



Exchequer Integration

Updating to Release 1.5

EDM for Exchequer Release 1.5

OCR for Exchequer Release 1.5

Date Updated: 09/05/2017

Contents

Contents.....	2
Introduction	3
Background	3
Compatibility	3
Updating the EDM Table Structure.....	4
Updating the EDM SQL Database tables.....	5
OCR – Create a DbCapture Export service user	6
Run the Exchequer Integration setup program	7
Update the system	7
Update the database connectivity, paths and assign the service user	8
Company Configuration Manager.....	9
Add new Drilldown dll.....	11
Re-Configure DbScanner global settings.....	12
EDM	13
OCR.....	16
Final testing and housekeeping	20
Testing.....	20
EDM	20
OCR.....	20
Housekeeping.....	20
Appendix	21

Introduction

Background

This document provides step by step instructions on updating to R1.5 from previous versions of the integration.

It should only be attempted by experienced V1 engineers with knowledge of both the V1 product set and preferably Exchequer and its processes.

V1 take no responsibility for accidental loss of data if an update is attempted without consultation.

Compatibility

- Exchequer 2016 R2 onwards, SQL ONLY
 - You cannot update to R1.5 unless you are on Exchequer 2016 R2 and the SQL version
- V1 3.6 or DM4.X
 - You cannot update to R1.5 unless you are on V1 core software versions 3.6 or above

Consult the Platform Requirements document *prior* to doing any update as failure to meet any requirements can lead to lengthy and costly delays to the project.

Assumptions:

- The Exchequer R1.5 distribution has been downloaded from the portal and uncompressed on to the Exchequer / V1 application server.
For our example update procedure, we will assume this is `C:\temp\Exchequer1.5`, change the paths as appropriate.

Mandatory Pre-Requisites:

- ALL users of the V1 clients must be logged out whilst the update is being performed.
- No Exchequer users must attempt to archive a document using the V1 Archive Printer whilst the update is being performed.
- Accessibility to the SQL Management Studio as an administrative user (preferably sa)

Updating the EDM Table Structure

One of the many benefits of R1.5 is it removes the 15 company maximum limitation.

It does this by instead of having *tables* per company, the tables in R1.5 have a *field* for the company and presents those available to the user as a drop down list.

The accessibility to companies are controlled by the new security mechanism (discussed later in this document) by way of the new setup program and the Company Configuration Manager.

1. Load the **DbLogin Admin Console** as an administrative user
2. Click the **DbArchive Table Editor** button 
3. Click the **Import from XML** button 
4. Browse to the **C:\temp\Exchequer1.5\DbArchive** directory and select the **tables.xml** file, click Open



Note: This may take a few moments, there will be a period of inactivity which is normal, allow it to finish

5. When completed, close the **DbArchive Table Editor**
6. Close the DbLogin Admin Console

Updating the EDM SQL Database tables

Now that the new tables have been created, the legacy data must be migrated to the new table structure.

This is done by running simple stored procedures for each DbArchive table all of which have been provided for all standard tables.



Depending on if licensed for, only certain versions of EDM contained the field **DocGUID** in each DbArchive table which was required for the auditing process.

Before beginning the migration, check one of the existing DbArchive tables.

If it does *not* contain a DocGUID field, for each of the stored procedures remove the **,DocGUID** references from each Insert statement prior to executing it as per step 4 or you will get an error stating the field does not exist.

1. Log in to the SQL Management Studio, preferably as sa, logging in to the Instance where EDM has been installed
2. Left click on the **DbArchive** SQL database, right click on it and select New Query
3. Using File Explorer, browse to the **C:\temp\Exchequer1.5\Installation\Update** directory
4. Drag and drop each *.sql file in turn into the New Query Window and click Execute (you are advised to use a New Query for each *.sql file)



Note: This may take a few moments depending on how much data has been archived, there will be a period of inactivity which is normal, allow it to finish

What has just happened?

All companies in the Exchequer database are read and where data for them is present in the legacy EDM database populate the equivalent data in the new table structure.

Some integrations rely on the BLOBID to dictate the location of images and therefore the drilldown to it, but as Exchequer does not, even if these are reset during the update, the drilldown functionality will be un-affected and still work as before.

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: Open services.msc on the Exchequer / V1 server. If you have this collection of services, it is a licensed component:

-  DbCapComms Admin Client:31451
-  DbCapComms Interactive Client:31450
-  DbCapComms Util Client:31452
-  DbCapture OCR Server
-  DbCapture: Capture Service

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.

