# PCGENESIS TECHNICAL SYSTEM OPERATIONS GUIDE

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|---|---|
| 11/9/2021 | Section A: Setting Up a New PCGenesis Server |

*Topic 4*:  *Microsoft SQL Server Express*

*2016 Installation Instructions, V1.2*

# Revision History

| Date | Version | Description | Author |
|---|---|---|---|
| 11/9/2021 | 1.2 | 21.03.00 – Update to include Windows Server 2022. | D. Ochala |
| 01/13/2020 | 1.1 | 19.04.00 – Update to include Windows Server 2019. | D. Ochala |
| 12/06/2018 | 1.0 | 18.03.01 – Create document. | D. Ochala |

# *Table of Contents*

# *Overview*

This document contains the instructions for upgrading software to support the PCGenesis database and the *VerraDyne Print Manager* software. The first part of the upgrade is to load the Microsoft components required to run a database.

This release supports the software packet for systems running Windows Server 2012 or Windows Server 2016 or Windows Server 2019 or Windows Server 2022. The software packet contains the following components:

Windows Server 2012 / 2016 / 2019 / 2022 Software Packet

- .NET 4.5 Framework (required for *VerraDyne Print Manager* software)
- Microsoft SQL Server Express 2016
- Microsoft SQL Server 2016 Management Studio
- Adobe Reader (to be loaded to the server)

For school systems running Windows Server 2012, or Windows Server 2016, or Windows Server 2019, or Windows Server 2022, Microsoft SQL Server Express 2016 requires the PCGenesis server to have **all maintenance and service packs installed on your PCGenesis server** so that the Windows Server operating system is fully up to date.

# *Procedure A: Download SQL Server Software Packet Files*

## This Release is for Windows Server 2012 or 2016 or 2019 or 2022

PCGenesis Release **18.S.16** is now available for download and installation for school systems running Windows Server 2012 or 2016 or 2019 or 2022. The GaDOE would like school systems which meet the operating system requirements listed below to <mark>down load and install this release</mark> **before June 30, 2018**.

## New Method for Downloading Release Files

The files required to install this release are very large. As a result, the GaDOE has a new method for downloading the release files. PCGenesis Administrators may access the installation files and documentation by copying the following link into their web browser or clicking on the link below. You must use CHROME and not Internet Explorer to access this site.

[https://ftp.doe.k12.ga.us/](https://ftp.doe.k12.ga.us/)

Use the following credentials when prompted:

User:         pcg2012-16
Password:     PCGreleases

**You should see five files** along with the pdf file which contains the release documentation. All five files are required to install the release.

Navigate to the **K:\INSTAL** directory on the PCGenesis server. Highlight each file, in turn, and click on the **Download** button. (The web browser may require downloading the files to the **Download** directory, after which they should be copied to the **K:\INSTAL** directory.) Download or copy the following files to the **K:\INSTAL** directory.

- **InstlNET**
- **PCGUNZIP.EXE**
- **SQLinstl16.BAT**
- **Win2012_Win2016_SQLEXPR_x64_ENU .exe**
- **Win2012_Win2016_SSMS-Setup-ENU.exe**

Please take the time to review this document carefully prior to installing the new release. Following the instructions for installing the release is absolutely necessary.

# *Procedure B:  Installation Instructions for Release 18.S.16 Software*

## *B1. Perform a PCGenesis Full Backup*

When the prior evening's backup was successful, and when installing *Release 18.S.16* before performing any work in PCGenesis for the day, proceed to *B2. Install PCGenesis Release.*  In addition to its current labeling, also label the prior evening's backup CD/DVD/USB as **"Data Backup Prior to Release 18.S.16"**.  Continue to use the backup CD/DVD/ USB in the normal backup rotation.
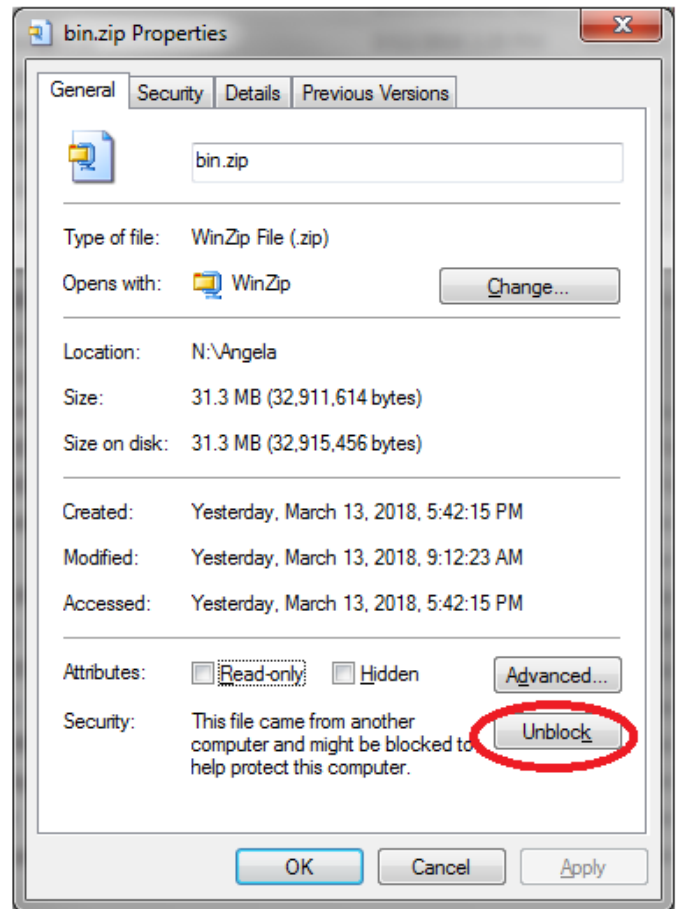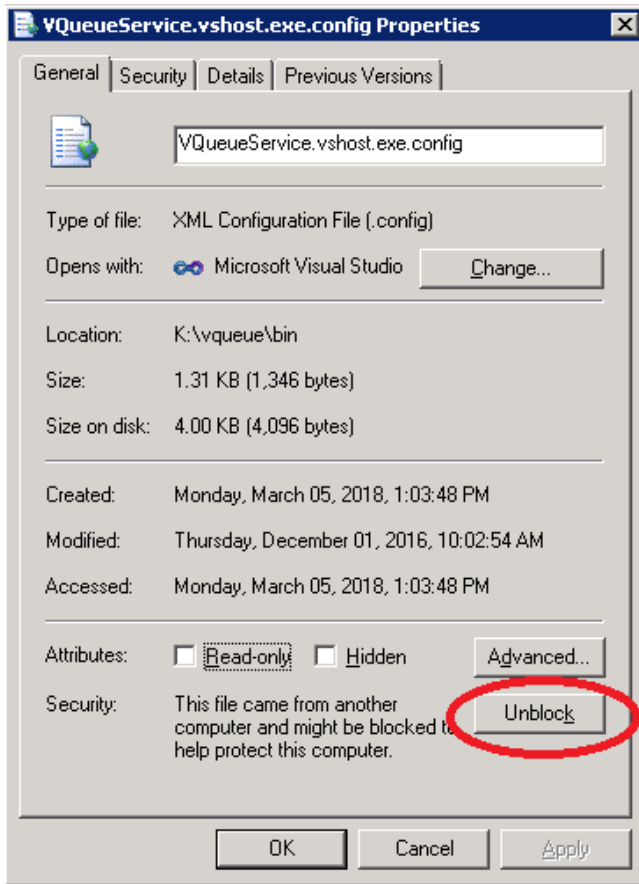
| Step | Action |
|------|--------|
| **1** | **Verify all users are logged out of PCGenesis**. |
| **2** | If the *Uspool* background task has not yet been removed from the from "A*ll Users Startup",* close *Uspool* at the server.  *Uspool* must be permanently removed and should no longer be running on the server. |
| **3** | Perform a **PCG Full Backup** to CD or DVD or USB. |
| **4** | When the PCGenesis backup completes, label the backup CD or DVD or USB **"Full System Backup Prior to Release 18.S.16"**. |
| **5** | Proceed to *B2. Install PCGenesis Release 18.S.16.* |

