



Ultimus Database Server Migration

This document explains how to perform an Ultimus BPM Database server migration from one SQL Server to another. It is important to note that while this database migration is taking place, the Ultimus BPM Suite must be considered “off line” by all Ultimus BPM Suite users. The Ultimus BPM Suite cannot be considered “online” again until all steps in this document are completed and confirmed.

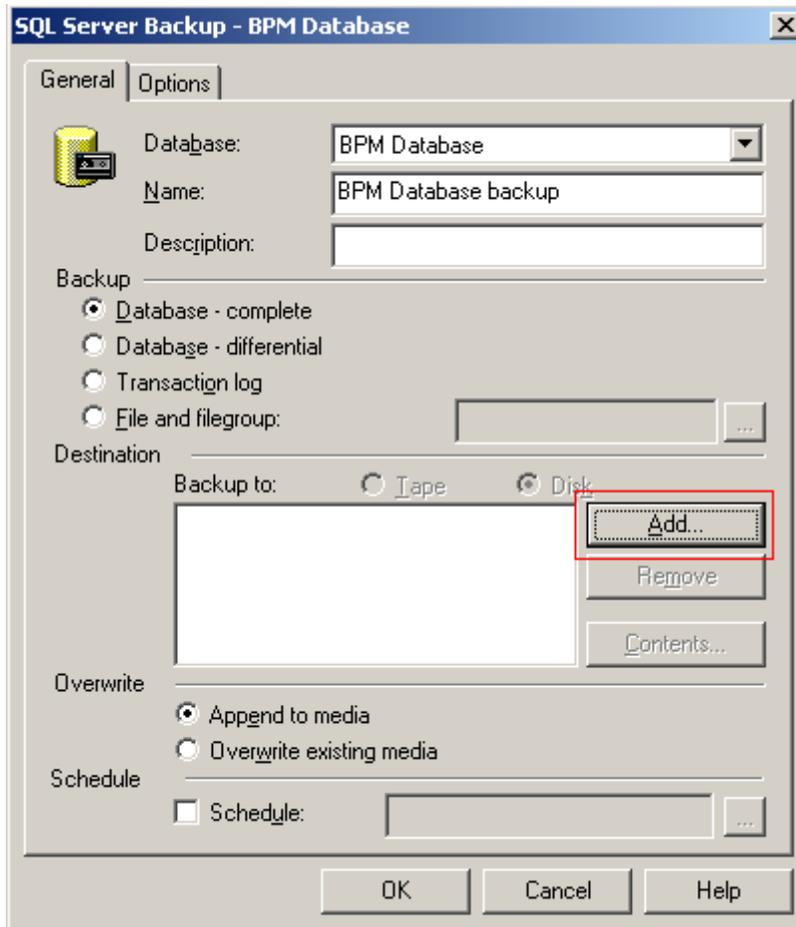
Please be sure to read this document in its entirety in order to be adequately prepared for performing an Ultimus Database Server Migration.

Section 1: Moving the Ultimus BPM Database to another Server

The Ultimus BPM Database can be moved to another SQL Server using SQL Server’s Backup and Restore option. Please make sure a blank Database with the same name exists on the other SQL Server as well. In the example below, we would assume that **ServerA** is the source SQL Server and **ServerB** is the destination SQL Server.

