Azure DevOps Server 2019 Installation Guide

BDC Benjamin Day Consulting

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Chapter 1: Install Windows Server 2019

Introduction

The first step for installing Azure DevOps Server 2019 (AzDO) is to install Windows Server. In this guide, I'm going to be using Windows Server 2019. I'm also assuming that you'll be installing Azure DevOps Server 2019 in a single server configuration – aka. the AZDO Application Tier and SQL Server will be installed on a single machine.

Install Windows Server 2019

I'm assuming that you've got an Active Directory Domain already set up and configured and that we'll eventually be joining this new server to that domain.

- Either insert your **Windows Server 2019 DVD** into the DVD drive or mount the **Windows Server 2019 ISO image** into the DVD drive for your virtual machine.
- Start the machine

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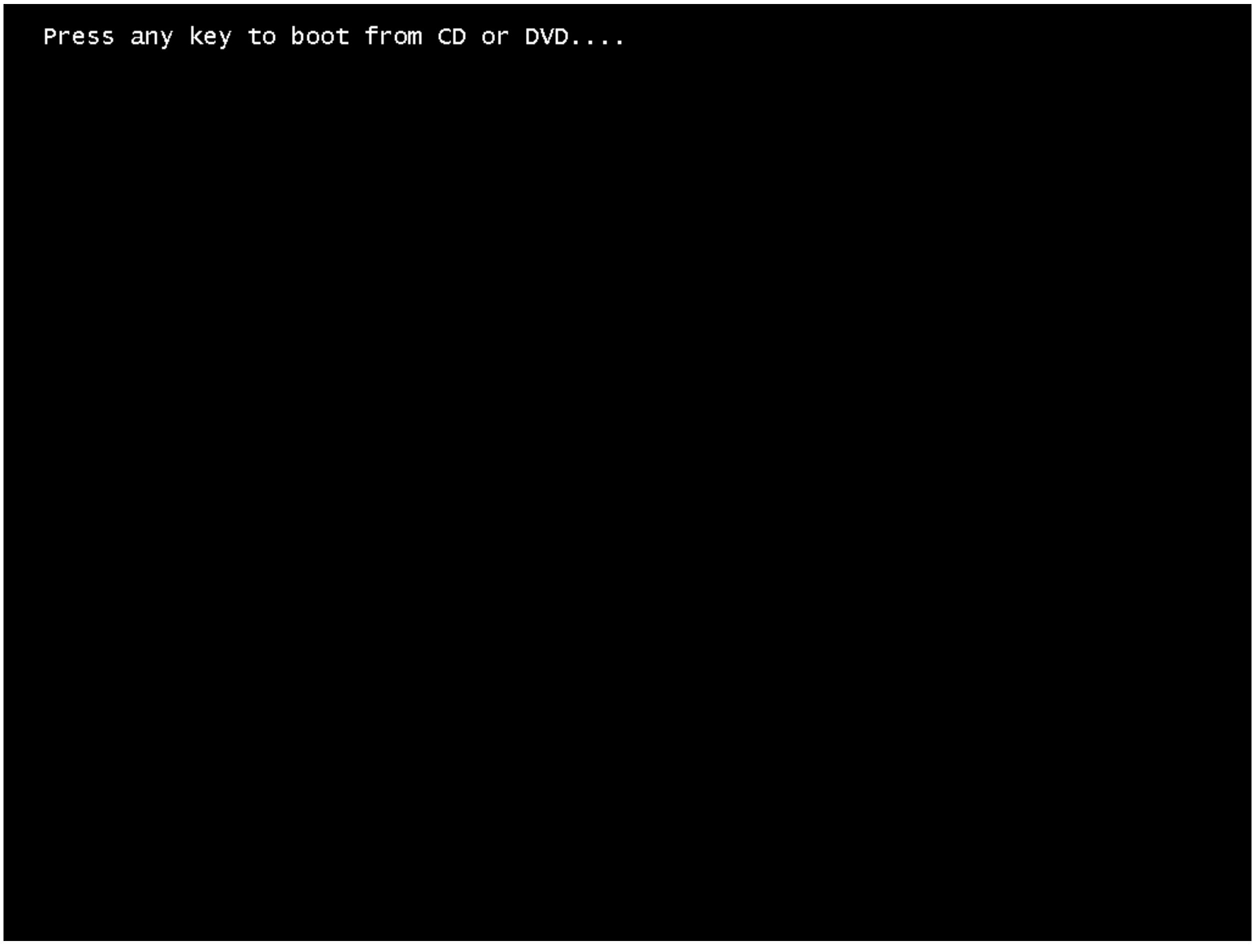
You will see the **Press any key to boot from CD or DVD....** message appear.



```
Press any key to boot from CD or DVD....
```

- Press any key to boot from the DVD drive

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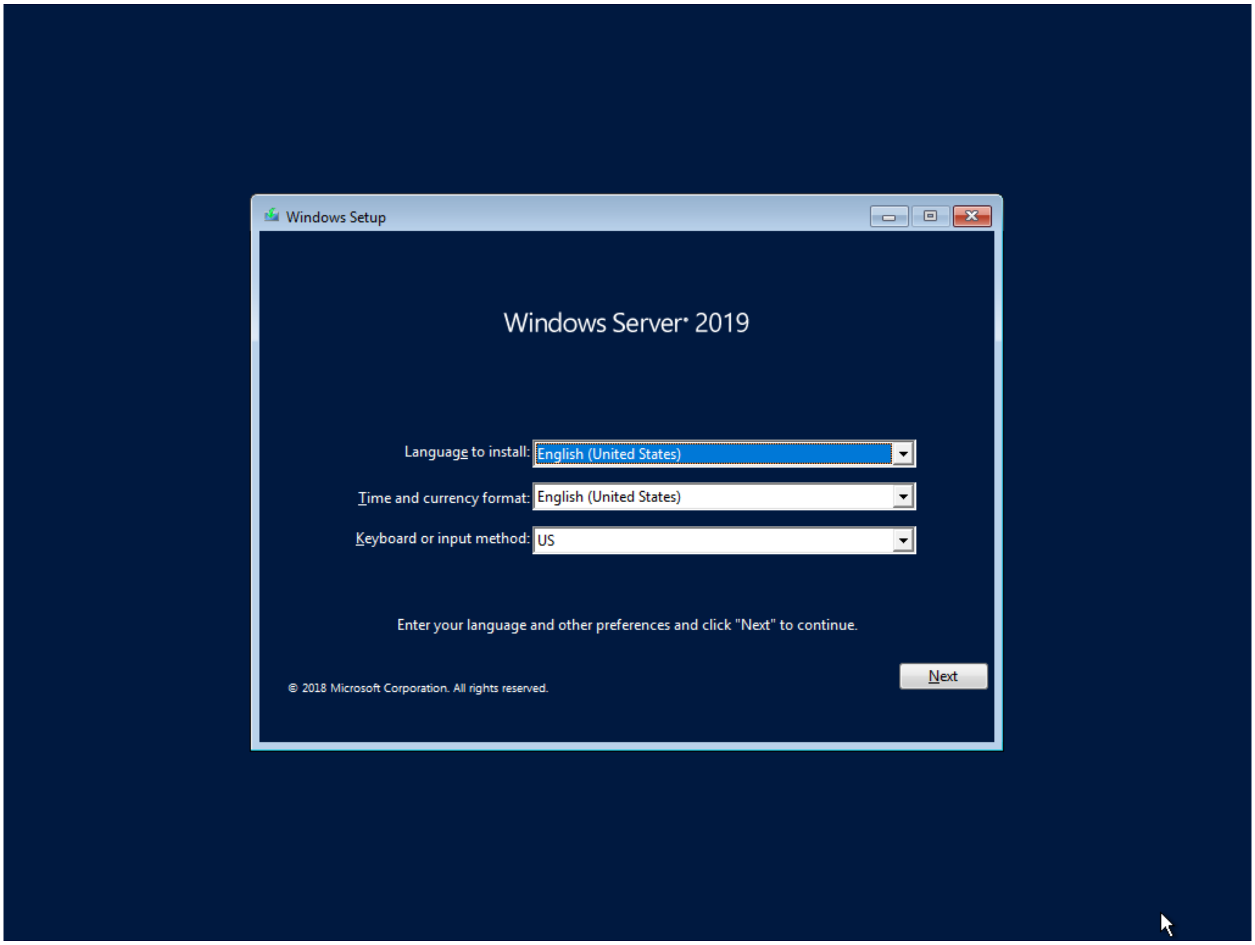
You should see the Windows Setup welcome screen.



Language to install: English (United States)

Time and currency format: English (United States)

Keyboard or input method: US

Enter your language and other preferences and click "Next" to continue.

© 2018 Microsoft Corporation. All rights reserved.

- Click **Next**

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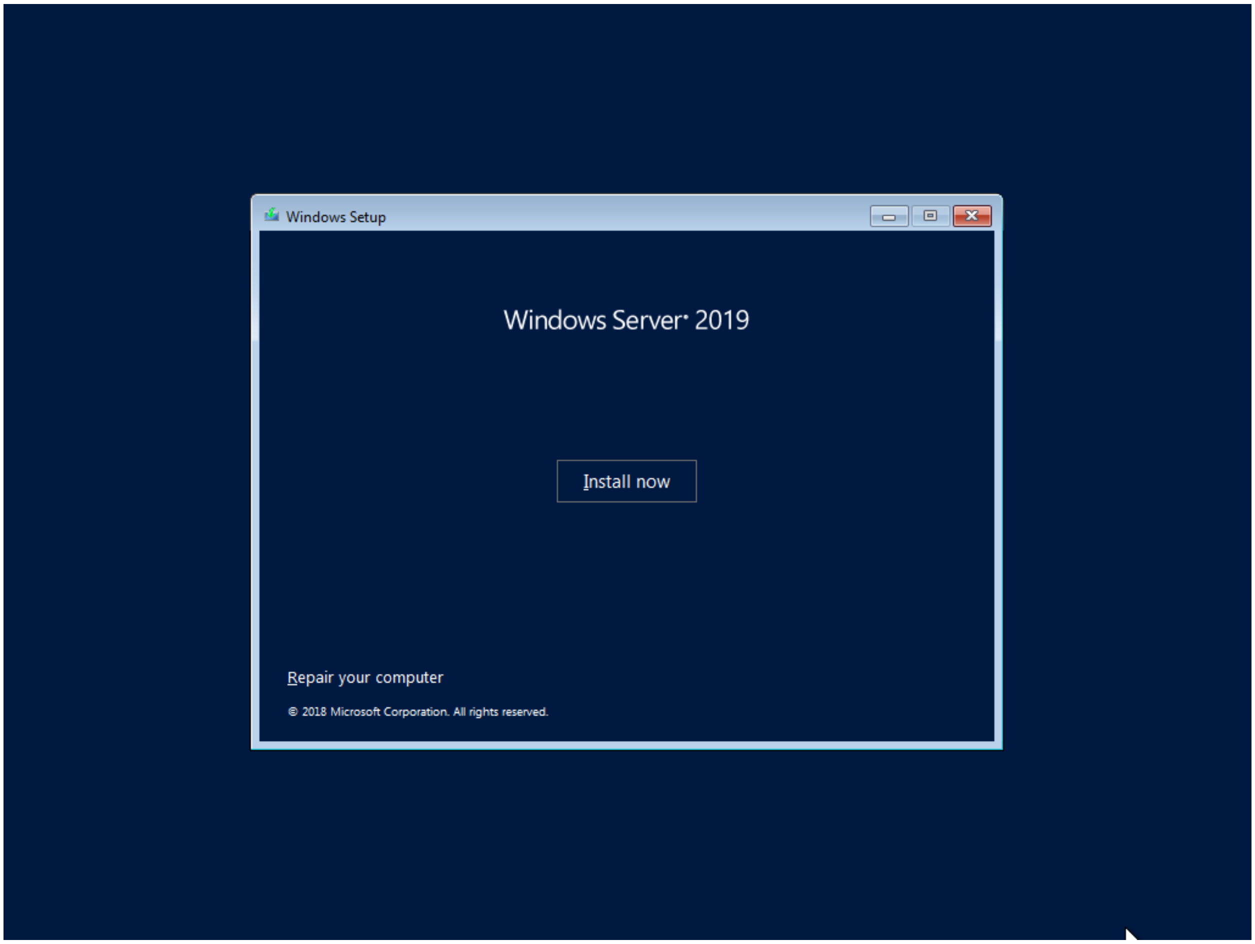

- Click the **Install now** button

You should see a screen saying that setup is starting.

Setup is starting

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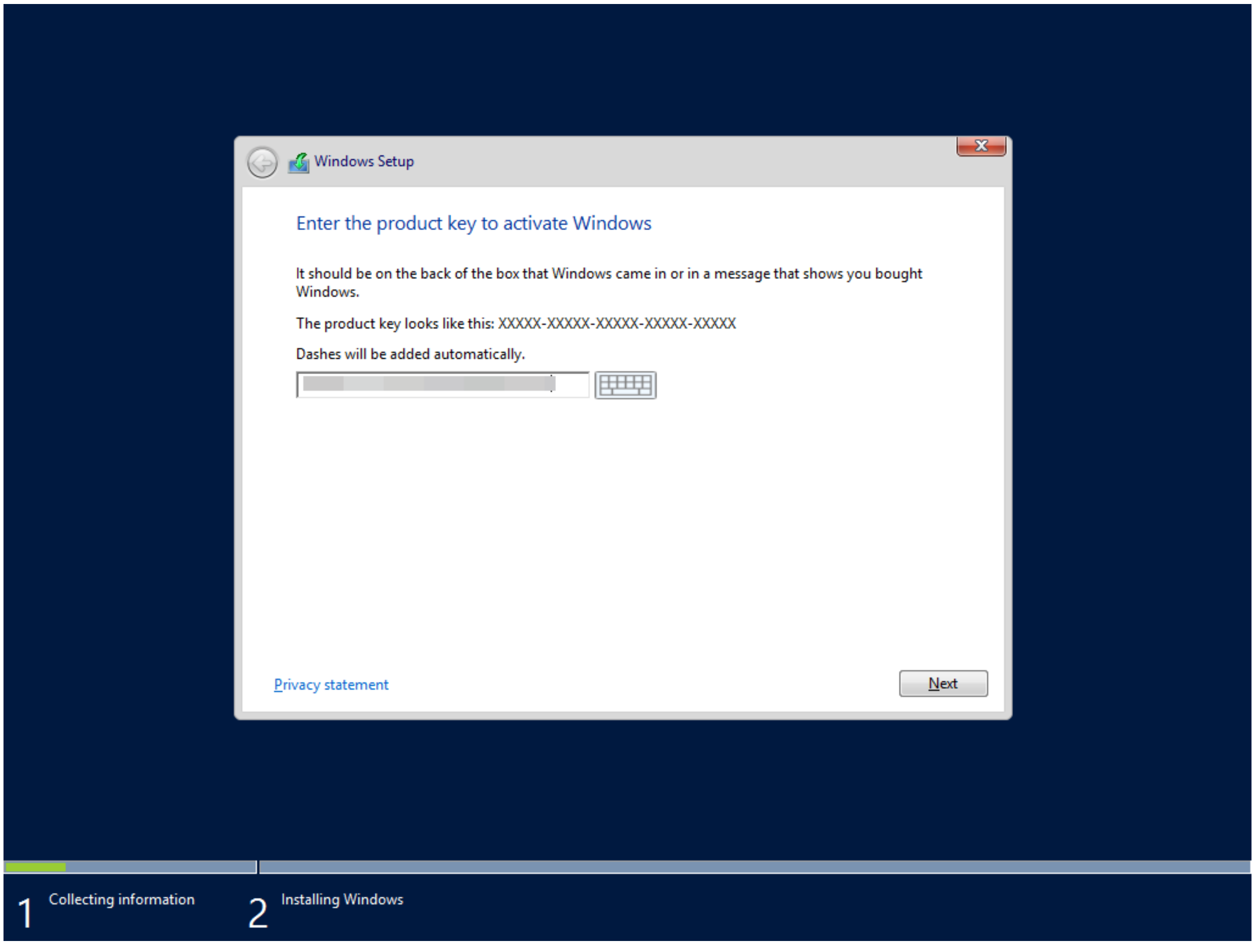
You’ll be prompted for a license key.



Enter the product key to activate Windows

It should be on the back of the box that Windows came in or in a message that shows you bought Windows.

The product key looks like this: XXXXX-XXXXX-XXXXX-XXXXX-XXXXX

Dashes will be added automatically.

[redacted]

- Enter your license key
- Click the **Next** button

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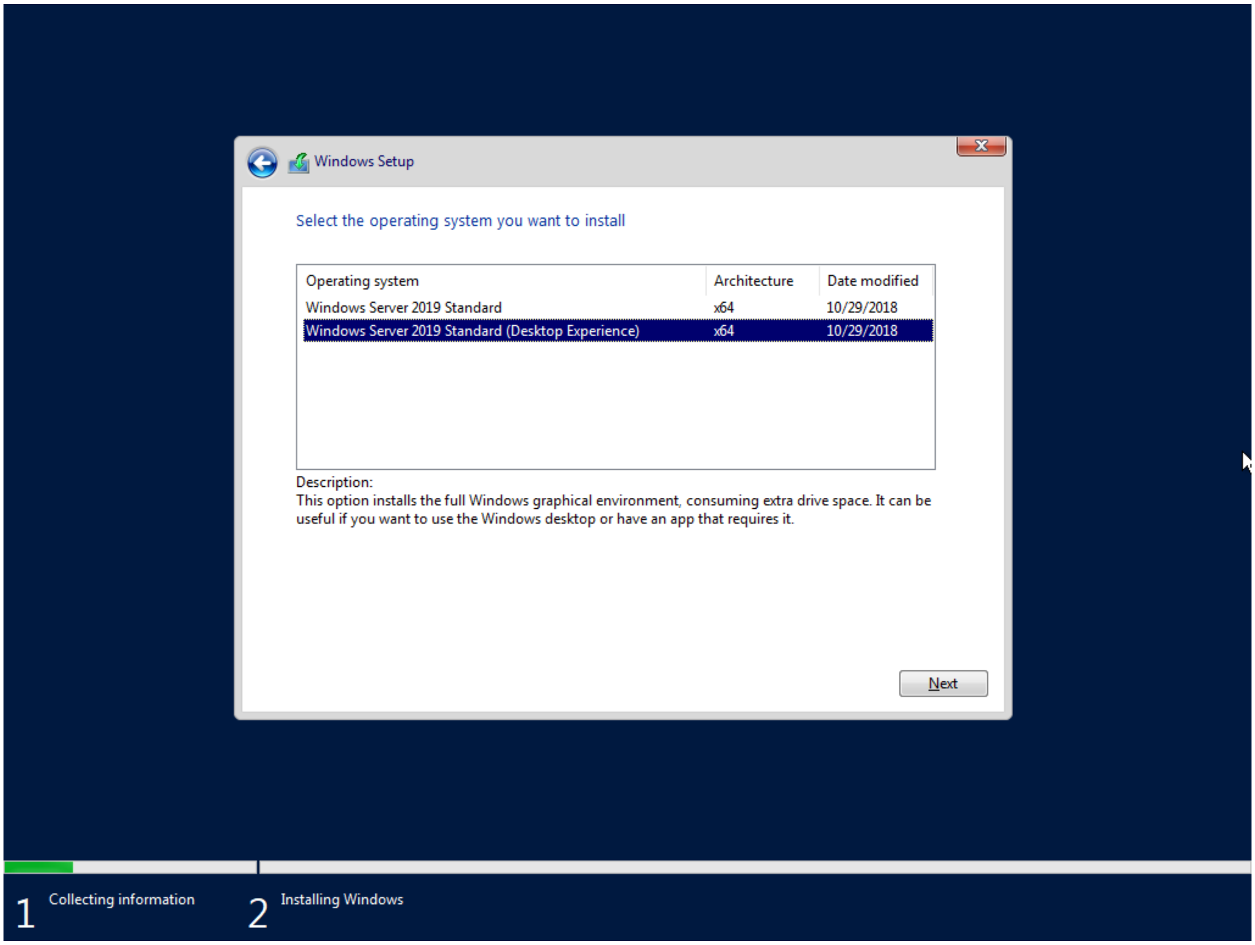
You'll be prompted to choose what version of Windows Server 2019 that you'd like to install. This guide assumes that you'll be installing Windows Server 2019 Standard and that you'll be installing the graphical user interface (GUI).



Select the operating system you want to install

Operating system	Architecture	Date modified
Windows Server 2019 Standard	x64	10/29/2018
Windows Server 2019 Standard (Desktop Experience)	x64	10/29/2018

Description:
This option installs the full Windows graphical environment, consuming extra drive space. It can be useful if you want to use the Windows desktop or have an app that requires it.

- Choose **Windows Server 2019 Standard (Desktop Experience)**
- Click the **Next** button

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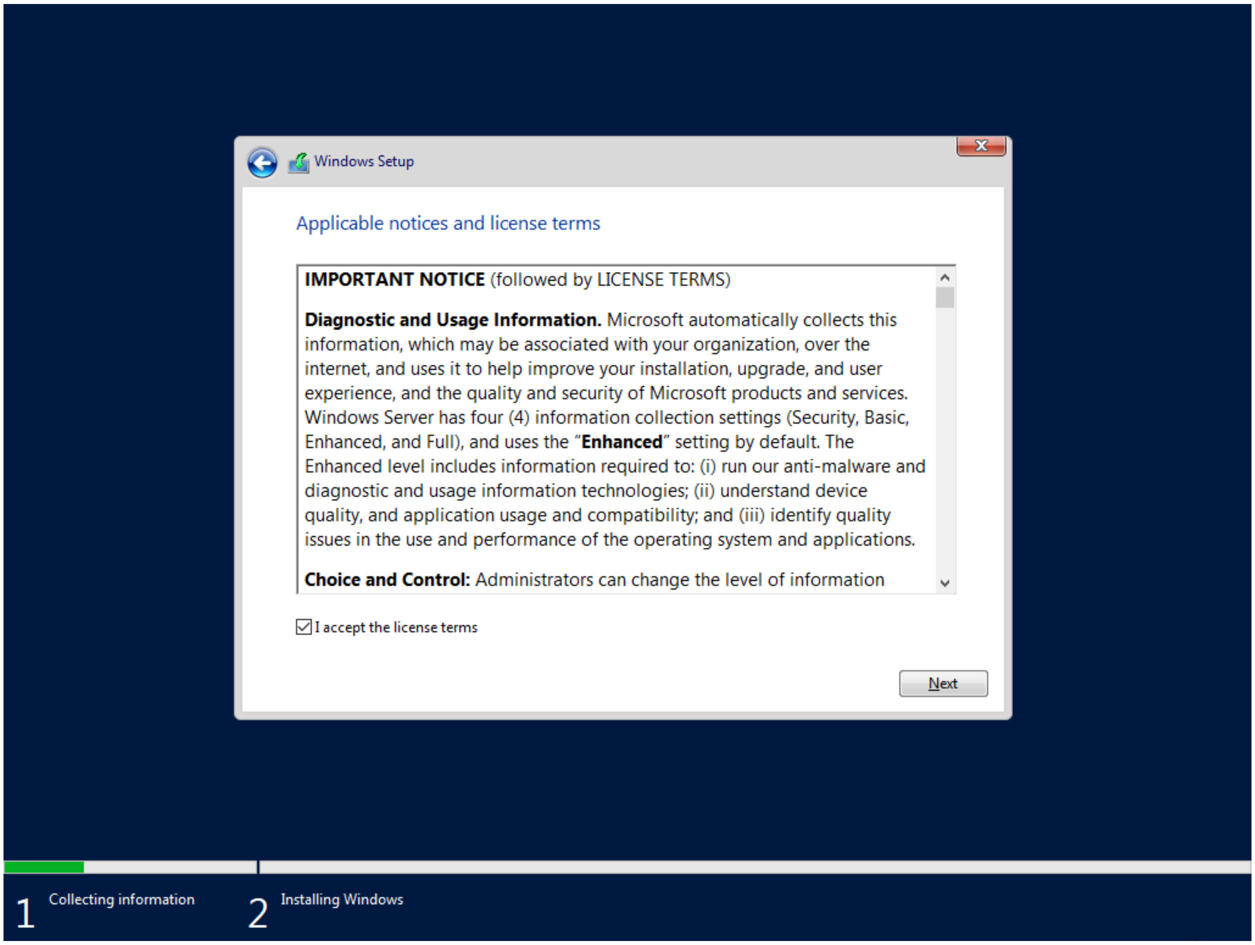
You'll be shown the license terms.



