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CommerceLink Setup & Configuration Guide

TeamViewer

Version 1.0

Document Overview

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| 1.0 | Nov 23, 2017 | Noman Saeed |  | Final Review |
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***Distribution List***

***Approved By***

|  |  |  |
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| Noman Saeed | Technical Lead | 1.0 |
| Noman Saeed | Technical Lead | 1.1 |
|  |  |  |

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## Installation Steps

# Prerequisite for deployment

## General

1. Dot Net Framework 4.5
2. Ports enabled and all required configuration in place for SFTP client to read and write data to SFTP server.
3. Directory structure on SFTP.
4. Directory structure on local server
5. Ports enabled to send email (future requirements)
6. Administrative Rights on server
7. Service account to run CommerceLink service with AX admin’s permission

## Magento® Prerequisite

1. Related Magento® website running
2. Integration Framework component is enabled
3. Crone Jobs are enabled
4. Crone Jobs written by VSI should be deployed on all servers

## AX Prerequisites

1. Related AX customization deployed -Dynamics AX 2012 R3 Environment.
2. Online Stores are configured and in published state along with customizations.
3. AOS Service

## Product

1. Channel Published
2. Channel Hierarchy Published
3. Catalog Published

## Sales Order

1. All product synced in CommerceLink DB.
2. Ecommerce channel configured properly.
3. Xml/CSV generated from Ecommerce (Magento) is in required format.
4. AX configurations should be present in CommerceLink db (like: Customer Group, Tax code, shipping methods, shipping charges categories and payment method etc.)
5. AX Customization Mapping for sales order on retail transaction tables which has custom fields.

## Customer

1. Customer Number/Account No must be auto generated in AX
2. Customer group specified in configuration must exists in AX as well

## Jobs

Following job in AX should be running error free.

1. 1020 = Prices and Discounts
2. 1040 = Products
3. 1130 = Product Availability
4. 1150 = Catalog
5. 1070 = Channel Configuration
6. P0001 = Channel Transactions
7. Sync Online Orders

## Deployment items

We have following items for deployment.

* 1. Commerce Link Web UI Application
     + Web API for Commerce Link Web UI
  2. Commerce Link Data Service
  3. Commerce Link File Sync Service
  4. Commerce Link Web APIs

# Reference Tables

## Job Table

This table is a reference table for all jobs of the CommerceLink. There are few columns which are very important to understand Jobs

**JobName Column:** This column is used to store the name of the Job.

**Enabled Column:** There is an “Enabled” column in this table which is used to turn on or turn off the jobs.

**JobTypeId Column:** If set as 0 means that the Job processes data from AX and generates file (if required). If set as 1 means that the Job uploads or downloads the file.

**CommerceLink Data Sync Service’s Jobs:**

|  |  |  |
| --- | --- | --- |
| **JobID** | **JobName** | **Description** |
| 2 | ProductSyncJob | Product Synchronization Job pulls products from AX ERP and generate XML files for ECOM Server |
| 4 | PriceSyncJob | Price Synchronization Job pulls product prices from AX ERP and generate XML files for ECOM Server |
| 17 | SalesOrderSyncJob | Sales Order Synchronization Job pulls ECOM Sales Order XML from SFTP |
| 19 | SyncDiscount | Discount Synchronization Job pulls discounts from AX ERP and generate XML files for ECOM Server |
| 20 | SyncSalesOrderStatus | SyncSalesOrderStatus Job pulls Sales Order Status from AX ERP and generate XML for ECOM. |
| 1 | InventorySyncJob | Inventory Synchronization Job pulls inventory from AX ERP and generate XML files for ECOM Server |
| 24 | ConfigurationSync | Configuration Sync Job pulls configuration related to Channel and generate XML files for ECOM Server |
| 26 | QuotationReasonGroupSync | Quotation Reason Group Job pulls quotation reason group info from Channel and generate XML files for ECOM Server |

**CommerceLink File Sync Service’s Jobs:**

|  |  |  |
| --- | --- | --- |
| **JobID** | **JobName** | **Description** |
| 12 | UploadProductSync | Product Synchronization Job upload Catalog XML files from CommerceLink DataFiles to ECOM SFTP server |
| 14 | UploadPriceSync | Price Synchronization Job upload PriceBook XML files from CommerceLink DataFiles to ECOM SFTP server |
| 117 | DownloadSalesOrderSync | Sales Order Synchronization Job download SalesOrders XML files from ECOM SFTP server to CommerceLink DataFiles |
| 119 | UploadDiscountSync | Discount Synchronization Job upload Dicount XML files from CommerceLink DataFiles to ECOM SFTP server |
| 122 | UploadSalesOrderStatusSync | SyncSalesOrderStatus Job upload OrderStatus XML files from CommerceLink DataFiles to ECOM SFTP server |
| 11 | UploadInventorySynch | UploadInventorySynch Job upload Inventory XML files from CommerceLink DataFiles to ECOM SFTP server |
| 124 | UploadConfigurationSync | UploadConfigurationSync Job uploads Configuration XML files from CommerceLink DataFiles to ECOM SFTP server |
| 126 | UploadQuotationReasonGroupSync | UploadQuotationReasonGroupSync Job uploads Quotaion Reason Group XML files from CommerceLink DataFiles to ECOM SFTP server |

## JobSchedule table

This table is used to store and set the information about the Jobs start time, interval and frequency.

**IsActive Column:** There is an IsActive column in this table which is used to turn on or turn off the job for a particular store.

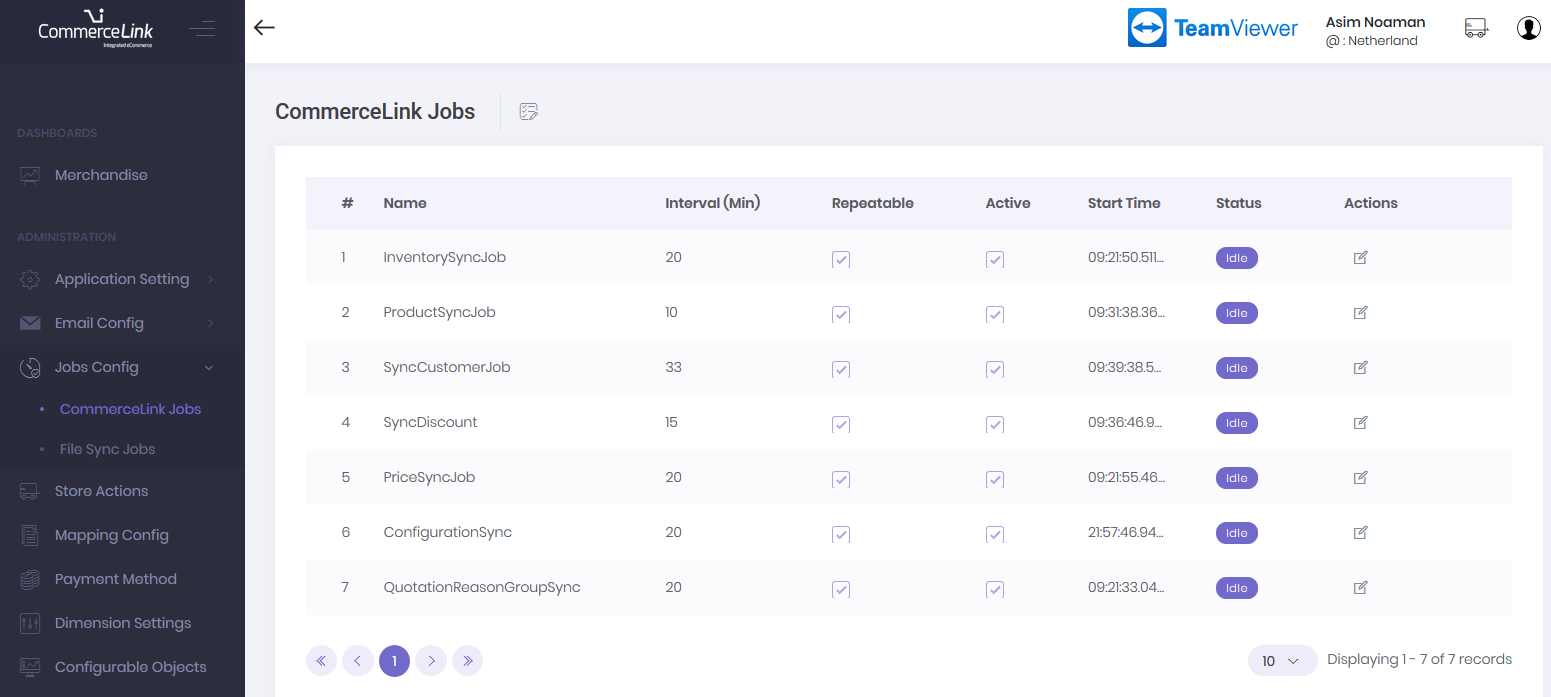
(1 means job is turned on and 0 means job is turned off.)

**JobInterval Column:** This column is used to specify the frequency of the job after which it will be executed. This value is in minutes.

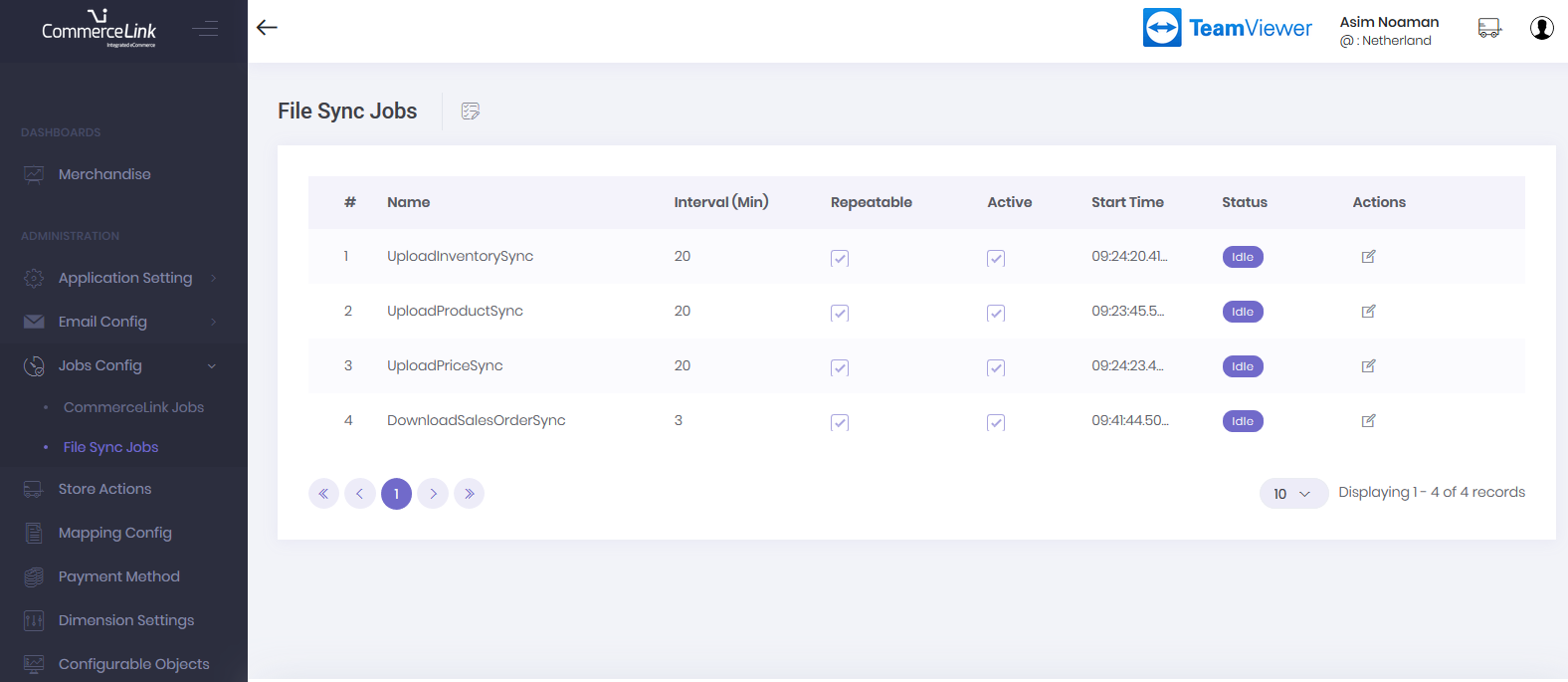
**StartTime Column:** This column is used to specify the fixed execution time of the job on daily basis. For fixed time execution JobInterval should be 0.

