

# Perform Test Database Upgrade Before Installing SCCM

This document covers the steps to perform test database upgrade before installing SCCM. Most of the time we skip doing test database upgrade and install in-console update directly. I haven't come across any issue when i did that. However performing test database upgrade is not [mandatory](#). But i recommend you to do it because you never know who would have modified or made some customizations to the existing DB.

## Perform Test Database Upgrade Before Installing SCCM

Now that you understand why one needs to perform test database upgrade, we look at the steps to do it. I will break down the whole process into steps so that it is much easier to follow.

### Step 1 – Prepare your environment for Test Database Upgrade

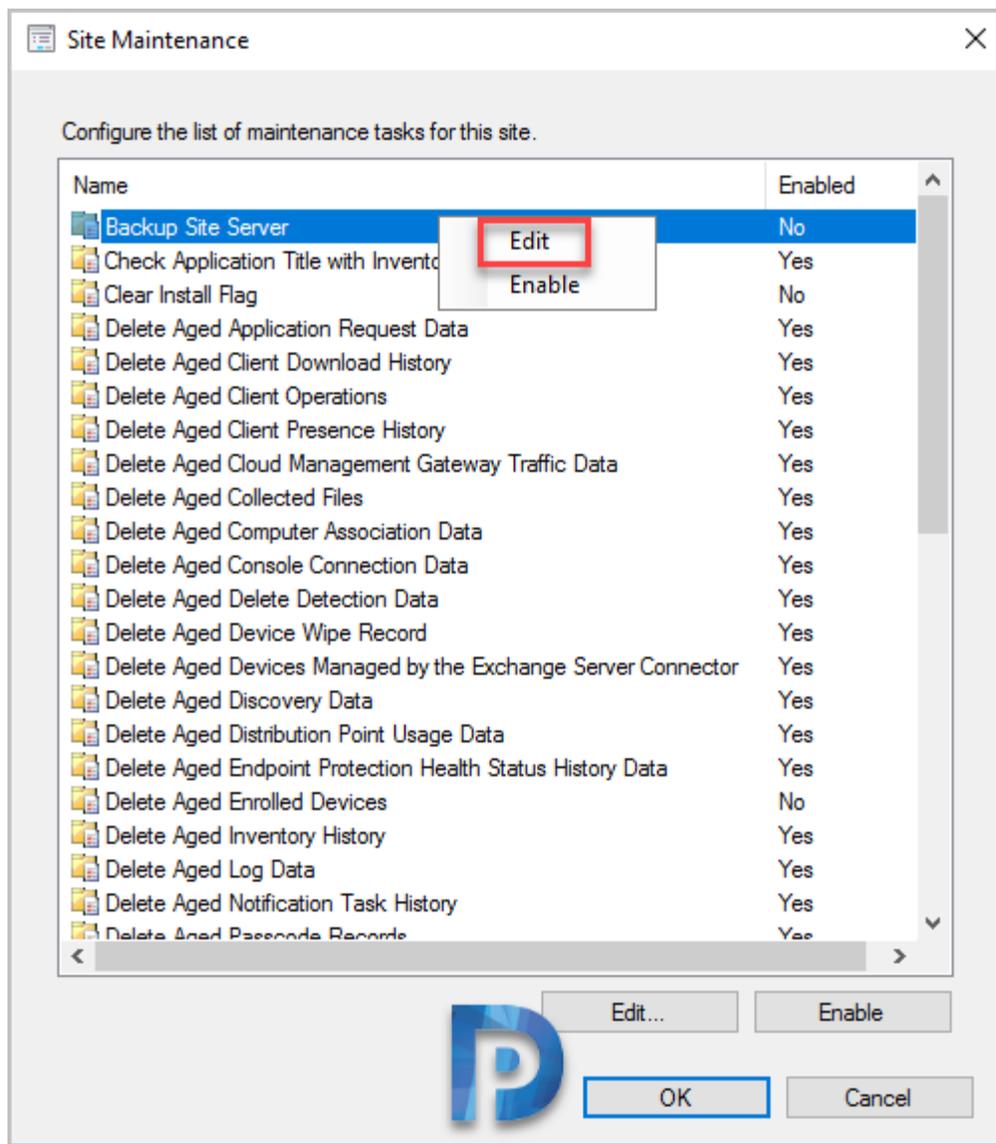
First of all you need a VM (member server) on which we will perform test database upgrade. Create a VM, install the server operating system and join it to the domain. In the next step install SQL server (follow this [guide](#)). The SQL version must run the same edition and version of your production SQL. Once you install SQL server, proceed to step 2.

### Step 2 – Backup your Database

In of my previous post, I showed the steps to backup SCCM server. To backup site server, we use the built-in maintenance task “**Backup Site Server**“. If you have not enabled this task before, you can follow this [post](#). I will cover some steps that will help you backup the SCCM database.

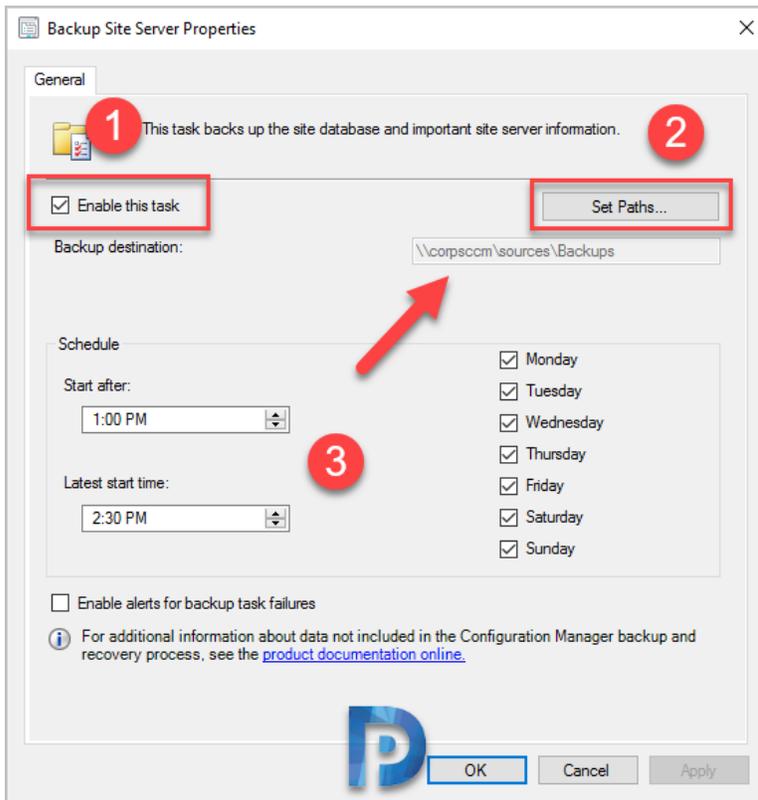
To backup your database, follow the below steps :-

1. Launch Configuration Manager console.
2. Navigate to Administration > Site Configuration > Sites.
3. Click Site Maintenance on top ribbon.
4. Right click **Backup Site Server** and click **Edit**.