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IMPORTANT NOTICE (followed by LICENSE TERMS)

Diagnostic and Usage Information. Microsoft automatically collects this information, which may be associated with your organization, over the internet, and uses it to help improve your installation, upgrade, and user experience, and the quality and security of Microsoft products and services. Windows Server has four (4) information collection settings (Security, Basic, Enhanced, and Full), and uses the "**Enhanced**" setting by default. The Enhanced level includes information required to: (i) run our anti-malware and diagnostic and usage information technologies; (ii) understand device quality, and application usage and compatibility; and (iii) identify quality issues in the use and performance of the operating system and applications.

Choice and Control: Administrators can change the level of information

☑ I accept the license terms

- Read the license terms in painstaking detail
- Check the **I accept the license terms** box
- Click the **Next** button

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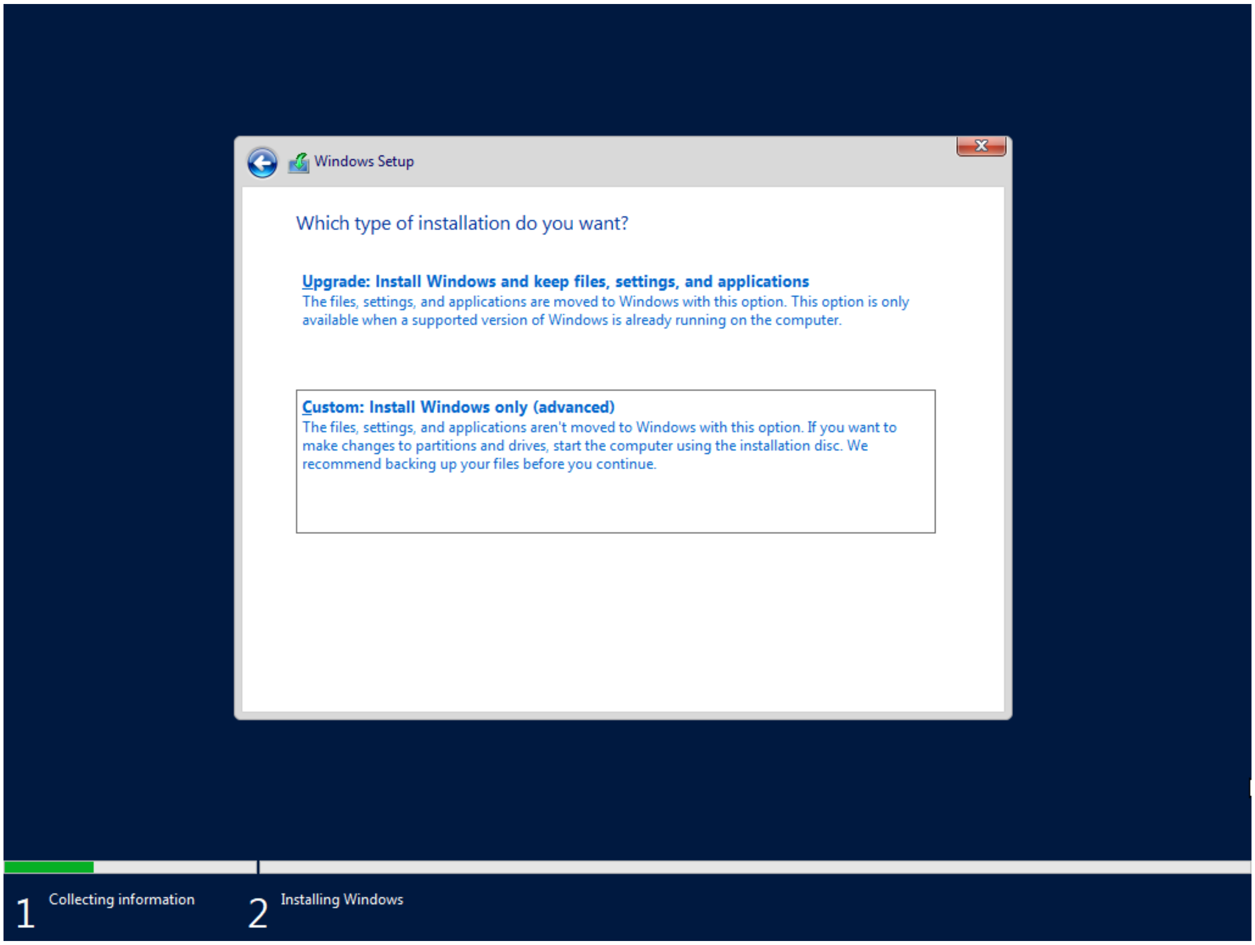
We'll be doing a new installation rather than an upgrade.



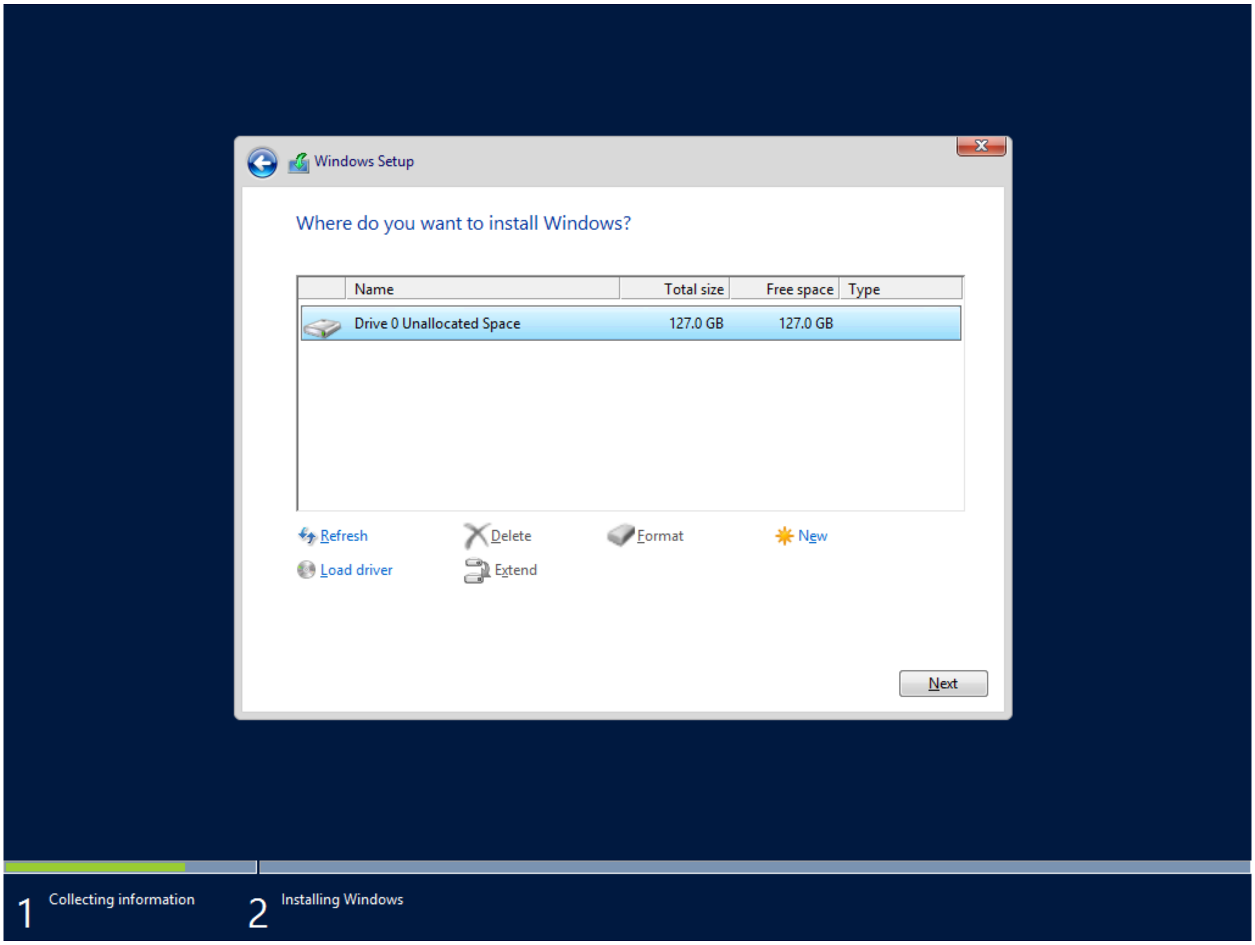
Which type of installation do you want?

Upgrade: Install Windows and keep files, settings, and applications
The files, settings, and applications are moved to Windows with this option. This option is only available when a supported version of Windows is already running on the computer.

Custom: Install Windows only (advanced)
The files, settings, and applications aren't moved to Windows with this option. If you want to make changes to partitions and drives, start the computer using the installation disc. We recommend backing up your files before you continue.

- Click **Custom: Install Windows only (advanced)**

You should now see a dialog that lets you choose where you'd like to install windows. I'm assuming that we'll be installing on a new computer without any existing partitions on the disk.



Where do you want to install Windows?

Name	Total size	Free space	Type
Drive 0 Unallocated Space	127.0 GB	127.0 GB	

- Choose **Drive 0 Unallocated Space** or another appropriate partition or unallocated disk space
- Click **Next**

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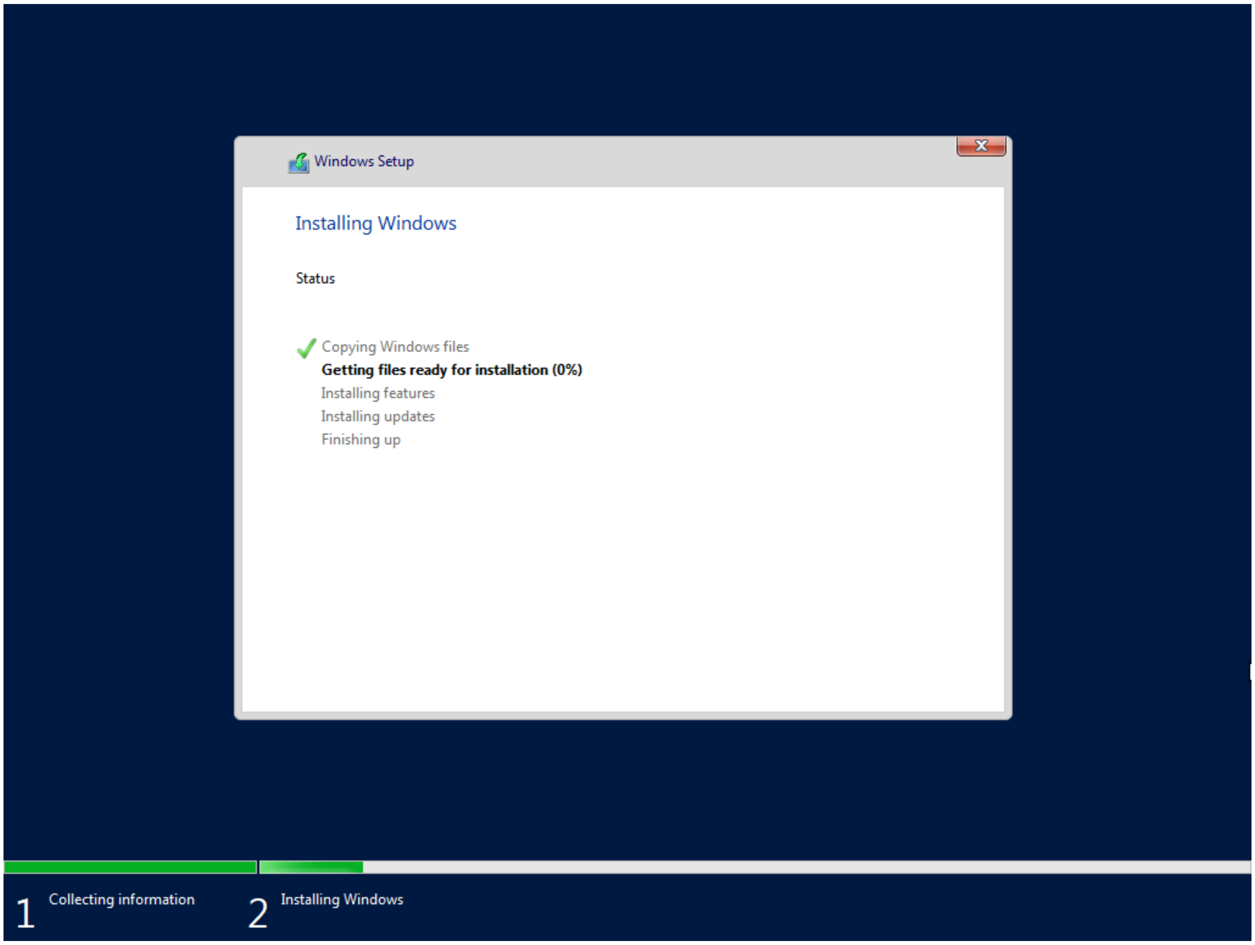
The installation should now be running.



Windows Setup

Installing Windows

Status

✓ Copying Windows files
Getting files ready for installation (0%)
Installing features
Installing updates
Finishing up

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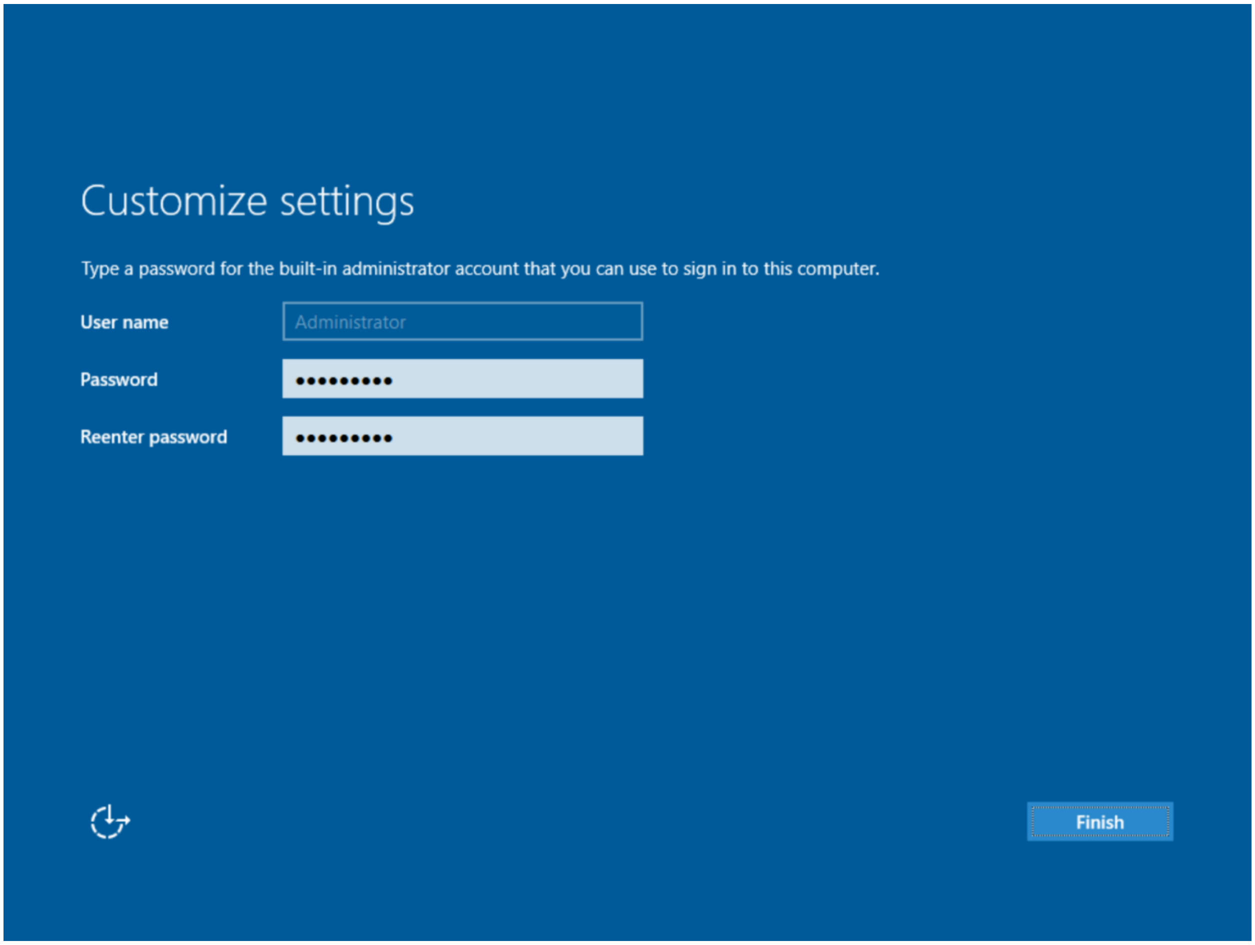
Your server will automatically reboot when the installation is complete and you'll be prompted to create an administrator password.



Customize settings

Type a password for the built-in administrator account that you can use to sign in to this computer.

User name: Administrator

Password: •••••••••

Reenter password: •••••••••

- Enter your password in the **Password** box
- Enter your password in the **Reenter password** box
- Click the **Finish** button

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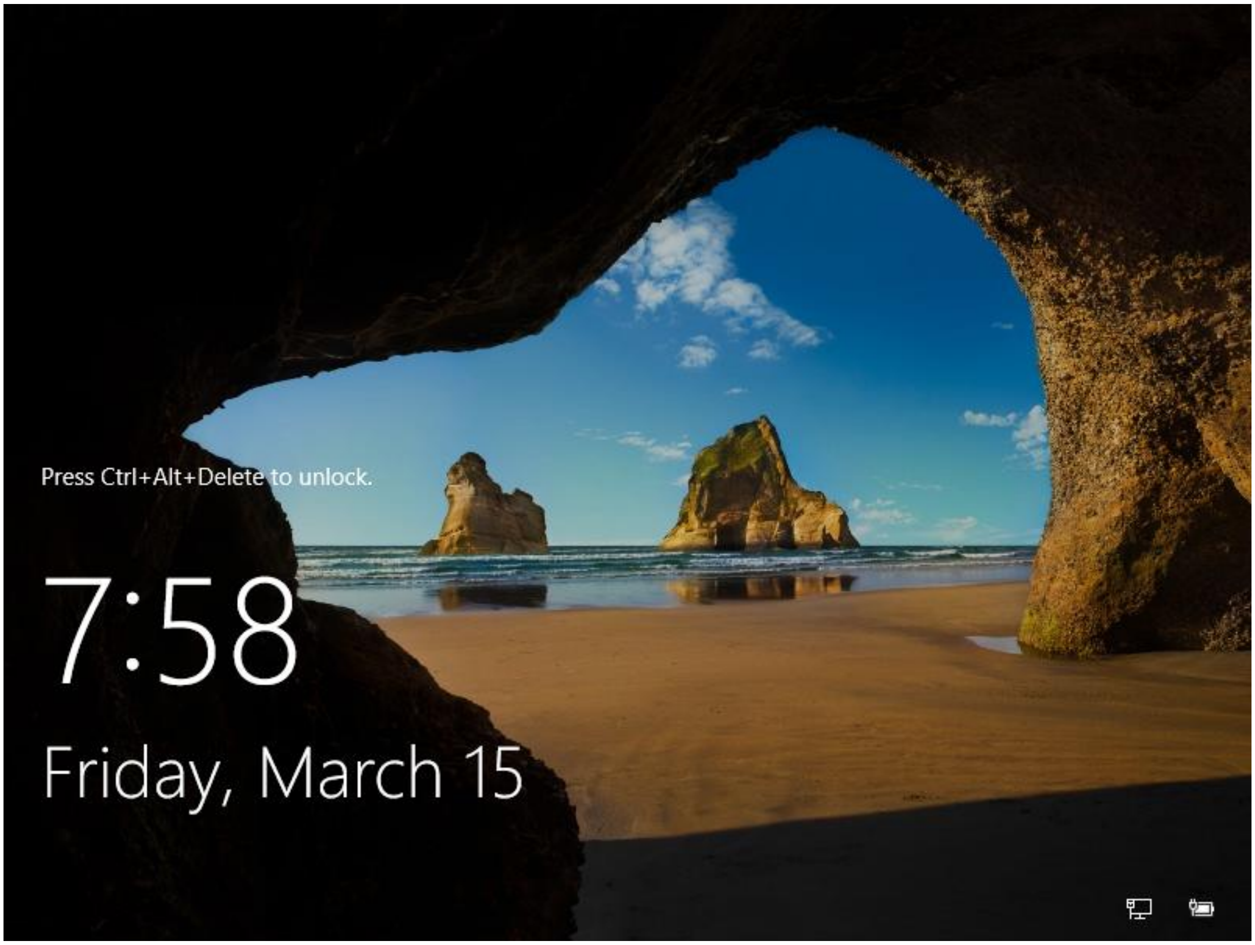
You should now see the lock screen for your new server.



Press Ctrl+Alt+Delete to unlock.

