Agilent OpenLAB

Data Store

Disaster Recovery Plan

Agilent Technologies

Notices

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Introduction

The guide provides a sample plan to restore your Agilent OpenLAB Data Store Server in the event of a disaster.

Agilent recommends that the following measures are taken to ensure that a proper recovery can be made in the event of a disaster:

1. Prepare and validate a recovery plan for the unlikely case that the OpenLAB Data Store Server becomes inoperable due to a hardware or software failure.
2. Perform periodic full backups and differential backups between the full backups of your Data Store Server. Use the backup procedure that is provided in this guide or refer to the Agilent OpenLAB Data Store Backup and Restore Guide for more information on performing backups.
3. Record and store system information you need to restore your system in a place that will not be affected by a software or hardware failure of your Data Store system.

This sample plan addresses only the basic procedure of backing up and restoring a test Data Store server. Using this sample plan for reference only, system administrators should develop their own disaster recovery plan for the customer's needs, and test the plan thoroughly.

The test server used in this sample plan is a Windows 2008 R2 SP1 enterprise, Microsoft SQL 2008 R2 SP1 system with the following configuration:

- OpenLAB CDS Data Store installed
- EZChrom application

Who should read this guide?

This guide is designed for the Agilent OpenLAB CDS Data Store system administrator. Basic knowledge of the underlying SQL-Server database management system and the Windows backup and restore process is helpful.

Preparation Procedures

Step 1. Record and store system information you will need to restore your system

Record and store the system information that you need to restore your system in a place that will not be affected by a software or hardware failure of your Data Store system.

The following is a sample checklist for our test server. Be sure to replace the details with information appropriate for your system.

Sample Checklist

Information you need to restore your system includes:

Server Information

- ❑ Server name: `9DRBR`
- ❑ Operating system: `Windows 2008 R2 SP1`
- ❑ SQL Server: `Microsoft SQL 2008 R2 SP1 (Mixed mode)`
- ❑ Domain settings: `Agilent.com`
- ❑ User who did the installation: `Username/password (Administrator privileges on Windows server and SQL server)`

OpenLAB CDS Installation Configuration

- ❑ Installation folder: `E:\Program Files (x86)\Agilent Technologies`
- ❑ Installation Qualification: `Checked`
- ❑ Installation Type: `Networked System`
- ❑ Networked System: `Data Store Server`
- ❑ Database type: `Existing SQL Server`
  - Database server name: `9DRBR`
  - Database instance: `Default instance`
- ❑ Server connection type: `Create new database`
- ❑ OpenLAB Shared Services database: `OLSharedServices with Windows authentication`
- ❑ Backend Storage: `Data Store Server`
  - Content file directory: `E:\OpenLAB-DS`
- ❑ OpenLAB Shared Service Language: `English`
- ❑ Register application: `EZChrom`
  - Enterprise path: `\\9DRBR\OpenLAB-EP`

OpenLAB CDS System Configuration

- ❑ OpenLAB Data Store Database: `OpenLabDS`
- ❑ OpenLAB Data Store Indexes folder: `C:\DSIndex\solr`
- ❑ OpenLAB CDS system administrator and password: `Username/password`
- ❑ OpenLAB CDS Authentication Provider: `Windows Domain`
- ❑ OpenLAB CDS AFS account and password: `afs-username/password`
- ❑ Account for Instrument service on AIC: `aic-username/password`
- ❑ OpenLAB CDS License: `No license(trial)`

Backup Information

- ❑ Backup of Data Store database name and location
- ❑ Backup of Shared service database name and location
- ❑ Backup of Data store content folder name and location
- ❑ Backup of Data store index folder name and location
- ❑ Backup of the OpenLABInstallation_Workgroup_OLSS_Server_DataStore.xml for reference (which is located in the E:\Program Files (x86)\Agilent Technologies\Logs\Install Log)

Step 2. Determine the folder location to store the backup

If you are performing a backup, locate the folder (on a share, USB drive, etc.) to store backup information. Record the location to use later in the backup process.