Run the Exchequer Integration setup program

Now the tables have been updated and the data migrated, the integration files have to be updated to reflect the new features present in R1.5.

Update the system

1. From the location of the distribution **C:\temp\Exchequer1.5** directory, load the setup.exe as **administrator**
2. Select **Server Configuration**
3. Press **OK**
4. Choose the **Update your system to Release 1.5** radio button
5. Press **Next**

AGAIN PLEASE CHECK THAT NO ONE IS USING THE SYSTEM AS THIS WILL CAUSE UNRECOVERABLE ISSUES
ALL V1 Clients must be closed
No Exchequer users must be archiving documents via the V1 Archive Printer Driver

6. Browse to the CurrentSettings.xml file (located at the route of the Core V1 distribution directory)
7. Confirm the method of drilldown:
 - a. To continue to use DbWebQ, select this and the most likely path will be presented, use the magnifying glass on the right to confirm. If you see the DbWebQ login screen, you're good to go. If not, correct the path until you do.
 - b. If the V1 Core software has also been updated to DM4 and SmartRetrieve is now the preferred method for drilldown, select this and the most likely path will be presented, use the magnifying glass on the right to confirm. If you see the SmartRetrieve login screen, you're good to go. If not, correct the path until you do.
8. Confirm the path to the Exchequer home directory using the MAPPED DRIVE, usually X:\Excheqr, this path is validated when you click OK.
9. Click Update

EDM

- All definition files backed up and new ones copied in and paths / ports configured
- All new files required for R1.5 copied over

OCR

- All definition files backed up and new ones copied in and paths / ports configured
- All new files required for R1.5 copied over
- New DBCP files copied in and a -queueupdate performed

10. If OCR has been detected and when the update has completed, click Next >

Update the database connectivity, paths and assign the service user

11. Confirm whether the Exchequer system is configured to use Job Costing by selecting Yes / No in the drop down
12. Click the List button
 - a. This will find the available SQL instances where the Exchequer database is installed
13. Pick the instance from the list where the Exchequer database is located
14. Confirm the username and password to authenticate the connection to the Exchequer database
15. Click the Test button which checks the connection details entered
16. Assuming the above is successful, pick the Exchequer Database from the dropdown list
17. Browse to the location of SQLCMD.exe
 - a. If it isn't on the same server, copy the dir where it is onto the server and browse to that
18. Confirm the UNC path to the Exchequer home directory, click the blue browse icon to the right to check it is correct
19. Confirm the username and password of the dbcaptureexport service user you created in the previous chapter.
 - a. Note – These credentials cannot be validated at this point, so make sure they are entered correctly
20. Click Apply
 - V1_SETTINGS files for both EDM and OCR updated with the details, the following registry entry:


```
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\V1ExchequerInt
```
 - It is populated with all the necessary details so the upload of documents can occur.
 - All definition files backed up and new ones copied in and paths / ports configured
 - All new files required for R1.5 copied over
21. Close the setup program.
22. Open services.msc
23. Right click and click properties of the 'DbCapture: Export Service'
24. Click Logon
25. Click This account
26. Click Browse
27. Type in: dbcaptureexport, click Check Names, click OK
28. Confirm the password, click OK
29. Restart the service

