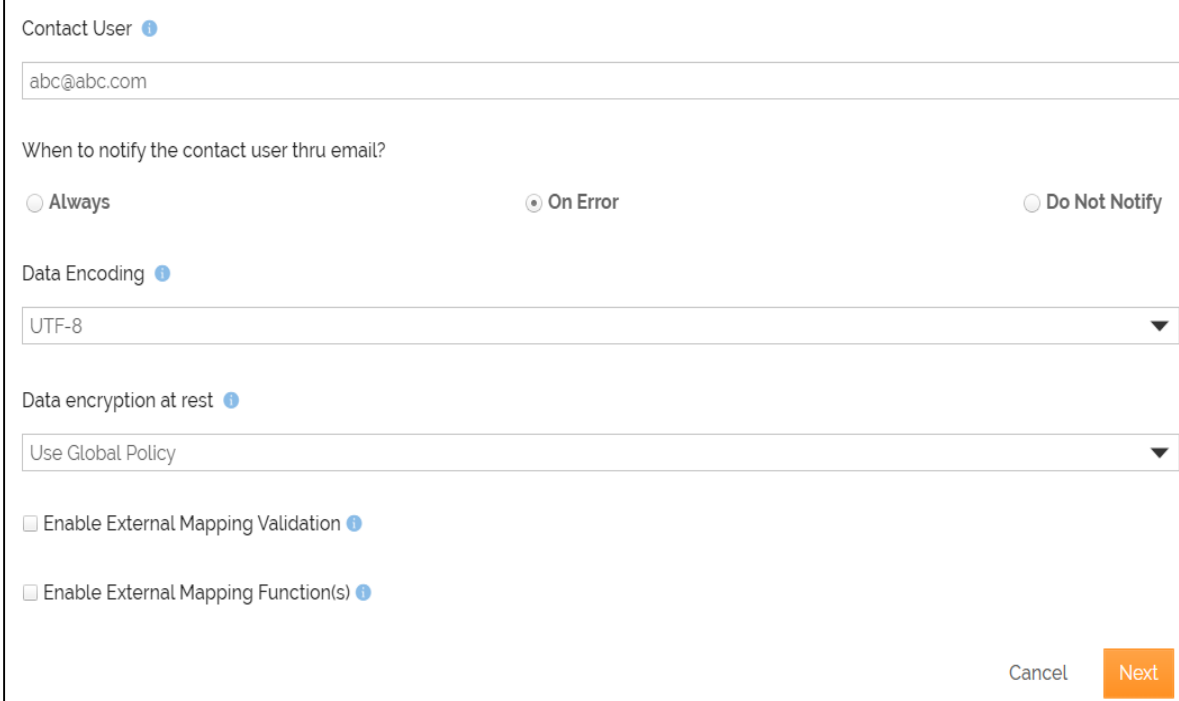
- Keep the rest of the fields as they are.
- Click **Next**.



Select Routing Type

None

Cancel Next



Contact User ⓘ

abc@abc.com

When to notify the contact user thru email?

Always On Error Do Not Notify

Data Encoding ⓘ

UTF-8

Data encryption at rest ⓘ

Use Global Policy

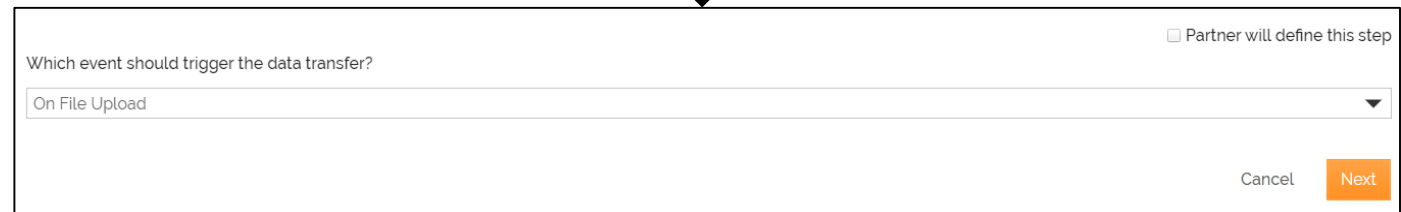
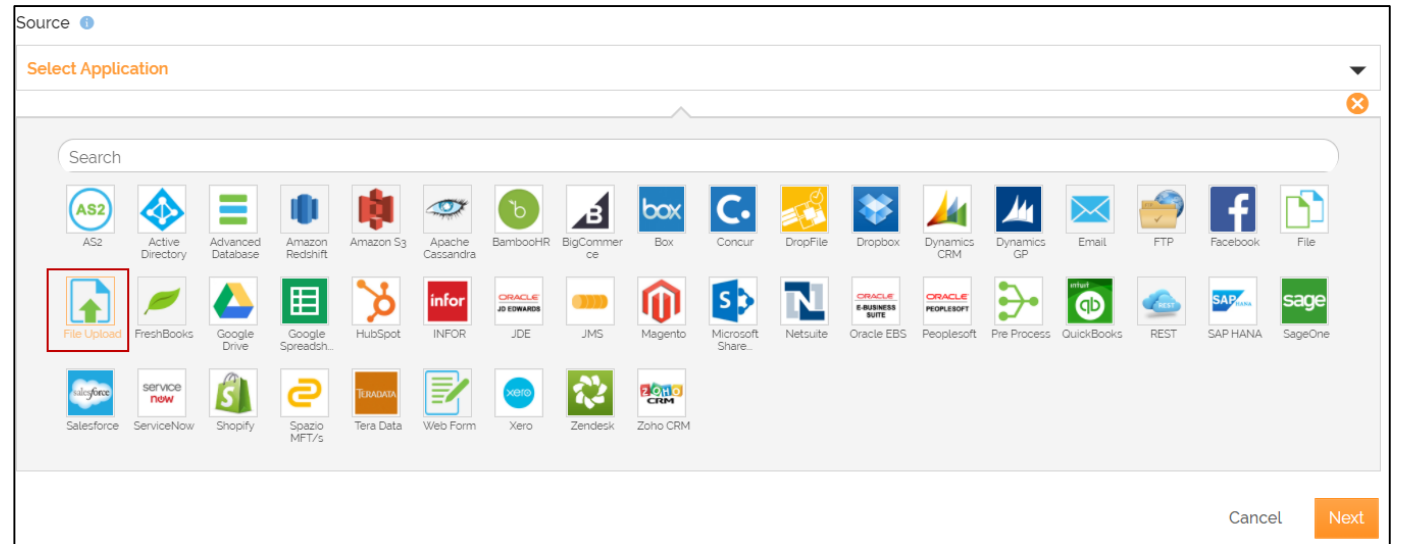
Enable External Mapping Validation ⓘ

Enable External Mapping Function(s) ⓘ

Cancel Next

Exercise 3

- On the **Choose App** page, select **File Upload** and click **Next**.
- On the **Choose Trigger** page, click **Next**.



Exercise 3

- On the **Data_Decryption** page, click **Next**.
- On the **Choose App** page, select **Post Process** in the **Destination** field.
- Click **Next**.

Partner will define this step

Is source file encrypted? ⓘ

Cancel **Next**

Destination ⓘ

Post Process

Search

AS2	Active Directory	Advanced Database	Amazon Redshift	Amazon S3	Apache Cassandra	BambooHR	BigCommerce	Box	Concur	DropFile	Dropbox	Dynamics CRM	Dynamics GP	Email	FTP	Facebook	File	
FreshBooks	Google Drive	Google Spreadh..	HubSpot	INFOR	ORACLE JD EDWARDS	JDE	JMS	Magento	Microsoft Share...	Netsuite	ORACLE BUSINESS SUITE	ORACLE PEOPLESOFT	Post Process	QuickBooks	REST	SAP	SAP HANA	SOAP
SageOne	Salesforce	ServiceNow	Shopify	Tera Data	Xero	Zendesk	Zoho CRM											

Cancel **Next**

Exercise 3

- On the **Choose Action** page, do the following steps:
 - Select **Process Flow** in the **Select Post Process Type** field.
 - Select the process flow that you have created earlier in this exercise in the **Select Process Flow** field.
 - Click **Next**.
- On the **Data_Encryption** page, click **Next**.



Select Post Process Type

Process Flow


Select Process Flow ⓘ

PurchaseOrder_PostProcess_Training_Flow_CE

Process Parameter(s)

+ Add Parameter

Cancel Next



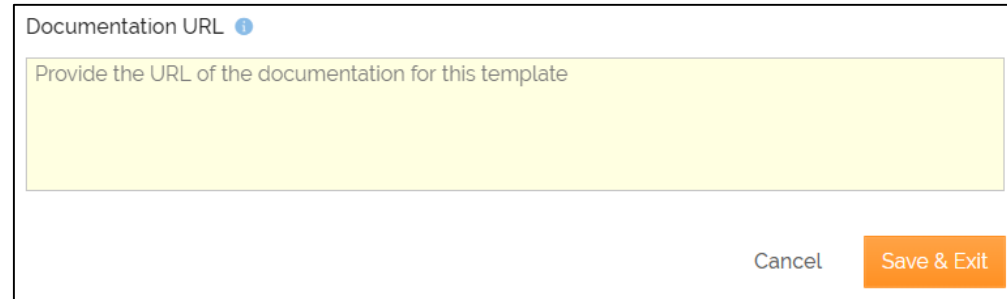
Partner will define this step

Want to encrypt target file? ⓘ

Cancel Next

Exercise 3

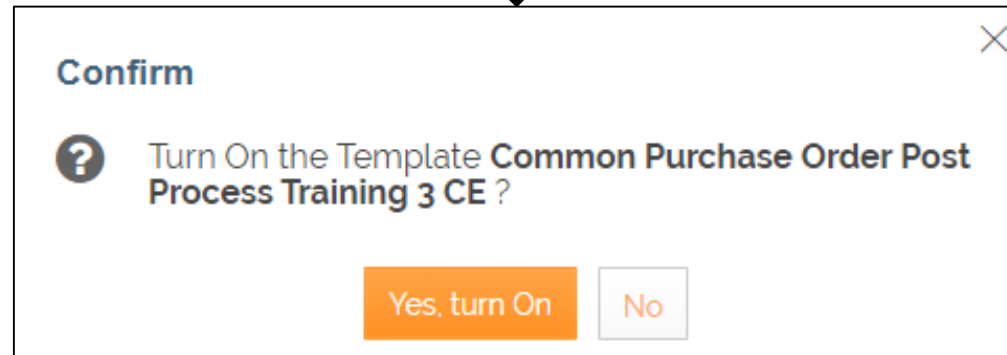
- On the **Documentation** page, click **Save & Exit**.
- Click **Yes, Turn On** to activate the template.



Documentation URL ⓘ

Provide the URL of the documentation for this template

Cancel Save & Exit



Confirm














Turn On the Template **Common Purchase Order Post Process Training 3 CE** ?

Yes, turn On No

Exercise 3

Do the following to grant the partner (already created) access to the template:

1. Click **More** and select the **Grant Access**.

#TRANSACTION	OWNER	MODIFIED	ACTION
1	Carlos Escab...	Today 3:03 AM	OFF <input checked="" type="checkbox"/> ON 
2	Carlos Esca		 View  Edit
0	Carlos Esca		 Delete  Check-in
1	Carlos Esca		 Replace With  Revision History
0	Carlos Esca		 Grant Access  Revoke Access
0	Carlos Esca		 Create Copy  Edit Contact User
0	Training Use		 View References  View Dependencies

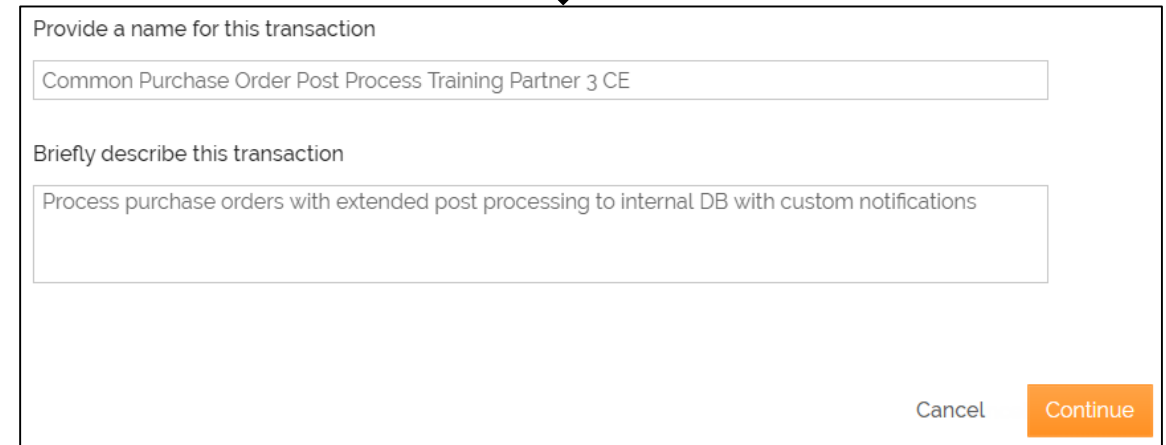
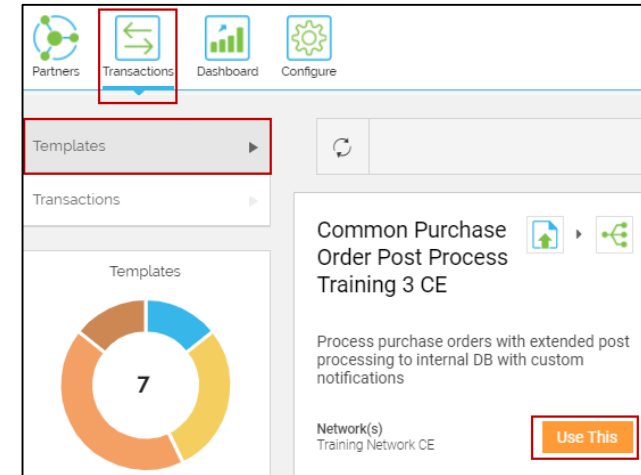
2. Select the partner that you had created earlier in this exercise.
3. Click **Grant Access**.

Exercise 3

Now you are going to create a transaction based on this template to convert the XML data from the source a to a format that can go into a database at the target.

To create the transaction:

- Click **Transactions > Templates**.
- On the **Template** screen, search for the template that you have created.
- Click **Use This** on the template tile.
- Provide the name and description for the transaction.
- Click **Continue**.

