

Backup and Disaster Recovery

A current backup of your Laserfiche server files is essential for quickly restoring a Laserfiche working environment in the event of server failure. There are many different ways to backup your Laserfiche installation, and this particular section will focus on using built-in MSSQL client tools to create an effective database maintenance plan. There are many different third party solutions available on the market that will accomplish the same task. Please refer to the manuals for other products to determine the best method of backing up your Laserfiche repository.

Laserfiche Architecture Reviewed

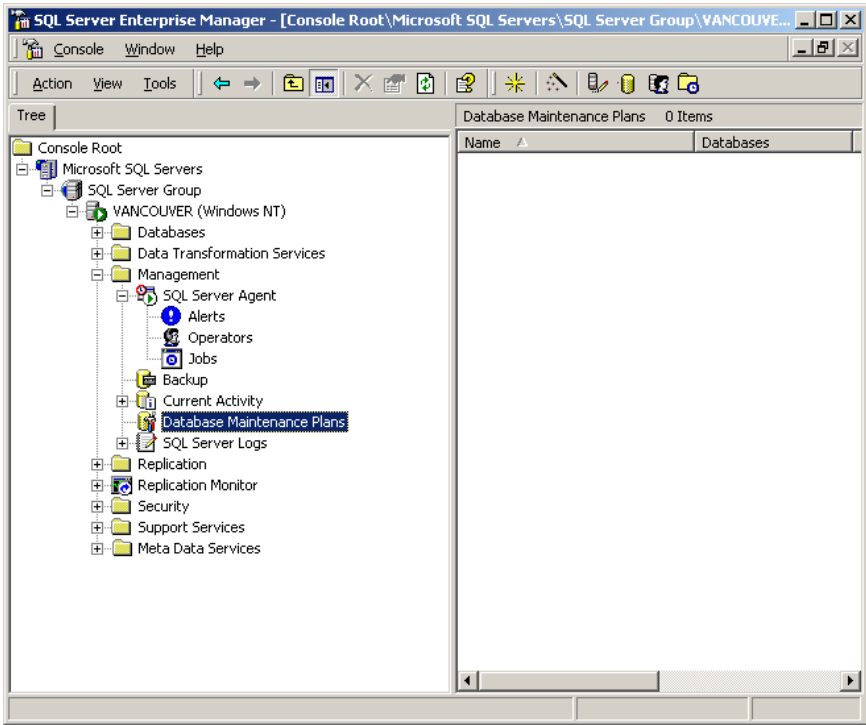
Before moving into MSSQL Maintenance Planner, a quick review of the Laserfiche Architecture will help to determine what is required when backing up a Laserfiche repository. Every Laserfiche repository consists of the database files, the volumes, and the index files. These three components are sufficient to restore a Laserfiche repository. In reality, the database files and the volumes are the bare essentials necessary to recreate the repository. The index files can be recreated in a blank search folder whenever the Laserfiche server service is restarted. By simply reindexing the whole repository, the index files are repopulated.

There are many different ways to back up the database files and volumes. The simplest way is to manually copy them to another location or to burn them onto some media. This is not recommended because it requires the Laserfiche server service and the SQL server service to be stopped in order to perform the task. MSSQL Maintenance Planner and other third party software tools allow you to back up the database and volume files without stopping any services.

MSSQL Maintenance Planner

The MSSQL Maintenance Planner is an easy to use interface that will schedule your back up schedule.

