MS Dynamics AX Integration

User Manual

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Table of Contents

Chapter 1   Introduction

This document provides a description of the installation procedure for the e-Con 4.1 integration with the Microsoft Dynamics AX software. The e-Con 4.1 installation is described in a separate installation manual for e-Con 4.1.

1.1 General Information

Read the system requirements before starting installation. The e-Con 4.1 version must be properly installed before the Microsoft Dynamics AX installation is started.

When installing on Microsoft Windows Terminal Server, the server must be in the "Install" mode. Change the mode manually at the command prompt ("change user/install") or run the setup from the control panel ("Add/Remove Programs").

Chapter 2   Installation Scenarios

This chapter describes the most common installation scenarios.

2.1 Schematic view of complex scenario

Client PC
+ Axapta client
+ IE 6.0 or higher
Modeler Clients:
+ e-Con modeler
+ .NET runtime

Terminal server / Citrix
+ e-Con modeler
+ Axapta client
+ .NET runtime
+ IE 6.0 or higher

e-Con Data
+ e-Con data folders

e-Con server
+ IIS
+ e-Con server
+ e-Con XML-license
+ MSMQ client
+ Axapta client (preferred)
+ .NET runtime
+ IE 6.0 or higher

Axapta server
+ Axapta AOS
+ Axapta client
+ e-Con modeler (optional)

MSMQ server
+ MSMQ server

Application Server
+ Batch client
+ MSMQ client

	Axapta Object Server	**e-Con Server**	**Axapta Batch client**	**MSMQ Server**	**e-Con data**	**Terminal Server / Citrix**	**Client PC modeler**	**Client PC configure**
e-Con Server installation		X						
e-Con XML license stored in e-Con server Web folder		X						
e-Con Studio installation	Optional (1)	(3)				X	X	
Axapta Object Server	X							
Dynamics AX Client	Optional (1)	Preferred	X			X	X	X
IIS available		X						
e-Con data folder					X			
MSMQ component installed and setup		X	X	X				
.NET runtime 1.1 available		X					X	
IE 6.0 or higher available		X					X	X
XML6.0 (4)	X		X			X	X	X
Import e-Con objects and Initialize	(2)	(2)				(2)	(2)	(2)

(1) Optional installation of Dynamics AX client and e-Con Studio for testing purposes.

(2) Import can be done from every Dynamics AX client if available.

(3) Installed together with e-Con Server.

(4) Only for Axapta 3

Based on this scenario a couple of other scenarios with combined servers can be extracted. The <u>most common</u> scenarios are explained.

2.2 Dynamics AX Object Server & e-Con Server on the same computer.

	AOS & e-Con Server & data & MSMQ Server	Client PC modeler	Client PC configure
e-Con Server installation	X		
e-Con XML license stored in e-Con server Web folder	X		
e-Con Studio installation	(3)	X	
Dynamics AX Object Server	X		
Dynamics AX Client	Preferred	X	X
Dynamics AX Batch Client	X		
IIS available	X		
e-Con data folder	X		
MSMQ component installed and setup	X		
.NET runtime 1.1 available	X	X	
IE 6.0 or higher available	X	X	X
XML6.0 (4)	X	X	X
Import e-Con objects and Initialize	(2)	(2)	(2)

(1) Optional installation of Dynamics AX client and e-Con modeler for testing purposes.

(2) Import can be done from every Dynamics AX client if available.

(3) Installed together with e-Con Server.

(4) Only for Axapta 3

2.3 Dynamics AX Object Server & e-Con Server on different computers.

The e-Con data, Dynamics AX Batch Server and MSMQ Server on the e-Con Server.

	Dynamics AX Object Server	e-Con Server & e-Con data & MSMQ Server	Client PC modeler	Client PC configure
e-Con Server installation		X		
e-Con XML license stored in e-Con server Web folder		X		
e-Con Studio installation	Optional (1)	(3)	X	
Dynamics AX Object Server	X			
Dynamics AX Client	Optional (1)	Preferred	X	X
Dynamics AX Batch Client		X		
IIS available		X		
e-Con data folder		X		
MSMQ component installed and setup		X		
.NET runtime 1.1 available		X	X	
IE 6.0 or higher available		X	X	X
XML6.0 (4)	X	X	X	X
Import e-Con objects and Initialize	(2)	(2)	(2)	(2)

(1) Optional installation of Dynamics AX client and e-Con modeler for testing purposes.

(2) Import can be done from every Dynamics AX client if available.

(3) Installed together with e-Con Server.

(4) Only for Axapta 3

2.4 Dynamics AX Server & e-Con Server on different computers using Citrix.

The e-Con data, Dynamics AX Batch Server and MSMQ Server on the e-Con Server.

	Dynamics AX Object Server	e-Con Server & e-Con data & MSMQ Server	Terminal Server/Citrix
e-Con Server installation		X	
e-Con XML license stored in e-Con server Web folder		X	
e-Con Studio installation	Optional (1)	(3)	X
Dynamics AX Object Server	X		
Dynamics AX Client	Optional (1)	Preferred	X
Dynamics AX Batch Client available		X	
IIS available		X	
e-Con data folder		X	
MSMQ component installed and setup		X	
.NET runtime 1.1 available		X	X
IE 6.0 or higher available		X	X
XML6.0 (4)	X	X	X
Import e-Con objects and Initialize	(2)	(2)	(2)

(1) Optional installation of Dynamics AX client and e-Con modeler for testing purposes.

(2) Import can be done from every Dynamics AX client if available.

(3) Installed together with e-Con Server.