## Example UI and Description

CommerceLink Data Sync Service’s Jobs UI:



CommerceLink File Sync Service’s Jobs UI:



**Interval**: The job defined in Name column will start after this interval.

**Repeatable:** Not in use.

**Start Time:** If the interval is 0, and a start time is defined, then the job is going to be triggered on this defined start time on daily bases.

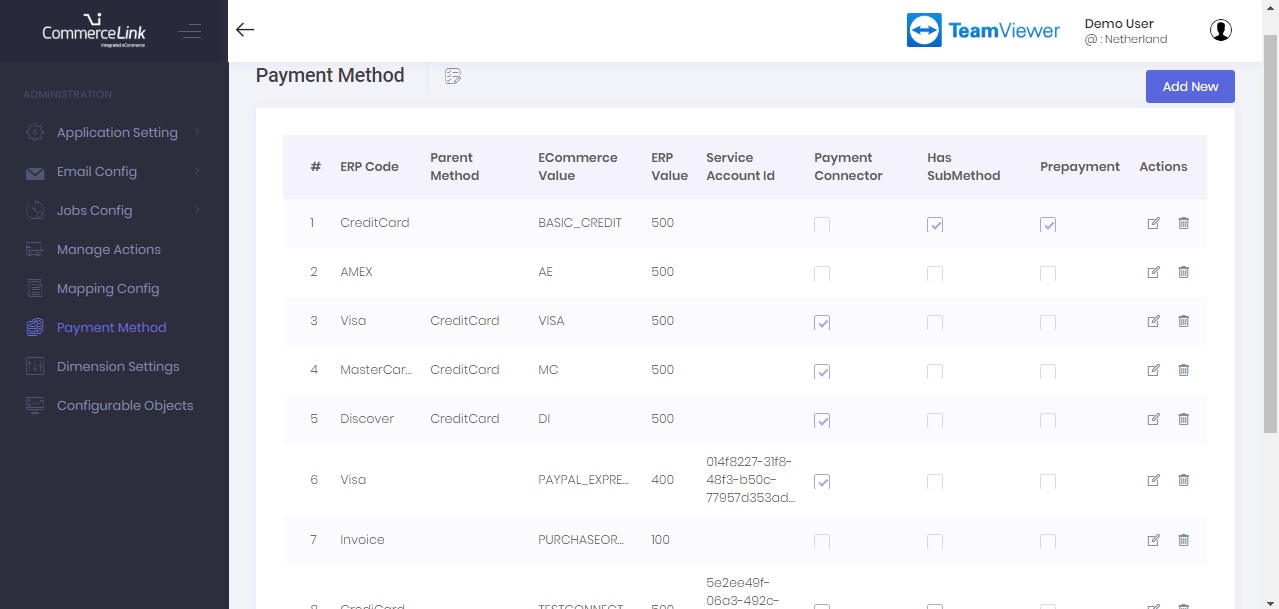
**Active:** This is used to turn job ON and OFF.

**Status:** The column shows whether the job is running or idle at any moment.

## Payment Method

This table is a reference table for all Payment Methods of the CommerceLink.

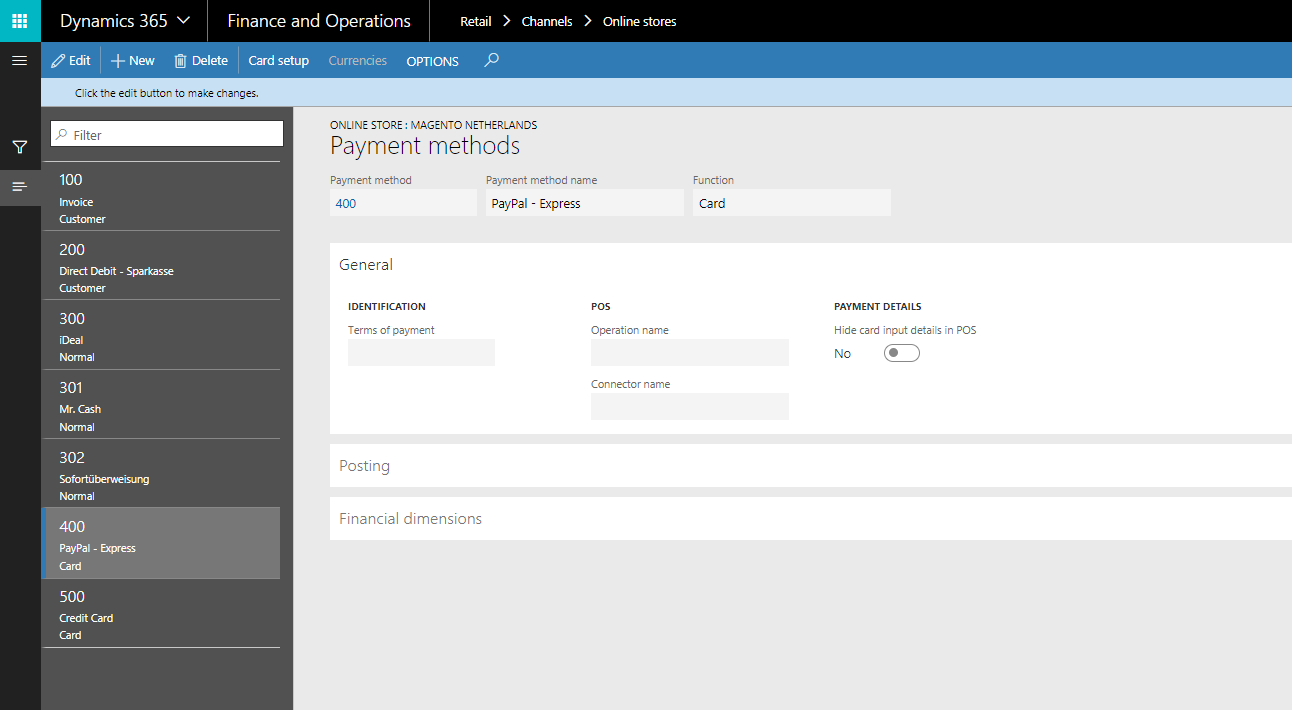
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ECommerceValue | ErpValue | Has SubMethod | IsPrePaymnet | IsCreditCard | UsePaymentConnector | ServiceAccountId |
| BASIC\_CREDIT | 500 | True | False | True | True | \*\*\*\*\*\*\*\*\*\*\* |
| AMEX | 500 | False | False | True | True | \*\*\*\*\*\*\*\*\*\*\* |
| VISA | 500 | False | False | True | True | \*\*\*\*\*\*\*\*\*\*\* |
| MASTER | 500 | False | False | True | True | \*\*\*\*\*\*\*\*\*\*\* |
| DISCOVER | 500 | False | False | True | True | \*\*\*\*\*\*\*\*\*\*\* |
| PAYPAL\_EXPRESS | 400 | False | False | True | True | \*\*\*\*\*\*\*\*\*\*\* |
| PURCHASEORDER | 100 | False | False | False | False | \*\*\*\*\*\*\*\*\*\*\* |



**ERPValue Column:** This column is used to set AX Payment method Id/code.

To fill this value go to the AX Retail Setup and click Payment methods option.

Map values from Payment method as shown in the following screenshot.

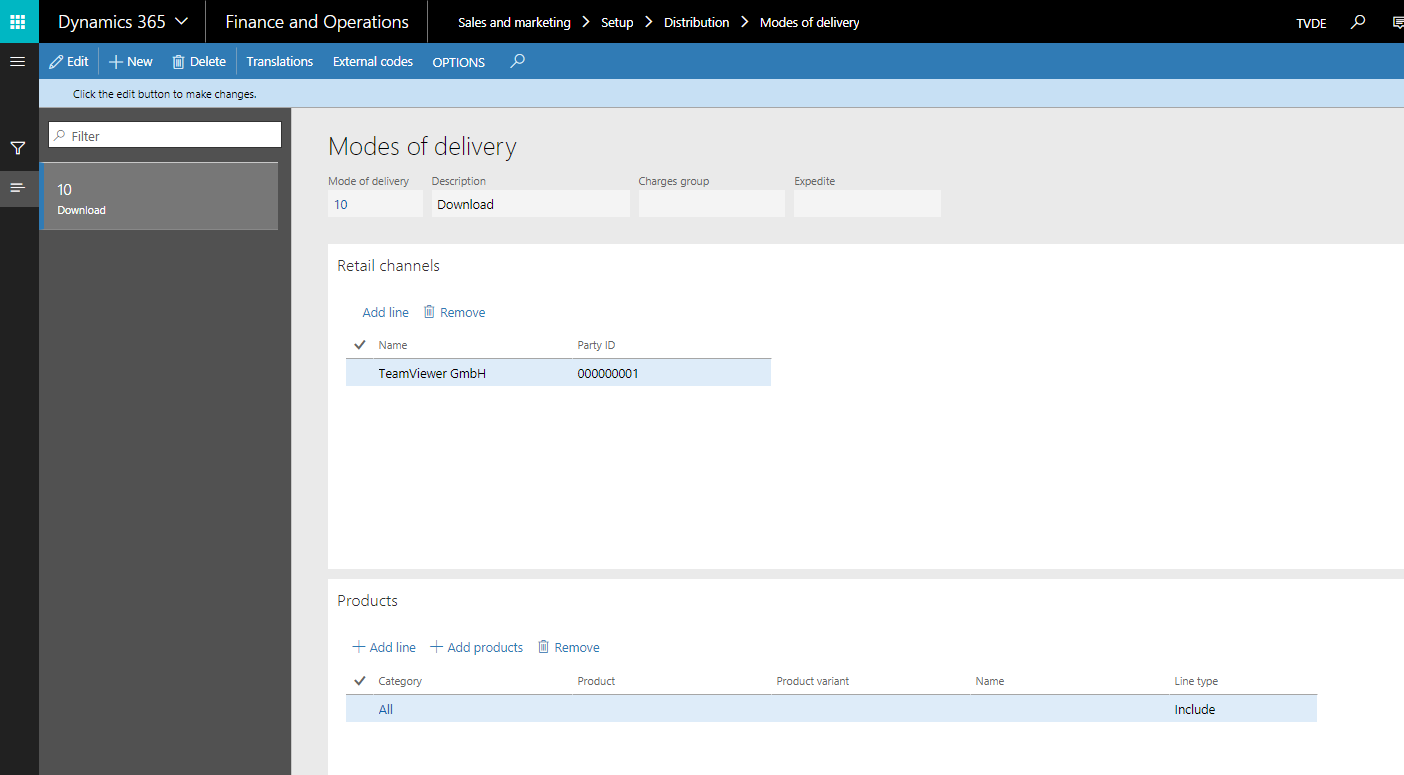


## ConfigurableObject Table

**Delivery Methods**

|  |  |
| --- | --- |
| Commerce Value | ERP Value |
| 001 | 10 |
| 002 | 10 |
| 003 | 10 |
| 004 | 10 |
| 005 | 10 |

001, 002, 003, 004 and 005 are delivery modes. These delivery modes ERPValues must be mapped from AX ERP as shown in the following screenshot:



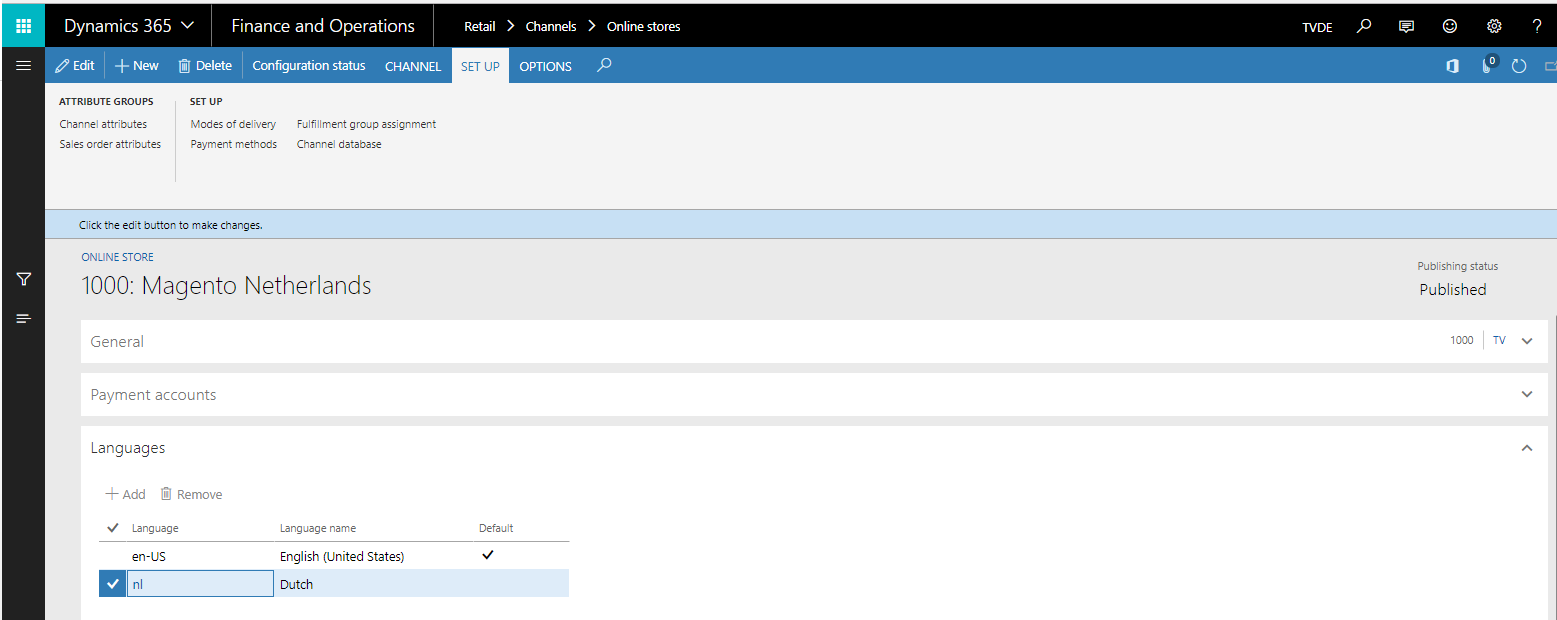
**Note: each delivery method has charges setup with same charge code in AX. CL will land same charge code as delivery method of sales order.**

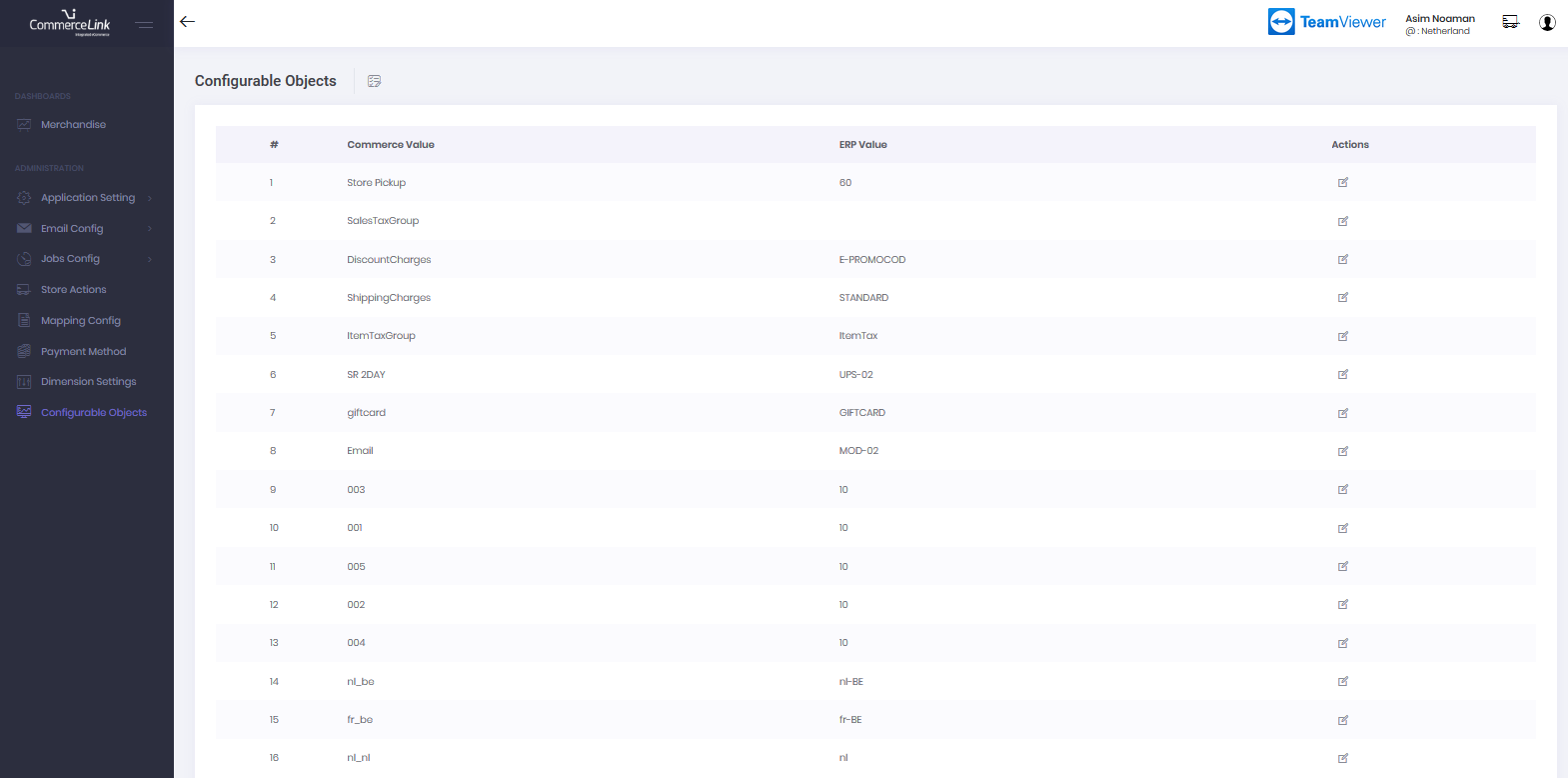
**Language Codes**

|  |  |
| --- | --- |
| Commerce Value | ERP Value |
| nl\_be | nl-BE |
| fr\_be | fr-BE |
| nl\_nl | nl |

For languages other than English, Language codes mapping should have the above values.

The ERP values should be set from the following section of D365

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## Configuration of Modules

Change each module setting to appropriate values.

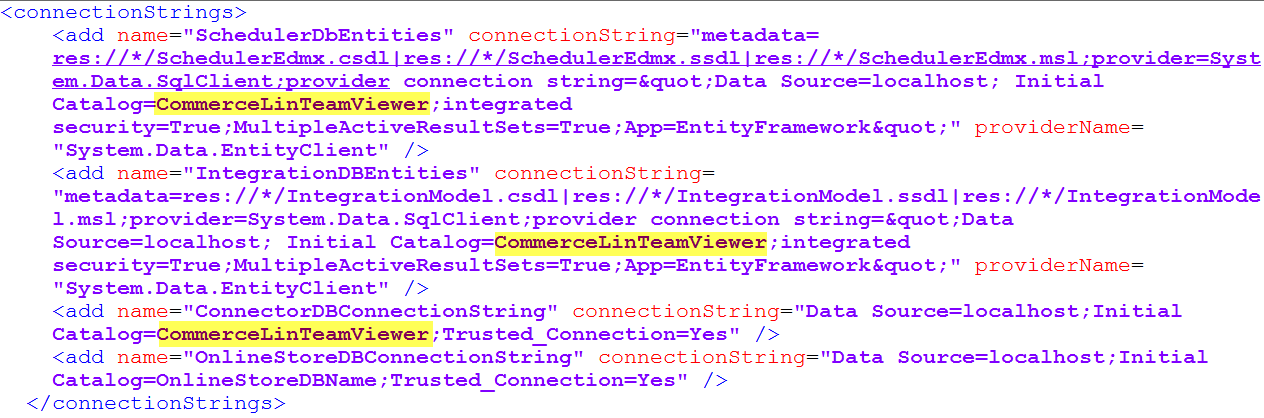
**Note: New installation will have these changes so no need to do them again, just verify them from mentioned files.**

**1-CommerceLink Data Sync Service:**

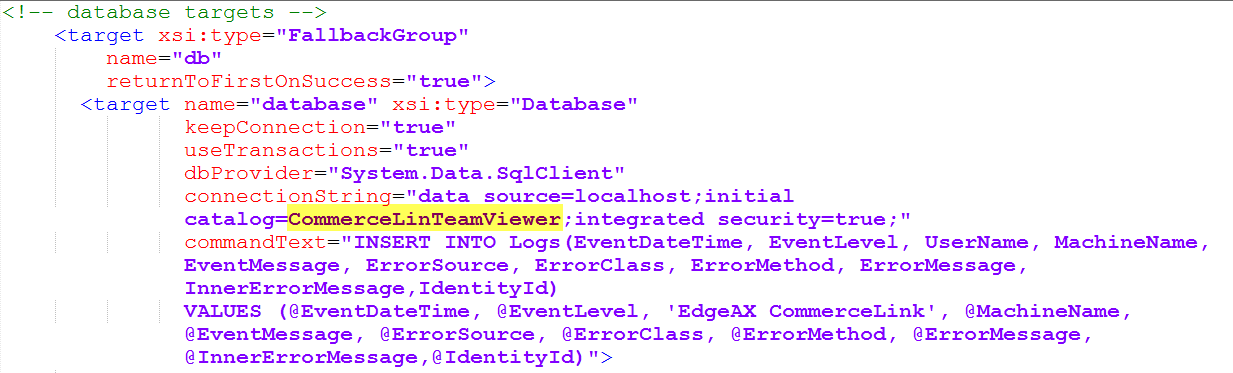
Change DB connection string configurations in “**VSI.EDGEAXConnector.WindowService.exe**” type “**Config**” file in CommerceLink Windows Service’s published folder. These configurations are store specific.

Configuration table for Connection String Section as follows:

|  |  |
| --- | --- |
| **Name** | **Connection String** |
| SchedulerDbEntities | Connection string for CommerceLink DB ( for Edmx) |
| IntegrationDBEntities | Connection string for CommerceLink DB ( for Edmx) |
| OnlineStoreDBConnectionString | Connection string for online store channel DB |
| ConnectorDBConnectionString | Connection string for CommerceLink DB |



Also changeDB connection string in “**NLog**” type “**Config**” file of CommerceLink Windows Service’s published folder.



