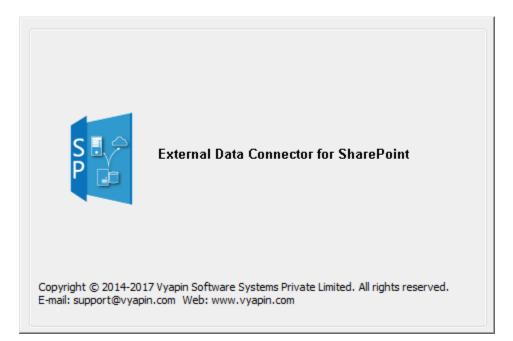
# External Data Connector for SharePoint



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# **External Data Connector Introduction**

About External Data Connector How to purchase? Technical support

System Requirements

How to activate the software?

### About External Data Connector

External Data Connector for SharePoint imports data from multiple external data sources, including Databases, SharePoint, CSV and Excel files, and integrates them into SharePoint Lists and Document Libraries. It supports databases such as SQL Server, MS Access, Oracle and any ODBC compliant database and file sources such as XLSX and CSV. The product can integrate data into all versions of SharePoint including Office 365. The product can also be used to sync/update lists in two different versions of SharePoint, for example, updating lists from SharePoint on-premises to SharePoint Office 365.

The External Data Connector for SharePoint facilitates:

- 1. Integration of external data from multiple sources into SharePoint Lists / Libraries and vice versa.
- 2. Apply metadata from external data sources to documents in SharePoint library.
- 3. Synchronization of SharePoint and external data through field/column mappings.
- 4. Automatic creation of new columns and mappings while creating new lists using imported data.
- 5. Creation of scheduled connections for automatic import and synchronization of external data into SharePoint Lists and Libraries.

# How to purchase?

You can purchase External Data Connector for SharePoint from our website <u>http://www.vyapin.com/</u>. Please contact our Sales department at <u>sales@vyapin.com</u> for sales and price related queries.

For your purchase convenience, we have signed up with resellers in USA & Europe. You may contact one of our resellers listed below:

USA	Europe	
FastSpring	BTSoftware BV	

Please visit our website <u>Purchase</u> section to view the updated list of software resellers.

# Technical support

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Technical support is available through e-mail. Send your questions to <u>support@vyapin.com</u>.

We make every effort to respond to your request on the same day you send in your e-mail. Please allow up to 24 hours for our technical support team to revert to you.

# System Requirements

#### Software:

Windows 10 / 8.1 / 8 / 7 / Vista / XP (or) Windows Server 2012 / 2012 R2 / 2008 / 2008 R2 / 2003 with the latest service packs and .NET Framework 4.0 or higher.

### How to activate the software?

Once you purchase the software online or through any one of our resellers, you will receive a sale notification through e-mail from our sales department. We will send you an e-mail with the necessary instructions to activate the software.

In case you do not receive an e-mail from our sales team after you purchase the software, please send the following information to our sales department at <u>sales@vyapin.com</u> with the sales order number:

- Company Name : End-user Company Name
- Location : City & Country for the Company Name given above

Please allow 12 to 24 hours from the time of purchase for our sales department to process your orders.

Register External Data Connector for SharePoint	
License Type: 30-day Evaluation Copy To register the software, copy and paste the license key in the textbox below: See example	
	^
<u>R</u> egister <u>C</u> ancel	

#### Image 1 - Activate screen

Perform the following steps to activate the software:

- 1. Download evaluation/trial copy of software from the respective product page available in our website at http://www.vyapin.com/
- 2. Install the software on the desired computer.
- 3. You will receive a license key through e-mail as soon as the purchase process is complete.
- 4. Click 'Activate' in Help -> About -> Activate menu to see the Activate dialog (as shown in Image 1).

5. Copy the license key sent to you through email and paste it in the 'License Key' textbox. For help on how to copy the license key, click 'Click here to see how to copy and paste the license key' link in the Activate dialog (as shown in Image 2).



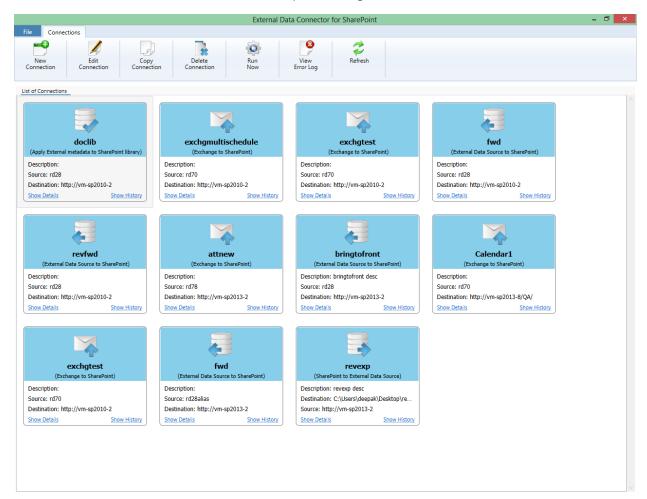
Image 2 - How to copy license key screen

# **External Data Connector Features**

Connection ManagerChange Application Data Folder LocationCreate a New ConnectionEdit an Existing ConnectionDelete an Existing ConnectionRun a ConnectionCopy an Existing ConnectionExternal Data Connector ToolsExternal Data to SharePointSharePoint to External DataExternal Data to SharePoint Library

# **Connection Manager - Introduction**

External Data Connector for SharePoint uses a connection oriented interface to manage synchronization between data source and SharePoint. External Data Connector Connection Manager is the main application window which will help you manage connection and their corresponding history. It also provides menus and tools to work with the connections in a simple and elegant manner.



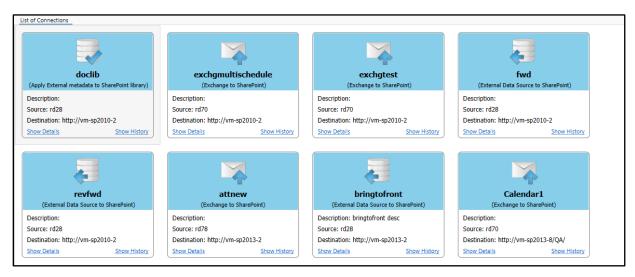
#### Standard menu bar:

Standard menu bar contain all the actions to work with a External Data Connector connection.



#### Connections pane:

Connections pane contains all the connections created by the user. Connection related operations such as Edit Connection, Copy Connection, Delete Connection and Run Now can be performed based on the selected connection in the Connections pane.



#### Connection details pane:

Connection Details pane will be displayed on clicking the Show Details on the selected connection. It displays the details about the currently selected Connection in Connections pane.

	Task Settings	
Connection Details		
Name	Calendar 1	
Description		
Туре	Exchange to SharePoint	
Source Details		
Data Source	rd70	
Version	Exchange 2010	
Login Name	spacenet\adminuser3	
Destination Details		
URL	http://vm-sp2013-8/QA/	
Login Name	harvester\farmadmin	
Library Name	Public	
Mapping Details		
From (System.String)	From (Text)	
To (System.String)	To (Text)	
Body (System.String)	Body (Text)	
Subject (System.String)	Subject (Text)	
DateTimeReceived (System.String)	DateTimeReceived (Text)	
DateTimeSent (System.String)	DateTimeSent (Text)	
ItemSize (System.String)	ItemSize (Text)	
PostedTime (System.String)	PostedTime (Text)	

#### Connection history pane:

Connection History pane will be displayed on clicking the Show History on the selected connection. It maintains every Connection run information. It displays the required information about Connection result, start time, end time, elapsed time, error log and activity log.

Star Task History - Calendar1					
Start Time	End Time	Elapsed Time	Result	Error Log	Activity Log
1/27/2014 15:27:32	11/27/2014 15:27:48	00:00:16	Sync Completed	View Error Log	View Activity Log
1/27/2014 15:38:57	11/27/2014 15:39:16	00:00:19	Sync Completed	View Error Log	View Activity Log
1/27/2014 15:46:27	11/27/2014 15:46:28	00:00:01	Sync Completed	View Error Log	View Activity Log
1/27/2014 15:46:54	11/27/2014 15:46:54	00:00:00	Sync Completed	View Error Log	View Activity Log
1/27/2014 15:47:33	11/27/2014 15:58:25	00:10:52	Sync Canceled	View Error Log	View Activity Log
1/27/2014 16:18:31	11/27/2014 16:20:56	00:02:25	Sync Completed	View Error Log	View Activity Log
1/27/2014 16:25:10	11/27/2014 16:29:50	00:04:40	Sync Completed	View Error Log	View Activity Log
1/27/2014 16:45:25	11/27/2014 16:55:36	00:10:11	Sync Canceled	View Error Log	View Activity Log
1/27/2014 18:00:05	11/27/2014 18:00:07	00:00:02	Sync Canceled	View Error Log	View Activity Log

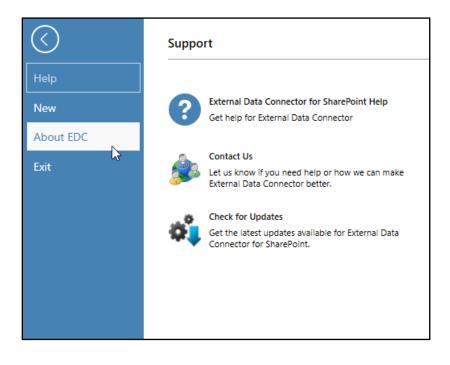
On selecting the View Activity Log link in Connection history pane, a window will appear which displays the statistics summary of the corresponding instance like shown below.

<u>U</u>			Activity L	og Viev	ver			×
View synchron	ization statistics a	nd results						
Connection Name:	reverse				Remarks:	Sync Completed		
Start Time:	04-Aug-14 6:05:07 PM	End Time:	04-Aug-14 6:05:13	PM	Elapsed Time:	00:00:06	]	
Connection Statistics	]							
Property				Value				
Total Records in sour	rce			4				
Number of records to	add			2				
Actual number of add	ded records			2				
Number of records to	o modify			0				
Actual number of mo	dified records			0				
Number of records to	o delete			2				
Actual number of del	eted records			2				
							Close	

# Change Application Data folder location

External Data Connector allows you to change Application Data folder location, where External Data Connector connections and related settings, and error logs are stored, at any time after installing External Data Connector software. To change the Application Data folder location, perform the following steps given below:

1. Select About EDC... from File menu



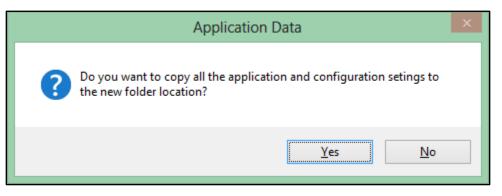
2. The About EDC dialog appears as shown below:

		About EDC	
External Data (	Conr	nector for SharePoint v2.3	
opyright © 2014 - 203	17 Vy	apin Software Systems Private Limited. All rights reserved.	SUA
		Web: www.vyapin.com	Pi
/iew License Agreeme			
Computer Name: vss	wks7		
ull Computer Name	: vssv	wks7.vyapin.local	
		The (CC)) Subsect Data Constants for Characteria	
rogram Folder: C:\F	rogra	am Files (x86)\External Data Connector for SharePoint	
	-	C:\Users\Public\Documents\ExternalDataConnector2x	
	-		
pplication Data Fol	der:		<b></b>
Application Data Fold Product: License Type:	der: 30-d	C:\Users\Public\Documents\ExternalDataConnector2x	· · · · · · · · · · · · · · · · · · ·
Application Data Fold Product: License Type:	der: 30-d	C:\Users\Public\Documents\ExternalDataConnector2x	
Application Data Fold Product: License Type:	der: 30-d	C:\Users\Public\Documents\ExternalDataConnector2x	
Application Data Fold Product: License Type:	der: 30-d	C:\Users\Public\Documents\ExternalDataConnector2x	

3. Click **Change...** button to change **Application Data** folder location of External Data Connector application. The **Browse For Folder** location dialog will appear as shown below:

Browse For Fold	ler ×
4 🜉 Computer	^
4 🏪 Local Disk (C:)	
D 퉲 Intel	
MSOCache	
PerfLogs	
D Program Files	
Program Files (x86)	
ProgramData	
🌗 Temp	
Users	
Nindows	×
Make New Folder OK	Cancel

- 4. Select a desired folder location and Click OK. The folder location can be local drives or mapped network drives.
- 5. External Data Connector provides an option to copy the existing application settings (External Data Connector integration connection settings, histories, error logs etc.) to the new location once you change the Application Data Folder. Once you specify the new Application Data folder location, External Data Connector will prompt you to copy existing application settings to the new location as shown below:

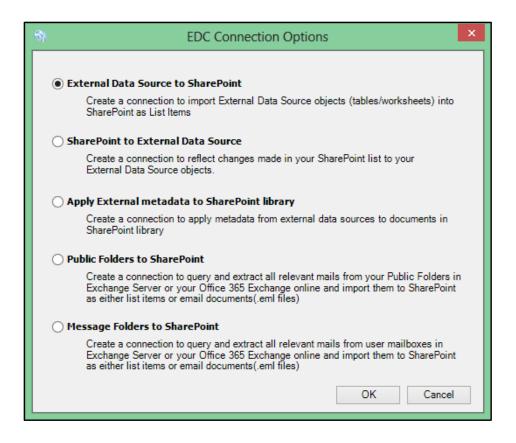


 Click the desired action (Yes/No) to proceed. External Data Connector will use the new Application Data folder location henceforth.

### Create a New Connection

You can create a connection to integrate data from various external data sources such as Databases, SharePoint, CSV, XLSX into SharePoint 2013, SharePoint 2010, and SharePoint Online in Office 365.

 Select the type of integration from the EDC Task Options screen which appears on clicking New Connection in External Data Connector main screen.



- 2. Click the link below for more information:
  - Create a connection to integrate data from External Data Source to SharePoint
  - Create a connection to integrate data from <u>SharePoint to External Data Source</u>
  - Create a connection to integrate data from <u>Apply External Data to SharePoint Library</u>
  - Create a connection to integrate data from Message Folders to SharePoint to SharePoint
  - Create a connection to integrate data from Public Folders to SharePoint to SharePoint

# Edit An Existing Connection

To edit an existing connection:

- 1. Select a connection from **Connections** pane
- 2. Click Edit Connection from main screen



- 3. External Data Connector Connection Wizard will load the selected connection settings and appears as seen in Create New Connection wizard. However, some of the options may be disabled when editing a connection.
- 4. Click the link below for more information:
  - Edit a connection to integrate data from External Data Source to SharePoint
  - Edit a connection to integrate data from <u>SharePoint to External Data Source</u>
  - Edit a connection to integrate data from <u>Apply External metadata to SharePoint Library</u>
  - Edit a connection to integrate data from Message Folders to SharePoint
  - Edit a connection to integrate data from Public Folders to SharePoint

To delete an External Data Connector connection:

1. Select a connection from **Connections** pane

Source: rd28 Sourc	exchgmultischedule (Exchange to SharePoint) Description: Source: rd70 Destination: http://vm-sp2010-2 Show Details Show History	exchgtest (Exchange to SharePoint) Description: Source: rd70 Destination: http://vm-sp2010-2 Show Details Show History	fwd (External Data Source to SharePoint) Description: Source: rd28 Destination: http://vm-sp2010-2 Show.Details Show.History
Source: rd28 Sourc	Source: rd70 Destination: http://vm-sp2010-2	Source: rd70 Destination: http://vm-sp2010-2	Source: rd28 Destination: http://vm-sp2010-2
Destination: http://vm-sp2010-2	Destination: http://vm-sp2010-2	Destination: http://vm-sp2010-2	Destination: http://vm-sp2010-2
Show Details Show History	Show Details Show History	Show Details Show History	Show Details Show History
revfwd	altnew	bringtofront	Calendar1
(External Data Source to SharePoint)	(Exchange to SharePoint)	(External Data Source to SharePoint)	(Exchange to SharePoint)
Description:	Description:	Description: bringtofront desc	Description:
Source: rd28	Source: rd78	Source: rd28	Source: rd70
Destination: http://vm-sp2010-2	Destination: http://vm-sp2013-2	Destination: http://vm-sp2013-2	Destination: http://vm-sp2013-8/QA/
Show Details Show History	Show Details Show History	Show Details Show History	Show Details Show History

2. Click Delete Connection from main screen.



3. Click Yes in Delete message-box shown below:



Note: Deleting a connection will permanently delete the selected connection and its history items.