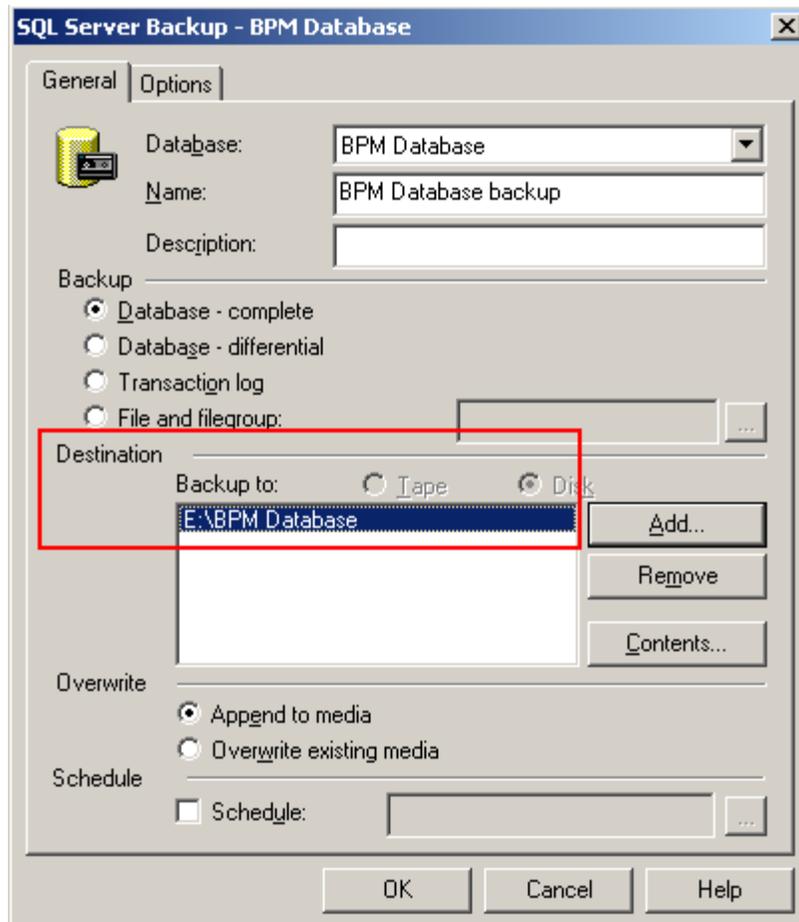
Note: *To make the migration as seamless as possible, it is advised to ensure the username and password for the new SQL Server is the same as the existing username and password.*

1. Close all the Ultimus Modules.
2. Stop all the Ultimus Services and COM+ Packages.
3. Open SQL Server Enterprise Manager on **ServerA** and right click the Database that needs to be moved.
4. Select All Tasks->Backup Database. This opens up the following dialog