(4) Only for Axapta 3

Chapter 3   General Installation Information

3.1 MS Dynamics AX components

See MS Dynamics AX installation CD for detailed information about installation of Dynamics AX Object Server and Dynamics AX Client installation. The e-Con installation, both Server and Modeler, will not check on the availability of Dynamics AX components, e-Con will install components for all available e-Con integrations.

3.2 Typical installation order of components

1. Install a Dynamics AX Client.

2. Import of Solution Center projects in the Dynamics AX environment.

3. Import of Econ41 project in the Dynamics AX environment

4. Link the Solution Center and e-Con menu to your Main Menu

3.3 Message Queue

On the e-Con Server computer the Message Queuing Component should be installed before e-Con Server is installed. The e-Con installation will create two default Messages Queues in the Private Queues; "navisionresponse4" and "navisionrequest4". On computers, e.g. Dynamics AX Batch Server or separate MSMQ Server, where the e-Con Server installation is not performed but the Message Queues are needed they should be created manually. See Message Queue Properties Setup chapter for more information.

Chapter 4   Installation of Dynamics AX Integration

4.1 Copy the Application Files

4.1.1 Copy labels and help files to the Axapta application folder

- Using Windows Explorer, go to the AX installation folder (the folder where this document is located) and select the *Setup| files* folder.

- Press *Ctrl+A* to select the contents of the Application files folder and then press *Ctrl+C* to copy these files.

- Select the desired Axapta application folder (../Application/appl/standard for example) and press *Ctrl+V* to paste the label files and help files into the application folder.

4.1.2 Copy the client DLL's to the Axapta Client bin folder

- Using Windows Explorer, go to the AX installation folder (the folder where this document is located) and select the *Setup|Application client* folder.

- Press *Ctrl+A* to select the contents of the Application client folder and then press *Ctrl+C* to copy these files.

- Select the desired Axapta Client bin folder (../Application/Axapta Client/Bin for example) and press *Ctrl+V* to paste the DLL into the application folder.

The eConIcons DLL is used for the Dynamics AX modeler tree form and has to be available on every e-Con modeler client. The TI.Common DLL and SharpZipLib DLL are used zip/unzip the repository data (Models, Configurations etc) and have to be available on every AX client that uses e-Con.

4.2 Setup the Dynamics AX environment for e-Con

The e-Con backend can be installed on a Dynamics AX system either as a precompiled BUS layer (.aod file) or as individual Dynamics AX AOT export files (.xpo files). Unless the target application already has a BUS layer installed, the layer option is the best one since it is simple, reliable and leaves the VAR and higher layers untouched.

4.2.1 Option 1: Install the Connectivity BUS layer (*option not yet available*)

The e-Con backend can be installed on a Dynamics AX system either as a precompiled BUS layer (.aod file) or as individual AX AOT export files (.xpo files). Unless the target application already has a BUS layer installed, the layer option is the best one since it is simple, reliable and leaves the VAR and higher layers untouched.

- Stop the Axapta Dynamics AOS service in the Windows Service Manager

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- Using Windows Explorer, go to the AX installation folder and select the *Setup\AX2009* or other folder depending on which service pack your target application is running on.

- Select the *axbus.aod* file and then press *Ctrl+C* to copy it.

- Select the desired Axapta application folder *(../Application/appl/standard* for example). If a BUS layer is already present in the application then rename the axbus.aoi file to axbus.aod.old, for example. Also rename the application object index file from axapd.aoi to axapd.aoi.old or delete the axapd.aoi file.

- Press *Ctrl+V* to paste the Connectivity BUS layer into the Axapta application folder.

- Start the Axapta Dynamics AOS service to rebuild the application object index file, which may take a few minutes.

4.2.2 Option 2: Import the Connectivity xpo files

When export files are used to install the e-Con backend on a Dynamics AX system, the code can be imported into any layer. However it is strongly recommended to use separate layers for e-Con and customer modifications.

- On the main toolbar in Dynamics AX, click to open the *Application Object Tree* (AOT).

- For AX3 in the AOT window toolbar, click to open the *Import* form. Select the Delete table and *class members* option and when importing into an empty BUS layer then select the *Import with ID values* option as well.

  First install Solution Center by importing the following XPO file:

  - Solution_Center_*.xpo

  The Solution Center integration points to standard AX2009 by using the Show details option in the Import form. Use the compare feature to merge the changes from the following XPO file into the AX application:

  - Sol_Center_Integration_*.xpo
  - Sol_Center_intergration_AX3sp3.xpo (only when you are using this version of Axapta)

  Then import the *ECon_Studio_ECon_4_1_SP1.xpo* project from the *Setup* subfolder of the AX installation folder. Please read chapter '*How to prevent merge xpo problems*' for additional merge tips & tricks.

- For AX2009 in the AOT window toolbar, click to open the *Import* form. Select the *Delete table and class members* option and when importing into an empty BUS layer then select the *Import with ID values* option as well.

  First install Solution Center by importing the following XPO files in this order:

  - Solution_Center_*.xpo
  - Solution_Center_*_Other.xpo
  - Solution_Center_Integration_*.xpo

  The Solution Center integration points to standard AX2009 by using the Show details option in the Import form. Use the compare feature to merge the changes from the following XPO file into the AX application:

- Solution_Center_Integration_*_Standard.xpo

Then import the *Econ_4_1.xpo* project from the *Setup* subfolder of the AX installation folder. For AX2009 you should also import StdFixforTIeCon.xpo to fix a standard error in the BomVersion table.

Note : Class EConUtil uses the external TI.Common.DLL and might not be compiled properly after the import; please check and recompile if necessary.

- After the import, it is necessary to restart Dynamics AX due to modifications to the Infolog class that can only take effect when a new Dynamics AX session starts.