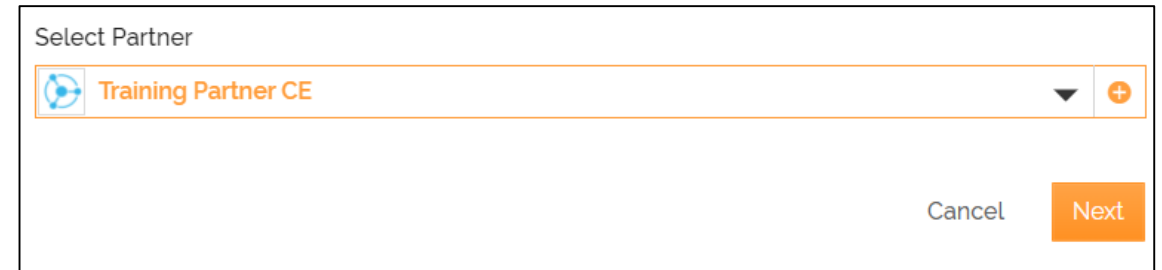
A screenshot of a form for creating a transaction. The form has two main sections. The first section is titled 'Provide a name for this transaction' and contains a text input field with the text 'Common Purchase Order Post Process Training Partner 3 CE'. The second section is titled 'Briefly describe this transaction' and contains a text input field with the text 'Process purchase orders with extended post processing to internal DB with custom notifications'. At the bottom right of the form, there are two buttons: 'Cancel' and 'Continue'.

Exercise 3

- Select the partner that you have created in the **Select Partner** field.
- Click **Next**.
- On the **Transactions Settings** page, in the **Contact User** field, the email address is automatically pulled from your user profile that you log in with. You can change or add multiple email addresses separated by comma.

This is the email address where you receive the notification email when the transaction is executed successfully or if there is an error during the execution.

- Click **Next**.



Select Partner

Training Partner CE

Cancel Next



Contact User ⓘ

akash.jaiswal@adeptia.com

Cancel Next

Exercise 3

- Keep **On File Upload** selected in the **Which event should trigger the data transfer?** field.
- Click **Next**.
- On the **Data_Decryption** page, keep the **Is source file encrypted?** check box unchecked.
- Click **Save & Exit**.
- You have created your transaction successfully. You will be prompted to turn on the transaction. Click **Yes, turn on**.

Which event should trigger the data transfer?

On File Upload

Cancel Next

Is source file encrypted? ⓘ

Cancel Save & Exit


























Confirm

Turn On the Transaction **Common Purchase Order Post Process Training Partner 3 CE** ?

Yes, turn On No

Exercise 3

- You can view the transaction on the **Transactions** home page.
- On the **Transactions** page, locate the transaction and click **Run Now**.
- As this is a file upload transaction, you will be asked to browse and upload the XML file. You can upload and check the transaction based on these two conditions:
 - Upload a file that has the quantity **more than 100** and check if the sales department is notified by an email with that file as an attachment.
 - Upload a file that has the quantity **less than 100** and check if the data is loaded into the target database.Every time you upload the file, you get a confirmation message about the successful execution of the transaction.
- You can check the status of the transaction on the **Dashboard**.

NAME	TYPE	PARTNER	OWNER	MODIFIED	ACTION
  Common Purchase Order Post Process Training Partner...	Pass-Thru I..	Training Partne..	Carlos EscabaL	Today 4:36 AM	OFF <input checked="" type="checkbox"/> ON 
  Purchase Order Transaction Training Exercise 2 CE	Convert Inb..	Training Partne..	Carlos EscabaL		 
  Inventory Items Processing Training Partner 4 Ext CE Tr..	CUSTOM In..	Training Partne..	Carlos EscabaL		 
  Inventory Items Processing Training 4 Ext CE Transaction	CUSTOM In..	Training Partne..	Akash Jaiswa		 
  Employee Benefits Transaction Training Exercise 1 CE	DATA INTE..	Adeptia	Carlos EscabaL		 
  EmployeeBenefitsTransaction	DATA INTE..	Adeptia	Training User		 
					 



Day 2

Custom Template

Custom Template

Custom Template is used in case you want a customized Process Flow for your complex Transactions. The Custom Template provides you with the flexibility to use the following activities:

- Multiple Source and Target activities with corresponding Source and Target layout
- Data Mapping
- Web Services
- Data Security (Encryption and Decryption)
- Mail Notification
- Native Call
- Custom Plugin, and more customization according to the business requirements

In Adeptia Connect you can create three types of custom templates:

- Inbound
- Outbound
- Partner to Partner

Custom Template

A custom template unlike pre-built template does not use a pre-defined process flow. To create a custom template you use a Process Flow defining the flow of file transfer. Therefore, you must create a process flow and publish it as a custom template before creating a template.

We have learnt how to create a Process Flow, let's see how to publish a process flow as a template before we learn to create a custom template.

To publish a process flow as template:

1. Go to Configure Option in Connect.
2. Click Process Flow tab from the left pane to populate the list of Process Flows.
3. Go the Process Flow you want to use as a template.
4. Go to the Action section of the Process flow and click Action arrow.
5. From the options shown, click Publish as a Template.
6. You can see the published process flow in the list while creating a custom template.

Mapping Features

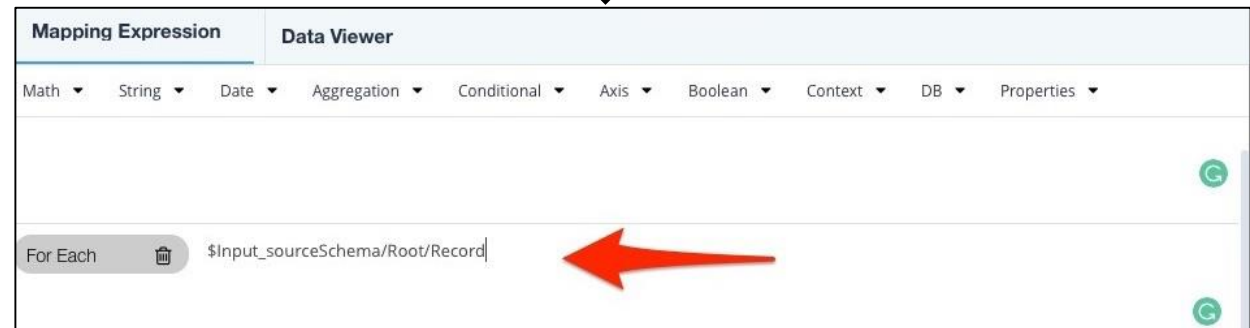
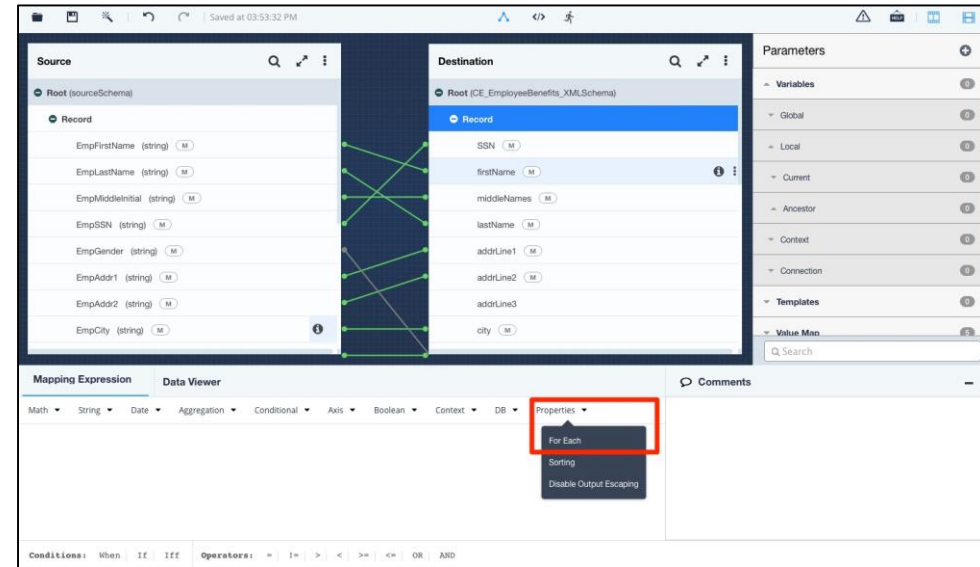
Mapping Features

For Each

Applying For Each to an element/root allows to repeat that element/root in the target field with for every value coming from the source file.

To apply a for each, create a new mapping or open an existing mapping.

1. Select the root or element where you want to apply for each.
2. Go to Mapping Expressions > Properties.
3. Click For Each.
4. Go to the Root/Element of the source layout that you want to repeat.
5. Double click.
6. It will appear in the For Each section.



Exercise 4: Inventory

Exercise 4

- In Exercise 4, we will take an example of stock details being maintained in an inventory system of the company. For example, the inventory management team of a company receives details of items in a CSV format.
- The stock details should be saved in a local database of the company that is used to generate relevant reports on the availability of stocks.
- A regular member of inventory management team may not be able to convert CSV file details to a format that can go into a database. Also, this is a repetitive task so help from an IT person cannot be taken every time.
- An out of the box template can help the inventory management of this company to automatically convert the CSV data from various departments and place it in the required database after converting it in the required format.
- For this, a custom template of Adeptia Connect can be used and configured to transfer the data in the aforementioned use case.

Let's see the steps to do it...

Exercise 4

Inventory Items Process requires conversion of CSV source data file into XML. Source data file is fetched from a File Upload. Correct source data is converted into an XML output file.

Design:

- Get Inventory Items CSV data file from source File Upload
- Apply rules to check for critical fields (to be done in Mapping)
- Convert valid data to XML

Configure:

Create the following activities to configure the process flow:

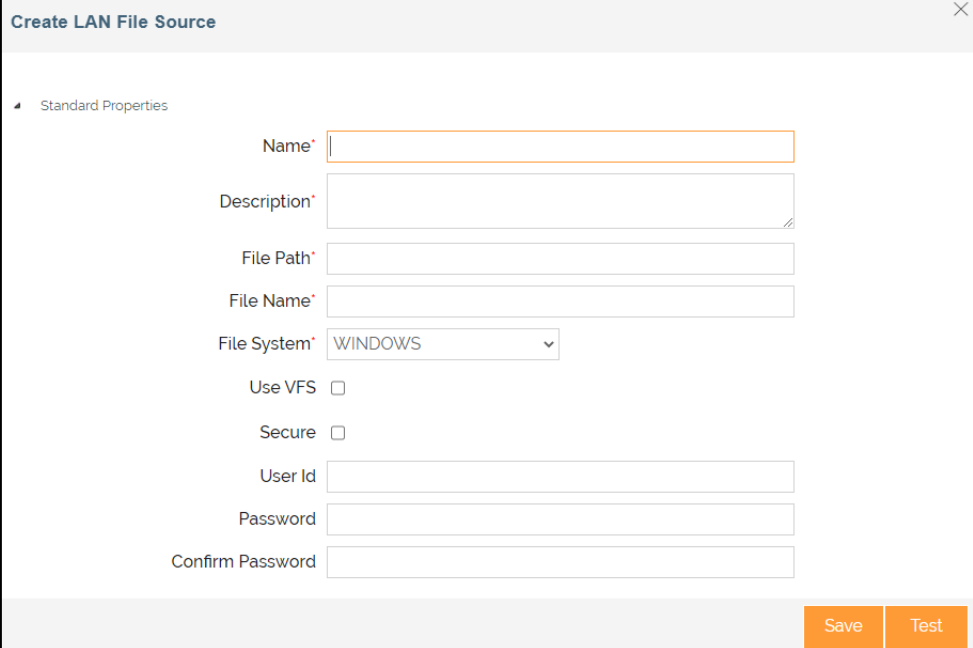
- Create LAN File Source
- Create Text layout for the CSV file
- Create Positional Layout for target (for good data)
- Create Excel Layout (for error records)
- Create Mapping
- Create LAN File Target for good data
- Create Email Target for bad data records

Exercise 4

Creating a LAN file source

- On the home page, click **Configure > SOURCES > LAN File Source**.
- Click **Create LAN File Source**.
- On the **Create LAN File Source** page, do the following steps:
 - In the **Name** and **Description** fields, enter the LAN file source's name and description respectively.
 - In the **File Path** field, enter the network path of the source file in the following format: `\\hostname\folder name`.
 - In the **File Name** field, enter the name of the source file, for Example: items.csv.
 - In the **File System** field, select **WINDOWS**.
 - Clear the **Secure** check box.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Refer to [Help](#) documentation for more details.



The screenshot shows a web-based configuration window titled "Create LAN File Source". The window contains a section for "Standard Properties" with the following fields and options:

- Name***: A text input field.
- Description***: A text input field with a small icon in the bottom right corner.
- File Path***: A text input field.
- File Name***: A text input field.
- File System***: A dropdown menu currently set to "WINDOWS".
- Use VFS**: An unchecked checkbox.
- Secure**: An unchecked checkbox.
- User Id**: A text input field.
- Password**: A text input field.
- Confirm Password**: A text input field.

At the bottom right of the window, there are two orange buttons: "Save" and "Test".

Exercise 4

Creating a Text Layout

- On the home page, click **Configure > LAYOUTS > Text**.
- Click **Create Text Layout**.
- In **Create Layout** window, keep **Default** selected in the **Select Layout UI Type** field.
- Click **Next**.
- In **Create Layout** window, do the following:
 - In the **Name** and **Description** fields, enter the text layout's name and description respectively.
 - Select the **Data Header Present** check box.
 - In the **Record Separator** field, enter `\n`.
 - In the **Field Separator** field, enter the punctuation mark comma (,).
 - Select the **Import Definition File** option as the **Definition Mode**.
 - In the **Definition File** field, click **Upload file** to upload a text file.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Create Layout

Standard Properties

Name*

Description*

Data Header Present

Record Separator*

Field Separator*

Definition Mode* Import Definition File Enter the Fields Sequentially

Definition File

#	Field Name	Type	Date Format	Time Format	Repeat	Parent
1		string	mmdyyyy	hh:mm:ss	1	
2		string	mmdyyyy	hh:mm:ss	1	
3		string	mmdyyyy	hh:mm:ss	1	

Exercise 4

Creating a Positional Layout

- On the home page, click **Configure > LAYOUTS > Positional**.
- Click **Create Positional Layout**.
- In **Create Layout** window, keep **Default** selected in the **Select Layout UI Type** field.
- Click **Next**.
- In **Create Layout** window, do the following:
 - In the **Name** and **Description** fields, enter the positional layout's name and description respectively.
 - Select the **Data Header Present** check box.
 - Select the **Import Definition File** option as the **Definition Mode**.
 - In the **Definition File** field, click **Upload file** to upload an appropriate file.
 - Leave the rest of the fields as they are.
 - Click **Save**.