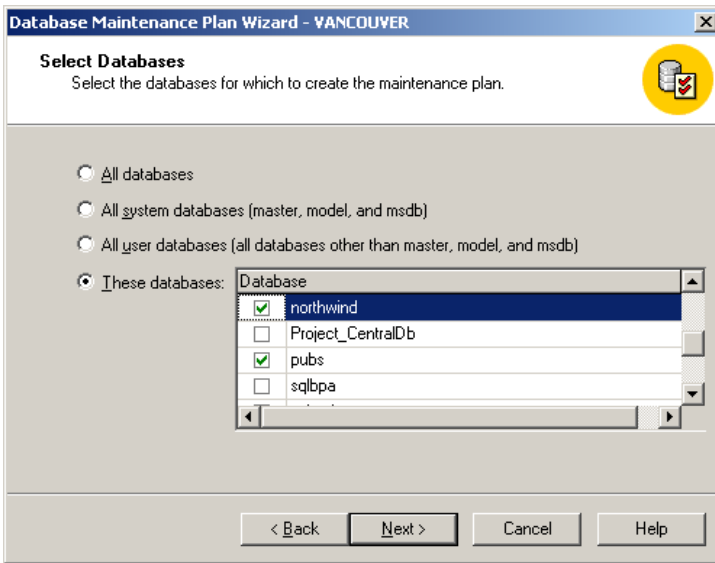
In the **Enterprise Manager**, browse to the **Database Maintenance Plans** for your SQL Server.



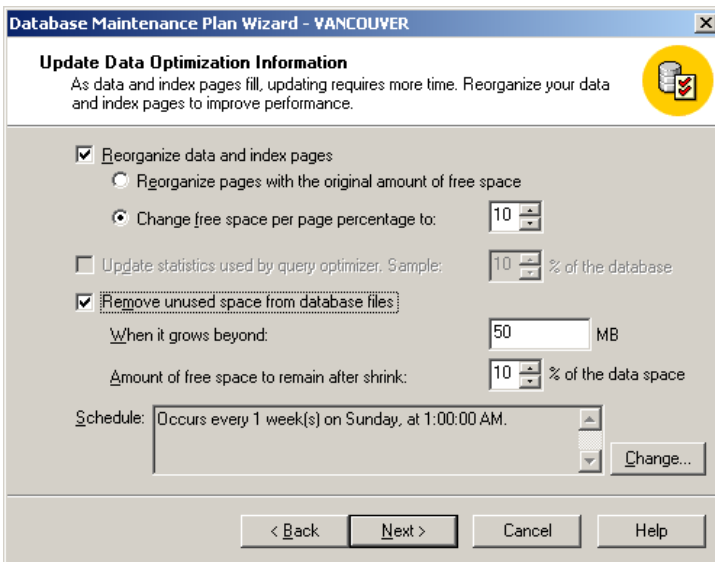
Right click to create a **New Maintenance Plan**.



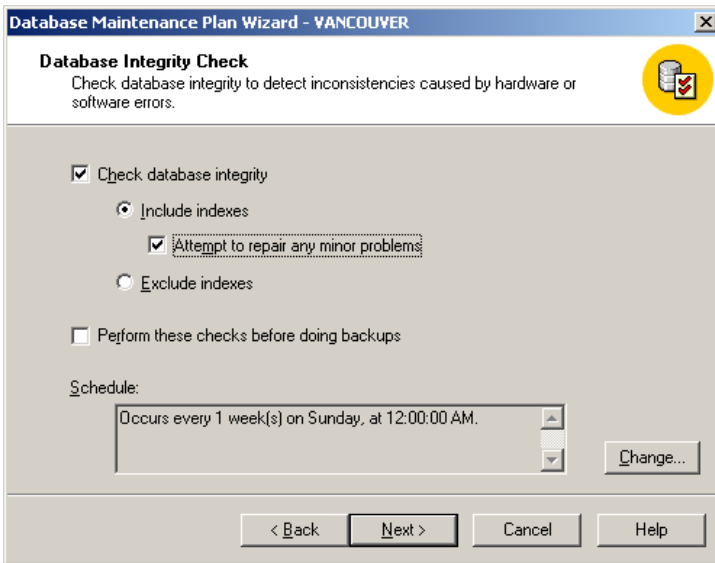
Click **Next** and choose the database(s) you would like to maintain. In this case, we will be maintaining the 'northwind' and 'pubs' databases.