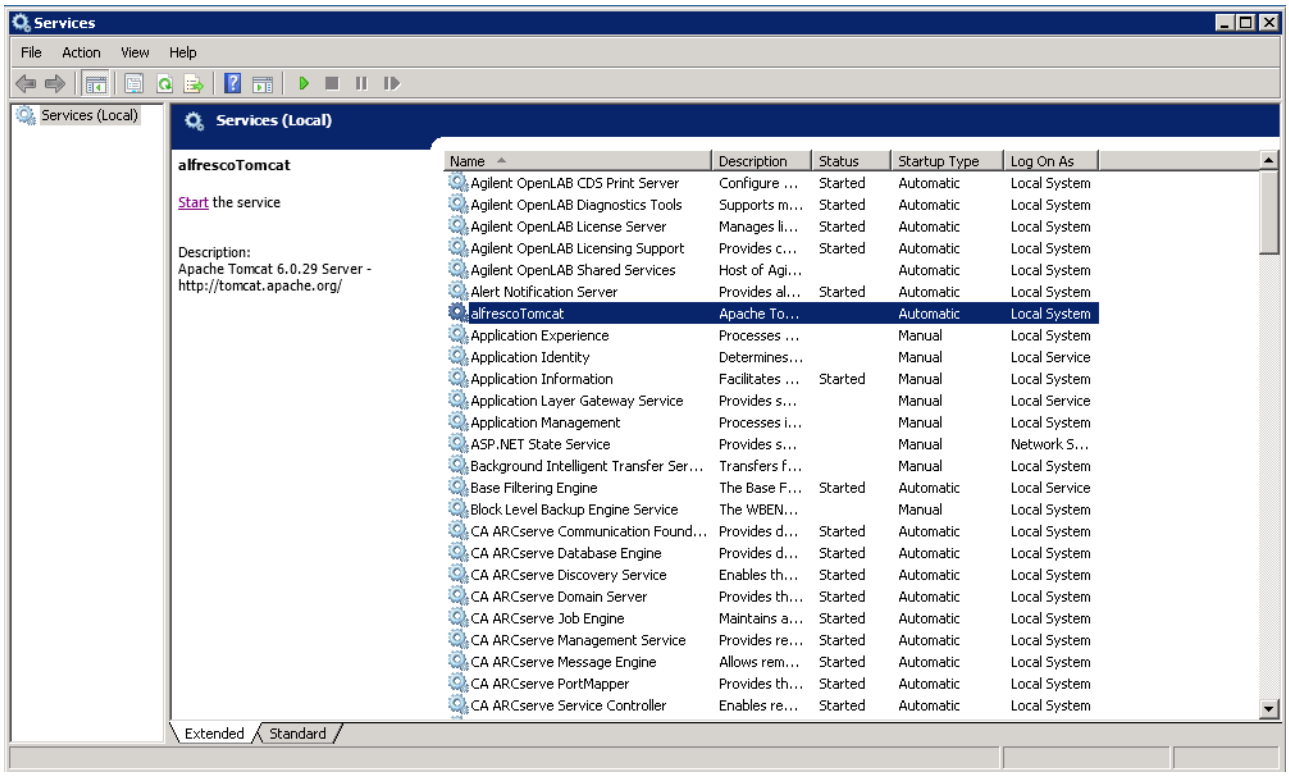
If you are restoring your system, locate the folder where the backup is stored. Record the location to use later in the restore process.

Backup Procedure

Backup the databases, content, and indexes

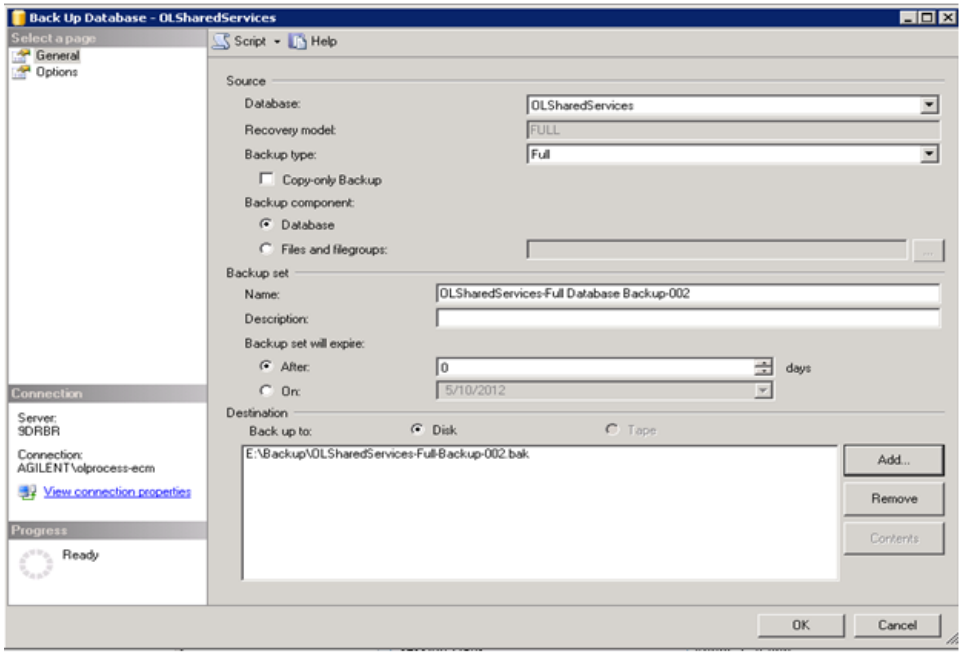
Refer to the Microsoft documentation for additional details or updates to these programs.