# B2. Install PCGenesis Release 18.S.16

## FROM THE PCGENESIS SERVER

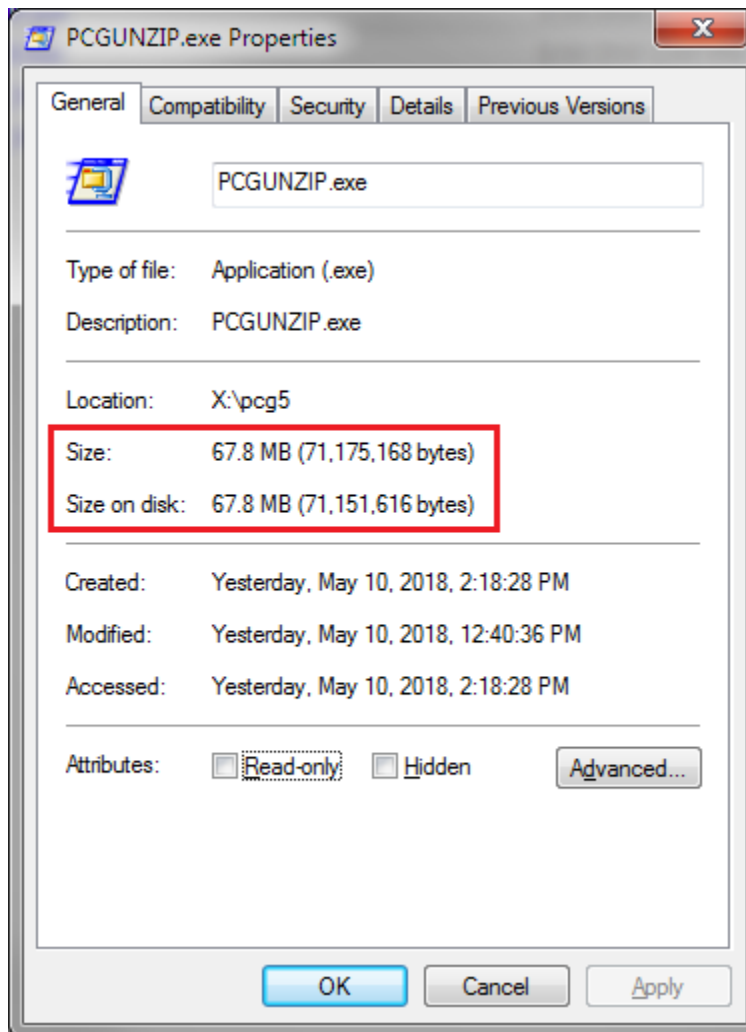| Step | Action |
|------|--------|
| **1** | **Verify that all Windows Server operating system updates have been applied to your system before starting this installation!** |
| **2** | **Verify all users are logged out of PCGenesis**. |
| **3** | Open **Windows® Explorer**. |
| **4** | Navigate to the **K:\INSTAL** directory. |
| **5** | Verify the following five files display:<br><br>• **PCGUNZIP.EXE**,<br>• **SQLINSTL16.BAT**<br>• **INSTLNET**<br>• **Win2012_Win2016_SQLEXPR_x64_ENU.exe**<br>• **Win2012_Win2016_SSMS-Setup-ENU.exe**<br><br>*If these five files do not display, return to the MyGaDOE Web portal, and detach the files from the Web portal again.* |

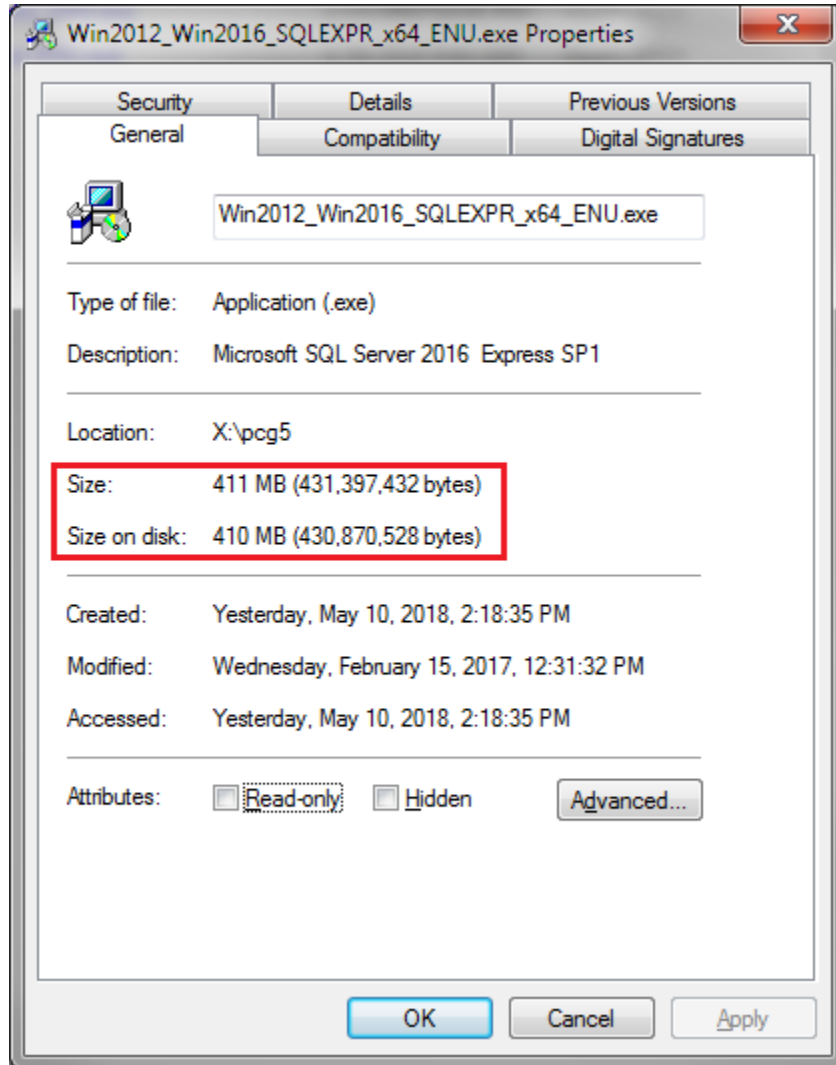| Step | Action |
|------|--------|
| **6** | ***\*\*\* ALERT \*\*\**** |
| | After downloading the files we need to make sure they are not blocked, otherwise when we unzip, ALL the files will be blocked.   This is a new security feature of the Windows Server 2012 / 2016 / 2019 / 2022 operating system. |
| | To check whether the files have been blocked, **right-click** on each of the five downloaded files and select **Properties**.  If you see a security message at the bottom, as shown below, you will need to click the '**Unblock**' button.  This is a very important step! |

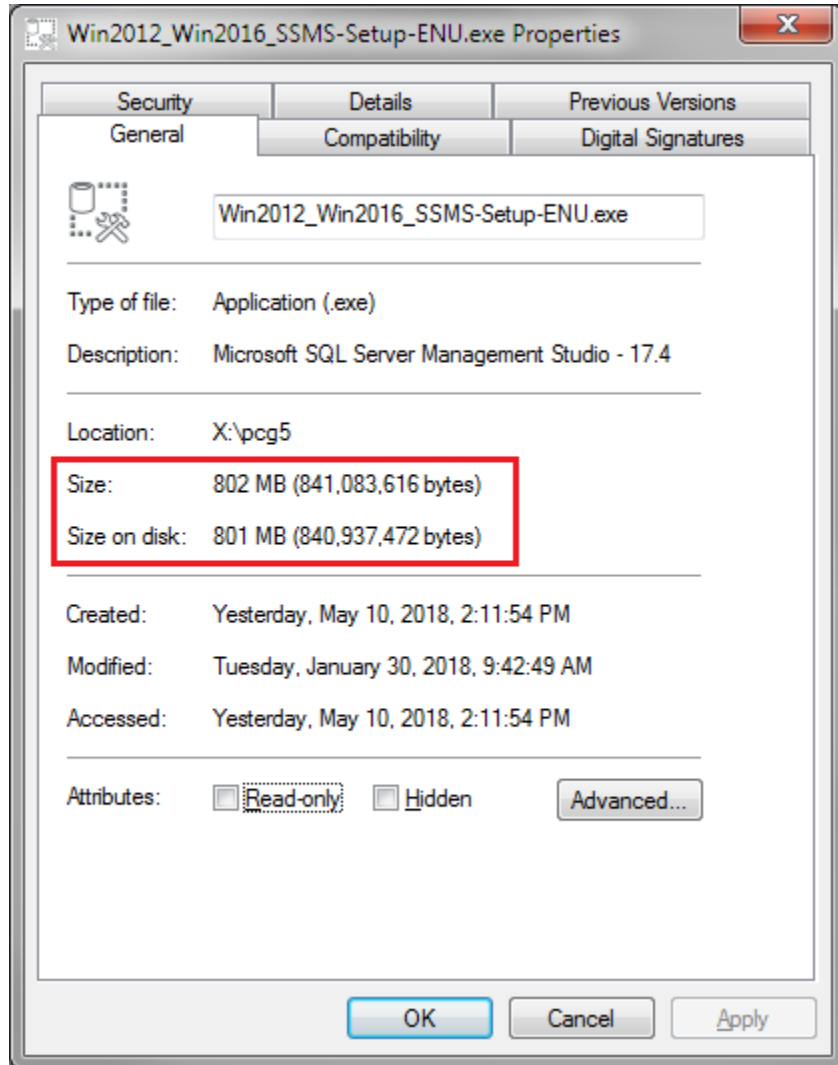| Step | Action |
|------|--------|
| 7 | In the **K:\INSTAL** directory, right click on **PCGUNZIP.EXE** and select the '**Properties**' option.  Verify that the size of the file is **67.8 MB** as shown below.<br><br>*If the size of the file is <u>not</u> **67.8 MB** as shown below, return to the MyGaDOE Web portal, and detach the file from the Web portal again.* |