The screenshot shows the 'Create Layout' window with the following configuration:

- Name:** [Empty text box]
- Description:** [Empty text box]
- Data Header Present:**
- Field Separator:** Field Length Start & End Positions
- Definition Mode:** Import Definition File Enter the Fields Sequentially
- Definition File:** XSD [Dropdown menu] [Empty text box] **Upload File** [Button]

#	Field Name	Description	Type	Date Format	Time Format	Start	End	Length	Align	Skip
1			string	mmddyyyy	hh:mm:ss	1			L	<input type="checkbox"/>
2			string	mmddyyyy	hh:mm:ss				L	<input type="checkbox"/>
3			string	mmddyyyy	hh:mm:ss				L	<input type="checkbox"/>

Number of Rows: 1 at Position 5 **Add Row** **Remove Row**

Save [Button]

Exercise 4

Creating an Excel Layout

- On the home page, click **Configure** > **LAYOUTS** > **Excel**.
- Click **Create Excel Layout**.
- In **Create Layout** window, keep **Default** selected in the **Select Layout UI Type** field.
- Click **Next**.
- In **Create Layout** window, do the following:
 - In the **Name** and **Description** fields, enter the excel layout's name and description respectively.
 - Select the **Data Header Present** check box.
 - Select the **Import Definition File** option as the Definition Mode.
 - In the **Definition File** field, click **Upload file** to upload an excel file.
 - In the **Sheet Name** field, select the specific sheet.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Create Layout

Standard Properties

Name*

Description*

Secure

Password

Confirm Password

Data Header Present

Definition Mode* Import Definition File Enter the Fields Sequentially

Definition File

Sheet Name*

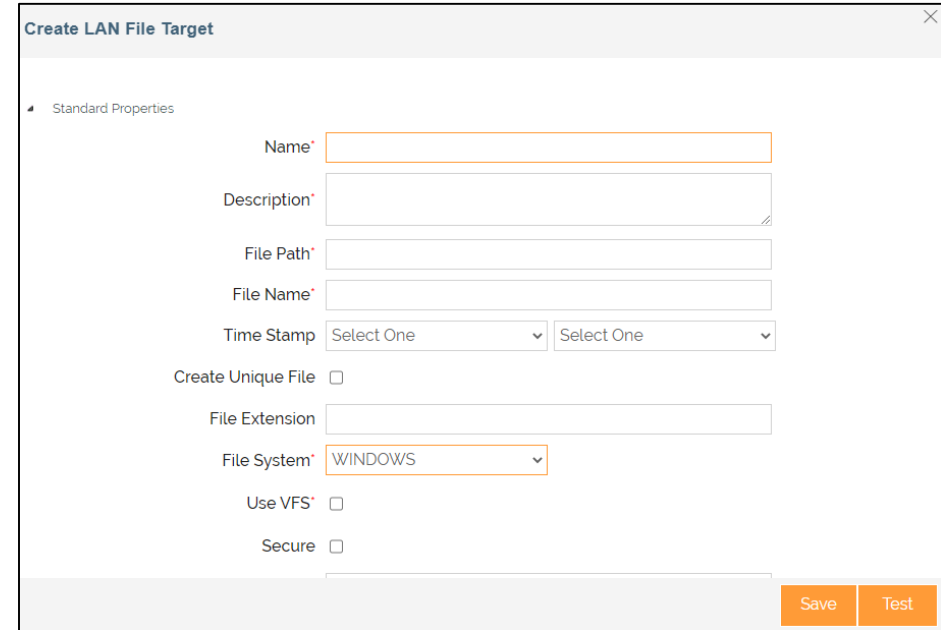
#	Field Name	Type	Format	Sub Format	Data Mode

Exercise 4

Creating a LAN File Target

- On the home page, click **Configure > TARGETS > LAN File Target**.
- Click **Create LAN File Target**.
- On the **Create LAN File Target** page, do the following steps:
 - In the **Name** and **Description** fields, enter the LAN file target's name and description respectively.
 - In the **File Path** field, enter the network path of the source file, for example: *D:/Training/Target*.
 - In the **File Name** field, enter the name of the source file, for Example: *inventoryitems_output*.
 - In the **File Extension** field, enter **txt**.
 - In the **File System** field, select **WINDOWS**.
 - Clear the **Secure** check box.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Refer to the [Help](#) documentation for more details.



The screenshot shows a web-based configuration form titled "Create LAN File Target". The form is organized into a "Standard Properties" section. It contains the following fields and controls:

- Name:** A text input field.
- Description:** A text input field with a small icon in the bottom right corner.
- File Path:** A text input field.
- File Name:** A text input field.
- Time Stamp:** Two dropdown menus, each currently set to "Select One".
- Create Unique File:** An unchecked checkbox.
- File Extension:** A text input field.
- File System:** A dropdown menu currently set to "WINDOWS".
- Use VFS:** An unchecked checkbox.
- Secure:** An unchecked checkbox.

At the bottom right of the form, there are two orange buttons: "Save" and "Test".

Exercise 4

Creating a Mail target

- On the home page, click **Configure > TARGETS > Mail Target**.
- Click **Create Mail Target**.
- On the **Create Mail Target** page, do the following steps:
 - In the **Name** and **Description** fields, enter the mail target's name and description respectively.
 - In the **Outgoing Mail Server** field, enter the SMTP server address.
 - In the **Security Type** field, select **SSL**.
 - In the **Port** field, enter the port number.
 - In the **From(Email-Id)** field, enter the sender's email id.
 - In the **To Email-Id(s)** field, enter the email-Id(s) of the recipients separated by commas.
 - In the **Subject** field, enter the subject.
 - In the **File Name** field, enter the Name of the file, if the data is to be sent in the email as an attachment.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Refer to [Help](#) documentation for more details.

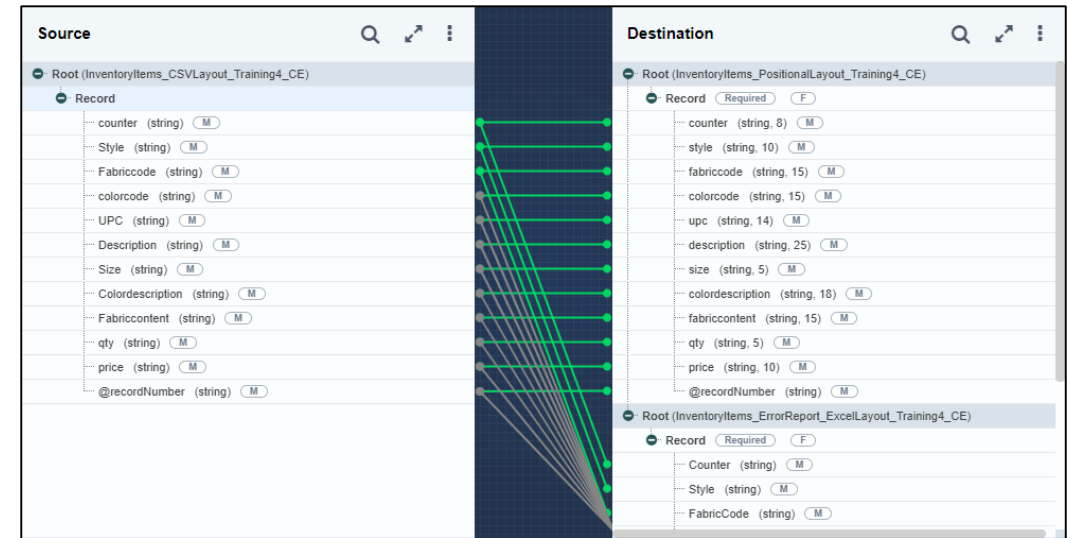
The screenshot shows the 'Create Mail Target' form with the following fields and values:

- Name*: [Empty text input]
- Description*: [Empty text area]
- Protocol*: SMTP (dropdown)
- Outgoing Mail Server*: [Empty text input]
- Domain: [Empty text input]
- CDO host machine: [Empty text input]
- Security Type*: None (dropdown)
- Port: 25 (text input)
- From(Email-Id)*: [Empty text input]
- To Email-Id(s)*: [Empty text input]
- CC: [Empty text input]

Buttons: Save, Test

Mapping between Text and Positional layout

- On the home page, click **Configure > DATA TRANSFORMATION > Mapping**.
- Click **Create Mapping**.
- In the **Create New Mapping** window:
 - Type the name and description for the new mapping service.
 - Click **Create**.
- After you click **Create**, it opens a **Data Mapper** page in a new tab.
Note: Ensure that your browser has not blocked the pop-up.
- On **Select Layout** screen,
 - Select the **Text layout** that you have created as a **source**.
 - Select the **Positional layout** and **Excel layout** that you have created as **destination** layouts.
 - Click **Load**.
- To map the elements, use the drag and drop approach. Click and drag the Source element and drop it to the Destination element.
 - For example, click **counter** element in Source layout and drag it to the **counter** element in the Destination.
 - Likewise, you can do for rest of the source elements to map with related destination elements.



Exercise 4

Mapping between Text and Positional layout

- In Mapping, apply a Rule in the Record node of layout, go to **Mapping Expressions > Properties > For Each** > apply a condition where UPC or Color code or Size is not blank. For more details about For Each, refer to [this page](#).
- Click the related fields in the source and the XPATH of those fields will automatically appear in the **For Each** panel.
- Click the positional layout record node and then put a [... apply condition as shown]

```
$Input_InventoryItemsCSVSchema/Root/Record[UPC != "" and Size != "" and color_code != ""]
```

- Click the second target layout which is Excel, follow the same steps as explained in the previous step. Only difference is that here the Boolean operator is opposite of what was used earlier.

```
$Input_InventoryItemsCSVSchema/Root/Record[UPC = "" or Size = "" or color_code = ""]
```

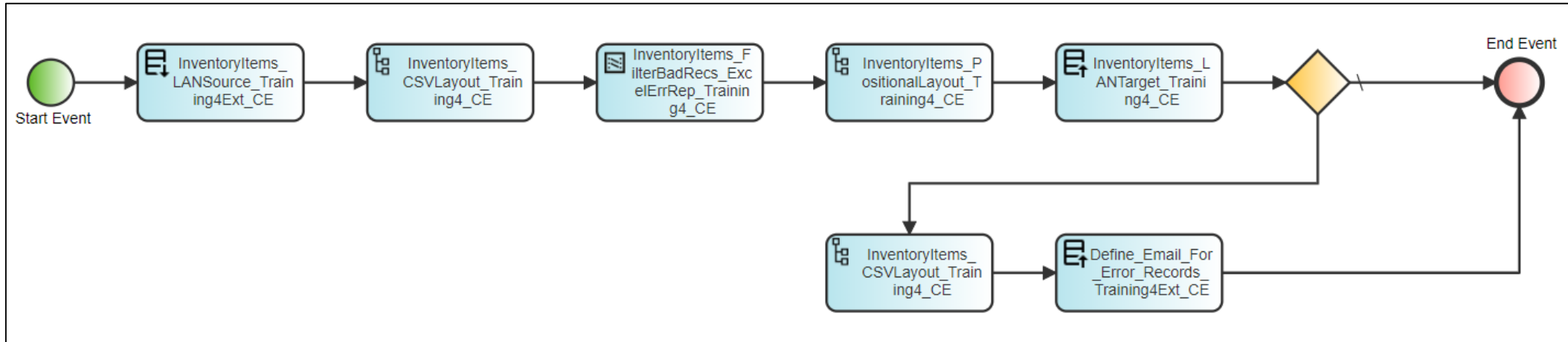
- Click **More** for any target layout's Root node and select **Assign Streams**.
- From the **Assign Streams** screen, make note of the streams' names and which layout name they correspond to.
- Once mapping is done, save the mapping (though by default mapping is autosaved) and close the Web Mapper.

The screenshot displays the Web Mapper interface with two source layouts and one destination layout. The Source layout (InventoryItems_CSVLayout_Training4_CE) contains fields: counter (string), Style (string), Fabriccode (string), colorcode (string), UPC (string), Description (string), Size (string), Colordescription (string), Fabriccontent (string), qty (string), price (string), and @recordNumber (string). The Destination layout (InventoryItems_PositionalLayout_Training4_CE) contains fields: counter (string), style (string), fabriccode (string), colorcode (string), upc (string), description (string), size (string), colordescription (string), fabriccontent (string), qty (string), price (string), and @recordNumber (string). A second destination layout (InventoryItems_ErrorReport_ExcelLayout_Training4_CE) is also visible. The Mapping Expression panel shows a 'For Each' rule with the condition: \$Input_InventoryItems_CSVLayout_Training4_CE/Root/Record[UPC = "" or Size = "" or color_code = "].

Exercise 4

Contd...

Using the activities that you have just created, design a process flow as illustrated below:



To create the process flow:

- Click **Configure > Process Flow > Create Process Flow**.
- On **Create New Process Flow** screen, enter the details in the **Name** and **Description** fields.
- Leave the rest of the fields as they are.
- Click **Done**.

Process Designer window opens in a new tab. You can design the process flow using the pre-defined activities.

Exercise 4

- Pull in the activities that you have already configured from the Repository View.
- Connect all the activities using the sequence flow and connect the activities as shown in the previous slide.
- Place a **Gateway condition** between the **LAN File target** and **End Event**, connect the gateway condition with the End Event and Excel layout (for error records) activities as shown in the previous slide.

*A **Gateway** in a process flow is where you define a condition to be satisfied before an output can proceed to the next stage. Based on a set of conditions, the Gateway decides and directs the output from the previous service to the next stage in the process flow. For example, the Gateway (decision node) as shown in the image allows the process flow to complete if there are no bad data records. In case of bad data records available in the file, the gateway redirects those data to the excel layout that further forwards the data to mail target to send the data as an attachment in an email.*

- **Save** the process flow.
- Publish this process flow as **Post Process** by clicking **More** menu and selecting **Publish as Template**.
- Click **Yes, Publish it** on the confirmation message.

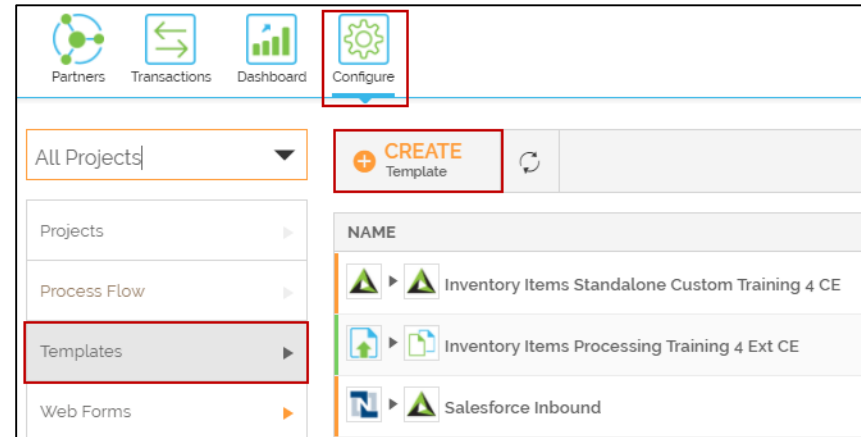
Exercise 4

Create a template of type 'Custom'.