### **Run a Connection**

External Data Connector 'Run Now' feature allows the user to instantiate a connection any time after the connection has been created. To run a connection:

1. Select a connection from **Connections** pane

doclib (Apply External metadata to SharePoint library)	exchgmultischedule (Exchange to SharePoint)	exchgtest (Exchange to SharePoint)	fwd (External Data Source to SharePoint)
Description:	Description:	Description:	Description:
Source: rd28	Source: rd70	Source: rd70	Source: rd28
Destination: http://vm-sp2010-2	Destination: http://vm-sp2010-2	Destination: http://vm-sp2010-2	Destination: http://vm-sp2010-2
Show Details Show History	Show Details Show History	Show Details Show History	Show Details Show History
		<b></b>	
revfwd	attnew	bringtofront	Calendar1
revfwd (External Data Source to SharePoint)	attnew (Exchange to SharePoint)	bringtofront (External Data Source to SharePoint)	Calendar1 (Exchange to SharePoint)
(External Data Source to SharePoint)	(Exchange to SharePoint)	(External Data Source to SharePoint)	(Exchange to SharePoint)
(External Data Source to SharePoint) Description:	(Exchange to SharePoint) Description:	(External Data Source to SharePoint) Description: bringtofront desc	(Exchange to SharePoint) Description:

2. Click Run Now from main screen.



3. Click Yes in Run Now confirmation message box shown below:



4. The current process of connection will be reported in a new dialog as shown below:

<b>S</b> }	External Data Connector - Synchronizer 🛛 – 🗖 🗙
Start Time :	Saturday, May 24, 2014 11:12:19 AM
Source:	rd47
Destination:	http://vm-sp2010-2
Action:	Processing 10 of 18
Overall Prog	ress:
Elapsed Time	e: 00.00:00:12 End Task

5. Once the sync is complete, a new entry will be added in **Connection History** section, where you can view the integration activity performed when the connection ran last.

To copy or create a new connection from an existing External Data Connector connection:

1. Select a connection from **Connections** pane

			<b>A</b>
doclib (Apply External metadata to SharePoint library)	exchgmultischedule (Exchange to SharePoint)	exchgtest (Exchange to SharePoint)	fwd (External Data Source to SharePoint)
Description:	Description:	Description:	Description:
Source: rd28	Source: rd70	Source: rd70	Source: rd28
Destination: http://vm-sp2010-2	Destination: http://vm-sp2010-2	Destination: http://vm-sp2010-2	Destination: http://vm-sp2010-2
2		a de la companya de l	
revfwd (External Data Source to SharePoint)	attnew (Exchange to SharePoint)	bringtofront (External Data Source to SharePoint)	Calendar1 (Exchange to SharePoint)
(External Data Source to SharePoint)	(Exchange to SharePoint)	(External Data Source to SharePoint)	(Exchange to SharePoint)
(External Data Source to SharePoint) Description:	(Exchange to SharePoint) Description:	(External Data Source to SharePoint) Description: bringtofront desc	(Exchange to SharePoint) Description:

2. Click Copy Connection from main screen.



3. In Copy Connection dialog, enter a new connection name in **Save As** text-box, specify a **Run As** account and password (if applicable) and Click **OK** to create a new connection with the same integration settings specified in the selected connection.

Copy Connection				
Enter a new name for the Connection to be created and also the password for the corresponding user.				
Сору:	db-sp			
Save As:	db-spnew			
Run As:	spserver\admin			
Password:				
	OK Cancel			
	•••			

# External Data Connector Tools

Query Builder

Profile Manager

View Error Log

### Query Builder

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To read or filter data from data source, you have to specify a query statement. You can manually enter the query or use the **Query Builder** tool to generate the query. Using the built-in query builder, you can build queries on tables in databases without having to write complex SQL queries.

1. The Query builder will fetch all the tables from the data source based on the details given and will

appear as shown below:

	Query Builder		×
Select Tables and Views Select tables and views from the list of available	tables/views		P
Select or Drag the tables and views Available tables and views Tables/Views Book1 Book2 Book3		Added Tables and Views	
Books Book4 Contacts-Address - Copy Contacts-Address - Copy Contacts - Copy	Add > < Remove		
		Back Next	Cancel

2. Select the tables from which the data should be read and click **Next**.

	Query Builder	. <b>X</b>
Select Tables and Views Select tables and views from the list of available	tables/views	
Select or Drag the tables and views Available tables and views Tables/Views Book1 Book2 Book3 Contacts-Address - Copy Contacts-Address - Copy Contacts - Copy	Add > < Remove	Added Tables and Views Tables/Views Contacts-Address - Copy Contacts-Address - Copy 1 Contacts-Address1 - Copy 1
		Back Next Cancel

- You can specify multiple JOIN conditions to merge tables/views from the list of tables selected. Select tables names and column names from the dropdown given. You can select the type of JOIN from the list of options given,
  - Inner Join
  - Left Join
  - Right Join

After the JOIN conditions are specified, query builder will appear as shown below, Click **Next** to proceed.

	Quer	y Builder ×		
Merge tables/views Specify conditions to join or merge tables/vi	iews			
Select conditions to merge table	s / views:			
Left Table/View Name:		Right Table/View Name:		
Contacts-Address - Copy	*	Contacts-Address1 - Copy 1 🛛 🗸		
Left Column Name:		Right Column Name:		
Object Name	~	Object Name 🗸		
Join Type:		Join Operator:		
🔘 Inner Join		○ And		
Left Join		Or		
Right Join				
Add [Inner Join [Contacts-Address - Copy 1] ON [Contacts-Address - Copy].[Object Name] = [Contacts-Address - Copy 1]. [Object Name] Left Join [Contacts-Address 1 - Copy 1] ON [Contacts-Address - Copy].[Object Name] = [Contacts-Address 1 - Copy 1].				
[Object Name]				
		Back Next Cancel		

4. Specify filter conditions if needed, based on the column name and column value. Click **Next** to proceed.

	Query Builder		×
Filter Conditions			
Specify conditions to filter record	ls		$\sim$
Filter Condition			
Select Table/View			
Contacts-Address	- Сору	¥	
Select Column :			
Object Name		~	
Select Value :			
John Bradshaw		~	
Filter Operator:			
OR	~		
		Add	
Where [Contacts-Address - Cop Bradshaw'	y].[Object Name] = 'Anderson' OR [Contacts-Address - (	Copy].[Object Na	me] = 'John
,			
	Back	Next	Cancel
L			

5. Select the columns which should be included in the query. External Data Connector will fetch values

only from the selected columns. By default, all column values will be fetched from data source.

	Query Builder	×
Select Columns Select columns from the list of available columns		P
Drag or Select the columns		
Available Columns  Contacts-Address - Copy  Gip Object Name  Gip Fully qualified domain name of c  Gip PO Box  Gip Contacts-Address - Copy 1  Gip Object Name  Gip Object Name  Gip Street  Gip Object Name  Gip	Add > < Remove	Added Columns Columns [Contacts-Address • Copy].[Object N [Contacts-Address • Copy].[Fully qua [Contacts-Address • Copy].[Display] [Contacts-Address • Copy].[PO Box] [Contacts-Address • Copy].[City] [Contacts-Address • Copy].[State/Ph [Contacts-Address • Copy].[State/Ph ] Back Next Cancel

6. To retrieve aggregated results from multiple tables, you can specify aggregate conditions, for the selected columns like shown below. This is an optional step, skip if not required.

Query Builder		×			
Specify aggregate conditions if needed (Optional).					
Specify aggregate conditions for the selected columns. This is an optional step, skip if not required.					
Expression	Aggregate	Alias			
[Contacts-Address - Copy].[Object Name]	×				
[Contacts-Address - Copy].[Fully qualified domain name of object]	×				
[Contacts-Address - Copy].[Display Name]	×				
[Contacts-Address - Copy].[Street]	×				
[Contacts-Address - Copy].[PO Box]	Avg 🗸	zipcode			
[Contacts-Address - Copy].[City]	×				
[Contacts-Address - Copy].[State/Province]					
	Back Nex	t Cancel			

7. Aggregate functions often need an added GROUP BY statement. The GROUP BY statement is used

in conjunction with the aggregate functions to group the result-set by one or more columns.

Query Builder	×
Specify Group By conditions (Optional).	
Specify conditions to group the aggregate result by selected columns.	P
Expression	Group By
[Contacts-Address - Copy].[Object Name]	✓
[Contacts-Address - Copy].[Fully qualified domain name of object]	
[Contacts-Address - Copy].[Display Name]	
[Contacts-Address - Copy].[Street]	
[Contacts-Address - Copy].[PO Box]	
[Contacts-Address - Copy].[City]	
[Contacts-Address - Copy].[State/Province]	
Back Nex	t Cancel

8. You can also specify **ORDER BY** conditions to sort the result-set by one or more columns. Click **Next** to proceed.

Query Builder			×	
Specify Order By conditions (Optional) Specify conditions to order the aggregate result. This is an optional step, skip if not required.				
Expression	Sort Type		Sort Order	
[Contacts-Address - Copy].[Object Name]	Ascending	Y	1	
[Contacts-Address - Copy].[Fully qualified domain name of object]	Ascending	Y	2	
[Contacts-Address - Copy].[Display Name]	Ascending	Y	3	
[Contacts-Address - Copy].[Street]	Ascending	Y	4	
[Contacts-Address - Copy].[PO Box]	Ascending	Y	5	
[Contacts-Address - Copy].[City]	Ascending	×	6	
[Contacts-Address - Copy].[State/Province]	Ascending	¥	7	
	Back	lext	Cancel	

9. The **Summary** step shows all the conditions specified so far. Click **Next** to generate query for the

specified conditions, or click **Back** to edit the conditions.

	Query Builder ×
Summary Shows all the co	inditions which are specified
Conditions	Values
Selected Tables	Contacts-Address - Copy Contacts-Address - Copy 1 Contacts-Address1 - Copy 1
Selected Columns	[Contacts-Address - Copy].[Object Name] [Contacts-Address - Copy].[Fully qualified domain name of object] [Contacts-Address - Copy].[Display Name] [Contacts-Address - Copy].[Street] [Contacts-Address - Copy].[PO Box] [Contacts-Address - Copy].[City] [Contacts-Address - Copy].[State/Province]
Filter	[Contacts-Address - Copy].[Object Name] = 'Anderson' OR [Contacts-Address - Copy].[Object Name] = 'John Bradshaw'
Join Conditions	Inner Join [Contacts-Address - Copy 1] [Contacts-Address - Copy].[Object Name] = [Contacts-Address - Copy 1].[Object Name] Left Join [Contacts-Address1 - Copy 1] [Contacts-Address - Copy].[Object Name] = [Contacts-Address1 - Copy 1].[Object Name]
	Back Next Cancel

10. The Final Query step display the generated query from the specified conditions. Click Close to use

the generated query for integration, or click **Back** to edit the conditions.

Query Builder	×
Final Query Shows the final query to process against database	
Query Statement:	
select [Contacts-Address - Copy].[Object Name]. [Contacts-Address - Copy].[Fully qualified domain name of object]. [Contacts-Address - Copy].[Display Name]. [Contacts-Address - Copy].[Street]. [Contacts-Address - Copy].[PO Box] from [Contacts-Address - Copy] Inner Join [Contacts-Address - Copy] Inner Join [Contacts-Address - Copy 1] ON [Contacts-Address - Copy].[Object Name] = [Contacts-Address - Copy 1].[Object Name] Where [Contacts-Address - Copy].[Object Name] = 'Anderson' OR [Contacts-Address - Copy].[Object Name] = 'Copy].[Object Name] = 'John Bradshaw'	
2 record(s) matches your query	^
Back	Close

#### **Profile Manager**

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You can create a user profile in Windows Stored User Names and Passwords applet, in order to specify the user context to run External Data Connector integration connections.

The stored user profile persists for all subsequent logon sessions on the same computer where External Data Connector is installed. The stored user profiles are visible to other logon sessions on the same computer.

The stored user profile created by using External Data Connector Profile Manager is restricted to the Windows User Profile context. If the Windows User Profile is maintained locally, External Data Connector stored user profile is accessible only by the same user in the same computer. If the user who creates External Data Connector stored user profile, has a Roaming user account in the enterprise, the External Data Connector stored user profile can be accessed by the same user in any computer in the Windows enterprise.

The stored user profile is a generic credential of Windows Stored User Names and Passwords applet and can be used by External Data Connector application only. The credential information is stored securely in an 256 bit encrypted format in Windows Stored User Names and Passwords applet.

1. In order to create a External Data Connector stored user profile, Click on ... button while specifying authentication details for SharePoint or external data source in connection creation.

2. The Profile Manager dialog will be shown as below:

<b>6</b> }	Profile Manager	×
		Add
		Remove
		Close

3. In order to add user profile, click **Add** button and provide user information in the **New User Profile** as shown below:

New User Profile				
Create a new user profile in Microsoft Windows stored UserNames and Passwords applet / Credential Manager				
U	lser Name:	spserver\user		
	Password:	*****		
Confirm	Password:		ן כ	
		OK Reset	]	

4. The newly added user profile will be shown in the Profile Manager as below:

<b>S</b> p	Profile Manag	ger ×
spserver\user		Add
		Remove
		Close

Henceforth, the stored user profile can be used as credential input in External Data Connector application in order to connect to the SharePoint or Data Source environment.

- 5. Click **Close** button to close the Profile Manager dialog.
- 6. Additional References:

Behavior of stored user names and passwords

http://support.microsoft.com/kb/281660

Stored User Name and Password Best practices

http://technet.microsoft.com/en-us/library/cc784749(WS.10).aspx

## View Activity Log

To view the activity log of External Data Connector perform the steps given below:

1/27/2014         15:38:57         11/27/2014         15:39:16         00:           1/1/27/2014         15:46:27         11/27/2014         15:46:28         00:           1/1/27/2014         15:46:27         11/27/2014         15:46:28         00:           1/1/27/2014         15:46:54         11/27/2014         15:46:54         00:           1/1/27/2014         15:47:33         11/27/2014         15:58:25         00:           1/1/27/2014         16:25:10         11/27/2014         16:29:50         00:           1/1/27/2014         16:25:51         11/27/2014         16:29:50         00:	:00:19 :00:01 :00:00 :10:52 :02:25 :04:40 :10:11	Sync Completed         View Error L           Sync Completed         View Error L           Sync Completed         View Error L           Sync Conceled         View Error L           Sync Conceled         View Error L           Sync Completed         View Error L           Sync Conceled         View Error L	Yew Activity Lo           Dag         View Activity Lo
1/27/2014 15:46:27         11/27/2014 15:46:28         00:           1/27/2014 15:46:54         11/27/2014 15:46:54         00:           1/27/2014 15:46:54         11/27/2014 15:46:54         00:           1/27/2014 15:47:33         11/27/2014 15:58:25         00:           1/27/2014 16:18:31         11/27/2014 16:20:56         00:           1/27/2014 16:25:10         11/27/2014 16:20:50         00:           1/27/2014 16:25:10         11/27/2014 16:55:36         00:	:00:01 ::00:00 ::00:52 ::02:25 ::04:40 ::10:11 ::00:00 ::00:100 ::00:11 ::00:00 ::00:100 ::000 ::00:100:1	Sync Completed         View Error L           Sync Completed         View Error L           Sync Canceled         View Error L           Sync Completed         View Error L           Sync Completed         View Error L           Sync Completed         View Error L	pg <u>View Activity Lo</u> pg <u>View Activity Lo</u> pg <u>View Activity Lo</u> pg <u>View Activity Lo</u>
1/27/2014         15:46:54         11/27/2014         15:46:54         00:           11/27/2014         15:47:33         11/27/2014         15:58:25         00:           11/27/2014         16:18:31         11/27/2014         16:20:56         00:           11/27/2014         16:25:10         11/27/2014         16:29:50         00:           11/27/2014         16:25:10         11/27/2014         16:25:36         00:	:00:00 : :10:52 : :02:25 : :04:40 : :10:11 :	Sync Completed         View Error L           Sync Canceled         View Error L           Sync Completed         View Error L           Sync Completed         View Error L           Sync Completed         View Error L	ba <u>View Activity Lo</u> ba <u>View Activity Lo</u> ba <u>View Activity Lo</u> ba <u>View Activity Lo</u>
1/27/2014         15:47:33         11/27/2014         15:88:25         00:           1/27/2014         16:18:31         11/27/2014         16:20:56         00:           1/27/2014         16:25:10         11/27/2014         16:29:50         00:           1/27/2014         16:52:51         11/27/2014         16:55:36         00:	:10:52 :02:25 :04:40 :10:11	Sync Canceled <u>View Error L</u> Sync Completed <u>View Error L</u> Sync Completed <u>View Error L</u>	pg <u>View Activity Lo</u> pg <u>View Activity Lo</u>
1/27/2014 16:18:31         11/27/2014 16:20:56         00:           11/27/2014 16:25:10         11/27/2014 16:29:50         00:           11/27/2014 16:45:25         11/27/2014 16:55:36         00:	:02:25 :04:40 :10:11	Sync Completed <u>View Error L</u> Sync Completed <u>View Error L</u>	Dq View Activity Lo
11/27/2014 16:25:10 11/27/2014 16:29:50 00: 11/27/2014 16:45:25 11/27/2014 16:55:36 00:	:04:40	Sync Completed View Error L	
1/27/2014 16:45:25 11/27/2014 16:55:36 00:	:10:11		og View Activity Lo
		Sync Canceled View Error L	
11/27/2014 18:00:05 11/27/2014 18:00:07 00:	:00:02		og <u>View Activity Lo</u>
		Sync Canceled View Error L	Dg View Activity La

1. Click View Activity Log from the connection history pane.

2. On selecting the **View Activity Log** link in Connection history pane, a window will appear which displays the statistics summary of the corresponding instance like shown below.

