



MSSQL Server System Databases and System Databases Do's and Don'ts



Types Of databases

- **User Databases** : These databases are created by a User which have permissions to create a database and these databases can be dropped/alterd with out having an impact on MSSQL Server working.
- **System Databases** : System Databases are needed for your SQL Server to operate.
- These databases keeps meta data about MSSQL instance.
- Most of them get created during installation.
- If you lose a system database like master then your SQL server will not function correctly or may even stop working completely.
- These databases collectively maintain and manage lot of information about the SQL server system like logins , databases , linked servers , jobs , schedules , reports , report data sources etc.



MSSQL System Databases

- **Master** : Core system database to manage the SQL Server instance.
- **TempDB** : Temporary database to store temporary tables (#temptable), table variables, cursors, work tables, row versioning, create or rebuild indexes sorted in TempDB.
- **MSDB** : Primary database to manage the SQL Server Agent configurations.
- **Resource** : The Resource database is responsible for physically storing all of the SQL Server 2005 system objects.
- **Model** : Template database for all user defined databases.
- **Distribution** : Primary data to support SQL Server replication.



System databases Do's and Dont's

- **Data Access** - Based on the version of SQL Server query only the recommended objects.
- **Changing Objects** - Do not change system objects.
- **New Objects** - Creating objects in the system databases is not recommended.
- **Sneaking a Peak** - Up to this point, all of the T-SQL code for the tables, views, stored procedures, functions, etc. has been clear text.
- **Dropping Objects** - The most prominent reason to drop system objects are for specific types of lock downs and auditing in particular industries.
- **Backups** - Be sure to have a consistent backup process for your system databases.
- **Scope** - Each SQL Server instance (including the Express Edition) has its own set of SQL Server system databases.