

# Restoring a MS SQL Database

R1Soft CDP provides the ability to take a snapshot of the Microsoft SQL server databases. Since CDP is using the VSS SQL writers, it ensures data integrity and consistency during the backup operation.

Follow the instructions below to restore a MS SQL database previously backed up by R1Soft CDP.

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Step 1: Restoring Database Data and Log Files | Step 2: Attaching the Database Data and Log Files

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## Step 1: Restoring Database Data and Log Files

To restore a database, follow the instructions below in your CDP.

1. Click on "Recovery Points" in the Main Menu to open the "Recovery Points" screen.

Standard Edition	Enterprise Edition	Advanced Edition
 <ul style="list-style-type: none"> <li>Dashboard</li> <li>Disk Safes</li> <li>Policy</li> <li><b>Recovery Points</b></li> <li>Task History</li> <li>Reporting</li> <li>Configuration</li> </ul>	 <ul style="list-style-type: none"> <li>Dashboard</li> <li>Volumes</li> <li>Agents</li> <li>Groups</li> <li>Users</li> <li>Disk Safes</li> <li>Policy</li> <li><b>Recovery Points</b></li> <li>Task History</li> <li>Reporting</li> <li>Configuration</li> </ul>	 <ul style="list-style-type: none"> <li>Dashboard</li> <li>Users</li> <li>Disk Safes</li> <li>Policy</li> <li><b>Recovery Points</b></li> <li>Task History</li> <li>Reporting</li> <li>Configuration</li> </ul>

2. Select a Recovery Point you want to restore from. You can restore the files from any available Recovery Point. Click on the "Browse" icon in the "Actions" column for this Recovery Point.

Agent	SQL Server 2008	Disk Safe	SQL Safe	Merge Selected	Lock Selected	Unlock Selected
<input type="checkbox"/>	<b>Id</b>	<b>Created On</b>	<b>State</b>	<b>Devices</b>		
<input type="checkbox"/>	1	Jan 12, 2011 4:45:02 PM	Available	2		

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### Tip

To find a Recovery Point, you can use the Basic and Advanced List Filters. See [Customizing the Recovery Points List](#).

3. The "Browse Recovery Point" window opens. Browse to locate the location of the SQL data and log files (.mdf and .ldf). See also: [Browsing Recovery Points](#).

Name	Size	Access Time	Modify Time
<input type="checkbox"/> Backup		Jan 12, 2011 11:52:59 AM	Jan 12, 2011 11:52:59 AM
<input type="checkbox"/> Binn		Jan 12, 2011 2:53:39 PM	Jan 12, 2011 2:53:39 PM
<input type="checkbox"/> DATA		Jan 12, 2011 4:40:07 PM	Jan 12, 2011 4:40:07 PM
<input type="checkbox"/> FTData		Jan 12, 2011 11:53:03 AM	Jan 12, 2011 11:53:03 AM
<input type="checkbox"/> Install		Jan 12, 2011 2:45:08 PM	Jan 12, 2011 2:45:08 PM
<input type="checkbox"/> JOBS		Jan 12, 2011 11:53:01 AM	Jan 12, 2011 11:53:01 AM
<input type="checkbox"/> Log		Jan 12, 2011 4:40:18 PM	Jan 12, 2011 4:40:18 PM
<input type="checkbox"/> repldata		Jan 12, 2011 11:53:02 AM	Jan 12, 2011 11:53:02 AM
<input type="checkbox"/> sql_engine_core_inst_keyfile.dll	13.3 KB	Jan 12, 2011 2:45:08 PM	Sep 17, 2010 9:57:46 AM
<input type="checkbox"/> sql_fulltext_keyfile.dll	13.3 KB	Jan 12, 2011 2:45:32 PM	Sep 17, 2010 9:57:46 AM
<input type="checkbox"/> Upgrade		Jan 12, 2011 2:45:13 PM	Jan 12, 2011 2:45:13 PM

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4. Check off the database .mdf data files and .ldf log files you want to restore.