4.3 Basic setup and initialization

4.3.1 Enable the configuration keys

- On the *Administration* menu*, click Setup/System, Configuration* to open the *Configuration* form.

- Check that the *ECon* key is enabled.

- Check that the *Solution Center* key is enabled.

- Close the form to apply the new settings.

4.3.2 Set up user group permissions

- On the *Administration* menu*, click Setup, Security* to open the *User Group Permissions* form.

- Select the *Admin* user group or create a new *ECon* user group and populate that group with the users that will have full access to the Solution Center and e-Con functionality.

- Select the *Permissions* tab and set up the desired permissions to the *ECon* and the *Solution Center* security keys for the selected user group.

- Close the *User Group Permissions* form to apply the new setup.

4.3.3 Make Connectivity accessible from the main menu

There is only one manual merge action that is necessary before e-Con can be used. The *main menu* must have a menu reference to the *Solution Center menu* and to the *e-Con menu*. Instead of including the main menu in the export files, this approach is taken to ensure that previous modifications to the main menu are not overwritten when e-Con is imported.

The *Solution Center* menu contains the full *Productivity Platform* functionality, which can be used to build rich solutions with minimal or no impact on the underlying application code.

- On the main toolbar in Dynamics AX, click to open the *Application Object Tree* (AOT).

- Go to Menus - MainMenu and add new menu references to the AppSolutionCenter

and EConMenu.

- Save changes to the MainMenu and close the AOT window.

4.3.4 Run the Productivity Platform setup wizard

- On the *Solution Center* menu, click *Platform*, *Setup wizard*. Note that the wizard may take a while to appear because it first scans the entire application to see which platform components are installed.

- On the *Welcome* dialog box, click *Next*.

- On the *Register components* dialog box, all installed components are displayed. The Setup wizard will register all installed components and click *Next*.

- On the *Initialize components* dialog box, the not-yet-initialized components are displayed. Select the components that you want to initialize and click *Next*.

- On the *Metadata and actions* dialog box, select the required options and click *Next*.

- On the *Setup completed* dialog box, the consequences of your selections in the Setup wizard are summarized. Click *Finish* to start the setup.

4.4 Getting started

4.4.1 Import the sample data

On the *Solution Center* menu, click *Platform, Import settings* to import the XML files from the Samples subfolder of the extracted installation folder. Note that the sample data assumes the standard "Light Company" demo database and should not be imported into a production database to prevent overwriting custom Connectivity settings.

4.4.2 Please read the documentation

On the *Solution Center* menu, click *Views, Help* to browse through the complete user documentation. The SolutionCenter.chm file can also be browsed directly from the HlpAppl folder within the Axapta application folder. A Windows shortcut to this file can be very useful.

4.4.3 Remember the on-line help

All Connectivity and platform forms have comprehensive on-line help in Dynamics AX. Simply press *F1* to see information regarding the purpose or function of fields, buttons, etc.
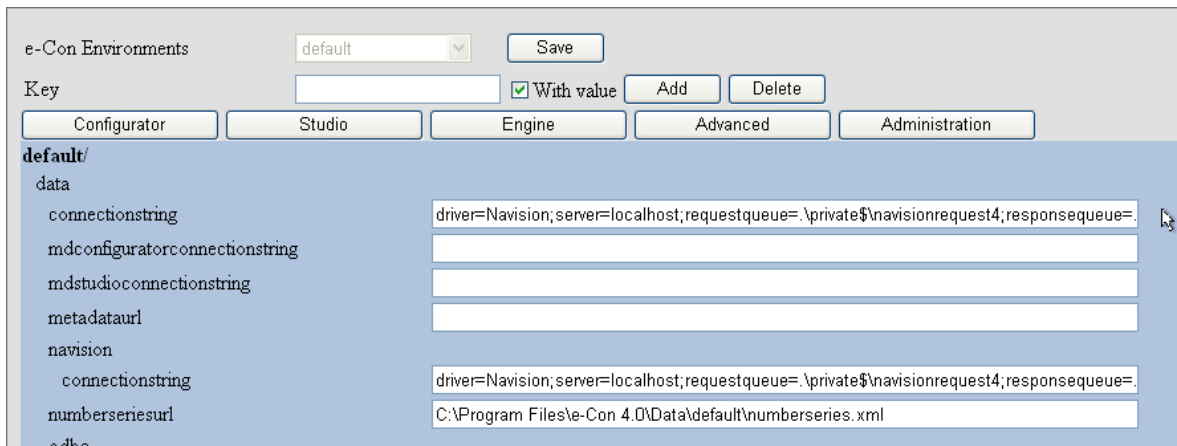
4.4.4 Change the default environment settings for AX

- Open the e-Con Menu and go to "Setup" – "e-Con Setup".

- Open the e-Con Server Tab.

Fields on eCon Server tab	
e-Con Server	The name of the e-Con Server. Normally this is the computer name of the e-Con Server.

e-Con Environment	The name of the environment used by e-Con during configuration with all the e-Con specific setup information. See section 8 of this document about this.

- Open the default e-Con environment via <Edit Environment>.

- Go to the "Administration" page via the "Administration" button.

- Copy content of "data.navision.connectionstring" into "data.connectionstring". Overwrite the existing value!

- Set the "studio.platform" value from "wpf" to "iis".

- Save the change and close the screen.

4.4.5 Import and generate the e-Con metadata groups

- Open the e-Con Menu and go to "Setup" – "Metadata groups".

- Click the 'Import metadata groups' button

- Browse and select the file 'eConMetadataGroups'. This file can be found on the e-Con product CD in the 'Integration\Install\Setup\Application files' folder.