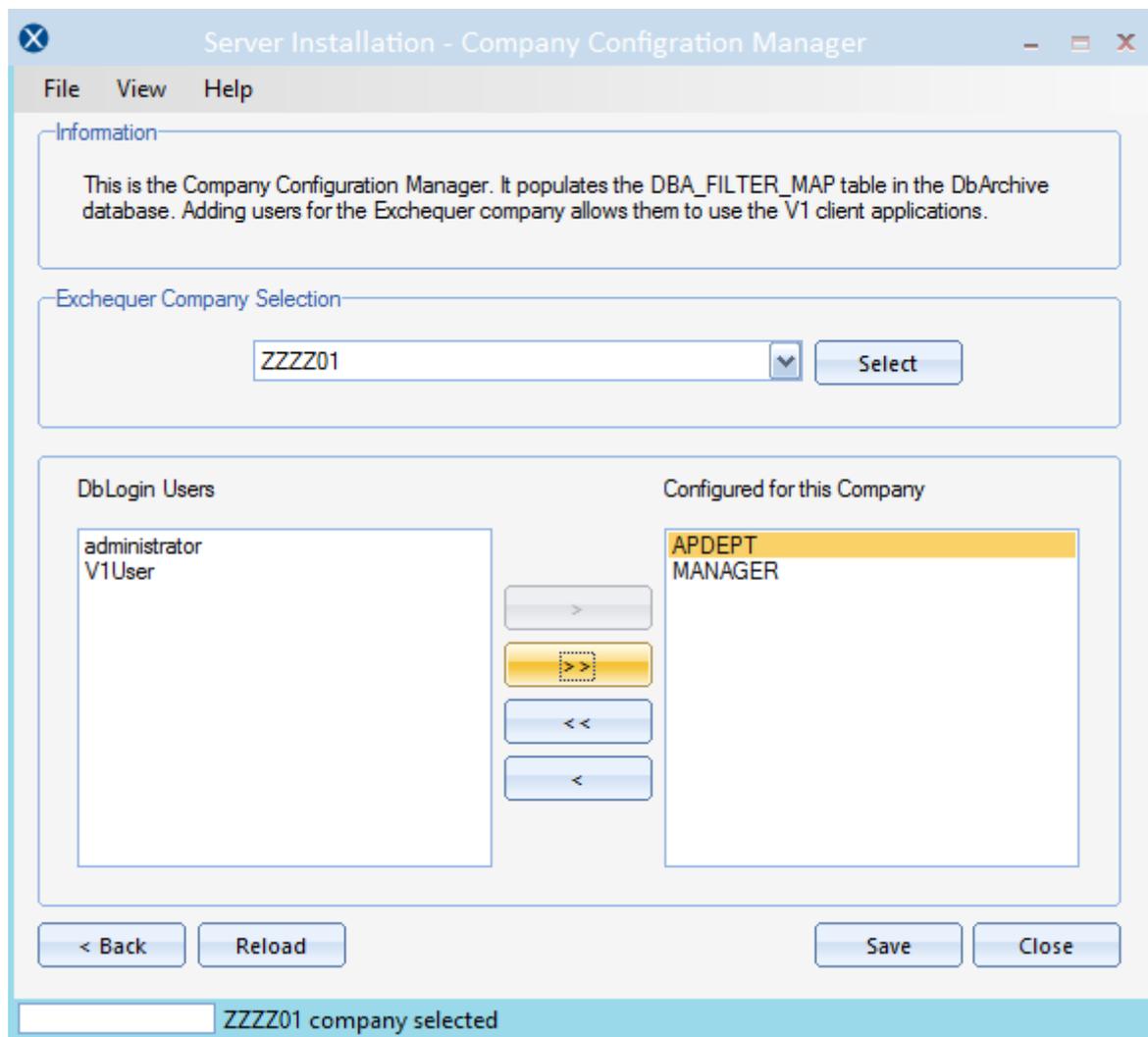
Company Configuration Manager

Another new feature of R1.5, the way that companies are administrated has been overhauled to allow the simple management of users and their access to documents in a single UI. This is called the Company Configuration Manager.

Q: How does it work?

A: In a nutshell it is a way of administrating DbLogin users who are added to the DbArchive DBA_FILTER_MAP table. This will contains all the Exchequer companies all the DbLogin users are configured to use.

In our example below, APDEPT and MANAGER are configured for the ZZZZ01 company, but V1User and administrator are not.



The DbLogin users are read from the C:\V1Home\DbLogin\userlist.xml.

As part of the update to R1.5, assuming all DbLogin users are added, you must run the Company Configuration Manager to ensure they are added.

Initially, it is recommended to add all users to all companies (the first option in the dropdown.)

The customer can then look after it themselves by adding / removing users they do not wish to see / have access to archive against / OCR documents against certain companies.

Again in our example, assuming V1User logged in to SmartDeposit to archive a document, the Exchequer company field would not present ZZZZ01 as a company to archive against, where if they logged in as APDEPT it would, and so on.

1. Open the setup.exe program
2. Click Server Configuration
3. Select the radio button for Company Configuration Manager, click Next>
4. Make your selections using the dropdown and arrow buttons, clicking Save commits your choices to the DbArchive DBA_FILTER_MAP table.