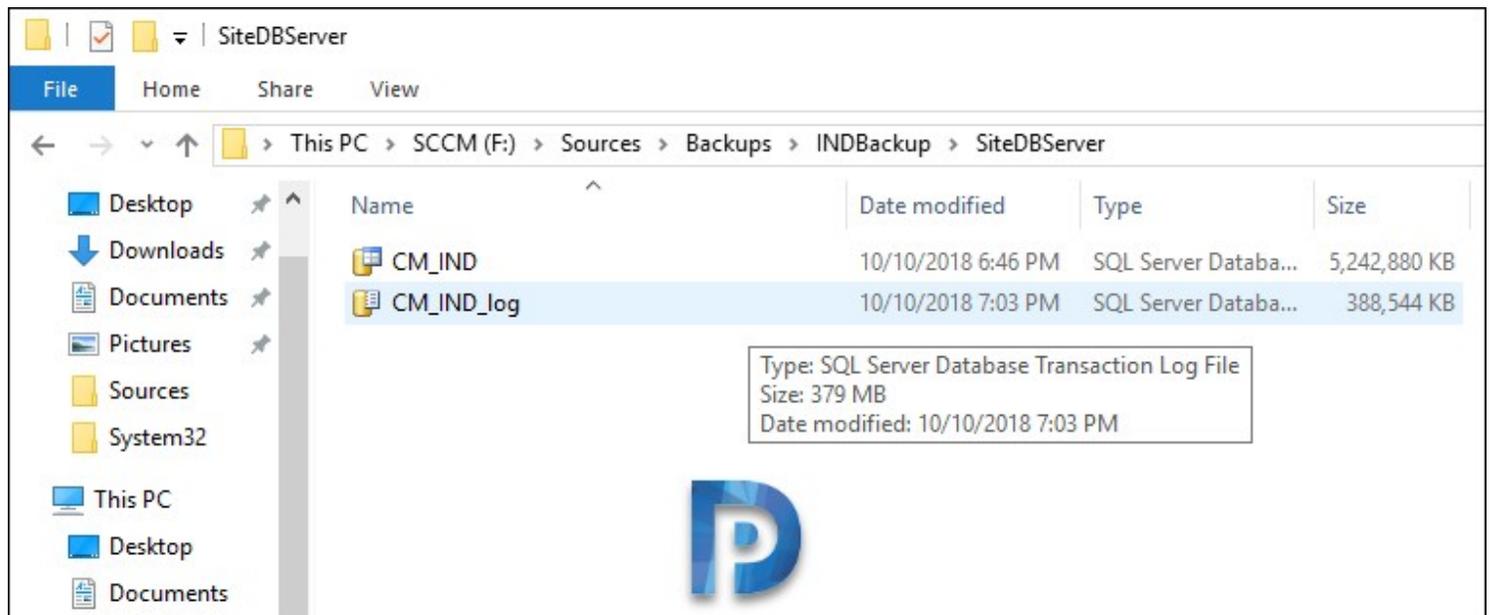


Under Backup Site Server Properties, perform the below steps.

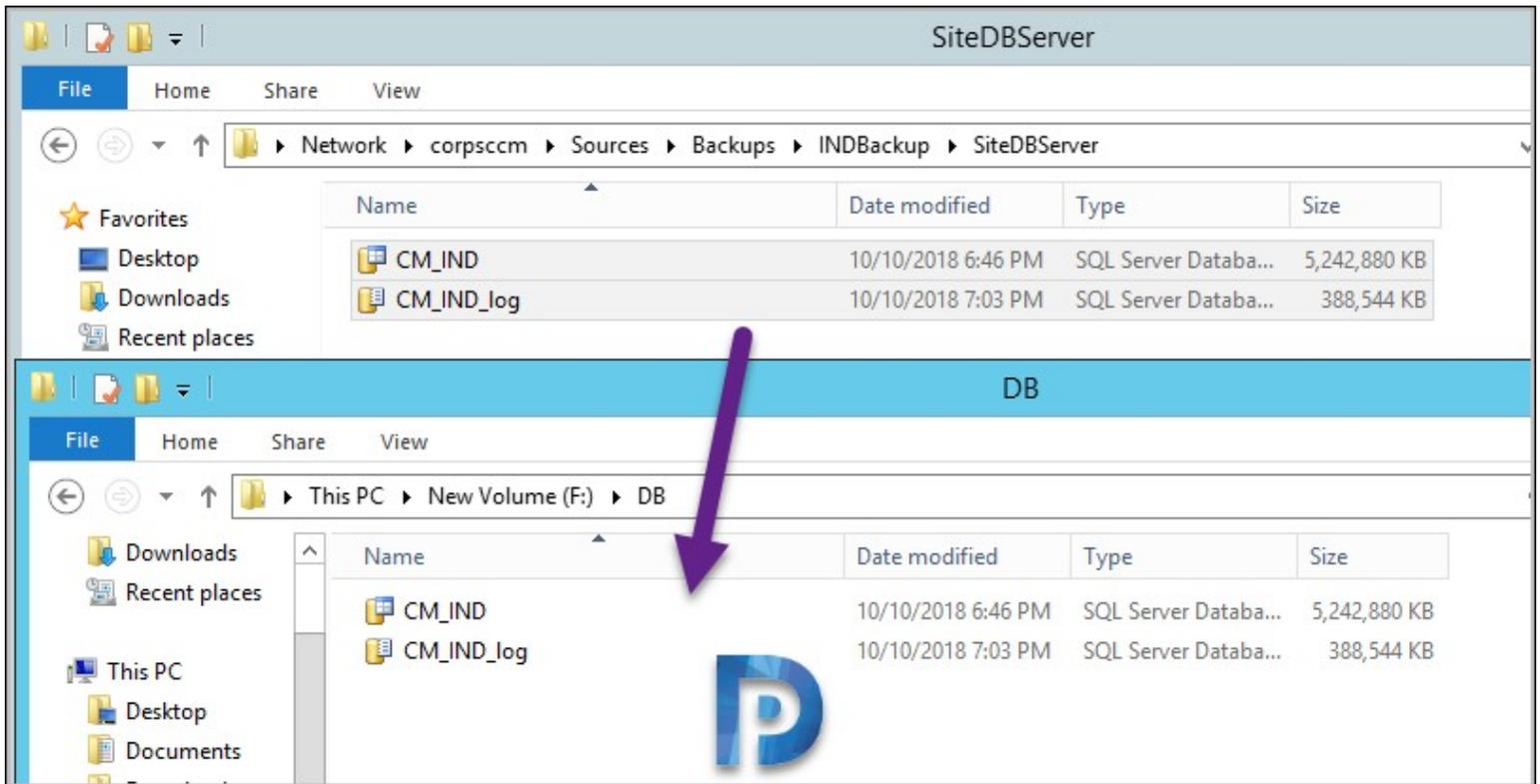
- Check box Enable this task.
- Click Set Paths and choose the backup destination.
- Configure the backup schedule by setting Start after and latest start time schedule.
- Click OK and close backup site server properties window.