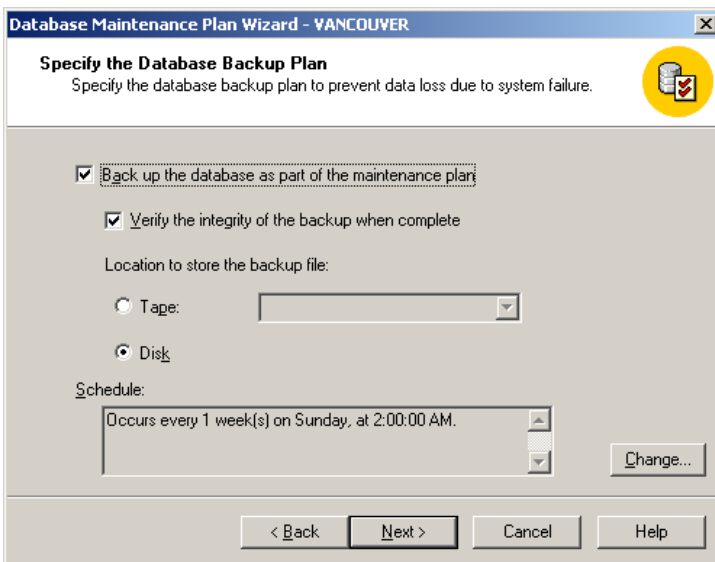
Click **Next** and choose to **Reorganize data and index pages** and **Remove unused space from database files**. The values can be left at their defaults unless you have a specific reason to change them. To change the schedule of when to run the data optimization, click on **Change**.



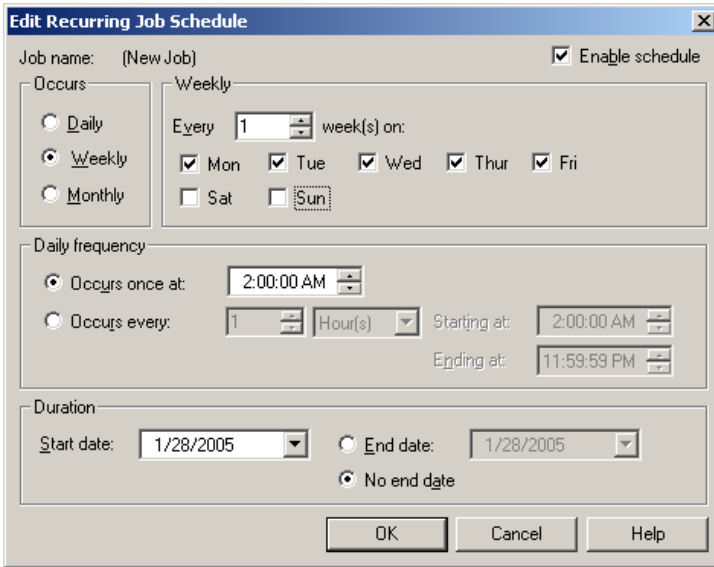
Click **Next** and check **Check database integrity** and **Attempt to repair any minor problems**. Do not click **Perform these check before doing backups**.



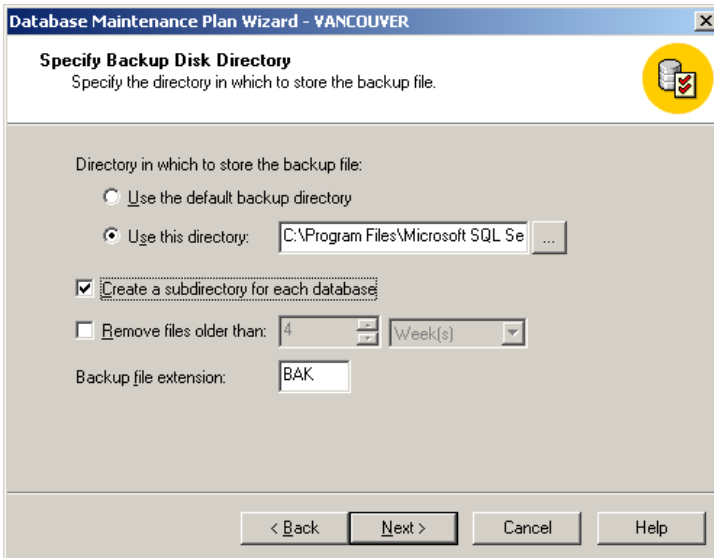
Click next to specify backup options. Check **Back up the database as part of the maintenance plan** and **Verify the integrity of the backup when complete**. Location to store the backup file should be set to **Disk**.