- As a result the metadata groups will appear (see form Metadata groups in the e-Con menu).

Chapter 5 Setup Message Queue Properties.

5.1.1 Permissions

During the e-Con installation two Message Queues are created to be used by the Axapta Application Server. The permissions for these two Message Queues must be set.

The created queues are:

- Request queue: This is the queue which is used to send data retrieval requests to the application backend.
  The path is <machine>\private$\navisionrequest4
- Response queue: This is the queue which is used to receive data retrieval responses from the application backend.
  The path is <machine>\private$\navisionresponse4

1. Go to "Computer Management".
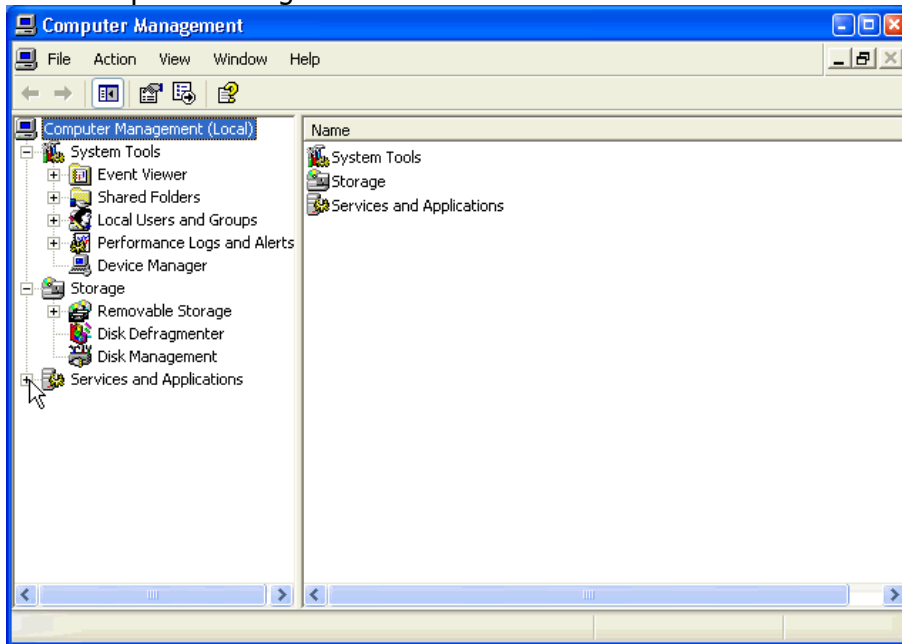
2. Select "Services and Applications" – "Message Queuing" – "Private Queues" and go to the properties of "navisionrequest4".
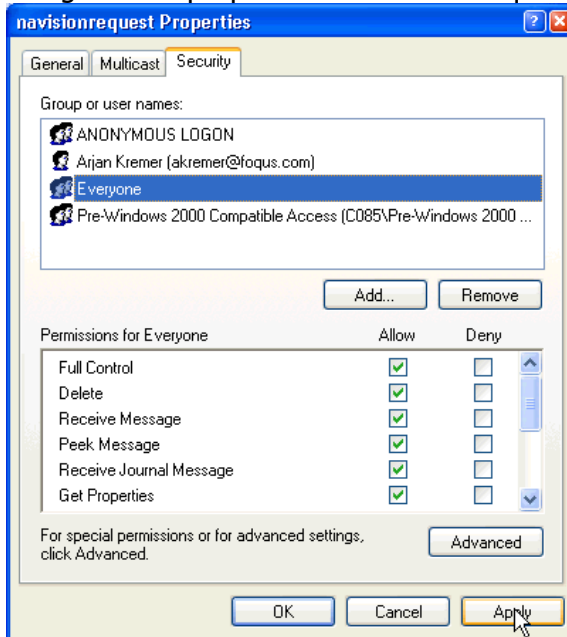
3. Give in the tab "Security" to "everyone", "Full Control" and "Apply".

4. Do the same for "navisionresponse4".

5.1.2 Best Practice

If the e-Con Server and the Dynamics AX Batch Client are running on different systems then the read queue should always be on the local system while the send queue should be on the remote system; that is the navisionrequest queue on the system where the Dynamics AX Batch Client is running, the navisionresponse queue on the system where the e-Con server is running. This way you will gain a better performance and it will be possible to use a send queue over HTTP, e.g. through a firewall.

Chapter 6   Deployment Model

6.1 General

This deployment diagram shows a typical three-tier Dynamics AX installation that is suitable for the e-Con integration.
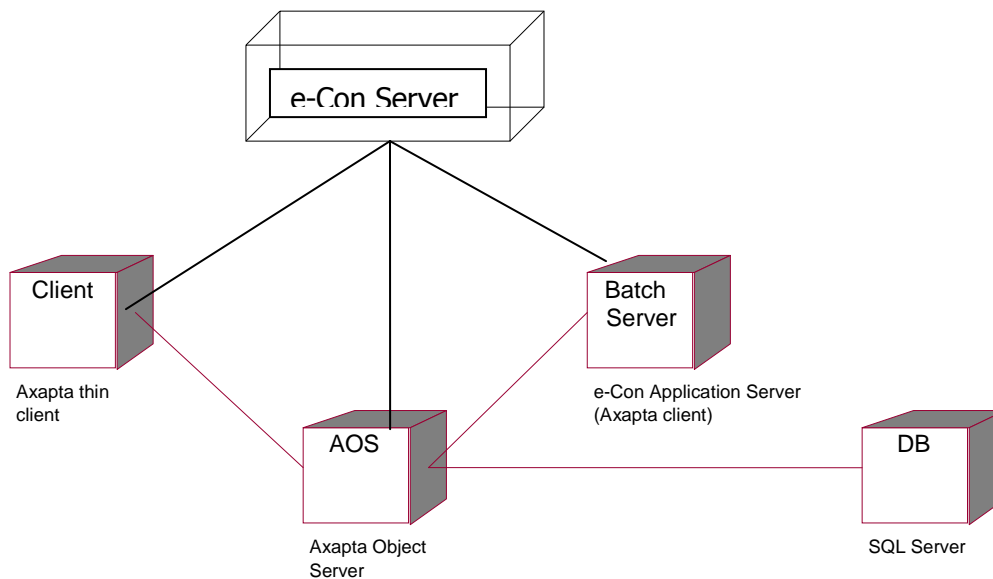
AOS