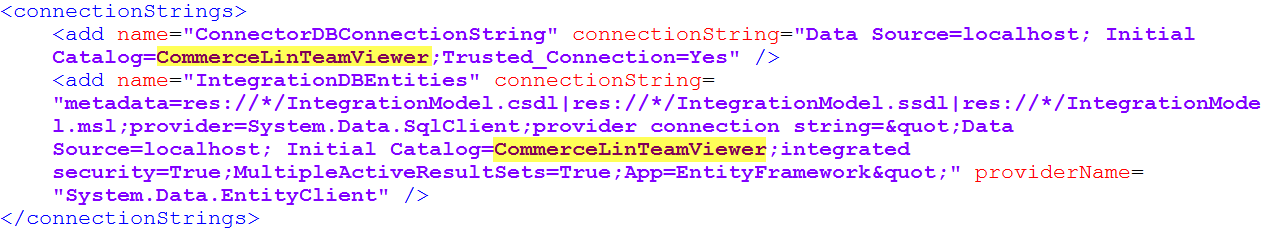
**Note: If yours connect is not trusted then also provide database username and password.**

**2-CommerceLink File Sync Service:**

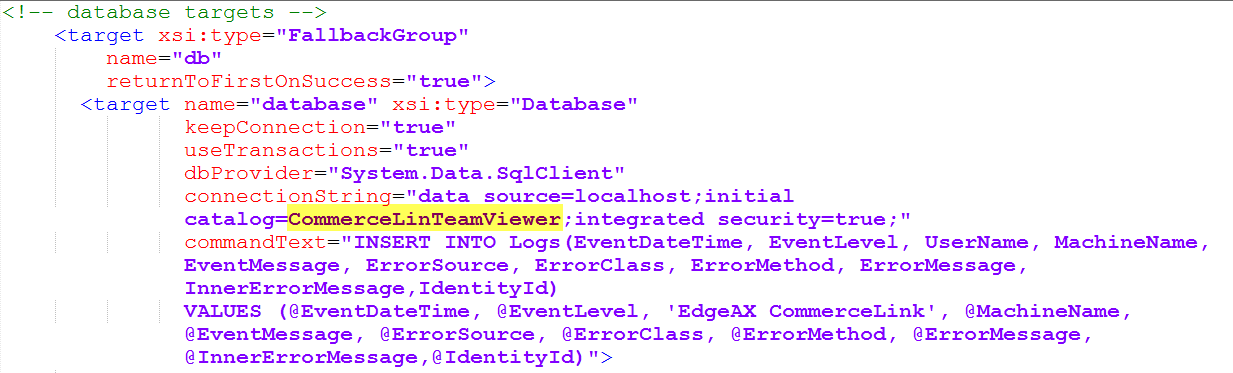
Change DB connection string configurations in “**VSI.EDGEAXConnector.FilesSyncService.exe**” type “**Config**” file in CommerceLink File Sync Service’s published folder. These configurations are store specific.

Configuration table for Connection String Section as follows:

|  |  |
| --- | --- |
| **Name** | **Connection String** |
| IntegrationDBEntities | Connection string for CommerceLink DB ( for Edmx) |
| ConnectorDBConnectionString | Connection string for CommerceLink DB |



Also changeDB connection string configurations in “**NLog**” type “**Config**” file of CommerceLink File Sync Service’s published folder.



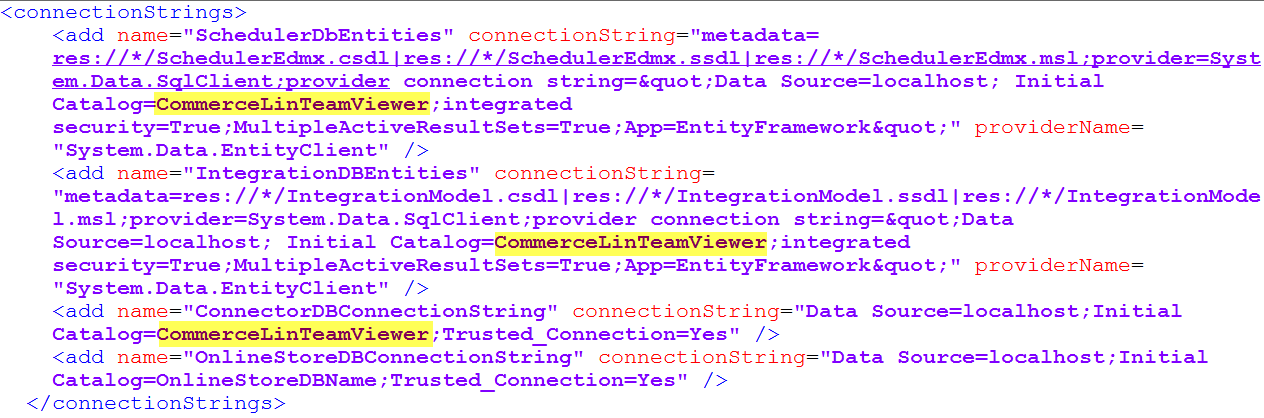
**Note: If yours connect is not trusted then also provide database username and password.**

**3-CommerceLink Web APIs:**

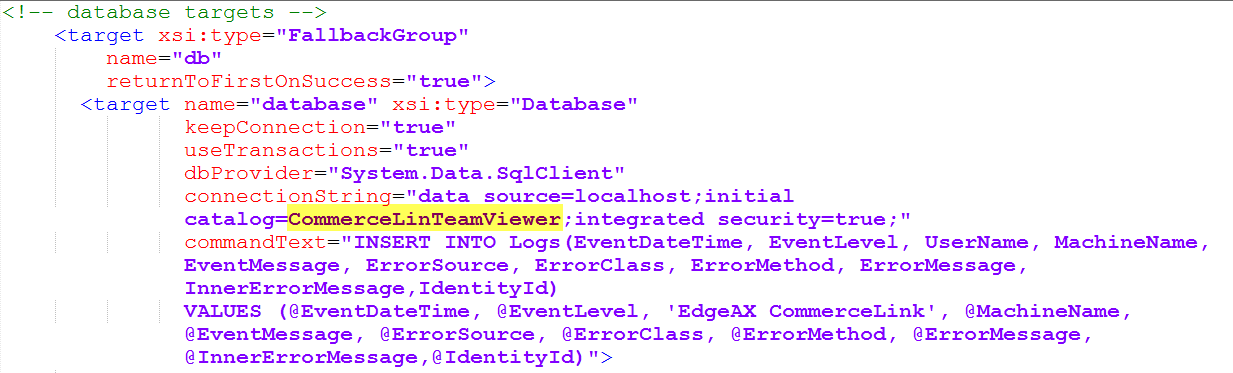
Change DB connection string configurations in “**Web.config**” type “**Config**” file in CommerceLink Web APIs published folder. These configurations are store specific.

Configuration table for Connection String Section as follows:

|  |  |
| --- | --- |
| **Name** | **Connection String** |
| SchedulerDbEntities | Connection string for CommerceLink DB ( for Edmx) |
| IntegrationDBEntities | Connection string for CommerceLink DB ( for Edmx) |
| OnlineStoreDBConnectionString | Connection string for online store channel DB |
| ConnectorDBConnectionString | Connection string for CommerceLink DB |

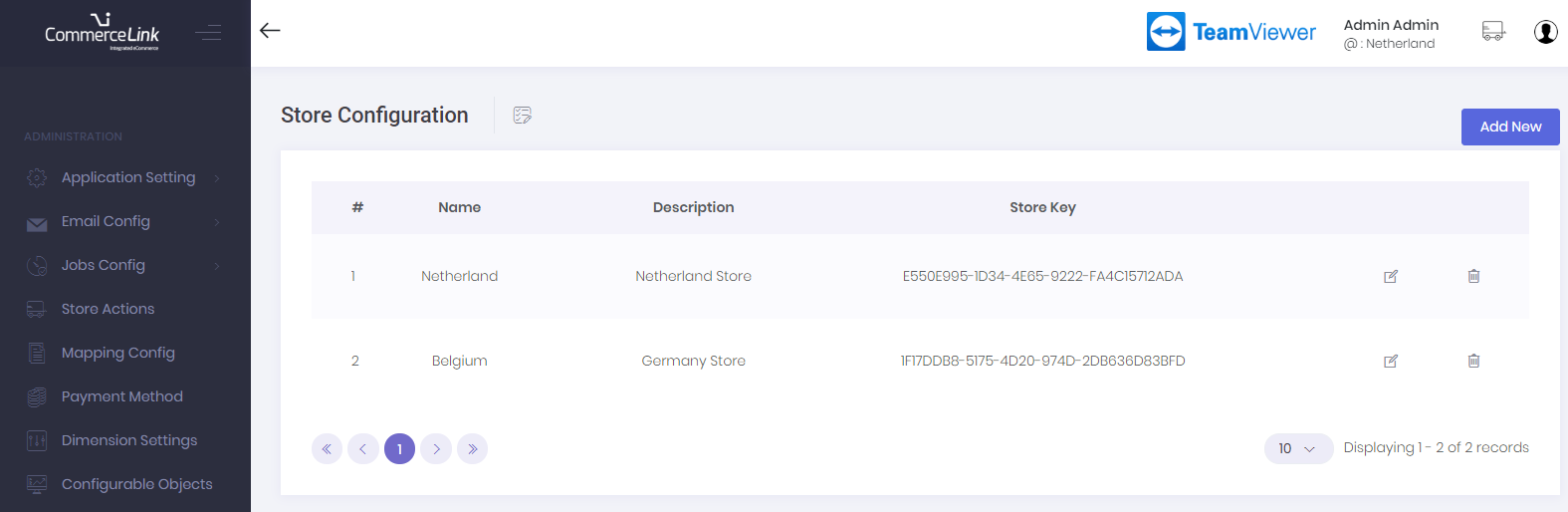


Also changeDB connection string configurations in “**NLog**” type “**Config**” file of CommerceLink Web APIs published folder.



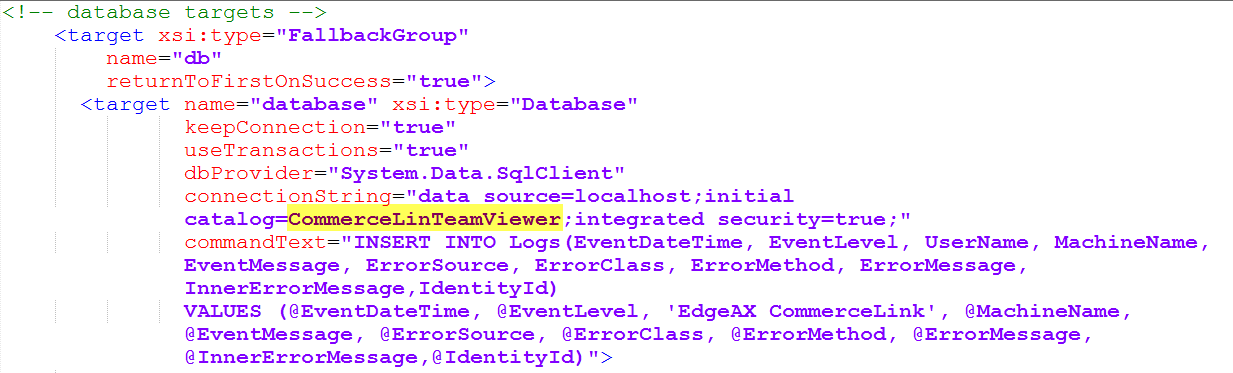
**Note: If yours connect is not trusted then also provide database username and password.**

Set the Store Key against the relevant store. Convey these store keys to ECom Team so that they can use this for calling CL Web APIs.



**4-CommerceLink Administration API:**

ChangeDB connection string configurations in “**NLog**” type “**Config**” file of CommerceLink Administration API folder.



