V1

Exchequer Integration

Server Installation

EDM for Exchequer Release 1.5
OCR for Exchequer Release 1.5

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Contents

Exchequer V1 Integration – Server Installation

Background

This document provides step by step instructions on installing and implementing the Exchequer V1 Integration.

The installation is split in to 2 tasks:

1. Install and Configure the Server side components
2. Install the clients

Compatibility

- Exchequer 2016 R2 and higher ONLY (SQL ONLY)
- V1 3.6 or 4.0 and higher ONLY

Prerequisites and Assumptions

There are a number of prerequisites and assumptions that must be satisfied before proceeding with the installation (see Technical Pre-Requisites document). These tasks cannot be ignored or it will compromise the success of the installation.

1.5 is optimized for DM4 so much of this document reflects that.

Recommendations:

- The V1 distribution is located on the Exchequer server and shared so it is accessible by the clients.

Assumptions:

- Apache 2.2X is installed only if SmartRetrieve is not going to be used for drilldowns

Note: If Apache is not present, an MSi can be found in the \Connector\Utils folder

Install the MSi and agree to the defaults, when completed, navigate to the following location:

> C:\Program Files / (x86)\Apache Software Foundation\Apache2.2\conf directory

Open the http.conf in a text editor and change **Listen 80** to **Listen 8085**, save and restart the Apache 2.2 service.

OCR – Create a DbCapture Export service user

This chapter only affects customers using DbCapture / Exchequer OCR so if this module has not been purchased, continue to the next chapter. In addition, if the Exchequer / V1 server is Windows 2008 R2 it is also not necessary to perform the following actions, so again, continue to the next chapter.

Q: How do I know if I've got DbCapture / OCR?
A: If the licences sent on your cut contain a dbcapture.key.

To ensure the drive mapping and associated activities of OCR for Exchequer are done without adversely affecting other areas of the system, a dedicated service user must be created.

This user will be assigned as a login to the DbCapture: Export Service and needs to be created prior to the next chapter as you will be prompted for it.

1. Open the Control Panel, click User Accounts
2. Click User Accounts again
3. Click manage another account
4. Click add a user account
5. Enter a user of: dbcexportservice
6. Give it a password, confirm it and a hint, click Next and Finish
7. Select the dbcexportservice user
8. Change the account type to Administrator
9. Back to Control Panel, go to System and Security and select Administrative Tools
10. Open Local Security Policy
11. Extend Local Policies > User Rights assignments
12. Double click on Logon as a service
13. Click on Add User or Group …
14. In the Enter the names to select cell, type dbcexportservice and click Check Names, click OK
15. Click Apply
16. Login to the server as the dbcexportservice and assign a default printer that you know is always going to be online.

Install and Configure the Server side components

The V1 software will be cut and licensed once the customer has purchased the software.

The cut is split into 2:

1. The 'core' software which are the main server and client components giving a vanilla system. This will be uploaded to the V1 website and a link to it sent via email.
2. The Exchequer Integration specific components which can be downloaded from the Portal, this builds upon the core installation, the end result being a functional system as per the requirements.

Ensure the above has been downloaded and uncompressed and is accessible to the Exchequer database server where they **MUST** be installed.
You **CANNOT** install the V1 components on a separate server to Exchequer.

Sub Task 1 - Core Software Installation

Prerequisites:

- A SQL database on the Exchequer database server called **DbArchive** has been created
- If sa is not permitted, a SQL user **V1User** exists and is assigned the default database to be **DbArchive**
- If used, the **V1User** SQL user has sufficient privileges (**dbowner**) to the **DbArchive** SQL table

If licensed for Exchequer OCR:

- A SQL database on the Exchequer database server called **DbCapture** has been created
- If sa is not permitted, a SQL user **V1User** exists and is assigned the default database to be **DbCapture**
- If used, the **V1User** SQL user has sufficient privileges (**dbowner**) to the **DbCapture** SQL table
- The user must be granted execute permissions to the Exchequer database

If licensed for Audit / Dashboard:

- A SQL database on the Exchequer database server called **V1Audit** has been created
- If sa is not permitted, a SQL user **V1User** exists and is assigned the default database to be **DbAudit**
- If used, the **V1User** SQL user has sufficient privileges (**dbowner**) to the **V1Audit** SQL table

A mail server is accessible to the Exchequer server where you are installing the V1 integration.