This is the Dynamics AX Object Server machine that normally runs all server side processing. For e-Con the AOS takes care of the actual processing of the e-Con configurations in Dynamics AX.

DB

This is the database server, running SQL Server or Oracle. It communicates with the AOS and with the batch server if present.

Batch Server

This optional machine can run Dynamics AX in client mode and does nothing but run a job. All the required processing will be executed on this machine and not the AOS server. This can help to ease some load off the AOS. For e-Con the batch server is used to run a Platform Startup command that takes care of the query request for data that are retrieved from the e-Con server. The communication is via MSMQ.

Client

The users run Dynamics AX on their local machines in thin client mode. Dynamics AX executes functionality either on the client or on the AOS server as indicated by server mode settings.

6.2 Security issues

An e-Con user must have access to the e-Con Server to retrieve the e-Con settings and e-Con models or configurations. The information is retrieved using web requests. The configurations that are processed within the Dynamics AOS service are also retrieved with web requests hence the user running the AOS must also have access to the e-Con server, just like any other e-Con user.

For additional security information please refer to the *e-Con 4.1 Security.doc* that can be found on the installation CD.

# Chapter 7 Application Server Batch Service

7.1 Introduction

This section in general describes how to run an Dynamics AX batch client as a Windows service. Although Dynamics AX itself does not provide any tools to do so, it can be easily achieved with some features from the Windows Resource Kit. The Resource Kits consist of a number of printed books, tools, and references for your Windows OS and can be obtained from CD or downloaded from the Microsoft website. The created Windows Service will run the Dynamics AX executable ax32.exe.
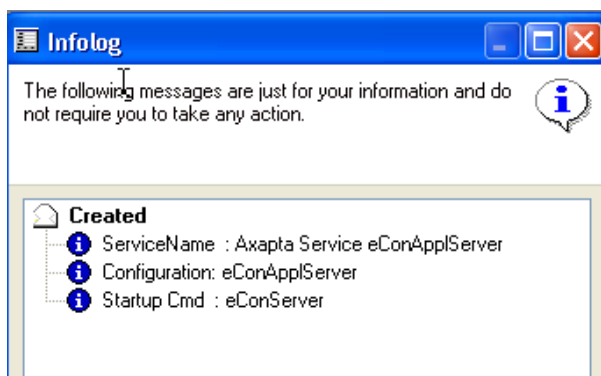
7.2 Create an Dynamics AX Batch Service

1. Copy the Recource Kit executables instsrv.exe and srvany.exe to the Dynamics AX client bin folder. Users running WindowsXP or Windows 2003 will find both executables on the e-Con installation CD path ...\Install\Setup\WindowsService.

2. Use the Dynamics AX Configuration Utility to create a configuration that can be used to run the batch client. For AX3 the user should be empty because the batch service has to use a Windows logon. The startup command should be the id of the Platform startup command. For the e-Con Application server this id equals the id of the Application Server (normally eConServer after initialization of the e-Con project)
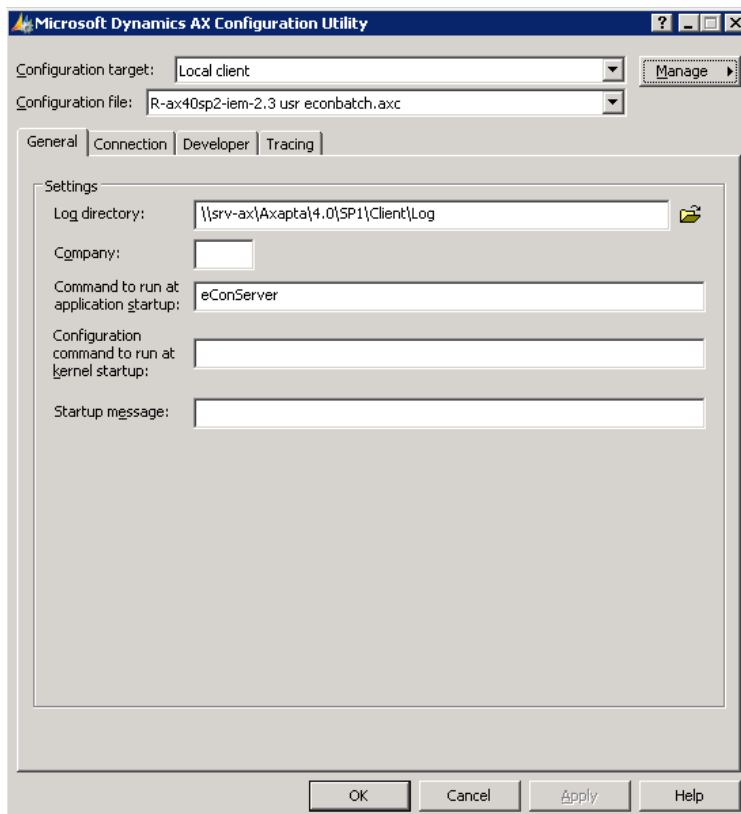
3. Create a new user for the batch client in the *Users* menu-option of the *Administration* menu and add enough permission to the user to run the batch processes and jobs. Save the configuration in an .axc file on the client machine where the Windows service is going to run. Never delete this .axc file since it is used during the restart of the batch.