Add new Drilldown dll

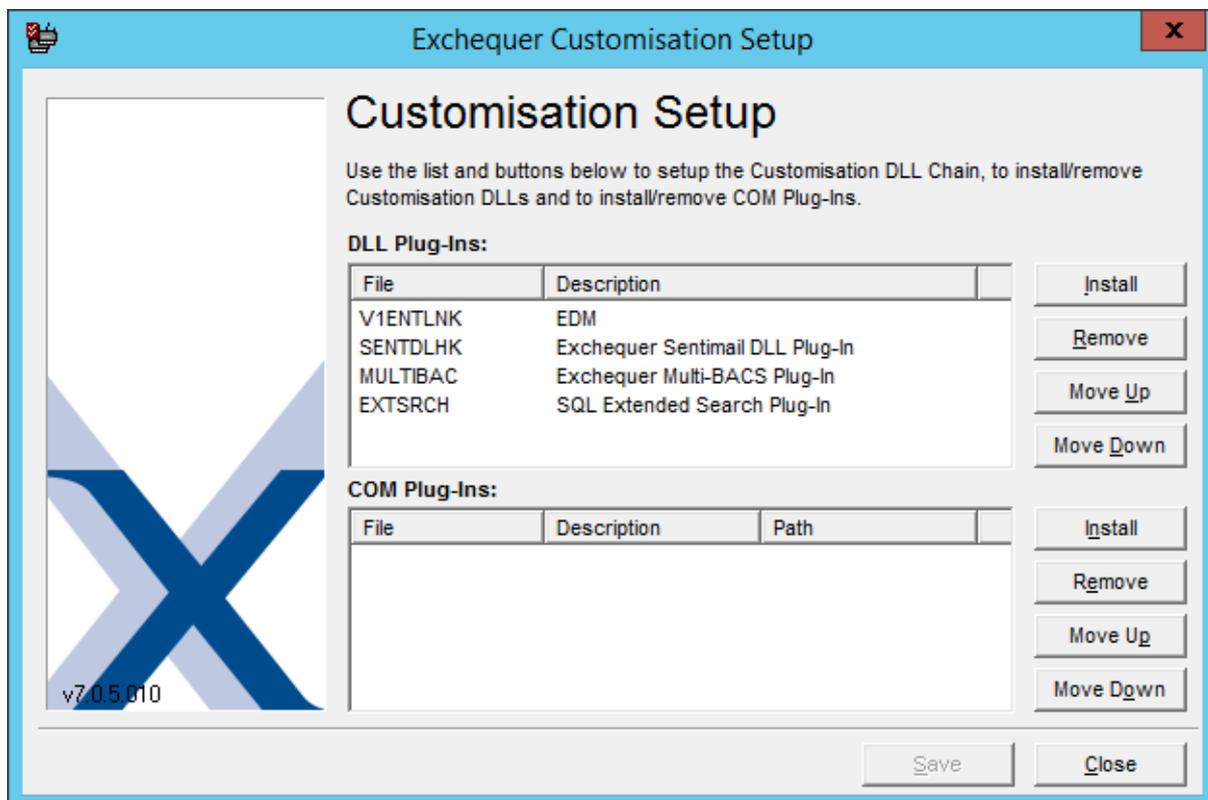
Previous versions of the drilldown were known as a 'Customization' or COM Plug in. Using this method meant flexibility to use .NET to produce View Document and Print Barcode options.

The downside to this method was it limited usage to a single use per work-station and no support for Terminal Services, both common ways to use Exchequer.

The new drilldown uses a DLL plugin, meaning the multi-user usage on the same workstation and support for Terminal Services, though it is less sophisticated in terms of capability.

Assumptions:

- The Exchequer home directory is X:\Excheqr
1. Navigate to the Exchequer home directory and launch ENPLUGIN.exe
 2. Remove any and all reference to previous EDM COM or DLL plugins.
 3. Click the top most Install button and browse to the X:\Excheqr\V1CODE\TMDD directory and select V1ENTLNK, give it a description of EDM.
 4. Move the EDM DLL to be the top most file, click Save.
 5. Running the setup program in Client Configuration mode configures the configuration file.



Re-Configure DbScanner global settings

Due to the structural changes to R1.5, the DbScanner *global* Profiles will require reconfiguration to accommodate the enhancements.