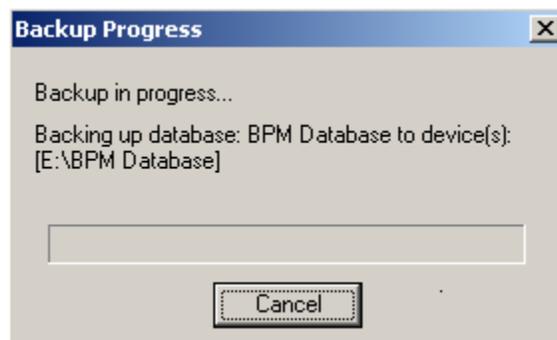


5. Click Add and specify the path for the Database backup file.

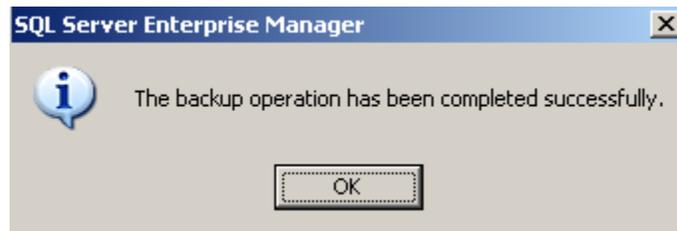




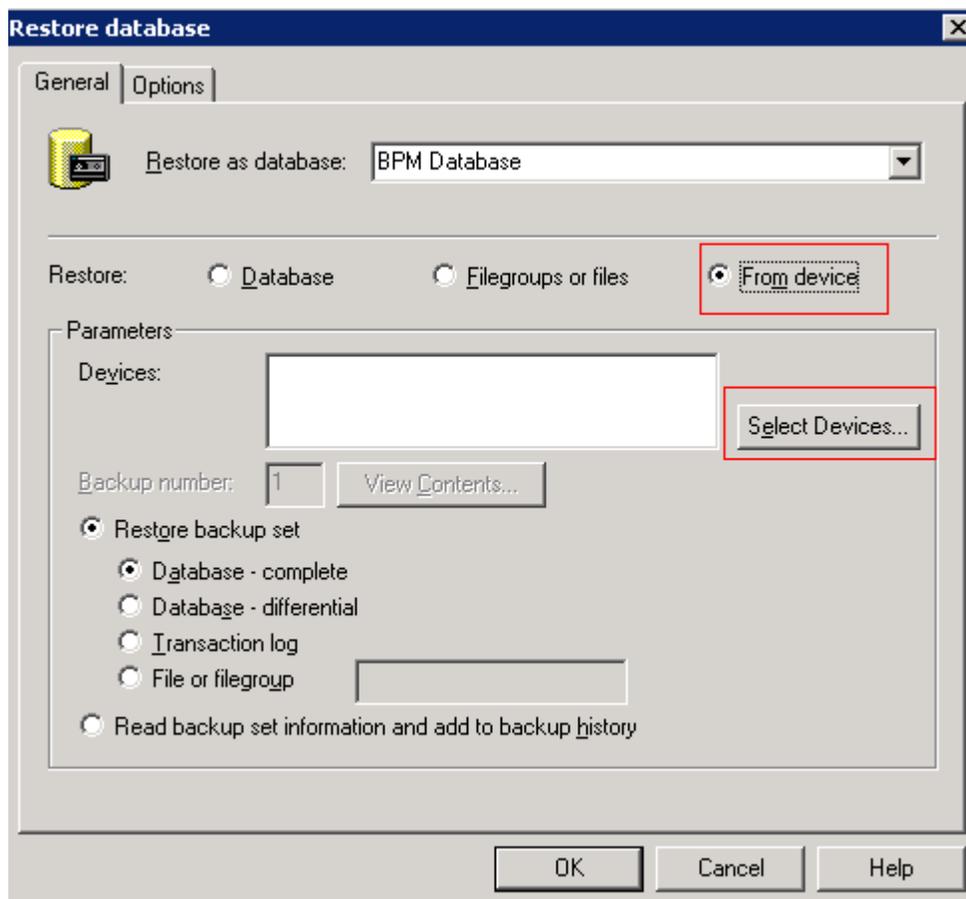
6. Click OK. This will start the backup process



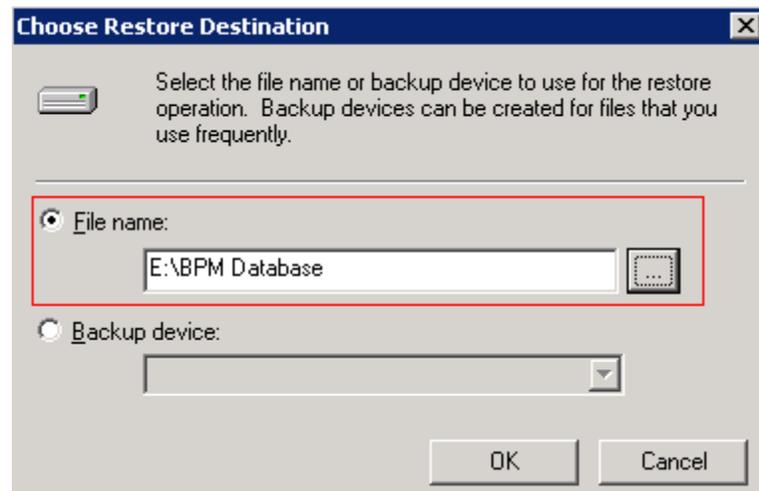
7. Wait for the completion of the backup until the following message is displayed.