- IPV6 has been disabled (requires a reboot if changed prior to the follow steps)
- Protocols for SQLSERVER TCP/IP are Enabled

Core Software installation instructions:

Prerequisites:
- If licensed for OCR, you **MUST** have your ABBYY license to hand **BEFORE** you start
- The server on which you are installing has internet connectivity
- The server on which you are installing has access to the mail-server to be used

1. Browse to the uncompressed location of the distribution
2. From the root location, as **administrator** run the **iManager.exe**
3. When prompted, copy the media to a suitable location on the Exchequer database server. The default location is **C:\V1Home\CD**.
4. Select Server Components
5. Select / adjust the below settings for each of the components in the tree:
    - Database Configuration
    - Web Server Configuration (If using SmartRetrieve untick Apache, this is no longer needed)
    - DbLogin - SQL Server Database
    - DbAudit – SQL Server Database
    - DbWebQuery Configuration (If using SmartRetrieve untick Apache, this is no longer needed)
    - DbMailSend Configuration

    If licensed for Exchequer OCR:

    - DbCapture
    - PDF Filewatcher / Hot Folder (Untick, this is handled by the integration)

6. Click Extract Finereader and when prompted, enter / activate the ABBYY license via the Internet, close the ABBYY License Manager
7. Click **Install**
8. When completed and if applicable, click **Install Smart Suite** and for each of the 3 components, agree to the defaults
9. Close the Server Components Screen and select **Client Components**
10. Confirm a suitable path
11. At the minimum, select the DbLogin Admin Console by ticking the box (although it is recommended for testing purposes all clients are installed on the server)
12. Click **Install**
13. When completed, exit the Client Components screen and close iManager.

Now proceed to Sub Task 2 – Smart Suite Configuration

Sub Task 2 – Smart Suite Configuration

Prerequisites:

- Sub Task 1 has been completed in full

Assumptions:

- The defaults were used in Sub Task 1, change the paths below where appropriate
- You have knowledge of the SQL server / instance used and the authentication necessary to gain access to the DbArchive database
- The distribution is in C:\Release-2-CD

For step by step details of the installation, refer to the V1 R4.0 Installation Guide 2016.pdf in the C:\Release-2-CD\Documentation directory beneath the distribution from Page 10 onwards.

Now proceed to Sub Task 3 – Integration Software Configuration

Sub Task 3 – Integration Software Installation

Prerequisites:
- Sub Task 1 & 2 have been completed in full
- Core software has been copied to the C:\V1Home\CD directory
- Knowledge of the Exchequer company codes to be used in conjunction with the Exchequer EDM system
- *You are advised to temporarily disable real-time anti-virus software (such as Symantec Endpoint Protection) as this can prevent the execution of scripts required for the connector*

Assumptions:
- The Exchequer home directory is C:\EXCHR

Installing the Integration Software:
Now that the core components and SmartSuite have been installed, they can be built upon using the Exchequer setup program.

1. Having downloaded the From the location of the distribution \Connector directory or where you have downloaded from the Portal, load the setup.exe **as administrator**
2. Select **Server Configuration**
3. When prompted, browse to the **CurrentSettings.xml** file, (located in the **C:\V1Home\CD** directory) click **Open** in the windows dialogue to select it
4. All the necessary details about the core installation should be displayed. Confirm they are corrected and amend accordingly.
5. Confirm the drilldown method
    a. If DbWebQuery, confirm the Base URL including DbWebQ.exe (usually http://<IPOFSERVER>:8085/cgi-bin/DbWebQ.exe) Click the magnifying glass button to the right of the cell to test it.
    b. If SmartRetrieve confirm the path to the SmartRetrieve portal page (usually http://<IPOFSERVER>:5002). Click the magnifying glass button to the right of the cell to test it.
6. Browse to the location of the Exchequer home directory, i.e. C:\EXCHR (NOT the mapped drive)
7. When satisfied all details are correct, Click **Install**

> ⚠️ **Note:** You may see a number of services stop and restart at this point and apparent periods of inactivity, this is normal, allow it to finish.

8. When this stage of the installation has completed, you will be prompted to configure the customization (***it may take a few seconds for the screen to load, wait for it to appear***):
    - Click the <u>top</u> **Install** button, browse to the **X:\EXCHQR\TMDD** directory
    - Select **V1ENTLNK** and click **Open**
    - If prompted, add a description of **'EDM'** and click **ok**.
    - Using the Move <u>Up</u> button, ensure EDM is *first* in the list of Plugins.
    - Click **Save** and **Close**.
9. Return to the setup program, click **Next** > to configure the database connection