4. Use the *User options* button to link a Windows user to the created Dynamics AX user. Do not add any domain information but just the user name.
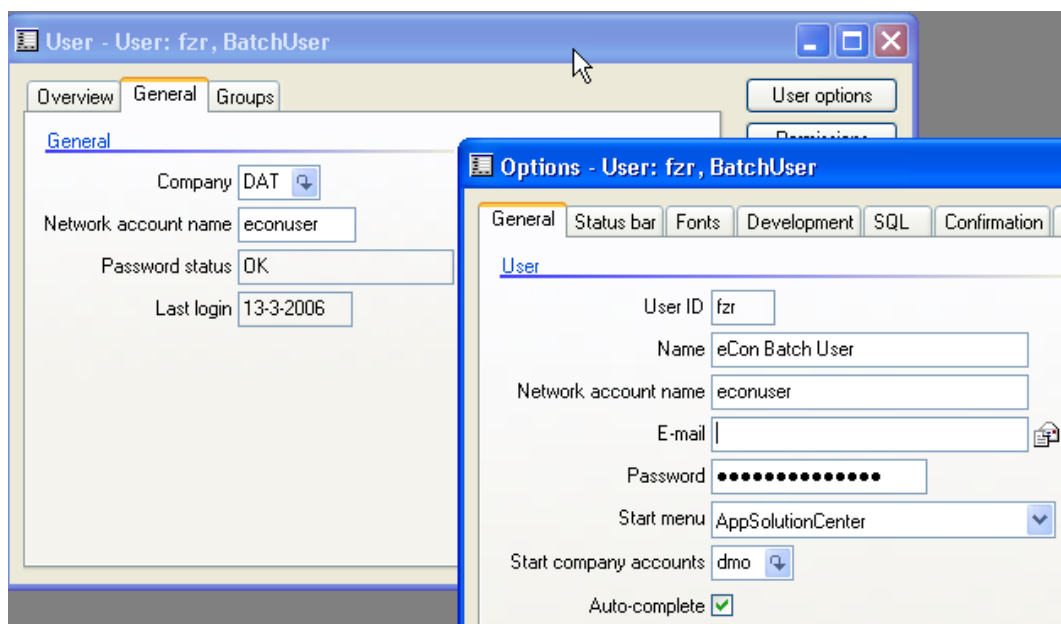
5. Run *Install Client as Service* in the *Platform/Event monitoring* menu-option in the *Solution Centre* menu and select the just saved .axc file, select the Client\bin folder. The Windows user running this process should have permission to write in the Windows registry. Press Ok and confirm the question '*Create Windows Service …?*'. If everything is processed then the following messages should pop up:

6. Go to the *Windows Services* and add the Windows User to the Log On properties of the created Dynamics AX Batch Service.
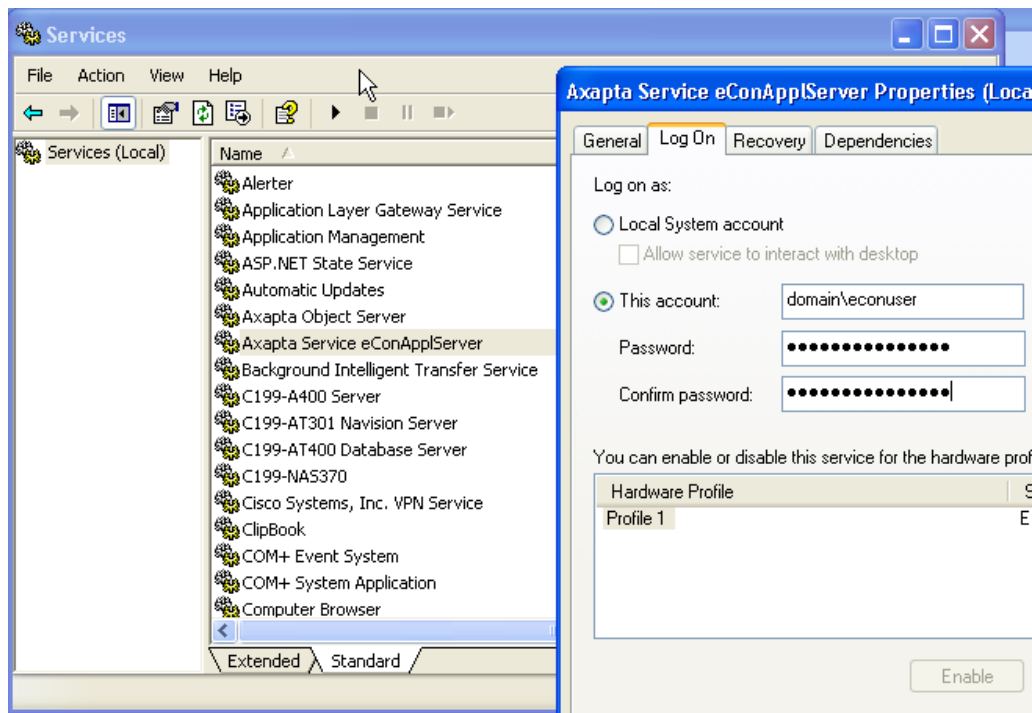
After the Windows Service has been started the user should be present as an extra online user in the *Online Users* of the Dynamics AX *Administration* menu. The *e-Con Dynamics AX Application Server* in the *e-Con menu / Periodic* should start automatically. Be aware that the Windows Service acts independently from the process running within that service. Stopping the *e-Con Dynamics AX Application Server* will stop the Dynamics AX process but not the Windows Service itself. Restart the Windows Service to start the *e-Con Dynamics AX Application Server* again.