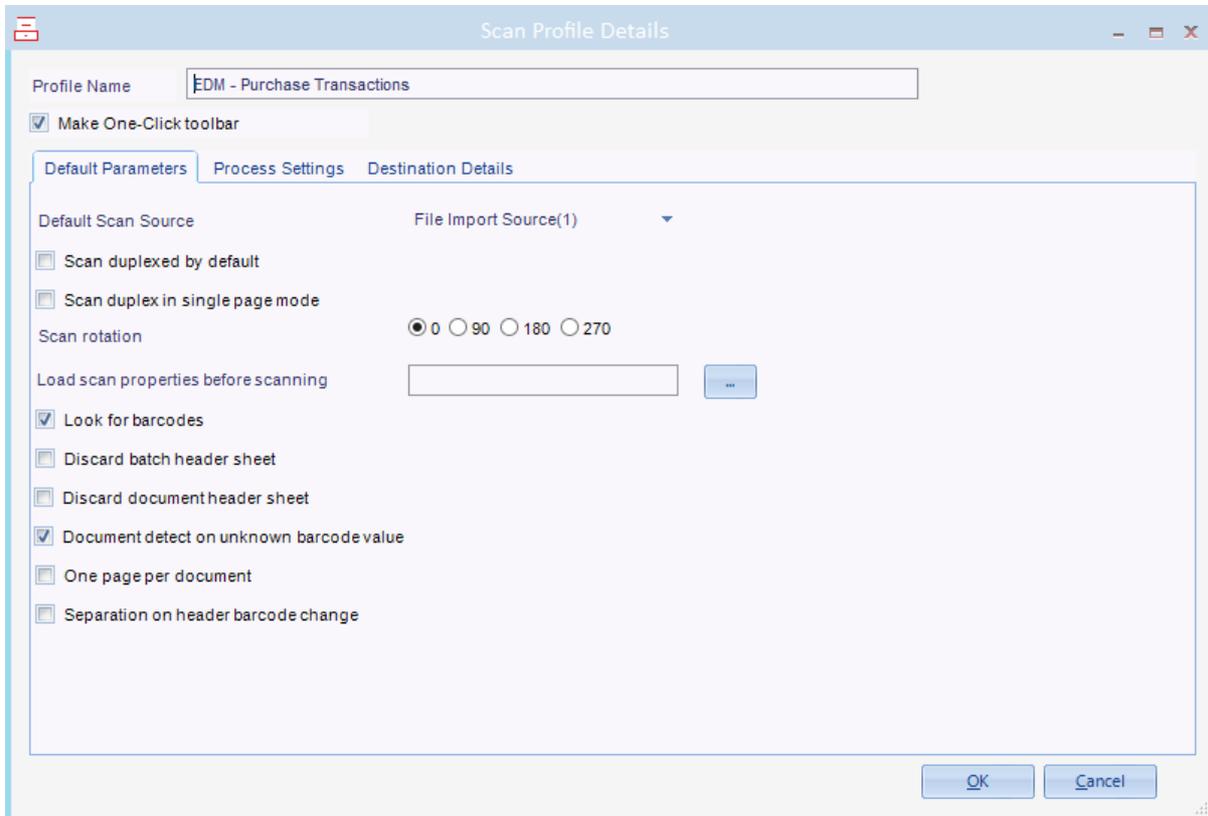
Although this could be done automatically by the connector, if bespoke changes have been made they would be lost during an update.

On the following pages there are example screen shot examples / step by step examples of the configuration of each profile for both EDM and OCR. Reflect them and where there are specific settings, they will be documented below the screen shot.