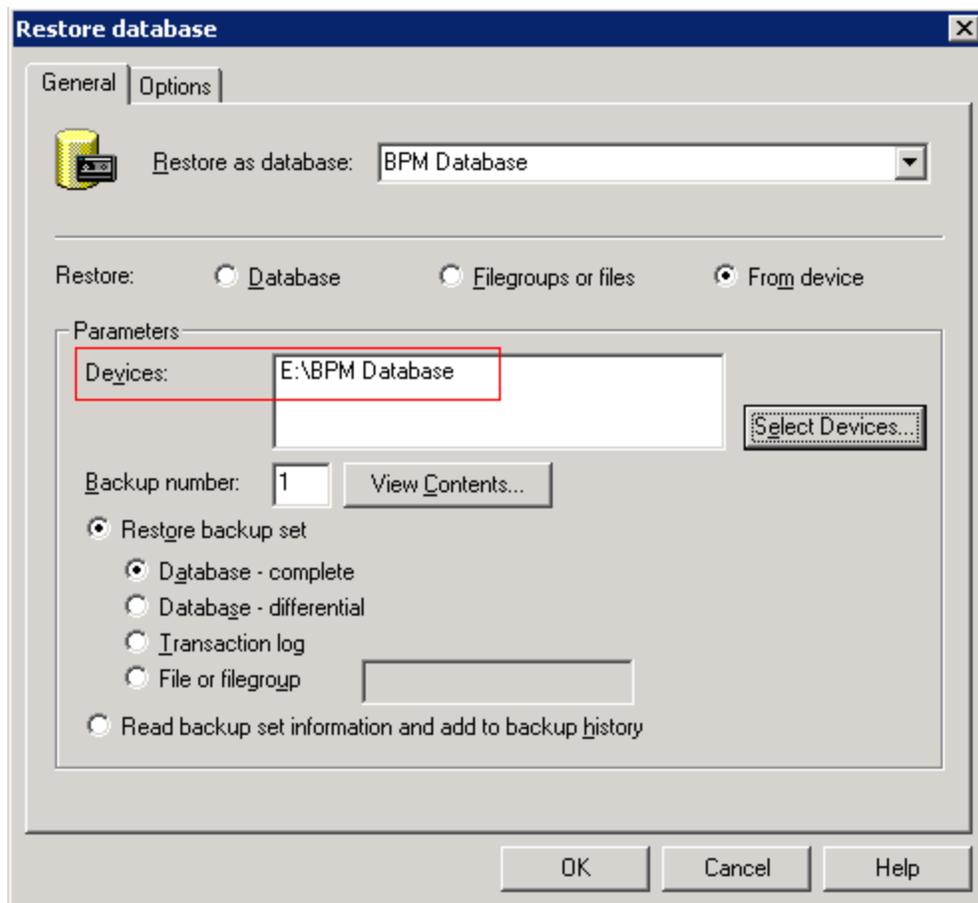
8. On the SQL **ServerB**, right click the newly created Ultimus BPM Database and select All Tasks-> Restore Database
9. Select 'From Device' Radio Button and click 'Select Devices' button as shown below.



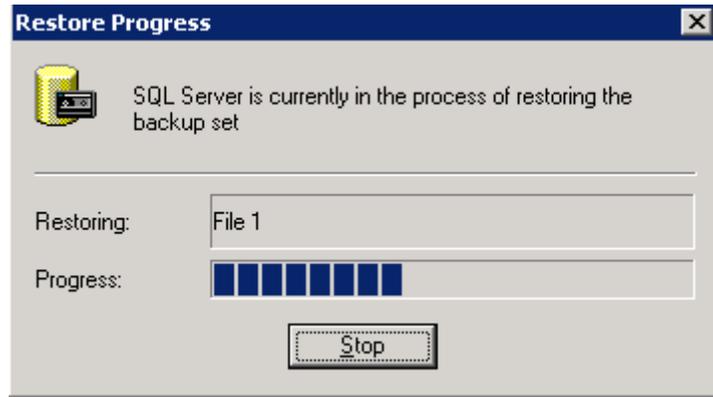
- Specify the backup file path in the following dialog after the 'Select Devices' button has been clicked.