**PCGUNZIP.exe:**

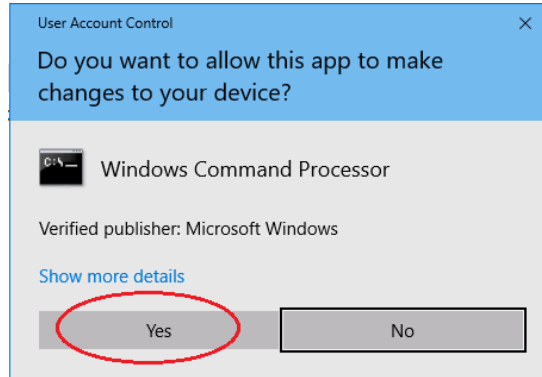| Step | Action |
|------|--------|
| **8** | In the **K:\INSTAL** directory, right click on **Win2012_Win2016_SQLEXPR_x64_ENU.exe** and select the '**Properties**' option.  Verify that the size of the file is **411 MB** as shown below.<br><br>*If the size of the file is <u>not</u> **411 MB** as shown below, return to the MyGaDOE Web portal, and detach the file from the Web portal again.* |

**Win2012_Win2016_SQLEXPR_x64_ENU.exe:**

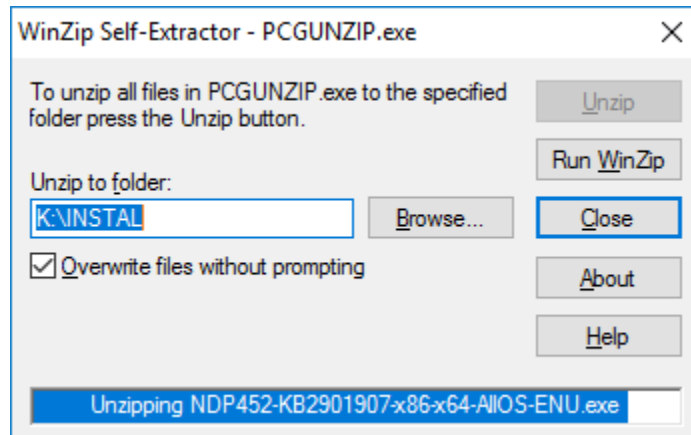| Step | Action |
|------|--------|
| **9** | In the **K:\INSTAL** directory, right click on **Win2012_Win2016_SSMS-Setup-ENU.exe** and select the '**Properties**' option. Verify that the size of the file is **802 MB** as shown below.<br><br>*If the size of the file is <u>not</u> **802 MB** as shown below, return to the MyGaDOE Web portal, and detach the file from the Web portal again.* |

**Win2012_Win2016_SSMS-Setup-ENU.exe**

| Step | Action |
|------|--------|
| **10** | Right-click **SQLINSTL16.BAT** and select ***Run as administrator*** to perform the installation. |

The following screen displays:
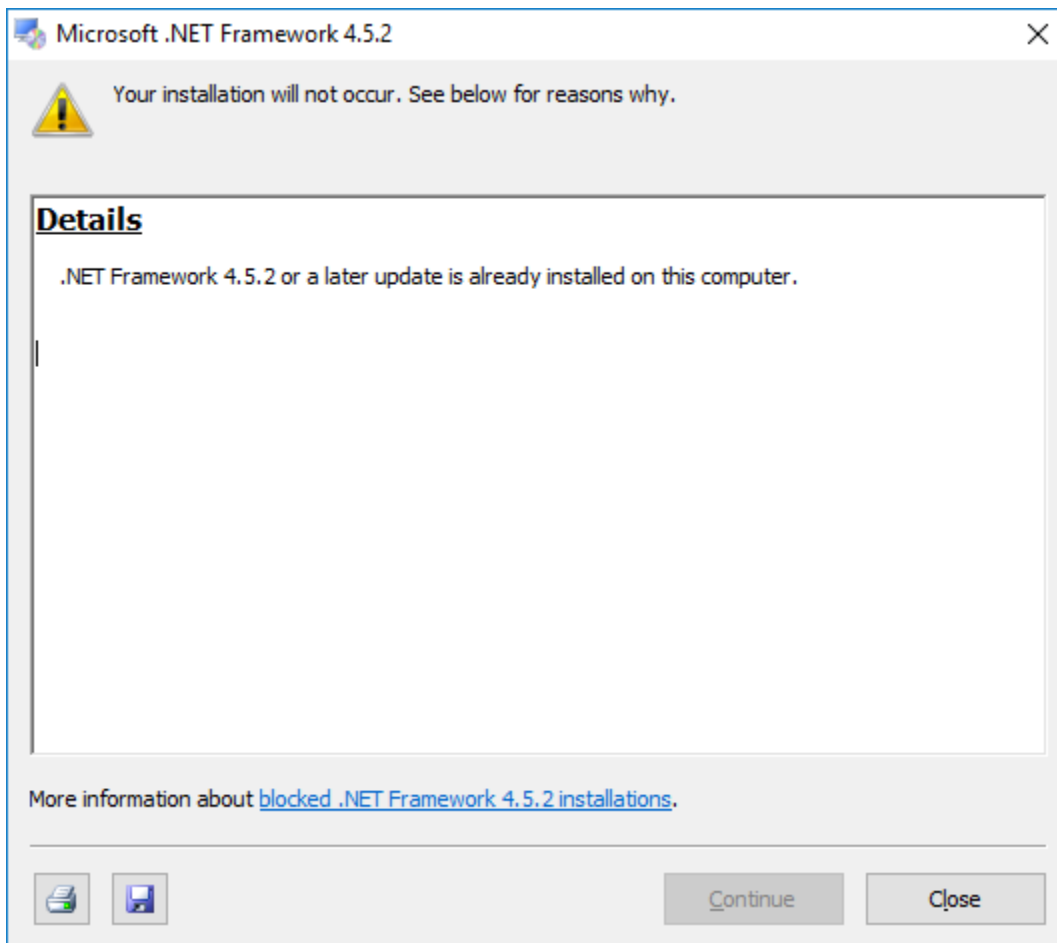


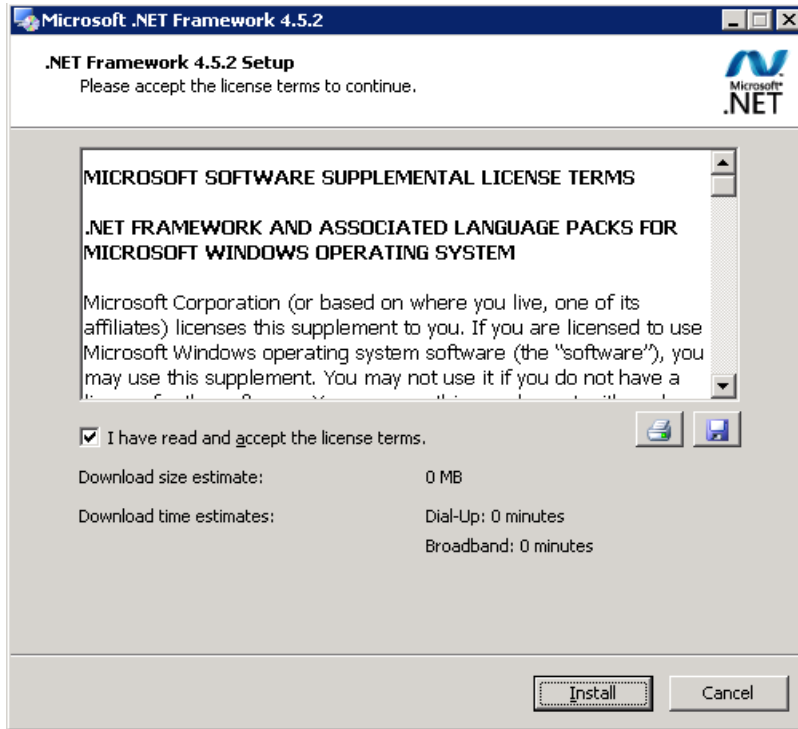| Step | Action |
|------|--------|
| **11** | When prompted with '*Do you want to allow this app to make changes to your device?*' select '**Yes**'. |

The following screen displays briefly:



If the PCGenesis server already has **Microsoft .NET Framework 4.5** installed, the following screen displays:

If the PCGenesis server does <u>not</u> have **Microsoft .NET Framework 4.5** installed, the following screen displays:
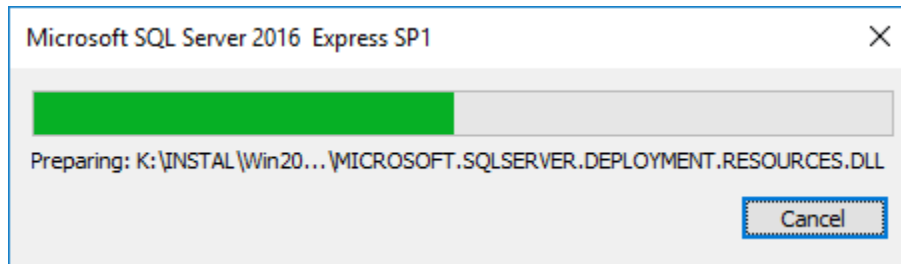


| Step | Action |
|------|--------|
| **12** | If the PCGenesis server already has **Microsoft .NET Framework 4.5** installed, proceed to *Step 8*. |
| | If the PCGenesis server does <u>not</u> have **Microsoft .NET Framework 4.5** installed, accept the license term and click '**Install**'. |
| | Click '**Done**' when the **Microsoft .NET Framework 4.5** installation is completed. |

