



MS SQL Server Database Installation and Technical Notes

Introduction

The purpose of this document is to provide a technical reference for the installation and maintenance of CAPIX databases using Microsoft SQL Server. The intended audience is technical staff responsible for the administration of corporate networks and databases. Experience with SQL Server operation is assumed.

MS SQL Server has proven to be a popular, convenient and high-performance database platform.

CAPIX is not responsible for supplying or supporting Microsoft SQL Server software.

Planning

The transactional and processing load of the CAPIX MS SQL Server database is not great. In most situations there is no need for a dedicated SQL Server machine for the CAPIX database. The CAPIX database is designed to co-habitat with other SQL Server databases.

The CAPIX SQL Server has been tested with a simulation of 500 con-current users. If there is a likelihood of having more than 100 concurrent users on a regular basis, then a dedicated server machine for the CAPIX database should be considered.

When installing the CAPIX SQL Server database initially we recommend allocating 500 Megabytes of storage for the database file (.MDF) and 100 Megabytes of storage for the transaction log file (.LDF).

Once the basic installation and configuration has been completed around 100 Megabytes of initial storage will be used for static data.

On average, the CAPIX database stores around 500 transactions per Megabyte of storage. Ongoing storage requirements can be gauged on this basis and estimating transaction volumes.

The CAPIX SQL Server database is designed to integrate with existing corporate network infrastructures. When installing the CAPIX database it should be included in the standard SQL Server database *Maintenance Plans*.

It is the responsibility of clients to ensure that standard backups and maintenance (including updating statistics and truncating log files) of the CAPIX database are performed on a regular basis.

Requirements

The CAPIX database is currently designed to work with Microsoft SQL Server 2000. SQL Server Version 7 is no longer supported. It is envisaged the SQL Server 2005 will be formally supported by CAPIX in 2005, although CAPIX envisages that it will take a couple of years for the 2005 product to become widespread.

It is strongly recommended that all of the current MS SQL Server Service Packs from Microsoft are installed. At present there are three SQL Server Service Packs available. Service Pack 3 is particularly important as it contains important updates to address security issues.

Installation

The following steps outline how to install a new CAPIX database in an SQL Server environment.

1) Download the template database from the CAPIX website (it can also be mailed on CD-ROM). This file is called *CAPIX_SQL_Svr_DB.zip* and is less than 10 Megabytes in size. Inside this ZIP archive are the two files:

- CAPIX.MDF – the actual MS SQL Server database file, shrunk to minimum size.
- CAPIX.LDF – the MS SQL Server transaction log file, shrunk to minimum size.

2) Extract (copy) these files for the template CAPIX SQL Server database (CAPIX.MDF) to the standard MS SQL Server data folder, typically:

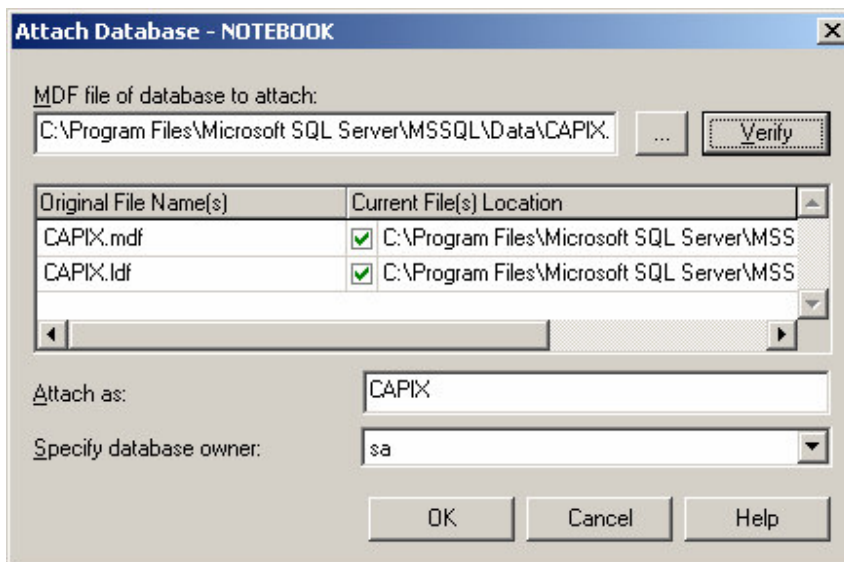
"C:\Program Files\Microsoft SQL Server\MSSQL\Data"

3) Start the Microsoft "SQL Server Enterprise Manager" program, select the target database server for the installation and expand the "Databases" folder.

Right-click on the "Databases" folder, select "All Tasks", then "Attach Database..."

Press the Browse ("...") button and select the CAPIX database from the folder/file list. This database file will have a .MDF extension.

Press the "Verify" button to verify that the database file is intact.



Once this is done, press the "OK" button to attach the CAPIX MS SQL Server database to the selected server.

The message "Attaching database has completed successfully" should appear when this is done.

4) The "CAPIX" database should now be visible in the Databases folder.

The CAPIX MS SQL Server database installation is now complete.

Networking and Inter-Process Communications

There are two common methods to connect to a SQL Server database.

- **Named-Pipes.** Use this method if the software accessing the database is on the same machine (server CPU) as the physical database. Eg. From IIS to SQL Server where both are on one CPU.
- **TCP/IP.** Use this method where the database and CAPIX software are on separate machines (CPUs). Eg. In Client-Server mode over a LAN.