Name	Size	Access Time	Modify Time
<input checked="" type="checkbox"/> AdventureWorksLT2008_Data.mdf	8.3 MB	Mar 15, 2009 10:31:16 AM	Jan 12, 2011 4:39:29 PM
<input checked="" type="checkbox"/> AdventureWorksLT2008_Log.ldf	2 MB	Mar 15, 2009 10:31:16 AM	Jan 12, 2011 4:39:29 PM
<input type="checkbox"/> master.mdf	4 MB	Jan 12, 2011 11:52:59 AM	Jan 12, 2011 4:39:29 PM
<input type="checkbox"/> mastlog.ldf	1 MB	Jan 12, 2011 11:52:59 AM	Jan 12, 2011 4:39:29 PM
<input type="checkbox"/> model.mdf	1.2 MB	Jan 12, 2011 11:52:59 AM	Jan 12, 2011 4:39:29 PM
<input type="checkbox"/> modellog.ldf	512 KB	Jan 12, 2011 11:52:59 AM	Jan 12, 2011 4:39:29 PM
<input type="checkbox"/> MS_AgentSigningCertificate.cer	517 bytes	Jan 12, 2011 2:54:38 PM	Jan 12, 2011 2:54:38 PM
<input type="checkbox"/> MSDBData.mdf	12.8 MB	Jan 12, 2011 11:53:00 AM	Jan 12, 2011 4:39:29 PM
<input type="checkbox"/> MSDBLog.ldf	5.6 MB	Jan 12, 2011 11:53:00 AM	Jan 12, 2011 4:39:29 PM
<input type="checkbox"/> ReportServer_log.LDF	6.1 MB	Jan 12, 2011 11:54:57 AM	Jan 12, 2011 4:39:29 PM
<input type="checkbox"/> ReportServer.mdf	3.2 MB	Jan 12, 2011 11:54:57 AM	Jan 12, 2011 4:39:29 PM
<input type="checkbox"/> tempdb.mdf	8 MB	Jan 12, 2011 11:54:44 AM	Jan 12, 2011 4:40:19 PM
<input type="checkbox"/> templog.ldf	768 KB	Jan 12, 2011 11:54:45 AM	Jan 12, 2011 4:44:02 PM

5. When you are finished selecting the files and directories, click the "Restore Selected" button.

Name	Size	Access Time	Modify Time
<input checked="" type="checkbox"/> AdventureWorksLT2008_Data.mdf	8.3 MB	Mar 15, 2009 10:31:16 AM	Jan 12, 2011 4:39:29 PM
<input checked="" type="checkbox"/> AdventureWorksLT2008_Log.ldf	2 MB	Mar 15, 2009 10:31:16 AM	Jan 12, 2011 4:39:29 PM

6. In the "Restore Files" window, define the restore options.

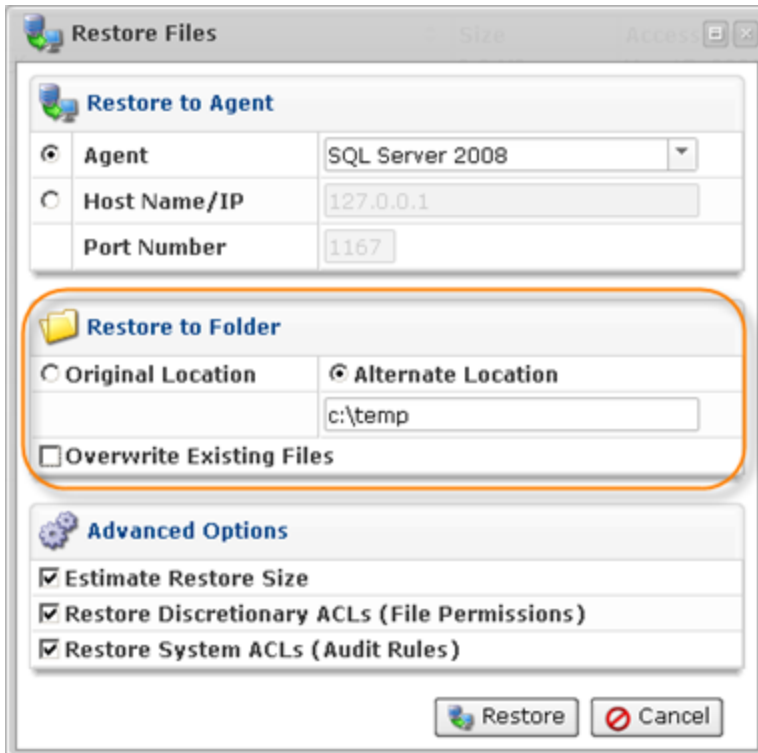
First, select an existing Agent to restore to or define a new Host name/IP and its port number.