You can select this type to create a template using a process flow. The activities used in the process flow act as placeholders that are configured while creating the template.

To create the template:

- Click **Configure > Templates > Create Template**.
- On the **Create New Template** screen, provide the name and description of the Template.
- Select the project from the **Select Project** field.
- Click **Continue**.

A screenshot of a form titled 'Provide a name for this template'. The form has three main sections: 1. 'Provide a name for this template' with a text input field containing 'Inventory Items Processing Training 4 Ext CE'. 2. 'Briefly describe this template' with a text area containing 'Process incoming inventory items data and filter bad records to send back for error correction and reprocessing'. 3. 'Select Project' with a dropdown menu showing 'Project_1'. At the bottom right, there are two buttons: 'Cancel' and 'Continue'.

Exercise 4

- Select **Custom** in the **Select template type** field.
- Select **Inbound** in the **Select direction** field.
- Click **Next**.
- Select the Network in **Select Network** field.

Only the Partners of the selected Network will be able to access this Template.

- Keep the **Allow Import Partner(s)** check box unchecked.
- Click **Next**.
- On the **Define Process Flow** page, select the process flow that you have created in the **Select Process Flow** field.
- Click **Next**.



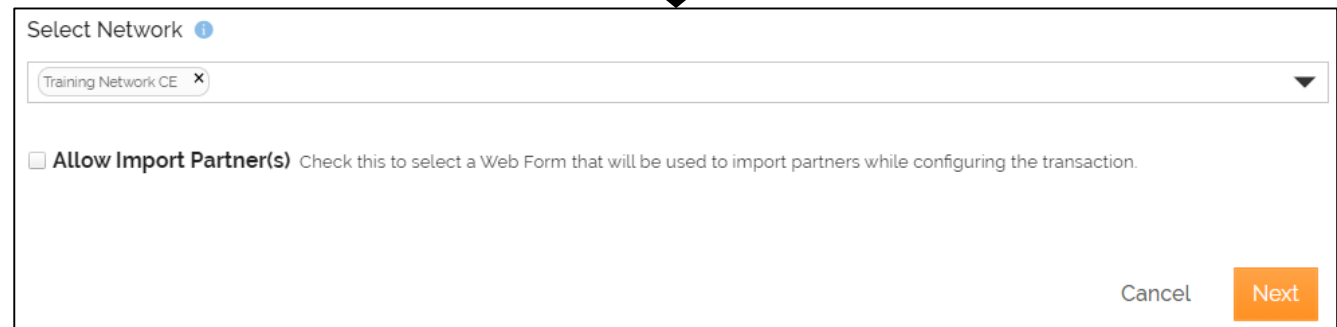
Select template type

Custom

Select direction ⓘ

Inbound

Cancel Next

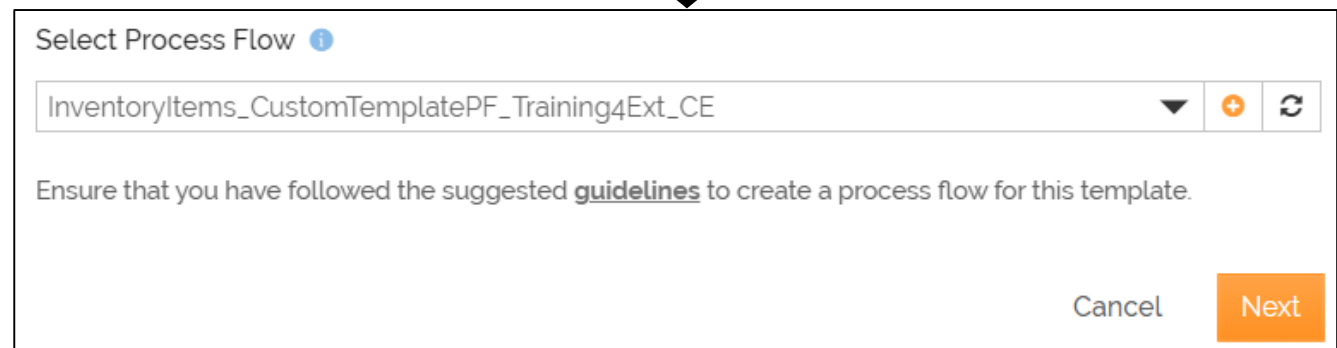


Select Network ⓘ

Training Network CE x

Allow Import Partner(s) Check this to select a Web Form that will be used to import partners while configuring the transaction.

Cancel Next



Select Process Flow ⓘ

InventoryItems_CustomTemplatePF_Training4Ext_CE

Ensure that you have followed the suggested [guidelines](#) to create a process flow for this template.

Cancel Next

Exercise 4

- On the **Define Activities** page, click **Next**.
- On the **Define Parameters** page, click **Next**.
- On the **Routing Type** page, click **Next**.
- On the **Settings** page, in the **Contact User** field, the email address is automatically pulled from your user profile that you log in with. You can change or add multiple email addresses separated by comma.

This is the email address where you receive the notification email when the transaction is executed successfully or if there is an error during the execution.

- Keep the rest of the fields as they are.
- Click **Next**.

Process Step	Base Type	Trigger/Action
Define_Source_Training4_CE	Source	Trigger
Define_Source_Layout_Training4_CE	Source Layout	
Define_Destination_Training4_CE	Target	<input checked="" type="checkbox"/> Destination
Define_Target_Layout_Training4_CE	Target Layout	
Define_Email_For_Error_Records_Training4Ext_CE	Target	<input type="checkbox"/> Destination
Define_ErrorRecords_Layout_Training4Ext_CE	Target Layout	
Define_Mapping_Training4Ext_CE	Mapping	

Sync

Cancel Next

Select Routing Type

None

Cancel Next

Contact User ⓘ

abc@abc.com

When to notify the contact user thru email?

Always On Error Do Not Notify

Data Encoding ⓘ

UTF-8

Data encryption at rest ⓘ

Use Global Policy

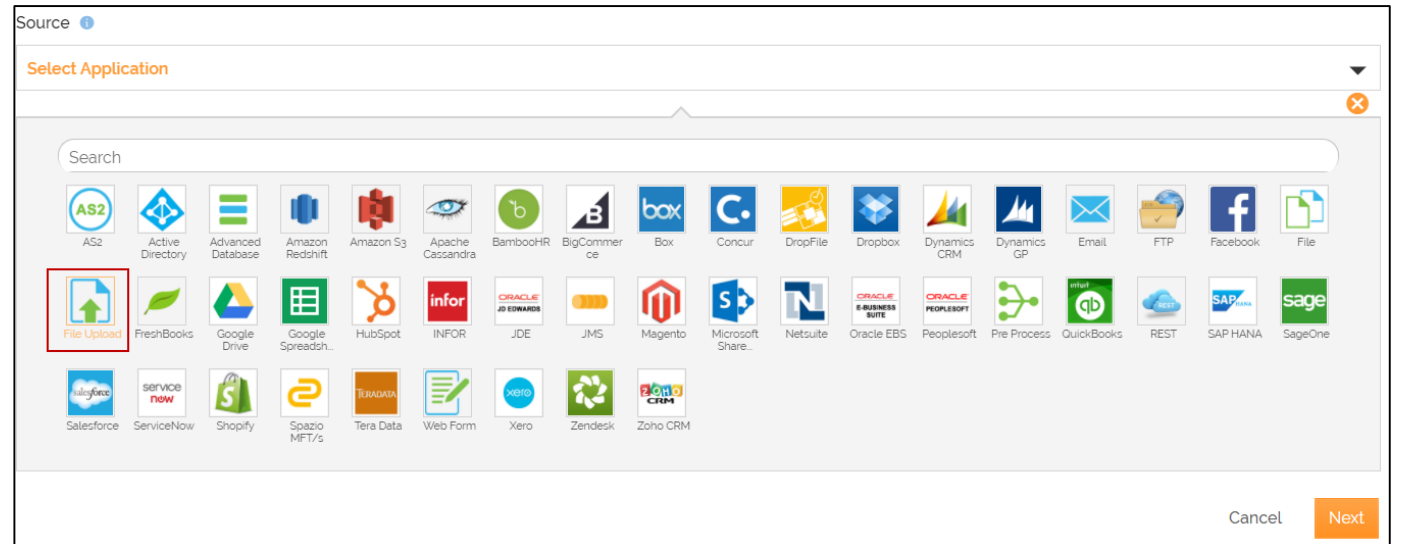
Enable External Mapping Validation ⓘ

Enable External Mapping Function(s) ⓘ

Cancel Next

Exercise 4

- On the **Choose App** page, select **File Upload** and click **Next**.
- On the **Choose Trigger** page, click **Next**.



Exercise 4

- Select **Text** in the **Select your source data format** field.
- Select the text layout that you have created earlier in this exercise in the **Select your source data layout** field.
- Keep the **Partner will define this step** check box unchecked.
- Click **Next**.

Partner will define this step

Select your source data format ⓘ

Text ▼

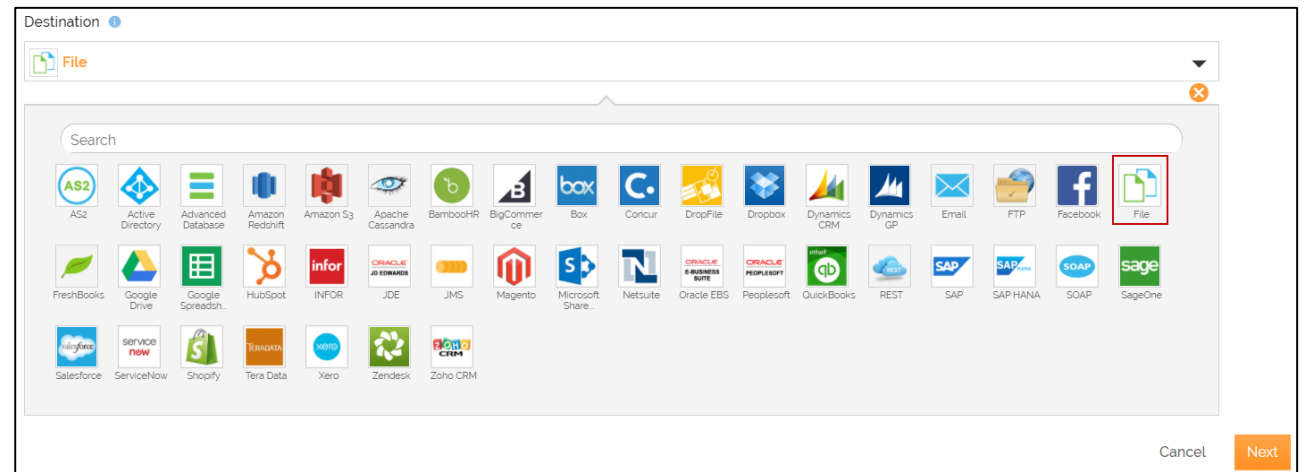
Select your source data layout ⓘ

InventoryItems_CSVLayout_Training4_CE ▼ + ↺

Cancel **Next**

Exercise 4

- On **Choose App** page, select **File** in the **Destination** field.
- Click **Next**.
- Select the LAN File target that you have created earlier in this exercise in the **Select the LAN target** field.
- Keep the **Partner will define this step** check box unchecked.
- Click **Next**.



Exercise 4

- Select **Positional** in the **Select your target data format** field.
- Select the positional layout that you have created earlier in this exercise in the **Select your target data layout** field.
- Keep the **Partner will define this step** check box unchecked.
- Click **Next**.

Partner will define this step

Select your target data format ⓘ

Positional ▼

Select your target data layout ⓘ

InventoryItems_PositionalLayout_Training4_CE ▼ + ↺

Cancel Next

Exercise 4

- On the **Choose App** page, select **Email** in the **Destination** field.
- Click **Next**.
- On the **Select Account** page, select the email account in the **Provide Email account information** field.
- Click **Next**.

Destination Partner will define this step

Email

Search

Advanced Database Amazon S3 BambooHR BigCommerce Box Concur DropFile Dropbox Email FTP Facebook File FreshBooks Google Drive Google Spreadsh. HubSpot JMS Magento

Microsoft Share... Netsuite QuickBooks SAP SageOne Salesforce ServiceNow Shopify Xero Zendesk Zoho CRM

Cancel Next

Partner will define this step

Provide Email account information

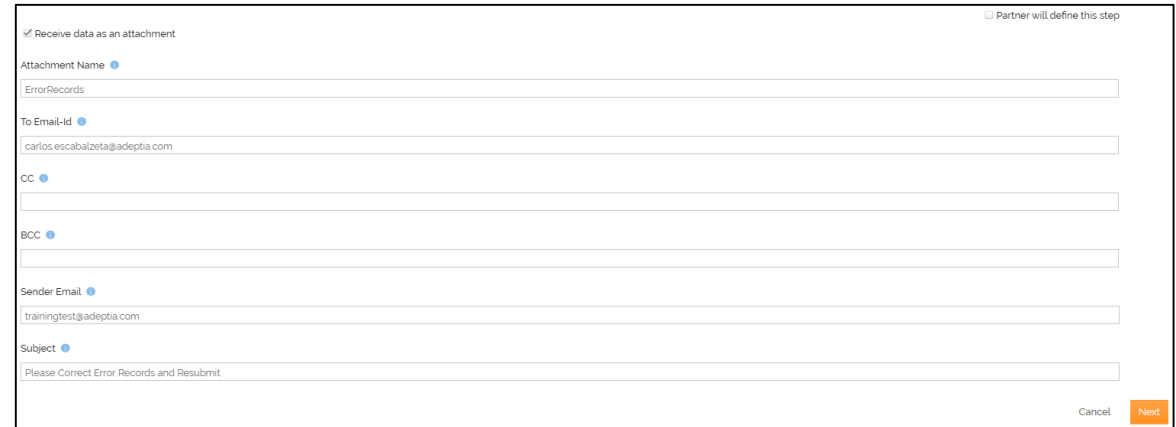
Adeptia EvalBPM Email

Test

Cancel Next

Exercise 4

- On the **Define Target Location** page:
 - Provide the details as required.
 - Keep the **Partner will define this step** check box unchecked.
 - Select the **Receive data as an attachment** check box.
 - Click **Next**.
- Select **Text** in the **Select your target data format** field.
- Select the text layout that you have created earlier in this exercise in the **Select your target data layout** field.
- Keep the **Partner will define this step** check box unchecked.
- Click **Next**.



