Model Database

The model database is used as the template for all databases created on an instance of SQL Server. Because tempdb is created every time SQL Server is started, the model database must always exist on a SQL Server system. The entire contents of the model database, including database options, are copied to the new database. Some of the settings of model are also used for creating a new tempdb during start up, so the model database must always exist on a SQL Server system.

When a CREATE DATABASE statement is issued, the first part of the database is created by copying in the contents of the model database

If you modify the model database, all databases created afterward will inherit those changes. For example, you could set permissions or database options, or add objects such as tables, functions, or stored procedures. File properties of the model database are an exception and are ignored except the initial size of the data file. The default initial size of the model database data and log file is 8 MB.

Key Point

1. Model database is a template for all database,
2. All default databases will be created as per as the model database,
3. if you made any change in model database, this change will affect for future database when you create.
4. When you run create database command, all of the content copying from model database,
5. The default initial size of the model database data and log file is 8 MB.

Physical Properties of model

The following table lists initial configuration values of the **model** data and log files.

File	Logical name	Physical name	File growth
Primary data	modeldev	model.mdf	Autogrow by 64 MB until the disk is full.
Log	modellog	modellog.ldf	Autogrow by 64 MB to a maximum of 2 terabytes.

Restrictions

The following operations cannot be performed on the **model** database:

- Adding files or filegroups.
- Changing collation. The default collation is the server collation.
- Changing the database owner. model is owned by sa.
- Dropping the database.
- Dropping the guest user from the database.
- Enabling change data capture.
- Participating in database mirroring.
- Removing the primary filegroup, primary data file, or log file.
- Renaming the database or primary filegroup.
- Setting the database to OFFLINE.
- Setting the primary filegroup to READ_ONLY.
- Creating procedures, views, or triggers using the WITH ENCRYPTION option. The encryption key is tied to the database in which the object is created. Encrypted objects created in the model database can only be used in model.