#### Chapter 2 – External Data Connector Features – External Data Connector Tools

24			Activity Lo	og Vie	wer			×
View sync statistics	and sync results							
Connection Name:	reverse				Remarks:	Sync Completed		
Start Time:	04-Aug-14 6:05:07 PM	End Time:	04-Aug-14 6:05:13	PM	Elapsed Time:	00:00:06		
Connection Statistics								
Property				Value				
Total Records in sour	rce			4				
Number of records to	add			2				
Actual number of add	ded records			2				
Number of records to	o modify			0				
Actual number of mo	dified records			0				
Number of records to	o delete			2				
Actual number of del	eted records			2				
							Close	

# External Data Source to SharePoint

Create a Connection

Edit a Connection

### Create a Connection

- Step 1 : Source SharePoint Location
- Step 2 : Destination SharePoint Location
- Step 3 : List Details
- Step 4 : Data Source Summary
- Step 5 : File Contents
- Step 6 : Column Mapping
- Step 7 : Configure Connection Startup

### **External Data Source**

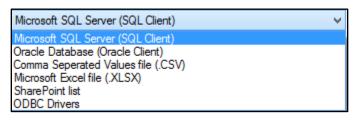
\_\_\_\_\_

To specify an External Data Source, from which you wish to integrate with a SharePoint site, perform the steps given below:

1. The **External Data Source** step appears as shown below:

9	External Data Source to SharePoint
	a source details which contains the details to create list items
Data source:	Microsoft SQL Server (SQL Client)
Server name:	Log on to the server  Use Windows Authentication Use Server Authentication User Name: Password: Connect to a database Select or enter a database name:
	Back Next Enish Cancel

2. Select a data source from the list of available data sources in the dropdown:



- 3. The login and other details will be displayed according to data source selected.
- 4. If the selected data source is a database, specify the login and other database details like shown below:

Log on to the server					
O Use Windows Authentication					
Use Server Authentie	Use Server Authentication				
User Name:	sqllogin3	¥			
Password:	*******				
Connect to a database					
Select or enter a database name:					
External-D	ata-Connector	V C			

5. If the selected data source is a file like XLSX, CSV etc, specify the location of a file. The location can also be from a network shared drive.

6. If the selected data source is another SharePoint list, specify the source list details like URL of the site, list name, and authentication details in their respective fields to proceed. The above mentioned details are show below:

- SharePoint Details:			
URL:	http://vm-sp2010-2		
Authentication Type:	Windows Authentication	۷	
Use the following crea	dential to connect to SharePoint:		
User Name:	harvester\farmadmin	¥	
	(johndoe@contoso.com, contoso\johndoe)		
Password:			
Source List:			
	bulklist	4	C

### **Destination SharePoint location**

To specify a SharePoint URL of a site, in which you wish to integrate data from an external data source, perform the steps given below:

1. The **Destination SharePoint location** step appears as shown below:

θ <sub>1</sub>	External Data Source to SharePoint
Select destination Share Specify the URL of a SharePoint list t	rePoint location o create list items from external data source
URL: http://vm-sp2010-2	
SharePoint user credential:	
Authentication type:	Windows Authentication
Use the following crea	lential to connect to SharePoint:
User Name:	spserver\user v (johndoe@contoso.com, contoso\johndoe, johndoe)
Password:	**************************************
	Back Next Finish Cancel

- 2. Specify a valid SharePoint URL in the URL textbox. External Data Connector will load all the lists from the specified SharePoint site, if the site URL and authentication is valid.
- 3. Specify the Authentication type and user credentials to connect to the SharePoint URL using the options given below :

#### a. Specify the Authentication Type

- Windows Authentication
- Forms Authentication
- Office 365 Cloud based identity
- Federated Authentication
- b. Specify the user credentials

Specify the user context stored in the user profile (OR) Enter the user name in any ONE of the following formats: \,UserName@DomainName, UserName and its corresponding password. External Data Connector will initiate Windows authentication or Forms authentication depending on configuration in the destination SharePoint site. Click Next button to proceed.

External Data Connector will store the user credential to connect to SharePoint in the Microsoft Windows Stored User Names and Passwords applet / Credential Manager for security reasons. The stored user profile is tied to the user context (currently logged on user account) in which the profile is created.

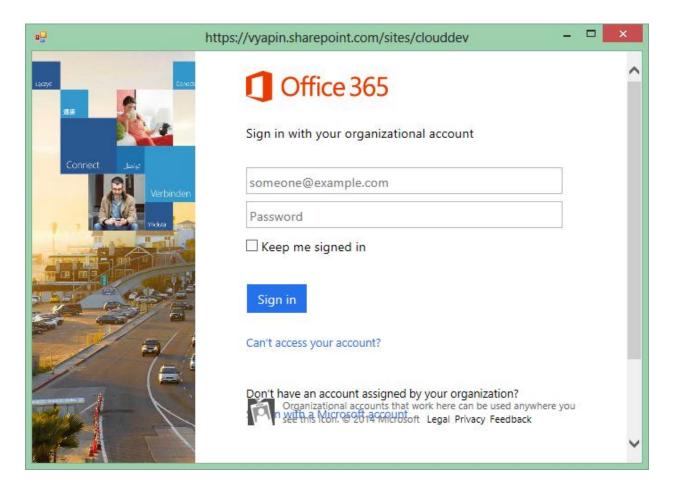
Click ... button to create new user profile. <u>Click here</u> to view the details about Profile Manager dialog.

Select Federated Identity in Authentication Type combo to connect to a SharePoint site (SharePoint On-premise or SharePoint Online) using federated identity configured using ADFS. Also, select this option to connect to Office 365 SharePoint Online configured using federated identity provider.

To connect to Office 365's SharePoint Online environment, you can use Web Single Sign-on option for both Cloud Identity (Office 365 Online User Credential e.g., johndoe@vyapin.onmicrosoft.com) and Federated Identity (configured via ADFS e.g., johndoe@vyapin.onmicrosoft.com).

<b>9</b>	External Data Source to SharePoint	×
Select destination Shar Specify the URL of a SharePoint list to	rePoint location o create list items from external data source	
URL: https://vyapin.sharepoint.co	m	
SharePoint user credential:		
Authentication type:	Federated Authentication	
Use the following cred	lential to connect to SharePoint:	
User Name:		
Password:	(johndoe@contoso.com, contoso\johndoe, johndoe)	
	Back Next Einish Cance	əl

Upon clicking Next button to proceed, you will be prompted for credential (username and password) as shown below:



Provide ID and Password in the respective textboxes and click **Sign in** button to proceed.

#### List details

To specify the list to add list items from data source, or publish the data to a document library or export to a drive, perform the steps given below:

1. The List details step appears as shown below:

External Data Source to SharePoint						
Specify the list details to add/publish items         Select a list to add list items or specify a list name to add items from data source						
✓ Publish to Sharel	✓ Publish to SharePoint list					
Add ite	ems to a	an existing list from data so	ource			
		Announcements		~		
O Create	a new	list to add items from data	source			
List	Name:					
List	t Type:	GenericList		$\sim$		
Item Settings:	Skip th	e list item if already exists		~		
<ul> <li>Automatically</li> </ul>	y synchr	onize items in destination, if it	: doesn't exist ir	n sou	irce	
✓ Publish to Share!	Point lil	brary				
Wel	b URL:	http://vm-sp2010-2				
Library	Name:	Shared Documents		~	C	
File Name and F	ormat:	publishFile	.CSV	~		
Item Se	ettings:	Skip the list item if already ex	tists	~		
✓ Export to drive:						
Export	Path:	D:\data\exportedFile.html			Save As	
		Back	Next		Einish Cancel	

 If the data from external data source has to be published in a list as list items, select the Publish to list option. Specify the list in which the items has to be added and also specify the action which has to be performed, if the list item already exists in the list. Also, select the option given if the External Data Connector has to synchronize automatically, if the data doesn't exist in data source in subsequent runs. The above mentioned settings are shown below:

✓ Publish to SharePoint list					
Add items to an existing list from data source					
	Announcements	~			
O Create a new list to add items from data source					
List Name:	List Name:				
List Type:	GenericList	$\sim$			
Item Settings: Skip the list item if already exists v					
✓ Automatically synchronize items in destination, if it doesn't exist in source					

3. If the data from the data source has to be published to a document library as a metadata file, select the Publish to library option. Specify the other details like URL of the site to publish, library name, list item settings to avoid redundant items, file name and file format. The file can be published in XLSX, CSV and HTML formats. The above settings mentioned are shown below:

✓ Publish to SharePoint library							
Web URL:	http://vm-sp2010-2						
Library Name:	Shared Documents		~	C			
File Name and Format:	publishFile	.CSV	~				
Item Settings:	Skip the list item if already ex	tists	~				

4. If the data from the data source has to be exported to any networked storage including local drive or web folders as a metadata file, select the Export to drive option. Specify the location and format of the file to export by clicking on Save As button. The above settings are shown below:

✓ Export to drive:							
Export Path:	D:\data\exportedFile.html	Save As					

#### **External Data Source Summary**

If the selected data source is a database, data source summary step will be displayed which shows the **Connection string** to use with the Database and the **SELECT** statement to query against the Database.

1. The **External Data Source summary** step appears as shown below:

<b>9</b>	External Data Source to SharePoint		×
External Da	ata Source summary	<u>-</u>	
Shows the summa	ry of external data source to be imported		
External	Data Provider: Microsoft SQL Server (SQL Client)		
Con	nection String:		
	Data Source=rd28; Initial Catalog=External-Data-Connector; User ID=sqllogin3;	0	
0			
Que	ry Statement:		
	O Manual		
		^	
		$\sim$	
		Verify	
	Using Query Builder		
		^	
		~	
	Query Builder	Verify	
	<u>B</u> ack <u>N</u> ext	<u>F</u> inish <u>C</u> an	cel

- 2. Use the **Manual** query textbox, if the **SELECT** statement to filter the data source is known.
- Or use Using Query builder option by clicking on the Query Builder button to form the SELECT statement based on the requirement.

Refer <u>Query Builder</u> for more information.

4. The entered **Connection string** and **SELECT** statement can be verified by clicking on the Verify button. The result will be shown as below:

		Preview		×
https://space#voyager#local	Orbit	DocumentLibrary	Bulk 12Feb 14	Book1#csv.NoName
https://space.voyager.local	Orbit	Document Library	Bulk12Feb14	Bulk12Feb14/FolderD/Doc
https://space.voyager.local	Orbit	Document Library	Bulk12Feb14	Bulk12Feb14/FolderD/Doc
https://space.voyager.local	Orbit	Document Library	Bulk12Feb14	Bulk12Feb14/FolderD/Doc
https://space.voyager.local	Orbit	Document Library	Bulk12Feb14	Bulk12Feb14/FolderD/Doc
https://space.voyager.local	Orbit	DocumentLibrary	Bulk12Feb14	Bulk12Feb14/FolderD/Doc
https://space.voyager.local	Orbit	Document Library	Bulk12Feb14	Bulk12Feb14/FolderD/Doc
https://space.voyager.local	Orbit	Document Library	Bulk12Feb14	Bulk12Feb14/FolderD/Doc
https://space.voyager.local	Orbit	Document Library	Bulk12Feb14	Bulk12Feb14/FolderD/Doc
https://space.voyager.local	Orbit	Document Library	Bulk12Feb14	Bulk12Feb14/FolderD/Doc
https://space.voyager.local	Orbit	Document Library	Bulk12Feb14	Bulk12Feb14/FolderD/Doc
https://space.voyager.local	Orbit	Document Library	Bulk12Feb14	Bulk12Feb14/FolderD/Doc
https://space.voyager.local	Orbit	DocumentLibrary	Bulk12Feb14	Bulk12Feb14/FolderD/Doc
https://space.voyager.local	Orbit	DocumentLibrary	Bulk12Feb14	Bulk12Feb14/FolderD/Doc
https://space.voyager.local	Orbit	Document Library	Bulk12Feb14	Bulk12Feb14/FolderD/Doc
https://space.voyager.local	Orbit	Document Library	Bulk12Feb14	Bulk12Feb14/FolderD/Doc
https://space.vovager.local K	Orbit	Document library	Rulk 12Feb 14	Bulk 12Feb 14/FolderD/Doc ♥ >

### **File Contents**

If the selected data source is a XLSX, CSV or a HTML file, the **File Contents** step will appear, which show the contents of the file to be imported.

1. File Contents step will appear as shown below:

First Name	Last Name	Company	Phone	Email	Country	
John	Doe	Vyapin	5465418761	john@vyapin.com	India	
Aaron	Cook	Vyapin	5465418762	aaron@vyapin.com	Australia	
David	Robinson	Vyapin	5465418763	david@vyapin.com	England	
Gore	Richard	Vyapin	5465418764	gore@vyapin.com	England	
Kalu	Jones	Vyapin	5465418765	kalu@vyapin.com	New Zealand	
Kevin	Pietersen	Vyapin	5465418766	kevin@vyapin.com	Australia	
Alistair	Jones	Vyapin	5465418767	alistair@vyapin.c	America	
Michael	Hussey	Vyapin	5465418768	michael@vyapin	France	
Ricky	Martin	Vyapin	5465418769	ricky@vyapin.com	Germany	
Steven	Adams	Vyapin	5465418771	steven@vyapin.c	India	

## **Column Mapping**

External Data Connector allows you to map metadata properties between data source and a SharePoint list

1. **Column Mapping** step will appear as shown below:

Sp. Exter	rnal Data Source to SharePoint	×
Column mapping Select column from SharePoint list to match with a	column in external data source	
Column mapping conditions: Note: The reference column is obtained to verify the		s automatically as in source
SharePoint List Columns	Data Source Columns	Reference column
×	×	
	<u>B</u> ack <u>N</u> ext	<u>Finish</u>

 External Data Connector can automatically map columns for you if needed. Select Map columns automatically as in source to automate mapping. Column mapping will be done based on the column name.

External Data Source to SharePoint								
Column mapping Select column from SharePoint list to match with a column in external data source								
Column mapping conditions:       Image: Map columns automatically as in source         Note: The reference column is obtained to verify the existence of a list item in the list.								
SharePoint List Columns		Data Source Columns		Reference column				
First Name (Text)	~	First Name (System.String)	~	✓				
Last Name (Text)	~	Last Name (System.String)	~					
Company (Text)	~	Company (System.String)	~					
Phone (Text)	¥	Phone (System.String)	~					
Email (Text)	~	Email (System.String)	~					
	¥		~					
		<u>B</u> ack	<u>N</u> ext	<u>Finish</u>				

3. If the selected list to add items is a new list, new columns will be created in the list if auto-mapping option is selected. You can also select the type of column to be created in the list.

Column mapping conditions:       Image: Map columns automatically as in source         Note: The reference column is obtained to verify the existence of a list item in the list.						
SharePoint List Columns	Field Type		Data Source Columns		Reference column	
First Name	Single line of text	~	First Name (System.String)	~	<ul><li>✓</li></ul>	
Last Name	Single line of text	~	Last Name (System.String)	~		
Company	Single line of text	~	Company (System.String)	~		
Phone	Single line of text	~	Phone (System.String)	~		
Email	Single line of text	~	Email (System.String)	~		
Country	Single line of text	~ ¥	Country (System.String)	~ ¥		
		×		~		

4. Specify at-least one reference column, to avoid adding duplicate items in the list. External Data Connector will read the reference column value, query them against the list and if the item exists in the list, action specified in the list item settings will be performed (Skip, Update, Overwrite or Add).