Open the Web.config file. Change the connection strings of the following:

<connectionStrings>

<add name="storeConnection\_EF" connectionString="metadata=res://\*/IntegrationModel.csdl|res://\*/IntegrationModel.ssdl|res://\*/IntegrationModel.msl;provider=System.Data.SqlClient;provider connection string=&quot;data source=13.68.73.77;initial catalog=TVTestDB;persist security info=True;user id=Shan;password=++12345Abcd1231231;MultipleActiveResultSets=True;App=EntityFramework&quot;" providerName="System.Data.EntityClient" />

<add name="IntegrationDBEntities" connectionString="metadata=res://\*/IntegrationModel.csdl|res://\*/IntegrationModel.ssdl|res://\*/IntegrationModel.msl;provider=System.Data.SqlClient;provider connection string=&quot;data source=13.68.73.77;initial catalog=TVTestDB;persist security info=True;user id=Shan;password=++12345Abcd1231231;MultipleActiveResultSets=True;App=EntityFramework&quot;" providerName="System.Data.EntityClient" />

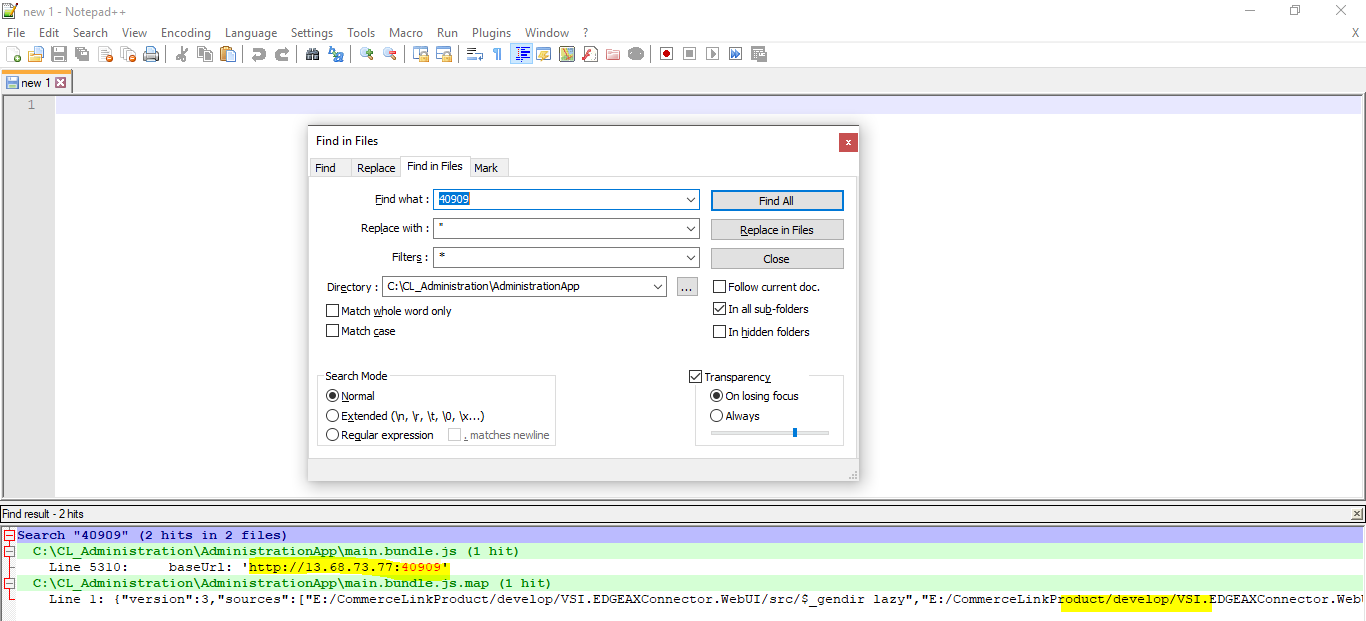
<add name="storeConnection" connectionString="Data Source=13.68.73.77;initial catalog=TVTestDB;persist security info=True;user id=Shan;password=++12345Abcd1231231;MultipleActiveResultSets=True;" providerName="System.Data.EntityClient" />

<add name="AspNetIdentity" connectionString="Data Source=localhost;Initial Catalog=CLStores;integrated security=True" providerName="System.Data.SqlClient" />

</connectionStrings>

**5-CommerceLink Administration App Configurations:**

1. Open the Administration App Folder and copy the path in and search the string “40909” inside using notepad from the folder, you will get the following files.

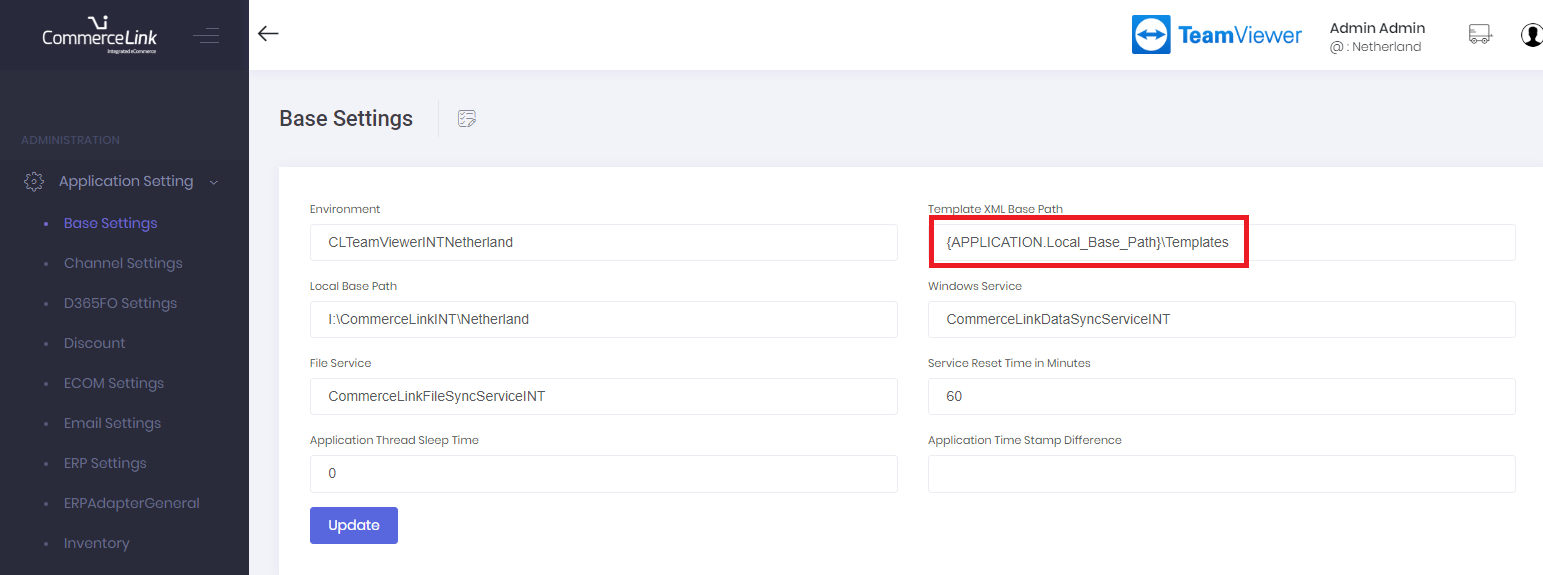


Change the baseURL values from both files to CommerceLink Administration API Path

**Maps Configuration**

Verify mapping template path is configured correctly.

**Note: Also assign full permission read & write to CommerceLink directory.**

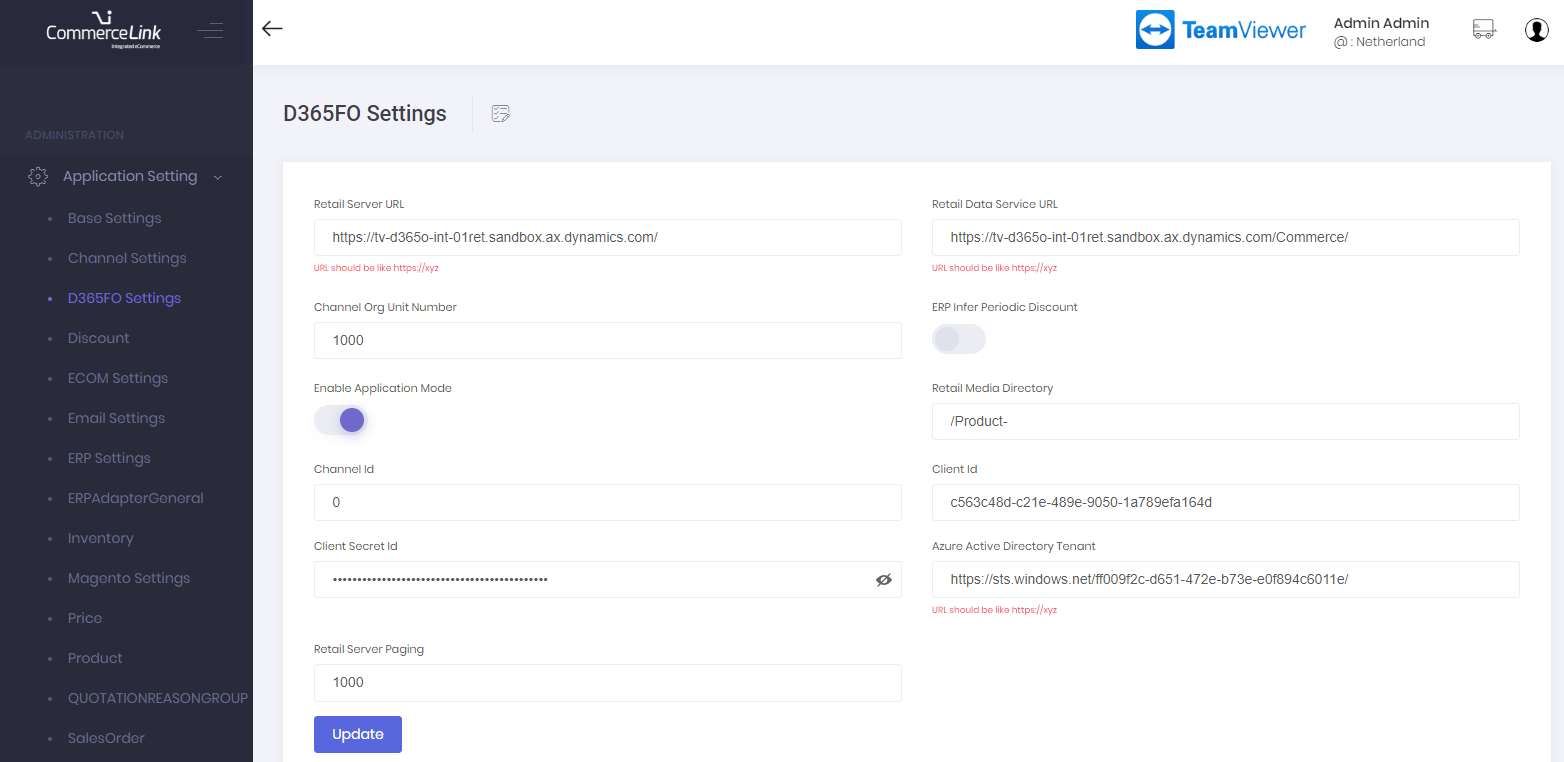


1. **Retail Server/AX connectivity**

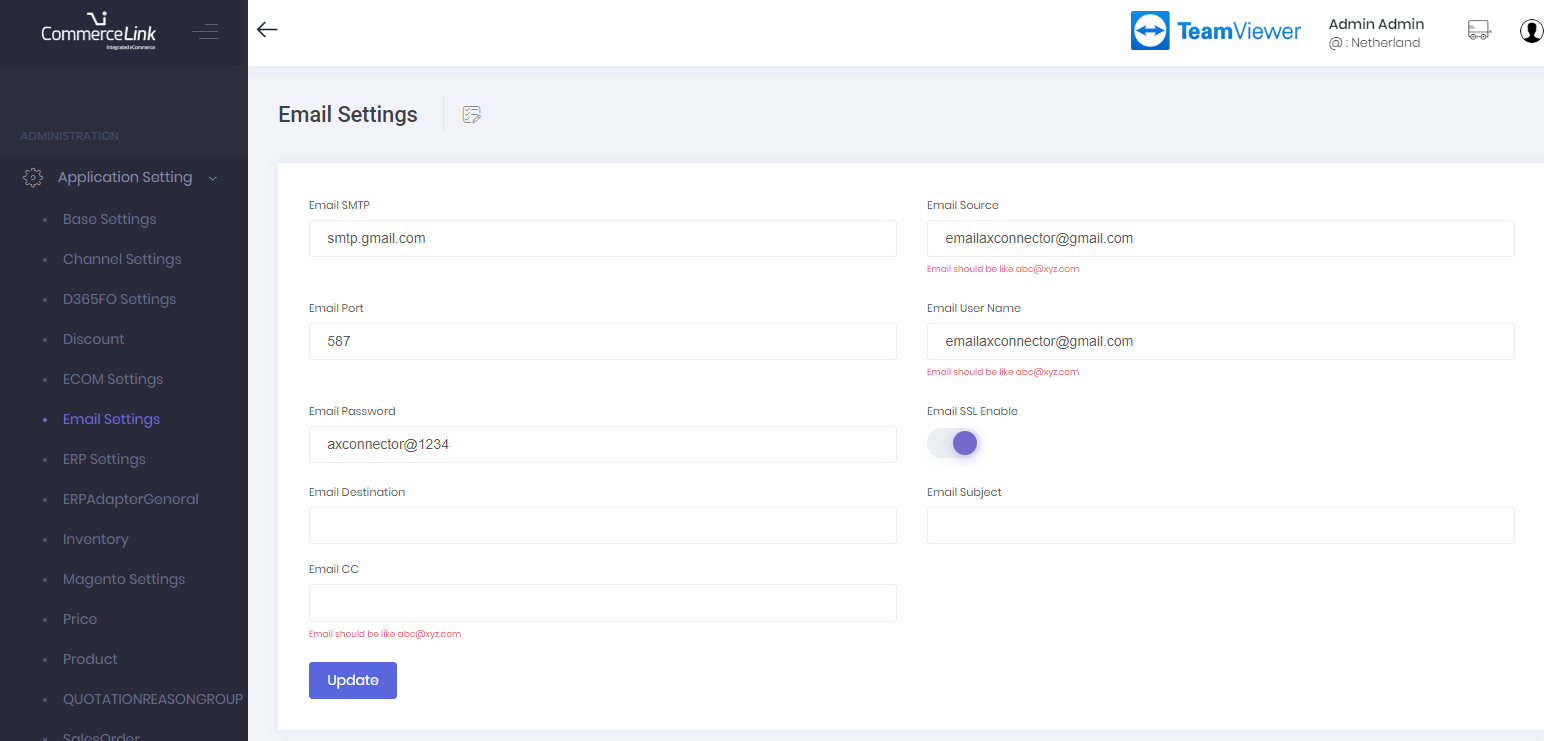
Need to verify retail server configuration in ERP Settings.