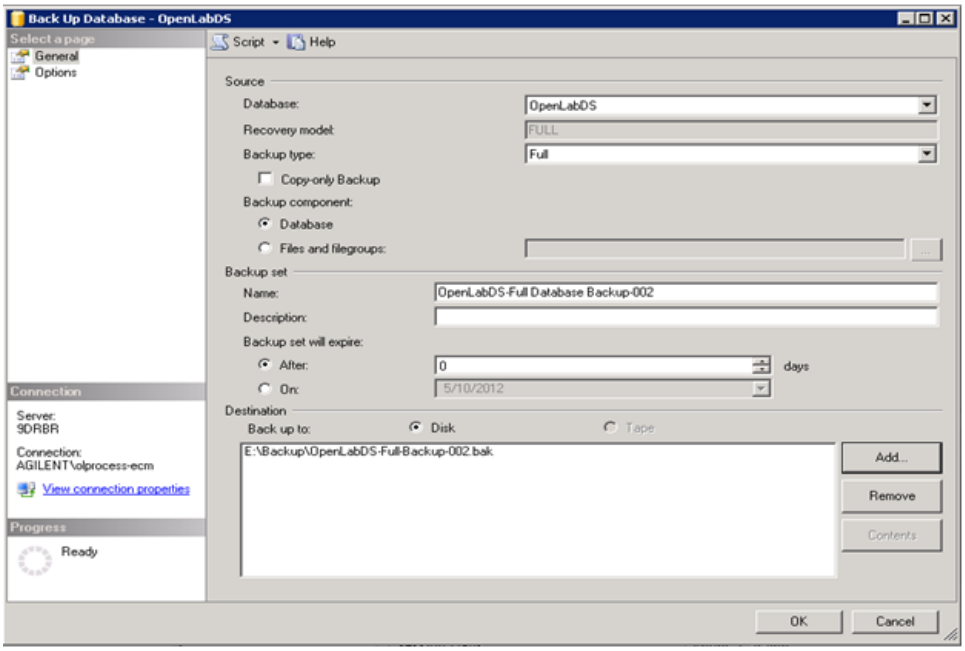
1. Open Windows **Services**.
2. Stop the **alfrescoTomcat** service, and then the **Agilent OpenLAB Shared Services**.



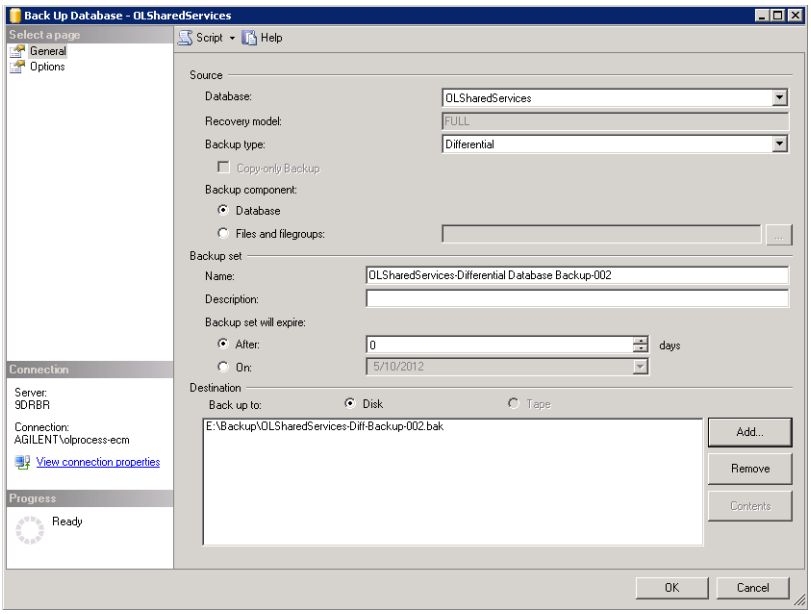
3 Open the SQL Server Management Studio.