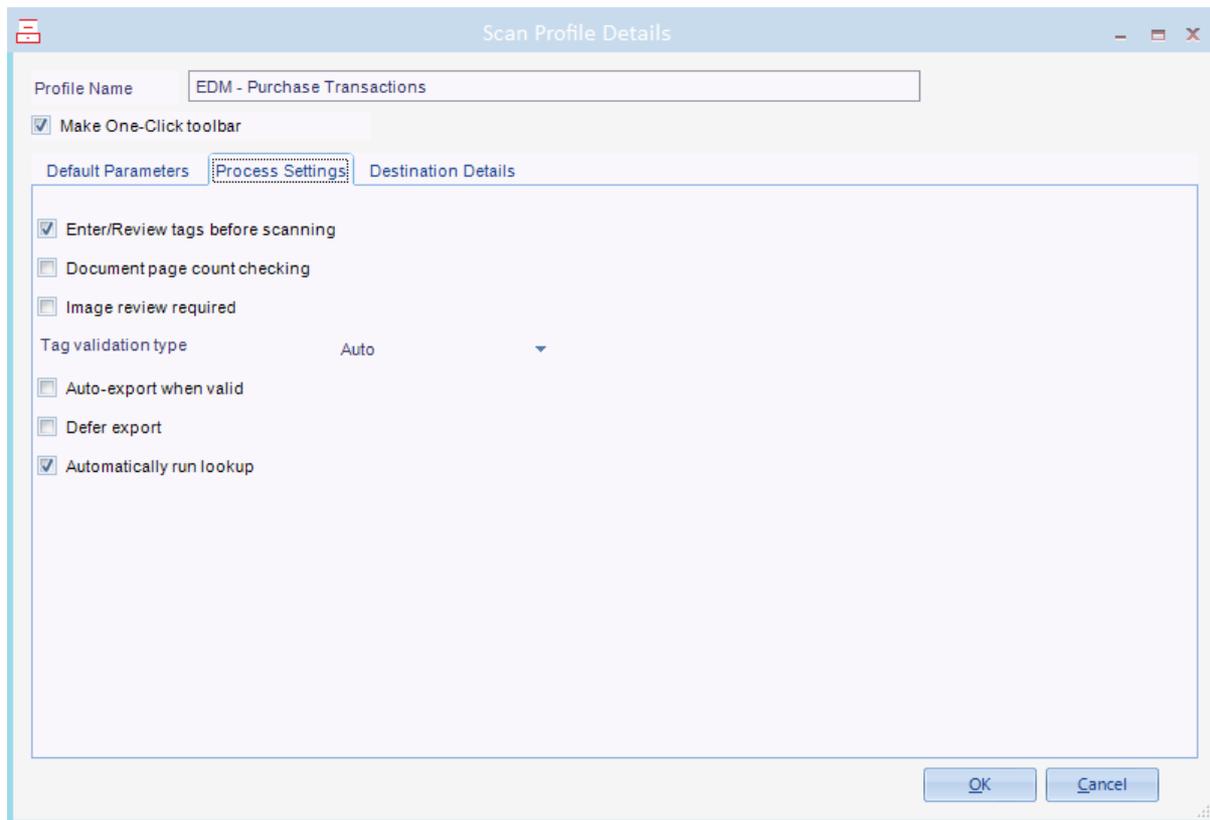
Although DbScanner is a traditionally installed on just a client(s) / scan stations, you are advised to make these alterations on the server which will then be propagated to every DbScanner client using it day to day.

EDM

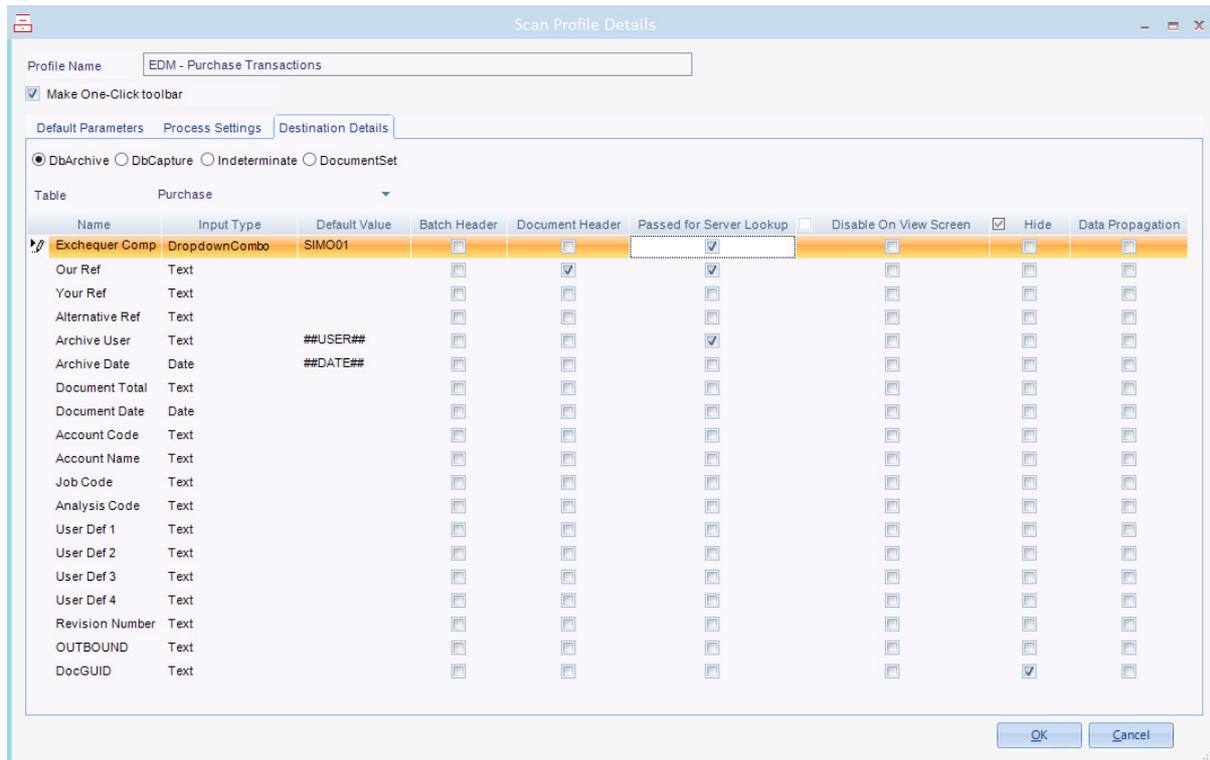
EDM – PTRANS (same principal for each EDM table)