7.3 Trouble Shooting

The install batch process checks for the instsrv and srvany executables in the client bin folder. Some checks are done on the selected .axc file; the user should be a Windows user and therefore be blank and the startup command should be filled.

If the Dynamics AX Batch Service still does not appear in the Windows Services then please retry. The instsrv and srvany executables run asynchronously which might give unpredictable results. The installation can be repeated without any problem. Please check if the Windows user has sufficient privileges to write the Windows registry. The service should appear under HKEY_LOCALMACHINE/SYSTEM/CurrentControlSet/Services with the proper parameters.

If the Windows Service seems to be running fine but the batch user does not appear within Dynamics AX then try double clicking the .axc file. Dynamics AX should start and run the startup command without any user interaction.

Via '*Solution Center / Setup / Automation / Actions*' you can run the action linked to the startup command of the *e-Con Dynamics AX Application Server* directly.

Chapter 8   How to create a new e-Con environment

Normally there are three different e-Con environments, production, test and develop. After installing e-Con there is one environment available the so called 'default' environment. This section describes how to create other environments.

Basically the creation of a new environment exists of steps:
1. Make a new e-Con environment with his own datastore
2. Add new queues
3. Make a new e-Con web folder
4. Add a new application server batch service

In the next part these steps will be described more in detail.

8.1 New e-Con environment

To create a new e-Con environment the next steps must be performed:
- Open the e-Con Setup window, in the MS Dynamics AX Main Menu, click e-Con, Setup, e-Con setup.
- Enter the new name for the environment in the 'environment' field, e.g. test.
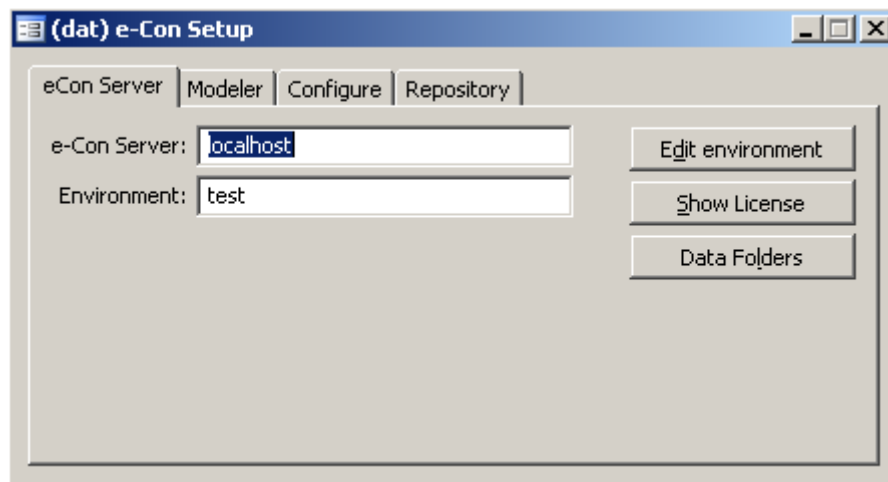
- Open the new environment by clicking the 'Edit environment' button.
- Select the 'Data store' setting and enter a new data store in here, e.g. test as well.
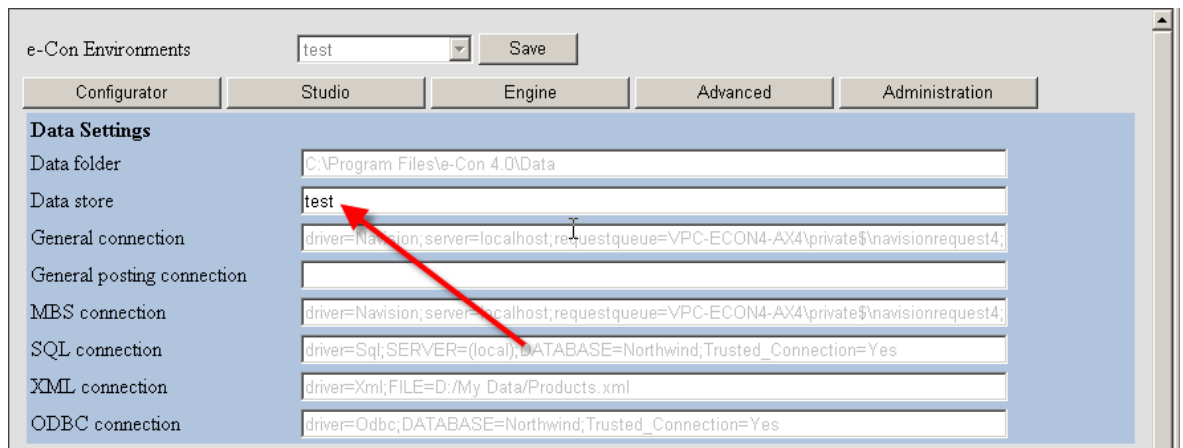
- Save the changes by clicking the 'Save' button on top and close the e-Con settings form.
- Go to the file explorer and select the e-Con data folder there, by default this is 'C:\Program Files\To-Increase\e-Con 4.1\Data'.
- Create a new folder with a name corresponding to the data store name, e.g. test.
- Return to the 'e-Con Set up' in AX and click the 'Datafolders' button to create the required folders in the new data store.

8.2 New Queues

To make sure that messages (data requests) from one environment doesn't mix up with messages from another it's required to set up individual queues for every environment. During the e-Con intallation the following queues are already created:

- Navisionpost4
- Navisionrequest4
- Navisionresponse4

For the new environment other queues has to be added.