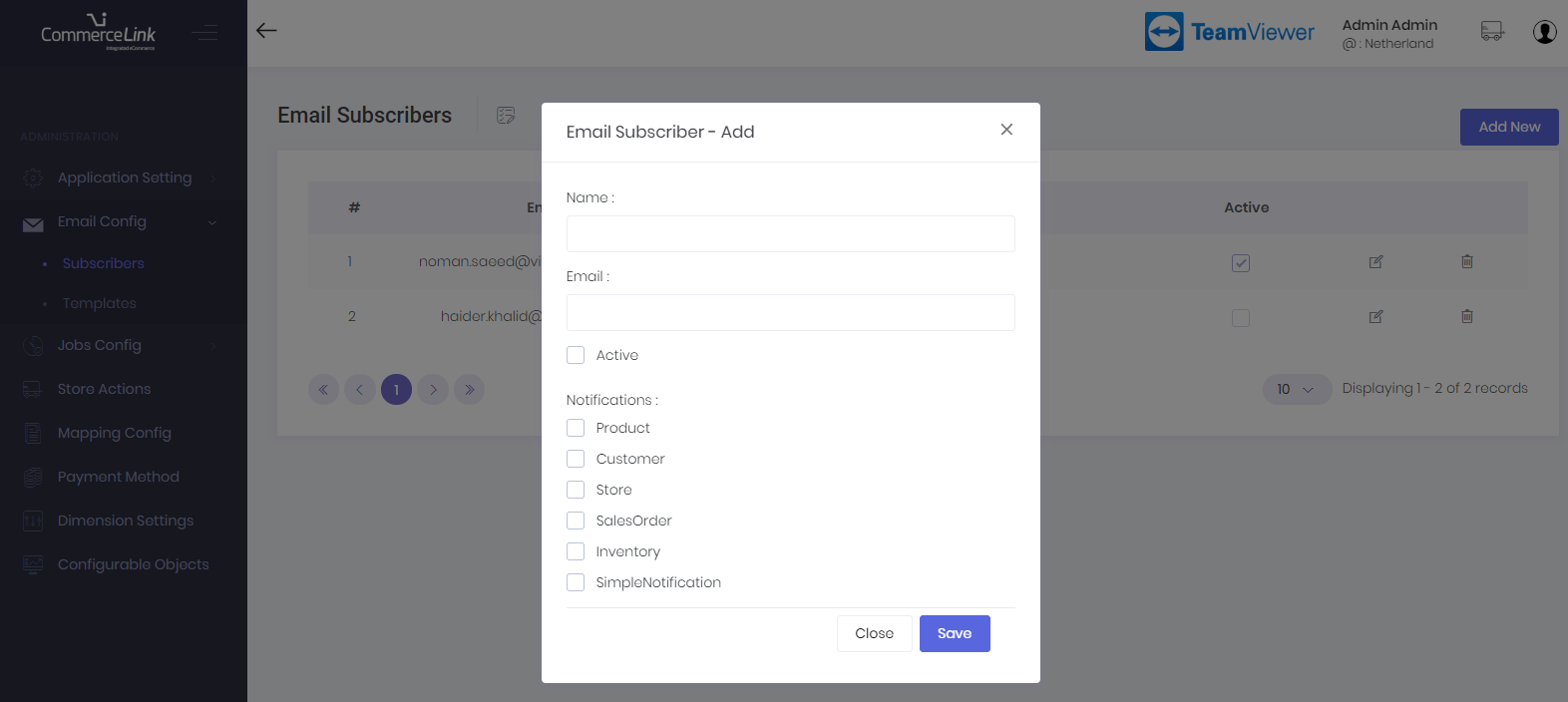
Update retail server **URL** and **OUN** number.

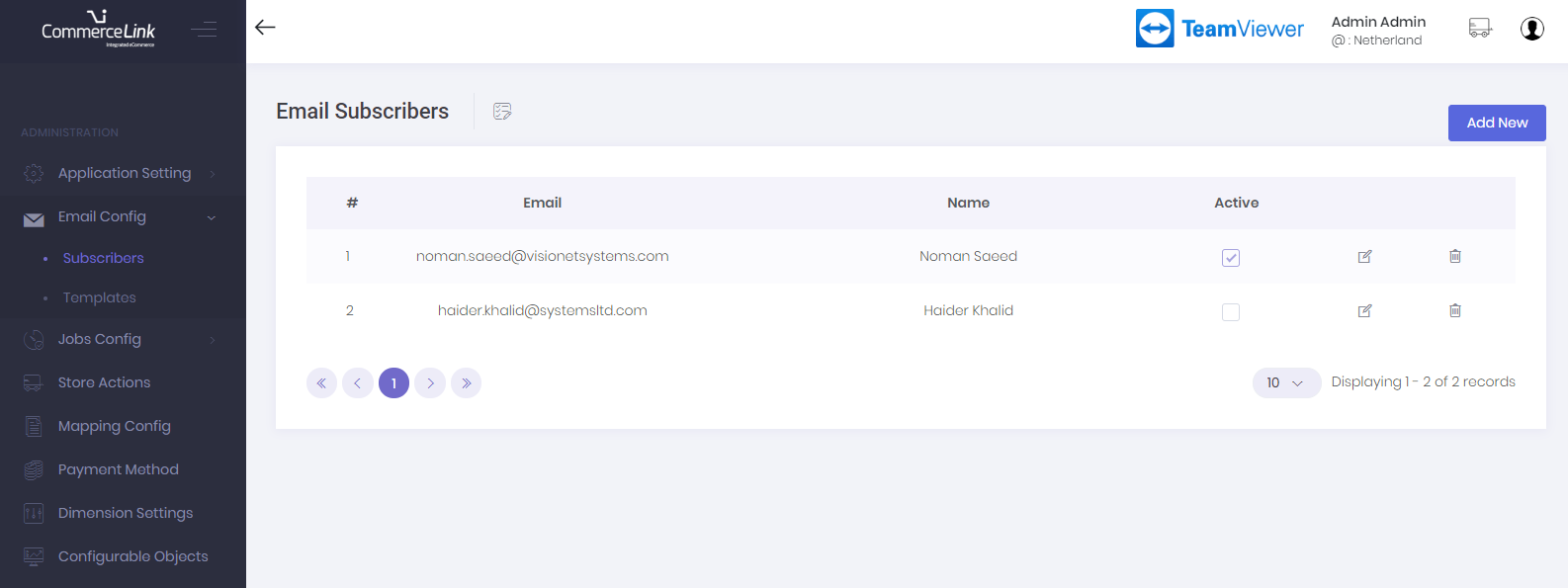
**Client-ID, Client-Secret, Enable Application Mode** and **Tenant** URL