Note: If 'Create a new list' option is selected for integration, columns of type single/multiple line of text, Number, Date and time and Yes/No can be created.

#### Configure Connection Startup

To specify the connection name and trigger settings for the External Data Connector connection, perform the steps given below

1. Configure Connection startup step will appear as shown below:

<b>9</b> 1	Exchange to SharePoint	×
	nection startup or the Connection and specify trigger settings.	
<u>C</u> onnection Name: Description:	taskName this is an interactive task	
Trigger Options:	Connect as:         User Profile:         Source:       voyager\adminuser1         Destination:       voyager\famadmin_sp13-1         Schedule Settings:         Schedule:       Daily         Verry       1 Image: day(s)	
	Back Next Einish	<u>C</u> ancel

- 2. Enter a unique connection name in **Connection Name** textbox.
- 3. Select a Trigger Option from one of the following options given below:
  - Run now to run the connection immediately after clicking Finish button
  - Schedule To create a Windows scheduled task. External Data Connector will create a schedule connection in the Windows Scheduled Tasks with the given settings.

4. You can also specify location to an executable or a script to execute once the sync gets completed,

if needed.

Program/Scrip	t (Optional)						
	When you create a connection, you can specify an action that will occur, once the sync process						
gets complete	d.						
		Br <u>o</u> wse					

### **Edit Connection**

\_\_\_\_\_

Edit connection is similar to creating a connection, except that a few settings cannot be altered as stated below.

1. The External Data Connector Connection Wizard appears as shown below:

<b>9</b>	External Data Source to SharePoint
	a source details which contains the details to create list items
Data source:	Microsoft SQL Server (SQL Client)
Server name:	
	Log on to the server         Image: Use Windows Authentication         Use Server Authentication         User Name: Image: I
	Connect to a database Select or enter a database name:
	<u>B</u> ack <u>N</u> ext <u>Finish</u> <u>Cancel</u>

- 2. Specify the URL of the SharePoint site and authentication details in **Destination SharePoint location**
- 3. Specify External Data source details.
- 4. Specify List Details to add/publish items.

- 5. In <u>Data Source summary</u> you can edit the query statement to read data from Data Source.
- File Contents will display the content to be imported if the selected data source is a XLSX, CSV or a HTML file.
- 7. Specify <u>Column Mapping</u> conditions.
- 8. In <u>Configure Connection startup</u> edit mode, the connection name cannot be altered.
- 9. Click **Finish** button to save the connection settings, or click **Back** button to go to the previous step.

# SharePoint to External Data Source

Create a Connection

Edit a Connection

### Create a Connection

Step 1 : <u>Source SharePoint Location</u>

- Step 2 : External Data Source
- Step 3 : Column Mapping
- Step 4 : <u>Configure Connection Startup</u>

### Source SharePoint location

To specify a SharePoint URL of a site, from which you wish to integrate data to an external data source, perform the steps given below:

1. The Source SharePoint location step appears as shown below:

<b>9</b>	Sh	arePoint to External Data Source		- 🗆 🗙
	t <b>source SharePoint lo</b> ne URL of a SharePoint list to crea	ocation te/update records in external data source		
URL:	http://vm-sp2010-2			
	SharePoint User Credentials:			
	Authentication type:	Windows Authentication	<b>~</b>	
	Use the following cred	ential to connect to SharePoint:		
	User Name:		<b>Y</b>	
	Password:	(johndoe@contoso.com, contoso\johndoe)		
	Source List:	listrunnow	~ <b>C</b>	
		Back	<u>N</u> ext <u>F</u> inis	sh <u>C</u> ancel

2. Specify a valid SharePoint URL and authentication details in the given fields. On clicking the refresh button, External Data Connector will load all the lists from the specified SharePoint site. Select a desired list and proceed.

<del>9</del>	S	harePoint to External Data Source 🛛 🗕 🗖 🗙
	t <b>source SharePoint lo</b> ne URL of a SharePoint list to creat	te/update records in external data source
URL:	http://vm-sp2010-2	
	SharePoint User Credentials:	
	Authentication type:	Windows Authentication
		ential to connect to SharePoint:
	User Name:	spserver\user v (johndoe@contoso.com, contoso\johndoe)
	Password:	******
	Source List:	
	Ann	iouncements V
		Back Next Finish Cancel

3. Specify the Authentication type and user credentials to connect to the SharePoint URL using the options given below :

#### a. Specify the Authentication Type

- Windows Authentication
- Forms Authentication
- Office 365 Cloud based identity
- Federated Authentication
- b. Specify the user credentials

Specify the user context stored in the user profile (OR) Enter the user name in any ONE of the following formats: \,UserName@DomainName, UserName and its corresponding password.

External Data Connector will initiate Windows authentication or Forms authentication depending on configuration in the destination SharePoint site. Click Next button to proceed.

External Data Connector will store the user credential to connect to SharePoint in the Microsoft Windows Stored User Names and Passwords applet / Credential Manager for security reasons. The stored user profile is tied to the user context (currently logged on user account) in which the profile is created.

Click ... button to create new user profile. <u>Click here</u> to view the details about Profile Manager dialog.

Select Federated Identity in Authentication Type combo to connect to a SharePoint site (SharePoint On-premise or SharePoint Online) using federated identity configured using ADFS. Also, select this option to connect to Office 365 SharePoint Online configured using federated identity provider.

To connect to Office 365's SharePoint Online environment, you can use Web Single Sign-on option for both Cloud Identity (Office 365 Online User Credential e.g., johndoe@vyapin.onmicrosoft.com) and Federated Identity (configured via ADFS e.g., johndoe@vyapin.onmicrosoft.com).

<del>9)</del>	S	harePoint to External Data Source	- 🗆 🗙
	t source SharePoint lo	cation te/update records in external data source	
URL:	https://vyapin.sharepoint.com/sit	tes/clouddev	
	SharePoint User Credentials:	Federated Authentication	
	Use the following cred User Name:	spserver/user	
	Password:	(johndoe@contoso.com, contoso\johndoe)	
	Source List:		
	CU	STOM LIST V	
		<u>B</u> ack <u>N</u> ext <u>F</u> inish	<u>C</u> ancel

Upon clicking Next button to proceed, you will be prompted for credential (username and password) as shown below:

• <mark>0</mark>	https://vyapin.sharepoint.com/sites/clouddev	-	×
Lacyc Conce 23.5 Connect Jack	<b>Office 365</b> Sign in with your organizational account		~
Verbinden	someone@example.com		
yinda 🦢	Password		
	C Keep me signed in		
	Sign in		
	Can't access your account?		
	Don't have an account assigned by your organization? Organizational accounts that work here can be used anywhere in well in well in the work of the second s	you	
			~

Provide ID and Password in the respective textboxes and click **Sign in** button to proceed.

## **External Data Source**

To specify an External Data Source, which you wish to integrate with a SharePoint site, perform the steps given below:

1. The External Data Source step appears as shown below:

<b>6</b> j	SharePoint to External Data Source – 🗆 🗙
	ernal data source ein which the records has to be added
Data source:	Microsoft SQL Server (SQL Client)
Server name:	
۰ ر	on to the server Use Windows Authentication Use Server Authentication
	User Name:
	nect to a database
	Select or enter a table name:
	<u>B</u> ack <u>N</u> ext <u>Finish</u> <u>Cancel</u>

2. Select a data source from the list of available data sources in the dropdown:

Microsoft SQL Server (SQL Client)	<
Microsoft SQL Server (SQL Client)	
Oracle Database (Oracle Client)	
Comma Separated Values file (.CSV)	
Microsoft Excel file (.XLSX)	
ODBC Drivers	

- 3. The login and other details will be displayed according to data source selected.
- 4. If the selected data source is a database, specify the login and other database details like shown below:

Log on to the server						
O Use Windows Authentication						
Use Server Authentication						
User Name: sqllogin						
Password:	******		]			
Connect to a database						
Select or enter a databas	se name:	DataCompare	~ <b>C</b>			
Select or enter a tab	le name:	Page Visits	~			

5. If the selected data source is a file like XLSX, CSV etc, specify the location of a file. The location can also be from a network shared drive.

## Column Mapping

\_\_\_\_\_

External Data Connector allows you to map metadata properties between data source and a SharePoint list.

1. Column Mapping step will appear as shown below:

<b>9</b>	SharePoint	to External Data Source	- 🗆 🗙				
	Column mapping Select column from SharePoint list to match with a column in external data source						
	Column mapping conditions:       Map columns automatically as in source         Note: The reference column is obtained to verify the existence of a list item in the list.						
	SharePoint List Columns	Data Source Columns	Reference column				
*	×	×					
	Preview	Back Next	Enish <u>C</u> ancel				

2. External Data Connector can automatically map columns for you if needed. Select **Map columns automatically as in source** to automate mapping. Column mapping will be done based on the column name.

	lumn mapping conditions: :e: The reference column is obtained to verify the	exister		ns autom	natically as in source
	SharePoint List Columns		Data Source Columns		Reference column
Ø	First Name (Text)	~	First Name (System.String)	~	<ul><li>✓</li></ul>
	Last Name (Text)	~	Last Name (System.String)	~	
	Company (Text)	~	Company (System.String)	~	
	Phone (Number)	~	Phone (System.Int32)	~	
	Email (Text)	~	Email (System.String)	~	
ŧ		~		~	

- 3. Specify at-least one reference column, to proceed the operation. External Data Connector will use this column value to find the records to be added or deleted from data source.
- 4. On clicking the **Preview** button, External Data Connector shows the list of records to be added, deleted and modified in the data source.

			Summai	у			
Records	Summary						
	mmary of records						
Note: This :	shows the curr	ent status of t	he records. T	his may vary o	n subseque	nt schedul	ed runs
Records to be a	added Records	to be modified	Records to be o	deleted			
First Name	Last Name	Company	Phone	Email	datetime	choice	multic
Bruce	Wayne	ABC Inc.	546,546,546	john@abc.com			
C							
¢							

### Operations to perform

Using this window, you can disable certain options like Add / Update / Delete on moving records from SharePoint to External Data Source.

1. **Operations to perform** step will appear as shown below:

SharePoint to Exte	ernal Data Source	×
<b>Operations to perform</b> Select the options to perform during synchronization		
Select the options to perform:		
Allow records to be added		
<ul> <li>Allow records to be modified</li> </ul>		
<ul> <li>Allow records to be deleted</li> </ul>		
	Back Next Finish	<u>C</u> ancel

2. Select the options which you want to perform or unselect the options which you don't want to, and then click **Next**.

#### **Configure Connection Startup**

To specify the connection name and schedule settings for the External Data Connector connection, perform the steps given below

1. Configure Connection startup step will appear as shown below:

4	SharePoint to External Data Source
	for the connection and specify trigger settings.
Connection Name:	revexp
Description:	revexp desc
Trigger Options:	Connect to Data Source as: User Profile:
Run now	Destination:
◯ Schedule	Source:
	Schedule Settings: Schedule: Daily ✓ Start Time: 03:14 PM ♀ Schedule Daily Every 1 ♀ day(s)
	Back Next Einish Cancel

- 2. Enter a unique connection name in **Connection Name** textbox.
- 3. Select a Trigger Option from one of the following options given below:
  - Run now to run the connection immediately after clicking Finish button
  - **Schedule** To create a Windows scheduled task. External Data Connector will create a schedule connection in the Windows Scheduled Tasks with the given settings.

#### **Edit Connection**

\_\_\_\_\_

Edit connection is similar to creating a connection, except that a few settings cannot be altered as stated below.

1. The External Data Connector Connection Wizard appears as shown below:

<u>କ୍</u>	Sh	arePoint to External Data Source – 🗖 🗙
	t source SharePoint lo	te/update records in external data source
URL:	http://vm-sp2010-2	
	SharePoint User Credentials:	
	Authentication type:	Windows Authentication
	Use the following cred	ential to connect to SharePoint:
	User Name:	spserver\user v (johndoe@contoso.com, contoso\johndoe)
	Password:	
	Source List:	
	test	istrunnow V
		Back Next Finish Cancel

- 2. Specify the URL of the SharePoint site and authentication details in <u>Source SharePoint location</u>.
- 3. Specify External Data source details.

- 4. Specify <u>Column Mapping</u> conditions.
- 5. In <u>Configure Connection startup</u> edit mode, the connection name cannot be altered.
- 6. Click **Finish** button to save the connection settings, or click Back button to go to the previous step.

# Apply External metadata to SharePoint Library

Create a Connection

Edit a Connection

#### Create a Connection

- Step 1 : External Data Source
- Step 2 : Destination SharePoint Location
- Step 3 : Data source summary
- Step 4 : File Contents
- Step 5 : Column Mapping
- Step 6 : <u>Create new columns</u>
- Step 7 : Configure Connection Startup

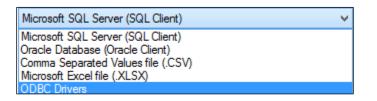
#### **External Data Source**

To specify an External Data Source, from which you wish to integrate with a SharePoint site, perform the steps given below:

1. The External Data Source step appears as shown below:

9	External Data Source to SharePoint
	e external data source a source details which contains the details to create list items
Data source:	Microsoft SQL Server (SQL Client)
Server name:	
	Log on to the server  Use Windows Authentication User Name: Password:
	Connect to a database Select or enter a database name:
	Back Next Enish Cancel

2. Select a data source from the list of available data sources in the dropdown:



- 3. The login and other details will be displayed according to data source selected.
- 4. If the selected data source is a database, specify the login and other database details like shown below:

Log on to the server						
O Use Windows Authentication						
O Use windows Auther	itication					
Use Server Authentic	ation					
<ul> <li>Use Server Authentic</li> </ul>	alion					
User Name:	sqllogin3	~				
oser Hame.	Squoguto					
Password:						
1 6334010.						
<ul> <li>Connect to a database</li> </ul>						
Select or enter a database	e name:					
Etand	to Connected					
External-Da	ita-Connector	~	<b>U</b>			

5. If the selected data source is a file like XLSX, CSV etc, specify the location of a file. The location can also be from a network shared drive.

#### Destination SharePoint location

To specify a SharePoint URL of a site, in which you wish to integrate data from an external data source, perform the steps given below:

1. The **Destination SharePoint Location** step appears as shown below:

Sp Apply	External metadata to SharePoint library
Select destination SharePoi Specify the URL of a SharePoint site to upda	
URL: http://spserver/sites/site1	
Authentication type:	Windows Authentication 🗸
Use the following crea	dential to connect to SharePoint:
User Name:	spserver/user
Password:	(johndoe@contoso.com, contoso\johndoe, johndoe)
Destination Library:	
Automatically	dodib  v C synchronize items in destination, if it doesn't exist in source
	Back Next Einish Cancel

- 2. Specify a valid SharePoint URL in the URL textbox. On clicking the **Refresh** button, External Data Connector will load all the lists from the specified SharePoint site, if the site URL and authentication is valid.
- 3. Specify the Authentication type and user credentials to connect to the SharePoint URL using the options given below:

#### a. Specify the Authentication Type

- Windows Authentication
- Forms Authentication
- Office 365 Cloud based identity
- Federated Authentication
- b. Specify the user credentials

Specify the user context stored in the user profile (OR) Enter the user name in any ONE of the following formats: \,UserName@DomainName, UserName and its corresponding password. External Data Connector will initiate Windows authentication or Forms authentication depending on configuration in the destination SharePoint site. Click Next button to proceed.

External Data Connector will store the user credential to connect to SharePoint in the Microsoft Windows Stored User Names and Passwords applet / Credential Manager for security reasons. The stored user profile is tied to the user context (currently logged on user account) in which the profile is created.

Click ... button to create new user profile. <u>Click here</u> to view the details about Profile Manager dialog.

Select Federated Identity in Authentication Type combo to connect to a SharePoint site (SharePoint On-premise or SharePoint Online) using federated identity configured using ADFS. Also, select this option to connect to Office 365 SharePoint Online configured using federated identity provider.

To connect to Office 365's SharePoint Online environment, you can use Web Single Sign-on option for both Cloud Identity (Office 365 Online User Credential e.g., johndoe@vyapin.onmicrosoft.com) and Federated Identity (configured via ADFS e.g., johndoe@vyapin.onmicrosoft.com).

