Moving the Web Security Log Database

Topic 50530 | Web Security Solutions | Version 7.7.x, 7.8.x | Updated 22-Oct-2013

Version 7.8 introduces support for the Web Security Log Database on Microsoft SQL Server 2012, and ends certification for Microsoft SQL Server 2005.

If you need to move your Microsoft SQL Server database to a new location (directory, drive, or machine), this article describes 2 procedures you can use to relocate your Log Database without data corruption or loss. Consult your database administrator to determine whether either of these procedures is appropriate for your organization.

- (*Recommended*) You can back up your Log Database in its current location, and then restore it to a new location. See *Back up and restore the Log Database*, page 2.
- You can detach your Log Database from its current location and reattach it in a new location. See *Detach and reattach the Log Database*, page 5.



Warning

Before beginning, make sure that the destination SQL Server instance's **collation** setting matches that of the source SQL Server instance.

To check, in SQL Server Management Studio:

- 1. Right click the SQL server instance name and select **Properties**.
- 2. Under the General tab, check the **Server Collation** value.

MAKE SURE the collation value is the same on both servers. Only move the SQL Server databases if the collation values match.

Back up and restore the Log Database

Topic 50531 | Web Security Solutions | Version 7.7.x, 7.8.x | Updated 22-Oct-2013

Before upgrading an existing installation of Microsoft SQL Server to a new version or migrating to a new machine, back up your Websense TRITON reporting databases to a safe location.

If you are **upgrading in place**, the upgrade process should not affect the reporting databases, but it is a best practice to make a backup copy to safeguard against corrupted data or other data loss.

If you plan to **migrate your databases** to a new Microsoft SQL Server installation on another machine, to minimize downtime, start by installing and configuring SQL Server in the new location.

The upgrade or migration process begins with a backup of your existing reporting databases. Because the backup process can be quite time consuming, the instructions in this document ask you to perform the backup in 2 stages.

- The initial backup can be performed while the Log Database is online, processing data.
- The second, incremental backup is performed on just the active partition and catalog database for your Web or Email Security solution.

The intent is to minimize the database downtime required for the upgrade or database migration.

Step 1: Perform a full backup

- 1. Open SQL Server Management Studio (Start > All Programs > Microsoft SQL Server 2005 *or* 2008 > SQL Server Management Studio) and log on to the SQL Server instance that hosts your Websense TRITON reporting databases.
- 2. In the Object Explorer, under **Databases**, locate your Websense Web Security databases.

The default database names are: **wslogdb70_n** and **wslogdb70_amt_1** (partition databases) and **wslogdb70** (the catalog database)

In these examples, "n" is the partition number. The higher the number, the newer the partition.

- 3. Right-click each database (for example, wslogdb70_1), expand the **Tasks** menu, and select **Back Up**.
- 4. In the Back Up Database window, you can either accept the default backup **Destination**, or click **Add** and specify a new path for the backup file. When you are finished, click **OK** to run the backup.
- 5. Repeat steps 3 and 4 to back up each of the remaining databases.

At the end of this process, you have full backups of all of your older partition databases, as well as recent backups of the catalog database and the active partition to

which new log records are currently being added. Continue to the next section when you are ready to temporarily stop database processing.

Step 2: Back up the catalog database and active partition

- 1. Stop all Websense Log Server instances in your deployment.
- 2. Disable the Web Security database jobs.
 - a. In the left navigation pane, click the **SQL Server Agent** folder for the instance hosting the Log Database.
 - b. Click **Jobs**, and disable each of the Websense jobs by right-clicking the job and selecting **Disable**.

The job names are in the format "Websense_xxx_<catalog database name>" where xxx is the type of job and <catalog database name> is the actual name of your catalog database (by default, wslogdb70 or esglogdb76).

Make sure that **all Websense jobs are completed** before continuing. This could take several minutes or a few hours, depending on the details of your installation. Contact your database administrator if you need assistance determining whether the jobs are completed.

- 3. Perform a differential backup of the catalog database (**wslogdb70**). This will back up anything that has changed since the initial backup performed in Part 1 of this procedure.
- 4. Perform a differential backup of the active database partition (the one that is still receiving new log records). Its name is something like wsglogdb70_10.

Continue with one of the following:

- *Step 3a: Upgrade in place*, page 3
- Step 3b: Migrate the database to a new SQL Server host, page 4

Step 3a: Upgrade in place

If the machine hosting your database engine is adequate to host an upgraded version of SQL Server:

- 1. Upgrade your Microsoft SQL Server installation, following the instructions in your Microsoft documentation.
- 2. Once installation is complete, enable the Websense SQL Server Agent jobs.
 - a. In the left navigation pane, click the **SQL Server Agent** folder for the instance hosting the Log Database.
 - b. Click **Jobs**, and enable each of the Websense jobs by right-clicking the job and selecting **Enable**.

The job names are in the format "Websense_xxx_<catalog database name>" where xxx is the type of job and <catalog database name> is the actual name of your catalog database (by default, wslogdb70).

3. Start all Websense Log Server or instances in your deployment.

Log Server resumes sending data to the Log Database, and the ETL job begins processing the Web Security records into the active partition.

