

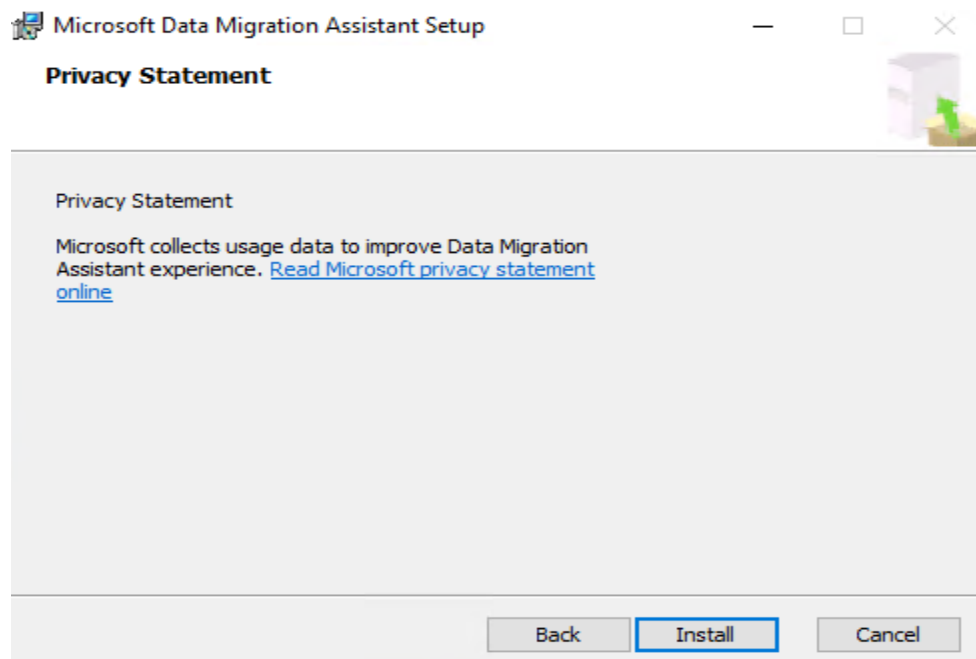
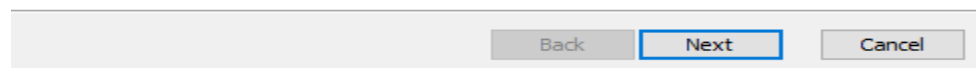
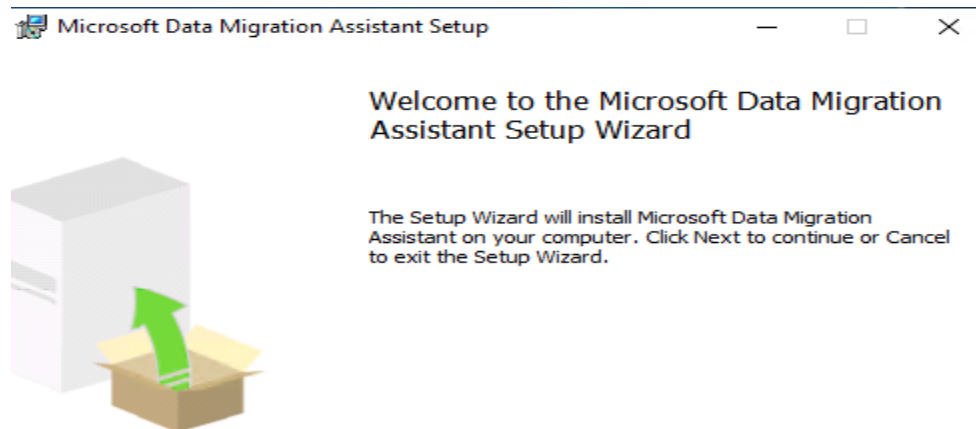
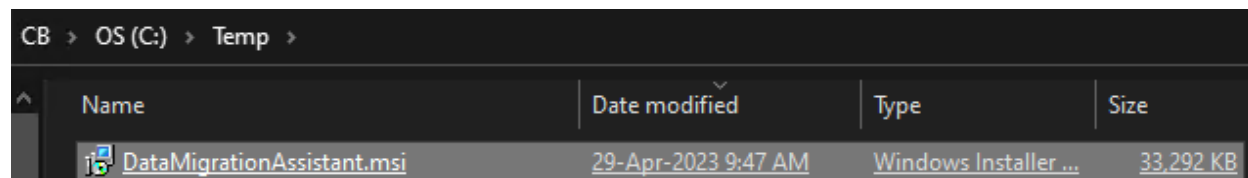
Upgrade SQL Server 2019 to SQL Server 2022

In this post, I am going to upgrade sql 2019 to 2022 for Configuration Manager 2303. Please read through this document from Microsoft for Pre Req and other details.

<https://learn.microsoft.com/en-us/sql/database-engine/install-windows/supported-version-and-edition-upgrades-2022?view=sql-server-ver16>

You can download Data Migration Assistant tool to check, if the server is ready for upgrade. Also don't forget to backup the database for safety.

<https://www.microsoft.com/en-us/download/details.aspx?id=53595>



Completed the Microsoft Data Migration Assistant Setup Wizard

Click the Finish button to exit the Setup Wizard.



Launch Microsoft Data Migration Assistant

Back

Finish

Cancel



Get started here

+ New
Use + to create a new project.

Welcome to Data Migration Assistant
Version: 5.7.5715.1



Did you know:


Azure Migrate can now discover and assess your SQL Server data estate running on VMware? Check for Azure SQL readiness, get recommendations, deployment types, and monthly cost estimates. Learn more: <https://aka.ms/dma-azmigrate-sql-migration>

Azure Data Studio offers an enhanced experience for assessing and migrating SQL Server databases to Azure SQL Managed Instance or SQL Server on Azure Virtual Machine? Learn more: <https://aka.ms/dma-ads-sql-migration>