Sp Apply	External metadata to SharePoint library ×
Select destination SharePoi Specify the URL of a SharePoint site to upda	
URL: https://vyapin.sharepoint.com/	
SharePoint user credential:	
Authentication type:	Federated Authentication
Use the following crea	lential to connect to SharePoint:
User Name:	✓ 2
Password:	(johndoe@contoso.com, contoso\johndoe, johndoe)
Destination Library:	
Automatically	DOC  v C synchronize items in destination, if it doesn't exist in source
	Back Next Einish Cancel

•	https://vyapin.sharepoint.com/sites/clouddev	. [	x
Isaaya Canada Ala	Sign in with your organizational account		^
ونعل Connect Verbinden	someone@example.com		
	Keep me signed in		
	Sign in		
	Can't access your account?		
	Don't have an account assigned by your organization? Organizational accounts that work here can be used anywhere yo with a Microsoft account Legal Privacy Feedback	u	
			Ý

Upon clicking Next button to proceed, you will be prompted for credential (username and password) as shown below:

Provide ID and Password in the respective textboxes and click **Sign in** button to proceed.

## Data Source summary

If the selected data source is a database, data source summary step will be displayed which shows the **Connection string** to use with the Database and the **SELECT** statement to query against the Database.

1. The External Data Source Summary step appears as shown below:

<b>9</b> 1	External Data Source to SharePoint		×
	nta Source summary ny of external data source to be imported		
External	Data Provider: Microsoft SQL Server (SQL Client)		
Con	nection String:		
	Data Source=rd28; Initial Catalog=External-Data-Connector; User ID=sqllogin3;	< >	
Que	y Statement:		
	O Manual		
		^	
		~	
		Verify	
	Using Query Builder		
		^	
		~	
	Query Builder	Verify	
	<u>B</u> ack <u>N</u> ext	<u>F</u> inish	Cancel

2. Use the **Manual** query textbox, if the **SELECT** statement to filter the data source is known.

- 3. Or use **Using Query builder** option by clicking on the **Query Builder** button to form the **SELECT** statement based on the requirement. Refer <u>Query Builder</u> for more information.
- 4. The entered **Connection string** and **SELECT** statement can be verified by clicking on the Verify button. The result will be shown as below:

		Preview			×
https://space#voyager#local	Orbit	DocumentLibrary	Bulk 12Feb 14	Book1#csv.NoName	^
https://space.voyager.local	Orbit	Document Library	Bulk12Feb14	Bulk12Feb14/FolderD/Doc	
https://space.voyager.local	Orbit	DocumentLibrary	Bulk12Feb14	Bulk12Feb14/FolderD/Doc	
https://space.voyager.local	Orbit	Document Library	Bulk12Feb14	Bulk12Feb14/FolderD/Doc	
https://space.voyager.local	Orbit	DocumentLibrary	Bulk12Feb14	Bulk12Feb14/FolderD/Doc	
https://space.voyager.local	Orbit	DocumentLibrary	Bulk12Feb14	Bulk12Feb14/FolderD/Doc	
https://space.voyager.local	Orbit	DocumentLibrary	Bulk12Feb14	Bulk12Feb14/FolderD/Doc	
https://space.voyager.local	Orbit	DocumentLibrary	Bulk12Feb14	Bulk12Feb14/FolderD/Doc	
https://space.voyager.local	Orbit	DocumentLibrary	Bulk12Feb14	Bulk12Feb14/FolderD/Doc	
https://space.voyager.local	Orbit	DocumentLibrary	Bulk12Feb14	Bulk12Feb14/FolderD/Doc	
https://space.voyager.local	Orbit	DocumentLibrary	Bulk12Feb14	Bulk12Feb14/FolderD/Doc	
https://space.voyager.local	Orbit	DocumentLibrary	Bulk12Feb14	Bulk12Feb14/FolderD/Doc	
https://space.voyager.local	Orbit	DocumentLibrary	Bulk12Feb14	Bulk12Feb14/FolderD/Doc	
https://space.voyager.local	Orbit	DocumentLibrary	Bulk12Feb14	Bulk12Feb14/FolderD/Doc	
https://space.voyager.local	Orbit	DocumentLibrary	Bulk12Feb14	Bulk12Feb14/FolderD/Doc	
https://space.voyager.local	Orbit	DocumentLibrary	Bulk12Feb14	Bulk12Feb14/FolderD/Doc	
https://space.vovager.local K	Orbit	Document library	Bulk 12Feb 14	Bulk 12Feb 14/FolderD/Doc >	~

#### **File Contents**

If the selected data source is a XLSX or a CSV file, the **File Contents** step will appear, which show the contents of the file to be imported.

1. File Contents step will appear as shown below:

	the file importe		Dhana	Fred	Country
First Name John	Last Name Doe	Company	Phone 5465418761	Email	Country
Jonn Aaron	Doe Cook	Vyapin	5465418761	john@vyapin.com	Australia
David	Robinson	Vyapin Vyapin	5465418763	aaron@vyapin.com david@vyapin.com	England
Gore	Richard	Vyapin	5465418764	gore@vyapin.com	England
Kalu	Jones	Vyapin	5465418765	kalu@vyapin.com	New Zealand
Kevin	Pietersen	Vyapin	5465418766	kevin@vyapin.com	Australia
Alistair	Jones	Vyapin	5465418767	alistair@vyapin.c	America
Michael	Hussey	Vyapin	5465418768	michael@vyapin	France
Ricky	Martin	Vyapin	5465418769	ricky@vyapin.com	Germany
Steven	Adams	Vyapin	5465418771	steven@vyapin.c	India

### Column Mapping

External Data Connector allows you to map metadata properties between data source and a SharePoint list

1. Column Mapping step will appear as shown below:

Apply External me	etadata to SharePoint library	×
Column mapping Select column from SharePoint library to match with a column	n in external data source	7
Column mapping conditions: Note: The reference column is obtained to verify the existence		natically as in source
SharePoint Library Columns	Data Source Columns	Reference column
* ~	~	
	Back Next	inish <u>C</u> ancel

2. External Data Connector can automatically map columns for you if needed. Select **Map columns automatically as in source** to automate mapping. Column mapping will be done based on the column name.

6	Apply Exter	rnal m	netadata to SharePoint library		×
	Diumn mapping ect column from SharePoint library to match with	a colur	nn in external data source		
	umn mapping conditions: e: The reference column is obtained to verify the	e exister		ns automa	atically as in source
	SharePoint Library Columns		Data Source Columns		Reference column
1	Name (File)	~	Name (nvarchar)	~	<ul><li>✓</li></ul>
	yn (Boolean)	~	yn (nvarchar)	~	
	single (Text)	~	single (nvarchar)	~	
	multiple (Text)	~	multiple (nvarchar)	×	
*		×		×	
			<u>B</u> ack <u>N</u> ext	Ēr	nish <u>C</u> ancel

3. Specify at-least one reference column, to fetch the corresponding document from SharePoint library. External Data Connector will read the reference column value, query them against the list and if the item exists in the list, the metadata of that document will be modified.

#### Create new columns

To specify the details of the columns to create during integration, perform the steps given below.

1. The **Create new columns** window will appear as shown below.

<b>6</b> }	Apply Ext	ernal metadata to Share	Point I	ibrary	×
	eate new columns (Optiona offy column details if you want to map the the		olumns ir	n SharePoint library	
Spec	<b>ite columns:</b> ify the new column details to create in the S revious step.	harePoint library. The data source		Map columns automatically as in ntains the columns which are not map	
	SharePoint Library Columns	Field Type		Data Source Columns	
<b> </b>	multiple	Single line of text	×	multiple (nvarchar)	×
	datetime	Date and Time	×	datetime (datetime)	~
*			~		×
		Bac	k	<u>N</u> ext <u>Finish</u>	<u>C</u> ancel

- 2. Specify the column details like column name and column type to create columns in SharePoint library.
- 3. Data source field in this step will display the columns which are not mapped in the previous step.

#### Note: Columns of type single/multiple line of text, Number, Date and time and Yes/No can be created.

#### **Configure Connection Startup**

To specify the connection name and trigger settings for the External Data Connector connection, perform the steps given below

1. Configure Connection startup step will appear as shown below:

	External Data Source to SharePoint	×
	or the Connection and specify trigger settings.	
Connection Name:		
Trigger Options: <ul> <li>Run now</li> <li>Schedule</li> </ul>	Connect as:         User Profile:         Source:       harvester\famadmin         Destination:       harvester\famadmin         Schedule Settings:         Schedule:       Daily         Start Time:       11:21 AM	
	Schedule Daily Every 1 and day(s)	
	When you create a connection, you can specify an action that will occur, once the sync         gets completed.         Brow         Brow         Brow	rse

- 2. Enter a unique connection name in **Connection Name** textbox.
- 3. Select a Connection Option from one of the following options given below:
  - Run now to run the connection immediately after clicking Finish button
  - Schedule To create a Windows scheduled task. External Data Connector will create a schedule connection in the Windows Scheduled Tasks with the given settings.

4. The Connection settings for a **Schedule** connection will appear as shown below:

4	External Data Source to SharePoint
_	or the Connection and specify trigger settings.
Connection Name:	scheduledtask
Trigger Options: Run now Schedule	Connect as: User Profile: Source: harvester\farmadmin Destination: harvester\farmadmin Schedule Settings: Schedule: Daily ✓ Start Time: 11:21 AM ♀ Schedule Daily Every 1 ♀ day(s)
	Program/Script (Optional) When you create a connection, you can specify an action that will occur, once the sync process gets completed. Browse
	Back Next Einish Cancel

5. You can also specify location to an executable or a script to execute once the sync gets completed, if needed.

-Program/Scrip	t (Optional)	
When you cre gets complete	ate a connection, you can specify an action that will occur, once d.	the sync process
		Br <u>o</u> wse

#### **Edit Connection**

\_\_\_\_\_

Edit connection is similar to creating a connection, except that a few settings cannot be altered as stated below.

1. The External Data Connector Connection Wizard appears as shown below:

9	External Data Source to SharePoint
	e external data source a source details which contains the details to create list items
Data source:	Microsoft SQL Server (SQL Client)
Server name:	
	Log on to the server  Use Windows Authentication Use Server Authentication User Name: Password:
	Connect to a database Select or enter a database name:
	Back Next Enish Cancel

- 2. Specify External Data source details.
- 3. Specify the URL of the SharePoint site and authentication details in <u>Destination SharePoint</u> <u>location</u>.
- 4. In **Data Source summary** you can edit the query statement to read data from Data Source.
- 5. <u>File Contents</u> will display the content to be imported if the selected data source is a XLSX, CSV or a HTML file.
- 6. Specify <u>Column Mapping</u> conditions.
- 7. In <u>Configure Connection startup</u> edit mode, the connection name cannot be altered.
- 8. Click **Finish** button to save the connection settings, or click **Back** button to go to the previous step.

# Message Folders to SharePoint

Create a Connection

Edit a Connection

#### Create a Connection

- Step 1 : Exchange and Directory Server Details
- Step 2 : <u>Recipient Mailboxes</u>
- Step 3 : Folder Search
- Step 4 : <u>Item Attributes</u>
- Step 5 : <u>Item Search</u>
- Step 6 : Mail Item Search
- Step 7 : Destination SharePoint Location
- Step 8: List Details
- Step 9: Multi List Mapping
- Step 10: Column Mapping
- Step 11: Configure Connection Startup

#### Exchange and Directory Server details

In this window, you can specify details like Exchange server name, version and credentials to access the Exchange server.

1. Exchange server details step will appear as shown below:

<b>9</b>	Exchange to SharePoint	×
Exchange / Office 365 Specify Exchange server and direct	credentials tory server details like server name, version and credentials to fetch user and mailbox details	
Exchange server type:	Exchange On-Premises      Exchange Online	
<u>V</u> ersion:	Exchange 2010 v	
Exchange Server Name:	rd70	
🚯 <u>U</u> ser Name:	spacenet\adminuser3	
	(contoso\johndoe)	
<u>P</u> assword:	******	
Domain Controller Name:	rd60	
<u>U</u> ser Name:	spacenet\adminuser3	
	(contoso\johndoe)	
<u>P</u> assword:	******	
	Back Next Einish	<u>C</u> ancel

2. The user account specified, should have impersonation rights to impersonate mailboxes and to access its mail items. For more details on configuring impersonation for a specified user, read <u>Configuring impersonation rights</u> to a mailbox user

3. Specify the directory server details like server name and credentials, to fetch the mailboxes corresponding to the specified exchange server.

#### **Recipient Mailboxes**

From this window, you can select multiple mailboxes to fetch mail items.

1. Recipient mailboxes step will appear as shown below:

<b>6</b> p	Exchar	nge to SharePoint		×
Recipient Mailboxes Select the recipient mail boxes to	fetch mail items			
<ul> <li>All mailboxes</li> <li>Specific mailboxes</li> </ul>				
			<u>A</u> dd	<u>R</u> emove
Name		Email		
		<u>B</u> ack	Next	inish <u>C</u> ancel

2. On clicking **Add** button, a window will appear which contains all the mailboxes in the specified directory server like shown below.

Recipient objects Select the recipient mail boxes to fetch the mail items					
Name	Email	Department			
<u>_</u> 1	12@spacenet.local				
<u></u> 2	13@spacenet.local				
🖺 Account1	account1@spacenet.local				
🚡 Account2	account2@spacenet.local				
🚡 Adminuser3	adminuser3@spacenet.local				
🛓 adminuser4	adminuser4@spacenet.local				
🎍 Alfonso S. Thomas	alfonso@spacenet.local	MD			
Basic Permissions2010	Basic2010@spacenet.local				
🖥 Bulk Use6	bulkuser6@spacenet.local				
🖥 Bulk User1	bulkuser1@spacenet.local				
🚡 Bulk User10	bulkuser10@spacenet.local				
🖥 Bulk User2	bulkuser2@spacenet.local				
🔓 Bulk User3	bulkuser3@spacenet.local				
🖥 Bulk User4	bulkuser4@spacenet.local				
Bulk User5	bulkuser5@spacenet.local				
🖥 Bulk User7	bulkuser7@spacenet.local				
🖥 Bulk User8	bulkuser8@s				
Bulk User9	bulkuser9@spacenet.local				
9 :L					

3. From this window, you can select multiple mailboxes to fetch mail items.

<b>9</b>	Exchange to SharePoint	×
Recipient Mailboxes Select the recipient mail boxes to fetch mail items		
<ul> <li>All mailboxes</li> <li>Specific mailboxes</li> </ul>	Add <u>R</u> emove	
Name Alfonso S. Thomas Craig F. Williams Crouch D. Lampard Darren R. Hick	Email alfonso@spacenet.local craig@spacenet.local darren@spacenet.local	
	Back Next Stinish Car	ncel

4. On selecting All Mailboxes option you can fetch mail items from all the mailboxes.

#### **Folder Search**

From this window, you can refine folder results by folder types, filter conditions or by selecting from the list of available folders.

1. Folder Search step will appear as shown below:

State Exchange to SharePoint	×			
Folder Search Select folder based on folder types, folder properties or from list of available folders				
Find Folders				
Select folders by selecting folder types     Select specific folders from recipient mailboxes				
<ul> <li>Message Folders</li> <li>Inbox</li> <li>Drafts</li> <li>Sent Items</li> <li>Deleted Items</li> <li>Ocntacts</li> <li>Contacts</li> <li>J asks</li> <li>Calendar</li> <li>Journal</li> <li>Custom Folders</li> <li>Other Folders (Junk E-mail, Notes etc.)</li> <li>Include sub-folders</li> </ul>				
Back Next Finish	<u>C</u> ancel			

2. The default option to filter folders is based on its folder types. You can select the types of folders to filter from the entire folder collection available in the server

3. You can also select folders from the list of available folders to fetch mail items.

Exchange to SharePoint	×
Folder Search Select folder based on folder types, folder properties or from list of available folders	
Find Folders	
Select folders by selecting folder types     Select specific folders from recipient mailboxes	
Message Folders     Afonso S. Thomas     Calendar     Conversation Action Settings     Deleted items     Drafts     Outbox     Journal     Junk E-Mail     Outbox     Sent items     Tasks     Craig F. Williams     Ocrouch D. Lampard     Darren R. Hick	2 Refresh
<u>B</u> ack <u>N</u> ext <u>Fi</u> nish	<u>C</u> ancel

#### **Item Attributes**

From this window, the user can select item attributes for all the folder types.