✓ Receive data as an attachment Partner will define this step

Attachment Name •
ErrorRecords

To Email-Id •
carlos.escabalzeta@adeptia.com

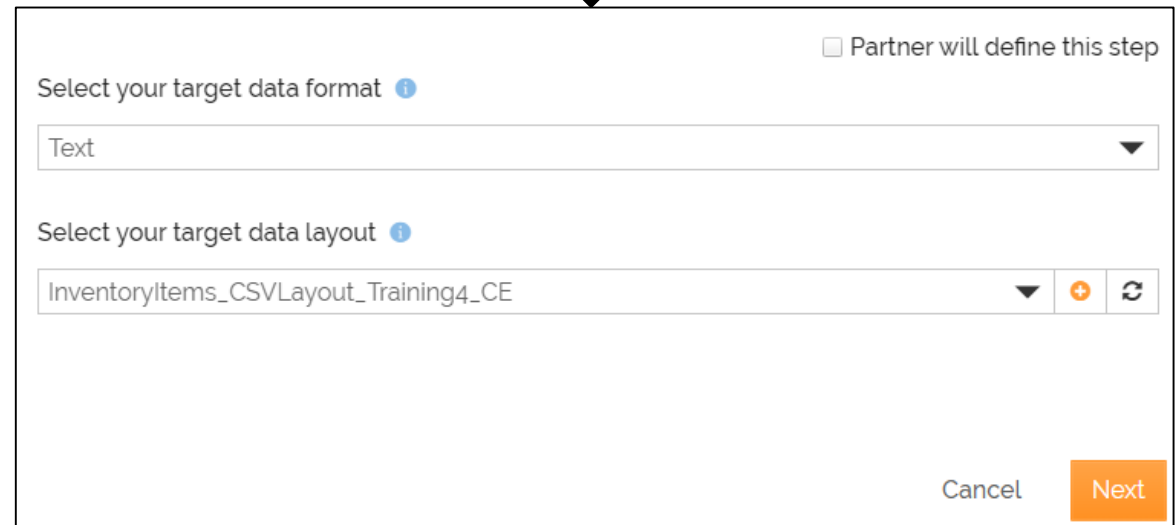
CC •
[Empty field]

BCC •
[Empty field]

Sender Email •
trainingtest@adeptia.com

Subject •
Please Correct Error Records and Resubmit

Cancel **Next**



Partner will define this step

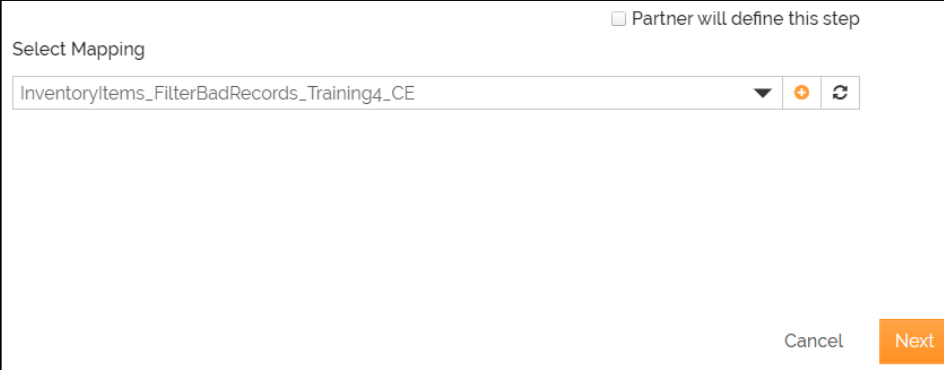
Select your target data format i
Text

Select your target data layout i
InventoryItems_CSVLayout_Training4_CE + ↺

Cancel **Next**

Exercise 4

- On the **Define Mapping** page, select the mapping that you have created earlier in this exercise in the **Select Mapping** field.
- Keep the **Partner will define this step** check box unchecked.
- Click **Next**.
- On the **Documentation** page, click **Save & Exit**.
- Click **Yes, Turn On** to activate the template.

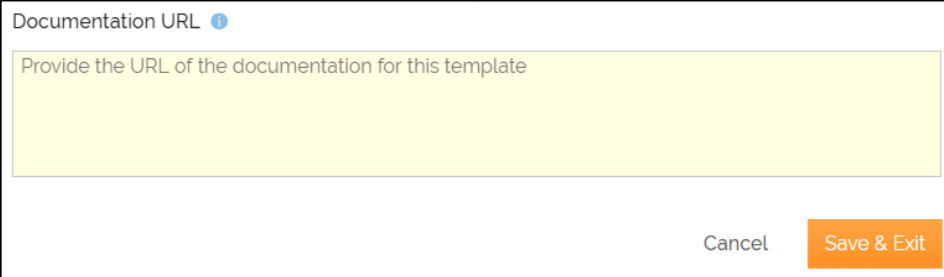


Partner will define this step

Select Mapping

Inventory/Items_FilterBadRecords_Training4_CE


Cancel Next



Documentation URL ⓘ

Provide the URL of the documentation for this template

Cancel Save & Exit



Confirm














Turn On the Template **Inventory Items Processing Training 4 Ext CE** ?

Yes, turn On No

Exercise 4

Do the following to grant the partner (already created) access to the template:

1. Click **More** and select **Grant Access**.

#TRANSACTION	OWNER	MODIFIED	ACTION
1	Carlos Escab...	Today 3:03 AM	OFF <input checked="" type="checkbox"/> ON 
2	Carlos Escab...	 View	 Edit
0	Carlos Escab...	 Delete	 Check-in
1	Carlos Escab...	 Replace With	 Revision History
0	Carlos Escab...	 Grant Access	 Revoke Access
0	Carlos Escab...	 Create Copy	 Edit Contact User
0	Training Use...	 View References	 View Dependencies

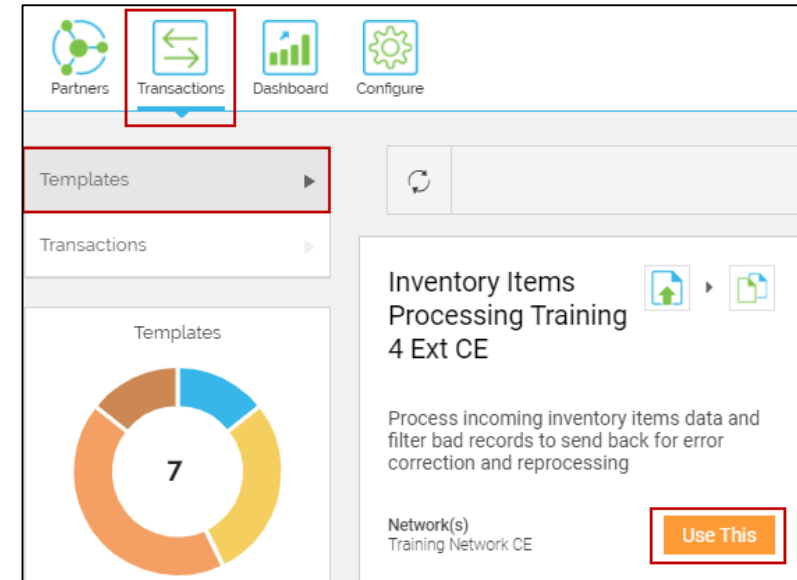
2. Select the partner that you had created earlier in this exercise.
3. Click **Grant Access**.

Exercise 4

Now you are going to create a transaction based on this template.

To create the transaction:

- Click **Transactions > Templates**.
- On the **Template** screen, search for the template that you have created.
- Click **Use This** on the template tile.
- Provide the name and description for the transaction.
- Click **Continue**.



Provide a name for this transaction

Briefly describe this transaction

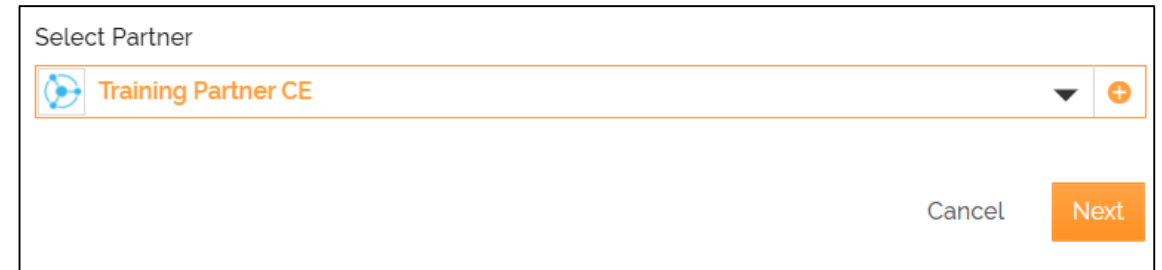
Cancel Continue

Exercise 4

- Select the partner that you have created in the **Select Partner** field.
- Click **Next**.
- On the **Transactions Settings** page, in the **Contact User** field, the email address is automatically pulled from your user profile that you log in with. You can change or add multiple email addresses separated by comma.

This is the email address where you receive the notification email when the transaction is executed successfully or if there is an error during the execution.

- Click **Next**.



Select Partner

Training Partner CE

Cancel Next



Contact User ⓘ

akash.jaiswal@adeptia.com

Cancel Next

Exercise 4

- Keep **On File Upload** selected in the **Which event should trigger the data transfer?** field.
- Click **Save & Exit**.
- You have created your transaction successfully. You will be prompted to turn on the transaction. Click **Yes, turn on**.

Which event should trigger the data transfer?

On File Upload

Cancel Save & Exit


























Confirm

Turn On the Transaction **Inventory Items Processing Training Partner 4 Ext CE Transaction ?**

Yes, turn On No

Exercise 4

- You can view the transaction on the **Transactions** home page.
- On the **Transactions** page, locate the transaction, click **More** menu and select **Run Now**.
- As this is a file upload transaction, you will be asked to browse and upload the **XML file**.
- After you have uploaded the file, you get a confirmation message about the successful execution of the transaction.
- You can check the status of the transaction on the Dashboard.

NAME	TYPE	PARTNER	OWNER	MODIFIED	ACTION
  Inventory Items Processing Training Partner 4 Ext CE Transaction	CUST..	Training P..	Carlos Es..	Today 6:22 AM	OFF <input checked="" type="checkbox"/> ON 
  Common Purchase Order Post Process Training Partner 3 CE	Pass-T..	Training P..	Carlos E		 
  Purchase Order Transaction Training Exercise 2 CE	Conver..	Training P..	Carlos E		 
  Inventory Items Processing Training 4 Ext CE Transaction	CUST..	Training P..	Akash J		 
  Employee Benefits Transaction Training Exercise 1 CE	DATA L.	Adeptia	Carlos E		 
  EmployeeBenefitsTransaction	DATA L.	Adeptia	Training		 
					 

Exercise 5: Order Fulfillment (publish as an API and consume an API as a post process)

Exercise 5

Order Fulfillment process automatically gets triggered when a Shipping department receives an email with customer orders from Sales. After receiving the email this process calls on a Fulfillment Web Service to fulfill these orders. Fulfillment Web Service responds back with Shipping and Invoice information for each order. Order Fulfillment process updates this information back into the customer order data file and emails it back to Sales.

Design:

- Receive Email containing customer orders from Sales
- Create Web Service Request message
- Call on a Fulfillment Web Service (prerequisite: create a sub process and publish it as a web service)
- Map Web Service Response back to customer orders
- Email the updated customer orders (shipping and invoice columns populated) back to Sales
- If Web Service does not respond send an error notification via email to Administrator

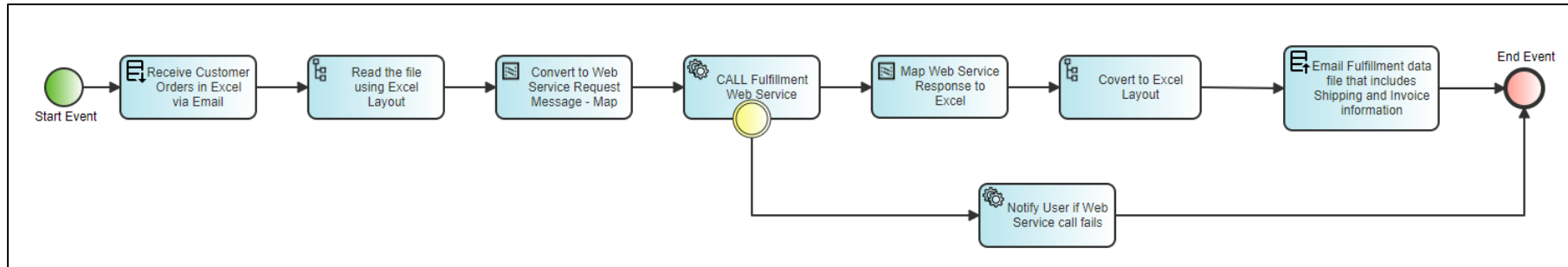
Configure:

Configure the process by creating below activities:

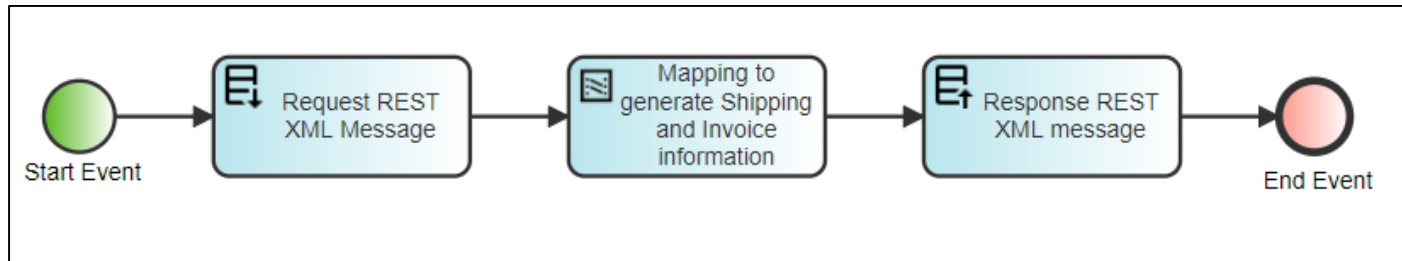
- Create Email Source and Target activity
- Create a sub-process and publish it as a web service
- Create mappings for generating SOAP Request and Response
- Create Web Service Provider and Consumer activities

Exercise 5

In this exercise, you need to design a process flow and a sub process flow as illustrated below:



Process flow



Sub process

Exercise 5

Contd...

Creating a Mail source

- On the home page, click **Configure > SOURCES > Mail Source**.
- Click **Create Mail Source**.
- On the **Create Mail Source** page, do the following steps:
 - In the **Name** and **Description** fields, enter the mail source's name and description respectively.
 - In the **Protocol** field, select **IMAP4**.
 - In the **Incoming Mail Server** field, enter the incoming mail (SMTP) Server address.
 - In the **Security Type** field, select **SSL**.
 - In the **Port** field, enter the port number of the incoming Mail Server.
 - In the **User Id** and **Password** fields, enter the Recipient Email address and password.