The screenshot shows the "Restore Files" dialog box with the following configuration:

- Restore to Agent:**
  - Agent: SQL Server 2008
  - Host Name/IP: 127.0.0.1
  - Port Number: 1167
- Restore to Folder:**
  - Original Location
  - Alternate Location: c:\temp
  - Overwrite Existing Files
- Advanced Options:**
  - Estimate Restore Size
  - Restore Discretionary ACLs (File Permissions)
  - Restore System ACLs (Audit Rules)

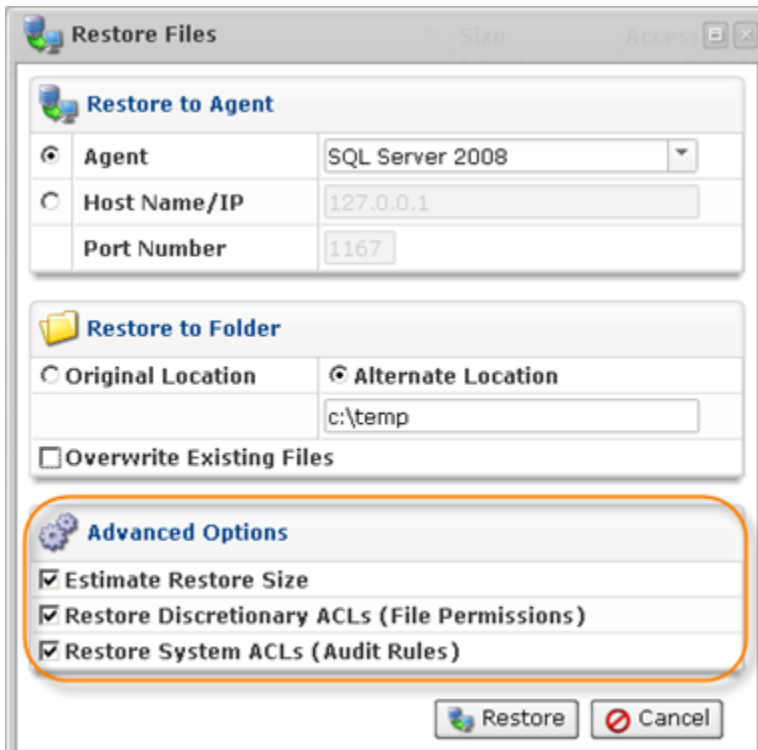
Buttons: Restore, Cancel

Second, if the database already exists and you want to restore the `.mdf` and `.ldf` files to an alternate location, check the option and specify the path where the files will be restored. Optionally, check the "Overwrite Existing Files" option.



Third, define the Advanced options if needed:

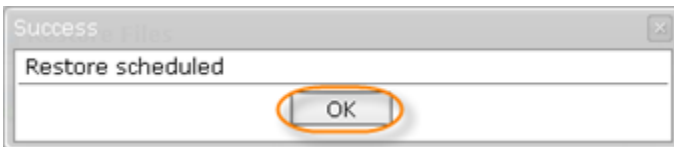
- Estimate Restore Size
- Restore Discretionary ACLs (File Permissions)
- Restore System ACLs (Audit Rules)



7. Click on "Restore."



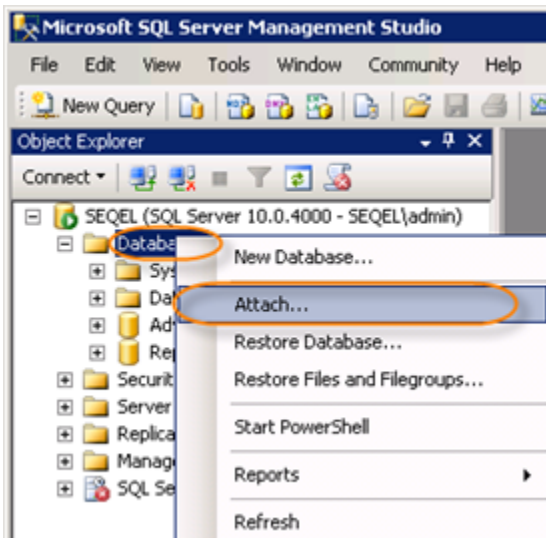
8. A notification window will inform you that the Restore task has been scheduled. This means the Task has started. The "Reporting" screen displays the progress of the Task. Click "OK" in the displayed window.



## Step 2: Attaching the Database Data and Log Files

Follow the instructions below to attach the database data and log file.

