

Ultimus Adaptive BPM Suite 8.2 Database and Server Migration

A Technical White Paper by Ultimus Product Management

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This document is intended to serve as a quick reference guide to migrating databases that support the Ultimus Adaptive BPM Suite. Ultimus requires at least 3 databases, one for the BPM Server, one for the Business Organization and one for the Ultimus BPM Studio Repository. Also we touch on how to modify data sources for processes in case that those are also being migrated to a different server. These steps are valid for both SQL and Oracle.

This document is not intended as a replacement for the Ultimus Installation or Configuration guides.

Database and BPM Server Migration Considerations

This paper covers 2 aspects of migration:

- 1. Switching the database on an existing BPM server
- 2. Migrating both BPM & database to another location

The scenarios above reflect SERVER migrations. The first one is moving the Ultimus BPM Database to a different server. Customers may need to upgrade their Database Servers or move the database from one server to another. This is fairly common and part of the day to day IT governance.

In the same manner, a customer may decide to move the Ultimus BPM Server to a more powerful server to help them deal with increased usage.

The second one is moving the entire BPM Server to a different server

This paper gives a step by step guide on how to perform both types of server migrations.

1. Switching the database on an existing BPM server Steps:

- a) Save the processes and their configuration out of the repository (wfl files, connectors, rules). This is important as a preventative measure and will ensure the integrity of your processes and configurations.
- b) Stop the Ultimus services and disable the services (so services cannot be restarted by accessing any client). This is important to ensure that people cannot access the Ultimus BPM Client during the migration. You may take an additional precaution and completely stop IIS on the server.
- c) Stop the com + components
 d) make a full backup of the db (! Repository, OC, BPM database),

e) configure the necessary databases in the new db server, import the data by restoring the original databases

 d) Configure Ultimus for the new db (system admin, Organizational Chart and repository (BPM Studio) The first two are performed in the Properties of Ultimus System Administrator. Here is the dialog box for the Ultimus BPM Server

Here is the dialog box for the Ultimus BPM Server Database

BPM Server Properties			×
 General Database Directories Other Configurations Housekeeping E-Mail Settings Advanced 	BPM Server Database Database type: Server: Authentication User ID: Password: 	Settings SQL Server usl-dalmeida sa xxxxxxx Use Trusted Connection Ultimus BPM Database	
		OK Cance	;

Here is the dialog box for the Business Organization Database:

Business Organization Configuration		
Business Organization D	atabase Settings	-
Database type:	SQL Server	
Server:	usl-dalmeida 💌	
Authentication		
User ID:	sa	
Password:	*****	
	Use Trusted Connection	
Catalog:	ACME Organization 2	
	OK Cancel	

The Repository can be modified in BPM Studio Configuration. Here is the Dialog Box:

Edit Repository	×
Name:	Repository2
Database Type:	SQL Server
Server:	usl-dalmeida 💌
Authentication —	
User ID:	sa
Password:	***********
	Use Trusted Connection
Catalog:	Ultimus Repository
	OK Cancel

- e) Make sure that before migrating the databases that the versions of the new database Servers are the same as the original databases (i.e. SQL 2005 SP1, Oracle 10.02.00.01)
- f) Enable and start the services, check the eventlogs directly after starting testing your process
- g) If using database Flobot or Recordsets etc. and not using connectors, then process need to be modified to point to new database on the new server. If using connectors only those will need editing. Connectors can be edited in the Connectors Tab of Ultimus System Administrator. Here is a dialog box of a connector:

Database Connector	- ACMEGLOBALDEMO	1
Name:	ACMEGLOBALDEMO	
Database type:	SQL Server	
Server:	USL-dalmeida	
Authentication ——		
User ID:	sa	
Password:	*****	
	Use Trusted Connection	
Catalog:	AdventureWorks	
Description:		
	<u> </u>	
	V	
Test Connection	OK Cancel	

 h) If migrating the BPM Studio Repository Databases, changes need to be made in BPM Studio Configuration

Console Root	Repository	Database type Ser
	Repository2	SQL Server usl-
BPM Servers	Edit Repository	×
∲ Domains ⊡∲ Access Rights	Name:	Repository2
	Database Type:	SQL Server 💌
	Server:	myDBServer1
	Authentication —	
	User ID:	sa
	Password:	************
		Use Trusted Connection
	Catalog:	Ultimus Repository
		OK Cancel

The Repository names should be preserved in the migration so that no additional configurations (such as giving access to all users) need to me changed.