Create Mail Source

Standard Properties

Name*

Description*

Protocol* POP3

Incoming Mail Server*

Domain

CDO host machine

Security Type* None

Port 110

User Id

Password

Confirm Password

Save Test

Exercise 5

Creating a Mail source

- In the **Subject** field, enter the subject.
- In the **File Name** field, enter the Name of the file, if the data is to be sent in the email as an attachment. Mail Source activity does not support more than one file attachment.
- Leave the rest of the fields as they are.
- Click **Save**.

Note: This is the Email Source service which will be attached to the first step in the Order Fulfillment process flow.

After attaching this service to the first step in the process designer, double-click on this activity > **Properties panel** > Set **Event Context Enabled** property to **True**.

Refer to [Help](#) documentation for more details.

Exercise 5

Creating a Mail target

- On the home page, click **Configure > TARGETS > Mail Target**.
- Click **Create Mail Target**.
- On the **Create Mail Target** page, do the following steps:
 - In the **Name** and **Description** fields, enter the mail target's name and description respectively.
 - In the **Outgoing Mail Server** field, enter the SMTP server address.
 - In the **Security Type** field, select **SSL**.
 - In the **Port** field, enter the port number.
 - In the **From(Email-Id)** field, enter the sender's email id.
 - In the **To Email-Id(s)** field, enter the email-Id(s) of the recipients separated by commas.
 - In the **Subject** field, enter the subject.
 - In the **File Name** field, enter the Name of the file, if the data is to be sent in the email as an attachment.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Note: This is the Email Target service which will be attached to the last step in the Order Fulfillment process flow.

Refer to [Help](#) documentation for more details.

The screenshot shows a web form titled "Create Mail Target". The form is organized into a "Standard Properties" section. The fields are as follows:

- Name:** A text input field.
- Description:** A text area.
- Protocol:** A dropdown menu currently set to "SMTP".
- Outgoing Mail Server:** A text input field.
- Domain:** A text input field.
- CDO host machine:** A text input field.
- Security Type:** A dropdown menu currently set to "None".
- Port:** A text input field with the value "25".
- From(Email-Id):** A text input field.
- To Email-Id(s):** A text input field.

At the bottom right of the form, there are two orange buttons labeled "Save" and "Test".

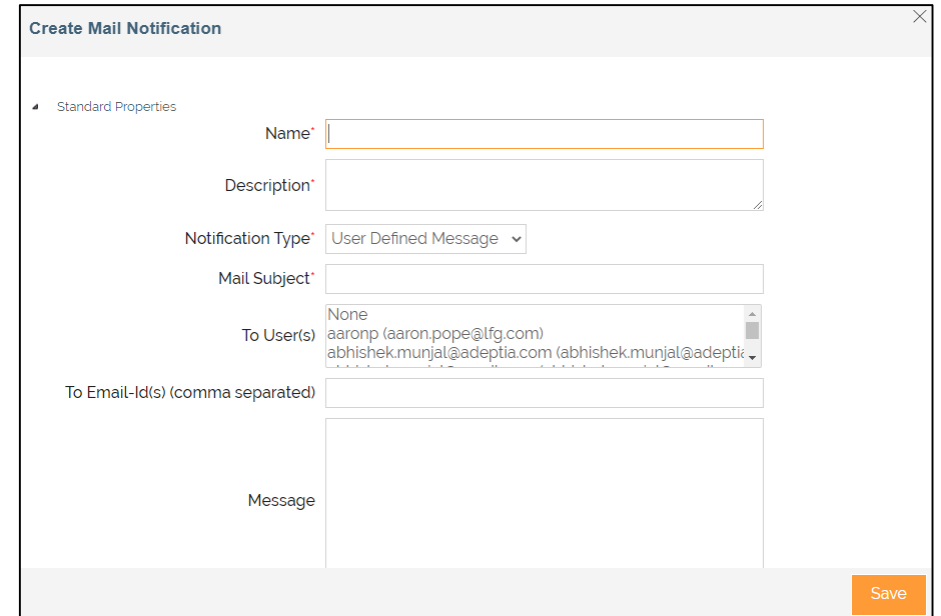
Exercise 5

Creating a Mail Notification

- On the home page, click **Configure > OTHERS > Mail Notification**.
- Click **Create Mail Notification**.
- On the **Create Mail Notification** page, do the following steps:
 - In the **Name** and **Description** fields, enter the mail notification's name and description respectively.
 - In the **Notification Type** field, select **Process Flow Summary**.
 - In the **Mail Subject** field, enter the subject for the email message.
 - In the **To User(s)** field, select the user(s) to whom you want to send the notification email.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Refer to [Help](#) documentation for more details.

Note: Notification service is for notifying the user if the web service call fails.



The screenshot shows a web form titled "Create Mail Notification" with a close button in the top right corner. The form is organized into a "Standard Properties" section. It contains the following fields and controls:

- Name:** A text input field.
- Description:** A text area.
- Notification Type:** A dropdown menu currently set to "User Defined Message".
- Mail Subject:** A text input field.
- To User(s):** A dropdown menu showing "None" at the top and two email addresses: "aaronp (aaron.pope@lfg.com)" and "abhishek.munjal@adeptia.com (abhishek.munjal@adeptia.com)".
- To Email-Id(s) (comma separated):** A text input field.
- Message:** A large text area for composing the email content.

A "Save" button is located in the bottom right corner of the form.

Exercise 5

Creating an Excel Layout

- On the home page, click **Configure > LAYOUTS > Excel**.
- Click **Create Excel Layout**.
- In **Create Layout** window, keep **Default** selected in the **Select Layout UI Type** field.
- Click **Next**.
- In **Create Layout** window, do the following:
 - In the **Name** and **Description** fields, enter the excel layout's name and description respectively.
 - Select the **Data Header Present** check box.
 - Select the **Import Definition File** option as the Definition Mode.
 - In the **Definition File** field, click **Upload file** to upload an excel file.
 - In the **Sheet Name** field, select the specific sheet.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Note: In this example, change the Data Type of the Tax and Total to Number.

The screenshot shows the 'Create Layout' window with the following fields and options:

- Name***: Text input field.
- Description***: Text input field.
- Secure**:
- Password**: Text input field.
- Confirm Password**: Text input field.
- Data Header Present**:
- Definition Mode***: Import Definition File, Enter the Fields Sequentially
- Definition File**:
- Sheet Name***: Text input field.

At the bottom, there is a table with the following columns: #, Field Name, Type, Format, Sub Format, Data Mode. A **Save** button is located at the bottom right of the window.

Exercise 5

Creating an XML request layout

- On the home page, click **Configure > LAYOUTS > XML**.
- Click **Create XML Layout**.
- In **Create Layout** window, keep **Default** selected in the **Select Layout UI Type** field.
- Click **Next**.
- In **Create Layout** window, do the following:
 - In the **Name** and **Description** fields, enter the XML layout's name and description respectively.
 - In the **File Path** field, click **Choose File** to upload an XSD file.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Note:

- Create XML schema for SOAP Request message that will be sent to the published web service.

The screenshot shows the 'Create Layout' dialog box with the following fields and options:

- Name:** Text input field.
- Description:** Text area.
- Validate XML:**
- Definition Mode:** Import File, Web Service Consumer, Web Service Provider
- File References:** None (dropdown menu)
- File Path:** Choose File (button), No file chosen (text), Validate XSD (button)
- Consumer ID:** Not Available (dropdown menu)
- XSD Type:** (dropdown menu)
- Provider:** (dropdown menu)
- WsProvider XSD Type:** (dropdown menu)
- Save:** Button at the bottom right.

Exercise 5

Creating an XML response layout

- On the home page, click **Configure > LAYOUTS > XML**.
- Click **Create XML Layout**.
- In **Create Layout** window, keep **Default** selected in the **Select Layout UI Type** field.
- Click **Next**.
- In **Create Layout** window, do the following:
 - In the **Name** and **Description** fields, enter the XML layout's name and description respectively.
 - In the **File Path** field, click **Choose File** to upload an XSD file.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Note:

- Create XML layout for **REST Request** message that will be sent to the published web service.

The screenshot shows the 'Create Layout' dialog box with the following fields and options:

- Name:** Text input field.
- Description:** Text area.
- Validate XML:**
- Definition Mode:** Import File, Web Service Consumer, Web Service Provider
- File References:** None (dropdown menu)
- File Path:** Choose File (button), No file chosen (text), Validate XSD (button)
- Consumer ID:** Not Available (dropdown menu)
- XSD Type:** (dropdown menu)
- Provider:** (dropdown menu)
- WsProvider XSD Type:** (dropdown menu)
- Save:** Button at the bottom right.

Exercise 5

Mapping between Excel and Request XML layout

- On the home page, click **Configure > DATA TRANSFORMATION > Mapping**.
- Click **Create Mapping**.
- In the **Create New Mapping** window:
 - Type the name and description for the new mapping service.
 - Click **Create**.
- After you click **Create**, it opens a **Data Mapper** page in a new tab.
Note: Ensure that your browser has not blocked the pop-up.
- On **Select Layout** screen,
 - Select the **Excel layout** that you have created as a **source**.
 - Select the **Request XML layout** that you have created as a **destination**.
 - Click **Load**.
- Map the source customer order layout (excel) to the target request layout (xml) using the drag and drop approach.

The screenshot displays the Data Mapper interface with two panels: Source and Destination. The Source panel shows a tree structure for 'Root (OrderFulfillmentExcelLayout_TrainingEx5)' with a 'Record' node containing various fields. The Destination panel shows a tree structure for 'Order (FulfillmentXML_Request_TrainingEx5) (OrderType)' with a 'Record' node containing various fields. Green lines connect the fields in the Source panel to the corresponding fields in the Destination panel, indicating the mapping.

Source Field	Destination Field
Vendor (string)	Vendor (string)
OrderNumber (string)	OrderNumber (string)
CostCenter (string)	Ship_To (string)
ShipTo (string)	Attention (string)
Attention (string)	ShipAddr1 (string)
ShipAddr1 (string)	ShipAddr2 (string)
ShipAddr2 (string)	Ship_State (string)
ShipCity (string)	Ship_Zip (string)
ShipState (string)	Ship_Country (string)
ShipZip (string)	Quantity (string)
ShipCountry (string)	Item_Code (string)
Quantity (integer)	Part_Number (string)
EPItemCode (string)	Description (string)
VendorPartNumber (string)	Unit_Price (decimal)
Description (string)	UoM (string)
UnitPrice (integer)	SubTotal (decimal)
UoM (string)	
Subtotal (string)	
DateShipped (string)	
ShippedVia (string)	
TrackingNumber (string)	
FreightCharge (string)	
Tax (integer)	
Total (integer)	
InvoiceNumber (string)	
@recordNumber (string)	

Note: The resulting output XML file will be treated as a request message for the web service call.

Exercise 5

Mapping between Response XML and Excel layout

- On the home page, click **Configure > DATA TRANSFORMATION > Mapping**.
- Click **Create Mapping**.
- In the **Create New Mapping** window:
 - Type the name and description for the new mapping service.
 - Click **Create**.
- After you click **Create**, it opens a **Data Mapper** page in a new tab.
Note: Ensure that your browser has not blocked the pop-up.
- On **Select Layout** screen,
 - Select the **Response XML layout** that you have created as a **source**.
 - Select the **Excel layout** that you have created as a **destination**.
 - Click **Load**.
- Map the response xml from web service to customer order schema (excel) using the drag and drop approach.

Note: The resulting excel file will be sent back to Sales with shipping and invoice information.

The screenshot displays the Data Mapper interface with two panels: Source and Destination. The Source panel shows a tree view for 'Order (FulfillmentXML_Response_TrainingEx5) (OrderType) (M)' with various fields like Vendor, OrderNumber, Ship_To, Attention, ShipAddr1, ShipAddr2, Ship_State, Ship_Zip, Ship_Country, Quantity, Item_Code, Part_Number, Description, Unit_Price, UoM, DateShipped, ShippedVia, TrackingNumber, FreightCharge, Tax, Total, and InvoiceNumber. The Destination panel shows a tree view for 'Root (OrderFulfillmentExcelLayout_TrainingEx5)' with a 'Record (Required) (M)' containing fields like Vendor, OrderNumber, CostCenter, ShipTo, Attention, ShipAddr1, ShipAddr2, ShipCity, ShipState, ShipZip, ShipCountry, Quantity, EPIItemCode, VendorPartNumber, Description, UnitPrice, UoM, Subtotal, DateShipped, ShippedVia, TrackingNumber, FreightCharge, Tax, Total, InvoiceNumber, and @recordNumber. Green lines connect the source fields to their corresponding destination fields.

Exercise 5

Mapping between Request XML and Response XML web service

- On the home page, click **Configure > DATA TRANSFORMATION > Mapping**.
- Click **Create Mapping**.
- In the **Create New Mapping** window:
 - Type the name and description for the new mapping service.
 - Click **Create**.
- After you click **Create**, it opens a **Data Mapper** page in a new tab.
- **Note:** Ensure that your browser has not blocked the pop-up.
- On **Select Layout** screen,
 - Select the **Request XML layout** that you have created as a **source**.
 - Select the **Response XML layout** that you have created as a **destination**.
 - Click **Load**.
- Map the source **Request XML layout** to the target **Response XML layout** using the drag and drop approach.

Note:

- Total field uses Math > Add function
- Tax, ShippedVia and FreightCharges uses constants.
- ShippingDate uses Current Date function.
- Invoice and Tracking number use Aggregation (Position) function.
- Refer to [Mapping Help](#) on how to use functions.

The screenshot displays the Data Mapper interface with two panels: Source and Destination. The Source panel shows a list of fields from a Request XML layout, including Vendor (string), OrderNumber (string), Ship_To (string), Attention (string), ShipAddr1 (string), ShipAddr2 (string), Ship_State (string), Ship_Zip (string), Ship_Country (string), Quantity (string), Item_Code (string), Part_Number (string), Description (string), Unit_Price (decimal), UoM (string), and SubTotal (decimal). The Destination panel shows a list of fields from a Response XML layout, including Vendor (string), OrderNumber (string), Ship_To (string), Attention (string), ShipAddr1 (string), ShipAddr2 (string), Ship_State (string), Ship_Zip (string), Ship_Country (string), Quantity (decimal), Item_Code (string), Part_Number (string), Description (string), Unit_Price (decimal), UoM (string), DateShipped (string), ShippedVia (string), TrackingNumber (string), FreightCharge (decimal), Tax (decimal), Total (decimal), and InvoiceNumber (string). Green lines connect the fields between the two panels, indicating the mapping. The mapping includes: Vendor to Vendor, OrderNumber to OrderNumber, Ship_To to Ship_To, Attention to Attention, ShipAddr1 to ShipAddr1, ShipAddr2 to ShipAddr2, Ship_State to Ship_State, Ship_Zip to Ship_Zip, Ship_Country to Ship_Country, Quantity to Quantity, Item_Code to Item_Code, Part_Number to Part_Number, Description to Description, Unit_Price to Unit_Price, UoM to UoM, and SubTotal to Total. A red line connects the SubTotal field in the Source panel to the Total field in the Destination panel.