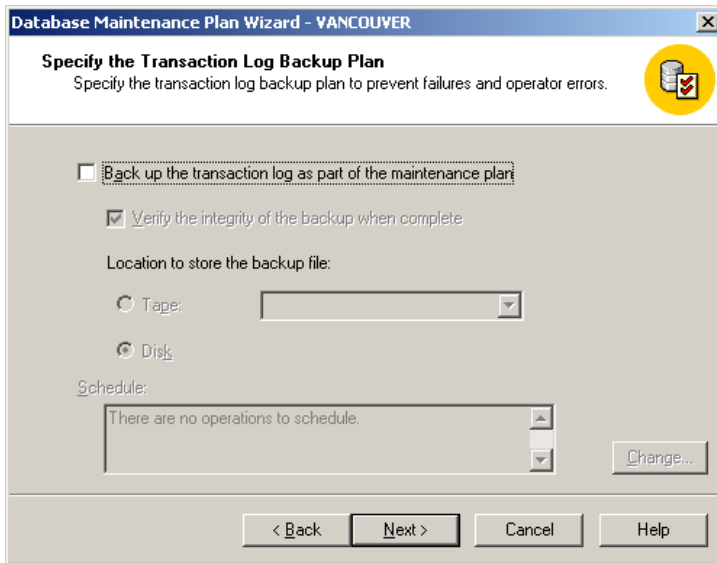
Click on **Change** to modify the backup schedule. At a minimum, Laserfiche recommends a nightly backup of the Laserfiche SQL database. Schedule database backups BEFORE the database integrity checks in the previous step. If this is a 24/7 installation, don't forget to backup the database on Saturdays and Sundays.



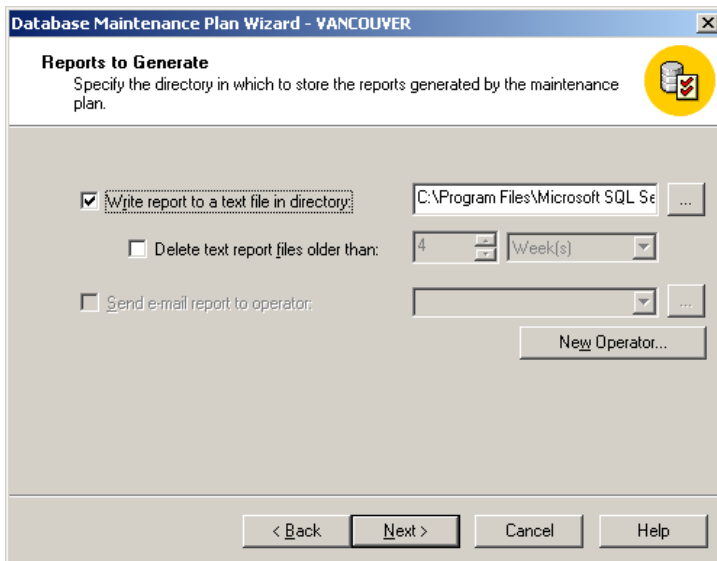
Click **OK** and **Next** to specify where to store the backup file. Choose **Use this directory to specify a backup file location** and check **Create a subdirectory for each database**.