7:58

Friday, March 15

- Type **CTRL-ALT-DEL** to open a login prompt

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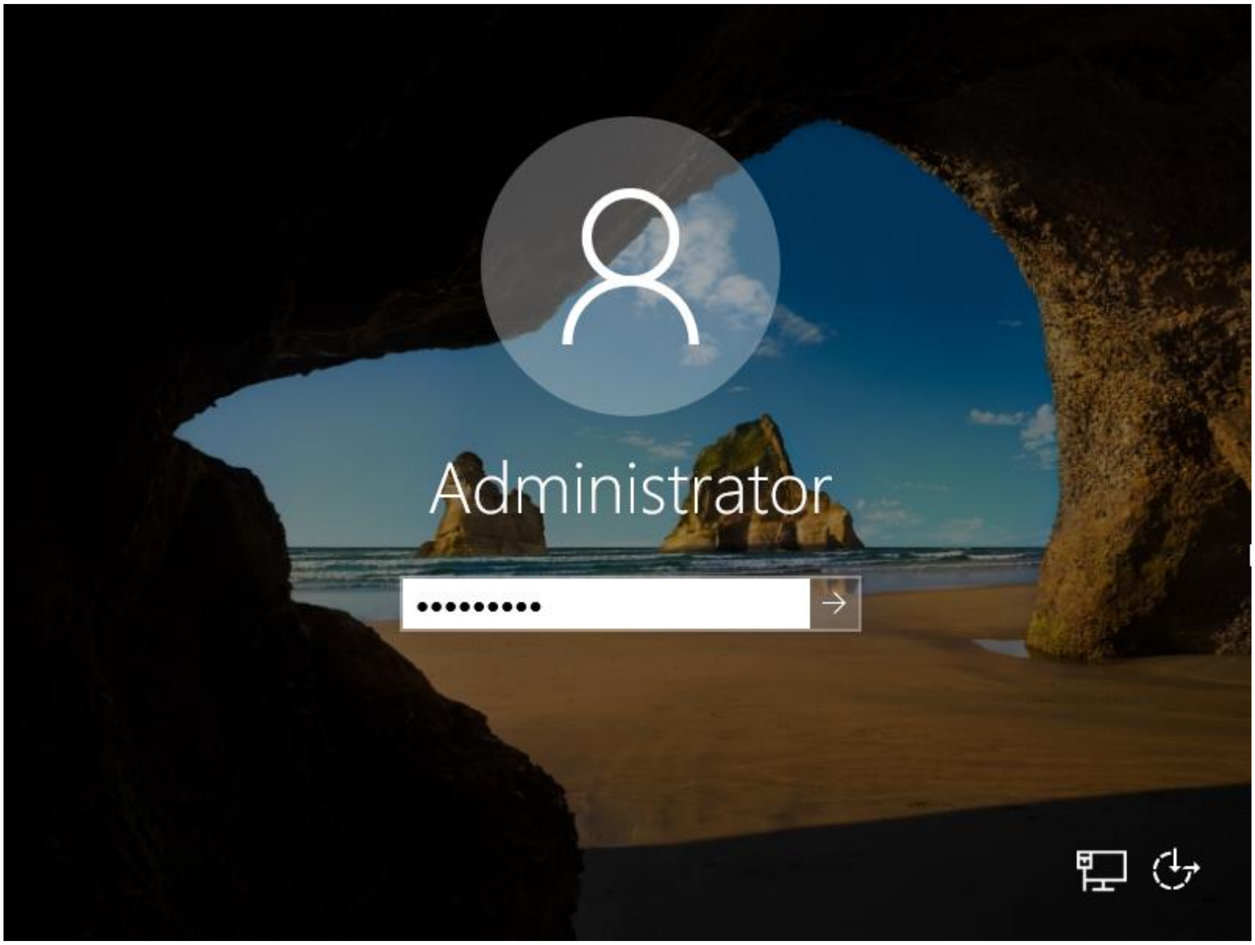
You should see the login prompt.



- Enter your **password** followed by **<ENTER>**

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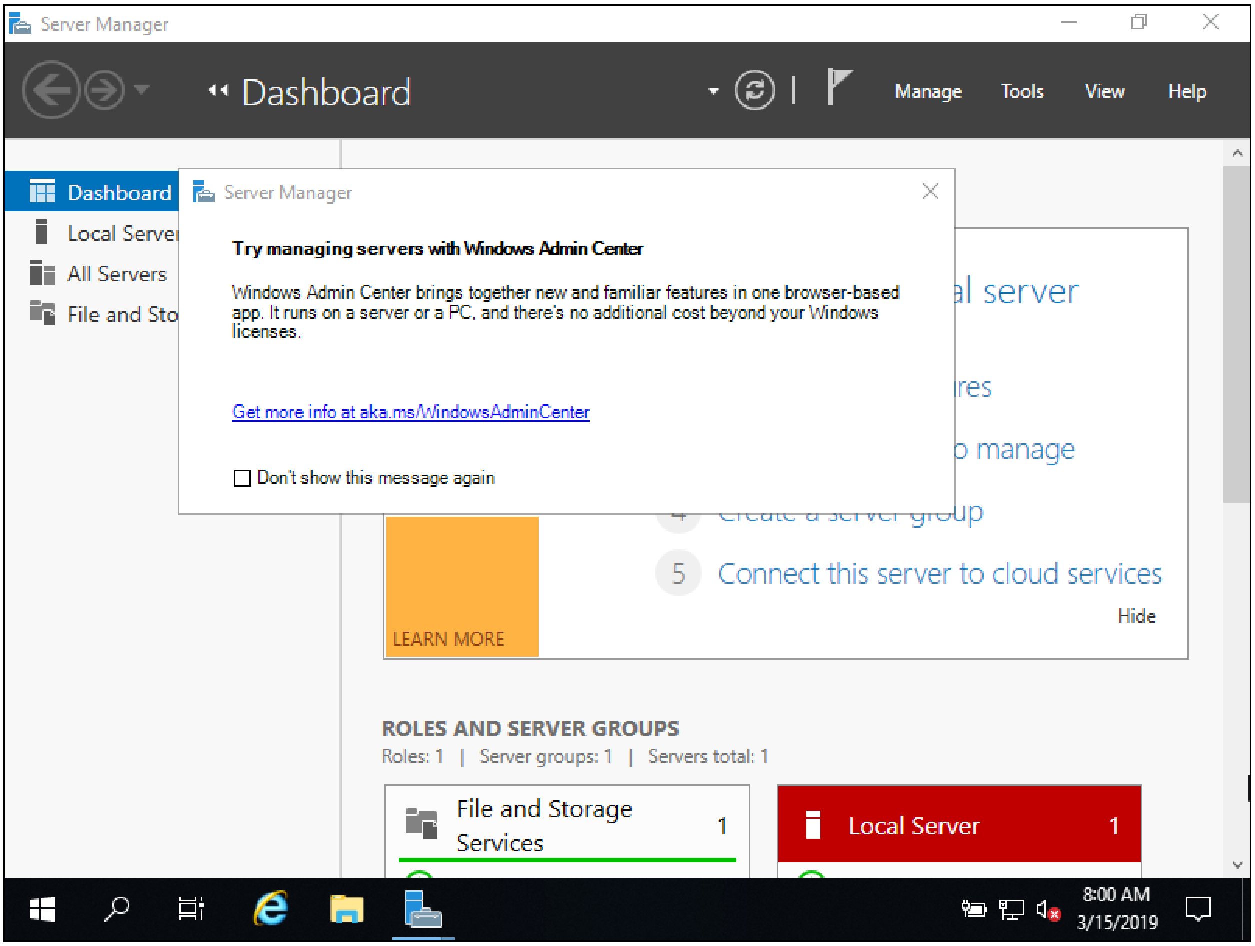
You should now be logged in and you should see the server manager dashboard. The next step is to run Windows Update to patch this server.



Server Manager

Try managing servers with Windows Admin Center

Windows Admin Center brings together new and familiar features in one browser-based app. It runs on a server or a PC, and there's no additional cost beyond your Windows licenses.

Get more info at aka.ms/WindowsAdminCenter

□ Don't show this message again

- Click the **Windows button** in the bottom left of the screen to navigate to the Start screen

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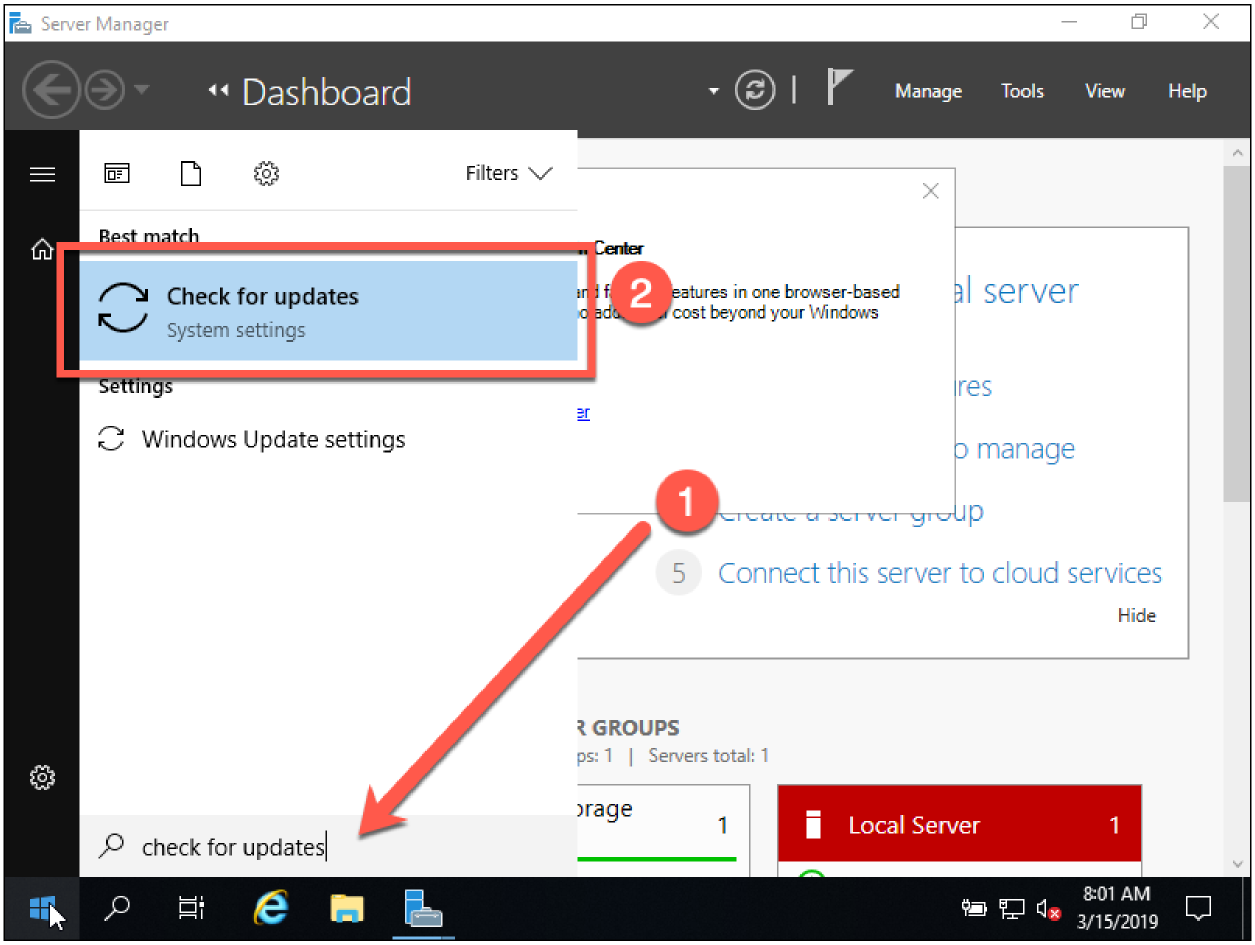
You should now be at the Start menu.



- In the search box, type **Check for updates**
- Click **Check for updates** in the search results

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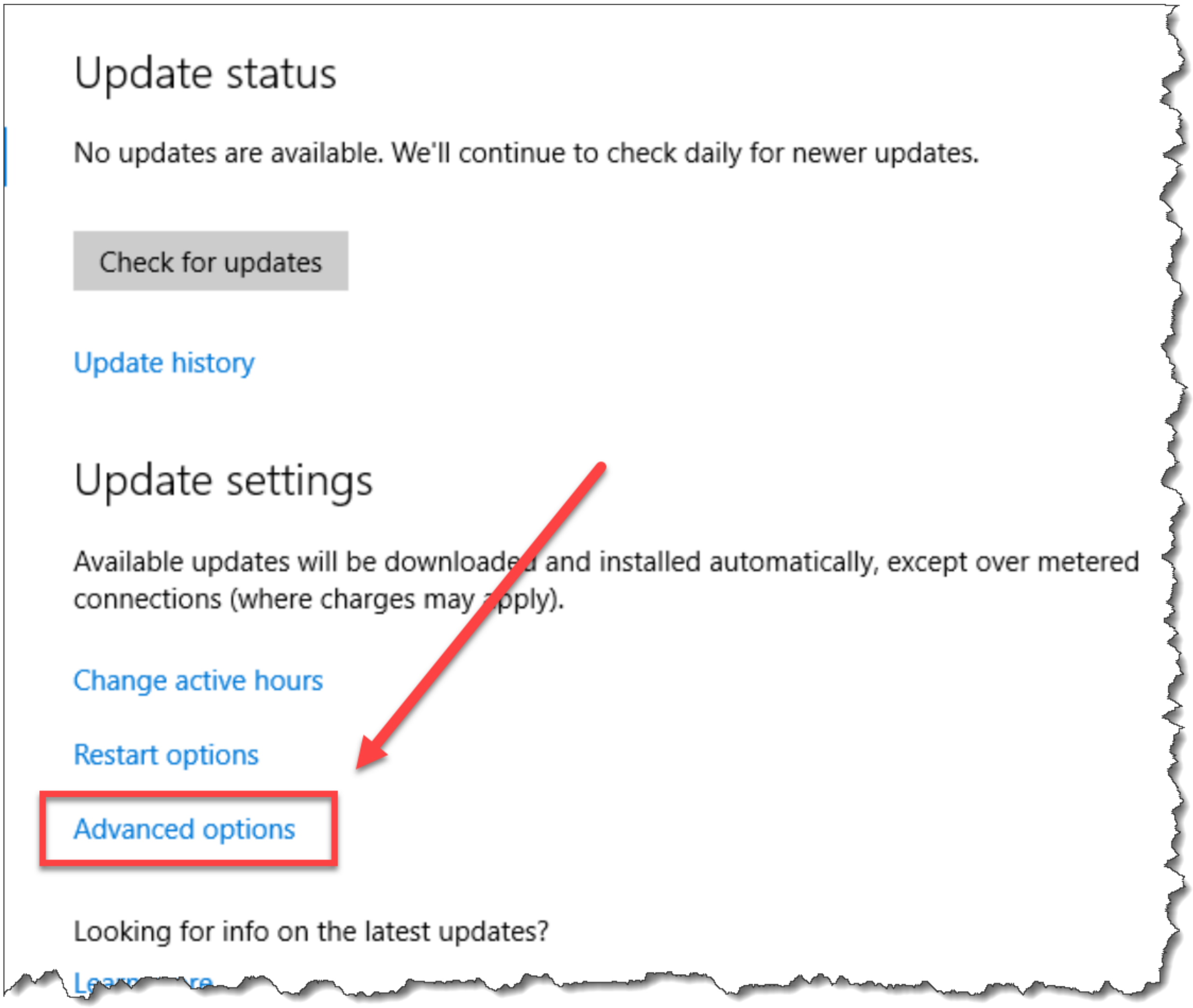
You should now see the Settings window. By default, Windows Update only gets patches for Windows itself but we want to enable patches for other products as well.



Update status

No updates are available. We'll continue to check daily for newer updates.

Update settings

Available updates will be downloaded and installed automatically, except over metered connections (where charges may apply).

Looking for info on the latest updates?

- Click the **Advanced options** link

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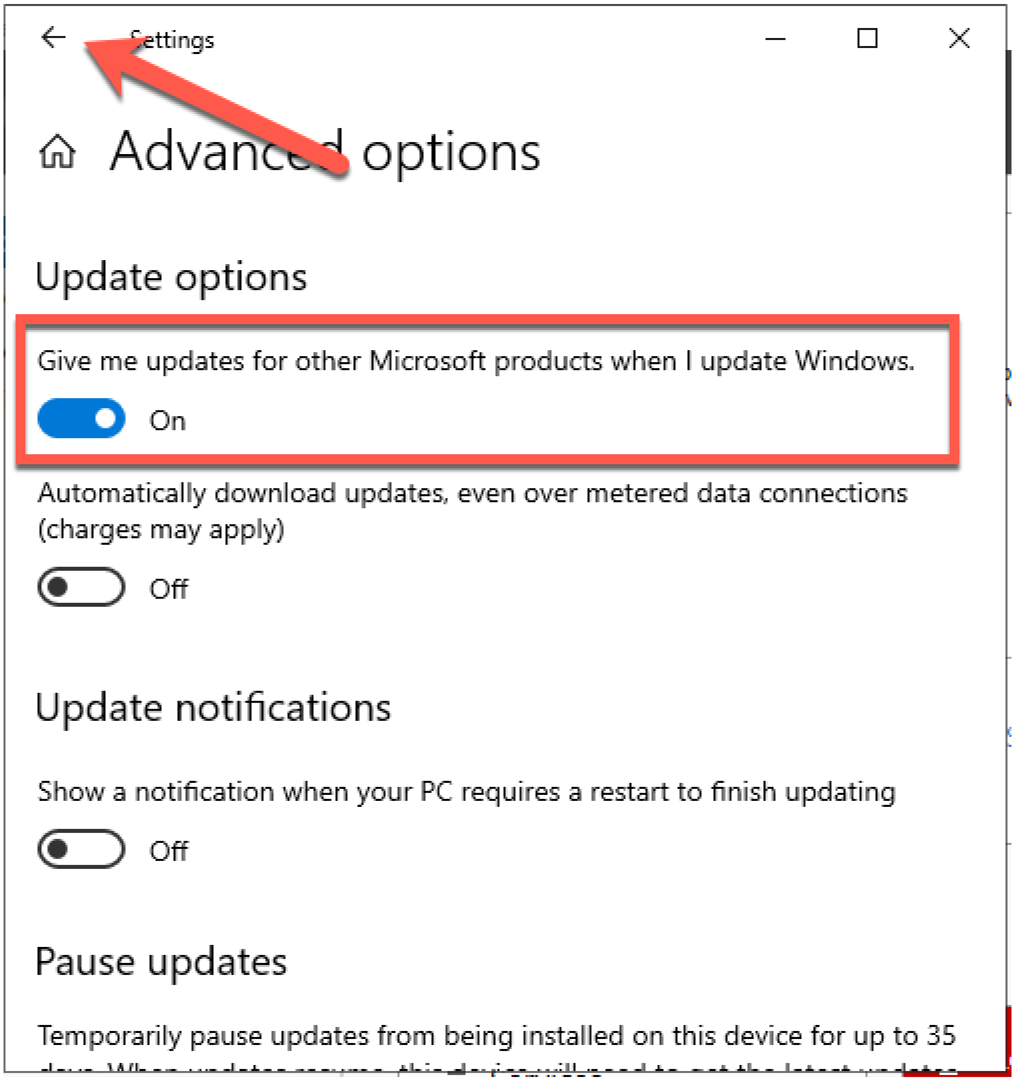
You should be on a screen with the title **Advanced options**.



Advanced options

Update options

Give me updates for other Microsoft products when I update Windows.

On

Automatically download updates, even over metered data connections (charges may apply)

Off

Update notifications

Show a notification when your PC requires a restart to finish updating

Off

Pause updates

Temporarily pause updates from being installed on this device for up to 35

- Check **Give me updates for other Microsoft products when I update Windows**
- In the upper left corner of the screen, click the back arrow button

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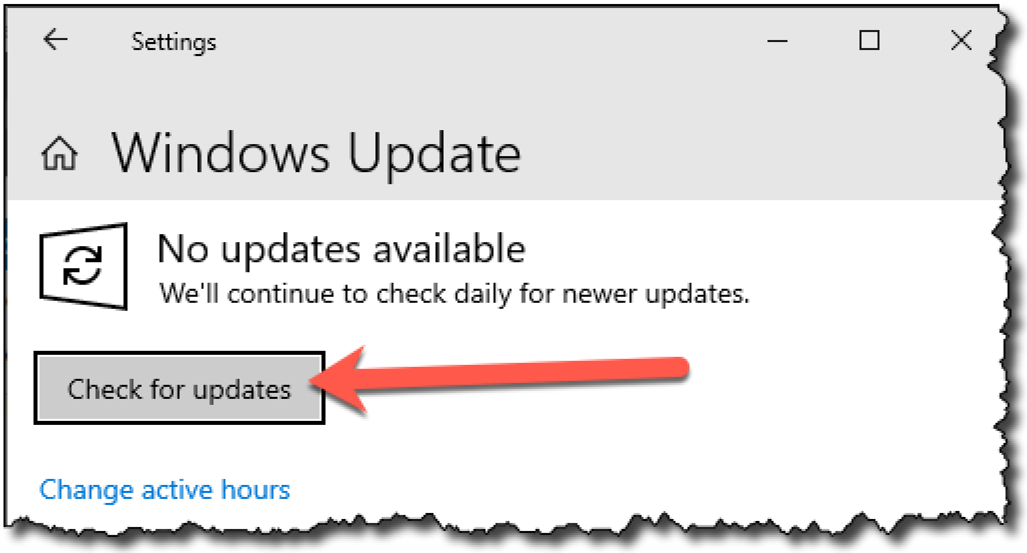
You should be back on the **Update status** screen.



No updates available

We'll continue to check daily for newer updates.

- Click the **Check for updates** button

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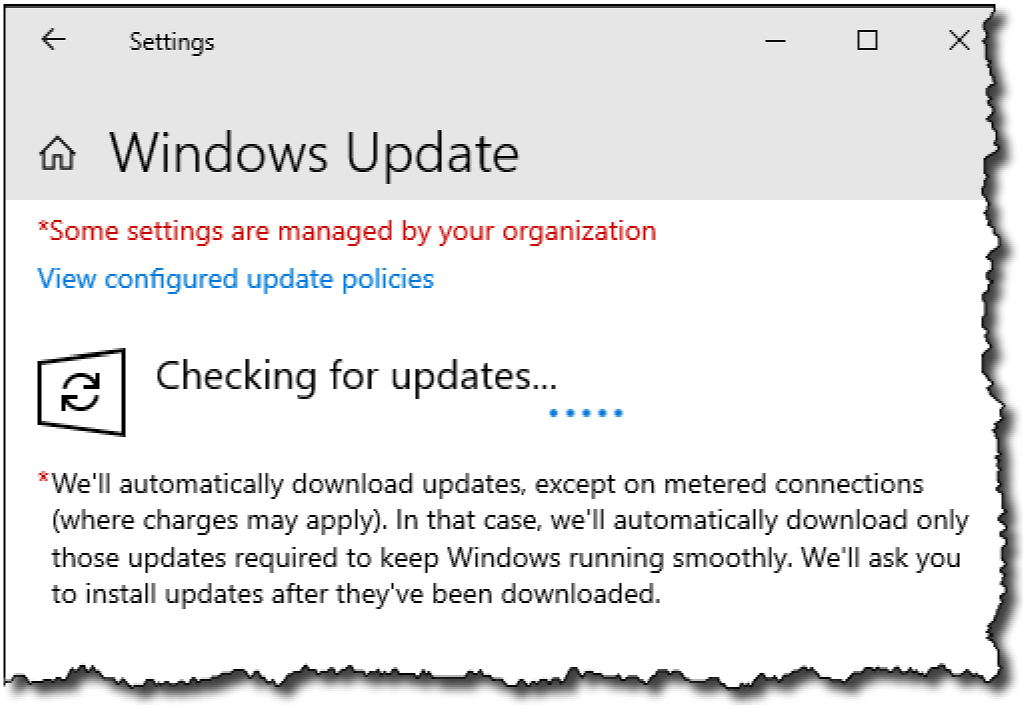
Windows Update should now be checking for updates.



*Some settings are managed by your organization

View configured update policies

Checking for updates...

*We'll automatically download updates, except on metered connections (where charges may apply). In that case, we'll automatically download only those updates required to keep Windows running smoothly. We'll ask you to install updates after they've been downloaded.

Windows Update will probably find a ton of available updates. Let them all run and reboot your server as needed.