The backup task runs as per the schedule. If the backup task is already enabled, go to the backup location. Within SiteDBServer folder, we need those two files to be copied to new VM.

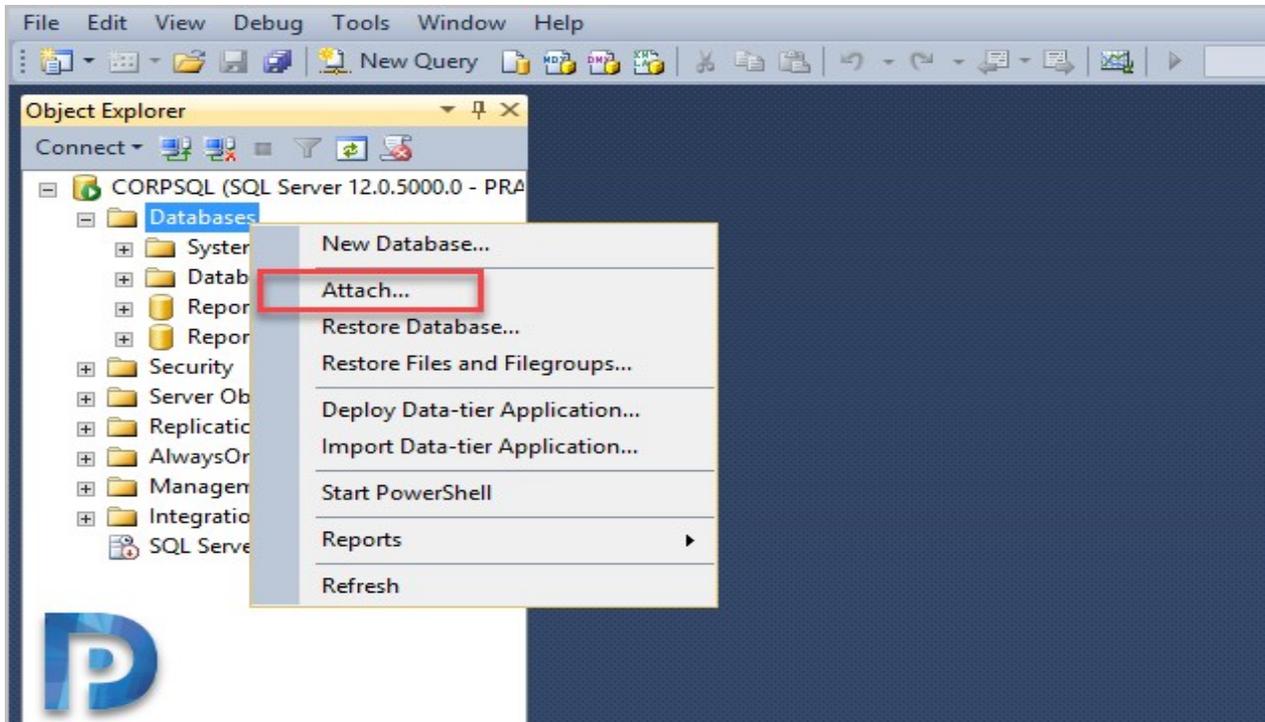


Copy both .MDF and .LDF files to the SQL server where we will perform test database upgrade.