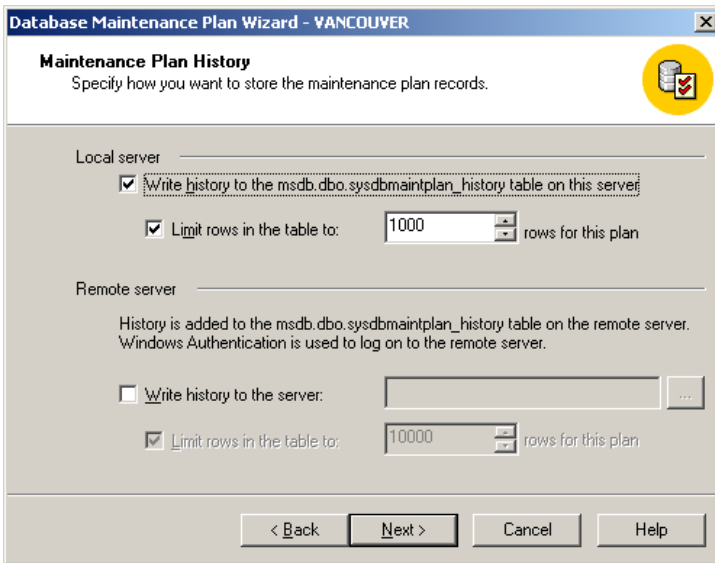
Click **Next** to specify whether or not to backup the transaction logs. This is not a required step; however, if you are installing Laserfiche into an installation where the scanning volume is large, you may want to consider backing up the transaction logs on a regular basis.



Clicking **Next** allows you to specify Reports to Generate. Click on **Write report to a text file in directory** and choose the directory in which you'd like to place the report file.

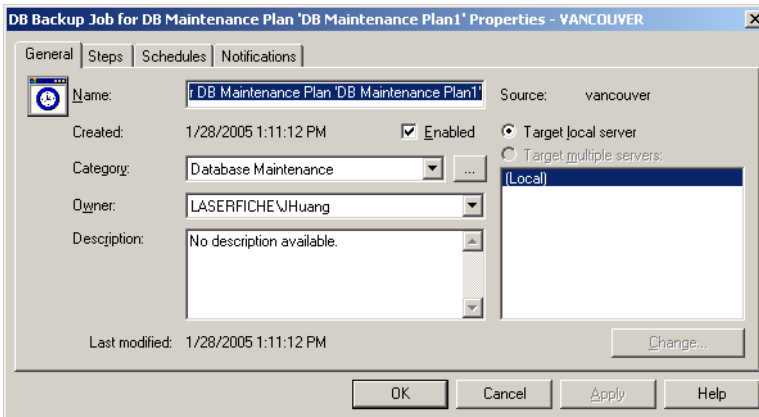


Clicking **Next** to get to the Maintenance Plan History. Here you can specify how to store Maintenance Plan records. Click the **Write history to msdb.dbo.sysdbmaintplan_history table on this server.**

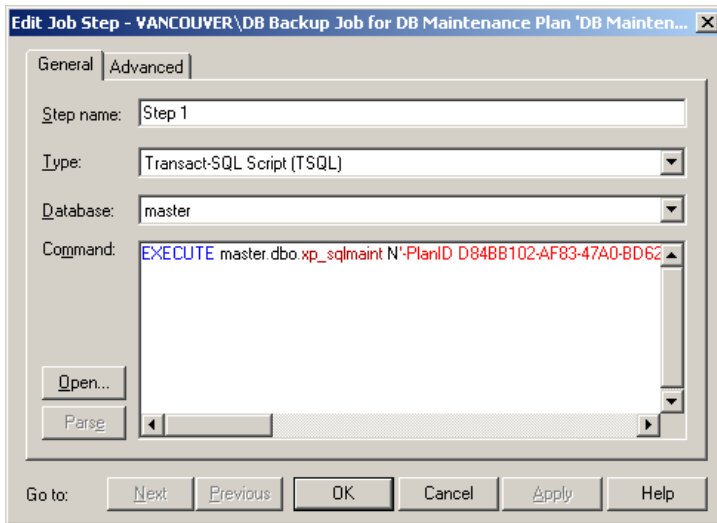


Click **Next** to review the items that you have selected and click **Finish** to create the maintenance plan.