The following screen displays:
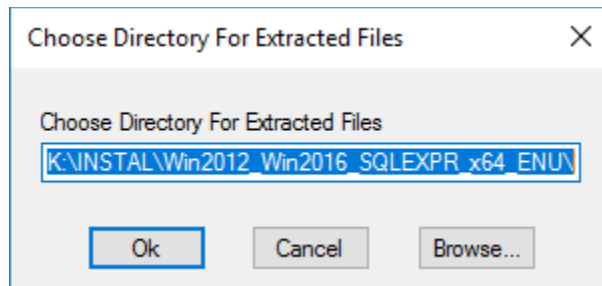


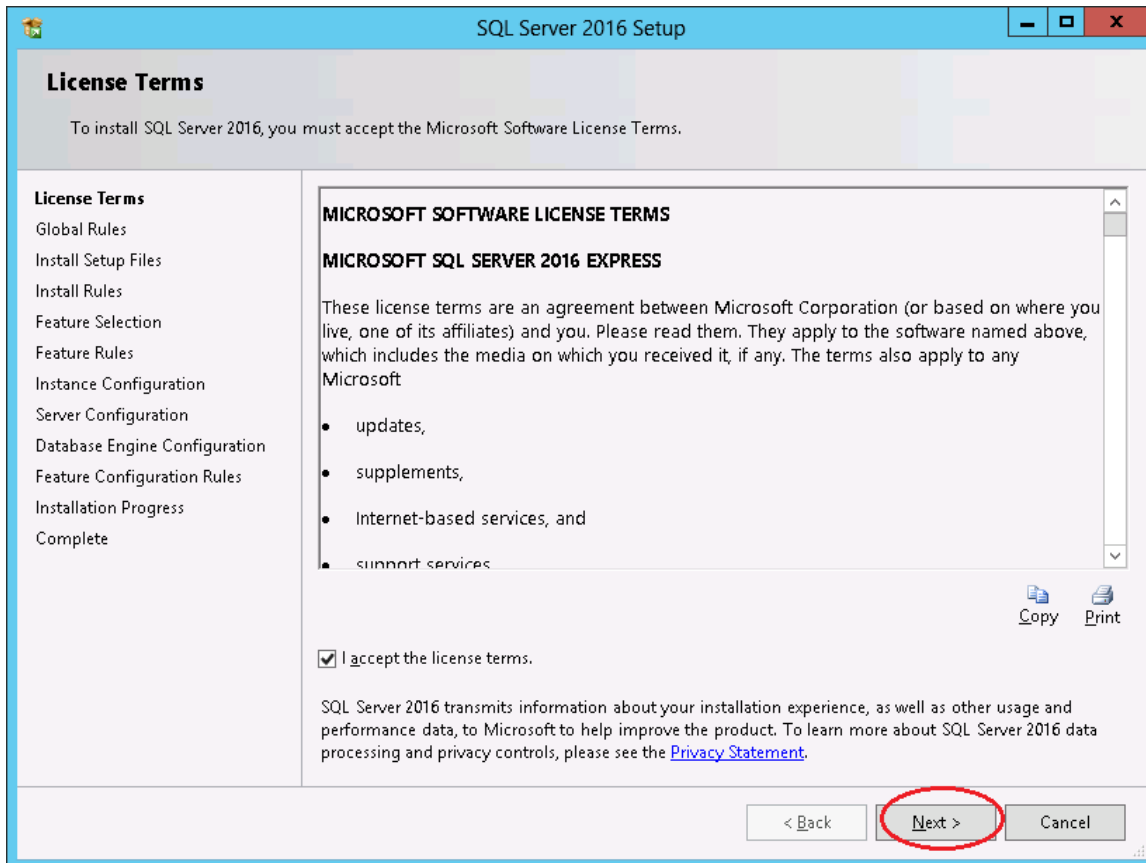| Step | Action |
|------|--------|
| **13** | When prompted with '*Choose Directory For Extracted Files*', select '**OK**'. |

The following screen displays briefly:



The following screen displays:



| Step | Action |
|------|--------|
| **14** | When prompted with '*SQL Server 2016 Setup – License Terms*', select '**Next**'. |

The following screen may be displayed in certain instances:



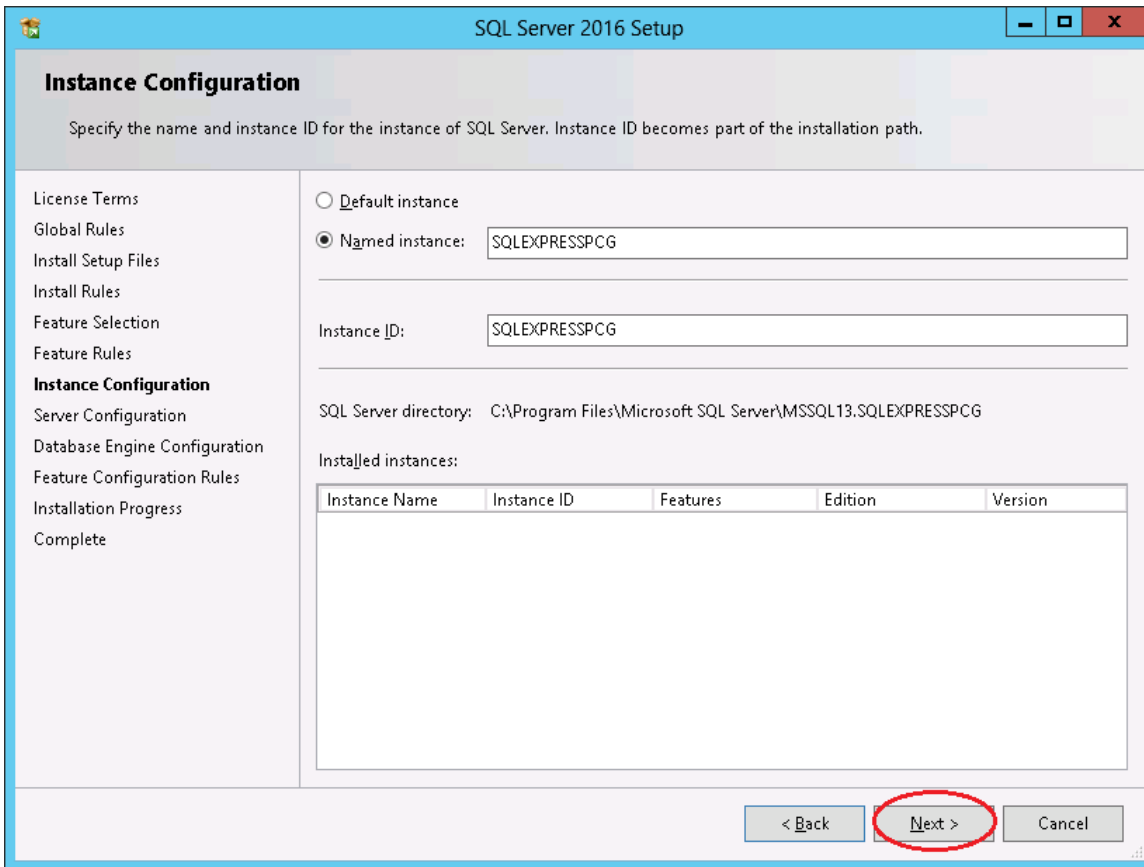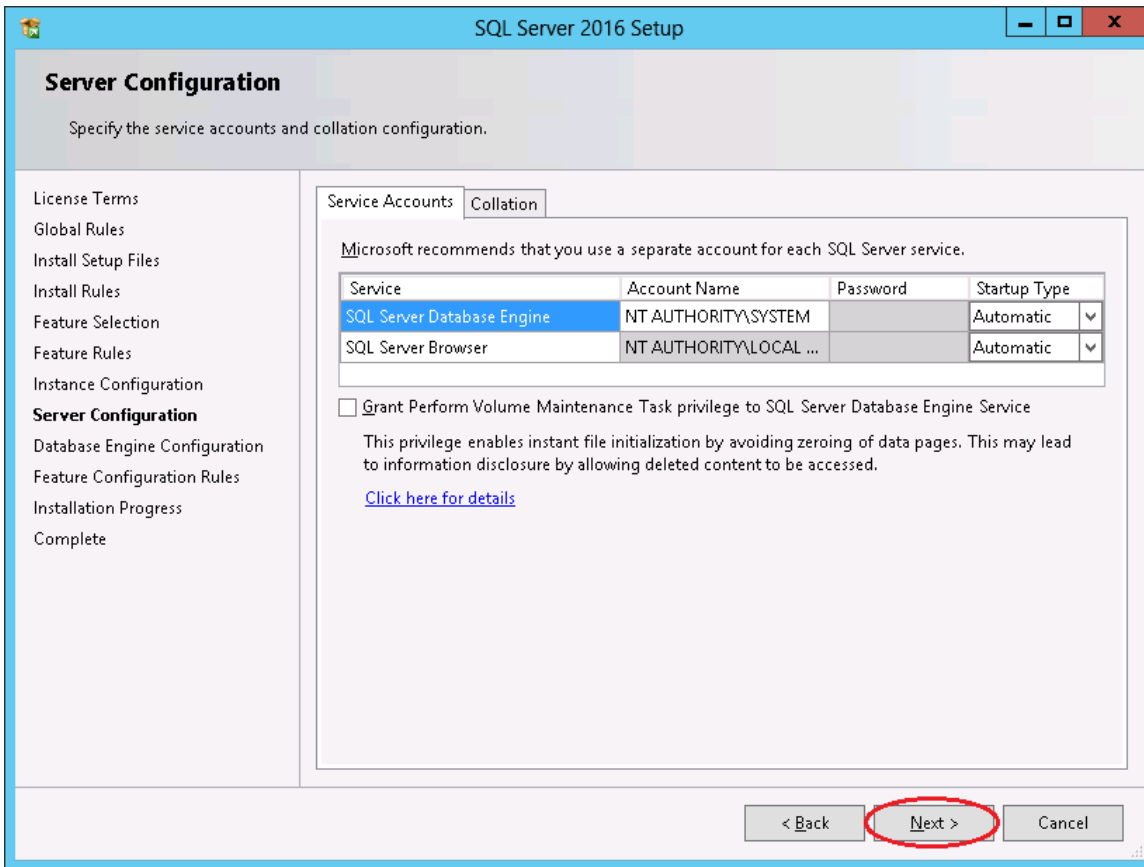| Step | Action |
|------|--------|
| **15** | If prompted with '*SQL Server 2016 Setup – Microsoft Update*', decide whether or not you would like your Windows Server to use *Microsoft Update* to automatically check for updates. |
| | If you would like *Microsoft Update* to check for updates, check the box and select '**Next**'. |
| | If you do <u>not</u> want *Microsoft Update* to check for updates, do <u>not</u> check the box and select '**Next**'. |
| | Generally, it is considered good operating practice to keep your PCGenesis Windows Server operating system and other components constantly up-to-date with the latest security patches. |

