White Paper

DSS 5 – Required External Database Access Roles

Document Summary

✓ Describes the required permissions for user accounts given to DSS in order to accomplish required tasks in the database

Introduction

DSS 5.01 is able to use an external database instead of the default database that DSS installs at install time. An external database, in this context, means any database other than the default database whether or not it resides on a server other than the DSS server or on the DSS server itself. DSS 5 can use the following for external databases: SQL Server 2005, SQL Server 2008/2008R2, and SQL Server 2012.

Most of the documentation for configuring DSS to use an external database can be found in the DSS System Administrator's Guide (SAG) and in the online help. At this time those documents do not include a description of the roles required for user's specified to DSS during external database configuration - that information is being provided here. For other information regarding the configuration of external databases please see one of the documents referenced above. The intent is to include the information from this whitepaper in the SAG and online help the next time those documents are revised.

DSS Accounts in SQL Server

Shown below is a partial screenshot of the external database configuration UI.
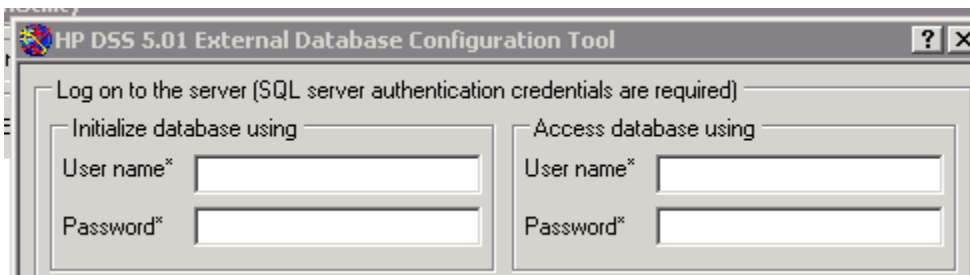

DSS requests two sets of credentials for use with external databases. (DSS uses two databases, both of which must exist in the same SQL Server instance). The same user credentials can be given to DSS for both the "Initialize database using" and "Access database using" users, as long as the user has the proper permissions for both roles.

The first credentials, for the "initialize database using" user, are used only to initialize the databases when DSS first works with them. These databases must already exist, but DSS will fill out the database tables, keys and other structures as DSS requires. These credentials are used only for database initialization and at no other time.

The credentials provided for "Access database using" are used for all other interactions between DSS and the database other than initialization.

User Account Authentication

The two user accounts must be configured for SQL Server authentication. This can be seen using SQL Server Management Studio. In the Security folder for the SQL Server instance open the Logins folder and right click on the user name being checked and choose properties. In the properties dialog the "SQL Server authentication" radio button should be selected, as shown below.
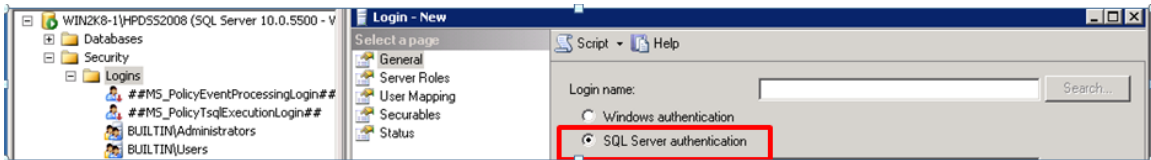
User Account Roles
SQL Server users have server wide roles and can also have database specific roles for databases within the SQL instance. The table below gives the required minimum roles for each of the users used by DSS.

User	Required Server Roles	Required Minimum Database Roles in the two DSS databases
Initialize Database using	public	db_owner
Access database using	public	db_datawriter, db_datareader

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