

Scheduling Transaction
Log Restores on a Standby
SQL Server



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# INTRODUCTION

You can schedule to restore the latest copy of the production database on a standby server. A standby server is always kept in a near-ready state by restoring the latest backup copy of the production database to the standby server periodically.

If a database on the production server fails, you need not wait to restore the whole database from the failed server. You can minimize the downtime by applying the latest backup to a standby server and then bringing the database online on the standby server.

## AUDIENCE

This white paper is intended for system engineers, disaster recovery planners, and data protection and recovery administrators. You should be familiar with backup and restore technologies, and disaster recovery concepts.

# **RESTORE ENVIRONMENT**

A disaster recovery site includes standby servers with the following components:

- Microsoft SQL Server
- Simpana<sup>®</sup> CommServe<sup>®</sup> software
- SQL Server Agent
- Standby SQL Server
- MediaAgent
- Storage

### GOAL

You want to schedule transaction log backups on the production server and then schedule the transaction log restores on a standby server.

## SOLUTION

Let us consider an example where a transaction log backup of database NewDB is scheduled every 15 minutes on the production server SQL10 starting 12:15 am. The backup operation takes around one minute to complete.

So let us run the transaction log restore operation a few minutes behind the transaction log backup operation to account for buffer time. We will restore NewDB as NewDB\_Standby on the destination server SQL10R every 15 minutes starting 12:17 am.

#### Before You Begin

Verify that NewDB is set to a full or bulk-logged recovery model.

#### Procedure

1. In the CommCell Browser, click **Client Computers** > *client* > **SQL Server**.

- 2. Right-click the instance, and then click **All Tasks** > **Browse and Restore**.
- 3. In the **Browse and Restore Options** dialog box, click **View Content**.

Verify that **Latest Backup** is selected. Else, transaction logs backed up at a specific date and time will be restored each time the schedule runs.

4. Select the NewDB database, and click **Recover All Selected**.

The SQL Restore Options dialog box is displayed.

- 5. On the **General** tab, select SQL10R as the **Destination Server**.
- 6. Select either **Standby** or **Norecovery**.

If you select **Standby**, specify an undo file path.

- 7. Select the **Unconditionally overwrite existing database or files** check box.
- 8. **Optional:** Edit the database name or the physical path.
- 9. Click **Advanced**.

The **Advanced Restore Options** dialog box is displayed.

- 10. On the **Options** tab, select **Database Restore**. Also select the **Latest Backup Data** and the **Apply Log Backup Only** check boxes. Click **OK**.
- 11. In the **SQL Restore Options** dialog box, click the **Job Initiation** tab and select **Schedule**.
- 12. In the **Schedule Details** dialog box enter the information needed to schedule a restore operation:
  - a. Enter a schedule name.
  - b. Select **Daily**.
  - c. In the **Start Time** box, enter 12:17 am as the time to start the restore job.
  - d. Select the **Repeat every** check box and enter 15 minutes as the time interval until 11:59 pm.
  - e. Click OK.
- 13. Click **OK** to close the **SQL Restore Options** dialog box.

**Note:** You can continue to run full backups on the production server along with the scheduled transaction log backups. The full backups neither truncate logs nor do they change the LSN (Log Sequence Number) chain.

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