The following screen displays:
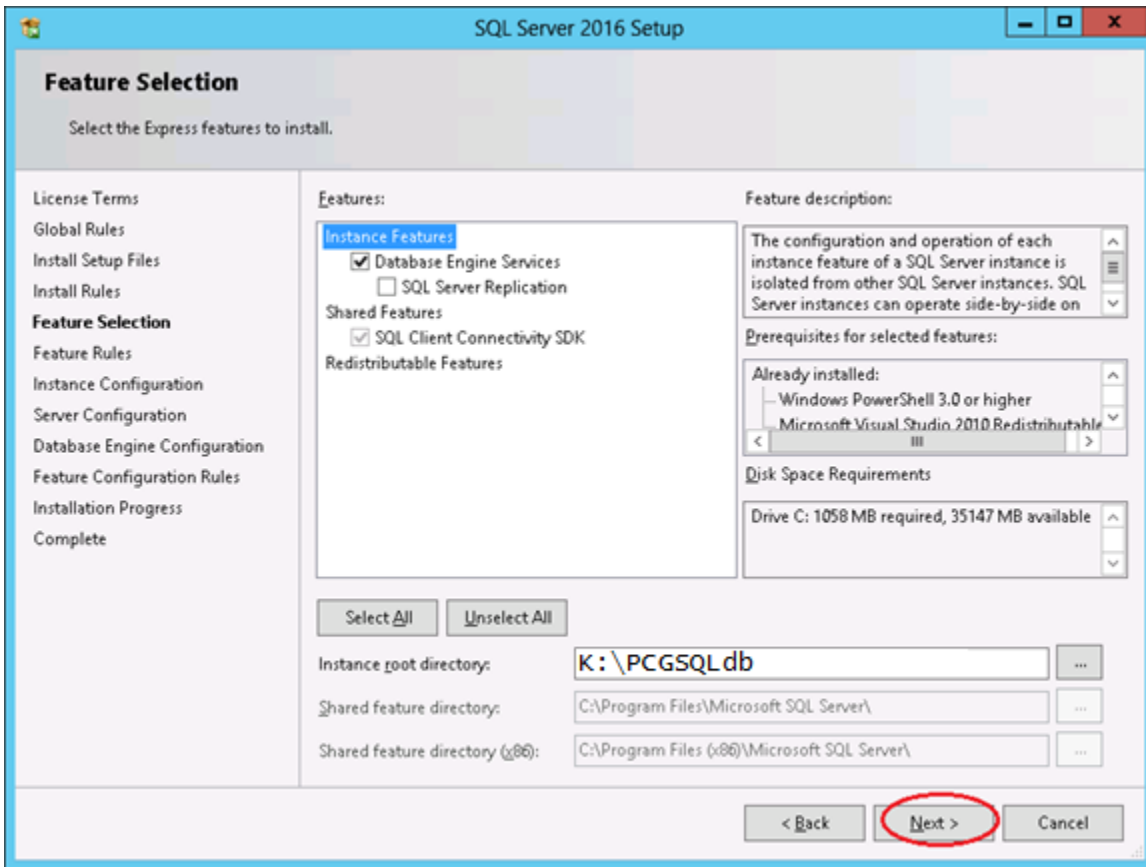


| Step | Action |
|------|--------|
| **16** | When prompted with '*SQL Server 2016 Setup – Feature Selection*', verify that '*Database Engine Services*' is checked, and select '**Next**'. |

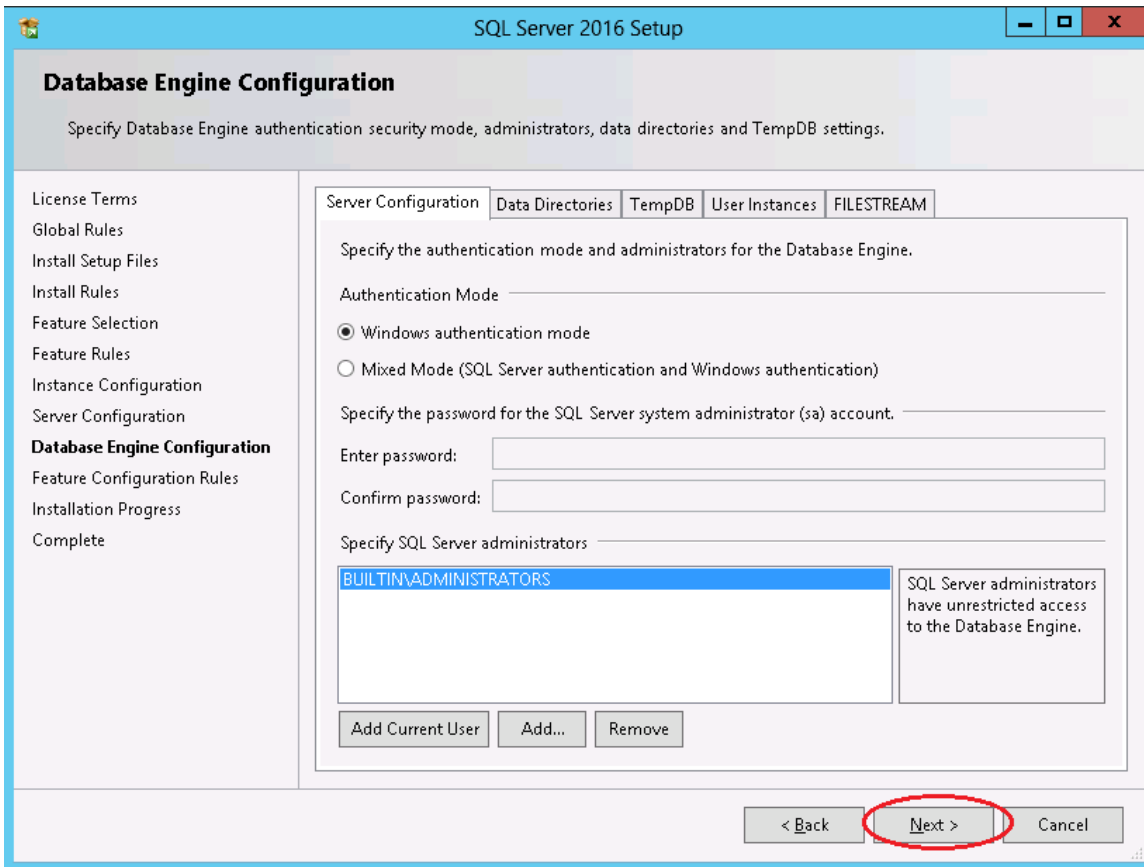The following screen displays:



| Step | Action |
|------|--------|
| **17** | When prompted with '*SQL Server 2016 Setup – Instance Configuration*', verify that the '*Named instance*' and '*Instance ID*' are **SQLEXPRESSPCG**, and select '**Next**'. |