10. If OCR is licensed, confirm whether the Job Costing module is activated by selecting Yes / No in the drop down, otherwise continue to step 11
11. Click the **List** button. This will search for all SQL Instances accessible to the server. Pick one from the dropdown. Confirm the **username** and **password** to access the instance and when satisfied, click the **Test** button to verify the credentials.
12. When connected, select the Exchequer Database Name from the dropdown.
13. Browse to the path for **SQLCMD.exe**
14. When satisfied all details are correct, click **Apply**, when completed, click **Next >**
15. Select your company / all companies, move the DbLogin users over depending on access required. This can be reloaded later, but it's worth doing as many as possible now.
16. When satisfied a company and its users are added, click **Save** and repeat for each one.
17. If OCR is not licensed for, close the setup program, other-wise click **Next >**
18. New for Release 1.5, this is DbCapture Advanced Configuration allows specific capability to be activated.
    a. PDF Polling
        i. **Browse** to a suitable directory on the server from which PDF's will be imported. Using the **slide bar**, decide the frequency this directory will be checked and if found, PDF's automatically imported into the DbCapture system. When satisfied, click the **Apply** button.
    b. Email Address for PDF Attachment Extraction
        i. From the dropdown, select which DbCapture Profile will be used to accept PDF's extracted from emails. Confirm the **email address**, the **password** to access it and polling frequency using the **slide bar**. When satisfied, click the **Apply** button.
    c. Queue Management
        i. Using the **slide bar**, select the frequency that documents in both the NONPOP and POP DbCapture queues will be purged of documents that have been successfully exported. When satisfied, click the Apply button.
        ii. Using the **slide bar**, select the frequency that documents in both the NONPOP and POP DbCapture queues will be automatically accepted assuming they're not locked (open by a user / already being exported) that are in an OK state. When satisfied, click the **Apply** button.

        NOTE: This service will be set to have a 'Manual' startup type so customers can decide whether to invoke it automatically.

19. Any of the close buttons for any of the groups will close the setup program.

Now proceed to Sub Task 4 - Integration Software Configuration

Sub Task 4 – Integration Software Configuration

Prerequisites:

- Sub Tasks 1,2 & 3 have been completed in full

Assumptions:

- The core installation is in the **C:\V1Home** directory

1. Load the **DbLogin Admin Console** and login as administrator / administrator
2. Select **the tick boxes to the left of the administrator and default_user** users in the list
3. Click the **User Settings** button 🗝
4. Right click on **Live** in the tree and left click **on Add Application** and click OK
5. Repeat this for as many applications present in the system until you see a popup stating all applications have been configured
6. Left click **DbCapture** in the tree; on the right hand pane ensure the **AccessLevel** is **5**
7. In the **ProfilesAllowed** field, edit the text so it reads **DbCapture,DbCapturePOP**
8. Left click on DbScanner in the tree; on the right hand pane ensure **Allow Configuration** is ticked and **DbScannerAdminLevel** is set to Administrator.
9. Click **Save** (User Settings will close.)
10. Click the 👥 button
11. Click the [Add...] button
12. Populate the User Name with **APDEPT**
13. Add the Forename, Surname, Email for the AP Department the customer uses and Password
14. Ensure to un-tick **Must Change,** Click **Add,** Click **Close**
15. On creation, it will inherit the default_users configuration so no further action needed
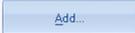
⚠️ **Note**: This is necessary for the OnHold reason workflow functionality in DbCapture, see the crib sheet for clarity

16. Click the **DbArchive Table Editor** button 📇
17. Click the **Import from XML** button 📂
18. Browse to the **c:\V1Home\DbArchive** directory and select the **tables.xml** file, click Open

⚠️ **Note**: This may take a few moments, the more companies, the longer it will take to import.

19. Close the **DbArchive Table Editor**
20. Click the **DbArchive Import/Export** button
21. Go to File > Show system tables
22. Click **_LINKS**
23. Click the **load button**
24. A warning appears that this may take some time, click **OK**
25. Click **OK** on success
26. Close the **DbArchive Tag Data Import/Export Tool**
27. Click the **Email Mappings** editor button

    You will now add the mappings necessary for associated documents to populate the
    description field with the subject line of any emails that are archived. Click the **Add** button
    and for each of those available (ending ASSOC), mapping against the description field
    (DDESC) and Subject line for each.
28. When finished, click the **Save** icon and close the **Email Mappings Editor**

Now Proceed to Sub Task 5 – Configure Users for Access

Sub Task 5 – Configure Users for Access

Prerequisites:

- Sub Tasks 1,2, 3 & 4 have been completed in full

In order that Exchequer users and EDM users are aligned, they must be 'mapped' together in both systems. For example, if you have 7 users for your Exchequer system; the same 7 users must be added to the EDM system.