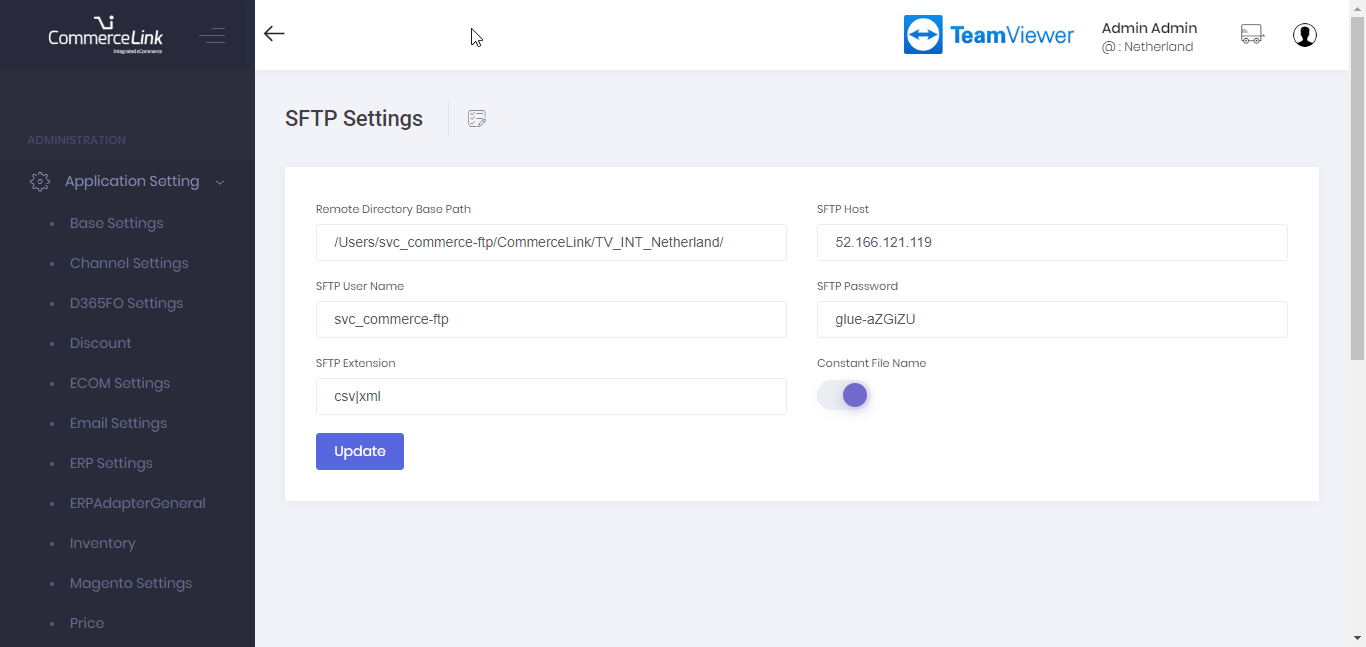
1. **Email Settings**



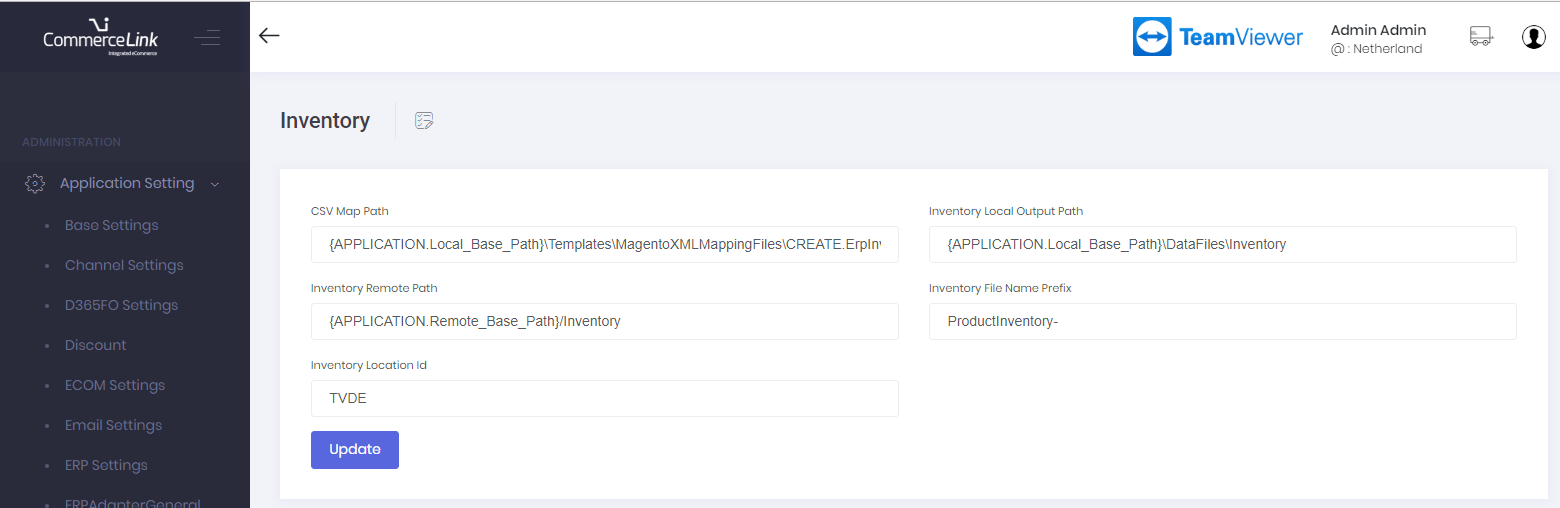




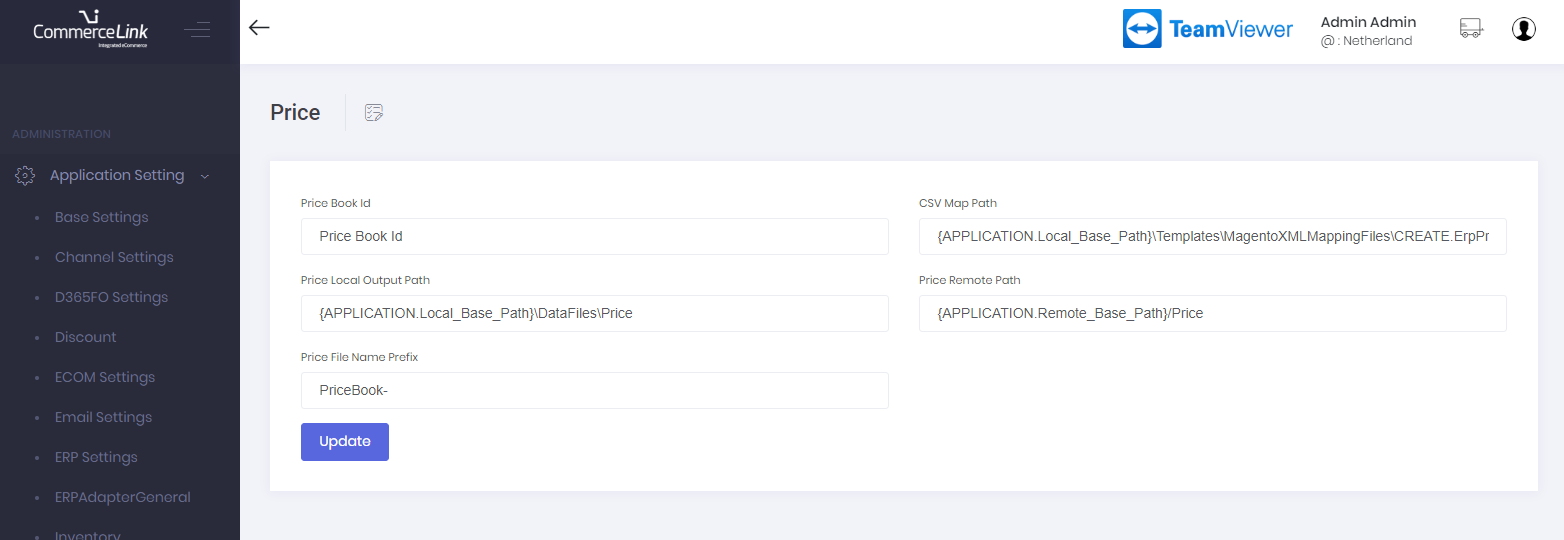
1. **SFTP**



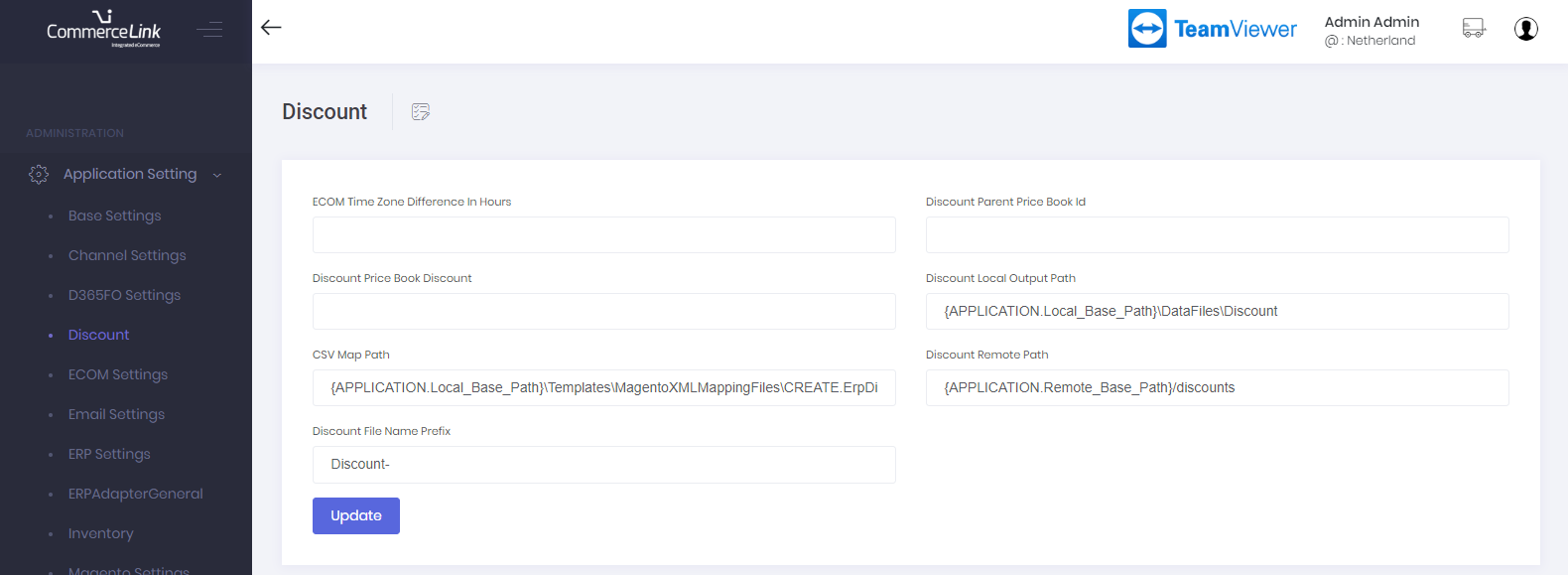
1. **Data Files**
   1. **Product/Inventory**