The following screen displays:
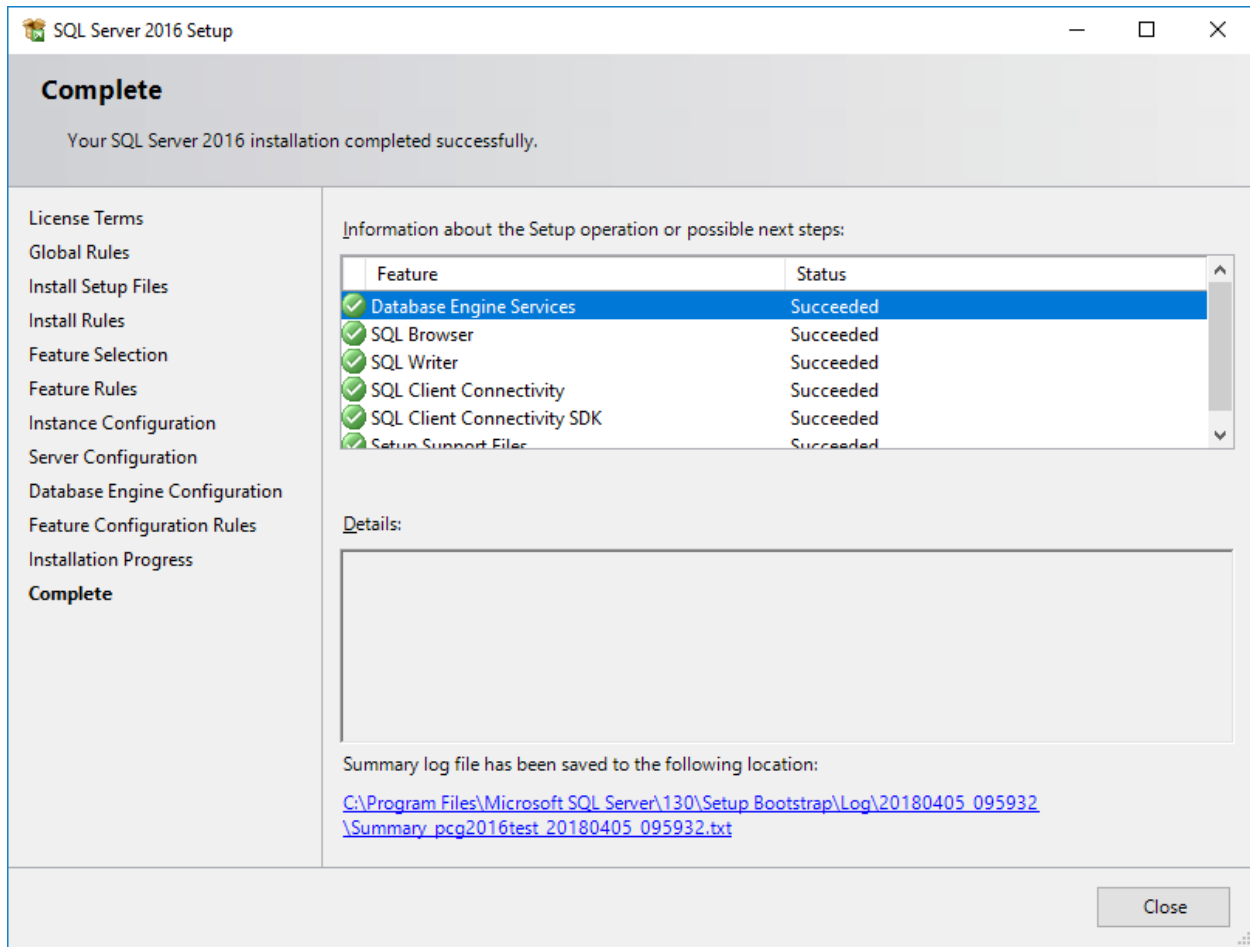


| Step | Action |
|------|--------|
| **18** | When prompted with '*SQL Server 2016 Setup – Server Configuration*', select '**Next**'. |

The following screen displays:



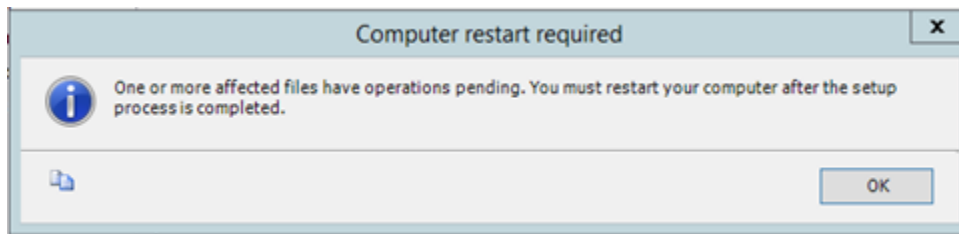| Step | Action |
|------|--------|
| **19** | When prompted with '*SQL Server 2016 Setup – Database Engine Configuration*', select '**Next**'. |

The following screen displays:



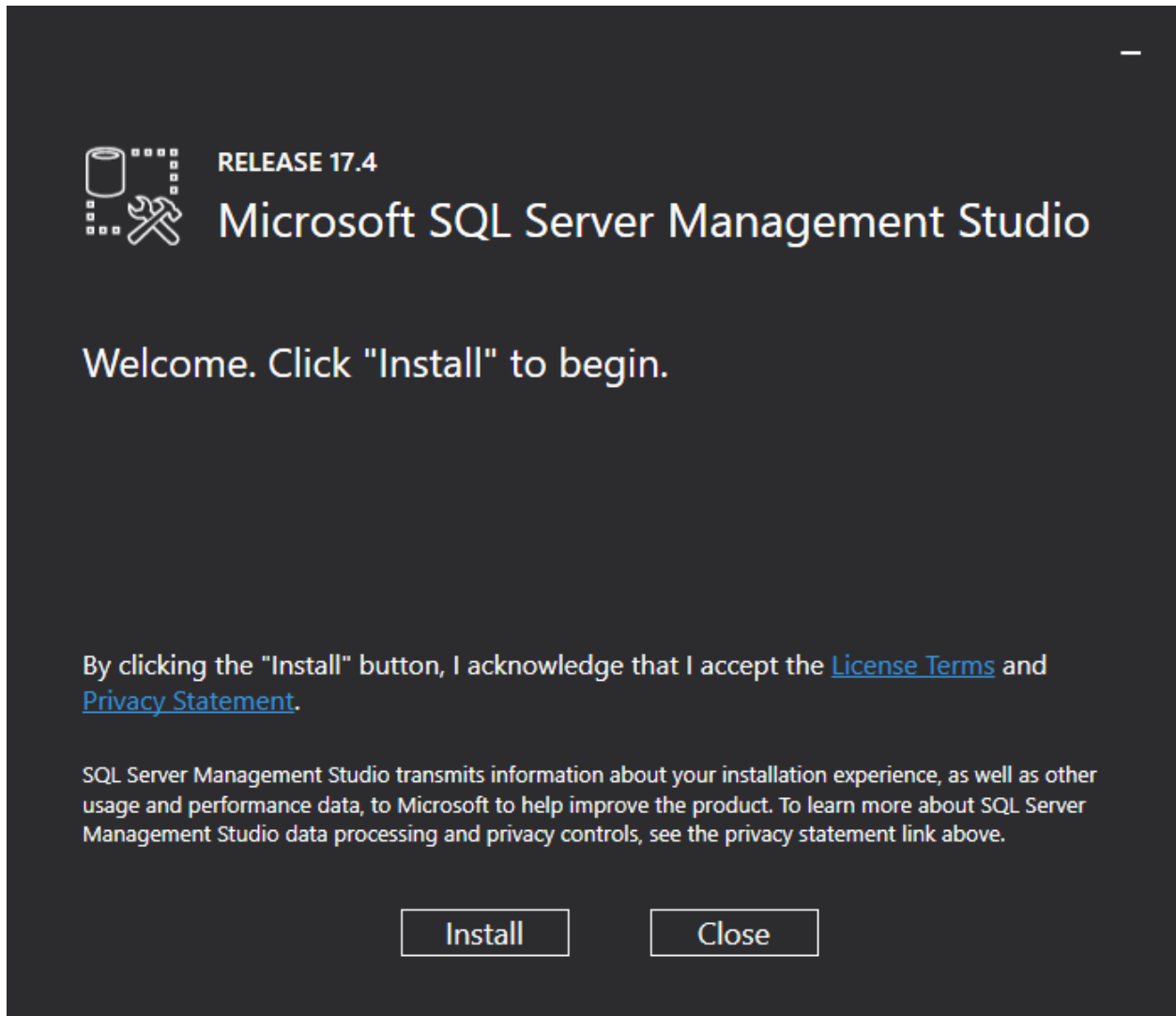| Step | Action |
|------|--------|
| **20** | When prompted with '*SQL Server 2016 Setup – Complete*', select '**Close**'. |

The following screen may or may not display:



| Step | Action |
|------|--------|
| **21** | When prompted with '*Computer restart required*', select 'OK'.<br><br>Do not **RESTART** the PCGenesis server at this time. The PCGenesis server should be rebooted as the last step of the procedure. |

The following screen displays:



| Step | Action |
|------|--------|
| **22** | When prompted with the '*Microsoft SQL Server Management Studio*' screen, select '**Install**'. |