To do this, the system administrator must familiarise themselves with DbLogin Admin Console which is used to configure users.

As per the first Server Configuration task, the DbLogin Admin Console will have been installed on the Exchequer database server.

Login in to the Exchequer database server as the same Windows user who originally ran the installation.

Launch the DbLogin Admin Console and log in as administrator / administrator. If we assume we want to add a user PETE, login as administrator / administrator and follow these steps:

1. Click the button
2. Click the button
3. Populate the Username matching *exactly* how it appears in Exchequer. We will assume the new user is PETE
4. Add the Forename, Surname, Email for the user (again it is preferable this is the email address for the Exchequer user) and Password
5. Ensure to un-tick **Must Change,** Click **Add,** Click **Close**
6. Using the Padlock icon, allocate your users to the applications they wish to use

Repeat the above steps for every user who requires access to the system using the padlock icon to alter those that do not require administrative accessibility.

Exchequer LIVE

If you are using Exchequer LIVE you **MUST** follow the instructions to create your Exchequer users within DbLogin. When processing invoices within DbCapture you must also ensure you are logged in as a user that exists in the Exchequer company.
This means that any PIN transactions created via POP / NONPOP processing will have a valid user in the Exchequer database and can be sent for approval in Exchequer LIVE.

Now proceed to Sub Task 6 – Configure User Access Levels

Sub Task 5 – Configure User Access Levels

Assumptions:
- Sub Tasks 1,2,3,4 & 5 have been completed in full
- Users have been created, one of those users is JAMES

This is not a mandatory task, if all users want access to all documents it is not needed.

However, certain users may only wish to have access to certain document types, for example: I have a user JAMES who only has access to Sales Transactions in Exchequer.

To ensure this level of access is aligned in the EDM system, the same setup must be configured.

1. On the Exchequer database server, login to the DbLogin Admin Console as administrator
2. Click the DbArchive Permissions Editor button
3. Click the Add button and name your access level SALES, click OK
4. A new column will appear in the interface called SALES and defaults to allow no access.
5. Locate the Sales table, click it to highlight it then click green icon.
6. Click the save icon to save the access level to the server and close the permissions editor.

The final step is to assign the access level to the user:

7. Click the tick box to the left of JAMES in the list
8. Click the user settings icon
9. From the tree of applications, left click DbArchive
10. In the panel on the right, note AccessLevel. Click this and select from the drop down the required access level, e.g. SALES
11. Click **Save**

From now on, JAMES will only have access to the SALES documents.
Repeat the above steps building your access levels per transaction.

Note: A user can only be assigned one access level at a time so if multiple documents are required, create additional access levels naming as appropriate before assignment.

Now proceed to Exchequer form amendment for printing

Exchequer form amendments for printing

Prerequisites:

- Sub Tasks 1,2,3,4,5 & 6 have been completed in full

When printing documents from Exchequer using the V1 Archive Printer driver, they are archived based on the formulas specified in the report.

To facilitate this, formulas have already been added to all supported reports as part of the installation process, but must be adjusted to accommodate each Exchequer Company.

So for example, if you wish to Archive SIN000123:

- Open the document
- Click the print icon
- Browse to the EDM-NEWINV.EFX report
- Select the V1 Archive Printer driver
- Ensure output to is set to printer
- Click OK

After a few seconds the document will then be archived and accessible by clicking the EDM button and View Archived Documents.

Assumptions:

- For our *example* we will assume the Exchequer company code is AAAA02

Purchase Order Transactions (POR)

1. Open Exchequer and login as a user with privileges to access the Exchequer Form Designer
2. Click Utilities > **Form Designer**
3. Click the Open button
4. Select **EDM-NEWPOR.EFX**, click Open
5. You will see a rectangular red box at the top of the form which is the EDM formulae, double click on it to edit
6. In the white formula text box, replace ZZZZ01 (the assumed default) with the Exchequer company code currently logged in to:

    DBAFILTERFIELD: AAAA02

7. Click OK
8. Click the Save button
9. Exit the Form Designer

Repeat the above steps logging in for each Exchequer Company, so in the above example replacing `AAAA02` with the associated company code, e.g. `AAAA03` and so on.

Repeat for the following reports:

EDM-NEWINV.EFX
EDM-NOMTXFR.EFX
EDM-TIMESHT.EFX

User considerations:

- In order to use this facility, the user must be added to both the DbLogin Console and given access to the company using the Company Configuration Manager

Now proceed to Post Installation

Post Installation

Although the installation process should fully install and integrate the software, it is best practice to make the following checks once the Server Configuration process has been completed.