Create New Project to perform the assessment

New

Project type

Assessment 

Migration

Project name

CBDB

Assessment type

Database Engine

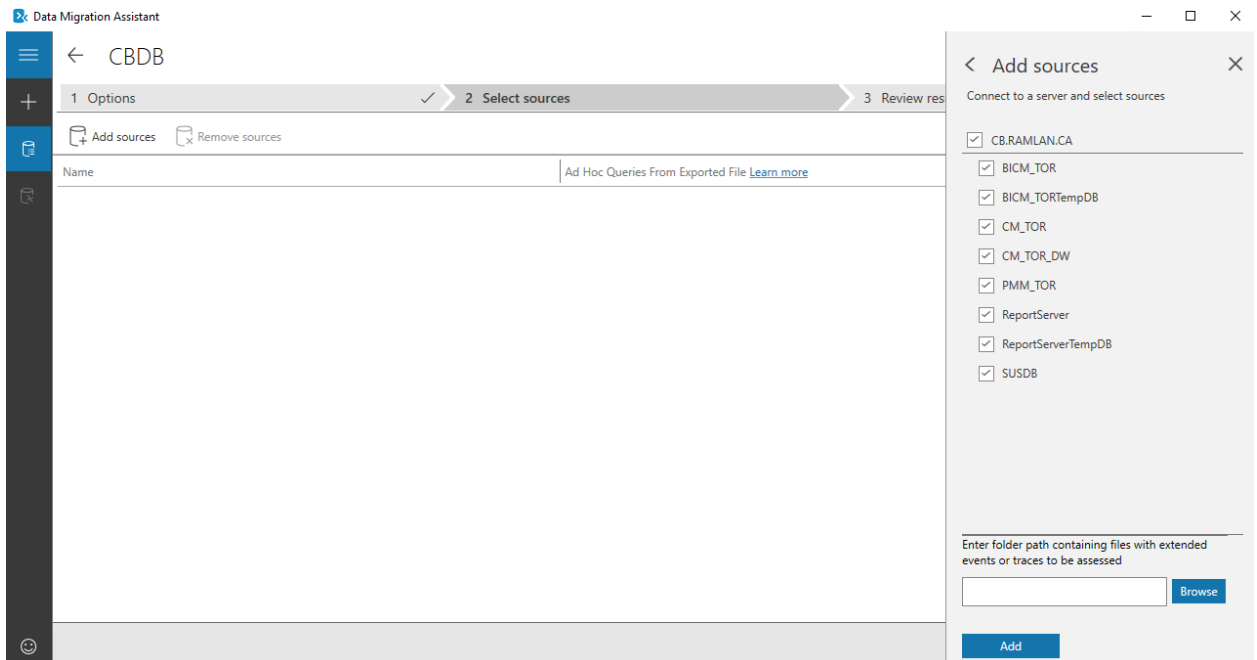
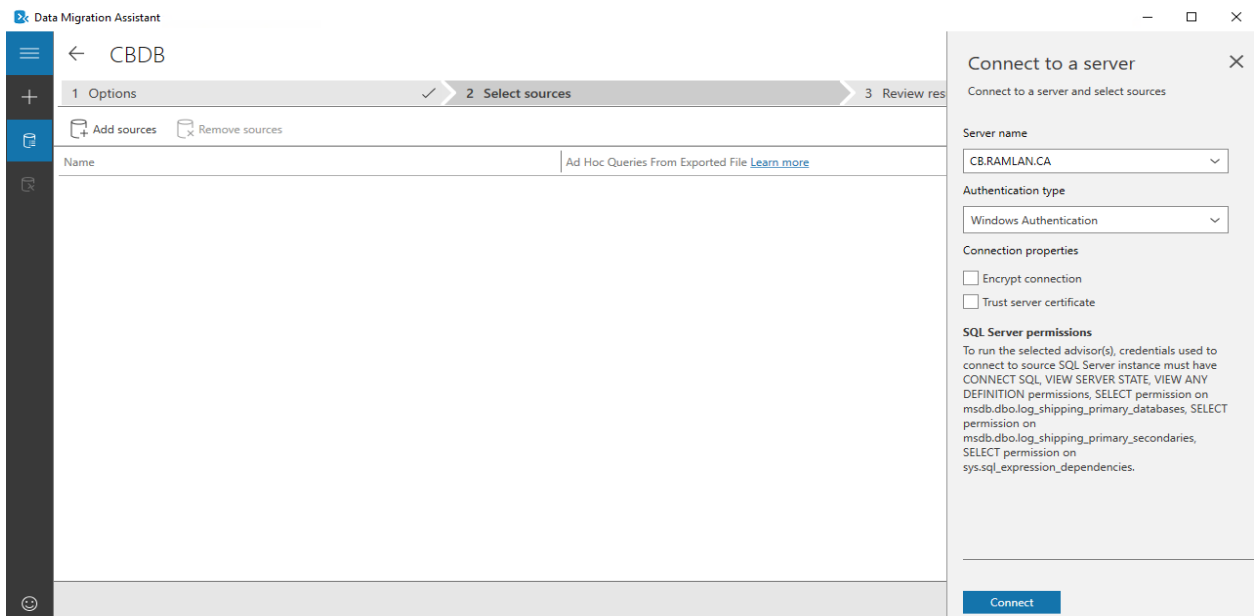
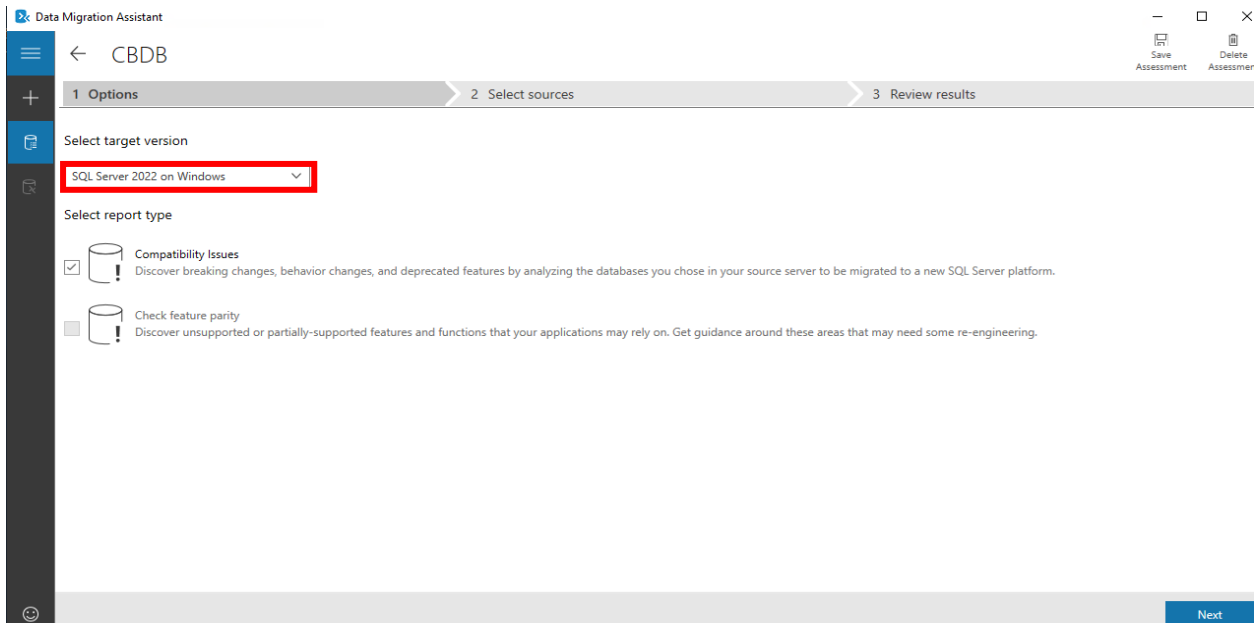
Source server type