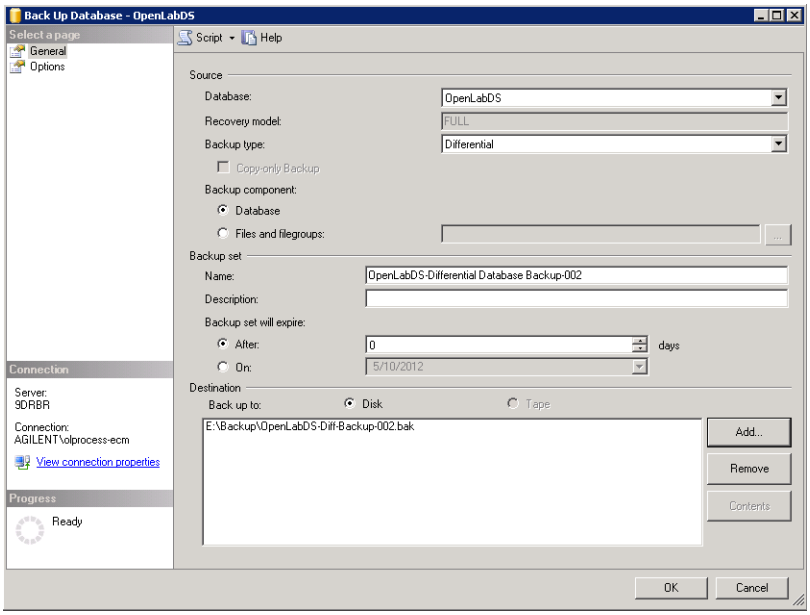
4 To conduct a complete backup of the OpenLAB Shared Services database (**OLSharedServices**) and the OpenLab Data Store database (**OpenLabDS**), select **Backup type: Full**.



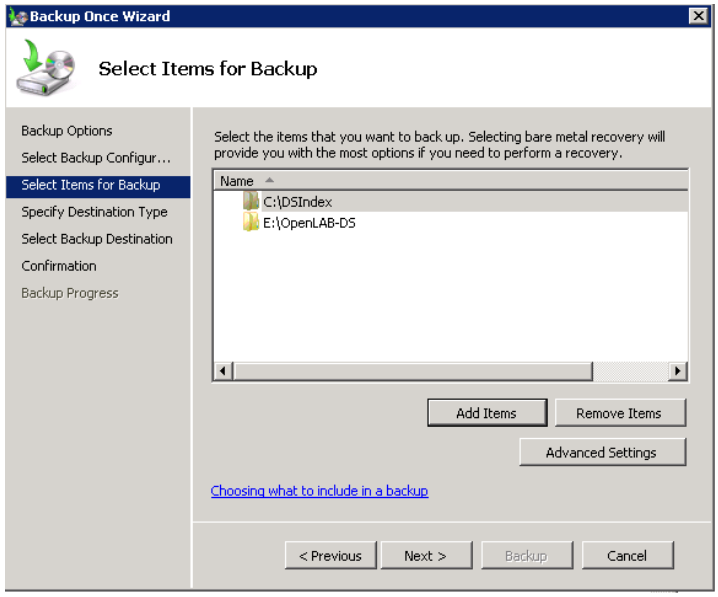


To conduct a differential backup of the OpenLAB Shared Services database (**OLSharedServices**) and the OpenLab Data Store database (**OpenLabDS**), select **Backup type: Differential**.



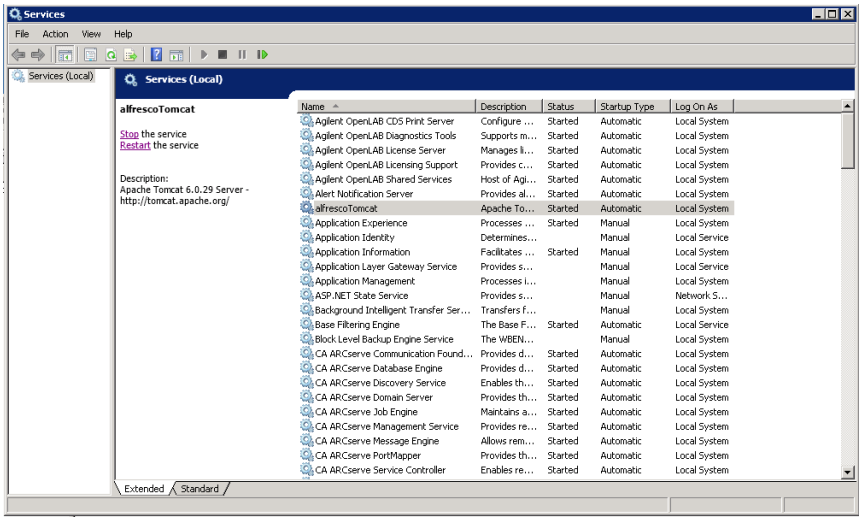


5 Use the Windows Server Backup program or other 3rd party backup and restore program to conduct a full backup of the Data Store content folder and DSIndex folder.