- Press OK to get back to the initial Database Backup dialog



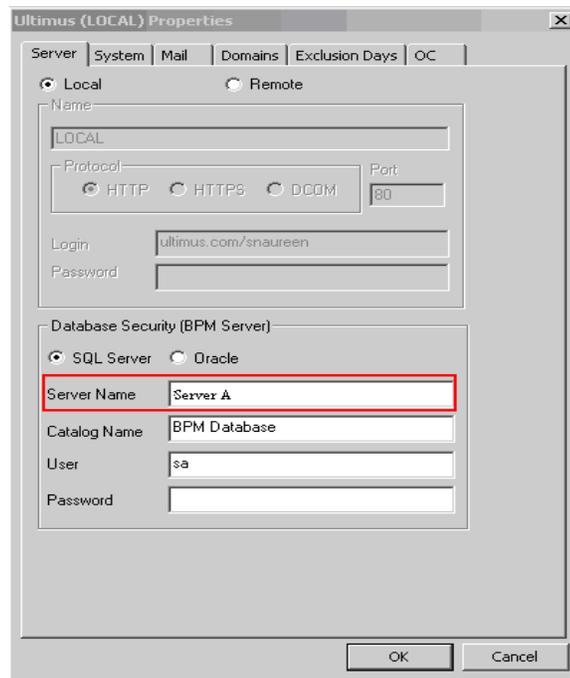
12. Press OK to start the Database restore operation.



13. Wait for the completion of the restore. The following message is displayed when the restore completes:



14. To reconfigure Ultimus BPM Server to point to the new SQL Server, open the Ultimus Administrator and right click the first node to open Ultimus Server Properties. On the Server tab, in the 'Database Security' section, the old SQL Server configuration will be present as shown below:



15. Change these configurations to point to the new SQL Server. The fields that need to be changed are 'Server Name', 'User' and 'Password' as shown below:

The screenshot shows the 'Ultimus (LOCAL) Properties' dialog box. The 'Local' tab is selected. Under 'Database Security (BPM Server)', the 'SQL Server' radio button is selected. The 'Server Name' field contains 'Server B', the 'Catalog Name' field contains 'BPM Database', the 'User' field contains 'sa', and the 'Password' field contains '***'. The 'Server Name', 'User', and 'Password' fields are highlighted with red boxes. The 'Login' field contains 'ultimus.com/snaureen' and the 'Port' field contains '80'.

This completes the Ultimus BPM Database migration. Please see the following topic to confirm that the migration was successful.

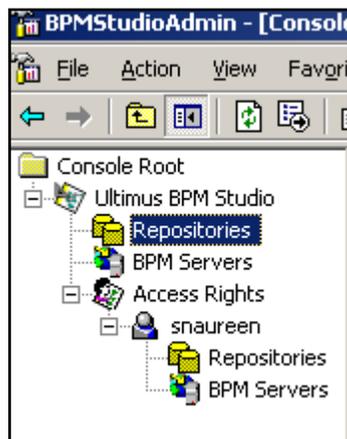
Post Migration Confirmation Tests

The following tests should be run after the Ultimus BPM Database server migration to confirm that the move was successful. Four suggested tests are:

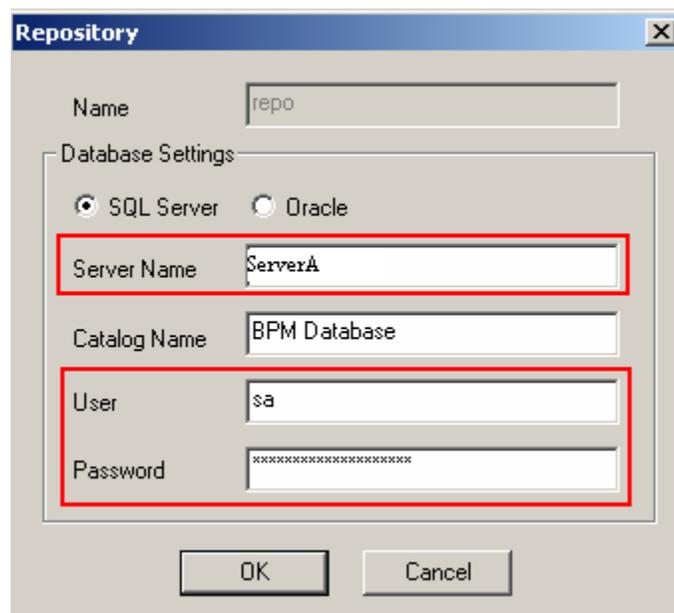
- Login to the Ultimus Client using the User ID / password of one "power user". Confirm the Ultimus task list shows properly
- Login to the Ultimus Administrator and confirm the list of published processes
- Login to the Ultimus Administrator. Confirm and refresh a previously configured incident filter (to ensure the list of active/completed tasks are shown properly)
- Login to the Ultimus Org Chart and confirm the list/number of charts