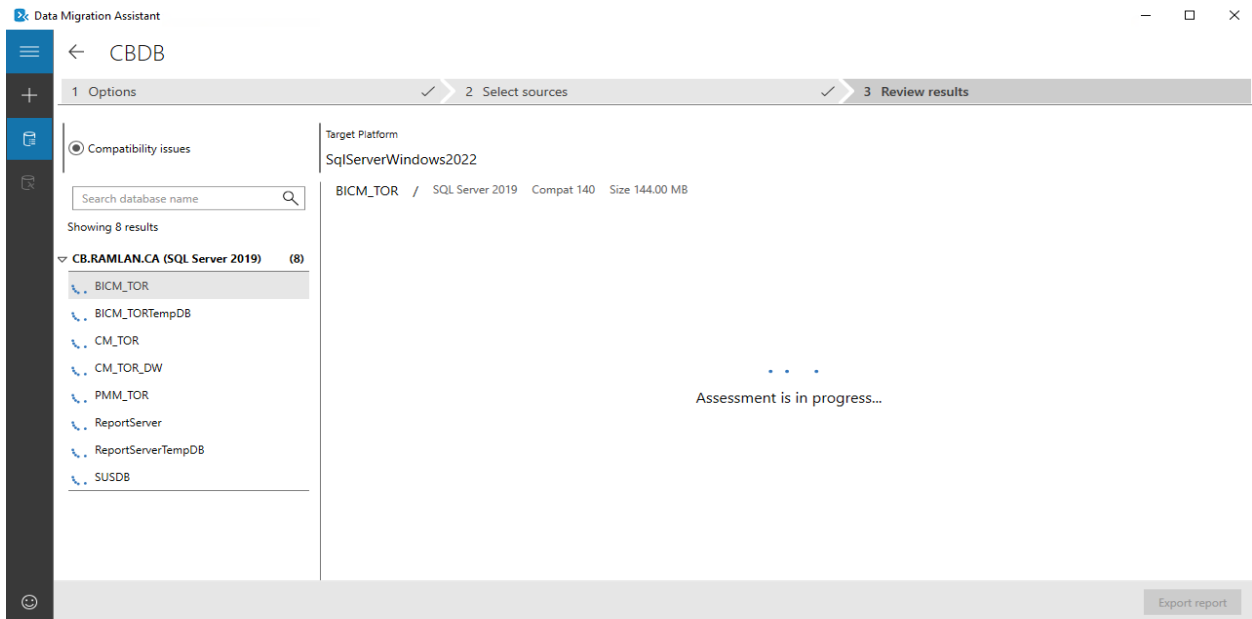
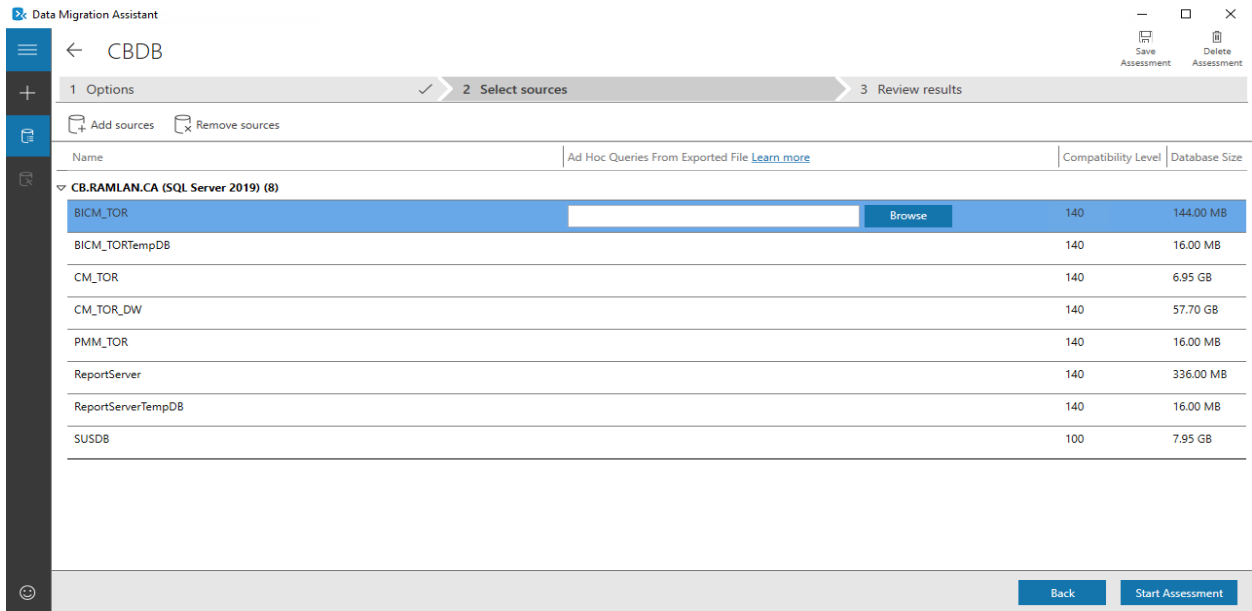
SQL Server

Target server type

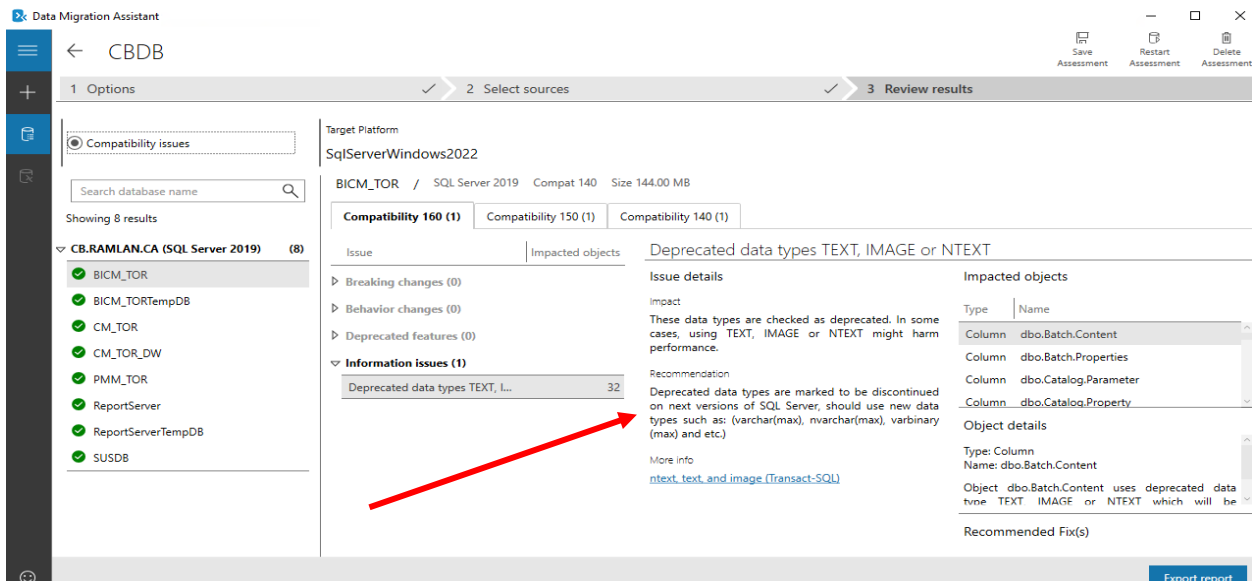
SQL Server

Create





Looks like the assessment passed without any major issue.



Check List

Pre-upgrade checklist

- Before upgrading from one edition of SQL Server 2022 (16.x) to another, verify that the functionality you're currently using is supported in the edition to which you're moving.
- Verify supported [hardware and software](#).
- Before upgrading SQL Server, enable Windows Authentication for SQL Server Agent and verify the default configuration, that the SQL Server Agent service account is a member of the SQL Server sysadmin group.
- To upgrade to SQL Server 2022 (16.x), you must be running a supported operating system. For more information, see [Hardware and Software Requirements for Installing SQL Server](#).
- Upgrade is blocked if there's a pending restart.
- Upgrade is blocked if the Windows Installer service isn't running.

Supported Versions:

Upgrades from earlier versions to SQL Server 2022

SQL Server 2022 (16.x) supports upgrade from the following versions of SQL Server:

- SQL Server 2012 (11.x) SP4 or later
- SQL Server 2014 (12.x) SP3 or later
- SQL Server 2016 (13.x) SP3 or later
- SQL Server 2017 (14.x)
- SQL Server 2019 (15.x)