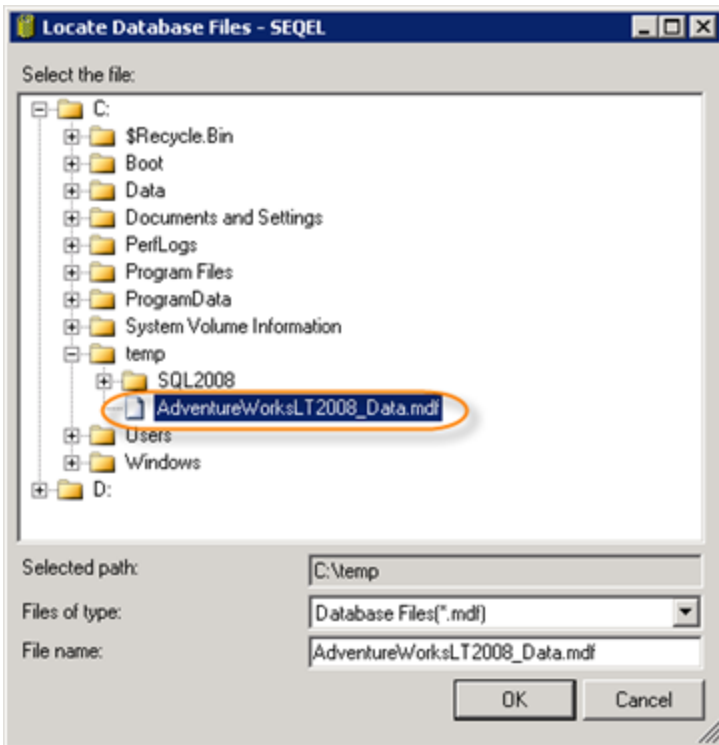
1. From the SQL Server Management Studio, right-click the "Databases" item and select the "Attach..." command in the menu.



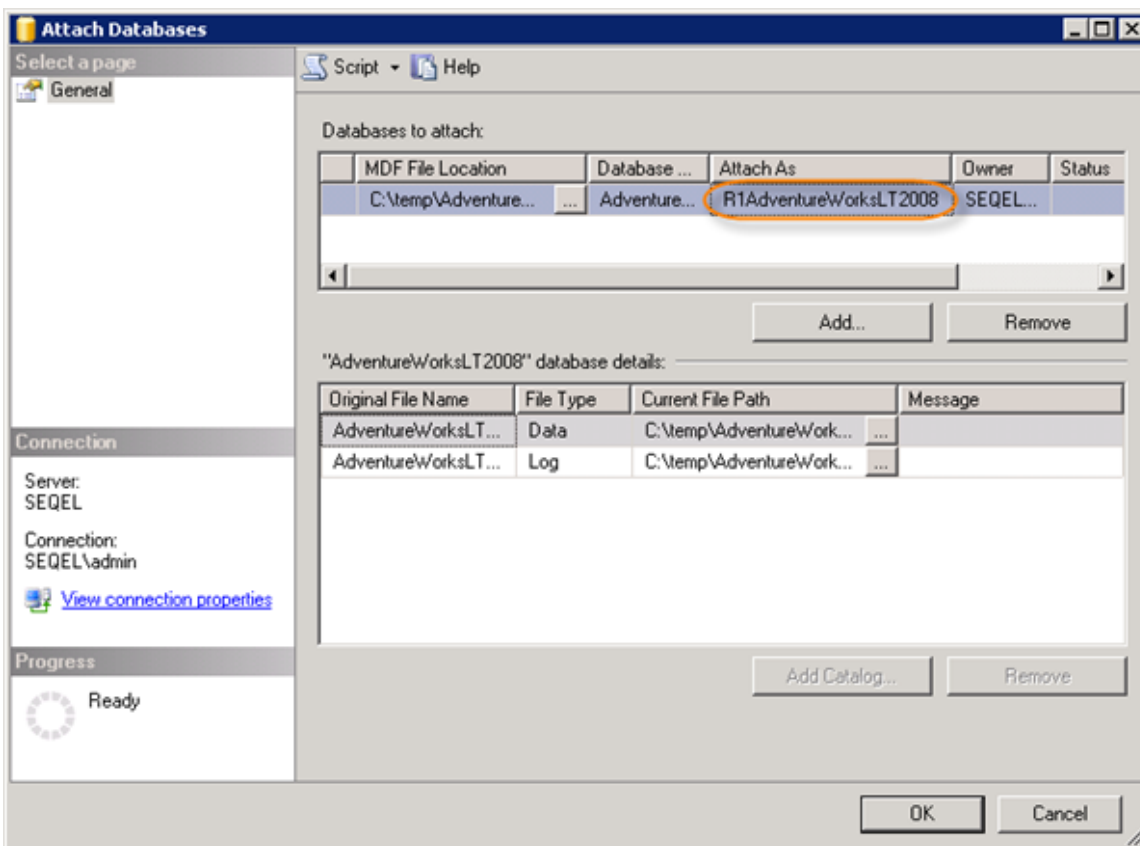
2. Browse to the restore location.

### Note

If you restored it to an alternate location, the path will include the new location as well as the old hierarchy of the file location.



3. In the "Attach As" column, change the database name if the original database is still online.



4. Click "OK." The database is now attached.