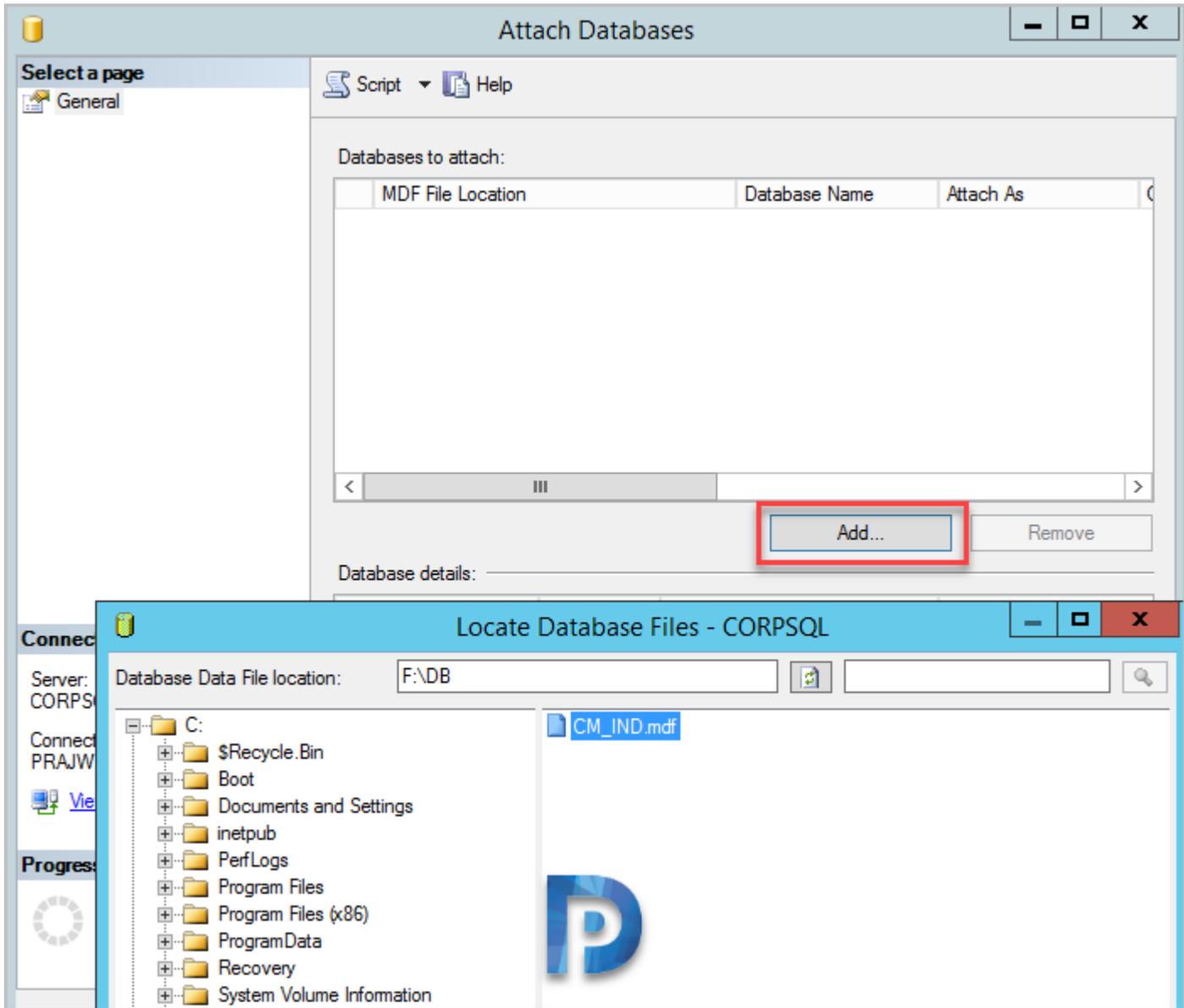


### Step 3 – Attach Database Copy

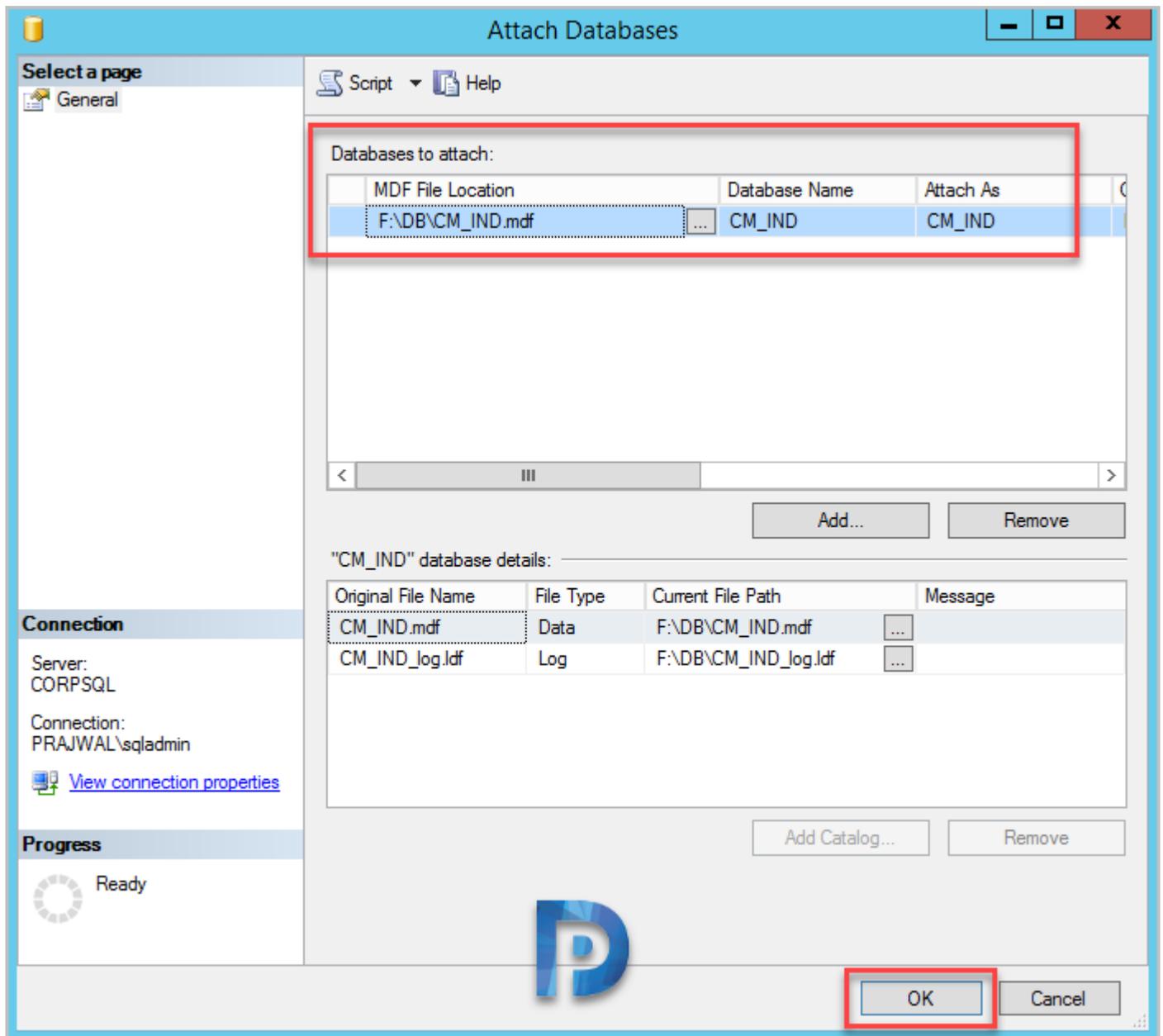
Now that we have got the backup files, login to the SQL server. Right click **Databases** and click **Attach**.



In Attach Databases window, click **Add** button. In the next step locate the database file. Select the .MDF file.