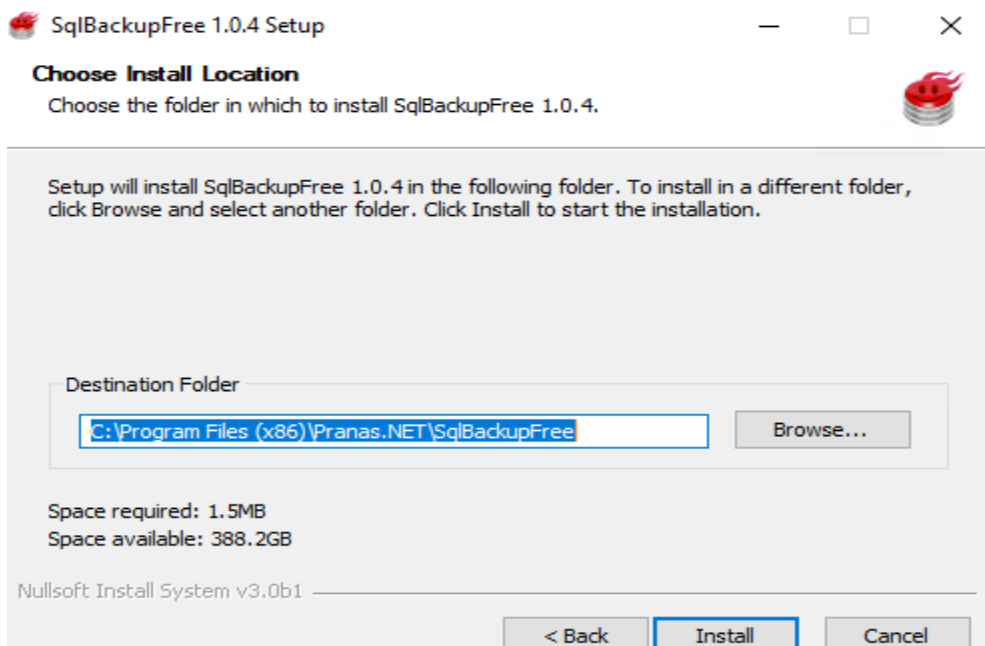
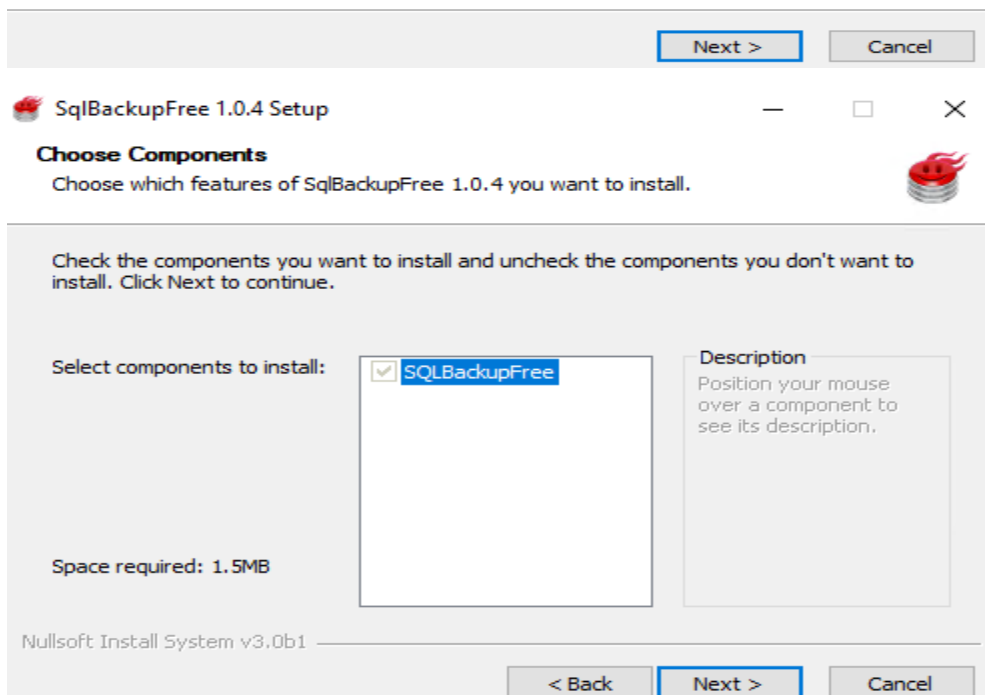
Supported Operating System

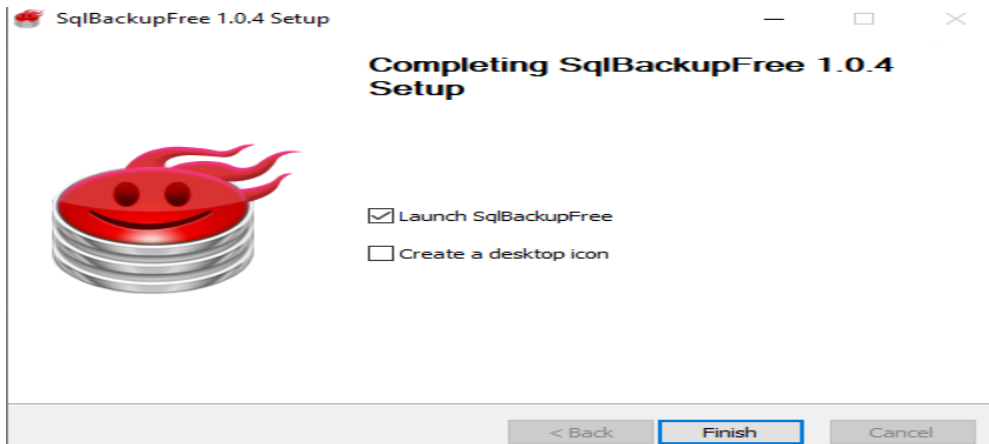
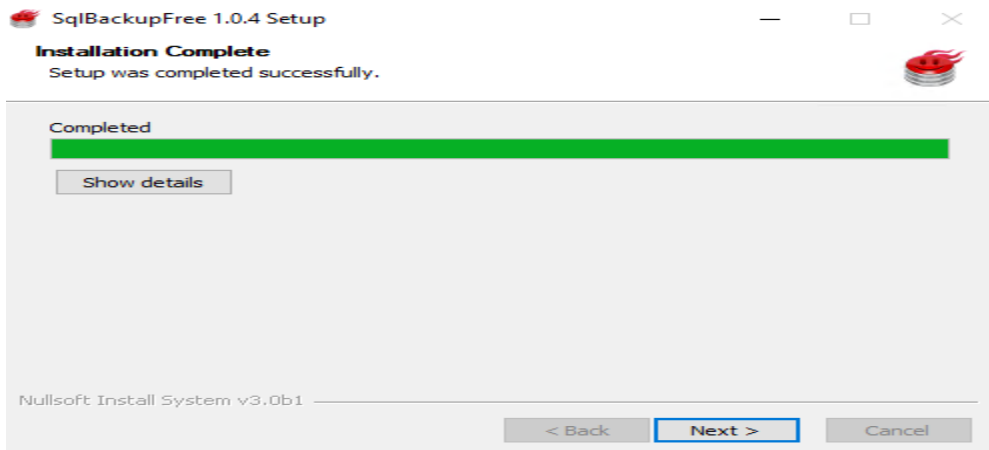
Component	Requirement
Operating system	Windows 10 TH1 1507 or greater Windows Server 2016 or greater
.NET Framework	Minimum operating systems includes minimum .NET framework.
Network Software	Supported operating systems for SQL Server have built-in network software. Named and default instances of a stand-alone installation support the following network protocols: Shared memory, Named Pipes, and TCP/IP.

I am running below OS version.