The following screen displays briefly:
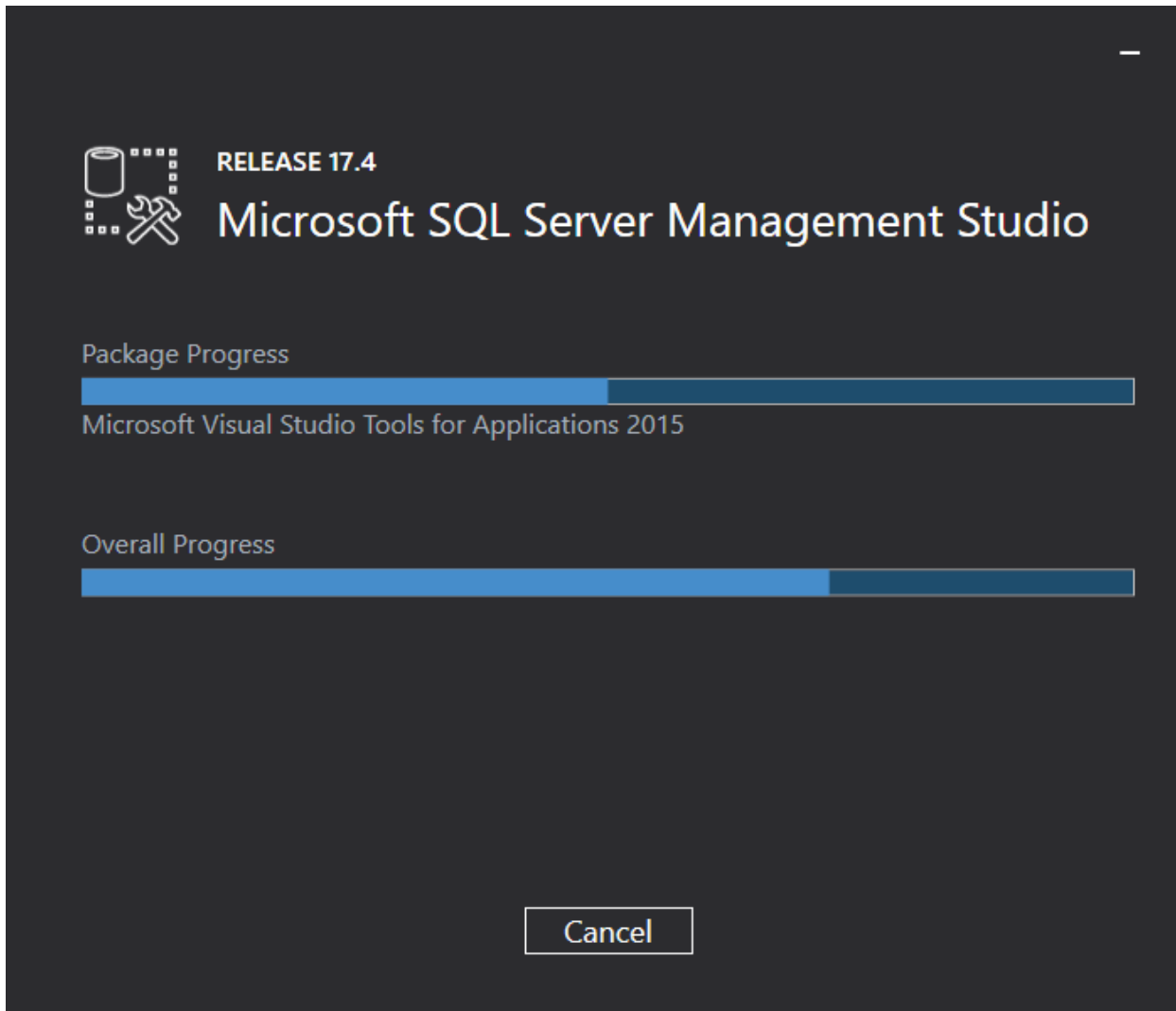
One of the following screens will display:
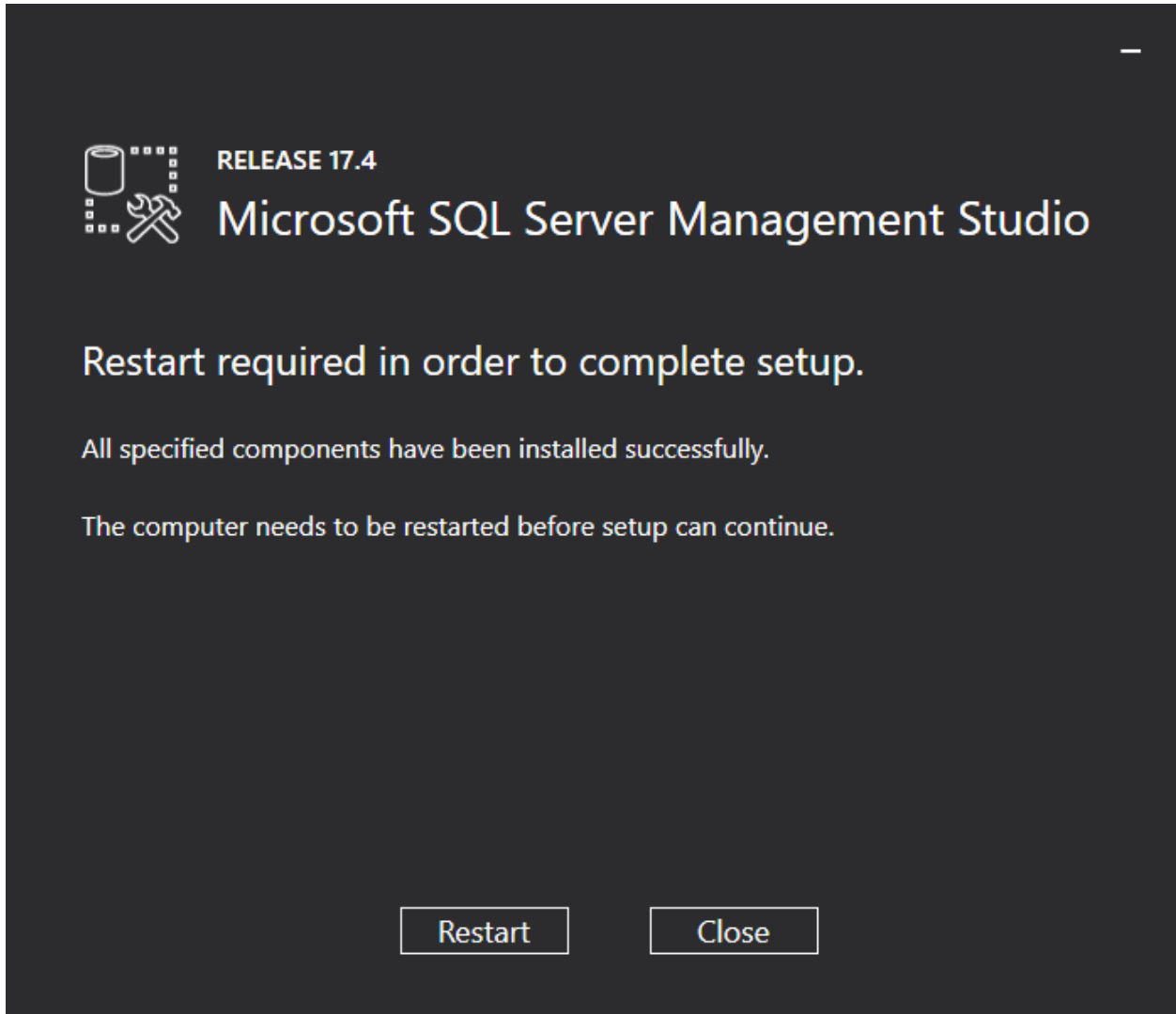
Or, this screen may display:
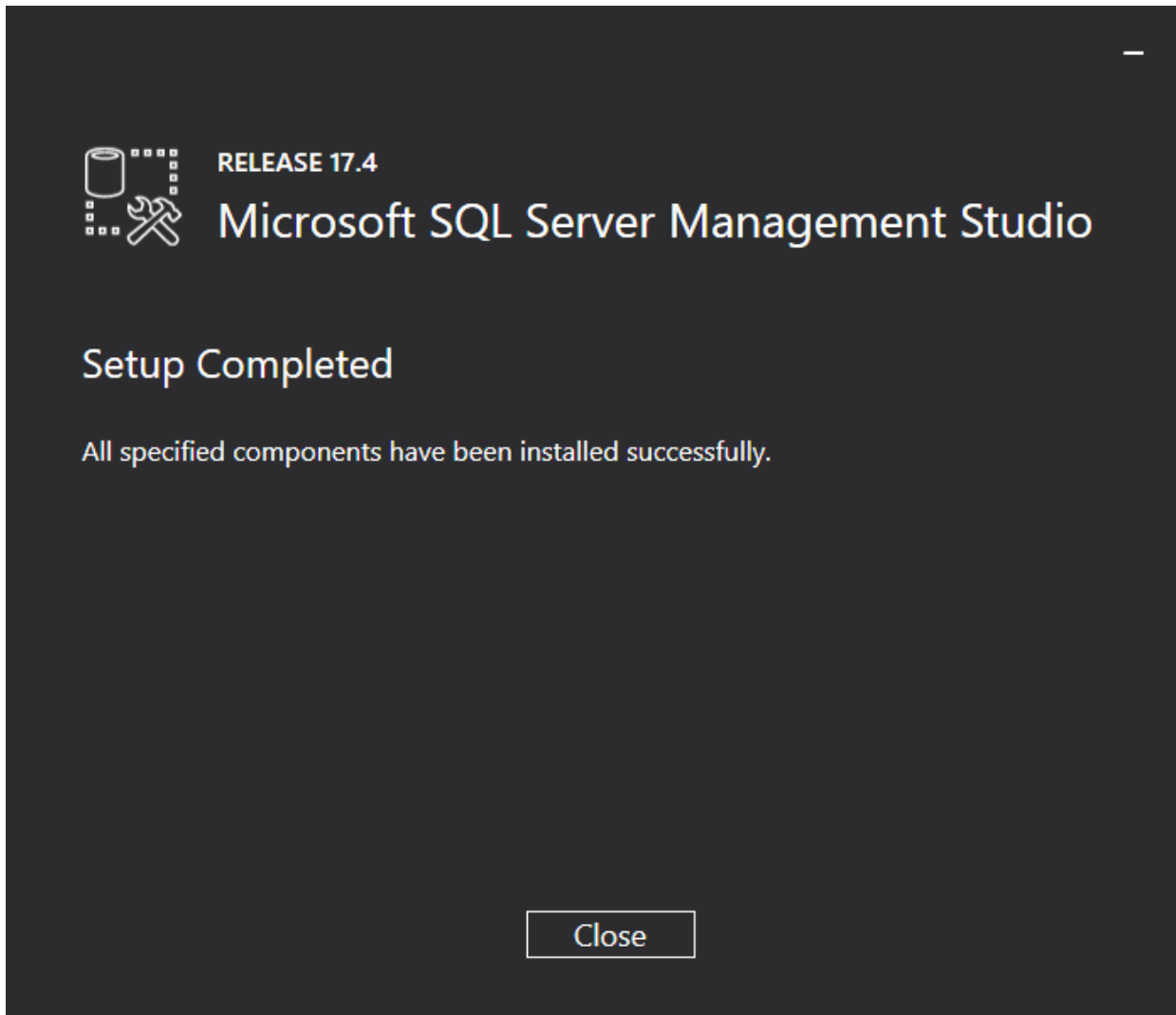


| Step | Action |
|------|--------|
| **23** | When prompted with the '*Microsoft SQL Server Management Studio*' screen, select '**Close**'.<br><br>Do not **RESTART** the PCGenesis server at this time. |