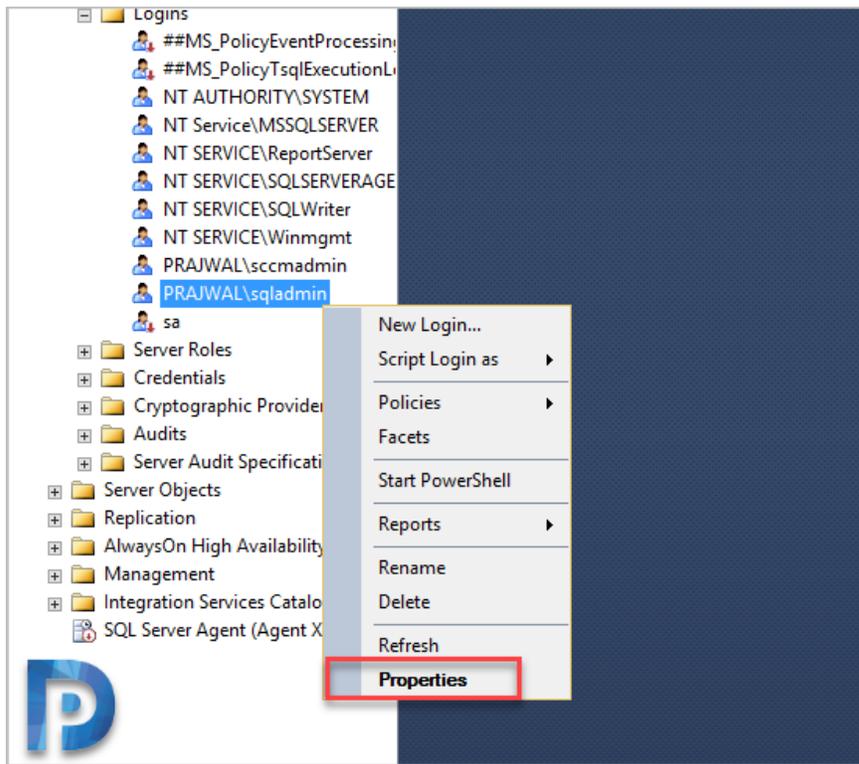


The Attach Databases window now shows the MDF file and its location. In the bottom pane, it also shows .MDF and .LDF files along with file path. Click **OK** and close the window.

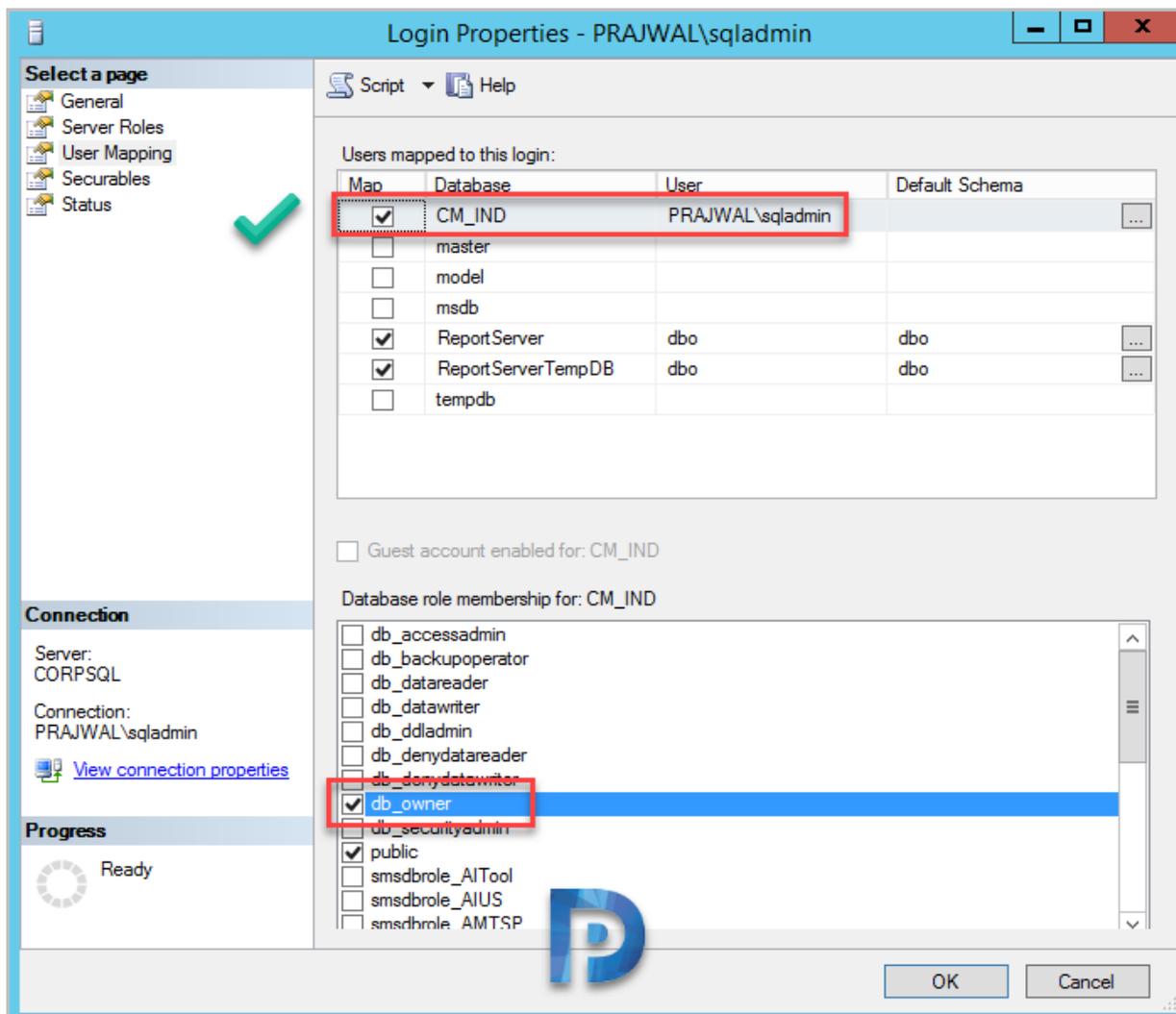


## Step 4 – Take DB Ownership

In this step we will take the DB ownership. Currently I am logged to this SQL server with an user account named sqldmin. Expand Security > logins and right-click the logged in user account and click **Properties**.