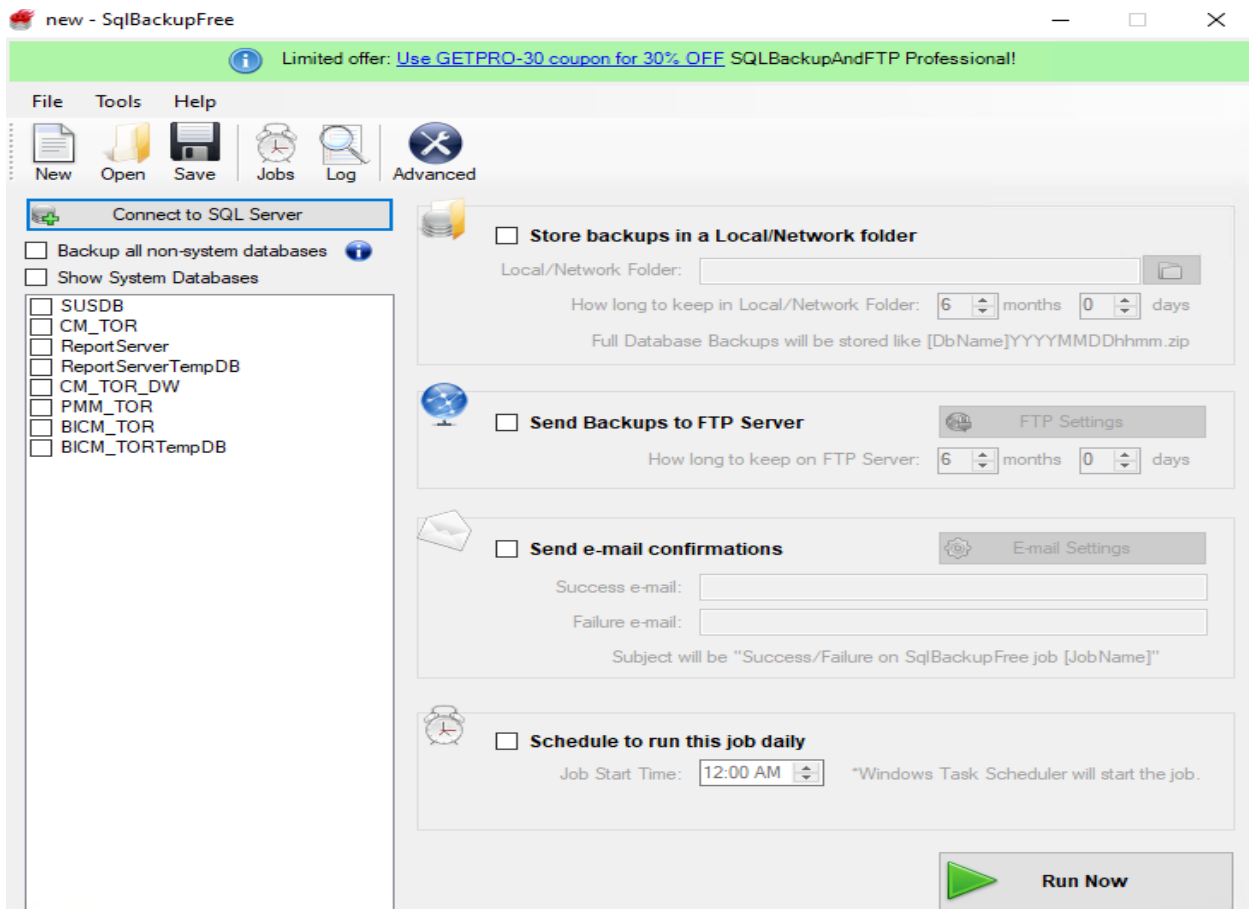


To backup database, I am using SQLBackupFree software. Installed the free version.

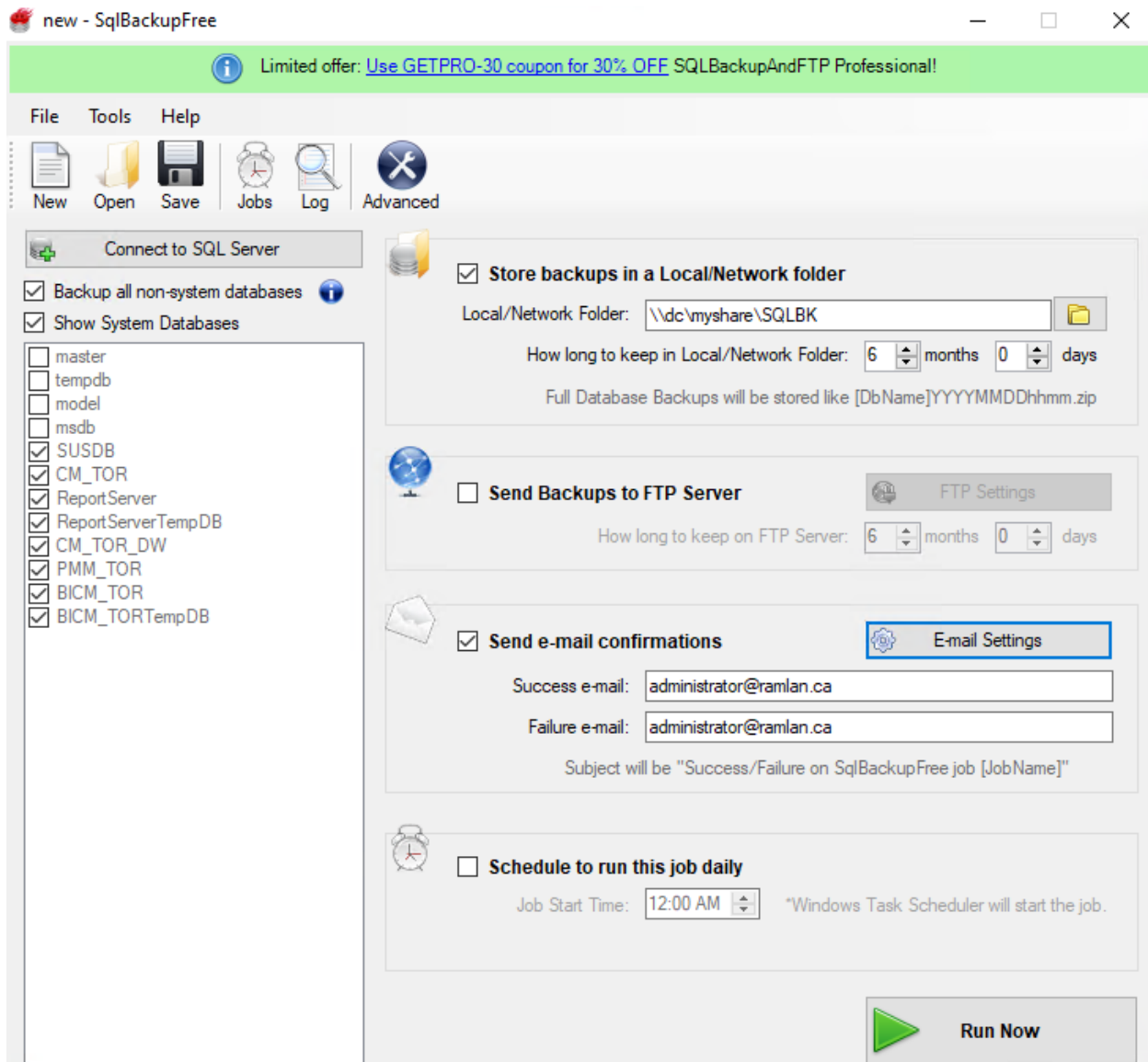
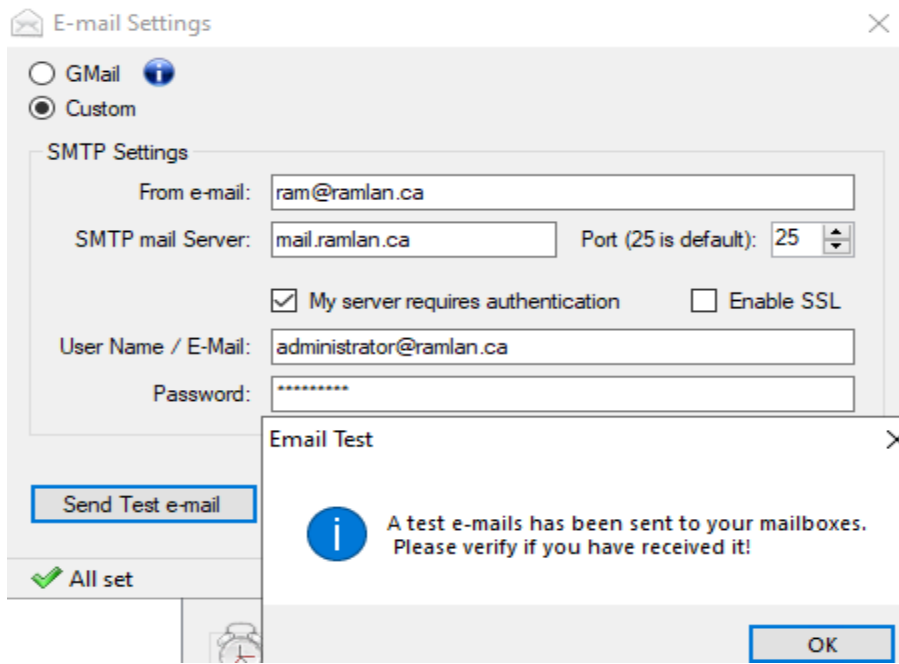