6 Open Windows **Services**.

7 Start the **Agilent OpenLAB Shared Services**, and then the **alfrescoTomcat** service.



Recovery Procedures

Use these procedures to recover your system if the OpenLAB Data Store becomes inoperable due to a hardware or software failure.

Step 1. Prepare the new system to meet the following requirements

1. Install the same OS system as your previous system.
2. Set the same host name as your previous system.
3. Join the domain.
4. Set the Windows user who will be installing the software as a member of the local system administrators group.
5. Login as the user who will be installing the software.
6. Install the SQL 2008 R2 SP1 (same version as on your previous system).
7. Install the required Microsoft hot fixes.

Step 2. Install the OpenLAB CDS Data Store system

1. Login as the user who was set up to install the software.
2. Obtain the same version of OpenLAB CDS as the previous installation.
3. Open the master installer to install the Data Store server. Use the same configuration as the previous installation.
4. Open OpenLAB Control Panel, edit the System Configuration. Use the same configuration as the previous configuration.
5. Activate the database.
6. Login to one of the system's AIC.
7. For EZChrom systems, run **%InstallationPath%\EZChrom\EnterpriseConfig.exe** to configure the AFS permission with the same domain user account as the previous installation. This step is not needed for ChemStation systems.

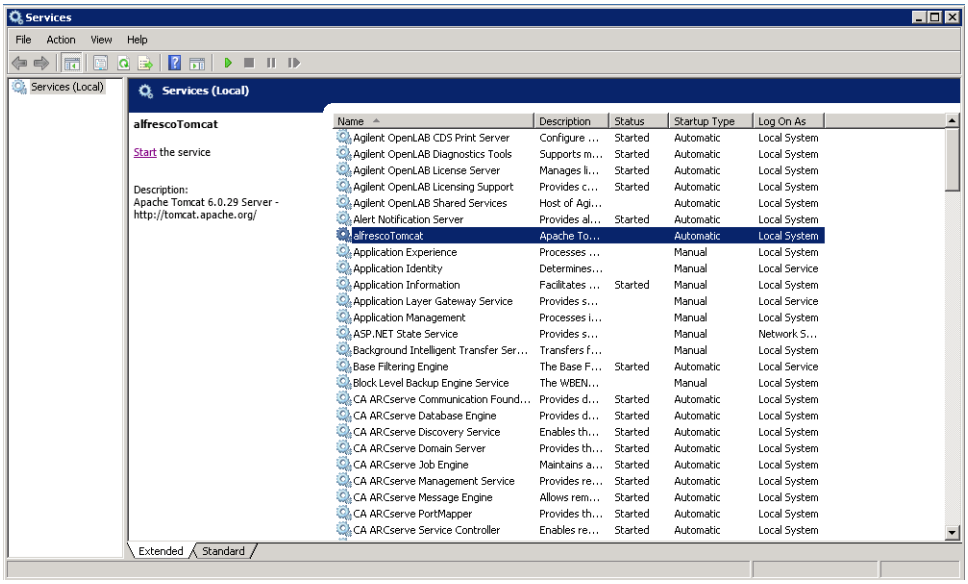
Step 3. Restore the Databases, Content, and Indexes

Refer to the Microsoft documentation for additional details or updates to these programs.

1 Login as the user who was set up to install the software.

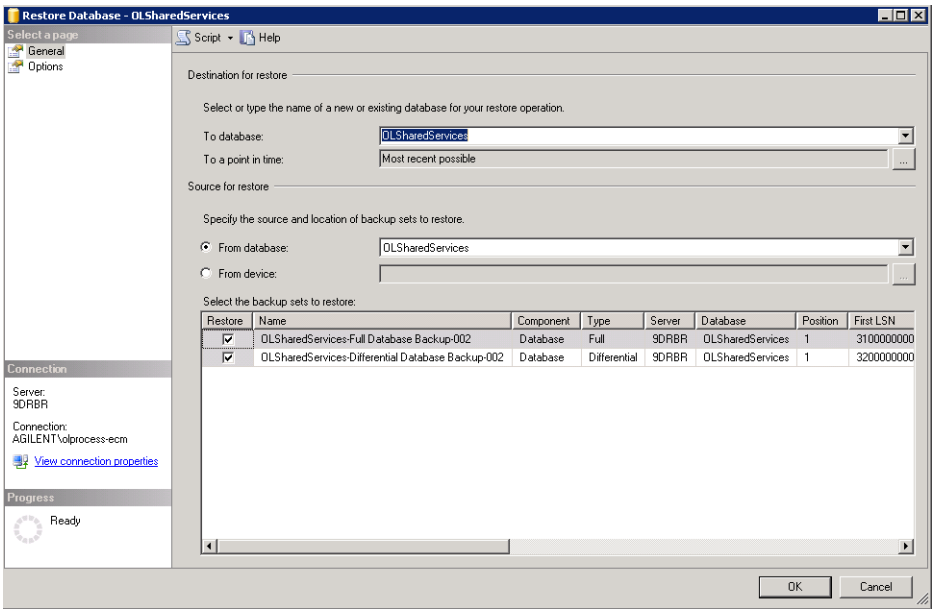
2 Open Windows **Services**.