1. **Item Attributes** window will appear as shown below:

Exchange to SharePoint	×
Item Attributes Select the attributes or properties of items which should be fetched from Exchange server	
Select Attributes:	
Public Folders         From (System.String)         Body (System.String)         Body (System.String)         Date TimeReceived (System.String)         Date Time Serie (System.String)         Body (System.String)         Posted Time (System.String)         Posted Time (System.String)         Body (System.String)         Posted Time (System.String)         Body (System.String)         Date Time Received (System.String)         Date Time Sectived (System.String)         Body (System.String)         Deleted Time (System.String)         Posted Time (System.String)         Deleted Time Sective (System.String)         Deleted Time Sective (System.String)         Deleted Time Sective (System.String)         Deleted Time Sective (System.String)         Date Time Sective (System.String)         Date Time Sective (System.String)         Date Time Sective (System.St	
Back Next Finish	<u>C</u> ancel

- 2. From this window, the user can select the item attributes to fetch from the Exchange server.
- 3. Only the selected attributes, will be allowed for mapping in Column Mapping step. If none of the columns are selected, the column mapping will be based on the destination list.

#### Item Search

Using this window, you can refine the item results by specifying item search conditons and also you can save the specified search conditions as a template.

1. **Item Search** step will appear as shown below:

<b>9</b>	Exchange to SharePoint							
Item Search (Optional) Specify optional criteria to search mail items. You may load a criteria from a saved search query or specify a new criteria								
Find Items	New Se	✓ <u>M</u> anage						
Date Range	Field	Condition	Value	Exclude				
Subject / Body	Field	Condition	Value	Exclude				
From / To / Cc	Field	Condition	Value	Exclude				
Headers	Field	Condition	Value	Exclude				
Bring the items when:  All of the above conditions are satisfied Any one of the above conditions is satisfied								
Save this Search	Query		<u>B</u> a	ck <u>N</u> ext	<u>Finish</u> <u>Cancel</u>			

2. Items can be filtered based on its properties. To filter items based on its Received, Sent, Created or Modified time, you can use the **Date Range** button.

<b>\$</b> 1	Date Range Filter
Received Sent Created Modified	
	Value
Condition	Friday , January 30, 2015
Yesterday	∀ То
	Friday , January 30, 2015
	<u>O</u> K <u>C</u> ancel
	<u>O</u> K <u>C</u> ancel

3. To filter items based on Subject or Body, click on the respective button and specify keywords to search for in the text fields provided to filter mail items.

<b>\$</b>	Content Filter ×			
Subject Body				
All of these word	s: Any of these words:			
The Exact phrase	: None of these words:			
	<u>O</u> K <u>C</u> ance	1		

4. To filter items based on the recipients, click on the respective button and select the users to filter mail items corresponding to the selected users.

ବନ୍ତ୍ର ନ	Recipient Filter	×
From To Cc		
Add a new user to the below list:		
User Name:	E-mail:	dd
Select Users:		
Name	Email	^
	12@spacenet.local	
2	13@spacenet.local	
Account1	account1@spacenet.local	
Account2	account2@spacenet.local	
Adminuser3	adminuser3@spacenet.local	
adminuser4	adminuser4@spacenet.local	
Alfonso S. Thomas	alfonso@spacenet.local	
Basic Permissions 2010	Basic2010@spacenet.local	
Bulk Use6	bulkuser6@spacenet.local	
Bulk User 1	bulkuser 1@spacenet.local	
Bulk User 10	bulkuser 10@spacenet.local	
Bulk User2	bulkuser2@spacenet.local	
Bulk User3	bulkuser3@spacenet.local	~
Select All	<u>O</u> K <u>C</u> a	ncel

5. You can also specify search conditions for other properties like categories, read/unread, importance, size and attachments.

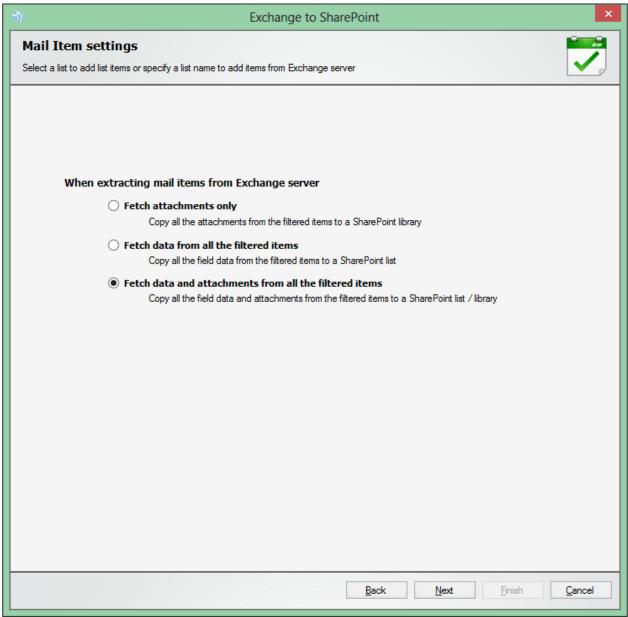
<b>\$</b> }	Header Filter	×	
Categories:	Blue Category	K	
Only items that are:	read	$\vee$	
Only items with:	one or more attachments	~	
Whose importance is:	e is: normal		
Item Size(Kilobytes)			
doesn't matter	✓ and		
	<u>O</u> K <u>C</u> ancel		

6. If you want to save the search conditions as a search query, you can select the **New Search Query** option and specify a name for the search query by clicking the **Save this Search Query** button. You can also load item search conditions from **Saved Search Queries**.

## Mail Item Settings

Using this window, you can specify additional options to bring in mail items from Exchange to SharePoint list.

1. Mail Item Settings step will appear as shown below:



2. The additional options available in mail item settings are:

- Fetch Attachments Only Allows you to bring all the attachments from the filtered items to a SharePoint library.
- Fetch data from all the filtered items Allows you to bring all the mail item properties to a SharePoint list without attachments.
- Fetch data and attachments from the filtered items Allows you to bring both properties and attachments from all the filtered items to a SharePoint list / library.

## **Destination SharePoint Location**

To specify a SharePoint URL of a site, in which you wish to integrate data from an external data source, perform the steps given below:

1. The Destination SharePoint location step appears as shown below:

Image: Second					
	ct destination SharePoint lo y the URL of a SharePoint site to create list				
URL:	http://vm-sp2013-2				
	SharePoint user credential				
	Authentication type:	Windows Authentication	1		
	Use the following cred	ential to connect to SharePoint:			
	User Name:	harvester\famadmin 🗸 🗸			
	Password:	(johndoe@contoso.com, contoso\johndoe, johnd	loe)		
	List Mapping				
	Copy the selected fol	ders / folder types to a single SharePoint list			
	◯ Copy each folder / fol	der type to different SharePoint lists	$\searrow$		
		Back	<u>N</u> ext <u>F</u> inish	<u>C</u> ancel	

- 2. Specify a valid SharePoint URL in the URL textbox. External Data Connector will load all the lists from the specified SharePoint site, if the site URL and authentication is valid.
- 3. Specify the Authentication type and user credentials to connect to the SharePoint URL using the options given below:

- a. Specify the Authentication Type
  - Windows Authentication
  - Forms Authentication
  - Office 365 Cloud based identity
  - Federated Authentication
- b. Specify the user credentials

Specify the user context stored in the user profile (OR) Enter the user name in any ONE of the following formats: \,UserName@DomainName, UserName and its corresponding password. External Data Connector will initiate Windows authentication or Forms authentication depending on configuration in the destination SharePoint site. Click Next button to proceed.

External Data Connector will store the user credential to connect to SharePoint in the Microsoft Windows Stored User Names and Passwords applet / Credential Manager for security reasons. The stored user profile is tied to the user context (currently logged on user account) in which the profile is created.

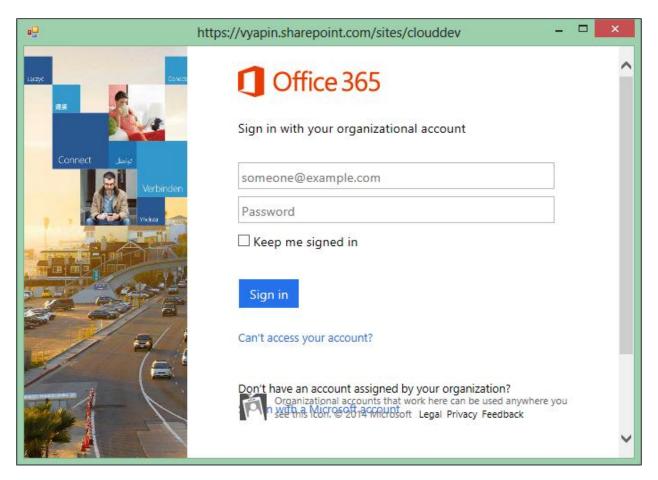
Click ... button to create new user profile.

Select Federated Identity in Authentication Type combo to connect to a SharePoint site (SharePoint On-premise or SharePoint Online) using federated identity configured using ADFS. Also, select this option to connect to Office 365 SharePoint Online configured using federated identity provider.

To connect to Office 365's SharePoint Online environment, you can use Web Single Sign-on option for both Cloud Identity (Office 365 Online User Credential e.g., johndoe@vyapin.onmicrosoft.com) and Federated Identity (configured via ADFS e.g., johndoe@vyapin.onmicrosoft.com).

<b>9</b>	Exchange to SharePoint	×
Select destination SharePoint I Specify the URL of a SharePoint site to create list		
URL: http://vm-sp2013-2		
SharePoint user credential		
Authentication type:	Federated Authentication	
Use the following cre	dential to connect to SharePoint:	
User Name:	harvester\famadmin v (johndoe@contoso.com, contoso\johndoe, johndoe)	
Password:		
	Iders / folder types to a single SharePoint list older type to different SharePoint lists	
	Back Next Finish	<u>C</u> ancel

Upon clicking Next button to proceed, you will be prompted for credential (username and password) as shown below:



Provide ID and Password in the respective textboxes and click Sign in button to proceed.

### List Details

To specify the list to add list items from data source perform the steps given below:

1. The List details step appears as shown below:

<b>9</b>	Exchange to SharePoint	×
Specify the list details to a	add items t name to add items from Exchange server	
Select a list to add list items of specify a list	a name to additions from Exchange server	
Publish to SharePoint	list/library	
Add items	to an existing list from Exchange server	
	a	<b>~</b>
○ Create a r	new list to add items from Exchange server	
List Nam	ie:	
List Typ	GenericList	~
Item Settings: Sk	ip the list item if already exists	~
	Back	Next Einish Cancel

2. Specify the list in which the items has to be added and also specify the action which has to be performed, if the list item already exists in the list.

Publish to SharePoint list/library						
Add items to an existing list from Exchange server						
	a 🗸 🗸					
🔘 Create a	O Create a new list to add items from Exchange server					
List N	List Name:					
List	Type:	GenericList	$\sim$			
Item Settings:	Skip the	e list item if already exists	~			

3. You can select between an existing list or create a new list to add the filtered items.

## Multi List Mapping

External Data Connector also allows you to map each of the selected folder to a different SharePoint list / library.

6 <u>1</u>	Exchange to SharePoint ×					×
	Specify the list details to add items         Select lists to add list items from the filtered folders in Exchange server					
1. It	older / Folder types 2 em Settings kip the list item if already exists	~	SharePoint list / library a	~	Мар	
Exchange Folder		SharePoint List		Reference C	olumn	
						Remove
			Back	<u>N</u> ext	<u>F</u> inish	<u>C</u> ancel

1. Multiple list mapping step will appear as shown below:

2. Select a folder and a SharePoint list which you want to map from its respective fields. On clicking on Map button you will be allowed to map columns for the selected folder and list like shown below,

3. After mapping all the selected folders with columns, select the desired option in Item Settings to skip, update, overwrite or add as new item, if the item already exists in the SharePoint list. Click Next to proceed the operation.

## **Column Mapping**

External Data Connector allows you to map metadata properties between data source and a SharePoint list

1. Column Mapping step will appear as shown below:

Sp Exte	rnal Data Source to SharePoint	×				
Column mapping Select column from SharePoint list to match with a column in external data source						
<b>Column mapping conditions:</b> Note: The reference column is obtained to verify th	Column mapping conditions:         Map columns automatically as in source           Note: The reference column is obtained to verify the existence of a list item in the list.					
SharePoint List Columns	Data Source Columns	Reference column				
×	✓					
	<u>B</u> ack <u>N</u> ext	<u>F</u> inish <u>Cancel</u>				

2. External Data Connector can automatically map columns for you if needed. Select **Map columns automatically** as in source to automate mapping. Column mapping will be done based on the column name.

External Data Source to SharePoint     X					
Column mapping Select column from SharePoint list to match with a column in external data source					
Column mapping conditions:       Image: Map columns automatically as in source         Note: The reference column is obtained to verify the existence of a list item in the list.					
SharePoint List Columns		Data Source Colum	ns	Reference column	
First Name (Text)	Y	First Name (System.String)	×	✓	
Last Name (Text)	Y	Last Name (System.String)	×		
Company (Text)	Y	Company (System.String)	×		
Phone (Text)	Y	Phone (System.String)	×		
Email (Text)	Y	Email (System.String)	×		
	¥		×		
		<u>B</u> ack	Next	<u>Finish</u>	

3. If the selected list to add items is a new list, new columns will be created in the list if automapping option is selected. You can also select the type of column to be created in the list.

Column mapping conditio Note: The reference column is		ice of a		mns aut	omatically as in source
SharePoint List Columns	Field Type		Data Source Columns		Reference column
First Name	Single line of text	~	First Name (System.String)	~	✓
Last Name	Single line of text	~	Last Name (System.String)	~	
Company	Single line of text	~	Company (System.String)	~	
Phone	Single line of text	~	Phone (System.String)	~	
Email	Single line of text	~ ×	Email (System.String)	- ×	
Country	Single line of text	~	Country (System.String)	~	
		~		~	

4. Specify at-least one reference column, to avoid adding duplicate items in the list. External Data Connector will read the reference column value, query them against the list and if the item exists in the list, action specified in the list item settings will be performed (Skip, Update, Overwrite or Add).

**Note:** If 'Create a new list' option is selected for integration, columns of type single/multiple line of text, Number, Date and time and Yes/No can be created.

# Configure Connection Startup

To specify the connection name and trigger settings for the External Data Connector connection, perform the steps given below

1. Configure Connection startup step will appear as shown below:

<b>\$</b>		Exchange to SharePoint	×
	nection startup	ecify trigger settings.	
<u>C</u> onnection Name:	taskName		
Description:	this is an interactive ta	sk	
Trigger Options:	Connect as:		
<u>R</u> un now	User Profile:		
◯ Sc <u>h</u> edule	Source:	voyager\adminuser1	
	Destination:	voyager\famadmin_sp13-1	
	Schedule Settings:		
	Sc <u>h</u> edule: Da	ily ∨ Start <u>T</u> ime: 03:07 PM 🜲	
	Schedule Daily		
	Every_1	aay(s)	
		Back Next Einish	<u>C</u> ancel

- 2. Enter a unique connection name in **Connection Name** textbox.
- Select a Trigger Option from one of the following options given below: Run now - to run the connection immediately after clicking Finish button Schedule - To create a Windows scheduled task. External Data Connector will create a schedule connection in the Windows Scheduled Tasks with the given settings.

### Edit a connection

Edit Connection is similar to creating a connection, except that a few settings cannot be altered as stated below.

1. The External Data Connector Connection Wizard appears as shown below:

<b>9</b>	Exchange to SharePoint	×
Exchange / Office 365 Specify Exchange server and direct	credentials story server details like server name, version and credentials to fetch user and mailbox details	
Exchange server type:	Exchange On-Premises      Exchange Online	
<u>V</u> ersion:	Exchange 2010 v	
Exchange Server Name:	rd70	
(1) User Name:	spacenet\adminuser3	
	(contoso\johndoe)	
<u>P</u> assword:		
Domain Controller Name:	rd60	
<u>U</u> ser Name:		
Password:	(contoso\johndoe)	
<u>P</u> assworu.		
	<u>B</u> ack <u>N</u> ext <u>F</u> inish	<u>C</u> ancel

- 2. Specify Exchange and Directory server details
- 3. Select the <u>Recipient mailboxes</u> to fetch its mail items.

- 4. Specify <u>Folder Search</u> and <u>Item Search</u> conditions to refine folder and item results.
- 5. Specify <u>Mail Item Settings</u> to bring the data and attachments from Exchange server.
- 6. In <u>Destination SharePoint location</u> specify the URL of the site and other necessary details.
- 7. Specify list and column mapping details based on the option selected in **Destination SharePoint** Location.
- 8. In <u>Configure Connection startup</u> edit mode, the connection name cannot be altered.
- 9. Click **Finish** button to save the connection settings, or click **Back** button to go to the previous step.