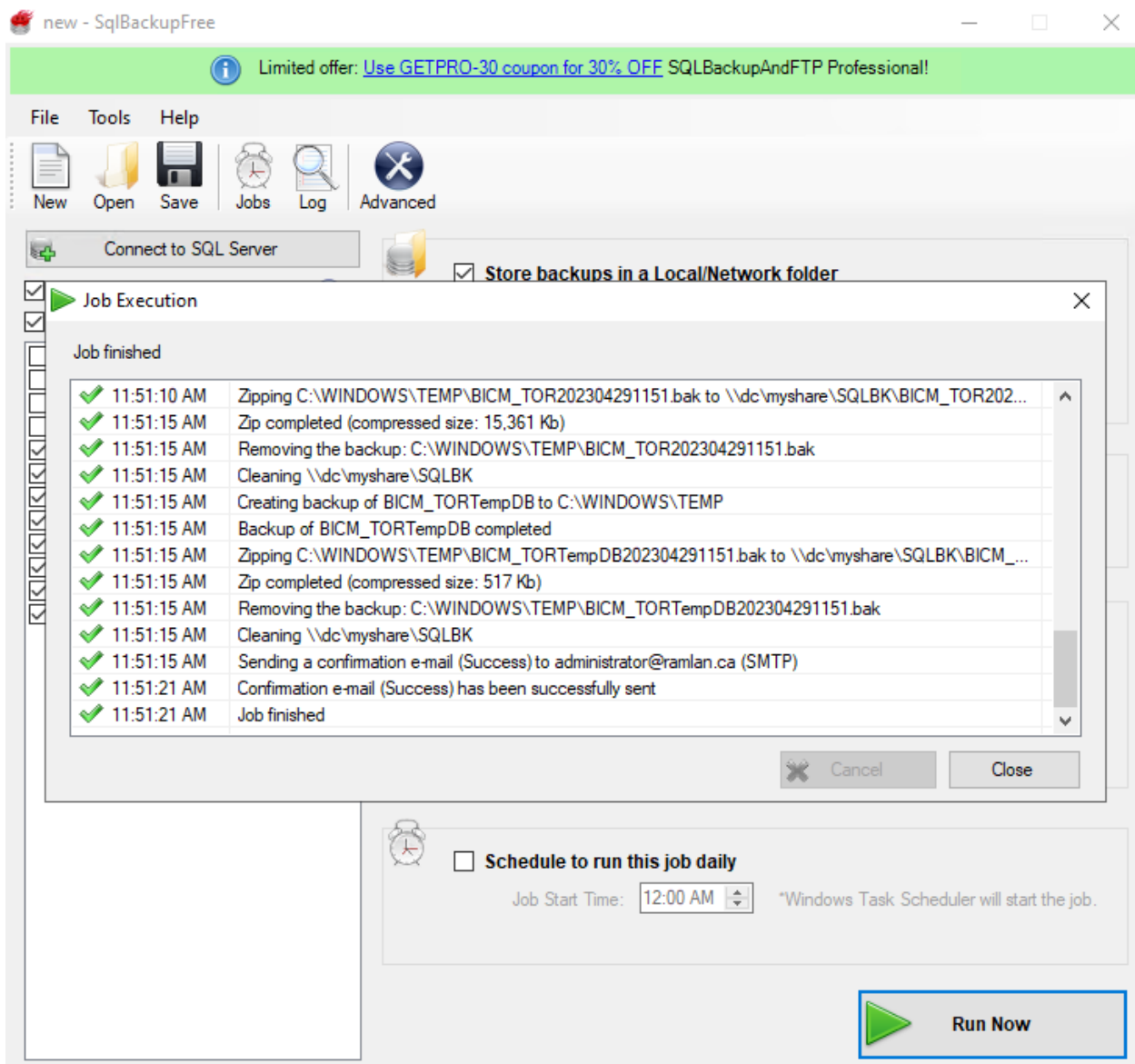


Will backup all the databases.

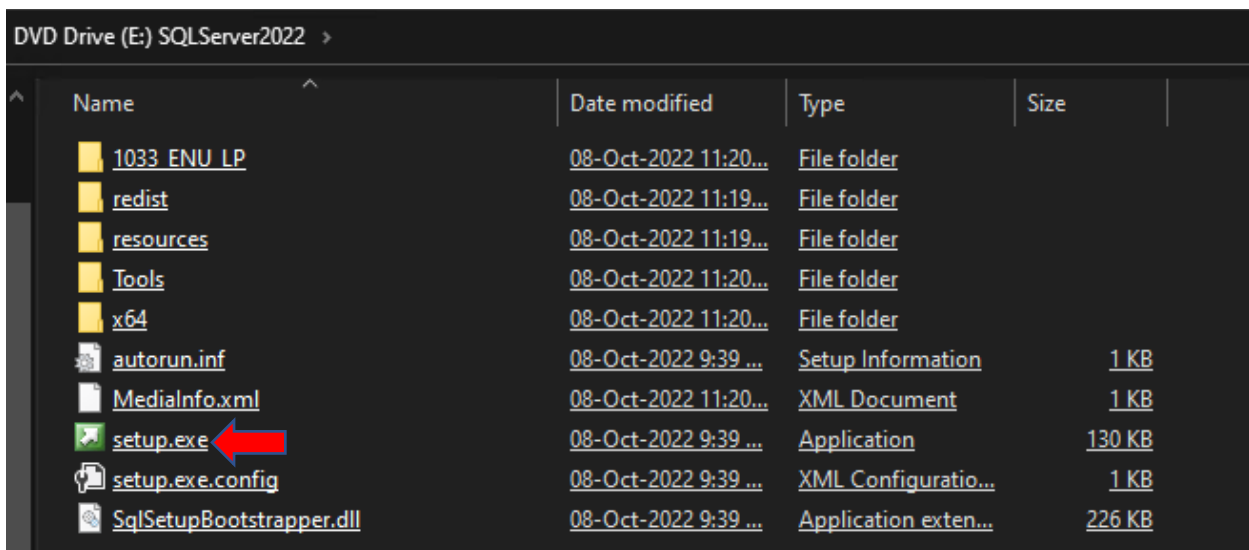


Configured email server





Now we are ready to upgrade the server. Run the setup.exe and complete the task.



Planning

Installation

Maintenance

Tools

Resources

Advanced

Options

Microsoft SQL Server 2022

[New SQL Server standalone installation or add features to an existing installation](#)

Launch a wizard to install SQL Server 2022 in a non-clustered environment or to add features to an existing SQL Server 2022 instance.

[Install SQL Server Reporting Services](#)

Launch a download page that provides a link to install SQL Server Reporting Services. An internet connection is required to install SSRS.

[Install SQL Server Management Tools](#)

Launch a download page that provides a link to install SQL Server Management Studio, SQL Server command-line utilities (SQLCMD and BCP), SQL Server PowerShell provider, SQL Server Profiler and Database Tuning Advisor. An internet connection is required to install these tools.

[Install SQL Server Data Tools](#)

Launch a download page that provides a link to install SQL Server Data Tools (SSDT). SSDT provides Visual Studio integration including project system support for Microsoft Azure SQL Database, the SQL Server Database Engine, Reporting Services, Analysis Services and Integration Services. An internet connection is required to install SSDT.



New SQL Server failover cluster installation

Launch a wizard to install a single-node SQL Server 2022 failover cluster. This action is only available in the clustered environment.



