

Upgrading to SQL Server 2008

Background

This note describes the benefits of changing to the latest SQL Server version when upgrading RDS Intranet. In addition, it provides directions on making the change depending on which of these is being done:

- New server plus new version of RDS Intranet.
- New version of RDS Intranet on present server.

Changing to Microsoft SQL Server 2008 accesses their latest SQL technology, especially indexing and query optimization. In addition, the new software provides a higher level of security. By staying current with service packs from Microsoft, proper operation with RDS Intranet is assured as it evolves along with Microsoft SQL.

The latest versions of RDS Intranet are shipping with SQL Server 2008, but RDS Intranet is still compatible with SQL Server 2000 and 2005.

Replacing Crystal Reports

RDS Intranet was modified to support Microsoft reports starting with SQL Server 2005. This eliminated the need for Crystal Reports, which has been in flux since the vendor was acquired by SAP. Versions after the acquisition did not address Reedholm needs.

While RDS Intranet currently supports reports in both Crystal and Microsoft formats, new reports created will only be provided in Microsoft format.

These links describe what's new in Microsoft SQL Server 2008:

- <http://www.microsoft.com/sqlserver/2008/en/us/overview.aspx>
- <http://www.microsoft.com/sqlserver/2008/en/us/standard.aspx>
- <http://www.microsoft.com/sqlserver/2008/en/us/workgroup.aspx>

SQL Editions Used by RDS Intranet

Reedholm hardware servers are set up with SQL Standard or Workgroup software. SQL Express isn't powerful enough and SQL Web doesn't provide complete reporting services. SQL Enterprise is too expensive at ~\$30k, but can be used if customer supplied.

Migrating to New Server Hardware

If new server hardware is used, the steps in this section are taken to transfer and upgrade the RDS Intranet database from an existing SQL 2000/2005 installation. If running SQL Server 2000, Enterprise Manager is used instead of Management Studio, which was introduced with SQL 2005:

Detaching Existing Database

After determining how to transfer the database files, e.g., through a corporate network, use of a portable hard drive, etc., the first major step is to detach the RDS Intranet database from the SQL Server.

- 1) All users are logged out.
- 2) Management Studio is connected to the instance and server with the RDS Intranet database.
- 3) Menu tree is expanded to the databases branch.
- 4) RIWEBSQL is highlighted and right-clicked.
- 5) Pop-up menu is used to navigate to Tasks→Detach database.
- 6) RIWEBSQL is verified as the database with update statistics checked before clicking OK.

Moving Database Files

Once the database is detached, the three files in the C:\ or D:\RIWEBSQL folder are copied to the new server C:\ or D:\RIWEBSQL folder.

Attaching Database to New Instance

On the new server, Management Studio is used on the new server to attach the database in the same way it was detached, with RIPRIME.MDF as the file "added".

Once a database is attached, it will automatically upgrade to the latest SQL version.

Updating Hidden User

The RDS Intranet hidden user must be removed from the RIWEBSQL database and added to all databases through Management Studio.

- 1) RIWEBSQL is expanded to Security→Users
- 2) RIhiduser is deleted.
- 3) Security→Logins is used to create new login.
- 4) RIhiduser is entered for the login name in the General page.
- 5) SQL Server Authentication is selected with password entered from RDS Intranet _private file DBCONFIG.XML.
- 6) Enforce Password is unchecked.
- 7) Master is selected as the default database.
- 8) User is set to System Administrator.
- 9) Permission for both Master and RIWEBSQL databases are granted with database roles of Public and DB_Owner.

All Other Users

All other RDS Intranet users (logins) must be deleted and re-created in the same fashion as the RDS Intranet hidden user was. Alternatively, the following Microsoft articles provide direction on creating SQL scripts for transferring users:

- <http://support.microsoft.com/kb/246133>
- <http://msdn.microsoft.com/en-us/library/ms187580.aspx#logins>

Database Maintenance Plan

The database maintenance plan needs to be re-created after RDS Intranet is installed. Instructions for this are in the RDS Intranet on-line help..

Upgrading SQL Server 2000/2005

This section has the steps for upgrading an existing installation of RDS Intranet from Microsoft SQL Server 2000/2005 to SQL 2008.

- 1) .Net Framework and Windows Installers, which are on the Microsoft SQL Server 2008 media, are updated.
- 2) Within the SQL Server Installation Center, “Upgrade from SQL Server 2000 or SQL Server 2005” is selected to begin the upgrade process.
- 3) Setup Support files are installed and used to confirm system configuration. Failures must be resolved before proceeding.
- 4) Instance of SQL Server that contains the RDS Intranet database is selected for upgrading.

- 5) Elements included in the prior SQL installation are selected in the feature list for upgrade.
- 6) Instance Configuration is kept at the default.
- 7) Service accounts are configured after the system passes the disk space requirements.
- 8) “Use the same account for all SQL Server Services” is clicked and NT AUTHORITY \ SYSTEM is selected.
- 9) Reporting Services is configured with Mixed Mode authentication:
 - User: sa
 - Password: sa1
- 10) The automated upgrade process proceeds after all system checks have passed.
- 11) After successful completion, the maintenance plans need to be verified. If the maintenance plans do not function, they are recreated using the RDS Intranet on-line help.
- 12) The upgraded SQL 2008 server must be registered because upgrades remove registry settings for previous SQL Server instances:
 - <http://msdn.microsoft.com/en-us/library/ms188717.aspx>

Once the upgrade to SQL 2008 is completed, some SQL Server 2000/2005 components might not be removed. Their presence won't affect performance, but can be removed with the Windows Add/Remove Programs tool.

Reporting Services

Reporting Services Configuration Manager is used to verify that the reporting services URLs conform to this scheme:

- Http://%servername%:8080/ReportServer
- Http://%servername%:80/ReportServer

On the Http://%servername%/Reports properties page, the role assignment of “Browser” is created for the Everyone Group. This is required for non- System Administrators to view reports.

RDS Intranet Upgrade

After the RDS Intranet database has been migrated or SQL Server has been updated, the latest version of RDS Intranet is installed. If a new hardware server was installed or if Microsoft Reports will be used, additional steps are taken as detailed in Reedholm RDS Intranet assembly instructions that can be supplied on request.