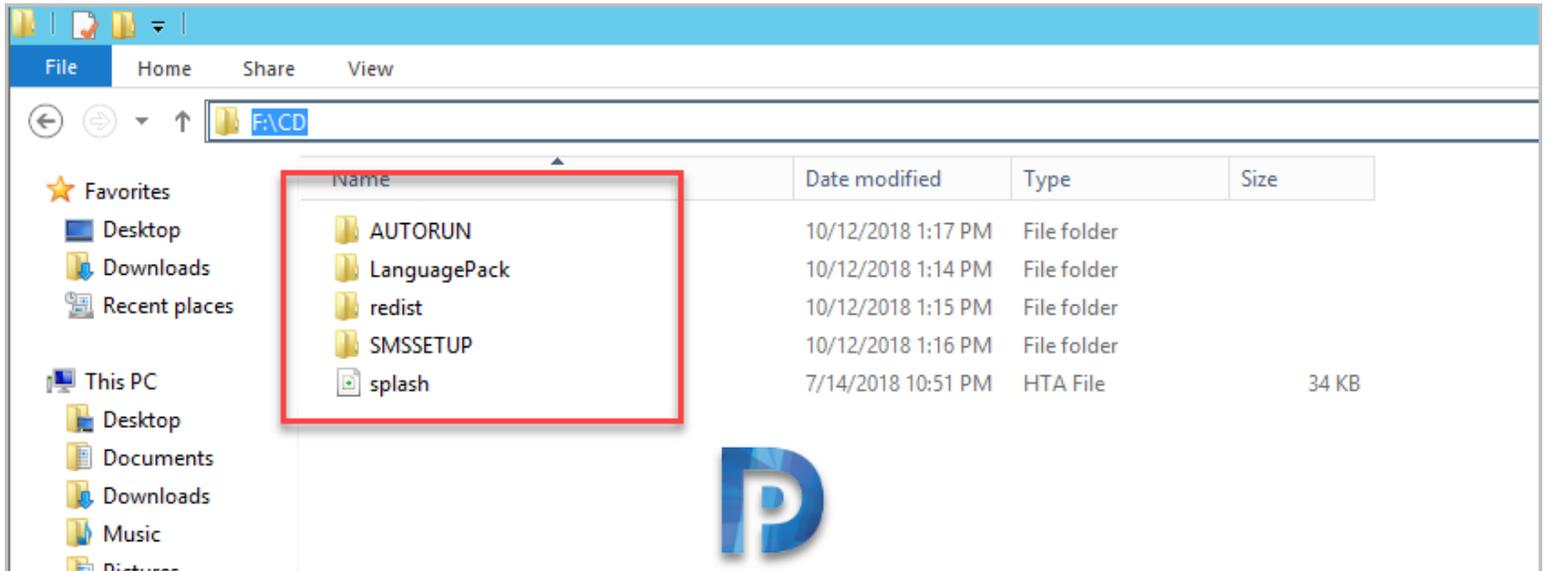


Click User Mapping and select the database that you attached. In the bottom pane, select db\_owner role membership.



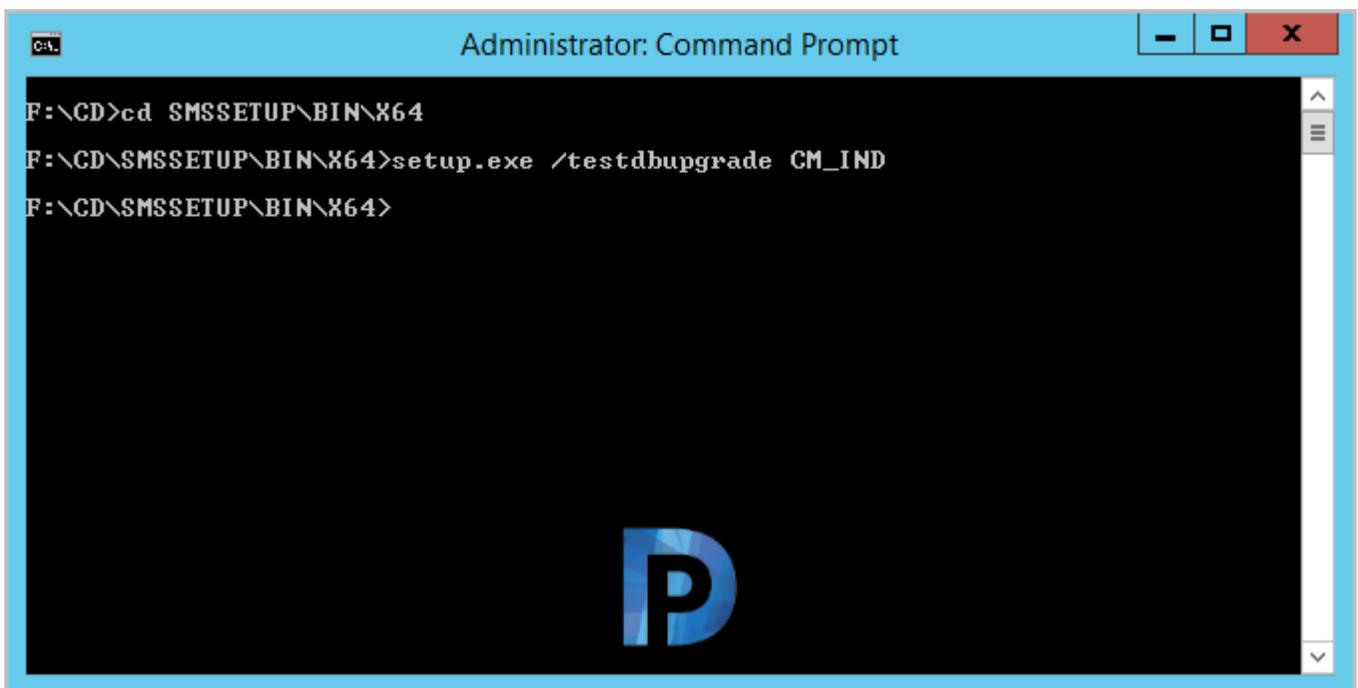
## Step 4 – Perform Test Database Upgrade

We are now good to perform test database upgrade. On your SQL server, mount SCCM ISO.