Add node to a SQL Server failover cluster

Launch a wizard to add a node to an existing SQL Server 2022 failover cluster. This action is only available in the clustered environment.

[Upgrade from a previous version of SQL Server](#)

Launch a wizard to upgrade a previous version of SQL Server to SQL Server 2022. [Click here to first view Upgrade Documentation](#)

Edition

Select the edition of SQL Server 2022 you want to install.

Edition

License Terms

Global Rules

Product Updates

Install Setup Files

Upgrade Rules

Select Features

Feature Rules

Ready to Upgrade

Upgrade Progress

Complete

Select an edition of SQL Server to install. You can choose to either use a SQL Server license that you have already purchased by entering the product key or choose pay-as-you-go billing through Microsoft Azure. You can also specify a free edition of SQL Server: Developer, Evaluation, or Express. Evaluation has the largest set of SQL Server features, as documented in SQL Server Books Online, and is activated with a 180-day expiration. Developer edition does not have an expiration, has the same set of features found in Evaluation, but is licensed for non-production database application development only. To upgrade from one installed edition to another, run the Edition Upgrade Wizard.

 Specify a free edition:

Evaluation

 Use pay-as-you-go billing through Microsoft Azure:

Warning: To enable this option, you must have an active Azure subscription that you will be required to provide along with a resource group, Azure region, and tenant ID later in setup. For more information, see <https://aka.ms/ArcEnabledSqlPAYG>.

Standard

 Enter the product key: I have a SQL Server license with Software Assurance or SQL Software Subscription I have a SQL Server license only

< Back

Next >

Cancel

Select Instance

Specify the instance of SQL Server to modify.

- Edition
- License Terms
- Global Rules
- Product Updates
- Install Setup Files
- Upgrade Rules
- Select Instance**
- Select Features
- Feature Rules
- Ready to Upgrade
- Upgrade Progress
- Complete

Select the instance of SQL Server to upgrade. To upgrade only shared features, select "Upgrade shared features" and then click next.

Instance to upgrade:

MSSQLSERVER ▾

Installed instances:

Instance Name	Instance ID	Features	Edition	Version
MSSQLSERVER	MSSQL15.MSSQLS...	SQLEngine	Enterprise	15.0.4236.7

< Back Next > Cancel

Select Features

It is not possible to change the SQL Server features to be upgraded in this release.

- Edition
- License Terms
- Global Rules
- Product Updates
- Install Setup Files
- Upgrade Rules
- Select Instance
- Select Features**
- Instance Configuration
- Feature Rules
- Ready to Upgrade
- Upgrade Progress
- Complete

Features:

MSSQLSERVER

- Database Engine Services
- Shared Features
- Redistributable Features

Description:

Prerequisites for selected features:

Already installed:
 Windows PowerShell 3.0 or hig
 To be installed from media:
 Microsoft Visual C++ 2017 Red

Disk Space Requirements

Drive C: 1006 MB required, 397483 MB available

< Back Next > Cancel

Upgrade to SQL Server 2022

Instance Configuration

Specify the name and instance ID for the instance of SQL Server. Instance ID becomes part of the installation path.

Default instance
 Named instance: *

Instance ID:

SQL Server directory: C:\Program Files\Microsoft SQL Server\MSSQL16.MSSQLSERVER

Installed instances:

Instance Name	Instance ID	Features	Edition	Version
MSSQLSERVER	MSSQL15.MSSQLS...	SQLEngine	Enterprise	15.0.4236.7

< Back Next > Cancel

Upgrade to SQL Server 2022

Ready to Upgrade

Verify the SQL Server 2022 features to be upgraded.

Edition
 License Terms
 Global Rules
 Product Updates
 Install Setup Files
 Upgrade Rules
 Select Instance
 Select Features
 Instance Configuration
 Feature Rules
Ready to Upgrade
 Upgrade Progress
 Complete

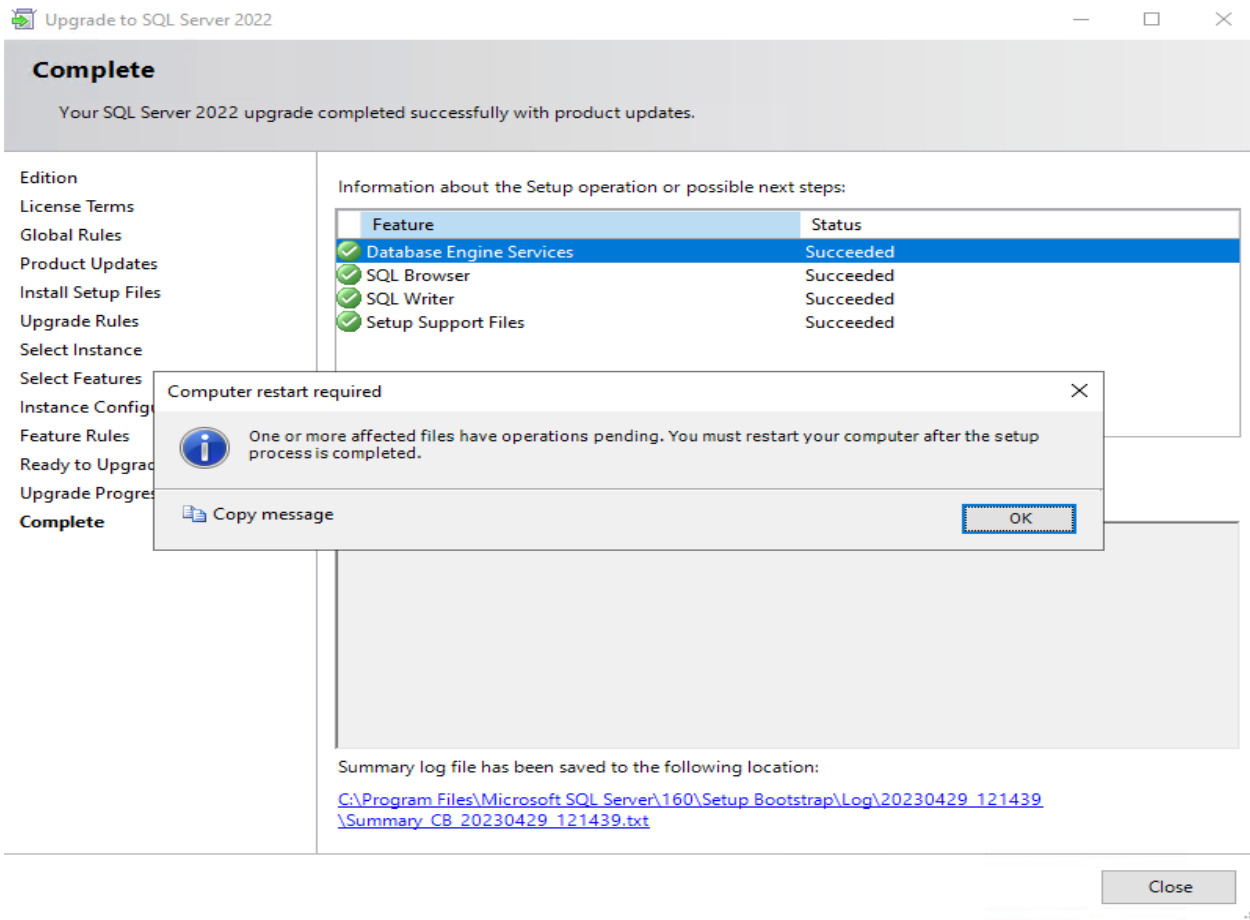
Ready to upgrade SQL Server 2022:

- [-] Summary
 - ... Edition: Enterprise
 - ... Action: Upgrade
 - [-] Prerequisites
 - [-] Already installed:
 - ... Windows PowerShell 3.0 or higher
 - [-] To be installed from media:
 - ... Microsoft Visual C++ 2017 Redistributable
 - [-] General Configuration
 - [-] Features
 - ... Database Engine Services
 - ... SQL Browser
 - ... SQL Writer
 - [-] Instance configuration
 - ... Instance Name: MSSQLSERVER
 - ... Instance Directory: C:\Program Files\Microsoft SQL Server
 - [-] Shared component root directory
 - ... Shared feature directory: C:\Program Files\Microsoft SQL Server\
 - ... Shared feature (WOW64) directory: C:\Program Files (x86)\Microsoft SQL Server\
 - [-] Product Update
 - ... Update Enabled: True
 - ... Update Source: MU

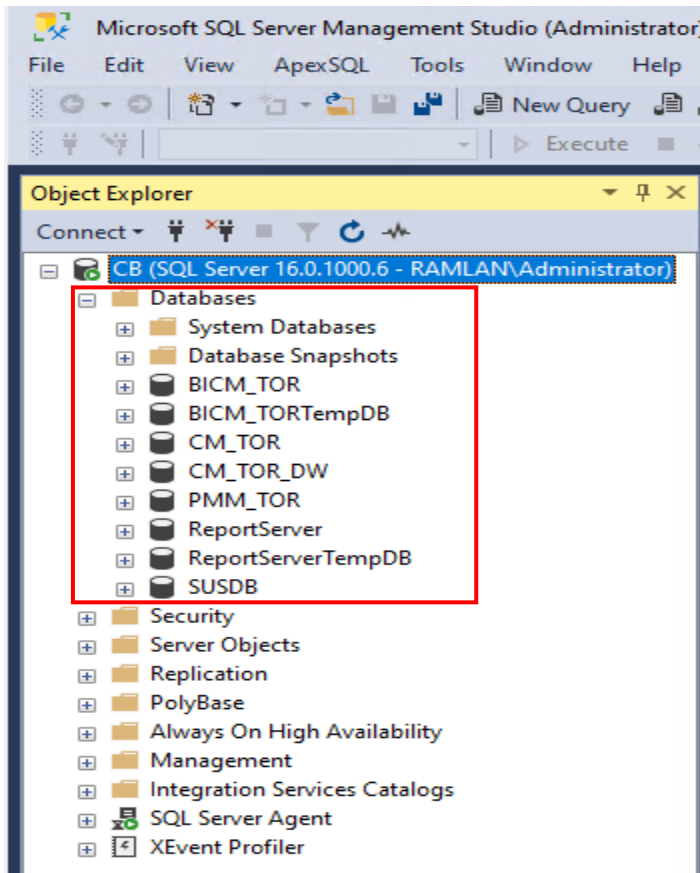
Configuration file path:

< Back Upgrade Cancel

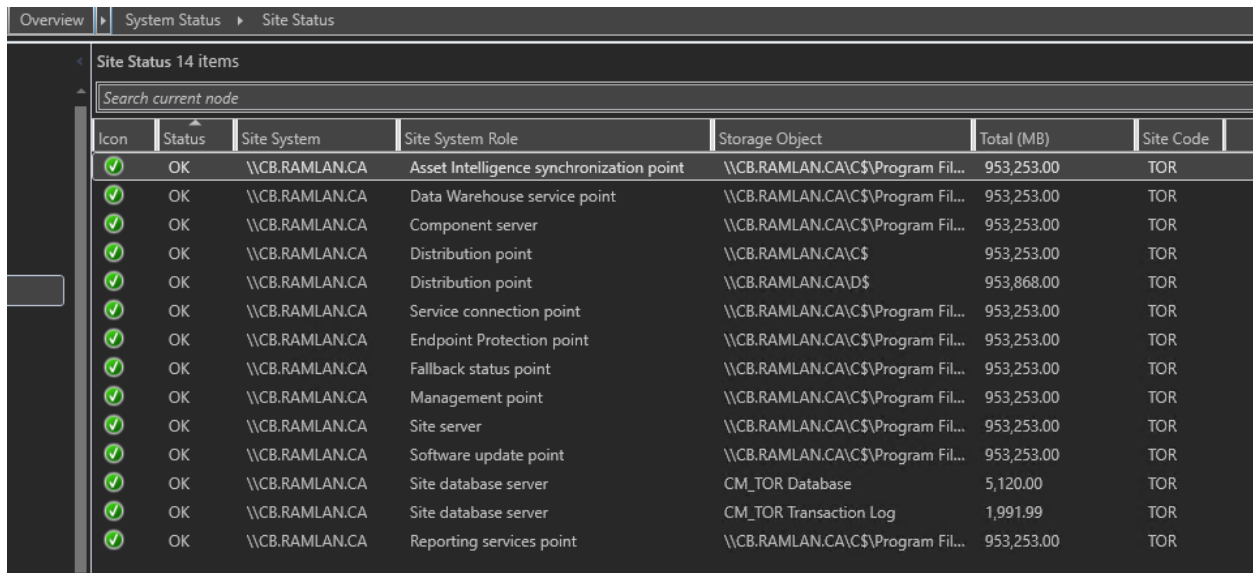
C:\Program Files\Microsoft SQL Server\160\Setup Bootstrap\Log\20230429_121439\ConfigurationFile.ini



Restarted the server and checked all the databases are working.



Configuration Manager Site Status – All database are working without any error.



The screenshot displays the 'Site Status' window in Configuration Manager. The breadcrumb navigation shows 'Overview > System Status > Site Status'. Below the navigation, there is a search bar labeled 'Search current node'. The main area contains a table with 14 rows, each representing a site system component. All components are marked with a green checkmark icon and the status 'OK'. The table columns are: Icon, Status, Site System, Site System Role, Storage Object, Total (MB), and Site Code.

Icon	Status	Site System	Site System Role	Storage Object	Total (MB)	Site Code
✓	OK	\\CB.RAMLAN.CA	Asset Intelligence synchronization point	\\CB.RAMLAN.CA\C\$\Program Fil...	953,253.00	TOR
✓	OK	\\CB.RAMLAN.CA	Data Warehouse service point	\\CB.RAMLAN.CA\C\$\Program Fil...	953,253.00	TOR
✓	OK	\\CB.RAMLAN.CA	Component server	\\CB.RAMLAN.CA\C\$\Program Fil...	953,253.00	TOR
✓	OK	\\CB.RAMLAN.CA	Distribution point	\\CB.RAMLAN.CA\C\$	953,253.00	TOR
✓	OK	\\CB.RAMLAN.CA	Distribution point	\\CB.RAMLAN.CA\D\$	953,868.00	TOR
✓	OK	\\CB.RAMLAN.CA	Service connection point	\\CB.RAMLAN.CA\C\$\Program Fil...	953,253.00	TOR
✓	OK	\\CB.RAMLAN.CA	Endpoint Protection point	\\CB.RAMLAN.CA\C\$\Program Fil...	953,253.00	TOR
✓	OK	\\CB.RAMLAN.CA	Fallback status point	\\CB.RAMLAN.CA\C\$\Program Fil...	953,253.00	TOR
✓	OK	\\CB.RAMLAN.CA	Management point	\\CB.RAMLAN.CA\C\$\Program Fil...	953,253.00	TOR
✓	OK	\\CB.RAMLAN.CA	Site server	\\CB.RAMLAN.CA\C\$\Program Fil...	953,253.00	TOR
✓	OK	\\CB.RAMLAN.CA	Software update point	\\CB.RAMLAN.CA\C\$\Program Fil...	953,253.00	TOR
✓	OK	\\CB.RAMLAN.CA	Site database server	CM_TOR Database	5,120.00	TOR
✓	OK	\\CB.RAMLAN.CA	Site database server	CM_TOR Transaction Log	1,991.99	TOR
✓	OK	\\CB.RAMLAN.CA	Reporting services point	\\CB.RAMLAN.CA\C\$\Program Fil...	953,253.00	TOR

This concludes on how to upgrade SQL Server for Configuration Manager (CB2303).

Thanks

Ram
29th Apr 2023