3 Stop the **alfrescoTomcat** service and then the **Agilent OpenLAB Shared Services**.

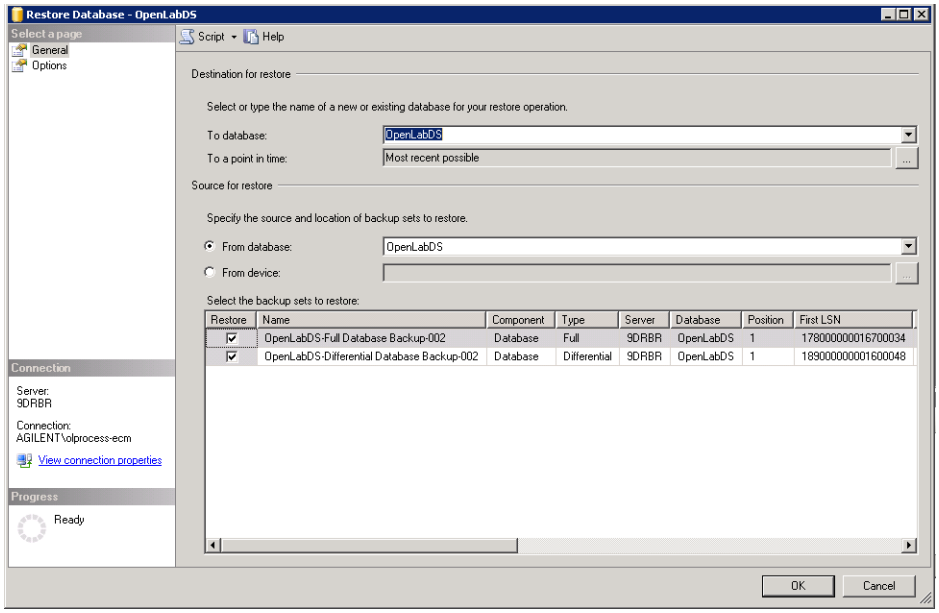


4 Open the SQL Server Management Studio.

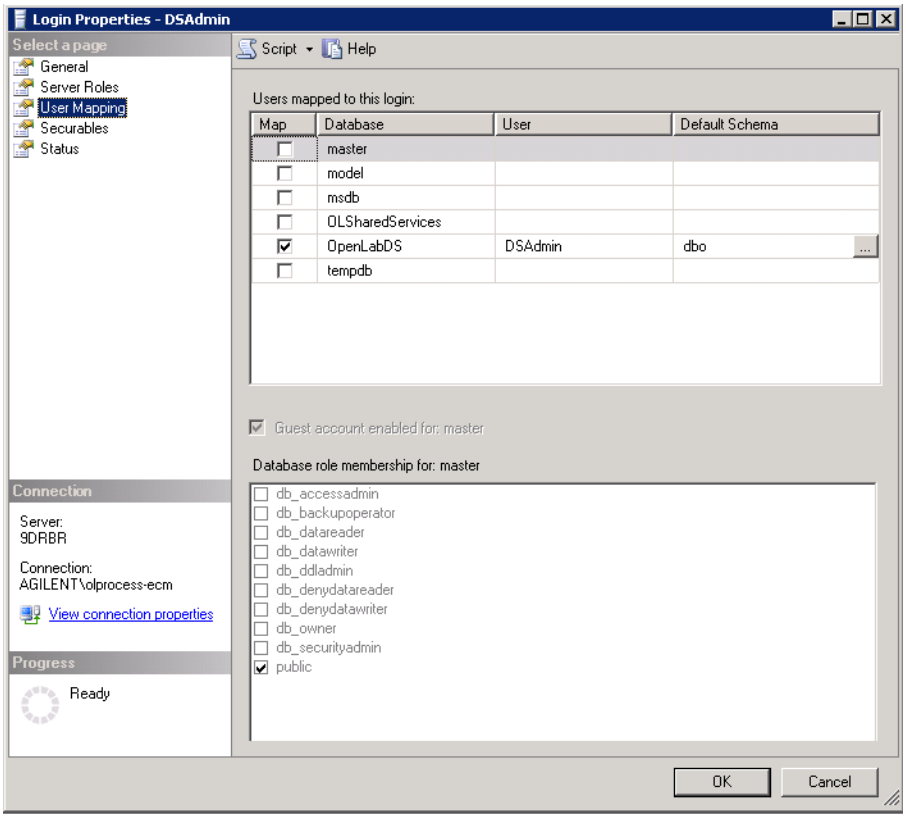
5 Restore the OpenLAB Shared Service database (**OLSharedServices**) from the full backup or differential backup. Select the option **With Replace** to replace the existing database with your backup version.