When the patches are all finished applying, make sure you're logged in as Administrator and continue on to the next page where I'll walk you through the optional step of disabling a useless and annoying anti-feature in Windows called IE Enhanced Security.

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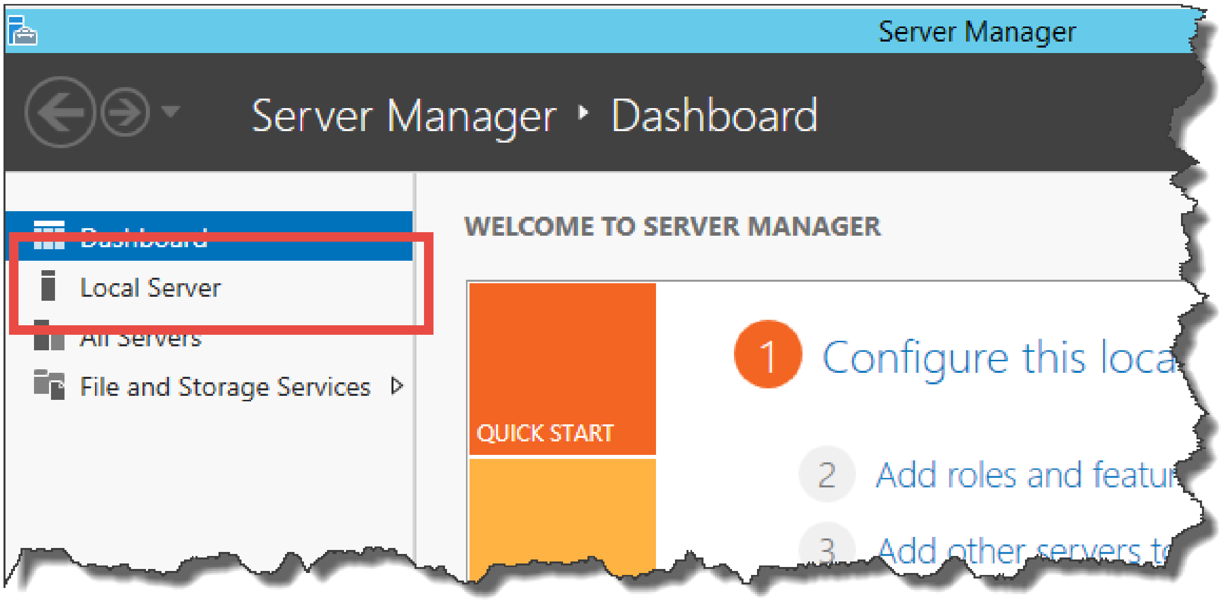
(Optional) Turn off IE Enhanced Security Configuration

Ok. So if you're paranoid about the internet and making sure that your server doesn't accidentally get infected by a virus that comes in because of someone's hapless browsing habits, you'll probably want to skip this section.

If you don't wear a tinfoil hat every day to keep the illuminati's evil space rays from controlling your mind, then you're probably like me and find IE Enhanced Security to be a royal pain in the behind. At some point, you're going to want to use the Internet Explorer web browser on this server and it'll be painful if IE Enhanced Security is turned on.

Let's turn it off.

You'll start this process by using **Server Manager**.



- In the left column of Server Manager, click **Local Server**

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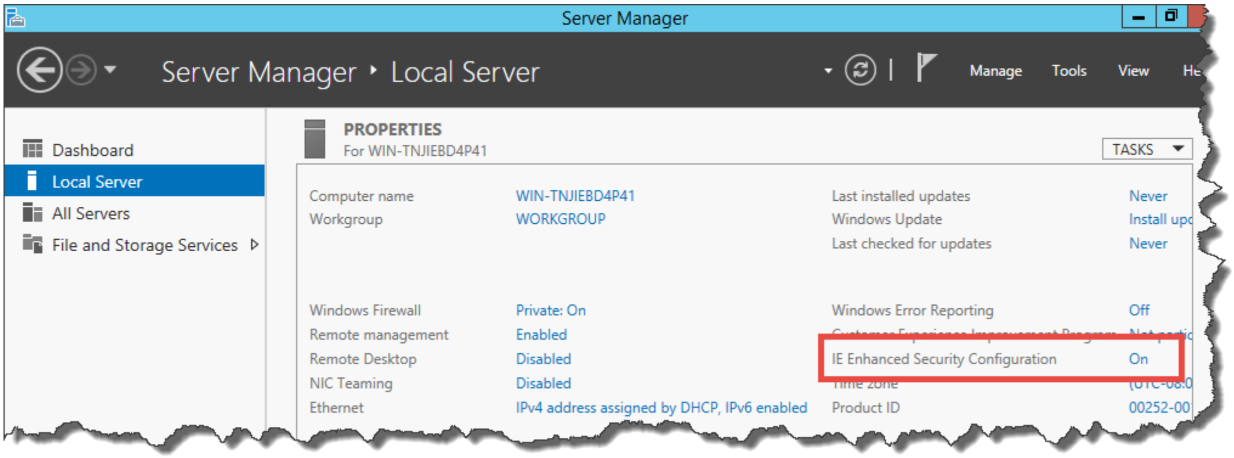
Towards the right side of the Server Manager window, you'll see an item that says **IE Enhanced Security Configuration**. It'll be set to **On**.

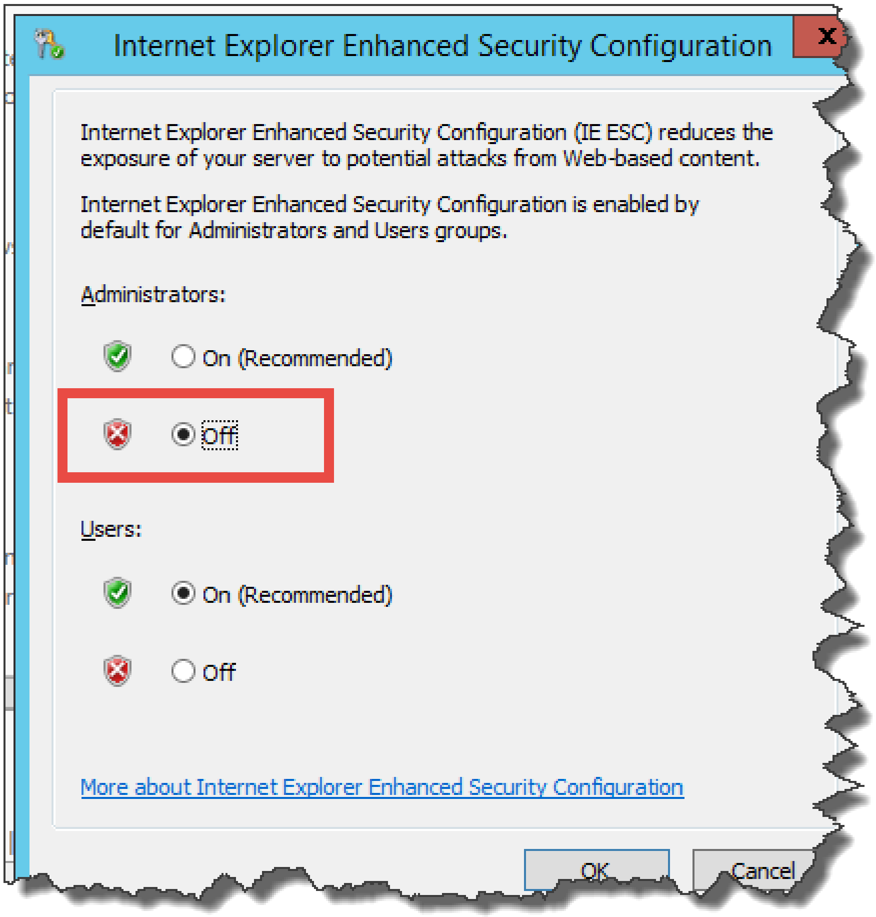


PROPERTIES
For WIN-TNJIEBD4P41

Computer name	WIN-TNJIEBD4P41	Last installed updates	Never
Workgroup	WORKGROUP	Windows Update	Install upd
		Last checked for updates	Never
Windows Firewall	Private: On	Windows Error Reporting	Off
Remote management	Enabled	Customer Experience Improvement Program	Not partic
Remote Desktop	Disabled	IE Enhanced Security Configuration	On
NIC Teaming	Disabled	Time zone	(UTC-08:0
Ethernet	IPv4 address assigned by DHCP, IPv6 enabled	Product ID	00252-00

- Click the link that says **On**

You should now see the **Internet Explorer Enhanced Security Configuration** dialog.



Internet Explorer Enhanced Security Configuration

Internet Explorer Enhanced Security Configuration (IE ESC) reduces the exposure of your server to potential attacks from Web-based content.

Internet Explorer Enhanced Security Configuration is enabled by default for Administrators and Users groups.

Administrators:

○ On (Recommended)

● Off

Users:

● On (Recommended)

○ Off

More about Internet Explorer Enhanced Security Configuration

- Under Administrators, select the **Off** radio button
- (Optional) Under Users, select the **Off** radio button
- Click the **OK** button

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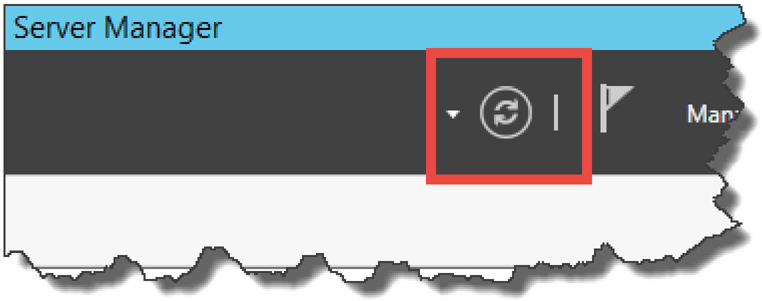
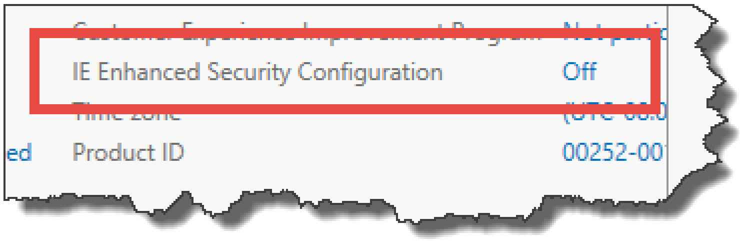
You should now be back at the main page of the Server Manager.



- Click the **Refresh** button

IE Enhanced Security Configuration should now be set to Off.


IE Enhanced Security Configuration Off

ed Product ID 00252-00

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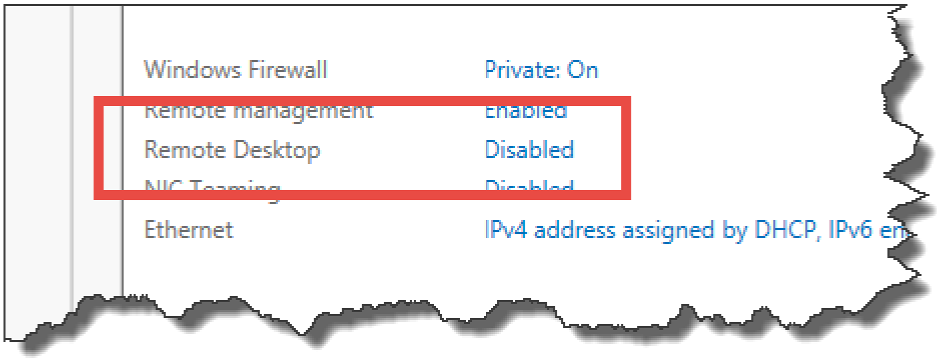
(Optional) Enable Remote Desktop

Are you lazy or maybe lazy-ish? Do you like convenience? Yah. Me, too. So that means that you'll probably want to enabled Remote Desktop. If you're a member of the Tinfoil Hat Patrol, you'll probably want to skip this section.

- Find **Remote Desktop** in Server Manager



Windows Firewall	Private: On
Remote management	Enabled
Remote Desktop	Disabled
NIC Teaming	Disabled
Ethernet	IPv4 address assigned by DHCP, IPv6 en

- Click the **Disabled** link to the right of Remote Desktop

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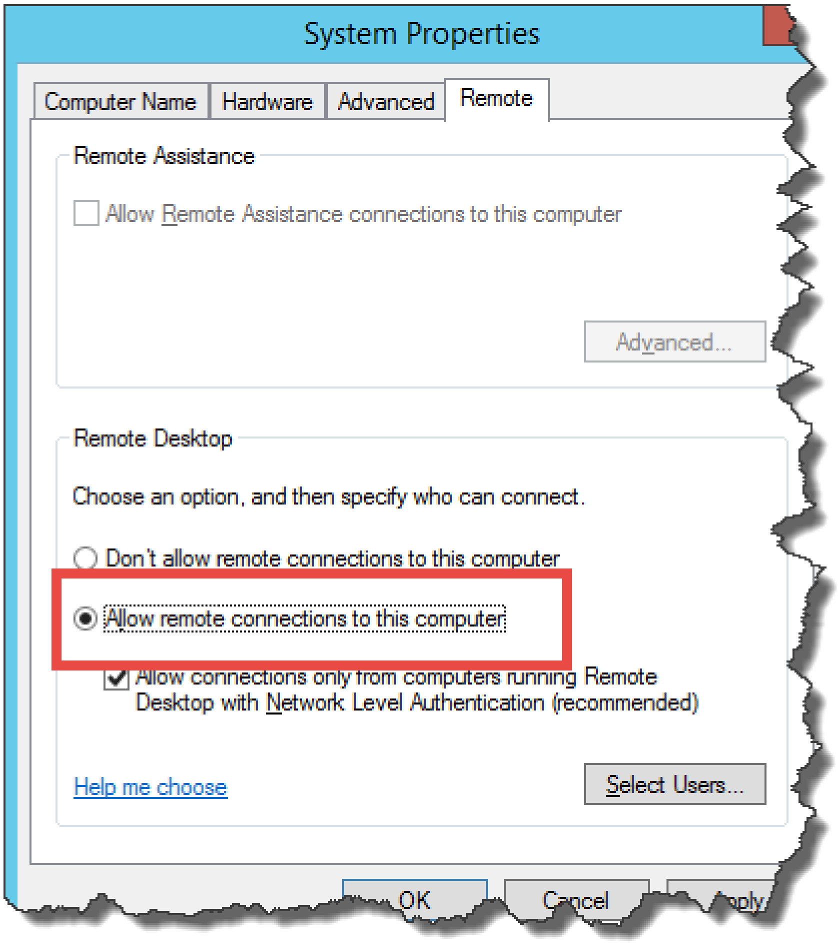
You should now see the **System Properties** dialog.



System Properties

Remote Assistance

□ Allow Remote Assistance connections to this computer

Remote Desktop

Choose an option, and then specify who can connect.

○ Don't allow remote connections to this computer

● Allow remote connections to this computer

☑ Allow connections only from computers running Remote Desktop with Network Level Authentication (recommended)

- In the Remote Desktop group, choose **Allow remote connections to this computer**
- Click the **OK** button

Remote Desktop is enabled.

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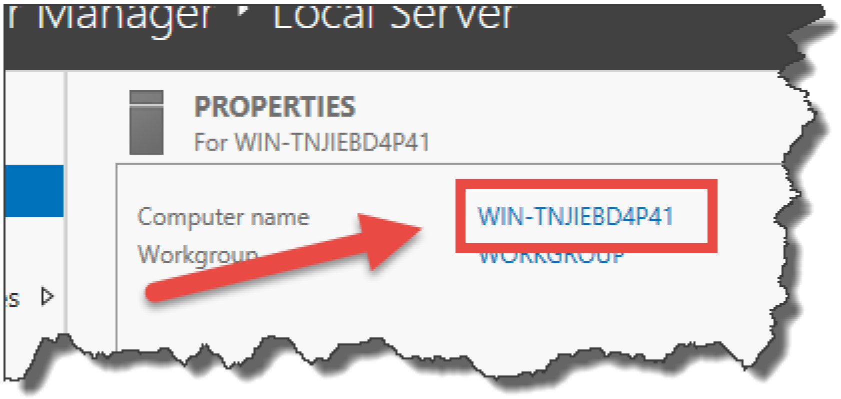
Join this Server to the Active Directory Domain

At the moment, you've got a stand-alone server with a wacky name that's not attached to anything. Workgroups? That's like the networking equivalent of having a stand-alone MP3 player that only syncs over USB. Who does that? What year is this?! 2005?! Not very useful. You'll now rename this computer and join it to your Active Directory domain so that it plays nicely with others.

In Server Manager, you'll see **Computer name** and **Workgroup**.



Computer name WIN-TNJIEBD4P41
Workgroup WORKGROUP

- Click on the computer name link

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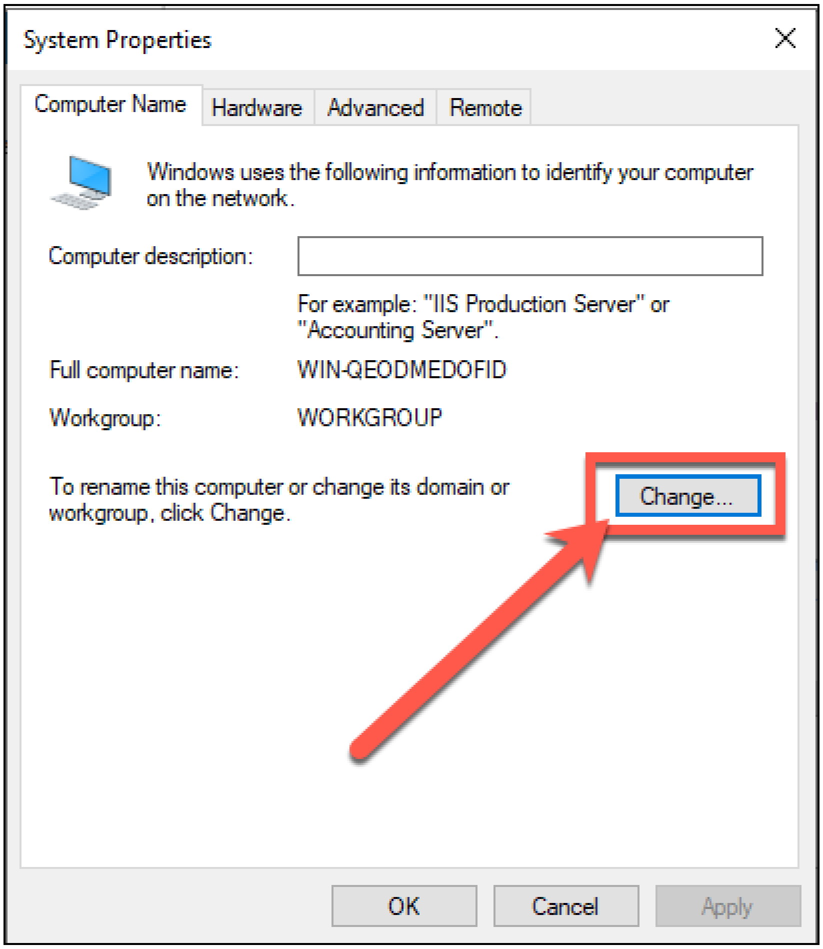
You should now see the **System Properties** dialog.



System Properties

Windows uses the following information to identify your computer on the network.

Computer description:

For example: "IIS Production Server" or "Accounting Server".

Full computer name: WIN-QEODMEDOFID

Workgroup: WORKGROUP

To rename this computer or change its domain or workgroup, click Change.

- Click the **Change...** button

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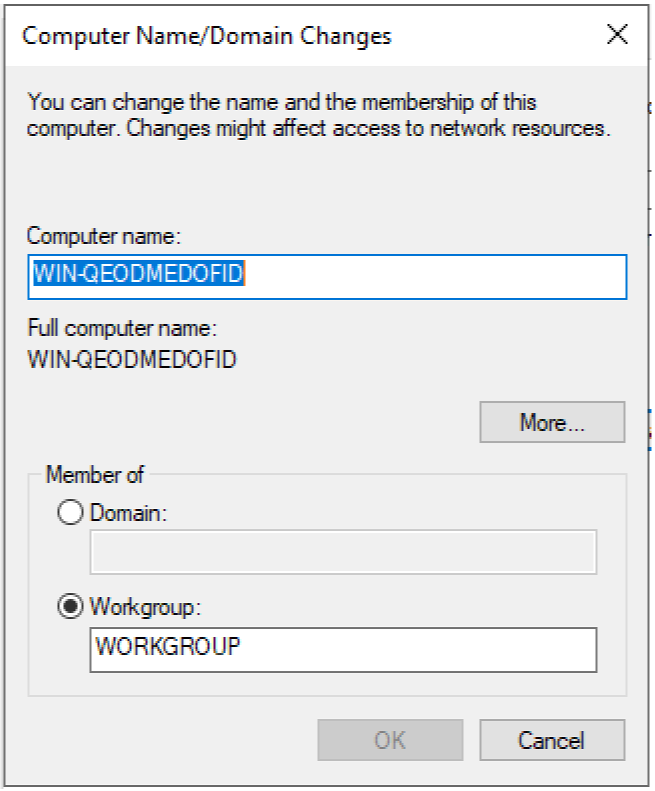
You should now be on the **Computer Name/Domain Changes** dialog. The dialog should be showing you the current name of the computer and the workgroup membership.



Computer Name/Domain Changes

You can change the name and the membership of this computer. Changes might affect access to network resources.

Computer name: WIN-QEODMEDOFID

Full computer name:
WIN-QEODMEDOFID

Member of

○ Domain:

● Workgroup: WORKGROUP

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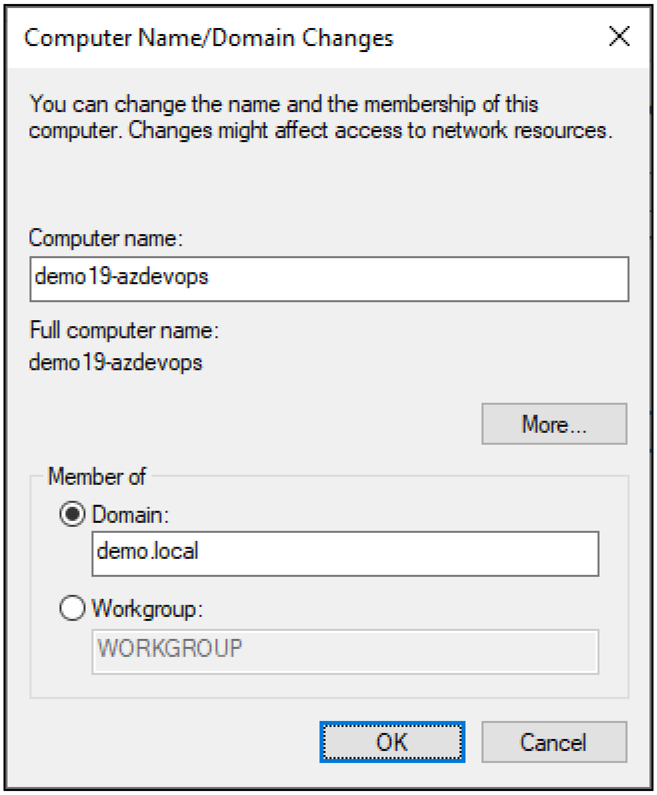
You should now change the values to be what you want the server to be named and the Active Directory domain that it should be attached to.