Assumptions:
- The server components have been installed to c:\V1Home
- The Exchequer home directory is x:\EXCHEQR
- At least 1 company code has been configured and it is ZZZZ01

Integration Checklist

Server

1. Ensure when running the TESTCOM utility, the toolkit responds satisfactorily.
2. Ensure clients have unrestricted access via TCP/IP to ports 32000*, 31417* and 31418* to the server.
3. Navigate to the c:\V1Home\DbArchive directory and open V1_SETTINGS.def in a text editor. Ensure the dba_server variable is set to the DNS of the Exchequer server.
4. Ensure the EXDRIVE variable is correct
5. Ensure the UNCPATH variable is set

> ⚠️ **Note:** Doubled up back slashes is normal.

6. Navigate to the c:\V1Home\DbArchive directory and open PTRANS.def in a text editor. Ensure the #INCLUDES path reflects the path to the V1_SETTINGS.def file.
7. Having run the installation, it is recommended to restart all Db* services to ensure they respond correctly. Navigate to the c:\V1Home\utils directory and double click on the restart_services.bat to restart all services installed. It is advised to do this as an administrator class user.

> ⚠️ **Note:** * These are the default values and recommended, if they have been changed during installation, alter firewall rules as per ports chosen.

> ⚠️ **Note:** If Exchequer OCR has been licensed, repeat steps 3, 4 and 5 but navigate to the c:\V1Home\DbCapture\defs directory and open the V1_SETTINGS_OCR.def.

Appendix

Additional information / pointers regarding the integration.

Assumptions:

- The server components have been installed to c:\V1Home
- The Exchequer home directory is x:\EXCHEQR
- At least 1 company code has been configured and it is ZZZZ01
- Release 1.5 is installed
- Exchequer / V1 Server is called MAINSERVERABC
- SQL Database server is called SQLSERVERABC
- The SQL Browser Agent service is running on SQLSERVERABC
- The SQL credentials are known and tested to access the Exchequer and V1 databases

Running the Multi-Company Manager on an different server to the Exchequer / V1 Server

The Multi-Company Manager configures access to DbLogin / Exchequer users access to Exchequers companies and is a critical part of the installation and setup.

Out the box, it can only be ran on the Exchequer / V1 server, however, there may be a requirement to run it in isolation by users who lack access to the Exchequer / V1 server.

For our example, we will assume the alternative server is called OTHERSERVERABC.
It must have TCP-IP access to both MAINSERVERABC and SQLSERVERABC.
Share the C:\V1Home\DbLogin directory on MAINSERVERABC so it's accessible on OTHERSERVERABC.

A requirement of using the Multi Company Manager stand-alone is Smo.
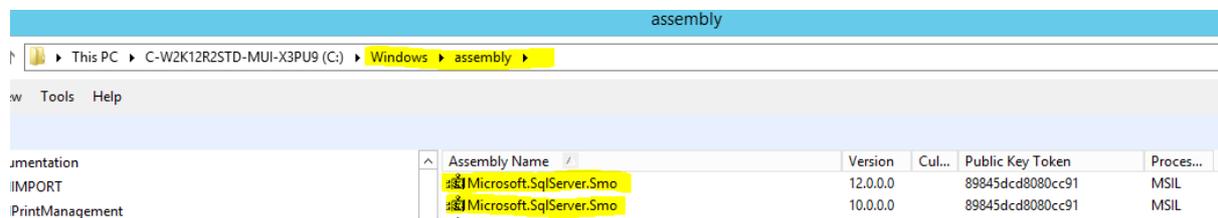
If not present, go here: https://www.microsoft.com/en-us/download/details.aspx?id=16978
Click on Install Instructions.
First install the package Microsoft® System CLR Types for SQL Server® 2008 R2
Then install the packageMicrosoft® SQL Server® 2008 R2 Shared Management Objects

1. Login to OTHERSERVERABC, preferably as an administrative user
Create the following registry entries as string values here:

HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\V1ExchequerInt\

STRING	Value
ExchequerIntVersion	1.5
V1HOMEDIR	\\MAINSERVERABC\
SQLINSTANCE	SQLSERVERABC
SQLUNAME	*The SQL user*
SQLPWORD	*The SQL password*
INSTALLERRAN	1
DATABASE	*The Exchequer database name*

2. Copy the Exchequer R1.5 distribution on to OTHERSERVERABC
3. Run the setup program
4. Select the option for Company Configuration Manager and click Next >
5. Make your selections, save, exit