Exercise 5

Configuring Fulfillment WS sub process

The screenshot displays the Adeptia software interface for configuring a sub-process. The interface is divided into three main sections:

- Repository View (Left):** Shows a tree structure of activities. The 'Data Mapping' folder is expanded, and 'FulfillmentWS_Mapping_Traini...' is selected. The 'ContextSource' folder is also expanded, showing 'ContextSource' as a sub-item.
- Central Canvas:** Shows a process flow starting with a 'Start Event', followed by three activities: 'Request REST XML Message', 'Mapping to generate Shipping and Invoice information', and 'Response REST XML message', ending with an 'End Event'. Red arrows point from the 'ContextSource' in the Repository View to the first activity, and from the 'restRequest' parameter in the Activity Properties panel to the first activity.
- Activity Properties (Right):** Shows the configuration for the 'Request REST XML Message' activity. The 'Parameter Name' dropdown is set to 'restRequest', which is circled in red. Other properties include 'Label: Request REST XML Message', 'Type: ContextSource', 'Alias: ContextSource', 'Activity Maximum Retries on Failure: 0', 'Activity Wait Time (in seconds) between Retries: 60', 'Async: Off', 'Character Set Encoding: None', 'Document Repository: Off', 'Event Context Enabled: Off', and 'Format: PLAIN_TYPE'.

Note:

- Attach Source > **Context Source** to the first activity and add a **Parameter Name** as **restRequest**.
- Attach Target > **Context Target** to the last activity and add a **Parameter Name** as **restResponse**.
- Attach Data Mapping > **FulfillmentWS_Mapping** to the second activity.

Exercise 5

Creating and publishing a REST Provider

- On the home page, click **Configure > WEB SERVICES > REST Provider**.
- Click **Create REST Provider**.
- On the **Create REST Provider** page, do the following steps:
 - In the **Name** and **Description** fields, enter the REST provider's name and description respectively.
 - In the **Select Port** field, select **Default**.
 - In the **Resource End Path**, enter the resource end path URL.
The URL can be static or dynamic.
 - In the **Process Flow Name** field, select the sub process flow that you have created in this exercise.
 - In the **Method Parameter** field, do the following:
 - Click **Add Method**.
 - In the **Method Type** field, select **Post**.
 - Click **Save**.
 - Leave the rest of the fields as they are.
 - Click **Save**.

Note:

- The Input and Output variables are the same as the ones provided in the Parameter Name property of Context Source and Context Target (in Process Designer).
- Input and Output XML are the schemas that were defined earlier and also used in the Web Service mapping activity.
- Now any web service client can call this published web service provider.

The screenshot shows the 'Create REST Provider' configuration window. It includes the following fields and options:

- Name:** Text input field.
- Description:** Text input field.
- Character Set Encoding:** Dropdown menu set to 'UTF-8' with a 'Refresh' button.
- Enable SSL:** Unchecked checkbox.
- Select Port:** Dropdown menu set to '80'.
- API Version:** Text input field.
- Resource End Path:** Text input field.
- Process Flow Name:** Dropdown menu with the option '-- Select Process Flow --'.

Below the dropdown menu, there is a table with the following structure:

#	Name	Value	Style
1			Query

A 'Save' button is located at the bottom right of the window.

Exercise 5

Creating a REST Consumer

- On the home page, click **Configure > WEB SERVICES > REST Consumer**.
 - Click **Create REST Consumer**.
 - On the **Create REST Consumer** page, do the following steps:
 - In the **Name** and **Description** fields, enter the REST consumer's name and description respectively.
 - In the **URL** field, enter the endpoint URL of the REST web service.
- Note:** You can get this URL by clicking **Endpoint** under **DOCUMENTATION** column of REST Provider that you have created in this exercise.

- In the **Method** field, select **Post**.
- Leave the rest of the fields as they are.
- Click **Save**.

Note:

This is the Web Service Call activity that will be used in the parent OrderFulfillment process to call the web service and get the shipping and invoice information.

Standard Properties

Name* FulfillmentWebService_Call_TrEx5

Description* call Fulfillment Web Service

Character Set Encoding* UTF-8

URL* https://training.adeptia.com:443/wsapi/shipinv
Extract Params From URL

#	Name	Value	Style
1			Query
2			Query
3			Query

No. of Rows 1 at Position 5 Add Row Remove Row

Method* Post

Exercise 5

Creating a process flow

- Click **Configure > Process Flow > Create Process Flow**.
- On **Create New Process Flow** screen, enter the details in the **Name** and **Description** fields.
- Leave the rest of the fields as they are.
- Click **Done**.

Process Designer window opens in a new tab. You can design the process flow using the pre-defined activities.

Process flow design

- Pull in the activities that you have already configured from the Repository View.
- Drag and drop an **Error Intermediate Event** from **Toggle Palette** to the “Call Fulfillment Web Service’ activity.

If Web Service call activity fails, this function will route the execution to the Email Notification activity and then end the transaction.

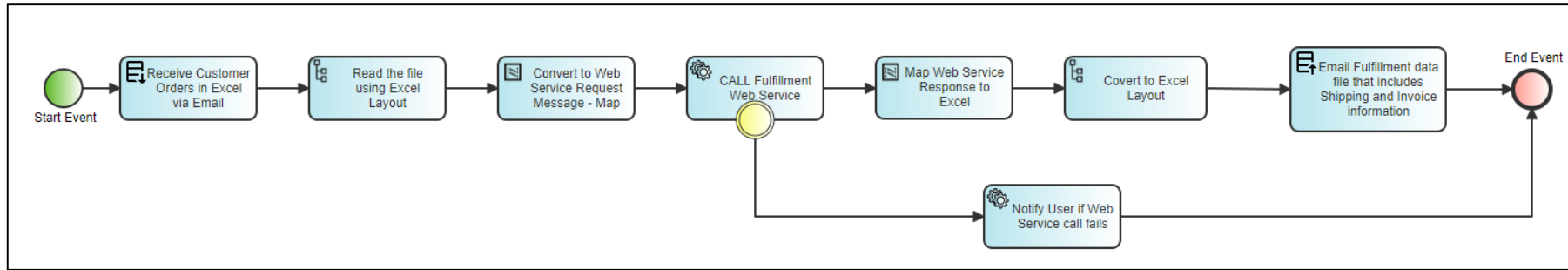
In this design the Web Service Message call requires a Web Service Consumer activity.

- Connect all the activities using the sequence flow as shown in the previous slide.
- Make the **Transformer** type of the Excel Target Layout as **'XmlStream2StreamTransformer'** before saving the process flow.
- Set the **Event Context Enabled** property of Email Source to **True**.
- Save the process flow.

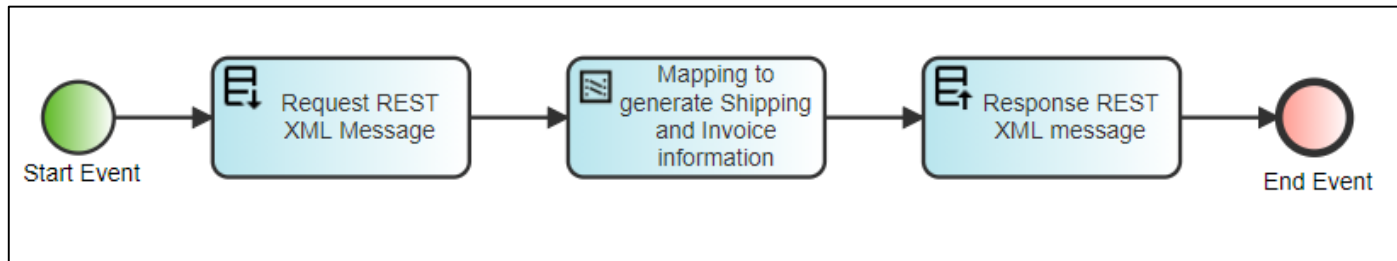
Sub process flow design

This sub-process is going to be published as a Web Service.

Exercise 5



Process flow



Sub process

Exercise 5

Deploy process flow

Go to Process Flow manage page > select the process flow > click **More** > **Execute**.

Note:

- Once executed, it sends an email with subject “Customer Orders” and attach customer_orders.xls file.
- You can check the execution logs of this process flow on Dashboard and verify the results.
- User will receive an email with updated customer orders file with shipping and invoice columns populated in excel.
- User can also use an Email Event to run the flow automatically (this activity is already created and registered, this email event needs to be activated).

MODIFIED	PUBLISHED	ACTION	
Today 11:23 AM	Unpublished	OFF <input checked="" type="checkbox"/> ON	⌵
Today 7:59 AM	Unpublished	OFF <input checked="" type="checkbox"/> ON	⌵
Dec 07 7:08 PM			
Dec 03 11:49 AM			
Nov 06 10:26 PM			
Nov 05 9:34 PM			
Nov 05 8:17 PM			
Nov 04 10:11 PM			
Jul 12 5:13 PM			

- Edit
- Delete
- Copy
- View
- Execute**
- Bind Event
- Unbind Event(s)
- View Event
- Check-in
- Replace With
- Revision History
- Publish as Post Process
- Publish as Template
- View Dependencies
- View References

Application Management

Application Management

There are various other management tasks that Adeptia Connect allows you to perform, these include changing the theme of application, monitoring system, managing logs, securing data, and APIs to check system health.

Application management section briefly covers following topics in this manual.

- Theme Settings
- Logs Archival & Cleanup
- Performance Management
- System Console
- Monitoring and Dashboard
- Adeptia Connect APIs
- Encryption at Rest

Application Management

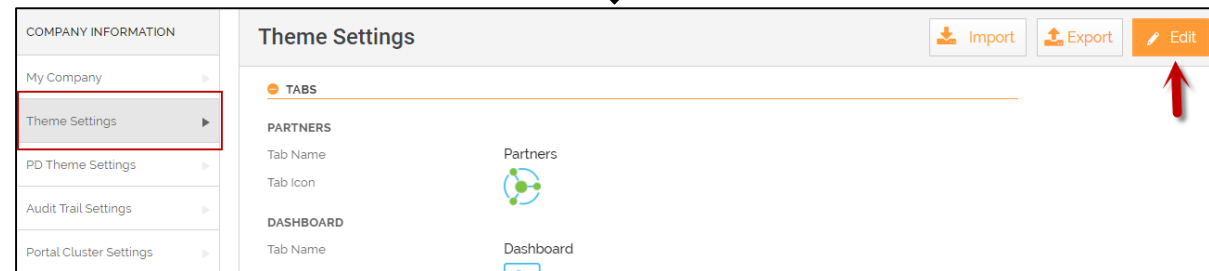
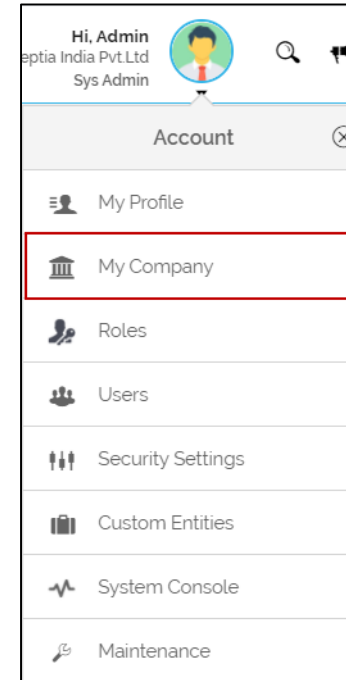
Theme Settings

Theme settings allow you to customize or modify Adeptia Connect UI to sync with your company branding. This gives you a flexibility to set color scheme, change name of the entities, tabs, or buttons. You can do similar for Process Designer.

To customize the theme:

1. Log in to Adeptia Connect with Sys Admin rights.
2. Go to **Accounts > My Company**.
3. Select **Theme Settings** from the left pane.
4. Click **Edit** to open the window in Edit mode.
5. Click **Import** to import a created theme.
6. Click **Export** to export the applied theme.

Visit [help page](#) for detailed information about theme settings and Export and import Theme settings options.



Application Management

Logs Archival & Cleanup

You can archive and clean up the Logs and Data Files in order to keep the high performance of the application. You can do it by defining on **log-cleanup.properties** file and by enabling and defining archival and cleanup schedules. Visit the [help page](#) to set up Archival sections, as it is not enabled by default.

Following are some key things to know before you work on logs:

- Database growth for logs

Database archival and cleanup can result in fragmented database storage and can result in poor performance of the system for logging operations. It is recommended to work with DBA to defragment database storage on a periodic basis

- Disk space growth for file repositories

Disk storage for file repositories should be frequently monitored and proper alerts configured and periodic cleanup schedule maintained

- Archival and retention policies

Archival and cleanup should be aligned to retention policies as applicable.

Application Management

Performance Management

To ensure efficient management and high availability of Adeptia Connect, performance is important. For this, you need to understand the usage of various resources such as memory, log database, and repository database, and more.

You can monitor the performance of Adeptia Server with the help of various parameters. To monitor various parameters of Adeptia Server, you need to send your request in the form of HTTP request. The values of these parameters are returned in the XML data.

Visit the [Performance help page](#) to understand how can you monitor the performance of Adeptia server and which parameters are displayed. In addition, this section explains how this information is presented to the user.

Application Management

System Console

System Console provides you with a list of information related to the status of Adeptia Connect. It also helps to diagnose the errors occurring while using Adeptia Connect. Steps to access the System Console page:

- Go to **Account** and click **System Console**.

You can also set threshold values for various alerts in system console. Alternately, you can also use APIs to fetch the status details shown on system console.

Following are the useful links from help portal that you can visit.

[About System Console](#)

[Setting Threshold Values for System Console](#)

[APIs for System Console](#)

Application Management

Monitoring and Dashboard

Adeptia System Console provides the detailed status of various components namely License Status, Cluster Status, Scheduler Status, Backend Database Status, Log Database Status, Process Execution Status, Archive Log Database Status, System Information, Kernel Information, and WebRunner Information.

To monitor the performance of Adeptia Connect, you need to send a request as a HTTP URL in the below format:

<http://<hostname>:<port>/adeptia/control/monitorMatrix?monitorFlag=<monitorflag>&matrixFlag=<matrixflag>>

You can also use APIs to various types the statuses of your product, such as status of License, Database, Logs, Kernel, etc.