EDM – PTRANS (same principal for each EDM table)



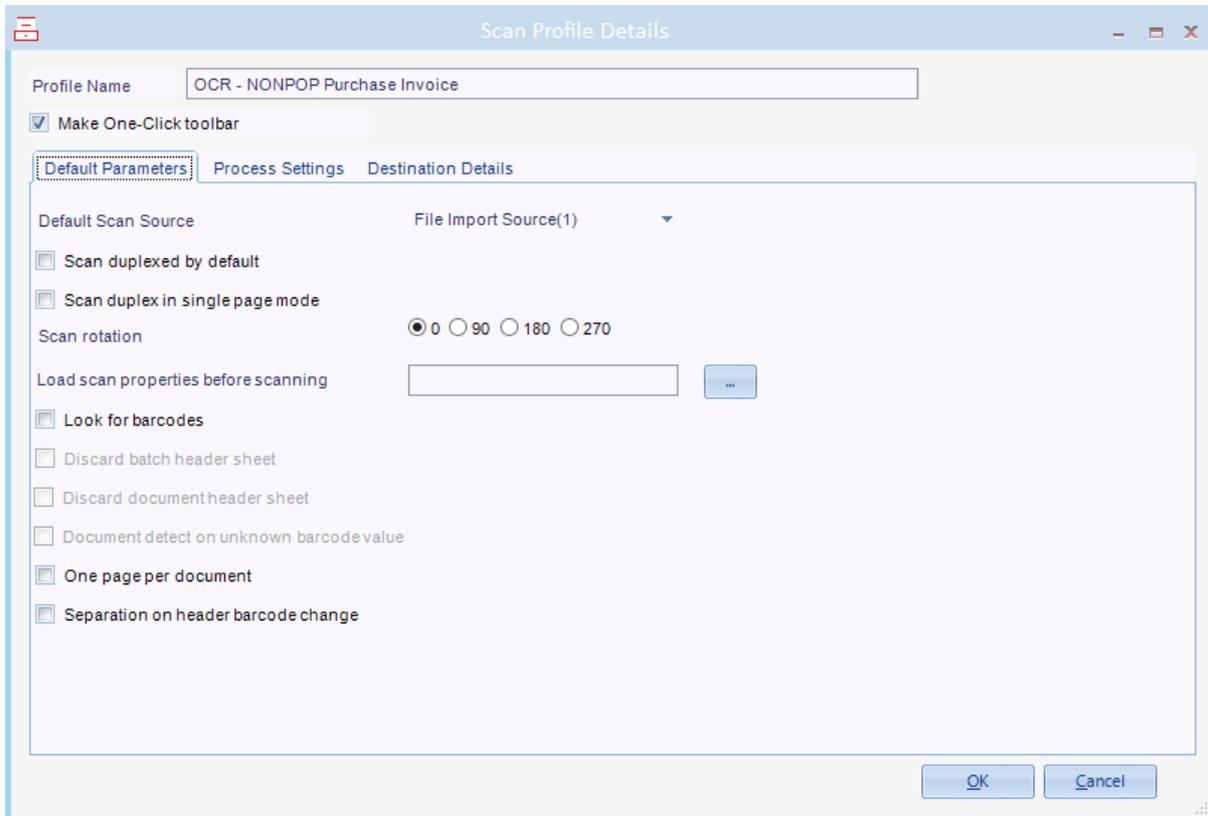
EDM – PTRANS (same principal for each EDM table)



- Add all the desired companies in the default value dropdown for the Exchequer Company field

OCR

OCR – NONPOP



OCR – NONPOP

The image shows a software dialog box titled "Scan Profile Details" with a standard Windows-style title bar (minimize, maximize, close buttons). The dialog is for a profile named "OCR - NONPOP Purchase Invoice".

At the top, there is a text field for "Profile Name" containing "OCR - NONPOP Purchase Invoice". Below this is a checked checkbox for "Make One-Click toolbar".