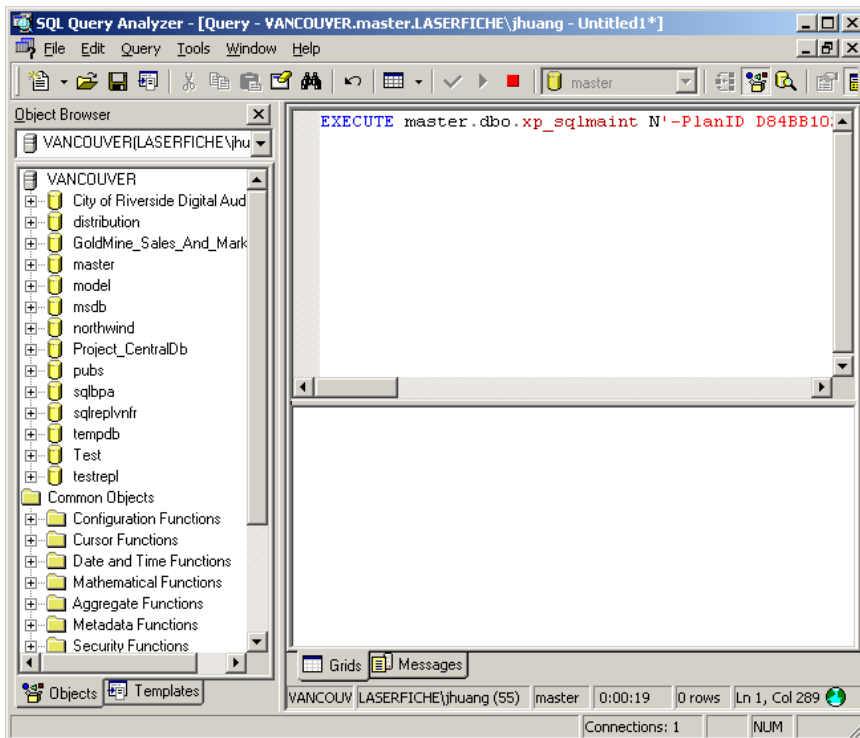
Test the backup by clicking on **Jobs** in the **Enterprise Manager** and getting **Properties** for the **DB Backup Job**.



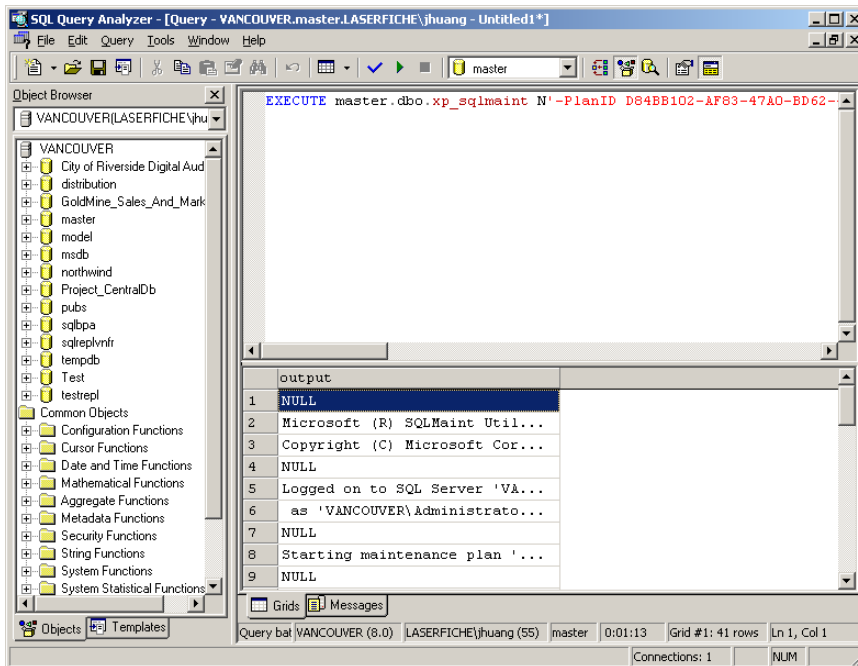
Click on **Steps** and **Edit** the step listed there.