# Public Folders to SharePoint

Create a Connection

Edit a Connection

#### Create a Connection

- Step 1 : Exchange and Directory Server Details
- Step 2 : Folder Search
- Step 3 : <u>Item Attributes</u>
- Step 4 : <u>Item Search</u>
- Step 5 : Mail Item Settings
- Step 6 : <u>Destination SharePoint Location</u>
- Step 7 : <u>List Details</u>
- Step 8 : Multi List Mapping
- Step 9 : Column Mapping
- Step 10 : Configure Connection Startup

# Exchange server details

In this window, you can specify details like Exchange server name, version and credentials to access the Exchange server.

1. Exchange server details step will appear as shown below:

<b>9</b>	Exchange to SharePoint ×			
Exchange / Office 365 credentials Specify Exchange server and directory server details like server name, version and credentials to fetch user and mailbox details				
Exchange server type:	Exchange On-Premises      Exchange Online			
<u>V</u> ersion:	Exchange 2010 V			
Exchange Server Name:	rd70			
(1) <u>U</u> ser Name:	spacenet \adminuser3			
	(contoso\johndoe)			
<u>P</u> assword:				
Domain Controller Name:	rd60			
<u>U</u> ser Name:	spacenet\adminuser3			
	(contoso\johndoe)			
<u>P</u> assword:				
	<u>B</u> ack <u>N</u> ext <u>Finish</u> <u>Cancel</u>			

- 2. The user account specified, should have impersonation rights to impersonate mailboxes and to access its mail items. For more details on configuring impersonation for a specified user, read <u>Configuring impersonation rights</u> to a mailbox user
- 3. Specify the directory server details like server name and credentials, to fetch the mailboxes corresponding to the specified exchange server.

# Folder Search

From this window, you can refine folder results by folder types, filter conditions or by selecting from the list of available folders.

1. Folder Search step will appear as shown below:

Image: Symplect Content of Conte	×
Folder Search Select folder based on folder types, folder properties or from list of available folders	
Find Folders     Select folders by selecting folder types     Select specific folders from public folders list	
Select folders inst	
<u>B</u> ack <u>N</u> ext <u>Finish</u>	<u>C</u> ancel

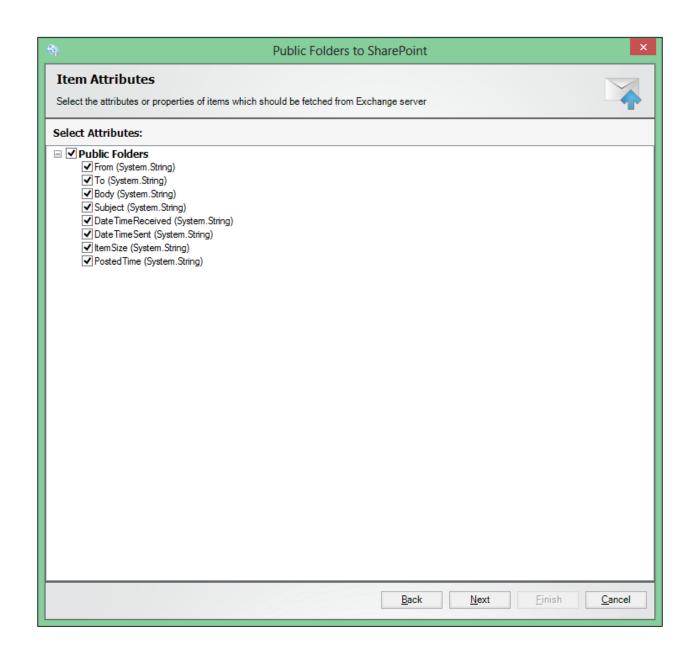
- 2. The default option to filter folders is based on its folder types. You can select the types of folders to filter from the entire folder collection available in the server
- 3. You can also select folders from the list of available folders to fetch mail items.

Public Folders to SharePoint	×
Folder Search Select folder based on folder types, folder properties or from list of available folders	
Find Folders O Select folders by selecting folder types O Select specific folders from public folders list	
	🕏 Refresh
Public Folders Int Attedees Bulk Test(Migration Team) Calendar Calendar with Mail enabled CalenderFolderTest ContractFolderTest ContractFolderTest ContractFolderTest ContractFolderTest ContractFolderTest ContractFolderTest ContractFolderTest Fortrest Fredback Findings For Test foronetest Goals Growth 2k3 Hurdles Internet Newsgroups Issues J L1 Latest News mail1 R mailcheck	~
<u>B</u> ack <u>N</u> ext <u>Finish</u>	Cancel

#### **Item Attributes**

From this window, the user can select item attributes for all the folder types.

1. Item Attributes window will appear as shown below:



- 2. From this window, the user can select the item attributes to fetch from the Exchange server.
- 3. Only the selected attributes, will be allowed for mapping in Column Mapping step. If none of the columns are selected, the column mapping will be based on the destination list.

# Item Search

Using this window, you can refine the item results by specifying item search conditions and also you can save the specified search conditions as a template.

1. Item Search step will appear as shown below:

<b>9</b>		Exchang	ge to SharePoint		×
Item Search Specify optional cr		nail items. You may load a c	riteria from a saved se	earch query or specify a n	ew criteria
Find Items	New Set	arch Query 🔵 Saved S	earch Queries		✓ <u>M</u> anage
Date Range	Field	Condition	Value	Exclude	
Subject / Body	Field	Condition	Value	Exclude	
Erom / To /	Field	Condition	Value	Exclude	
ć ·	Field	Condition	Value	Exclude	
Headers				$\triangleright$	
Bring the items when: <ul> <li>All of the above conditions are satisfied</li> <li>Any one of the above conditions is satisfied</li> </ul>					
Save this Search	n Query		B	ack <u>N</u> ext	<u>Finish</u> <u>Cancel</u>

2. Items can be filtered based on its properties. To filter items based on its Received, Sent, Created or Modified time, you can use the **Date Range** button.

<b>\$</b> p	Date Range Filter	×
Received Sent Created Modified		
	Value	
Condition	Friday , January 30, 2015	
Yesterday	✓ To	
	Friday , January 30, 2015	
	<u>O</u> K <u>C</u> ano	;el

3. To filter items based on Subject or Body, click on the respective button and specify keywords to search for in the text fields provided to filter mail items.

<b>S</b> }	Content Filter	×
Subject Body All of these words:	Any of these words:	
The Exact phrase:	None of these words:	
	<u>O</u> K <u>C</u> ance	el

4. To filter items based on the recipients, click on the respective button and select the users to filter mail items corresponding to the selected users.

<b>SP</b>			Recipient Filter		×
From	То	Cc			
Add a	new use	er to th	e below list:		
Use	r Name:		E-mail:	Ac	bb
Select	Users:				
Name			Email		^
			12@spacenet.local		
2 🗌			13@spacenet.local		
	count1		account1@spacenet.local		
	count2		account2@spacenet.local		
Adı	minuser3		adminuser3@spacenet.local		
adr	minuser4		adminuser4@spacenet.local		
Alfe	onso S. T	homas	alfonso@spacenet.local		
Bas	sic Permis	sions20	10 Basic2010@spacenet.local		
🛛 🗌 Bul	k Use6		bulkuser6@spacenet.local		
🛛 🗌 Bul	k User 1		bulkuser1@spacenet.local		
🗌 🗌 Bul	k User 10		bulkuser 10@spacenet.local		
🗌 🗌 Bul	k User 2		bulkuser2@spacenet.local		
Bul	k User 3		bulkuser3@spacenet.local		~
🗌 Sele	ect All		<u>o</u> ĸ	<u>C</u> ar	ncel

5. You can also specify search conditions for other properties like categories, read/unread, importance, size and attachments.

<b>9</b>	Header Filter	×
Categories:	Blue Category	¥
Only items that are:	read	~
Only items with:	one or more attachments	~
Whose importance is:	nomal	~
Item Size(Kilobytes)		
doesn't matter	✓ and	
	<u>O</u> K <u>C</u> ancel	

6. If you want to save the search conditions as a search query, you can select the **New Search Query** option and specify a name for the search query by clicking the **Save this Search Query** button. You can also load item search conditions from **Saved Search Queries**.

# Mail Item Settings

Using this window, you can specify additional options to bring in mail items from Exchange to SharePoint list.

1. Mail Item Settings step will appear as shown below:

Exchange to SharePoint	x
Mail Item settings         Select a list to add list items or specify a list name to add items from Exchange server	
When extracting mail items from Exchange server	
Copy all the attachments from the filtered items to a SharePoint library	
Copy all the field data from the filtered items to a SharePoint list	
Fetch data and attachments from all the filtered items Copy all the field data and attachments from the filtered items to a SharePoint list / library	
Back Next Enish Cance	*

2. The additional options available in mail item settings are,

**Fetch Attachments Only** - Allows you to bring all the attachments from the filtered items to a SharePoint library.

**Fetch data from all the filtered items** - Allows you to bring all the mail item properties to a SharePoint list without attachments.

Fetch data and attachments from the filtered items - Allows you to bring both properties and attachments from all the filtered items to a SharePoint list / library.

# **Destination SharePoint Location**

To specify a SharePoint URL of a site, in which you wish to integrate data from an external data source, perform the steps given below:

1. The **Destination SharePoint location** step appears as shown below:

<b>9</b>	Exchange to SharePoint	×	
Select destination SharePoint I	ocation		
Specify the URL of a SharePoint site to create list items from Exchange server			
URL: http://vm-sp2013-2			
SharePoint user credential			
Authentication type:	Windows Authentication		
Use the following cre	dential to connect to SharePoint:		
User Name:	harvester Viamadmin 🗸		
	(johndoe@contoso.com, contoso\johndoe, johndoe)		
Password:			
List Mapping			
Copy the selected folders / folder types to a single SharePoint list			
Copy each folder / folder type to different SharePoint lists			
	Back Next Einish	<u>C</u> ancel	

- 2. Specify a valid SharePoint URL in the URL textbox. External Data Connector will load all the lists from the specified SharePoint site, if the site URL and authentication is valid.
- 3. Specify the Authentication type and user credentials to connect to the SharePoint URL using the options given below:
  - a. Specify the Authentication Type
    - Windows Authentication
    - Forms Authentication
    - Office 365 Cloud based identity
    - Federated Authentication
  - b. Specify the user credentials

Specify the user context stored in the user profile (OR) Enter the user name in any ONE of the following formats: \,UserName@DomainName, UserName and its corresponding password. External Data Connector will initiate Windows authentication or Forms authentication depending on configuration in the destination SharePoint site. Click Next button to proceed.

External Data Connector will store the user credential to connect to SharePoint in the Microsoft Windows Stored User Names and Passwords applet / Credential Manager for security reasons. The stored user profile is tied to the user context (currently logged on user account) in which the profile is created.

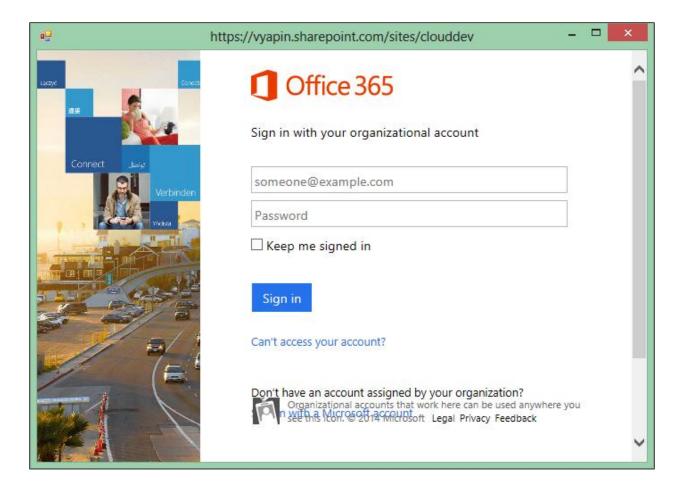
Click ... button to create new user profile. Click here to view the details about Profile Manager dialog.

Select Federated Identity in Authentication Type combo to connect to a SharePoint site (SharePoint On-premise or SharePoint Online) using federated identity configured using ADFS. Also, select this option to connect to Office 365 SharePoint Online configured using federated identity provider.

To connect to Office 365's SharePoint Online environment, you can use Web Single Sign-on option for both Cloud Identity (Office 365 Online User Credential e.g., johndoe@vyapin.onmicrosoft.com) and Federated Identity (configured via ADFS e.g., johndoe@vyapin.onmicrosoft.com).

<b>9</b>	Exchange to SharePoint	×
Select destination SharePoint lo Specify the URL of a SharePoint site to create lis		-
URL: http://vm-sp2013-2		
SharePoint user credential		
Authentication type:	Federated Authentication	
Use the following crea	dential to connect to SharePoint:	
User Name:	harvesterVarmadmin	
Password:	(johndoe@contoso.com, contoso\johndoe, johndoe)	
List Mapping	G	
	lders / folder types to a single SharePoint list	
○ Copy each folder / fo	lder type to different SharePoint lists	
	<u>B</u> ack <u>N</u> ext <u>Finish</u>	<u>C</u> ancel

Upon clicking Next button to proceed, you will be prompted for credential (username and password) as shown below:



Provide ID and Password in the respective textboxes and click Sign in button to proceed.

### List Details

To specify the list to add list items from data source perform the steps given below:

1. The List details step appears as shown below:

9		Exchange to SharePoint				×			
Specify the list details t	o add	litems							
Select a list to add list items or specify	Select a list to add list items or specify a list name to add items from Exchange server								
Publish to SharePo	int list	/library							
Add ite	ems to	an existing list from Exchange server							
		a	. •						
	<b>a new</b> Name:	list to add items from Exchange server							
	Type:	GenericList	~						
Item Settings:		ne list item if already exists	¥						
		Back		<u>N</u> ext	<u>F</u> inish	<u>C</u> ancel			

2. Specify the list in which the items has to be added and also specify the action which has to be performed, if the list item already exists in the list.

Publish to SharePoint list/library							
Add items to	o an existing list from Exchange server						
	a	~					
🔿 Create a nev	w list to add items from Exchange server						
List Name:							
List Type:	GenericList	$\sim$					
Item Settings: Skip t	he list item if already exists	$\checkmark$					

3. You can select between an existing list or create a new list to add the filtered items.

### Multi List Mapping

External Data Connector also allows you to map each of the selected folder to a different SharePoint list / library.

1. Multiple list mapping step will appear as shown below:

<b>9</b>		Exchan	ge to ShareP	oint			×
	<b>e list details to add it</b> dd list items from the filtered folders		ver				
	Folder / Folder types	~	SharePoint li a	st / library	¥	Мар	
	Item Settings Skip the list item if already exists		~				
Exchange Folde	r	SharePoint List	t		Reference	Column	
							Remove
				<u>B</u> ack	<u>N</u> ext	<u>F</u> inish	<u>C</u> ancel

2. Select a folder and a SharePoint list which you want to map from its respective fields. On clicking on Map button you will be allowed to map columns for the selected folder and list like shown below.

<b>6</b> p	S Column Mapping ×							
	umn mapping conditions: :: The reference column is obtained to v	erify		s au	tomatically as in source			
	Mail Item Properties		SharePoint List Columns		Reference column			
•	From (System.String)	~	From (Text)	~				
	To (System.String)	Y	To (Text)	~				
	Body (System.String)	~	Body (Note)	~				
	Subject (System.String)	V	Subject (Text)	~				
	DateTimeReceived (System.String)	V	DateTimeReceived (Text)	~				
	DateTimeSent (System.String)	V	DateTimeSent (Text)	~				
	ItemSize (System.String)	V	ItemSize (Text)	~				
	PostedTime (System.String)	~	PostedTime (Text)	~				
*		~		~				
				[	OK Cancel			

3. After mapping all the selected folders with columns, select the desired option in Item Settings to skip, update, overwrite or add as new item, if the item already exists in the SharePoint list. Click Next to proceed the operation.

## **Column Mapping**

External Data Connector allows you to map metadata properties between data source and a SharePoint list

1. Column Mapping step will appear as shown below:

Sy Exte	rnal Data Source to SharePoint	×					
Column mapping Select column from SharePoint list to match with a	column in external data source						
Column mapping conditions:       Map columns automatically as in source         Note: The reference column is obtained to verify the existence of a list item in the list.							
SharePoint List Columns	Data Source Columns	Reference column					
~	×						
	<u>B</u> ack <u>N</u> ext						

2. External Data Connector can automatically map columns for you if needed. Select Map columns automatically as in source to automate mapping. Column mapping will be done based on the column name.