Section 2: Moving the Ultimus BPM Repository to another SQL Server

1. Ultimus Repositories can be moved to another SQL Server by repeating Steps 1 through 13, given in section 1 above, for each Repository Database. If the Repository Database is within the Ultimus BPM Database, then the Repository tables would have been moved when the Ultimus BPM Database was moved and no further action is required.
2. To reconfigure Ultimus BPM Studio to use the new SQL Server, open the Ultimus BPM Studio Configuration and move to the 'Repository' Node:



3. Right Click the Repository and select 'Edit':



Here, the repository information pertaining to the old SQL Server will be displayed.

4. Modify, the 'Server Name', 'User' and 'Password' to point the Repository to the new Database Server.

The screenshot shows a dialog box titled "Repository". It has a "Name" field with the value "repo". Below it is a "Database Settings" section with two radio buttons: "SQL Server" (selected) and "Oracle". There are four text input fields: "Server Name" (containing "Server B"), "Catalog Name" (containing "BPM Database"), "User" (containing "sa"), and "Password" (containing "sa"). The "Server Name", "User", and "Password" fields are highlighted with a red border. At the bottom are "OK" and "Cancel" buttons.

This step completes the migration of Ultimus Repository Database(s). To confirm that the migration was successful, please see the section below.

Post Migration Confirmation Test

The following tests are suggested to confirm a successful server migration of the Ultimus Repository Database(s)

- Login to the Ultimus BPM Studio and ensure that the total number of processes display appropriately
- Check-out a few processes randomly to confirm that the process map displays appropriately

Important Note pertaining to the remainder of this document:

Prior to performing the actual database server migration, you will need to perform a review of all processes published in the production environment to confirm if the following Ultimus functions are being used:

- Recordsets and Recordset Actions
- Database Flobots
- Databound Properties

If you are not using any of these functions in your production environment, then you may skip the instructions provided in Sections 3 and 4.

If you are using these functions, but the database tables to which these functions connect will remain in their existing location (are not being migrated to a new database server), then you may skip Sections 3 and 4.

If you are using these functions, **and** the database tables to which these functions connect are also being migrated to a new database server, then you will need to perform the changes outlined in Sections 3 and 4.

Please also note that here we are assuming that none of the above-listed functions are utilizing tables in the Ultimus BPM Database itself, as direct reads/writes to the outside of or within these functions is not supported.

Section 3: Post-migration changes required in Process design

If there are processes that are designed to make calls to database tables via Ultimus database connectivity functions (listed above), **and** those tables are also being migrated to another server, then corresponding changes will need to be made within the properties/training of the identified functions within the processes in order to reflect the new SQL server database information.

Once the changes have been made to the functions through BPM Studio, the processes will need to be re-published using 'Upgrade Existing Version' option to reflect any changes in active incidents.

Note: These changes will be reflected only in the active incidents of the latest process version. If you have active incidents of older process versions that use any of the features described above, then you must complete those incidents before performing a database server migration. If you are unable to do so, please refer to Section 4.

Section 4: Using Database Aliases

If for some reason it is not possible to manually edit the database links in all processes, or if you have active incidents of older process versions which cannot be upgraded or completed, then SQL Server aliases can be used. A SQL Server Alias allows you to access the SQL Server with a name other than the machine name or the IP address. Using Aliases you can create an Alias by the name "ServerA" for ServerB. By using a SQL Alias, no changes are required to the Server name anywhere in Ultimus processes since ServerB would be accessible as 'ServerA'. However, you will need to take ServerA offline to avoid a conflict between the servers.

For details on how to create a SQL Server Aliases and how to use them in Ultimus, please refer to the Chapter 13, "**Database Aliases and Ultimus Recordsets**", in the Ultimus Configuration Guide or the Ultimus Knowledgebase article '**How to Create a SQL Server Alias**' available at the following location.

<http://216.27.18.73/KnowledgeBase/Documents/Application%20Documents/SAD100108.doc>