Copy and paste the command into the SQL Query Analyzer and run the query.

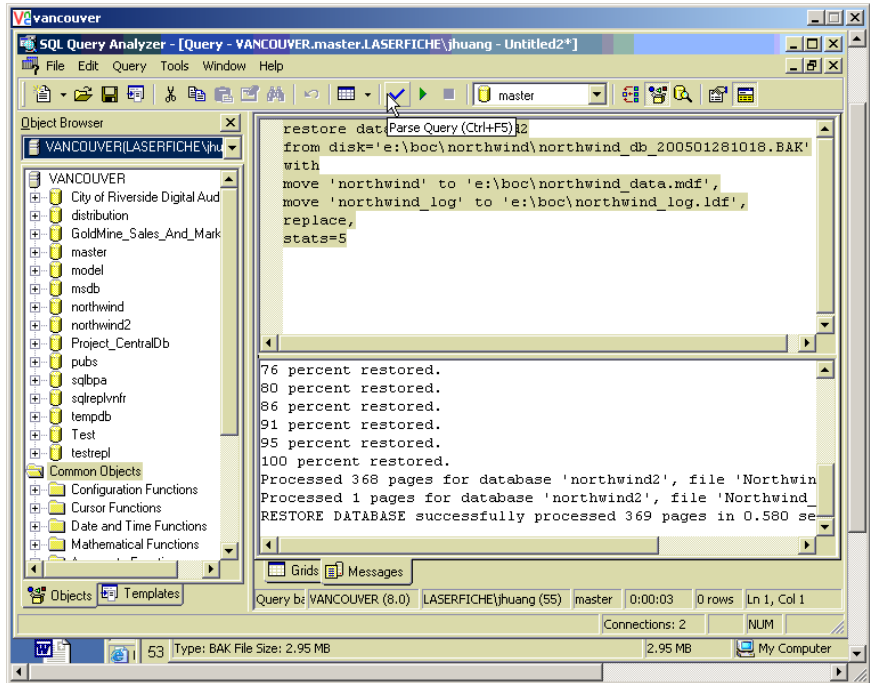


Review the output when the job is done and check the location of the backup file to verify that the backup completed successfully.



Test the backup by restoring it to SQL Server under a different name. We'll be restoring to a database called 'northwind2'. In the **Query Analyzer**, we run:

```
RESTORE DATABASE northwind2
FROM DISK=' E:\boc\northwind\ northwind_db_200501281018.BAK'
WITH
MOVE 'northwind' TO 'e:\boc\northwind_data.mdf',
MOVE 'northwind_log' TO 'e:\boc\northwind_log.ldf',
REPLACE,
STATS=5
```



Notice the command has completed successfully and the 'northwind2' database appears in the Query Analyzer browser.

Troubleshooting Laserfiche

This section will provide some tips to troubleshooting Laserfiche. The tips presented are more like guidelines for fixing problems rather than specific steps to solve the problem. Experience is the most important troubleshooting skill. Overtime as you deal with more Laserfiche installations, you will get a very good grasp at how to diagnosis problems.

Because a Laserfiche installation involves so many different components, it is recommended for a troubleshooter to understand the hardware configurations of a computer and a typical network. Understanding hardware offered by the latest technology in the computer market gives not only the ability to troubleshoot but to also assess the best solution for a Laserfiche installation. This includes understanding what types of hardware devices are available and which configuration would give the best solution for the best price.

Identifying the Problem

Problems occur when users report them. Users' reports are not always very accurate. Some users may diagnosis the problem themselves and report their diagnosis rather than report the symptoms. The troubleshooter should always assume nothing and diagnosis the problem themselves. Be sure to request for the problem to be recreated in order to get an exact sample of the problem and symptoms.