Application Management

Adeptia Connect APIs

- The API provides the way to fetch product information, Create, Update, and Delete activities without accessing the user interface.
- You can use the listed Adeptia Connect APIs on [this page](#) to view product information and to manage various activities (User, Partner, Transactions, Schema, and Mapping) from an external application.

Application Management

Encryption at Rest

When any Process Flow executes, all temporary files are stored in a repository folder. To prevent it from misuse, you may want to secure the folder. You can secure the repository folder by encrypting data in the folder.

To encrypt the data, you need to configure the following:

1. Create Keystore using Keytool
2. Configure Keystore in Adeptia Connect

For detailed steps, visit help page for [encryption of data at rest](#).

Configuring System Properties

The system properties can be updated to change the properties of the system components of Adeptia Connect. For example, you can change the mail server settings, enable or disable clustering and database settings etc.

Note: Only the users of *Admin* and *Sys Admin* type can update the system properties.

To access and update the system properties in Adeptia Connect, follow the steps below:

- Click **Configure > Developer Studio**.
- Click **Proceed** and you will be redirected to Adeptia Suite home page.
- On the **Developer Studio** home page, click **Administer** tab.
- Go to **Setup** menu and select **Application Settings**.
- Click the **Update System Properties**.
- Expand the system component whose properties you want to change.
- Click **Save**.
- To commit the changes, click **Reload Configuration**.

Accessing Adeptia Support

- Visit Adeptia Online Technical support (<https://support.adeptia.com>) to get your issues resolved. You can reach technical support team at support@adeptia.com.
- There is also a support forum which has answers and resolutions to most of the common issues you may face as an Adeptia Connect user. To access the support forum, visit <https://support.adeptia.com>.



Thank you for your attention!

Reference Slides

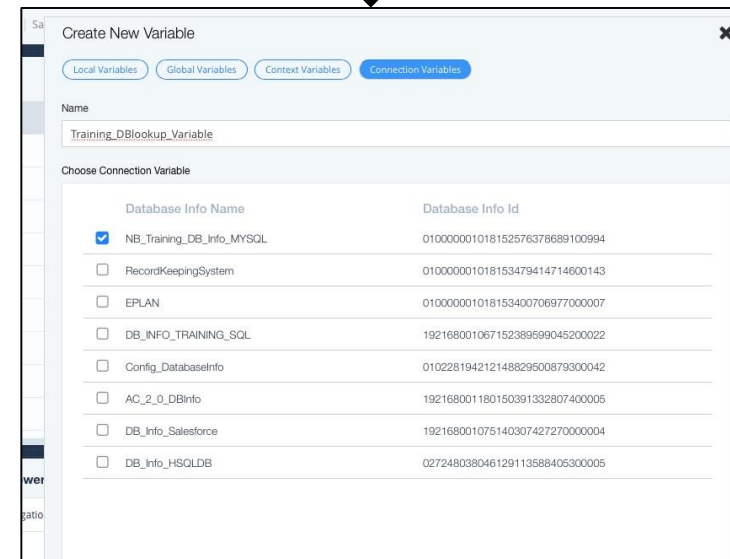
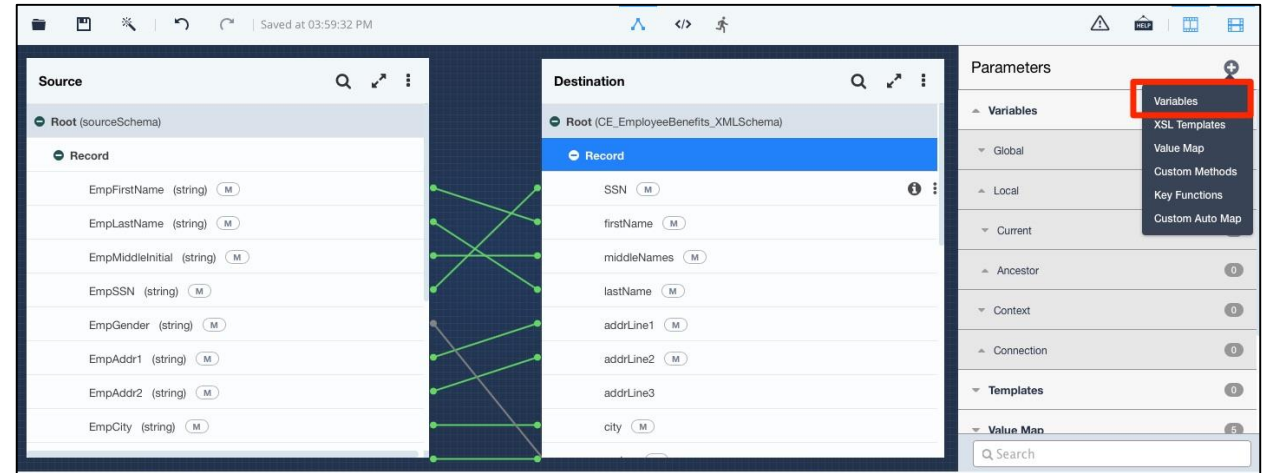
Mapping Features

Database Lookup

The DB function enables you to read and get the data from a database. Before you use a Database function, ensure you have created a mapping and a DBInfo. We have shown in previous slides how to create a DBInfo.

To use database lookup:

1. Click **Configure > DATA TRANSFORMATION > Mapping**.
2. Click **Create Mapping** to create a new mapping. Or, use Action arrow to edit an existing mapping.
3. Go to the Parameter option and click Variables.
4. In the Variables, click Connection Variables to view the list of available DBInfo.
5. Select the required DBInfo and give variable a Name.
6. Click **Save**.



Mapping Features

10. Go to Mapping Expression and Click on DB.

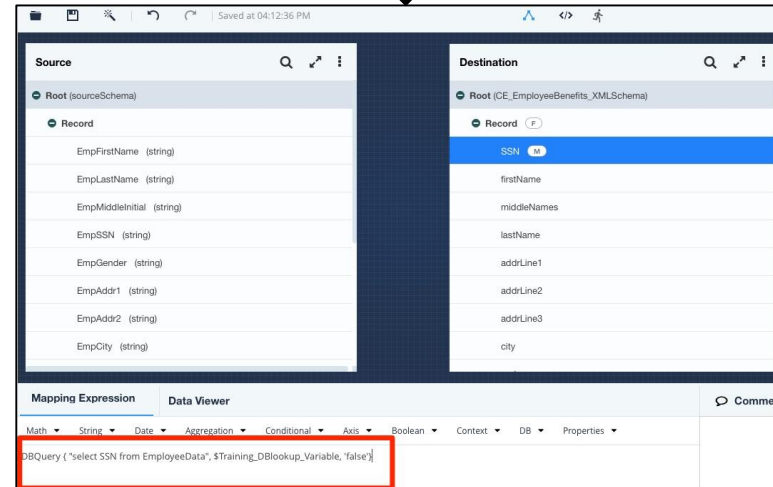
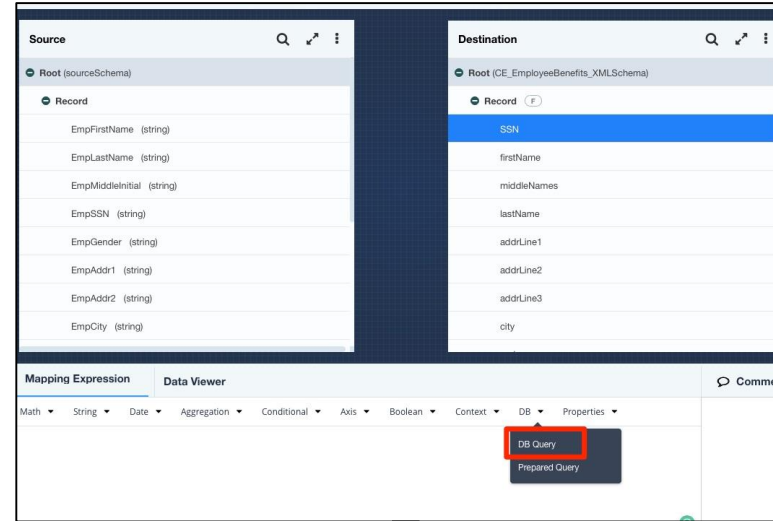
11. You have two types of Queries:

- DB Query: Returns data from the database, based on query
- PreparedQuery: Returns data from the database, based on query.

12. Before using any of these queries, ensure that that the source and destination layouts are loaded.

13. In the Mapping Expressions canvas area type the following query (for using a DBQuery).

```
SELECT sql_function as alias_name  
FROM table_name
```



Mapping Features

AIMap

AIMap reduces the effort required to configure data mapping rules and increases the accuracy by inferring mapping suggestions from the existing library of tested and validated data maps. It learns mapping patterns between existing data fields and trains a neural network to suggest future data mappings. It classifies predictions into High, Medium, and Low confidence mapping suggestions.

AIMap works on the principle of Artificial Intelligence and leverages a repository of mappings stored at the Adeptia-secured cloud. This repository hosts the mappings created by users of Adeptia Connect. If you choose to use AIMap while creating a mapping, it will fetch the mapping suggestions that match the elements of the layout.

AIMap remains on by default. Therefore, whenever you load a source and destination layout in the mapper, AIMap gets triggered automatically.

AIMap gives you suggestions after analysing the uploaded layout. Suggestions are of high, medium, and low confidence mappings categories. [Visit help page](#) to know more about the confidence levels.

Once you apply the suggestions. Adeptia automatically maps the layouts based on information it has from the repository.

Disaster Recovery Models

Due to any planned or unplanned event, an application may face a downtime in any form and at any time. This may cause huge data loss and irreversible damage to your business causing a disastrous scenario. Information Technology Enabled Services (ITeS) industry usually keeps a business continuity plan to address such outages. Adeptia also recommends installing Adeptia Connect in a disaster recovery environment that would ideally keep the business running in case the main production environment is down.

Adeptia recommends you to follow any of the two models to ensure continuous operation in case of unexpected scenario of disaster:

Basic Standby model

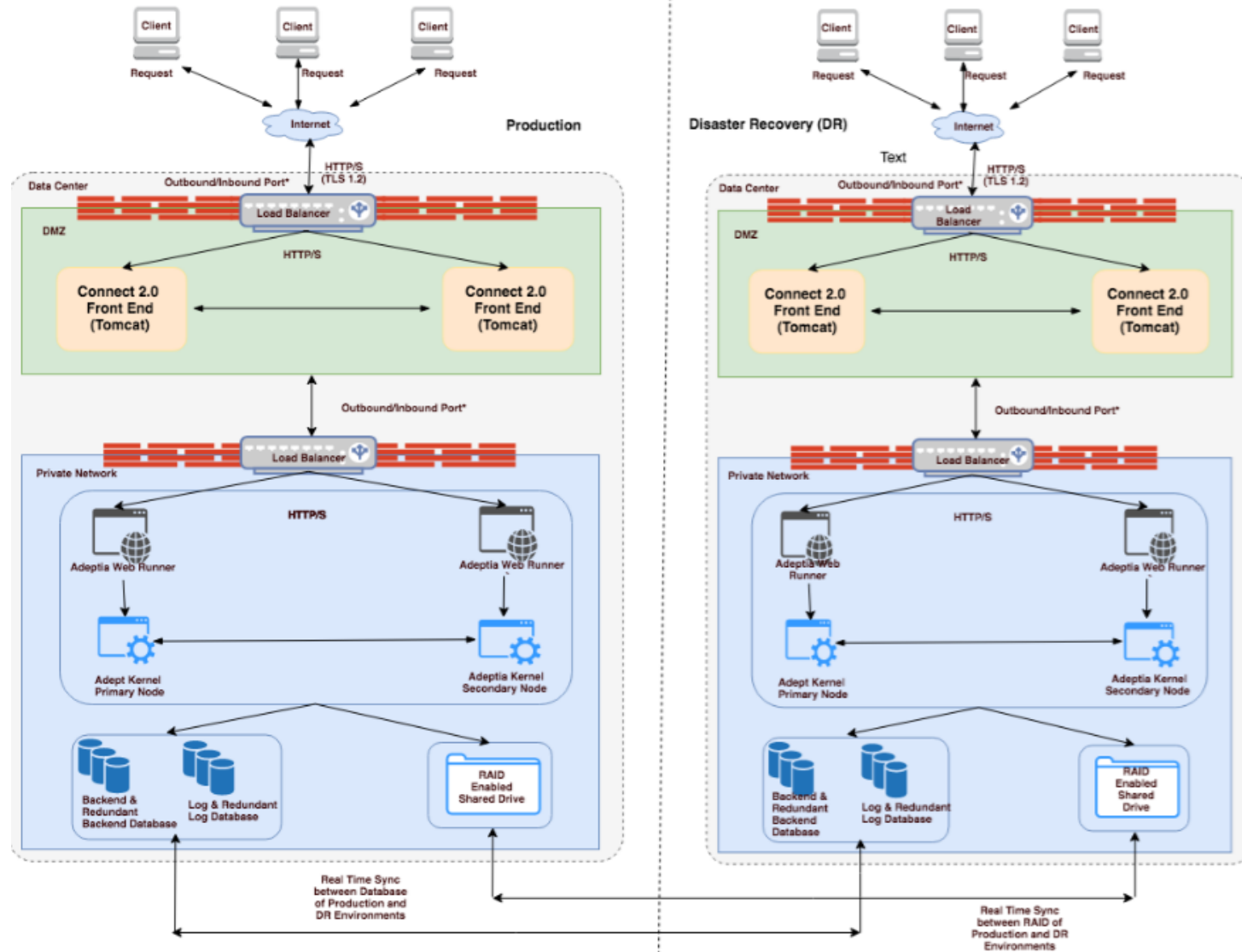
Basic Standby model is achieved by backing up the data from production environment's RAID to the RAID of disaster recovery constantly. This helps in copying all the activities created and stored in the RAID of the Production environment to the Disaster Recovery environment, protecting the data and application during a disaster and keeps the business continuity intact.

High Availability model

Adeptia Connect High Availability (HA) deployment architecture defines the components of Adeptia Connect (Connect Portal and Connect Server), shared storage, and redundant databases which ensure optimal operational performance, even at times of high loads. This architecture also helps you understand one of the disaster recovery mechanisms of Adeptia Connect system.

For more details about basic standby and high availability model, click [here](#).

Basic Standby Model



Q&A

The image features the text "Q&A" in a bold, three-dimensional red font. The characters are thick and blocky, with a slight shadow cast beneath them. The text is set against a dark, gradient background that transitions from a lighter grey at the top to a deep black at the bottom. A bright, circular spotlight illuminates the text from above, creating a strong contrast and casting a soft glow on the surface below. The overall composition is centered and minimalist.