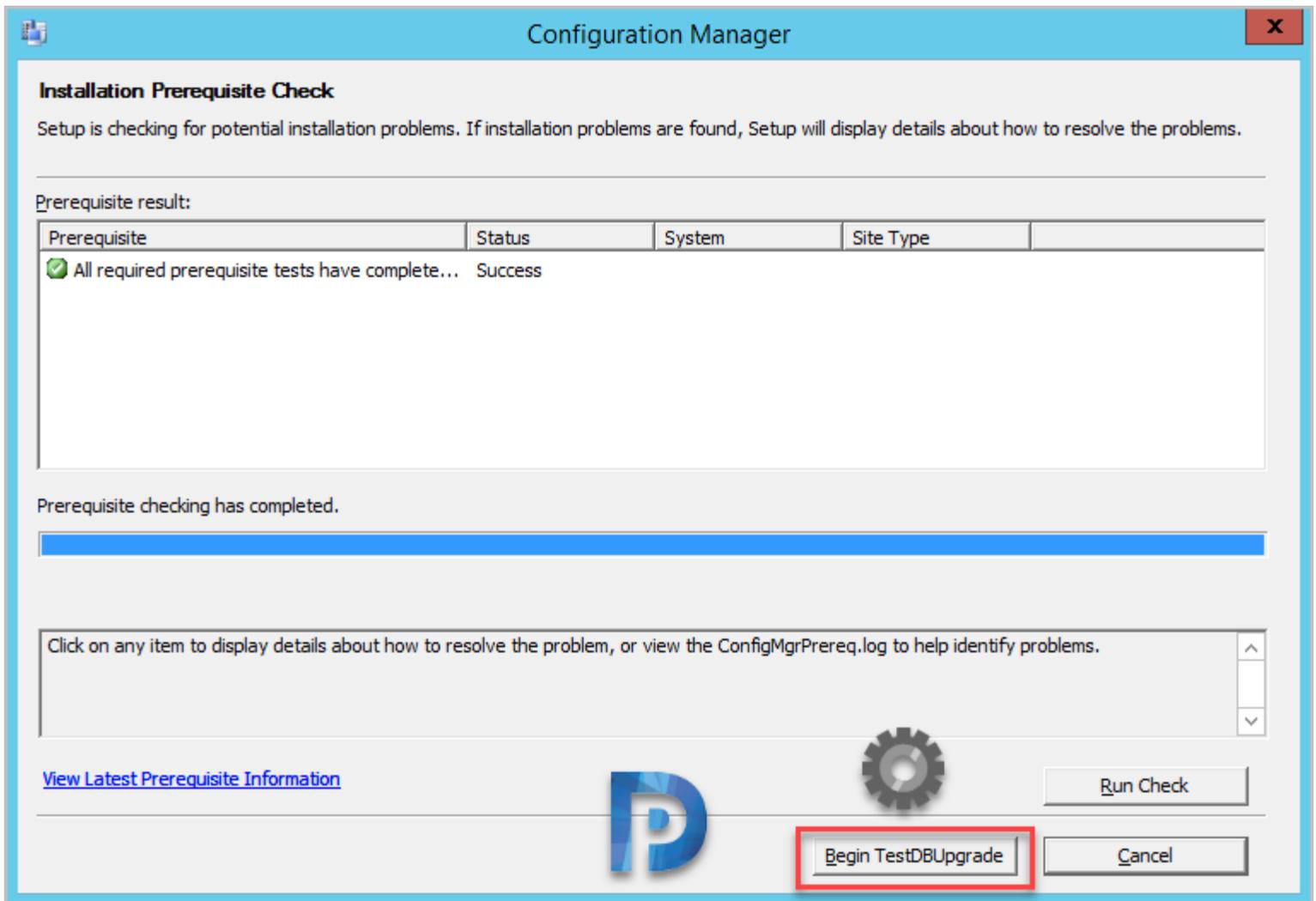


Run the command prompt as administrator. In addition, change the path to SMSSETUP\BIN\x64. Type the below command to perform test SCCM database upgrade.

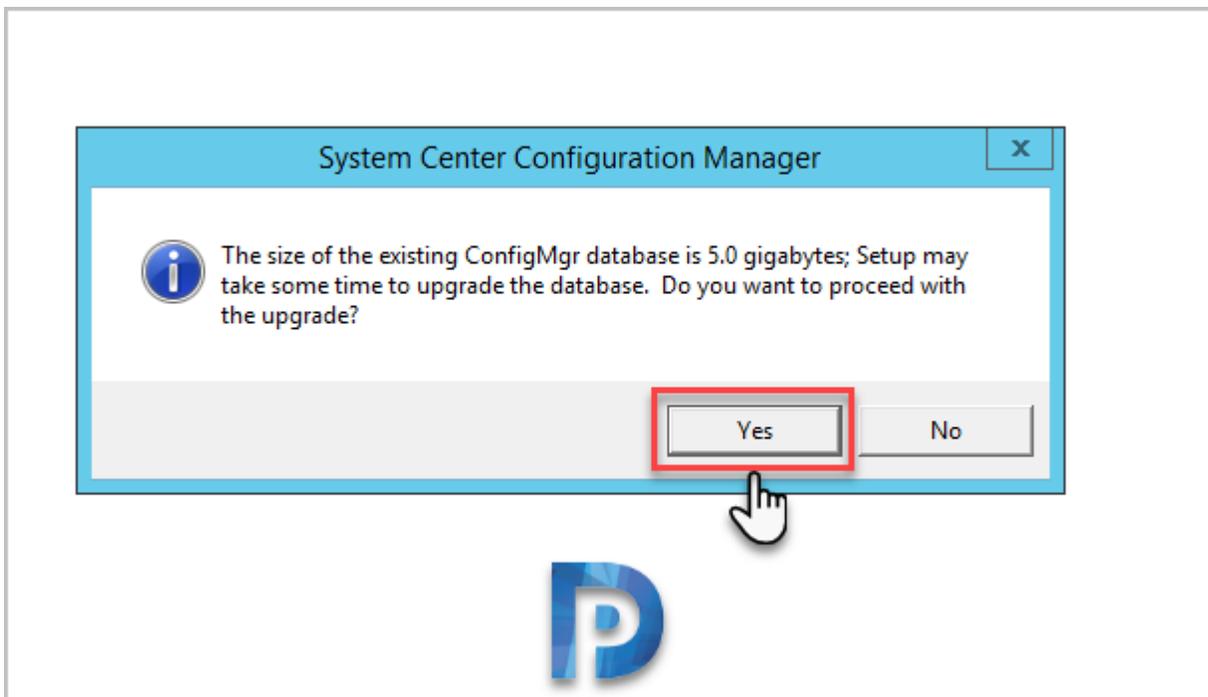
```
setup.exe /testdbupgrade database_name
```