Certain questions may help determine what has gone wrong. When did it start happening? What was changed? How long has it happened? What information is being reported that leads the user to think there is a problem? In most cases, something has changed and has caused a problem. Users may say nothing has changed recently, but it is very likely that users will put up with a problem for a significant period of time until they decide to report the problem. In addition to getting the symptoms of the problem, always get the classics such as Laserfiche version, OS version, hardware specifications, etc.

Isolate the Problem

Isolating the problem helps a lot by getting to the root of the problem. If the problem is occurring on every client machine, it is very likely to be a server side issue. If the problem is occurring on a single client machine, it is likely to be a

local issue to that particular machine. Because Laserfiche involves so many hardware and software components, a symptom from X could be caused by a problem with Y. A scanner is not scanning at its optimum speed because the computer's performance is too slow to keep up with the scanner or importing fails because the default volume has been detached.

The three R's

Many times by simply restarting the application, rebooting the machine, or reinstalling the software, the problem is eliminated. Restarting the application or rebooting the machine are typical steps to solving the problem. When it comes to reinstalling the software, it depends upon what software is being reinstalled. For example, reinstalling the Laserfiche client should not be a problem. Reinstalling any server application may require some backing up of data before performing the reinstallation. Under these circumstances, a reinstallation of a server side application may become tedious.

Troubleshooter's Attitude

Unnecessary anxiety should always be avoided. Typical users will take their cue from the troubleshooter as to how serious the problem is. The troubleshooter should always remain calm which not only avoids unnecessary anxiety but also provides a more comfortable environment for the troubleshooter to effectively solve the problem. If possible, take the problem to your own office where you can solve the problem in your own working environment and not always have someone looking over your shoulder.

Troubleshooting Tips in Laserfiche

Laserfiche Licenses

Every Laserfiche software component is installed with a license file, LF.lic. The license file is eye-readable and includes information like the number of full users, number of read-only users, server serial number, what type of features are associated with the product, etc. If the Laserfiche client is returns maximum connections exceeded, you can see the how many concurrent users were purchased by looking at the license file.

Scanners

Be sure that the scanner works through Windows and then attempt to make it work with Laserfiche. If it cannot even scan into Windows, do not expect it to be able to scan into Laserfiche. Scanners can be tested through Windows with Windows scanning interface under the control panel under scanners and digital cameras.

Scanconnect only works with ISIS scanners. Scanconnect is purchased per machine. Laserfiche Twain will work with only some Twain scanners, not all Twain scanners. Laserfiche Twain comes with every Laserfiche Client installation.

Isis scanners come with troubleshooting modules called Testapp.exe and Testappn.exe. VCDemo.exe is an equivalent to Testapp.exe but is used for Kofax Scanners utilizing VRS.

Typical Error Messages

“Server not found” means that the client cannot see the server. This could possibly be problems with the server machine and its connectivity with the network, the network as a whole, or the client machine and its connectivity with the network. Be sure that both the server and the client machines are connected on the same network and that the server machine is turned on. This problem may also arise if certain firewalls are preventing the communication between the client and the server.

The ping command used in the command prompt is very useful in determining whether a particular machine is able to contact another machine on the network.

“Database not found” means that the server can be seen, but no database was found on the server. This problem is usually fixed by restarting the Laserfiche Server Service. Also check the administrator’s console to see if the repositories are showing up.

A lot of problems arise from Windows security issues. Be sure to use an account that has administrative privileges when troubleshooting Laserfiche and gradually minimize rights until you’ve reached the level of security desired.

Sources of Information

Laserfiche provides a vast amount of information online to assist users in troubleshooting their issues. The Knowledge Base on the support site, Tech tips,

and user forums are the main sources of information. Also, Laserfiche manuals definitely will help with training issues or functionality issues. Your Laserfiche VAR can also definitely help you with your issues. Sometimes it may be faster to find the solution yourself before calling into tech support with your VAR.



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