If the PCGenesis server does not have **Adobe Acrobat Reader** installed, the following screen may display briefly:
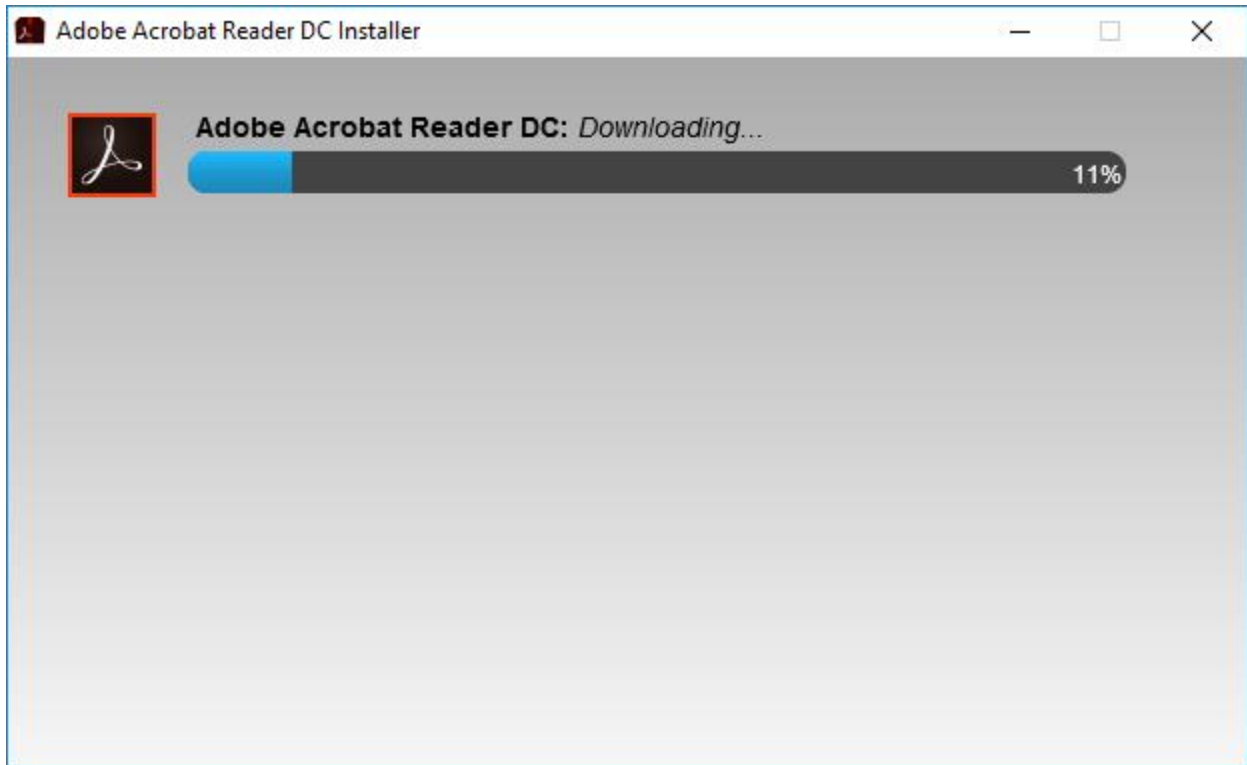


The following screen displays:
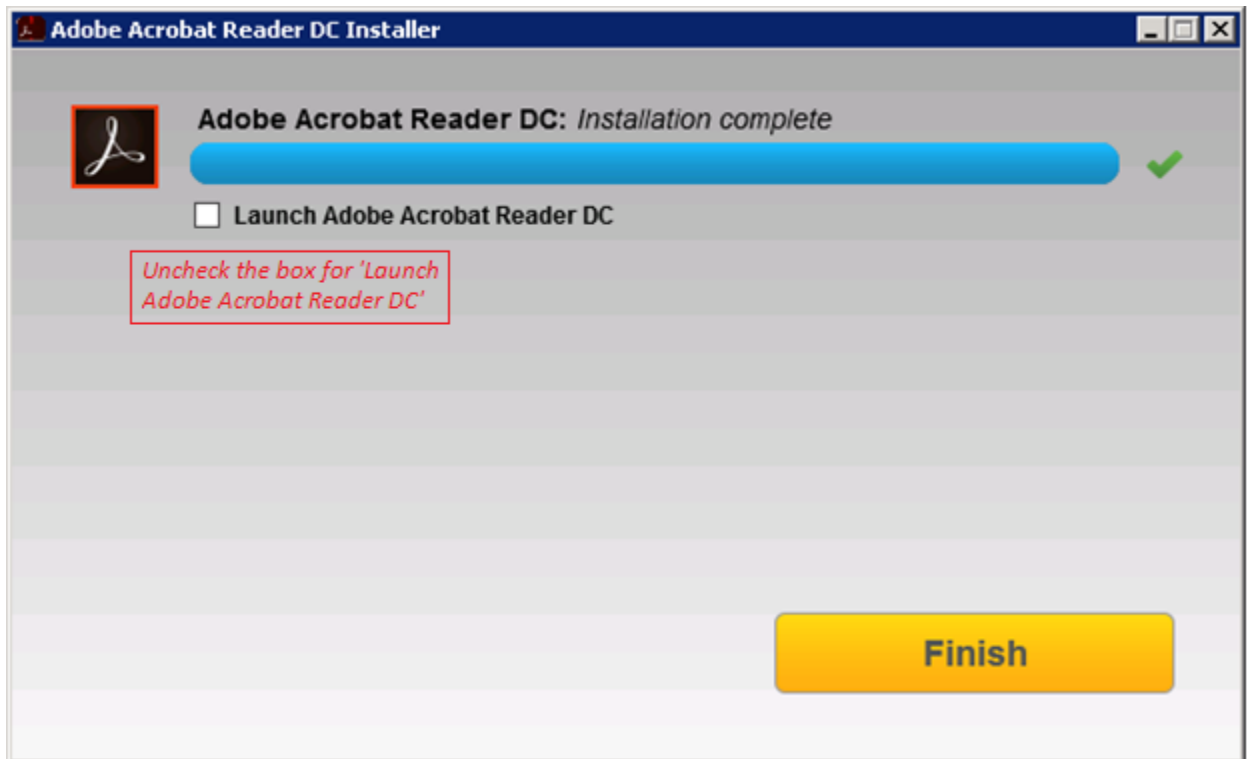
| Step | Action |
|------|--------|
| **24** | When prompted with the '*Adobe Acrobat Reader DC: Installation Complete*' screen, **uncheck** the box for '*Launch Adobe Acrobat Reader DC'* and select '**Finish**'. |
| **25** | Now, **REBOOT** the PCGenesis server. |

# *B3. Verify Release 18.S.16 Was Successfully Installed*

| Step | Action |
|------|--------|
| 1 | **Log into PCGenesis**. |
| 2 | From the *Business Applications Master Menu,* select  **30**  (**F30** - System Utilities). |
| 3 | From the *System Utilities Menu*, select  **17**  (**F17 -** Display Current Release Number). |

The following screen displays:



| Step | Action |
|------|--------|
| 4 | Verify the necessary components are installed. Check that a '**Y**' is displayed next to each of the following components.<br><br>.NET Framework 4.5:           **Y**<br>SQL SERVER EXPRESS 2016:     **Y**<br>SQL MANAGEMENT STUDIO 2016:  **Y**<br><br>*If the above components do not display a 'Y', contact the* Technology Management Customer Support Center *for assistance.* |
| 5 | Select **Enter**. |
| 6 | Log off the PCGenesis server. |

| Step | Action |
|------|--------|
| **7** | Verify users remain logged out of PCGenesis. |

## *B4. Perform a PCGenesis Full Backup After Release 18.S.16 is Installed*

| Step | Action |
|------|--------|
| **1** | **Verify all users are logged out of PCGenesis**. |
| **2** | Perform a **PCG Full Backup** to CD or DVD or USB. |
| **3** | When the PCGenesis backup completes, label the backup CD or DVD or USB **"Full System Backup After Release 18.S.16"**. |