****

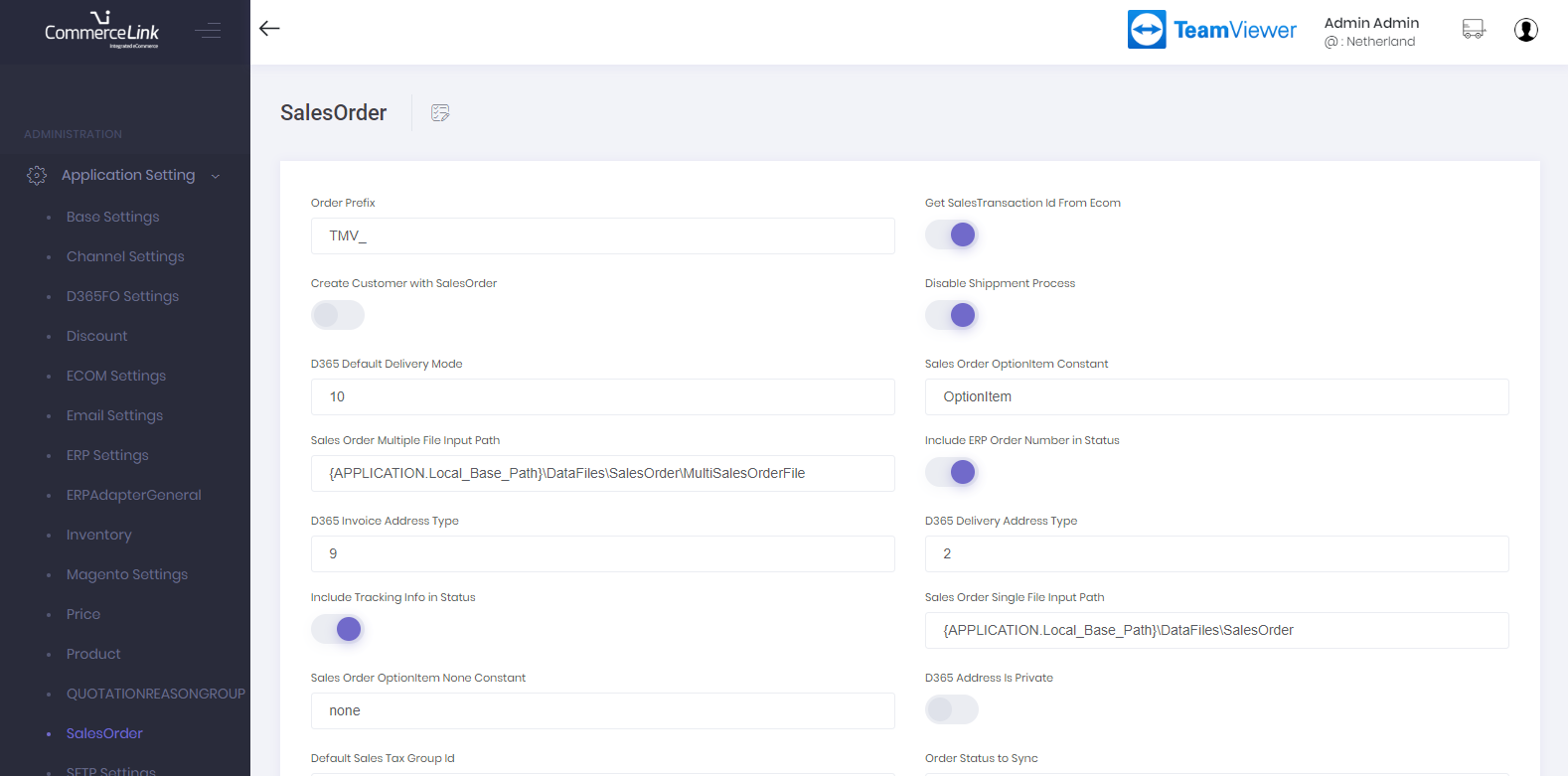
* 1. **Price**

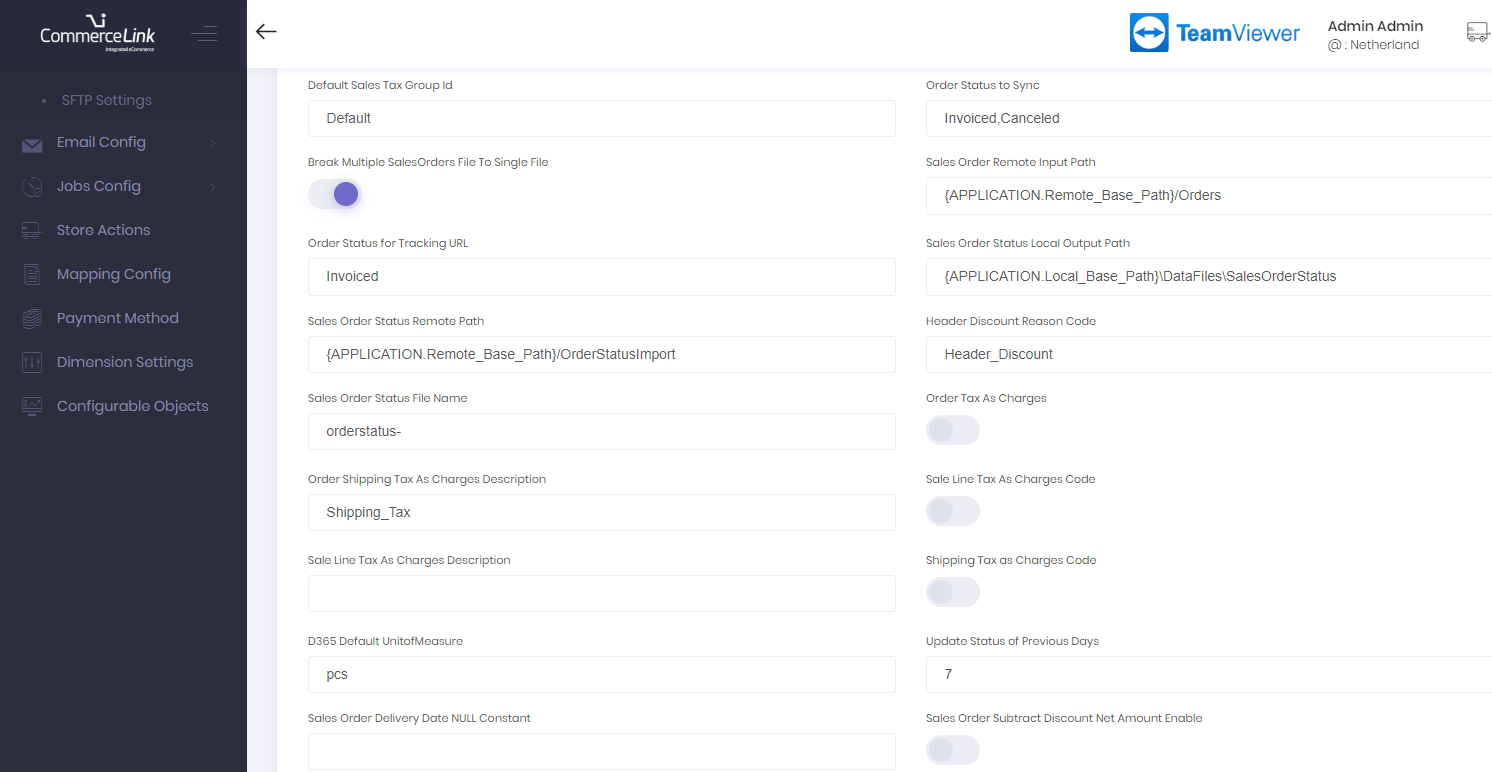
****

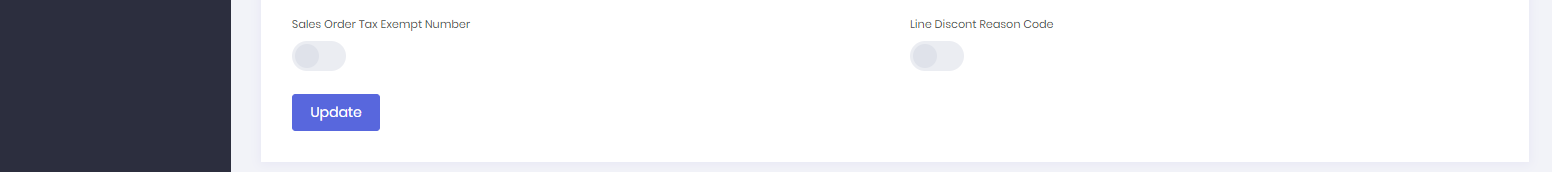
* 1. **Discount**

****

* 1. **SalesOrder**

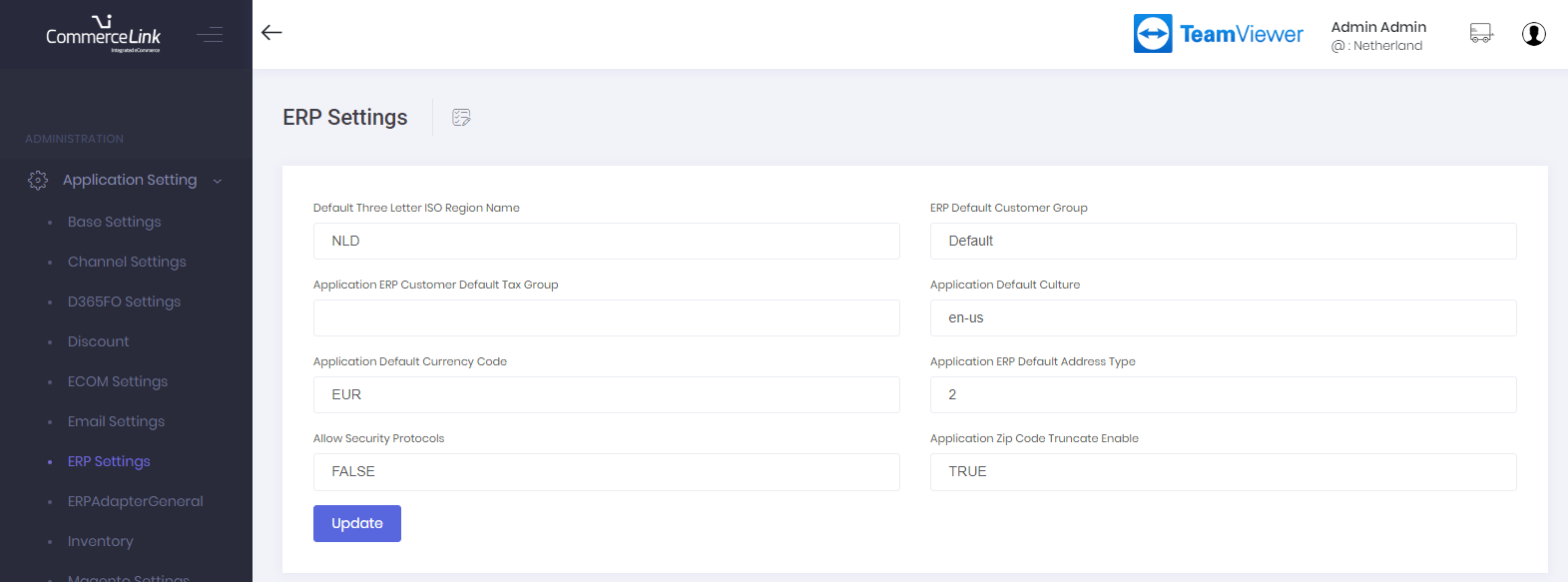
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1. **ERP Settings**

ERP setting covers basic general configuration, merchandise, customer and sales order configuration sync with AX.

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## SFTP Directory Structure

CommerceLink requires following folder structure on the SFTP.

* /root
  + /Catalog
    - Processed
  + /Discounts
    - Processed
  + /PriceBook
    - Processed
  + /Inventory
    - Processed
  + /Orders
    - processed
  + /OrderStatus
    - Processed
  + /Configuration
    - Processed
  + /QuotationReasonGroups
    - Processed

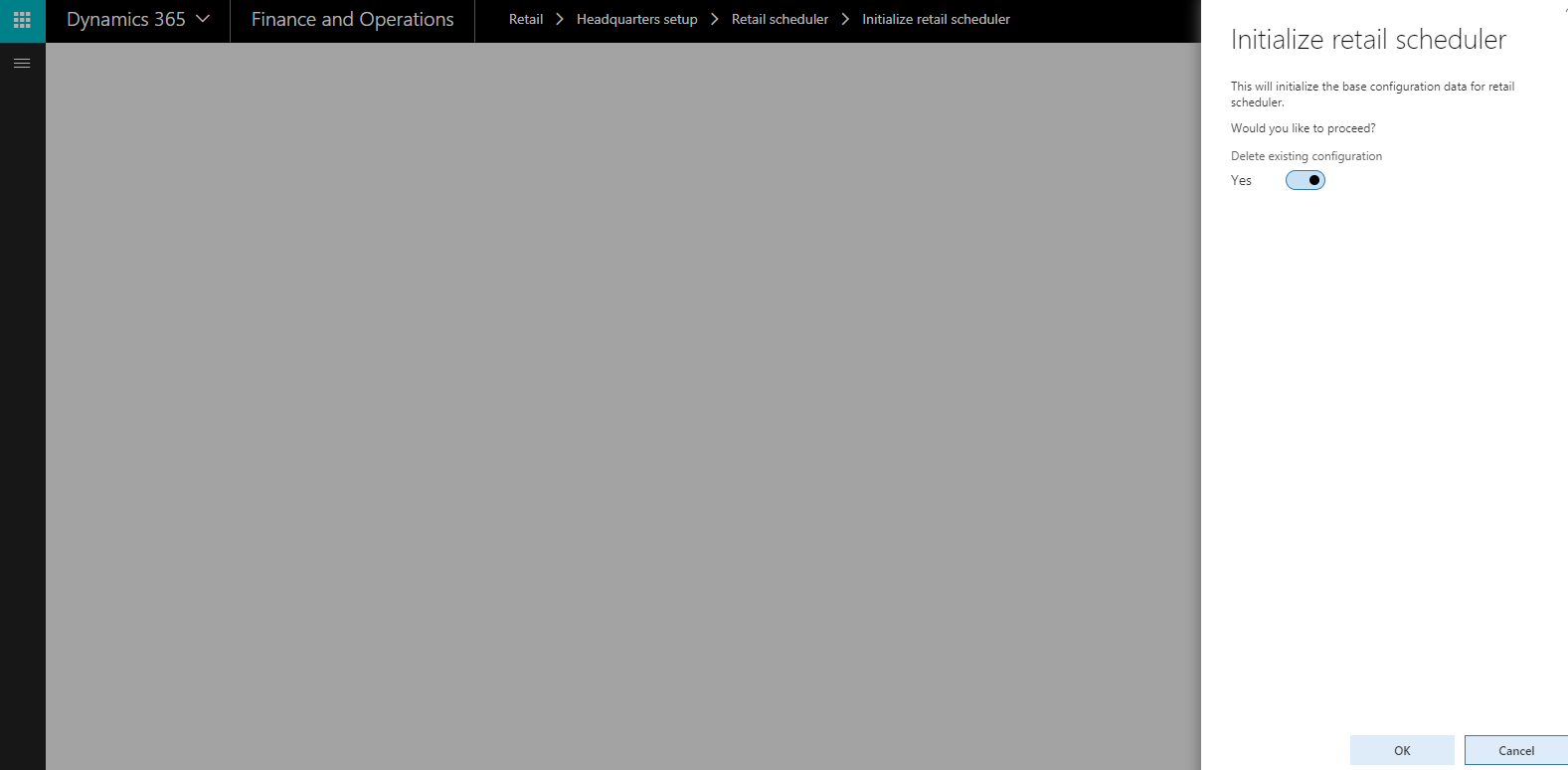
## Local Directory Structure

CommerceLink requires following local folder structure.

* DataFiles
  + Discount
    - Processed
    - Failed
  + Price
    - Failed
    - Processed
  + Product
    - Failed
    - Processed
  + Inventory
    - Failed
    - Processed
  + SalesOrder
    - Custom
    - Failed
    - MultiSalesOrderFile
    - Processed
    - Rejected
  + SalesOrderStatus
    - Failed
    - Processed
  + Configuration
    - Failed
    - Processed
  + QuotationReasonGroups
    - Failed
    - Processed

## Initialize Retail Scheduler in AX

Go to Retail -> Headquater setup -> Retail scheduler -> Initialize retail scheduler. Set Delete existing scheduler to “Yes” and click OK.



## First Time Deployment

In First Time Deployment, we will perform all explained steps to create and configure application.

## Secondary Deployment

In Subsequent Deployment, perform following steps:

* Take backup of application configuration files (App.Config).
* Take backup of CommecreLink DB.
* Execute MSI setup
* Verify config files to make sure all settings (If Required)
* Restart services.