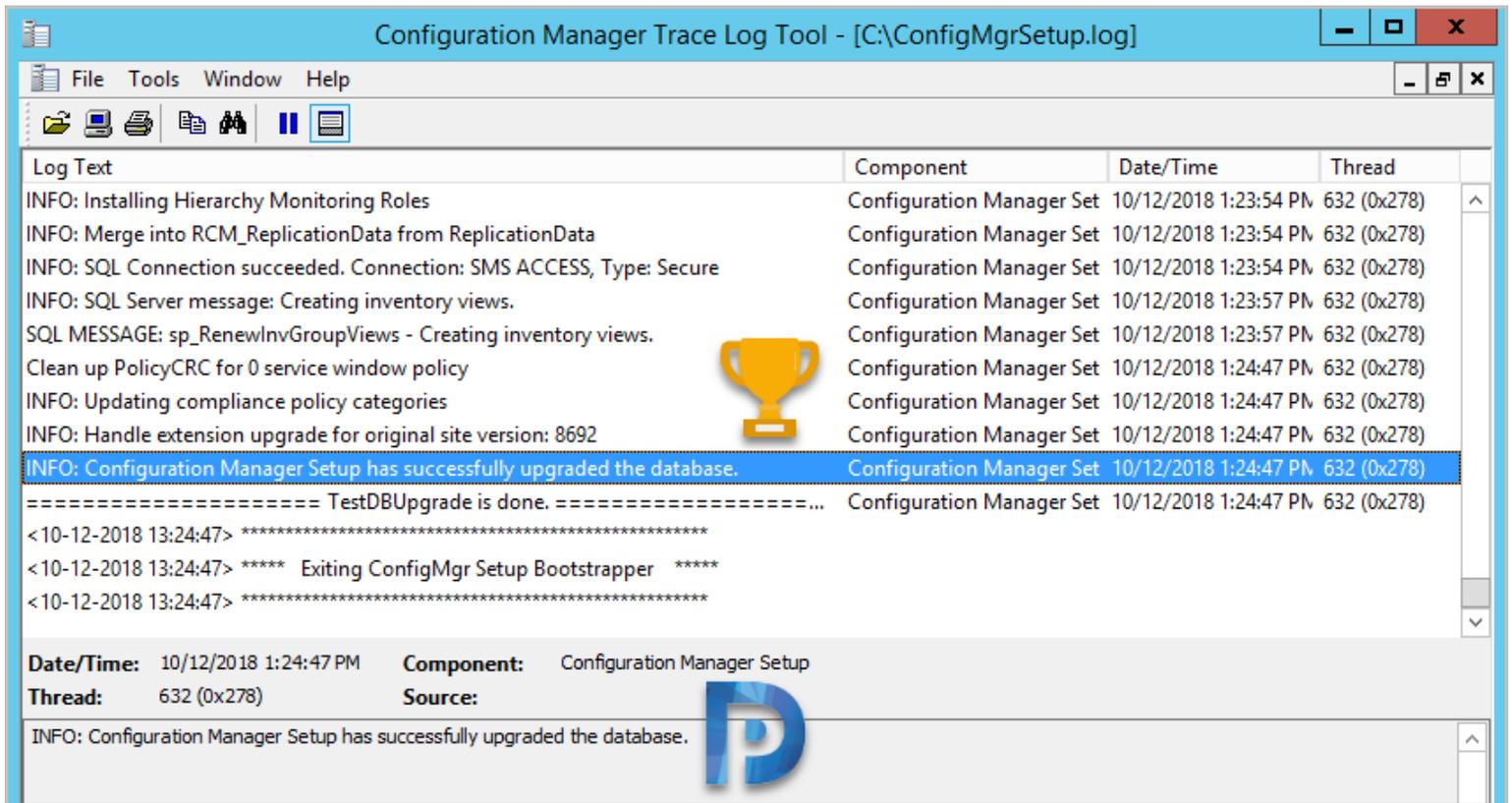
First the prerequisite checks are done. Click **Begin TestDBUpgrade** button.



On the info window, click **Yes**.



Open the ConfigMgrSetup.log file located on C: drive to monitor the testdbupgrade progress. At the end look for the line “**Configuration Manager Setup has successfully upgraded the database**“. You can now return to your active site and begin the update installation.



The screenshot shows the Configuration Manager Trace Log Tool window. The title bar reads "Configuration Manager Trace Log Tool - [C:\ConfigMgrSetup.log]". The window has a menu bar with "File", "Tools", "Window", and "Help". Below the menu bar is a toolbar with icons for file operations and execution. The main area is a table with columns: "Log Text", "Component", "Date/Time", and "Thread". The table contains several log entries, with the following entry highlighted in blue:

Log Text	Component	Date/Time	Thread
INFO: Installing Hierarchy Monitoring Roles	Configuration Manager Set	10/12/2018 1:23:54 PM	632 (0x278)
INFO: Merge into RCM_ReplicationData from ReplicationData	Configuration Manager Set	10/12/2018 1:23:54 PM	632 (0x278)
INFO: SQL Connection succeeded. Connection: SMS ACCESS, Type: Secure	Configuration Manager Set	10/12/2018 1:23:54 PM	632 (0x278)
INFO: SQL Server message: Creating inventory views.	Configuration Manager Set	10/12/2018 1:23:57 PM	632 (0x278)
SQL MESSAGE: sp_RenewInvGroupViews - Creating inventory views.	Configuration Manager Set	10/12/2018 1:23:57 PM	632 (0x278)
Clean up PolicyCRC for 0 service window policy	Configuration Manager Set	10/12/2018 1:24:47 PM	632 (0x278)
INFO: Updating compliance policy categories	Configuration Manager Set	10/12/2018 1:24:47 PM	632 (0x278)
INFO: Handle extension upgrade for original site version: 8692	Configuration Manager Set	10/12/2018 1:24:47 PM	632 (0x278)
<b>INFO: Configuration Manager Setup has successfully upgraded the database.</b>	Configuration Manager Set	10/12/2018 1:24:47 PM	632 (0x278)
===== TestDBUpgrade is done. =====	Configuration Manager Set	10/12/2018 1:24:47 PM	632 (0x278)
<10-12-2018 13:24:47> *****			
<10-12-2018 13:24:47> ***** Exiting ConfigMgr Setup Bootstrapper *****			
<10-12-2018 13:24:47> *****			

Below the table, there is a summary section with the following details:

**Date/Time:** 10/12/2018 1:24:47 PM    **Component:** Configuration Manager Setup  
**Thread:** 632 (0x278)    **Source:**

The source is represented by a large blue letter 'P' logo. The log entry "INFO: Configuration Manager Setup has successfully upgraded the database." is also visible in the bottom status bar area.