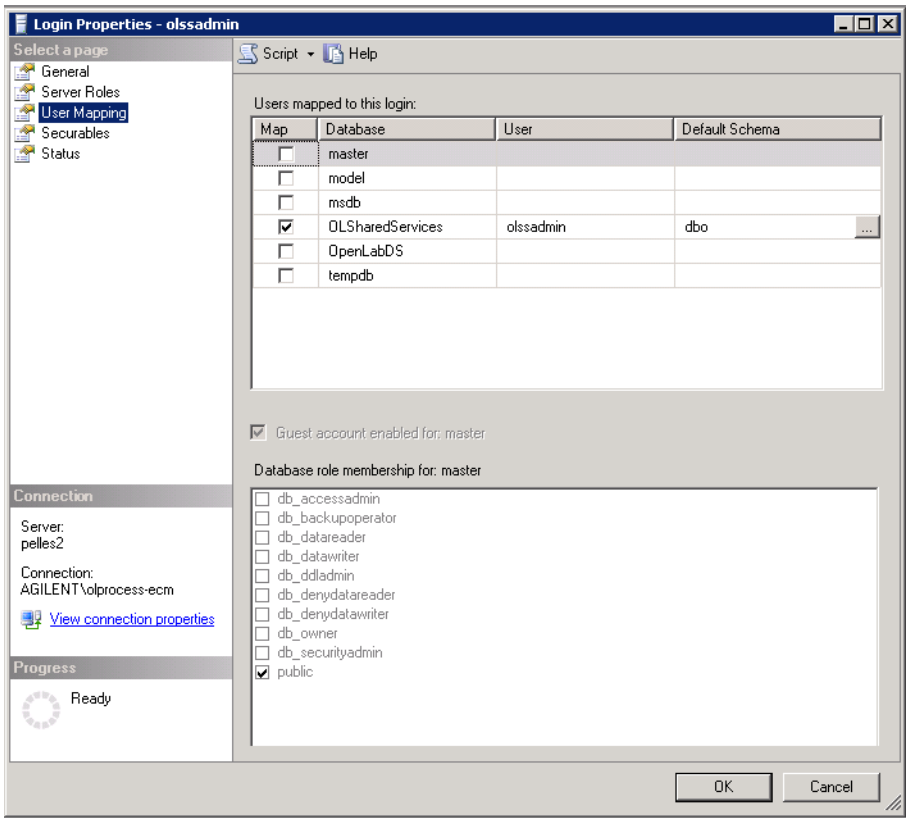
6 Restore the OpenLAB Data Store database (**OpenLabDS**) from the full backup or differential backup. Select the option **With Replace** to replace the existing database with your backup version.



7 Remove **DSAdmin** from **OpenLabDS > Security > Users**. Assign **Security > Logins > DSAdmin** as **db_owner** for Data Store database.



8 If using DB user and SQL Server authentication for OLSS database, remove the DB user from **Shared Services database > Security > Users**. Assign **Security > Logins > dbuser** as **db_owner** for Share Services database.