The main area of the dialog is divided into three tabs: "Default Parameters", "Process Settings" (which is selected and highlighted with a dashed border), and "Destination Details".

Under the "Process Settings" tab, there are several options:

- Enter/Review tags before scanning
- Document page count checking
- Image review required
- Tag validation type: None (with a dropdown arrow)
- Auto-export when valid
- Defer export
- Automatically run lookup

At the bottom right of the dialog, there are two buttons: "OK" and "Cancel".

OCR – NONPOP

Scan Profile Details

Profile Name:

Make One-Click toolbar

Default Parameters Process Settings **Destination Details**

DbArchive DbCapture Indeterminate DocumentSet

Profile: Exchequer NONPOP Invoices

Name	Input Type	Default Value	Batch Header	Document Header	Disable On View Screen	Hide	Data Propagation
Exchequer Company	DropDownCombo	SIMO01	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Search Type	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Query Database	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Supplier Code	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Supplier Name	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Supplier Email	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Supplier Invoice Reference	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Supplier Invoice Date	Date		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Alternative Reference	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Document Type	DropDownCombo	INVOICE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document Currency	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Net Value	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
V.A.T.	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Gross	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discount	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Additional Charges	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Document Status	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Override Location	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Coding Required	DropDownCombo	NO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ARCH_USER	Text	##USER##	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ARCH_DATE	Text	##DATE##	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Annotation Comments	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
User Def 1	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
User Def 2	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
User Def 3	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
User Def 4	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DocGUID	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Imported from Email	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

OK Cancel

- Add all the desired companies in the default value dropdown for the Exchequer Company field
- Add NO and YES to the Coding Required dropdown defaulting to NO

OCR – POP

Profile Name: OCR - POP Purchase Invoice

Make One-Click toolbar

Default Parameters | Process Settings | Destination Details

DbArchive DbCapture Indeterminate DocumentSet

Profile: Exchequer POP Invoices

Name	Input Type	Default Value	Batch Header	Document Header	Disable On View Screen	Hide	Data Propagation
Exchequer Company	DropdownCombo	SIM001	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Search Type	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Query Database	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Supplier Code	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Supplier Name	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Supplier Email	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Supplier Invoice Number	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Invoice Date	Date		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Document Type	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Document Currency	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Process	Drop-down list	Update [PIN] Status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exchequer Transaction Number	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Document Status	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Net Value	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
V.A.T.	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Gross	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discount	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Additional Charges	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ARCH_USER	Text	##USER##	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ARCH_DATE	Text	##DATE##	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Annotation Comment	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Imported from Email	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DocGUID	Text		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

OK Cancel

- Add all the desired companies in the default value dropdown for the Exchequer Company field
- Add the following options to the Process drop down:
 - Update [PIN] Status
 - Convert from [PDN] to [PIN]
 - Convert from [POR] to [PIN]

More details can be found in the Client Configuration documentation.

Once done, the users must re-import the global profiles locally to complete the process.

Final testing and housekeeping

Testing

Now the system is updated, you are advised to run a series of basic tests to ensure it is performing as expected:

EDM

- Load the DbDeposit / SmartDeposit interface and check you select a company and do a look up against a transaction
- Load DbScanner and check you can import / scan a document and retrieve tag information
- Load Exchequer and check drill downs for legacy documents still display the image in either DbWebQuery or SmartRetrieve (if this has been updated too.)

OCR

- Load DbScanner and check you can import / scan a document and pass it to DbCapture
- Copy a PDF into one of the OCRIMPORT directories and check it is passed to the correct profile.

Housekeeping

Assuming the tests have been successful, the **legacy** EDM tables (i.e. those beginning <COMPANYNAME>PTRANS etc ..) can be purged.

1. Load the DbLogin Admin Console as an administrative user
2. Click the DbArchive Import / Export button
3. Select each of the *legacy* tables (those beginning <COMPANY>) and click the clear button on each to purge the tags
4. Click the DbArchive Table Editor button
5. Delete the legacy DbArchive tables

Appendix

- Ensure \V1Home\DbArchive\DbCSQuery is dated 11/09/2015 or later to allow for the Company / User check in DbCapture (the enhancement allowing the interrogation of the DBA_FILTER_MAP table)
- Post update, check the #uses paths in each def file in \v1\DbArchive
- Post update, check the #uses paths in each def file in \v1\DbCapture\defs
- Post update, check the server details in \v1\DbArchive\V1_SETTINGS.def
- Post update, check the server details in \v1\DbCapture\defs\OCR_V1_SETTINGS.def