2) Switching the BPM Server

- a) If migrating BOTH the SQL Server and BPM Server follow the rules in section 1 for the Database Portion. Install Ultimus BPM Suite (including CP) on new server and install it with new blank database. The same exact version of Ultimus BPM Server, including CP and SP should be installed on the new server before switching to the production database (for Example Ultimus 8.2 CP2)
- b) After installation is complete in Ultimus System Administrator go to settings and change the database to the one which you restored from the previous environment

BPM Server Properties			×
General Database Other Configurations Housekeeping E-Mail Settings Advanced	BPM Server Database Database type: Server: Authentication User ID: Password: Catalog:	Settings SQL Server usl-dalmeida sa xxxxxxx Use Trusted Connection Ultimus BPM Database	
		OK Cancel	

c) Stop all Ultimus application, services and COM+ components

Ultimus BPM Service	Manages c	Started	Automatic	ULTIMUS
🎇 Ultimus FloStation Service	Manages a		Manual	ULTIMUS
🆓 Ultimus Management Service	Manages in	Started	Manual	ULTIMUS
🦓 Ultimus Notification Service	Manages a		Manual	ULTIMUS
🆓 Ultimus 'Out of the Suite' Reporting		Started	Automatic	Local System
🦓 Ultimus XVS Object Pool Service	Manages di	Started	Automatic	ULTIMUS

d) Define your connectors if you are using both in BPM Studio and Ultimus System Administrator



Once you restore the database the connectors will be loaded. What you need to do is edit them to point to the new database server if there was a change in the data source. This is explained in Session 1.i.

For BPM Studio, you can either re-create the connector, or you may copy the file UltimusConnectors.dat from the original BPM Studio Server's Ultimus Installation Folder (i.e. C:\Program Files\Ultimus Adaptive BPM Suite 8.2)

 e) Copy your resource files if any from Ultimus folder\Resources\ and paste it in same folder on new BPM server.

🗁 C:\Program Files\Ultimus Adaptive BPM Suite 8.2				
<u> Edit View Favorites Tools H</u> elp				
🔇 Back 👻 🕥 🖌 🏂 🔎 Search 🌔 Folders 🛛 🎼 🎯 🗙 🍤 🔛 🛛				
Address 🛅 C:\Program Files\Ultimus Adaptive BPM Suite 8.2				
Name 🔺	Size	Туре		
Resources		File Folder		
Chemas and Assemblies		File Folder		
S ActiveDirNet.dll	21 KB	Application Extension		
SustomSharePointManagementOLD.dll	189 KB	Application Extension		
S FCOPROFILER.dll	880 KB	Application Extension		
😡 LoggedinUsers.dat	3 KB	Video CD Movie		
Microsoft.Office.Interop.Excel_ORIGINAL.dll	1,247 KB	Application Extension		
🗐 ModelLog.txt	53 KB	Text Document		
Sengine.dll	2,017 KB	Application Extension		
OEngine.tlb	69 KB	TLB File		

f) Flostation Groups need to be created on the new server identical to the original server.



This is to ensure that all your Flobots running on FloStation Groups will complete properly. g) Configure the SharePoint site for the Ultimus Attachments:

BPM Server Properties		×
 General Database Directories Other Configurations Housekeeping E-Mail Settings Advanced 	Web Host Name myserver SharePoint Attachments Repository http://myserver:8080 Client Broadcast Message One Small Step for Ultimus, a Giant Leap for BPM	
	OK Cance	

- g) or client users connecting to BPM Server using <u>http://BPMServer/ultweb/thinclient.aspx</u>), an alert will need to be made to them noting there is a new client URL (because of the introduction of the new BPM Server and its new name). This may also be handled by re-directing the old URL to the new one.
- h) If BPM Studio Client is also reinstalled, it is important here to mention that the Repository names must be preserved throughout the migration

Final Notes

It is strongly recommended to keep original environments in place until it is determined that the new installation is working properly.