Computer Name/Domain Changes

You can change the name and the membership of this computer. Changes might affect access to network resources.

Computer name: demo19-azdevops

Full computer name: demo19-azdevops

Member of

● Domain: demo.local

○ Workgroup: WORKGROUP

- In the Computer name textbox, enter the desired name for this server
- Under **Member of** choose the **Domain** radio button
- In the **Domain** textbox, enter the name of the Active Directory domain
- Click the **OK** button

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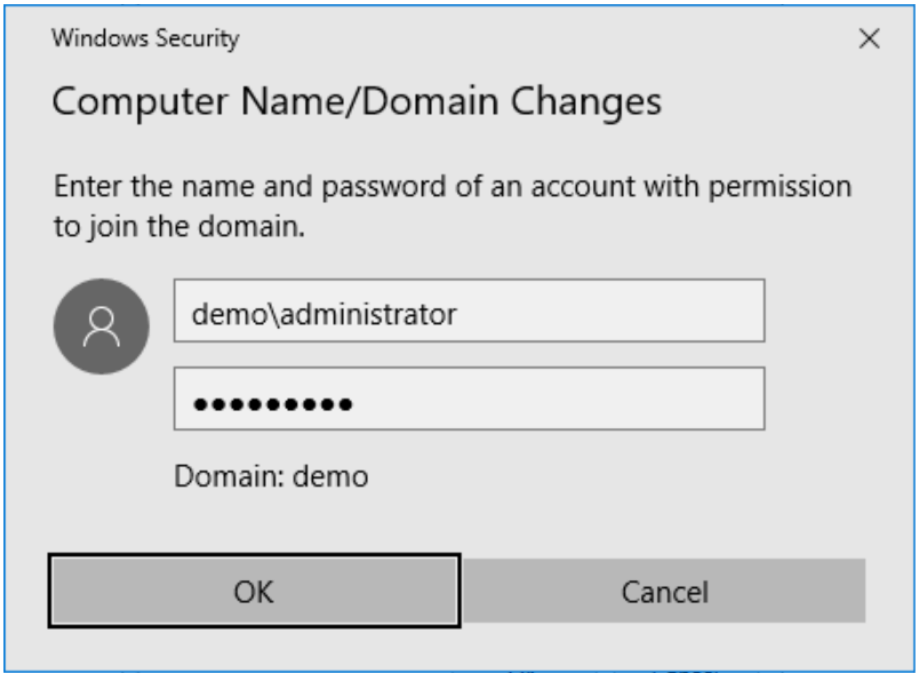
You'll be prompted for the username and password for a domain administrator for the target domain.



Windows Security

Computer Name/Domain Changes

Enter the name and password of an account with permission to join the domain.

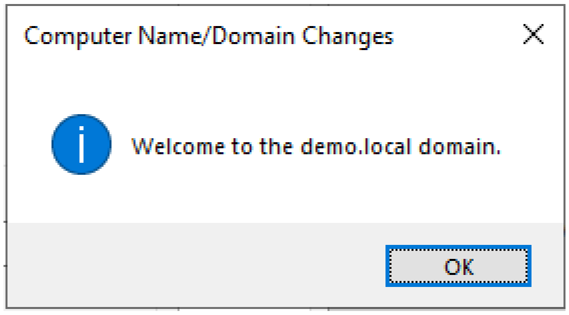
demo\administrator

●●●●●●●●●

Domain: demo

- Enter the username and password
- Click **OK**

You should see a dialog welcoming you to the new domain.



Computer Name/Domain Changes

Welcome to the demo.local domain.

- Click **OK**

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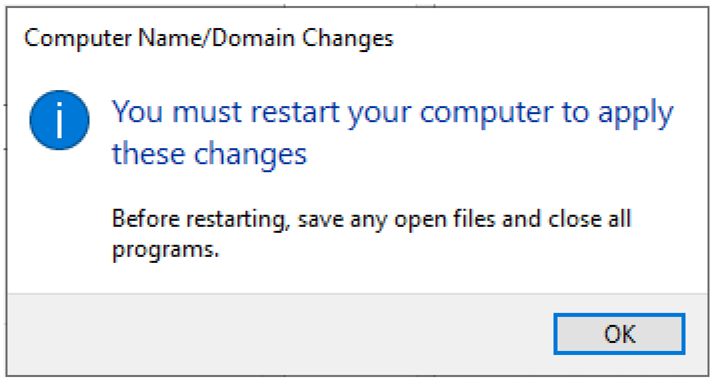
You'll be notified that you'll need to reboot this server.

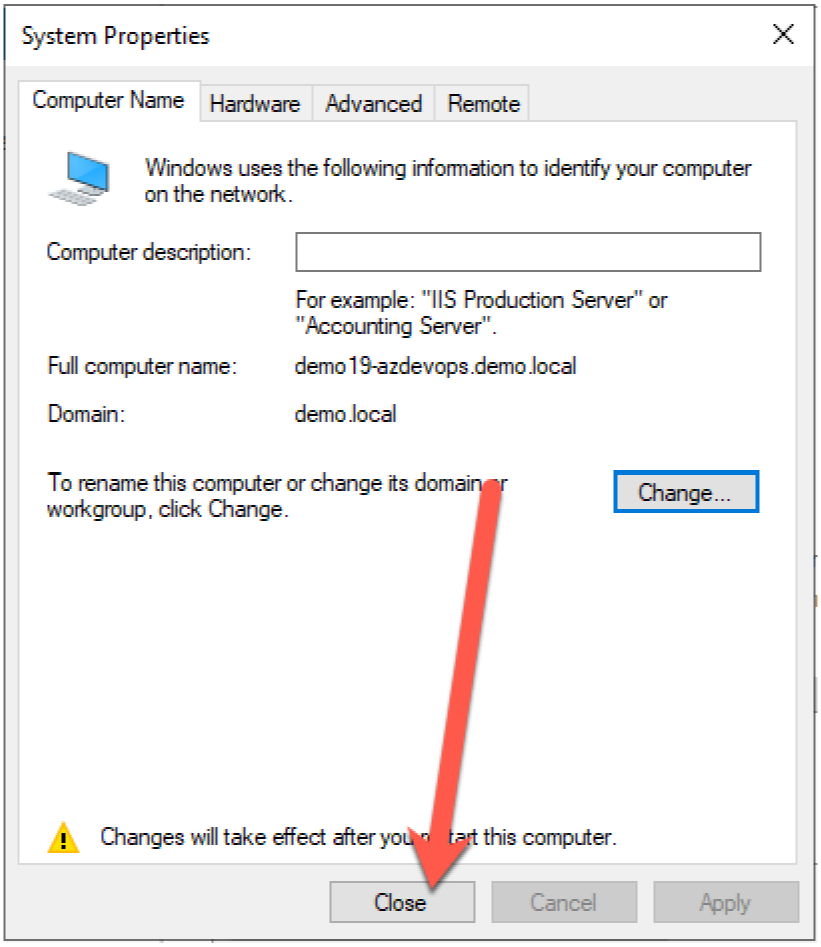


Computer Name/Domain Changes

You must restart your computer to apply these changes

Before restarting, save any open files and close all programs.

- Click the **OK** button



System Properties

Windows uses the following information to identify your computer on the network.

Computer description:

For example: "IIS Production Server" or "Accounting Server".

Full computer name: demo19-azdevops.demo.local

Domain: demo.local

To rename this computer or change its domain or workgroup, click Change.

Changes will take effect after you restart this computer.

- Click the **Close** button

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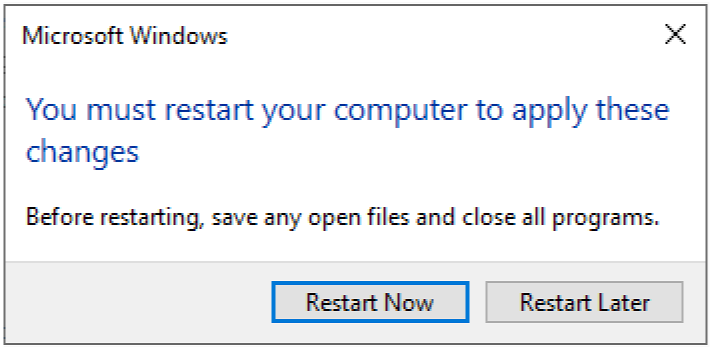

Microsoft Windows

You must restart your computer to apply these changes

Before restarting, save any open files and close all programs.

- Click the **Restart Now** button

The server will restart and return you to the lock screen. The server has been installed and joined to the domain.

NOTE: It is *optional* but you might find it helpful to configure this server to have a static IP address and a static A record entry in your DNS server.

Chapter 2: Install SQL Server 2017 for Azure DevOps Server 2019

Introduction

Azure DevOps Server 2019 (AzDO) uses SQL Server for all its back-end storage. This part of the guide will walk you through installing SQL Server 2017 for AzDO.

Install SQL Server 2017

- Either insert your **SQL Server 2017 DVD** into the DVD drive or mount the **ISO image** into the DVD drive for your virtual machine.
- Start the machine
- Log in as an administrator

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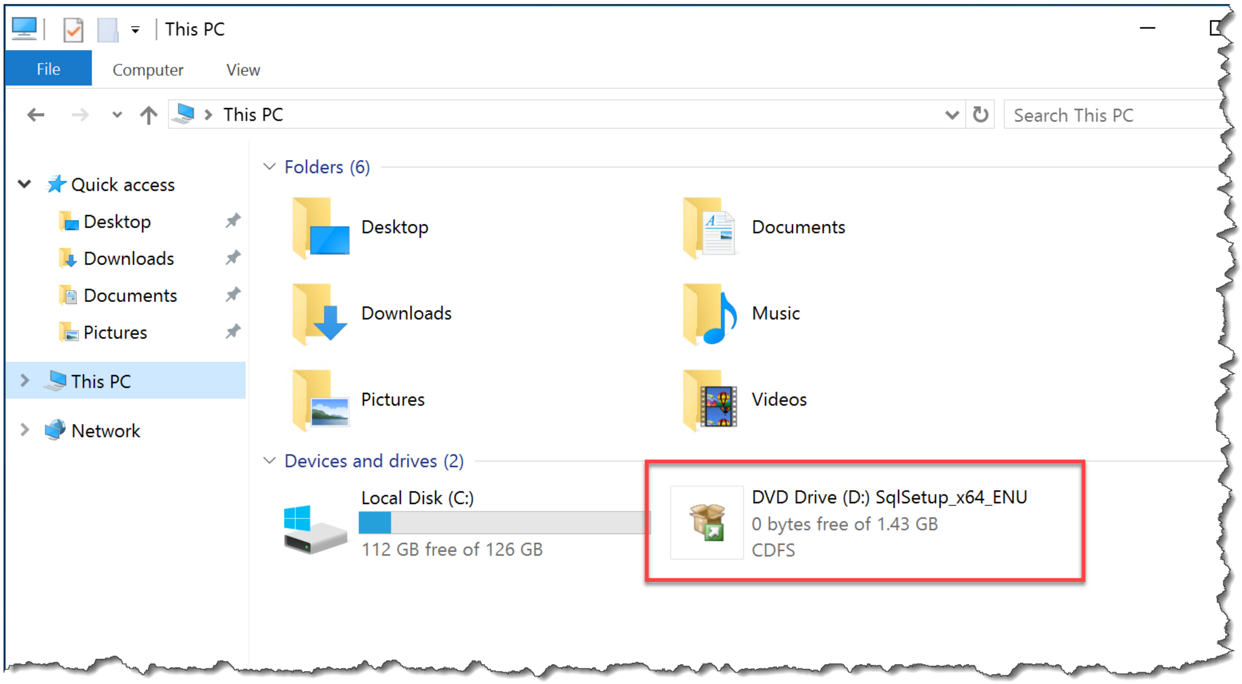
- Open Explorer.exe
- Navigate to **This PC** or another view that will show you all the drives on your machine

You should see a view that's similar to the screenshot below and you should see a DVD drive with **SqlSetup_x64_ENU** or another similar version of SQL Server in the drive.



- Double-click on the DVD drive with the SQL Server installer

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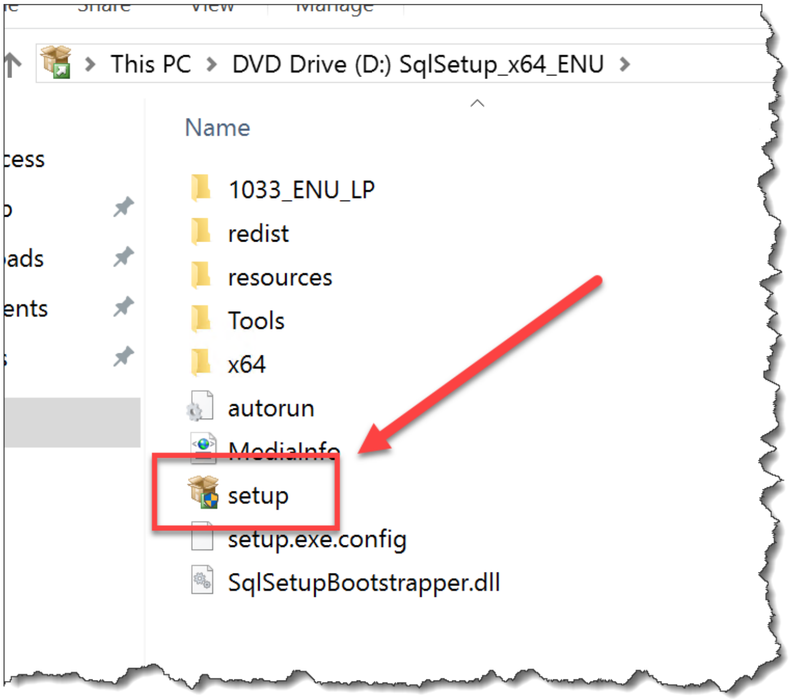
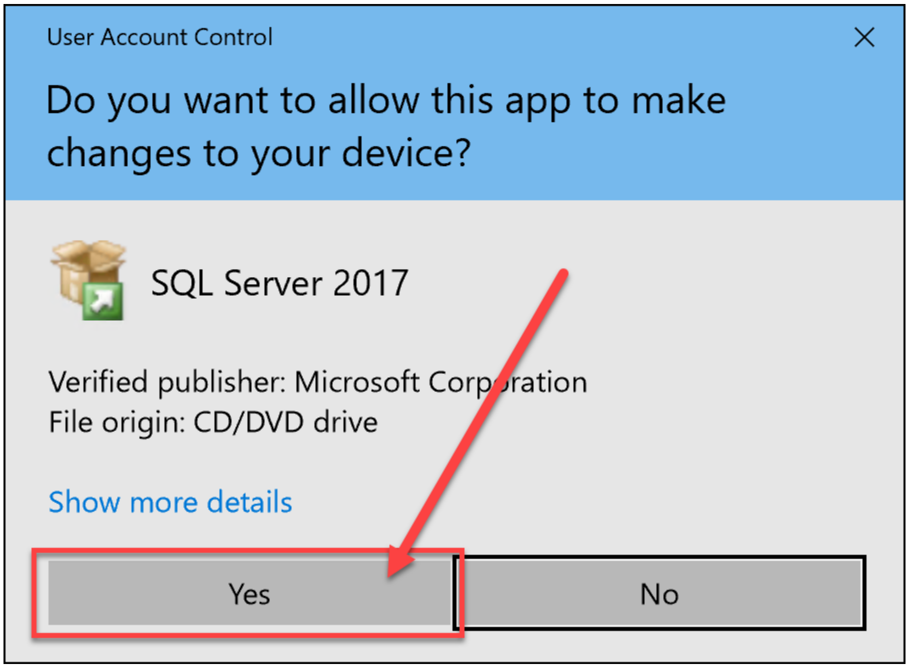
You should see the contents of the SQL installer.

- Double-click **setup** to run the installer



- Click **Yes** on the User Account Control dialog


User Account Control

Do you want to allow this app to make changes to your device?

SQL Server 2017

Verified publisher: Microsoft Corporation
File origin: CD/DVD drive

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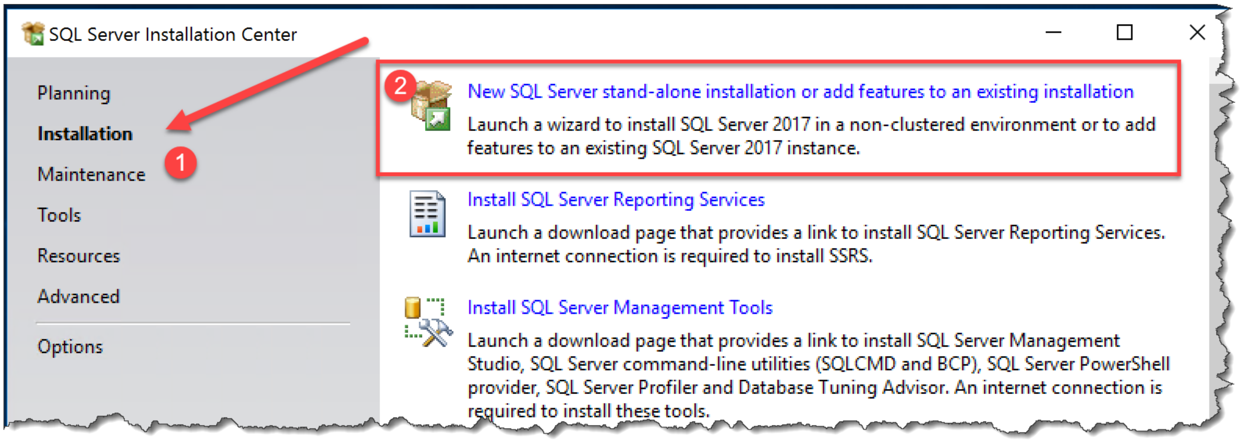
You should now see the **SQL Server Installation Center** window.

- In the left column, click the **Installation** link
- Click **New SQL Server stand-alone installation or add features to an existing installation**



New SQL Server stand-alone installation or add features to an existing installation

Launch a wizard to install SQL Server 2017 in a non-clustered environment or to add features to an existing SQL Server 2017 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.

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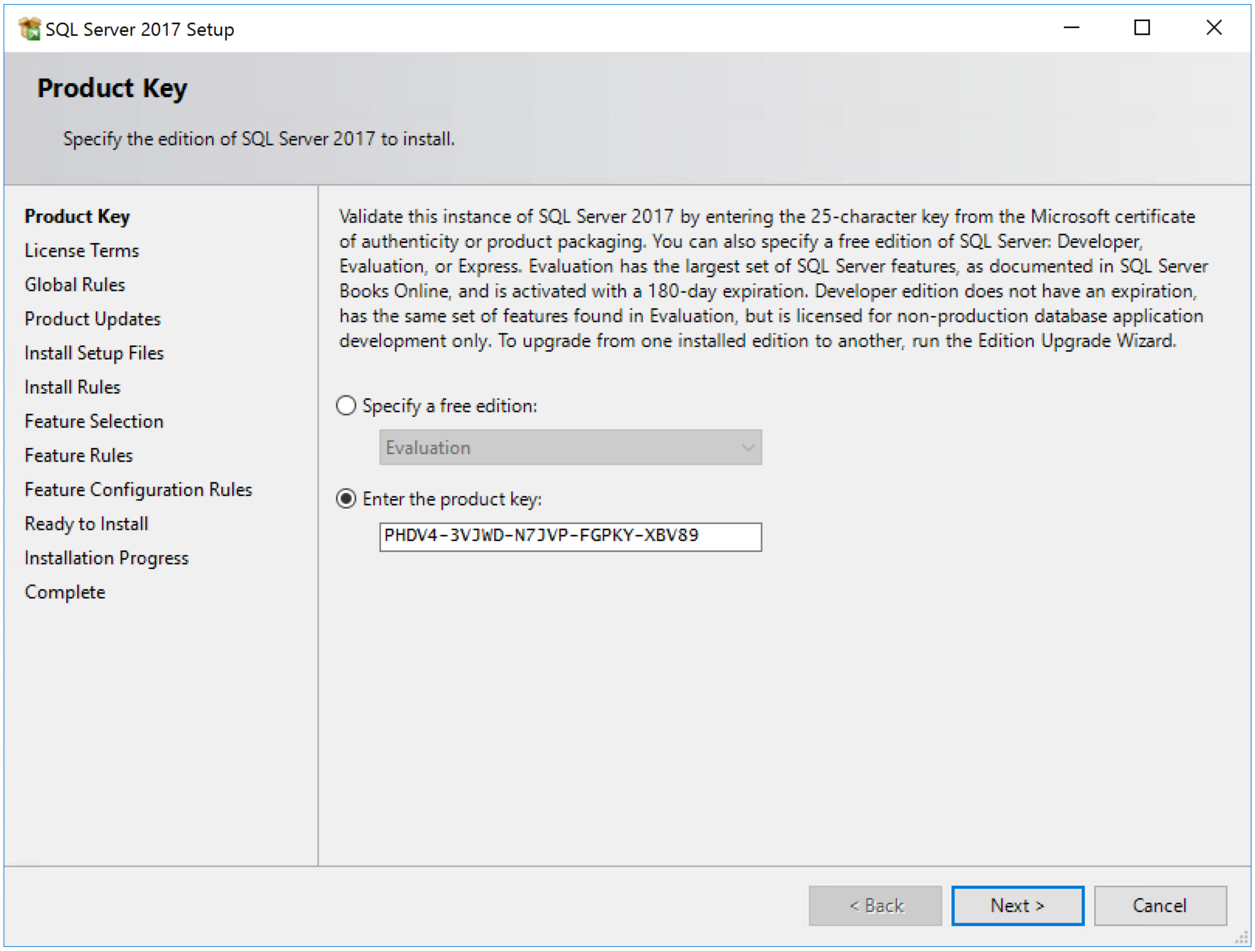
The first page of the SQL Server 2017 Setup wizard will prompt you for a product key. It should already be filled in with a product key.

- Click **Next**



SQL Server 2017 Setup

Product Key

Specify the edition of SQL Server 2017 to install.