Column mapping conditions: Note: The reference column is obtained to	verify the		o columns au	utomatically as in source
SharePoint List Columns		Data Source Columns		Reference column
irst Name (Text)	~	First Name (System.String)	~	✓
ast Name (Text)	×	Last Name (System.String)	~	
čompany (Text)	~	Company (System.String)	~	
Phone (Text)	~	Phone (System.String)	~	
imail (Text)	~	Email (System.String)	~	
	~		×	

3. If the selected list to add items is a new list, new columns will be created in the list if automapping option is selected. You can also select the type of column to be created in the list.

Column mapping condition Note: The reference column is		ice of a l		mns aut	omatically as in source
SharePoint List Columns	Field Type		Data Source Columns		Reference column
irst Name	Single line of text	~	First Name (System.String)	~	<ul><li>✓</li></ul>
ast Name	Single line of text	~	Last Name (System.String)	~	
Company	Single line of text	~	Company (System.String)	~	
hone	Single line of text	~	Phone (System.String)	~	
Email	Single line of text	~	Email (System.String)	~	
Country	Single line of text	~	Country (System.String)	~	
		×		×	

- 4. Specify at-least one reference column, to avoid adding duplicate items in the list. External Data Connector will read the reference column value, query them against the list and if the item exists in the list, action specified in the list item settings will be performed (Skip, Update, Overwrite or Add).
- 5. Note: If 'Create a new list' option is selected for integration, columns of type single/multiple line of text, Number, Date and time and Yes/No can be created.

# Configure Connection Startup

To specify the connection name and trigger settings for the External Data Connector connection, perform the steps given below

1. Configure Connection startup step will appear as shown below:

Configure Con	nection startup	Exchange to SharePoint	×
<u>C</u> onnection Name: Description:	taskName		
Trigger Options: () <u>R</u> un now () Sc <u>h</u> edule	Connect as: User Profile: Source:	voyager\adminuser1 voyager\famadmin_sp13-1	
	Schedule Settings: Schedule: Daily Schedule Daily Every 1	<ul> <li>✓ Start <u>T</u>ime: 03:07 PM</li> <li>▲ day(s)</li> </ul>	
		<u>B</u> ack <u>N</u> e	ext <u>Finish</u> <u>C</u> ancel

- 2. Enter a unique connection name in Connection Name textbox.
- 3. Select a Trigger Option from one of the following options given below:

**Run now** - to run the connection immediately after clicking Finish button **Schedule** - To create a Windows scheduled task. External Data Connector will create a schedule connection in the Windows Scheduled Tasks with the given settings.

### Edit a connection

Edit Connection is similar to creating a connection, except that a few settings cannot be altered as stated below.

1. The External Data Connector Connection Wizard appears as shown below:

Image: Space Point         ×						
Exchange / Office 365 credentials Specify Exchange server and directory server details like server name, version and credentials to fetch user and mailbox details						
Exchange server type:	Exchange On-Premises      Exchange Online					
<u>V</u> ersion:	Exchange 2010 v					
Exchange Server Name:	rd70					
🚯 <u>U</u> ser Name:	spacenet \adminuser3					
	(contoso\johndoe)					
<u>P</u> assword:	••••••					
<u>D</u> omain Controller Name:	rd60					
<u>U</u> ser Name:	spacenet\adminuser3					
Deserved	(contoso\johndoe)					
<u>P</u> assword:						
	Back Next Einish Cancel					

2. Specify Exchange and Directory server details.

- 3. Specify <u>Folder Search</u> and <u>Item Search</u> conditions to refine folder and item results.
- 4. Specify <u>Mail Item Settings</u> to bring the data and attachments from Exchange server.
- 5. In <u>Destination SharePoint location</u> specify the URL of the site and other necessary details.
- 6. Specify list and column mapping details based on the option selected in **Destination SharePoint Location**.
- 7. In <u>Configure Connection startup</u> edit mode, the connection name cannot be altered.
- 8. Click **Finish** button to save the connection settings, or click **Back** button to go to the previous step.

# Configuring impersonation rights

To assign Impersonation rights for a user, walk through the respective Exchange Server sections.

#### For Exchange Online

Please refer the following article:

https://msdn.microsoft.com/en-us/library/office/dn722376%28v=exchg.150%29.aspx

#### For Exchange 2013

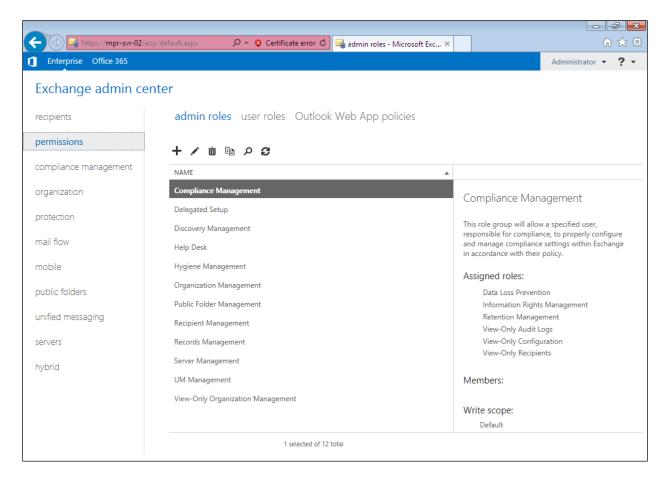
Prerequisites:

Administrative credential for the server running Exchange 2013 to assign role for a user in EAC.

Using EAC:

- Create a mailbox enabled account, say ARKES Service Account in Exchange Server organization.
- Launch the Exchange Admin Center (EAC) and browse to Permissions -> Admin roles. Click the "+" sign to add a new role.

To access the EAC by going to <u>http://serverFQDN/ecp/default.aspx</u> page



• Create a role with the following specifications.

Name:	User Impersonate.
Description:	User role with impersonation rights for EDC.
Write Scope:	Default.
Roles:	Add the Role name "ApplicationImpersonation".
Members:	Add the User "EDC Service Account".

Role Group - Internet Explorer, optimized for Bing and MSN	1	
new role group		Help
User Impersonate		
Description:		
Allows this user to impersonate other user mailboxes. Write scope:		
<ul> <li>Default</li> <li>Organizational unit:</li> <li>Roles:</li> <li> <ul> <li> </li> <li></li></ul></li></ul>		
NAME		
ApplicationImpersonation		
Members:		
NAME		
service Account service Account		· ·
	save	cancel

• Save the changes and wait for few minutes for the settings to replicate.

#### For Exchange 2010

Prerequisites:

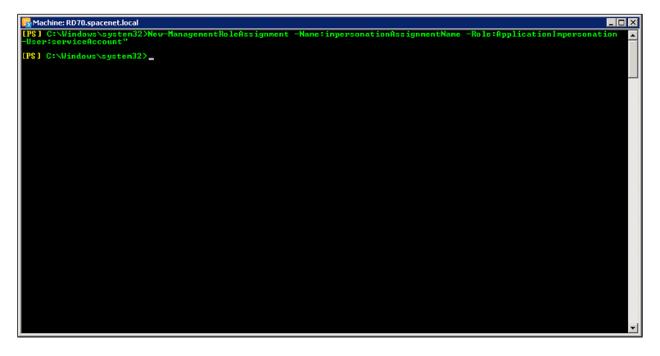
- I. Administrative credentials for the server running Exchange 2010 that has Client Access server role installed.
- II. Domain Administrator credentials, or a credential with permission to create and assign roles and scopes.
- III. Remote PowerShell installed on the computer from which you will run the command.

Using Management Shell:

Create a mailbox enabled ARKES Account, say ARKES Service Account in Exchange Server organization.

Open the Exchange Management Shell.

Run New-ManagementRoleAssignment –Name:impersonationAssignmentName – Role:ApplicationImpersonation –User:ARKES Service Account command.

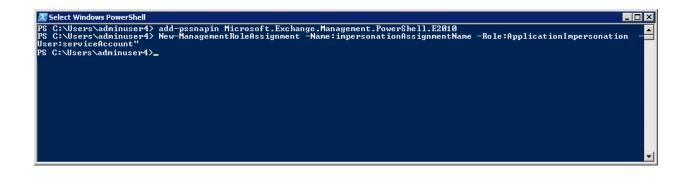


Using PowerShell:

Open PowerShell and run the following cmdlets in the specified order:

"Add-PSSnapin Microsoft.Exchange.Management.PowerShell.E2010"

Run New-ManagementRoleAssignment –Name:impersonationAssignmentName – Role:ApplicationImpersonation –User:ARKES Service Account command.



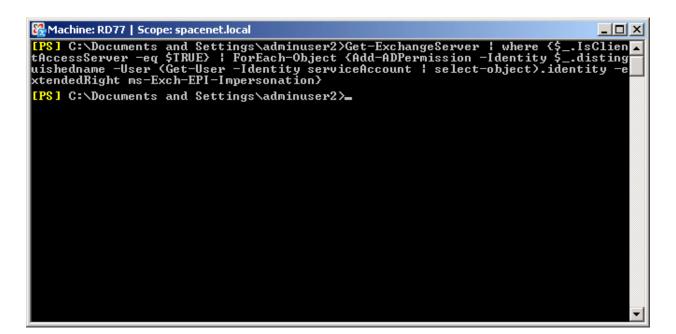
#### For Exchange 2007

Prerequisites:

- I. Administrative credentials for the server running Exchange 2007 that has Client Access server role installed.
- II. Domain Administrator credentials, or a credential with permission to create and assign roles and scopes.

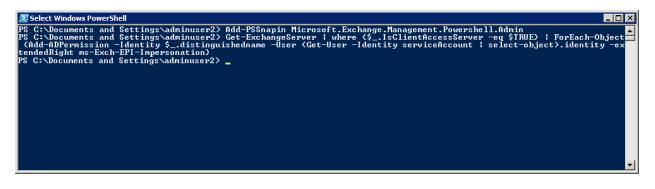
Using Management Shell:

- Create a mailbox enabled ARKES Account, say ARKES Service Account in Exchange Server organization.
- Open the Exchange Management Shell.
   Run Get-ExchangeServer | where {\$\_.IsClientAccessServer -eq \$TRUE} | ForEach-Object
   {Add-ADPermission -Identity \$\_.distinguishedname -User (Get-User -Identity ARKES Service
   Account | select-object).identity -extendedRight ms-Exch-EPI-Impersonation} command.



Using PowerShell:

 Open PowerShell and run the following cmdlets in the specified order: "Add-PSSnapin Microsoft.Exchange.Management.PowerShell.E2010" Run Get-ExchangeServer | where {\$\_.IsClientAccessServer -eq \$TRUE} | ForEach-Object {Add-ADPermission -Identity \$\_.distinguishedname -User (Get-User -Identity ARKES Service Account | select-object).identity -extendedRight ms-Exch-EPI-Impersonation} command.



# References

Frequently Asked Questions

Error Messages and Resolution

Troubleshooting

How to uninstall External Data Connector?

# Frequently Asked Questions

\_\_\_\_\_

For frequently asked questions about the product, please refer to the <u>Frequently Asked Questions</u> section in the website.

You may notice one or more of the error messages given below when using External Data Connector to connect to SharePoint and perform an integration connection. This is not an exhaustive compilation of all error messages, but an attempt to include as many known error messages and how to resolve the errors. Please refer **Troubleshooting** section of online help document for more information.

Error Message	Resolution
The remote server returned an error: (407) Proxy	Enable the Bypass proxy server for local addresses
Authentication Required.	option available at LAN Settings of Internet Options
	of Internet Explorer Browser.
The remote server returned an error: (401)	Make sure the username and password is valid to
Unauthorized.	connect the SharePoint site.
Login failed. The login is from an untrusted domain	Make sure the domains of the current user and the
and cannot be used with Windows authentication.	data source are trusted to access with windows
	authentication.
The remote name could not be resolved	Ensure that the entered Site URL is valid.
Select at-least one table to continue this operation	Ensure that you select at-least one table in the
	query builder, to generate the SELECT statement.
Left and Right table names cannot be same, select	In query builder, to perform <b>JOIN</b> operation, the
unique tables	selected left and right table should not be same.
	Select unique tables to perform <b>JOIN</b> operation.
Select columns of same datatype to join	The selected columns for <b>JOIN</b> operation must be
	of same data type to proceed the <b>JOIN</b> operation.
Select at-least one reference column	The reference column is used to avoid adding
	duplicate items in SharePoint list. So, it is
	mandatory to select at-least one column while
	mapping columns.
String was not recognized as a valid Date Time	Ensure that the mapped column in the data source
	contains a valid data time value.
User/Group [group_name] is not found	Check whether the reported group exists in the
	destination site collection. If it is a user name,

ensure that the given user name exists in the
corresponding SharePoint site or Active Directory
domain.

# Troubleshooting

If and when a problem arises, please forward the following files to support@vyapin.com to provide you with the solution.

- 1. Error log file e.g., \ExternalDataConnector1x\ErrorLog\ExternalDataConnectorErrorLog.txt
- For issues while running a connection, the Error Log file will be generated in a date and time-stamp folder within the connection folder name under 'TaskHistory' for scheduled connection and 'RunnowTasks' for interactive connection folders.
  - Error Log for Scheduled Connection: Error Log for Scheduled Connection: <Application Data Folder>\ExternalDataConnector1x\TaskHistory\runnowtest\20140526024832\ErrorLog\Exter nalDataConnectorErrorLog.txt
  - Error Log for Interactive Connection: <Application Data</li>
     Folder>\ExternalDataConnector1x\RunnowTasks\runnowtest\TaskHistory\20140526024750\
     ErrorLog\ExternalDataConnectorErrorLog.txt
- 3. The <Application Data Folder> is the common location where External Data Connector connection and their history will be stored in the computer running External Data Connector application. The <Application Data Folder> can be found from Help -> About screen. The default path of <Application Data Folder> is as follows:
  - Windows XP, Windows 2003 C:\Documents and Settings\All Users\Documents
  - Windows 8.1, Windows 8, Windows 7, Windows 2012, Windows 2008, Windows Vista C:\Users\Public\Documents

## How to uninstall External Data Connector?

When you create integration connections in External Data Connector, the application creates Windows Scheduled Connections (to run the integration connections at the specified time interval) and Stored User Profiles in the computer where External Data Connector is installed. Integration connection results for every connection run instance is also maintained in the computer as application files.

When you uninstall External Data Connector through **Control Panel - Add / Remove Programs** applet, Windows Installer program will remove only the application files from your machine. But, the application related files created by External Data Connector remain in the computer. In order to remove External Data Connector worker files completely, the uninstall wizard provides a set of cleanup options to perform the cleanup operation based your selection.

Use this wizard to cleanup the files / profiles that are created by External Data Connector for SharePoint application selectively and uninstall External Data Connector completely from the machine.

Launch the uninstall wizard by clicking Start -> Programs -> External Data Connector for SharePoint
 -> External Data Connector Uninstall Wizard. External Data Connector uninstall wizard will be

shown as below:

External Data Connector for SharePoint Uninstall Wizard	
Welcome to External Data Connector for SharePoint uninstall wizard           This wizard helps you to cleanup and uninstall External Data Connector for SharePoint completely.	
This wizard will guide you through the steps to cleanup the files created by External Data Connector for SharePoint application Using this wizard you can:	
Back Next Finish Cancel	

2. Select required cleanup options as shown below:

External Data Connector for SharePoint Uninstall Wizard	×	
Welcome to External Data Connector for SharePoint uninstall wizard This wizard helps you to cleanup and uninstall External Data Connector for SharePoint completely.	<b>A</b>	
✓ Cleanup all tasks and their history instances		
Cleanup all tasks and Task History information maintained by External Data Connector		
✓ Cleanup stored user profiles		
Remove all stored profiles created by External Data Connector Profile Manager		
✓ Uninstall External Data Connector application		
Remove all application files and uninstall External Data Connector from the machine		
Back Next Finish	Cancel	

3. Confirm the cleanup and/or uninstall process.

External Data Connector for SharePoint Uninstall Wizard	×
Welcome to External Data Connector for SharePoint uninstall wizard This wizard helps you to cleanup and uninstall External Data Connector for SharePoint completely.	
Click 'Finish' button to proceed with the cleanup process or click 'Cancel' button to terminate the uninstall wizard	
Back Next Finish	Cancel

Click **Finish** to run cleanup and/or uninstall process. Click Cancel to close the wizard.

4. Once the file cleanup process is complete, the uninstall wizard will automatically run Windows Installer program to remove External Data Connector application from the machine, if you have selected the cleanup option **Uninstall External Data Connector application** in the wizard.

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