- Add minimal 2 new queues, the response and request queue. Use names like Navisionrequest4test, Navisionresponse4test. (Read chapter 5 for more information about settings up queues)
- Open the e-Con settings by clicking the 'Edit environment' button in the 'e-Con Setup'.
- Change the following settings according to the new queue names:
  o General connection
  o MBS connection

Examples:

General connection old:

driver=Navision;server=localhost;requestqueue=VPC-ECON4-AX4\private$\navisionrequest4;responsequeue=.\private$\navision{uniqueid}response4

General connection new:

driver=Navision;server=localhost;requestqueue=VPC-ECON4-AX4\private$\navisionrequest4test;responsequeue=.\private$\navision{uniqueid}response4test

- Save the settings.

8.3 New web folder

To avoid that building of a model in one environment will interrupt the other environment a separate .NetASP application domain must be created as well. This can be done by duplicating the e-Con web folder and share.

- Copy the e-Con web folder and give it a new name e.g. eConTest. (The e-Con web folder is by default 'C:\Program Files\To-Increase\e-Con 4.1\Web\'
- Create a web share for this folder and give it a new name e.g. eCon4Test (Make sure that the security and permissions are according the original web folder)
- Open the e-Con settings by clicking the 'Edit environment' button in the 'e-Con Setup'.
- Change the following settings in there:

Page – Area	Setting	Example
Configurator – Output settings	Output folder	C:\Program Files\To-Increase\e-Con 4.1\Web**Test**\Output
Advanced – UI settings	Label URL	C:\Program Files\To-Increase\e-Con 4.1\Web**Test**\Labels.xml
Advanced – Web settings	e-Con folder	C:\Program Files\To-Increase\e-Con 4.1\Web**Test**
Advanced – Web settings	e-Con bin folder	C:\Program Files\To-Increase\Web**Test**\bin
Advanced – Web settings	e-Con URL	http://localhost/econ4**Test**

- Save the settings and exit them.
- Generate the models.

8.4 New e-Con application server

Since the e-Con application server batch service is dedicated to one environment a new application server batch service must be created as well.

- Create a new e-Con application server batch service. Read chapter 7 for more details how to do.
- Go to the application service form in AX, can be found in e-Con – periodic – Application Server.
- Select the right queue for the 'Private queue path' setting. Use the dropdown to select this queue.
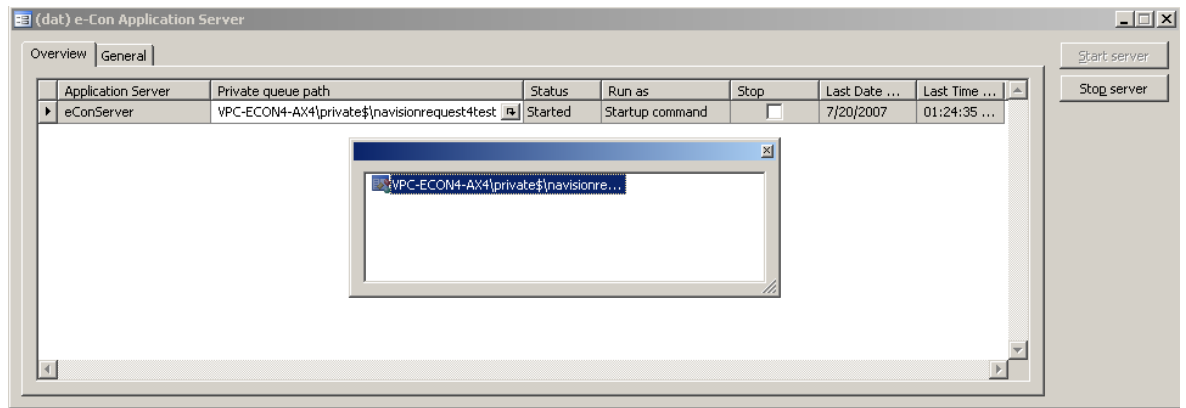
Chapter 9   How to prevent merge xpo problems

9.1 Introduction

The integration project contains a number of new elements that have strong
dependencies to standard application elements and a few system elements that normally
have no custom modifications. Especially the earlier AX versions (Axapta 3) might give
problems i.e. not able to run forms or compile etc.

9.2 The safe way to merge the xpo's

First import the solution center project itself, recompile 2 or 3 times, never mind the
remaining compilation errors. Continue with the solution center integration project. The
classes that are in the solution center integration xpo have to be merged in different
steps. In the first steps all classes should be imported except:
  - Application
  - ApplicationVersion
  - ClassFactory
  - Info
  - SysSetupFormRun
  - LedgerJournalEngine   (only if you are running AX3 sp3)

All other elements have to be imported and both projects should compile without any
errors now. From now on use the *AX3sp3* integration project when you are running AX3
sp3, otherwise use the standard integration project. In the next step import or merge the
following classes:
  - Application
  - ApplicationVersion
  - ClassFactory
  - LedgerJournalEngine   (only if you are running AX3 sp3)

Compile the objects and restart your AX client. Next import or merge:
  - SysSetupFormRun

Compile the objects and restart your AX client. Next import or merge:
  - Info

After compile and restart of the client your application is fine. Continue with the import of
the e-Con xpo. If some classes give a compile error about a variable 'actionType' then
compile forward the EConModelVersionCmdBase class.

9.3 Table synchronization issues

If you face any unrecoverable synchronization problems then the following action might
help. The sql statement can be executed in an Axapta job.

delete_From SQLDictionary where SQLDictionary.tabId != SQLDictionary.TableId