Validate this instance of SQL Server 2017 by entering the 25-character key from the Microsoft certificate of authenticity or product packaging. 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

● Enter the product key: PHDV4-3VJWD-N7JVP-FGPKY-XBV89

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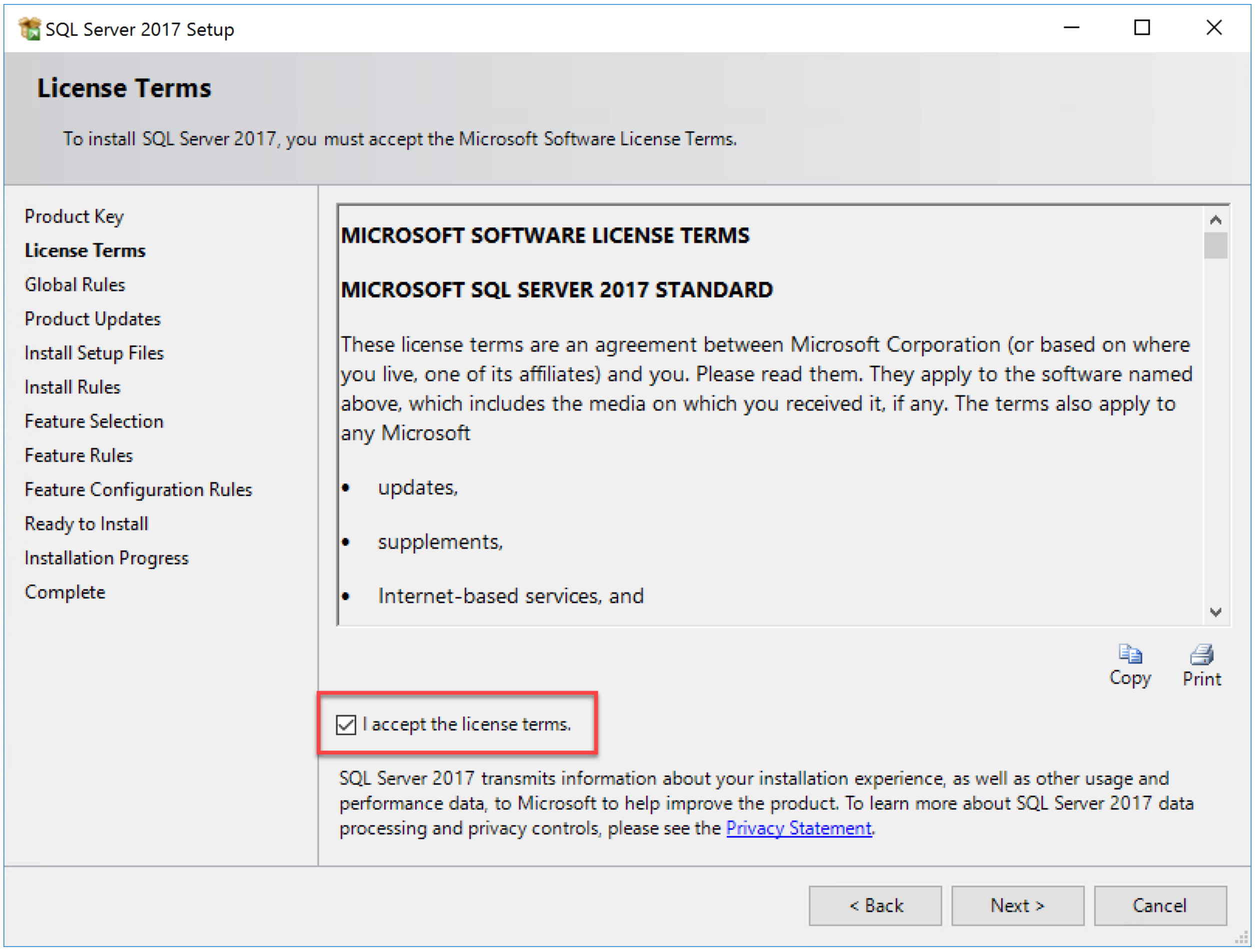
You should now be on the **License Terms** page.

- Read the license terms carefully and completely.
- Ponder the implications of the license terms for you and for your business
- Really deeply digest the true meaning and intent of the license terms
- Consider consulting an attorney to review the license terms to better understand the terms
- Contact Microsoft to negotiate any amendments to the software license terms that your attorney recommended
- When you, your attorney(s), and Microsoft have come to an agreement about your license terms, check the **I accept the license terms** checkbox
- Click **Next**



To install SQL Server 2017, you must accept the Microsoft Software License Terms.

MICROSOFT SOFTWARE LICENSE TERMS

MICROSOFT SQL SERVER 2017 STANDARD

These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft

- updates,
- supplements,
- Internet-based services, and

☑ I accept the license terms.

SQL Server 2017 transmits information about your installation experience, as well as other usage and performance data, to Microsoft to help improve the product. To learn more about SQL Server 2017 data processing and privacy controls, please see the Privacy Statement.

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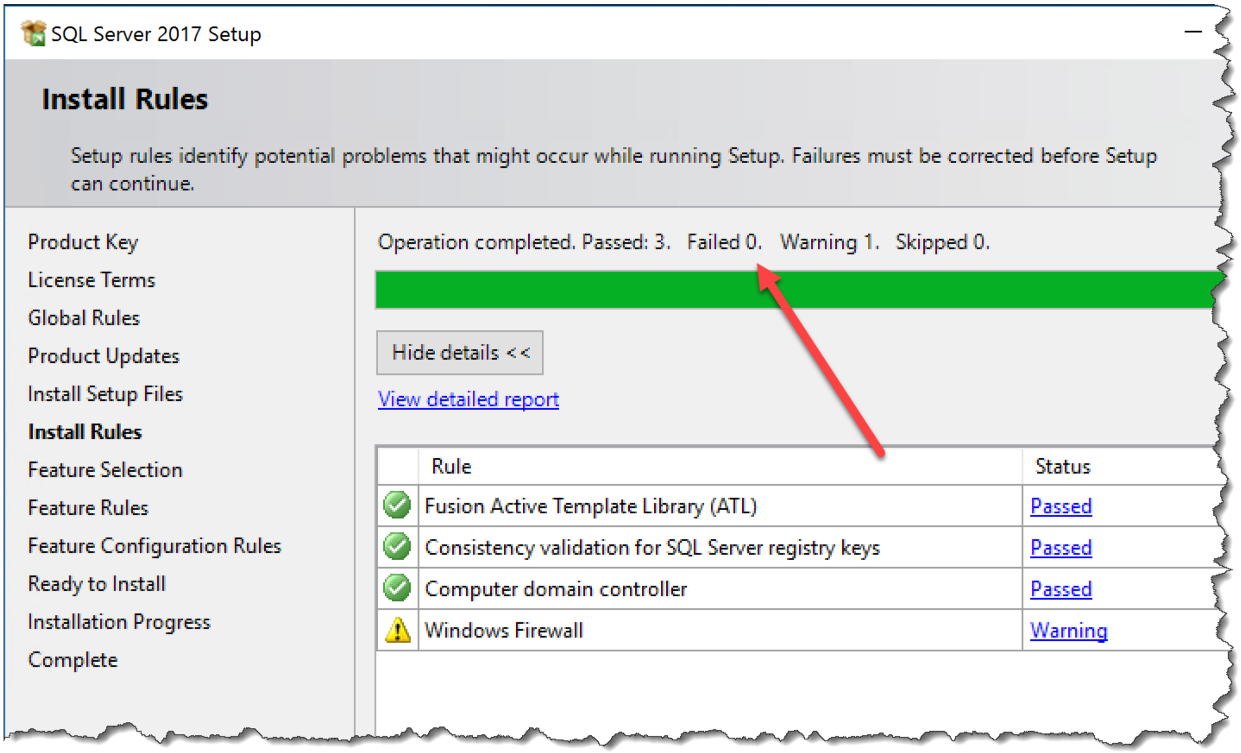
The install wizard will work on a few things and run some pre-install checks.

- Verify that there are zero failed rules
- Click **Next**



SQL Server 2017 Setup

Install Rules

Setup rules identify potential problems that might occur while running Setup. Failures must be corrected before Setup can continue.

Operation completed. Passed: 3. Failed 0. Warning 1. Skipped 0.

	Rule	Status
✓	Fusion Active Template Library (ATL)	Passed
✓	Consistency validation for SQL Server registry keys	Passed
✓	Computer domain controller	Passed
⚠	Windows Firewall	Warning

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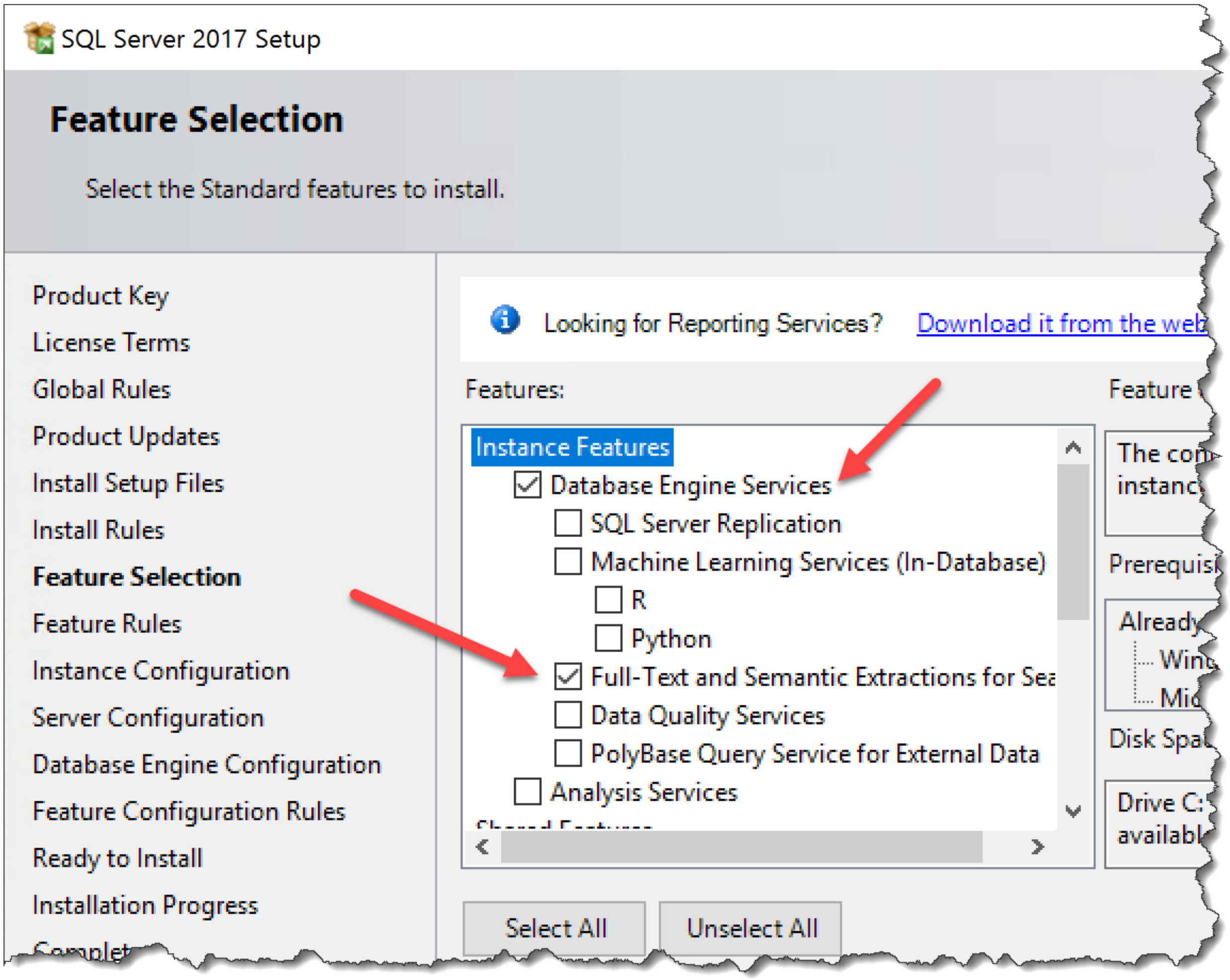
You should now be on the **Feature Selection** page.

- Check the checkbox for **Database Engine Services**
- Check the checkbox for **Full-Text and Semantic Extractions for Search**
- (Optional) If you are planning to run Azure DevOps Server and SQL Server on separate machines, check the checkbox for **Client Tools Connectivity**
- Click **Next**



SQL Server 2017 Setup

Feature Selection

Select the Standard features to install.

Looking for Reporting Services? Download it from the web

Features:

Instance Features
☑ Database Engine Services
□ SQL Server Replication
□ Machine Learning Services (In-Database)
□ R
□ Python
☑ Full-Text and Semantic Extractions for Sea
□ Data Quality Services
□ PolyBase Query Service for External Data
□ Analysis Services

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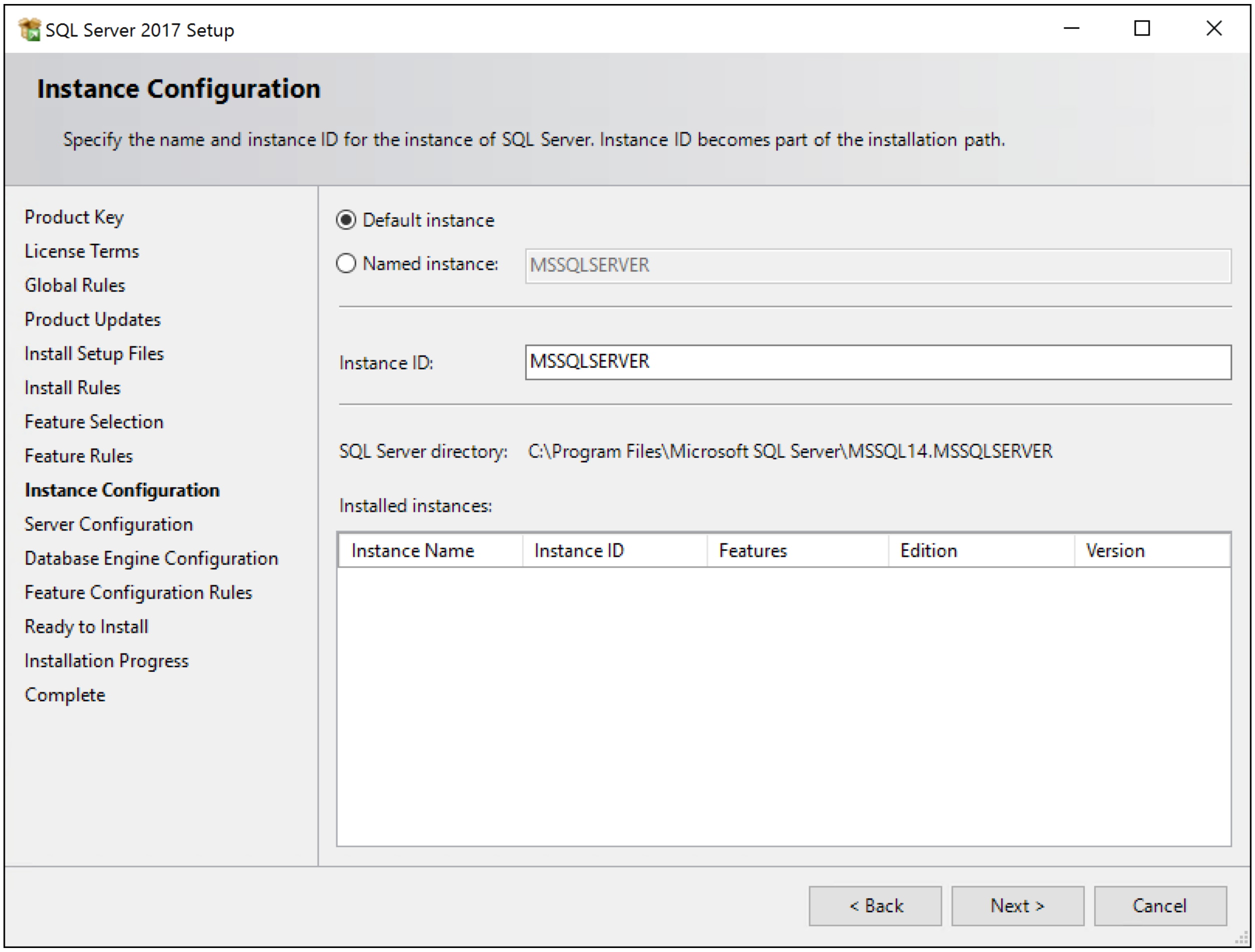
You should now see the **Instance Configuration** page of the install wizard. Do yourself a favor and just keep the default values.

- Click **Next**



SQL Server 2017 Setup

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: MSSQLSERVER

Instance ID: MSSQLSERVER

SQL Server directory: C:\Program Files\Microsoft SQL Server\MSSQL14.MSSQLSERVER

Installed instances:

Instance Name	Instance ID	Features	Edition	Version

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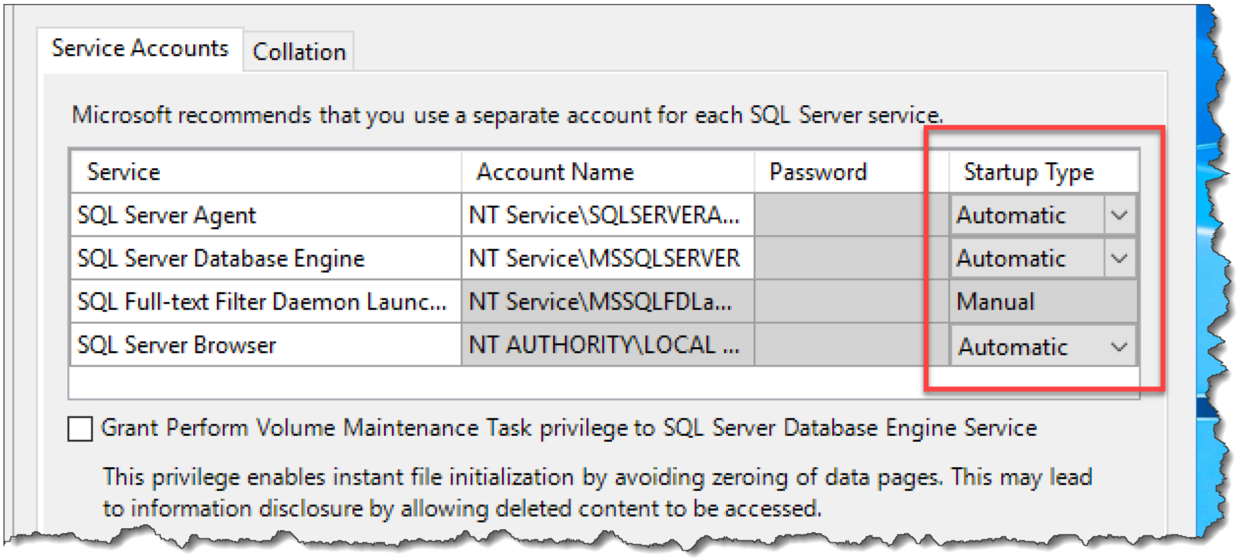
On the **Server Configuration** page, you'll specify the startup value for each service.

- Set **Startup Type** to **Automatic** for each service (NOTE: full-text search doesn't let you change the startup value so you can ignore it)
- Click **Next**



Microsoft recommends that you use a separate account for each SQL Server service.

Service	Account Name	Password	Startup Type
SQL Server Agent	NT Service\SQLSERVERA...		Automatic
SQL Server Database Engine	NT Service\MSSQLSERVER		Automatic
SQL Full-text Filter Daemon Launc...	NT Service\MSSQLFDLa...		Manual
SQL Server Browser	NT AUTHORITY\LOCAL ...		Automatic

☐ Grant Perform Volume Maintenance Task privilege to SQL Server Database Engine Service

This privilege enables instant file initialization by avoiding zeroing of data pages. This may lead to information disclosure by allowing deleted content to be accessed.

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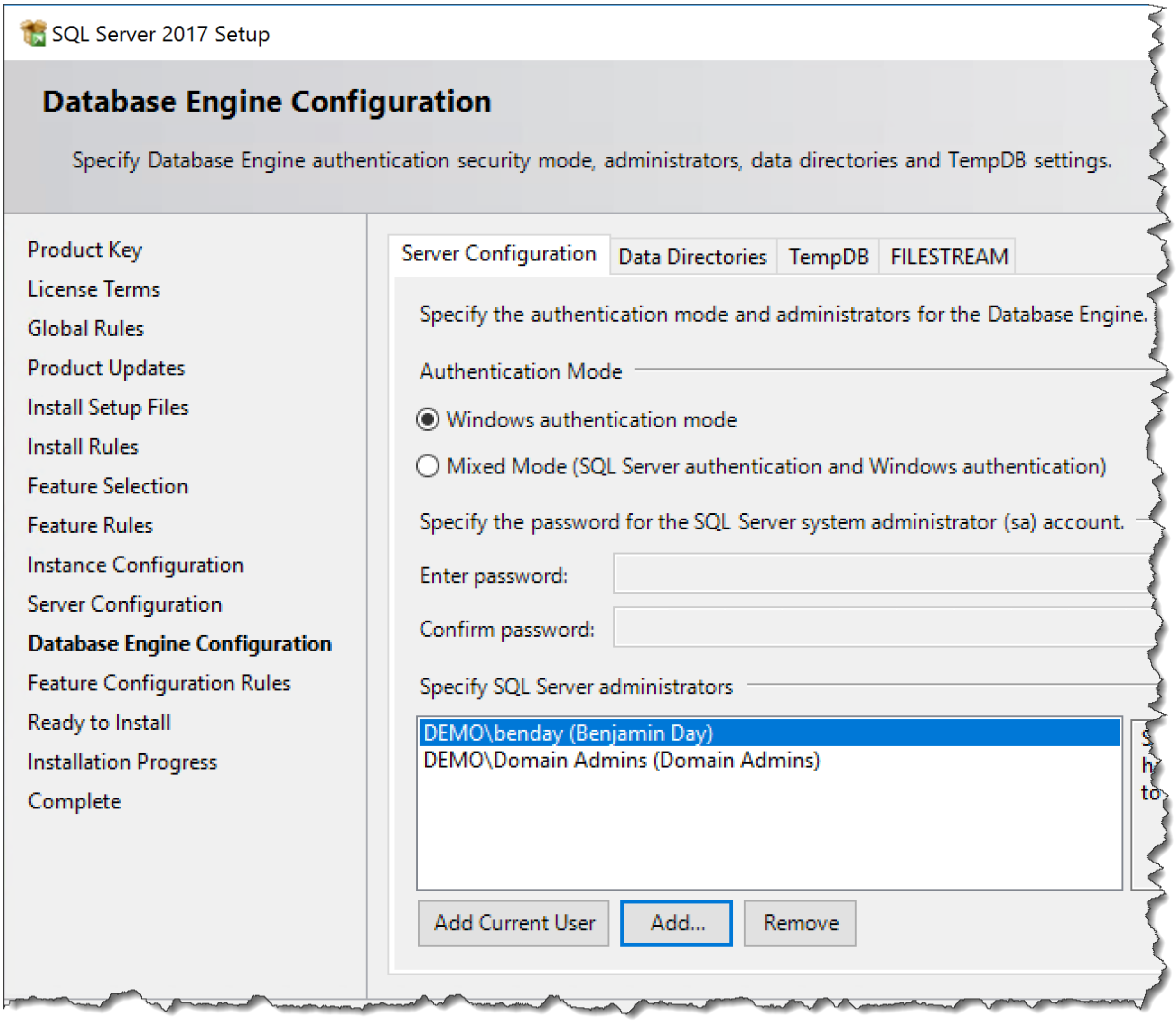
You should now be on the **Database Engine Configuration** page. On this page, you'll pretty much just be specifying who should be an administrator on your new SQL Server instance. By default, the installer does not automatically make Windows administrators members of the sysadmin group in SQL Server. (I think that's silly.)

- Click the **Add Current User** button
- Click the **Add…** button
  - On the search dialog, search for **Domain Admins**
  - Click **OK**
- Verify that the list of administrators is accurate
- Click **Next**



SQL Server 2017 Setup

Database Engine Configuration

Specify Database Engine authentication security mode, administrators, data directories and TempDB settings.

Specify the authentication mode and administrators for the Database Engine.

Authentication Mode

● Windows authentication mode

○ Mixed Mode (SQL Server authentication and Windows authentication)

Specify the password for the SQL Server system administrator (sa) account.