Step 3b: Migrate the database to a new SQL Server host

If you are moving the reporting database to SQL Server on another machine:

- Open SQL Server Management Studio (Start > All Programs > Microsoft SQL Server 2008 or 2012 > SQL Server Management Studio) and log on to the SQL Server instance that will host your reporting databases.
- 2. Restore the reporting databases from their backup location:
 - a. In Object Explorer, right-click **Databases** and select **Restore Database**.
 - b. Enter the database name in the **To database** field.
 - c. Select From device, then click the browse (...) button.
 - d. With **File** selected (the default), click **Add** and browse to the backup location.
 - e. Select the databases you want to restore from the **Select the backup sets to restore** list.
 - f. Select the **Options** page of the restore window, then verify that the **Restore As** column shows the correct location for the destination (restored) partition.
 - g. Repeat steps **a** through **f** until all databases have been restored.
- 3. Recreate the Web Security database jobs on the new SQL Server installation.
 - a. Open the **Query** window and point to the Websense catalog database (default name wslogdb70).
 - b. Execute the following stored procedures:

```
exec dbo.usp_update_views;
go
exec dbo.usp_create_background_jobs;
go
```

Continue with Update the Log Server connection, page 7.

Detach and reattach the Log Database

Topic 50532 | Web Security Solutions | Version 7.7.x, 7.8.x | Updated 22-Oct-2013

Step 1: Detach the database files

To prepare to move the Log Database, first detach it from its current SQL Server location and stop all of the SQL Server Agent jobs.

- 1. On the Log Server machine, use the Windows Services dialog box (Start > Administrative Tools > Services) to stop the **Websense Log Server** service.
- 2. On the SQL Server machine, open Microsoft SQL Server Management Studio:
 - Start > Programs > Microsoft SQL Server 2005 > SQL Server Management Studio
 - Start > Programs > Microsoft SQL Server 2008 > SQL Server Management Studio
- 3. Log into the SQL Server instance that hosts the Log Database.
- 4. Disable all Websense-related SQL Server Agent Jobs as follows:
 - a. In the left navigation pane, click the **SQL Server Agent** folder for the instance hosting the Log Database.
 - b. Click **Jobs**, and disable each of the Websense jobs by right-clicking the job and selecting **Disable**.

The job names are in the format "Websense_xxx_<catalog database name>" where *xxx* is the type of job and *<catalog database name>* is the actual name of your catalog database (by default, wslogdb70).

Make sure that **all Websense jobs are completed** before continuing. This could take several minutes or a few hours, depending on the details of your installation. Contact your database administrator if you need assistance determining whether the jobs are completed.

5. Use SQL Server commands or a SQL Server backup tool to create a backup of the database.

Before continuing, verify that the backup files are valid.

6. If you are simply copying the database files to a new directory or disk, and will then reattach them, continue to step 7.

If you plan to move the database to a new instance of SQL Server, it is strongly recommended that you delete the Websense SQL Server Agent jobs after disabling them. To do this:

- a. In SQL Server Management Studio, connect to the old instance and expand the **SQL Server Agent > Jobs** tree.
- b. Right-click each Websense job associated with **wslogdb70** and select **Delete**. (There are up to 6 jobs, depending on your product version.)

- 7. In SQL Server Management Studio, use the following steps to detach the catalog database (default name wslogdb70), and each standard logging and threats (AMT) partition database (default names wslogdb70_x and wslogdb_amt_1):
 - a. Expand the **Databases** folder.
 - b. Right-click one of the Websense databases, and then select **Tasks > Detach**.
 - c. Repeat this process for each database until the catalog database and all partition databases have been detached. The order does not matter because the Websense SQL Server Agent Jobs are disabled (not running).

The Websense Log Database has now been detached from its original location.

Step 2: Move and reattach the database files

Once the Log Database has been detached from its original location, move the it to the new location, re-attach it to SQL Server, and recreate the SQL Server Agent jobs.

- 1. Navigate to the directory you selected for the Log Database during Log Server installation.
- 2. Move all database files ending in .mdf and .ldf to the new location.

There should be an mdf file and an ldf file for each database that you detached in the previous procedure.

- On the SQL Server machine, open Microsoft SQL Server Management Studio for the new SQL Server instance, then attach each standard logging and threats (AMT) partition database (default names wslogdb70_x and wslogdb_amt_1) as follows:
 - a. Expand the nodes in the left navigation pane until you reach the **Databases** folder, and then right-click that folder.
 - b. Select Attach, then click Add.
 - c. Navigate to the location of the Log Database mdf and ldf files, then select a partition database **mdf** file.
 - d. Repeat this process for each standard logging and threats partition database.
 - e. Click **OK** when all partition databases have been selected.
- 4. Use the same procedure to attach the catalog database (by default, wslogdb70).
- 5. To create the SQL Server Agent jobs:
 - a. Open the **Query** window and point to the Websense catalog database (default name wslogdb70).
 - b. Execute the following stored procedures:

```
exec dbo.usp_update_views;
go
exec dbo.usp_create_background_jobs;
go
```

Continue with Update the Log Server connection, page 7.

Update the Log Server connection

Topic 50533 | Web Security Solutions | Version 7.7.x, 7.8.x | Updated 22-Oct-2013

Once the Log Database has been moved and the SQL Server jobs have been created, configure Log Server to send data to the new database location, and configure the Log Database to use the new location when it creates new partitions.

- 1. Log onto the TRITON console and select the **Web Security** module.
- 2. Navigate to the **Settings > Reporting > Log Server** page.
- 3. Under **Log Database Connection**, update all of the connection information to enable communication with the new SQL Server installation.
- 4. Click Test Connection to validate the new connection information.
- 5. Click **OK**, then **Save and Deploy** to implement the changes.
- 6. Log off of the TRITON console and use the Windows Services dialog box to restart:
 - Websense TRITON Web Security
 - Websense Log Server
- 7. When the TRITON service has restarted, log on to the TRITON console again.
- On the Settings > Reporting > Log Database page, under Partition Management, update the Data and Log File Path entries as needed.
 This ensures that new database partitions are created in the correct (new) location.

Moving the Web Security Log Database > 8