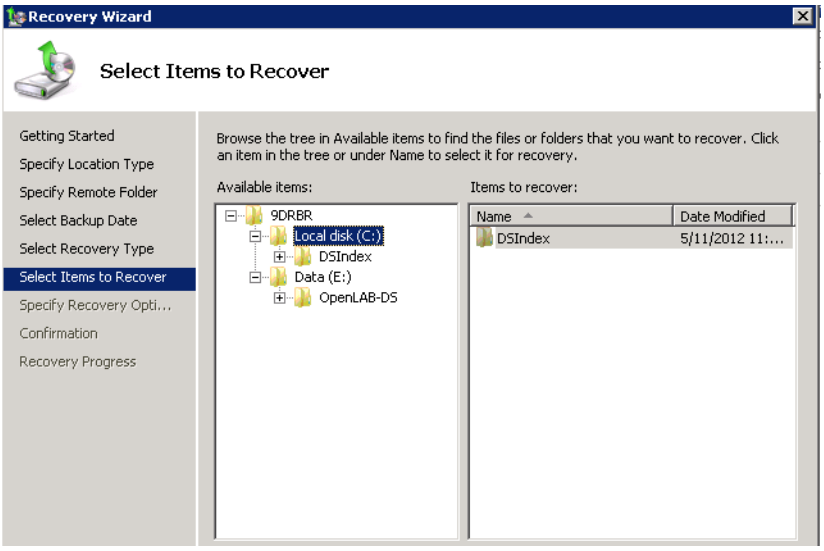


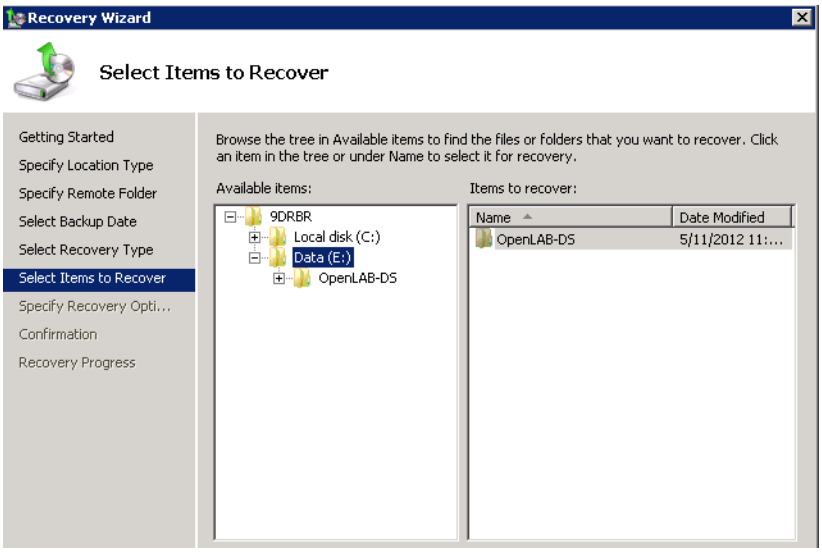
9 If the OpenLAB CDS authentication provider is Windows local, edit the tables **OLSharedServices.ExternalUsers** and **OLSharedServices.ExternalGroups** in the OpenLAB Shared Services database, to replace the value of the field **ExternalId** of each group or user with the SID of the group or user from the new computer system.

10 Rename the existing Data Store Content and DSIndex folders.

11 Open the Windows Server Backup program or other 3rd party backup and restore program.

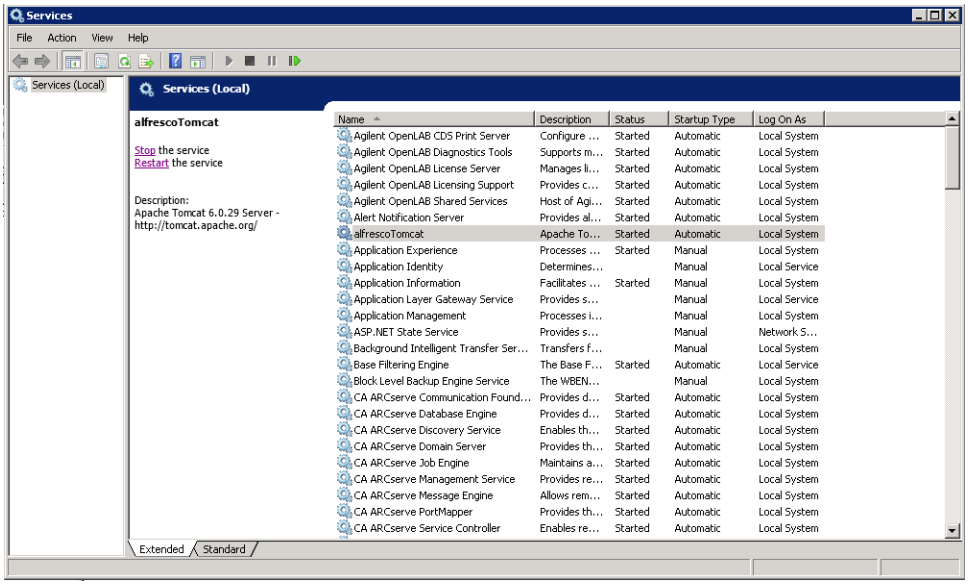
12 Conduct a restore of the DataStore Content and DSIndex folders to the original place in the directory from the full backup and differential backup.





13 Open Windows **Services**.

14 Start the **Agilent OpenLAB Shared Services**, and then the **alfrescoTomcat** services.



15 For EZChrom systems, reset printers from OpenLAB Control Panel if a printer server is installed. This step is not needed for ChemStation systems.

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