Enter password:

Confirm password:

Specify SQL Server administrators

DEMO\benday (Benjamin Day)
DEMO\Domain Admins (Domain Admins)

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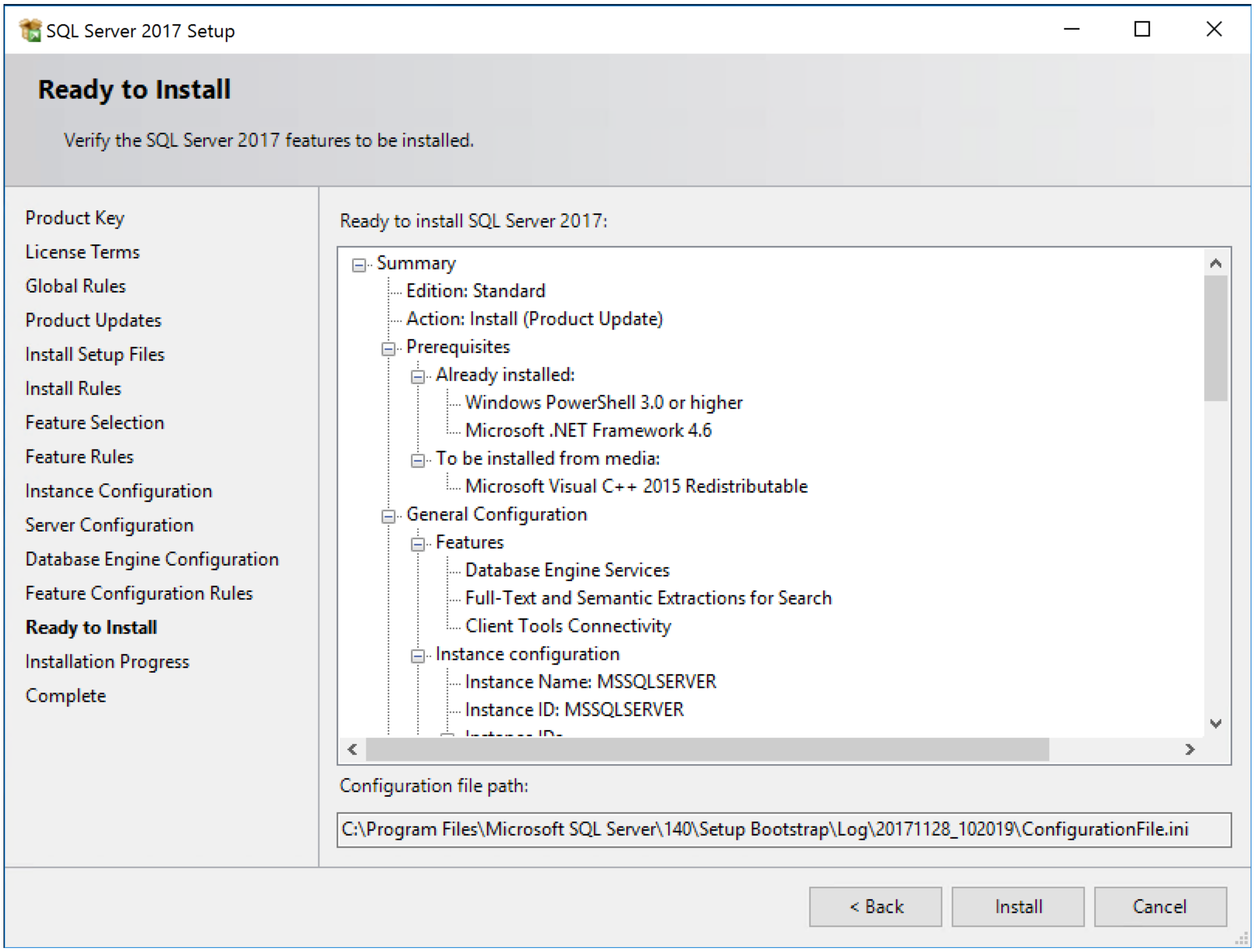
You should now be on the **Ready to Install** page of the dialog and you should see a summary of what is going to be installed.

- Click **Install**



Ready to Install

Verify the SQL Server 2017 features to be installed.

Ready to install SQL Server 2017:

- Summary
  - Edition: Standard
  - Action: Install (Product Update)
  - Prerequisites
    - Already installed:
      - Windows PowerShell 3.0 or higher
      - Microsoft .NET Framework 4.6
    - To be installed from media:
      - Microsoft Visual C++ 2015 Redistributable
  - General Configuration
    - Features
      - Database Engine Services
      - Full-Text and Semantic Extractions for Search
      - Client Tools Connectivity
    - Instance configuration
      - Instance Name: MSSQLSERVER
      - Instance ID: MSSQLSERVER

Configuration file path:

C:\Program Files\Microsoft SQL Server\140\Setup Bootstrap\Log\20171128_102019\ConfigurationFile.ini

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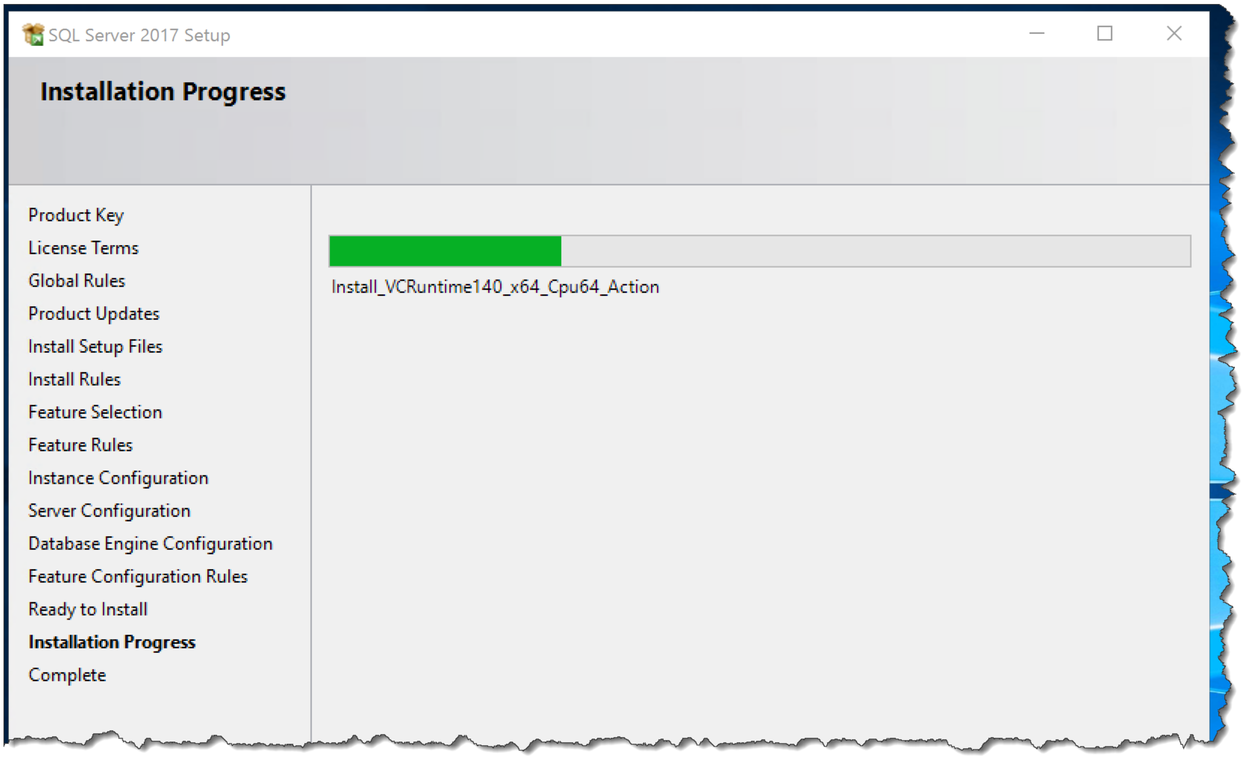
The installer should now be running.



Installation Progress

Install_VCRuntime140_x64_Cpu64_Action

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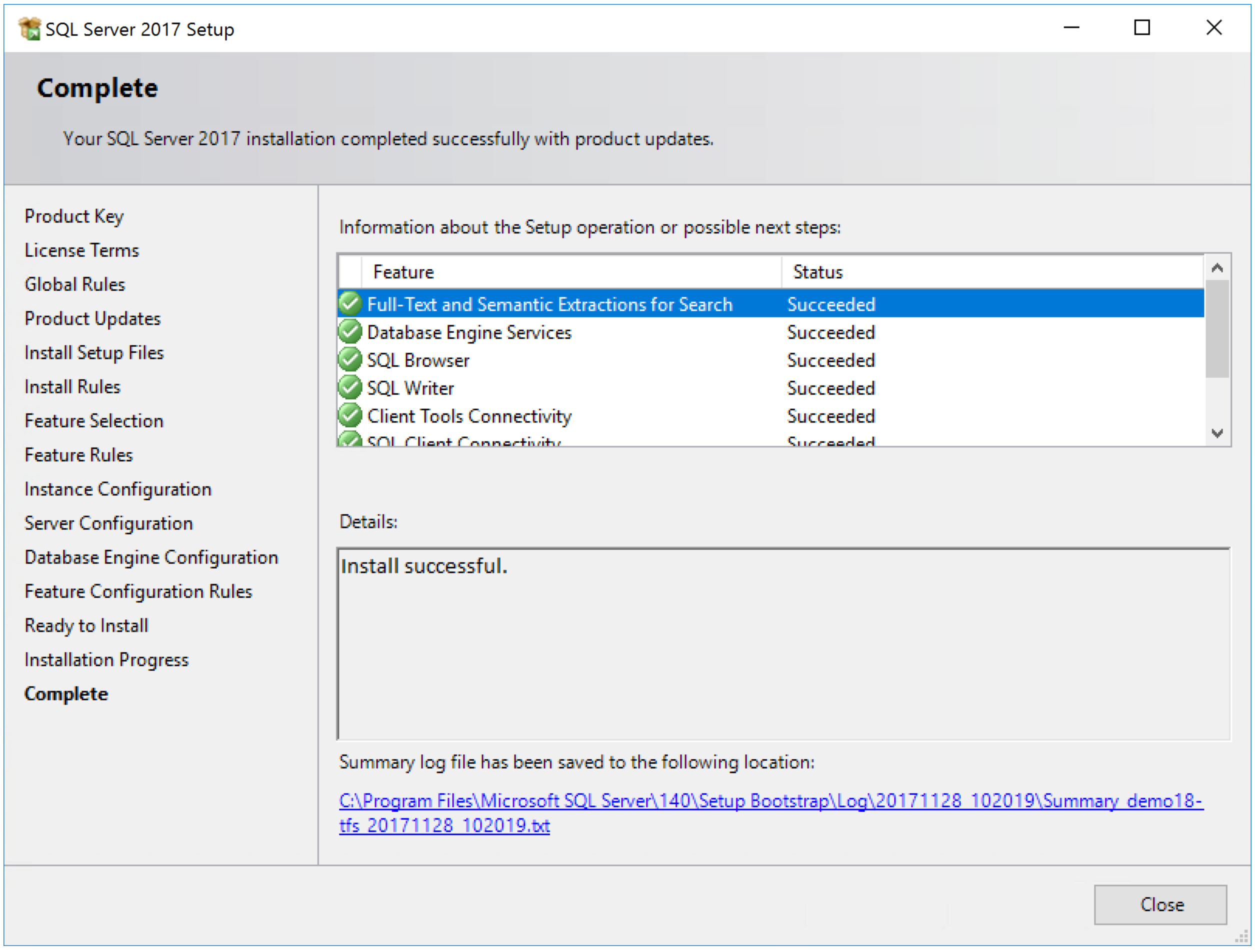
When the installer is done, you'll see a message saying **Complete**.

- Click **Close** to exit



Complete

Your SQL Server 2017 installation completed successfully with product updates.

Information about the Setup operation or possible next steps:

Feature	Status
✓ Full-Text and Semantic Extractions for Search	Succeeded
✓ Database Engine Services	Succeeded
✓ SQL Browser	Succeeded
✓ SQL Writer	Succeeded
✓ Client Tools Connectivity	Succeeded
✓ SQL Client Connectivity	Succeeded

Details:

Install successful.

Summary log file has been saved to the following location:

C:\Program Files\Microsoft SQL Server\140\Setup Bootstrap\Log\20171128_102019\Summary_demo18-tfs_20171128_102019.txt

SQL Server 2017 is now installed.

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Chapter 3: Install Azure DevOps Server 2019

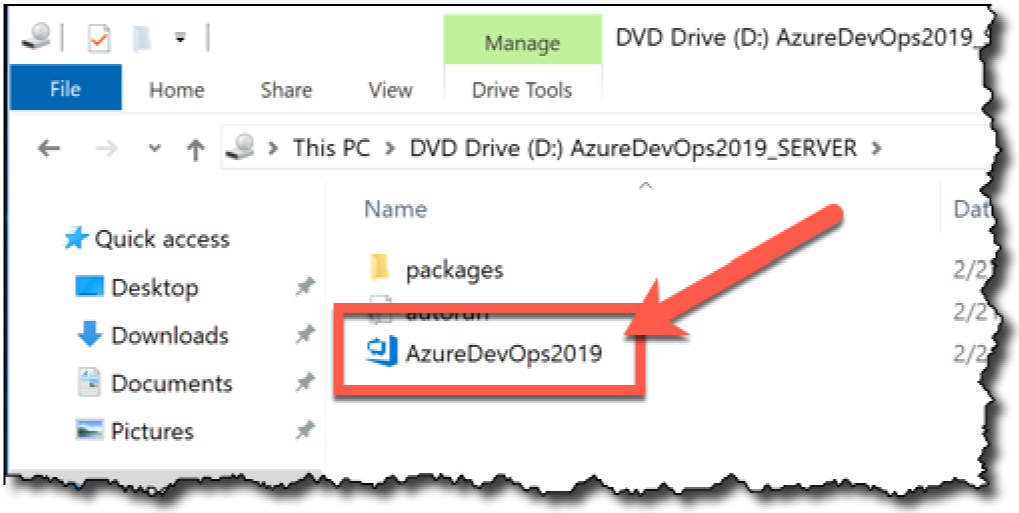
Introduction

Now that Windows and SQL Server are installed, you're ready to install Azure DevOps Server 2019 (AzDO). You'll probably want to create three domain accounts for use by the various pieces of AzDO: Azure DevOps Service (*domain*\azdoservice) and Azure DevOps Build (*domain*\azdobuild).

- If you're installing this on a Hyper-V virtual machine with dynamic memory enabled, change the **minimum amount of RAM to 2GB** (at least temporarily) to allow Azure DevOps Server 2019 to install along with SQL Server.
- Gather the username and passwords for the 2 AzDO service accounts (see above)
- Log on to the server using a user account with Administrator privileges

Run the Installer

- Mount the ISO image or insert the installer DVD
- Using Windows Explorer (explorer.exe), navigate to the installer directory



- Run **AzureDevOps2019.exe**

You should see the **Azure DevOps Server Setup** dialog.

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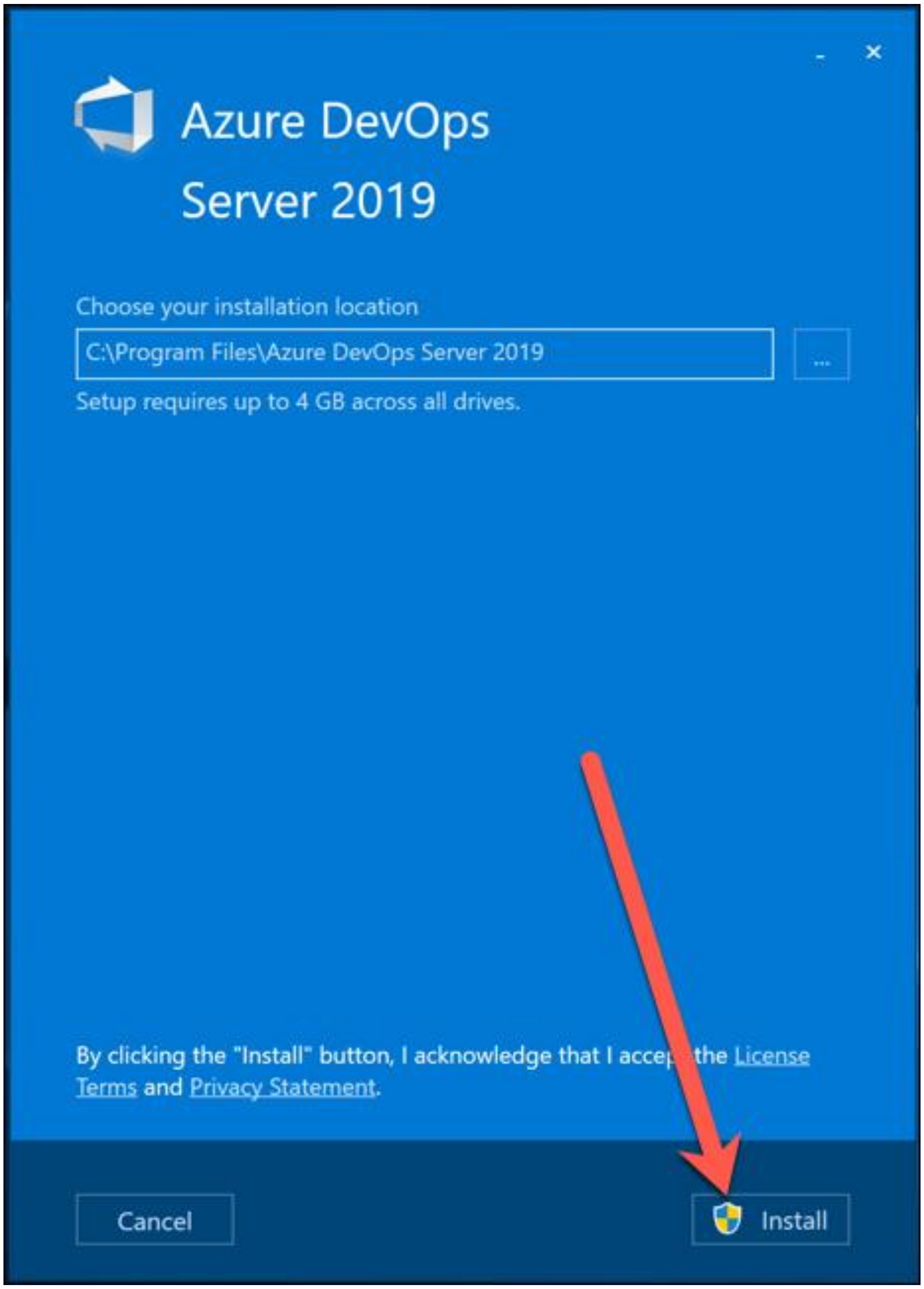
Azure DevOps
Server 2019
Choose your installation location
C:\Program Files\Azure DevOps Server 2019
...
Setup requires up to 4 GB across all drives.
By clicking the "Install" button, I acknowledge that I accep the License Terms and Privacy Statement.
Cancel
Install

- Click **Install**

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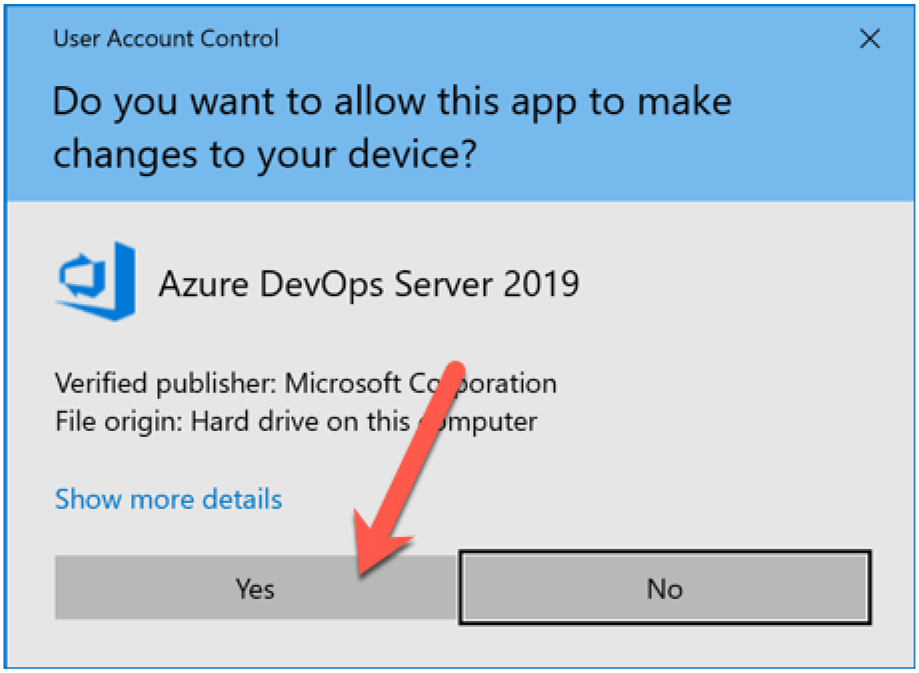
You'll see a User Account Control dialog.



User Account Control

Do you want to allow this app to make changes to your device?

Azure DevOps Server 2019

Verified publisher: Microsoft Corporation
File origin: Hard drive on this computer

- Click **Yes**

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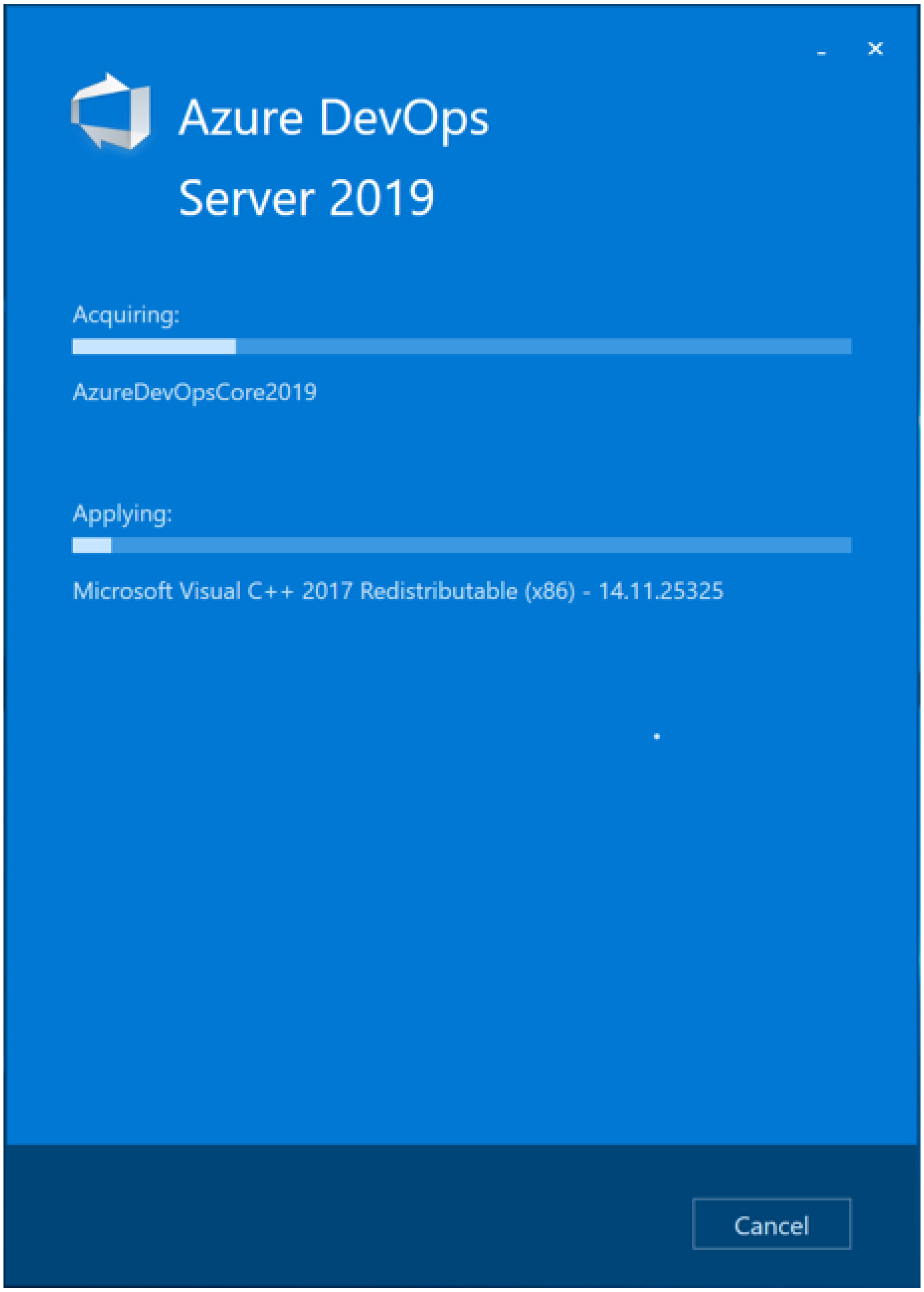
The installer will run and start to copy files to your disk.



Acquiring:

AzureDevOpsCore2019

Applying:

Microsoft Visual C++ 2017 Redistributable (x86) - 14.11.25325

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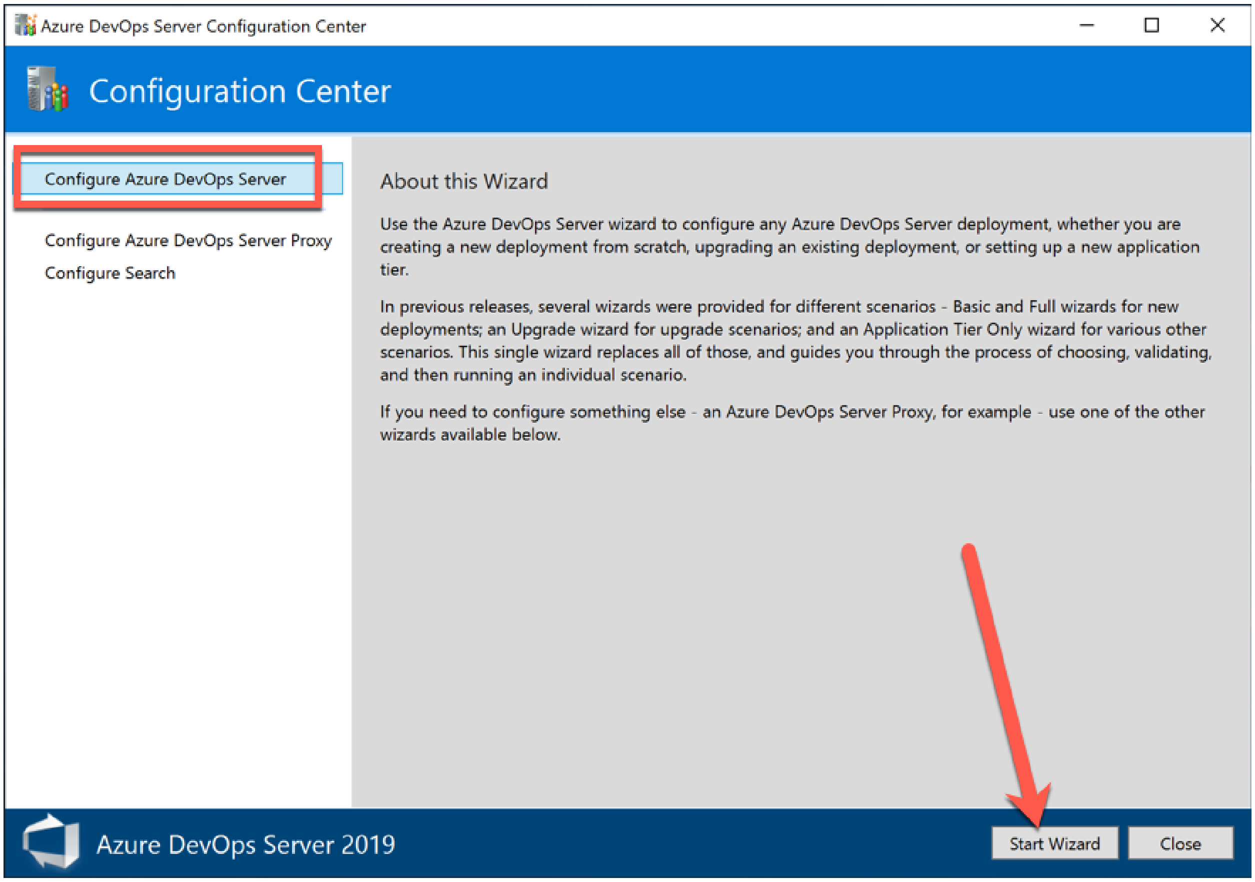
After running for a while (probably a long while), you should see the **Azure DevOps Server Configuration Center**.



Azure DevOps Server Configuration Center
Configuration Center
Configure Azure DevOps Server
Configure Azure DevOps Server Proxy
Configure Search
Azure DevOps Server 2019
Start Wizard
Close

About this Wizard

Use the Azure DevOps Server wizard to configure any Azure DevOps Server deployment, whether you are creating a new deployment from scratch, upgrading an existing deployment, or setting up a new application tier.

In previous releases, several wizards were provided for different scenarios - Basic and Full wizards for new deployments; an Upgrade wizard for upgrade scenarios; and an Application Tier Only wizard for various other scenarios. This single wizard replaces all of those, and guides you through the process of choosing, validating, and then running an individual scenario.

If you need to configure something else - an Azure DevOps Server Proxy, for example - use one of the other wizards available below.

- Choose **Configure Azure DevOps Server**
- Click **Start Wizard**

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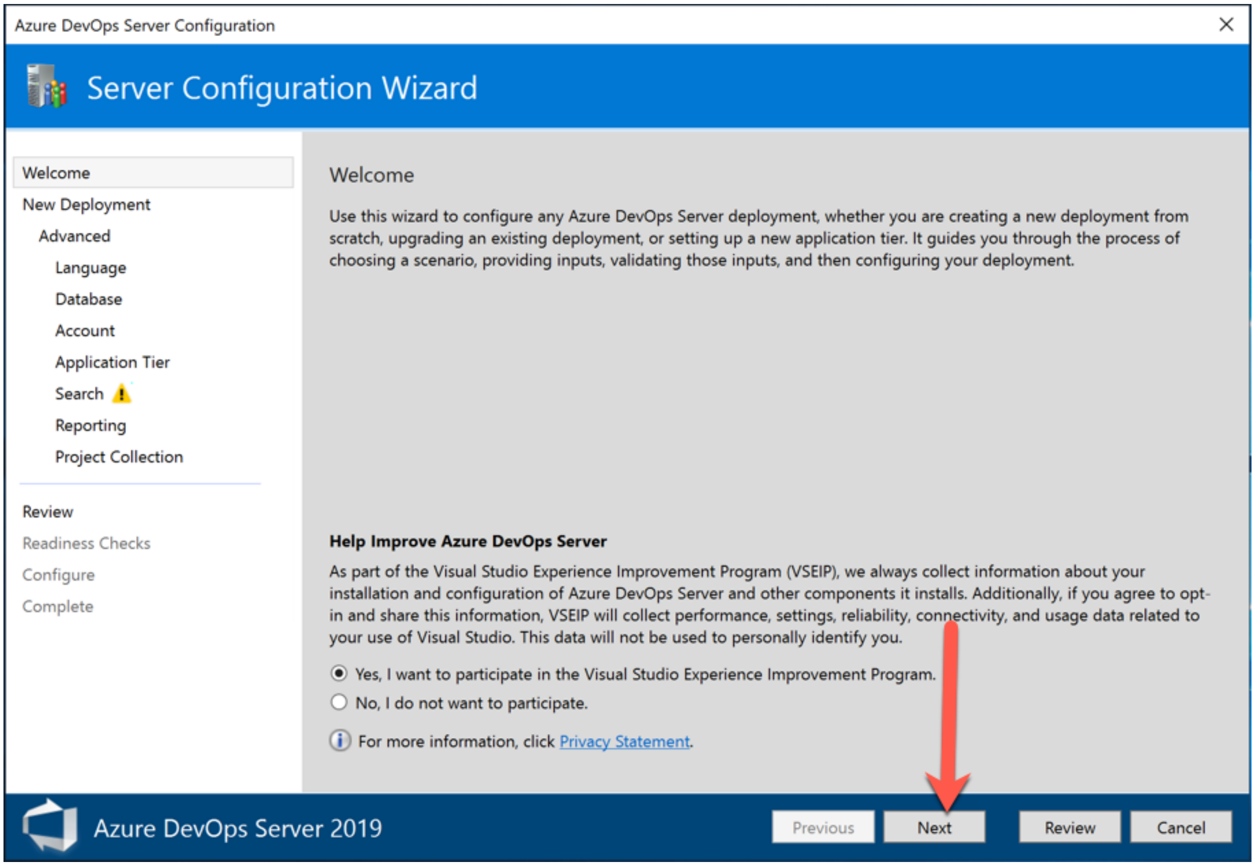
You should now be on the welcome page.



Azure DevOps Server Configuration

Server Configuration Wizard

Welcome

Use this wizard to configure any Azure DevOps Server deployment, whether you are creating a new deployment from scratch, upgrading an existing deployment, or setting up a new application tier. It guides you through the process of choosing a scenario, providing inputs, validating those inputs, and then configuring your deployment.

Help Improve Azure DevOps Server

As part of the Visual Studio Experience Improvement Program (VSEIP), we always collect information about your installation and configuration of Azure DevOps Server and other components it installs. Additionally, if you agree to opt-in and share this information, VSEIP will collect performance, settings, reliability, connectivity, and usage data related to your use of Visual Studio. This data will not be used to personally identify you.

● Yes, I want to participate in the Visual Studio Experience Improvement Program.

○ No, I do not want to participate.

For more information, click Privacy Statement.

- Choose **Yes, I want to participate in the Visual Studio Experience Improvement Program**
- Click **Next**

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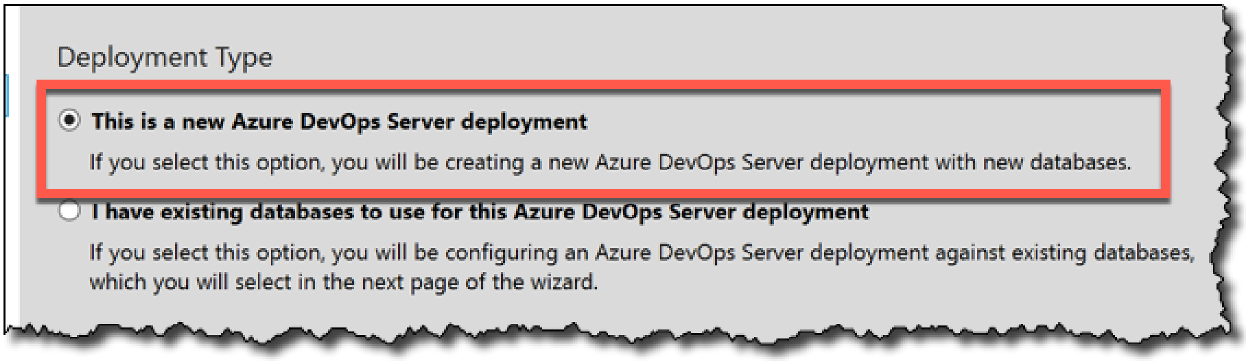
You should now be on the Deployment Type page.



Deployment Type

● **This is a new Azure DevOps Server deployment**

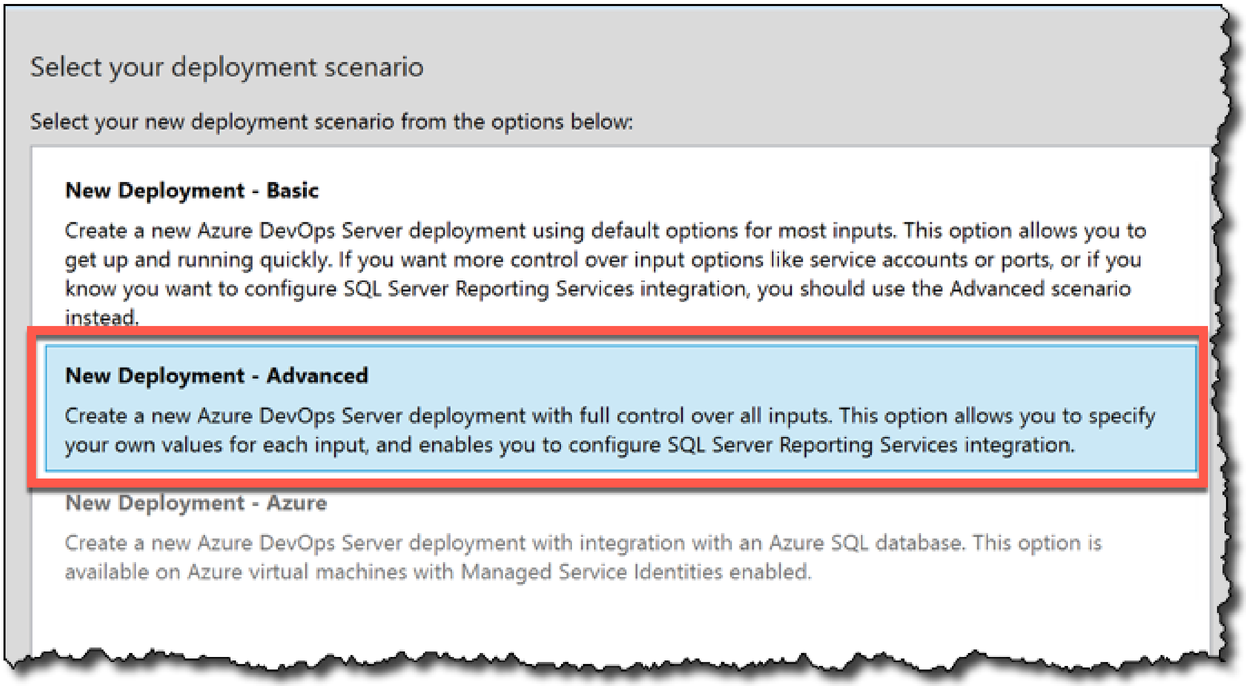
If you select this option, you will be creating a new Azure DevOps Server deployment with new databases.

○ **I have existing databases to use for this Azure DevOps Server deployment**

If you select this option, you will be configuring an Azure DevOps Server deployment against existing databases, which you will select in the next page of the wizard.

- Select **This is a new Azure DevOps Server deployment**
- Click **Next**

On the **Select your deployment scenario** page, you'll be prompted to choose between a 'New Deployment – Basic' or 'New Deployment – Advanced' deployment. Unless you are installing AzDO on an Azure Virtual Machine, the 'New Deployment – Azure' option will be disabled.



Select your deployment scenario

Select your new deployment scenario from the options below:

New Deployment - Basic

Create a new Azure DevOps Server deployment using default options for most inputs. This option allows you to get up and running quickly. If you want more control over input options like service accounts or ports, or if you know you want to configure SQL Server Reporting Services integration, you should use the Advanced scenario instead.

New Deployment - Advanced

Create a new Azure DevOps Server deployment with full control over all inputs. This option allows you to specify your own values for each input, and enables you to configure SQL Server Reporting Services integration.

New Deployment - Azure

Create a new Azure DevOps Server deployment with integration with an Azure SQL database. This option is available on Azure virtual machines with Managed Service Identities enabled.

- Choose **New Deployment – Advanced**
- Click **Next**

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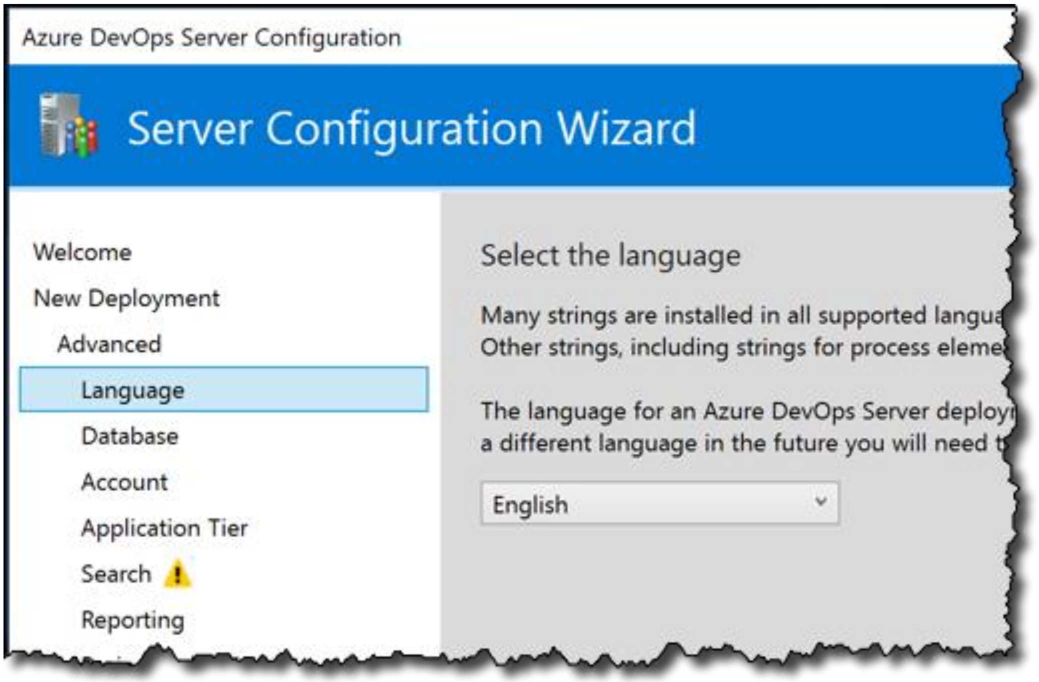
Choose your language.

- Choose the language
- Click Next



Azure DevOps Server Configuration

Server Configuration Wizard

Select the language

Many strings are installed in all supported langua
Other strings, including strings for process eleme

The language for an Azure DevOps Server deploy
a different language in the future you will need t

English

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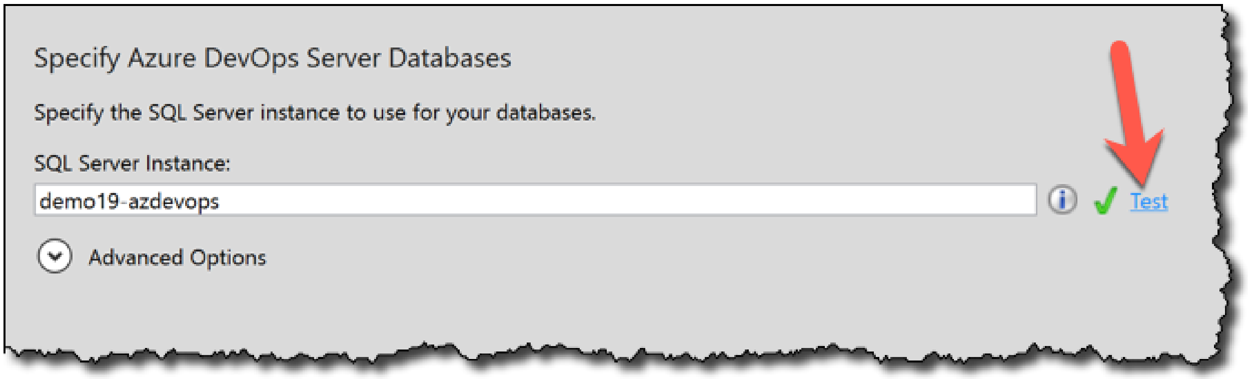
The **Specify Azure DevOps Server Databases** page prompts you to choose your SQL Server database. This guide assumes that you installed SQL Server 2017 Standard on the same machine as AzDO.



Specify Azure DevOps Server Databases

Specify the SQL Server instance to use for your databases.

SQL Server Instance: demo19-azdevops

- To the right of the **SQL Server Instance** textbox, click the **Test** link to verify the connection to SQL Server
- Confirm that the test passes
- Click **Next**

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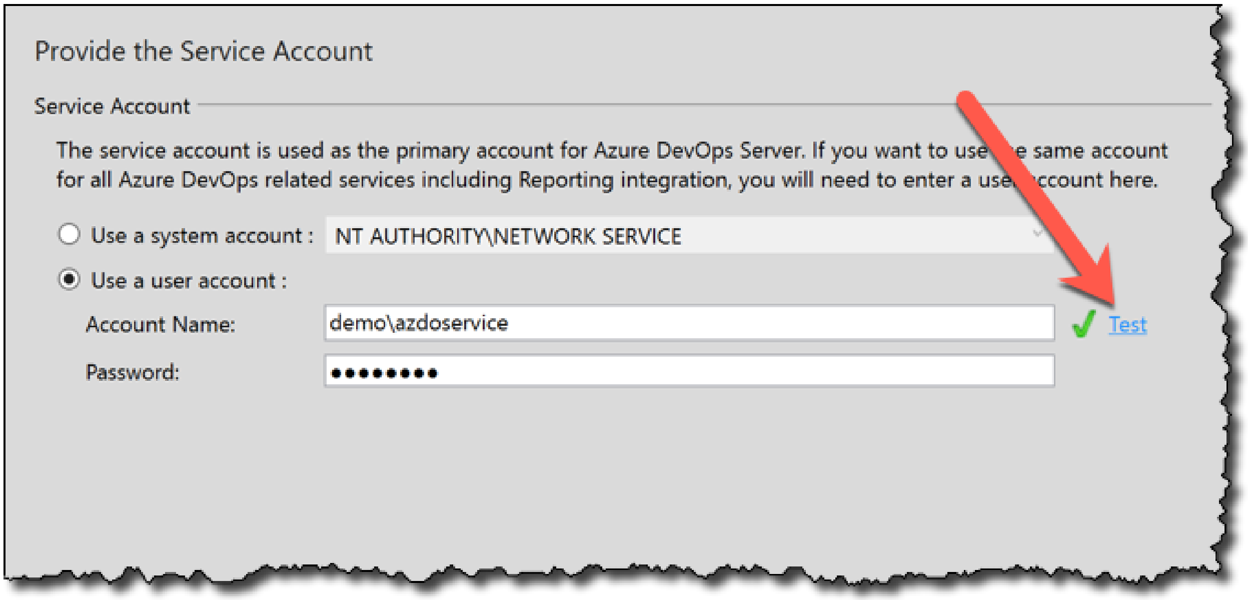
You should now see the Service Account page. You can choose to run AzDO as a system account but I find that this makes permissions management – more specifically, permissions *debugging* – much harder later on when you start doing automated builds, automated deployments, and automated testing. My recommendation is to run AzDO as a separate service account.



Provide the Service Account

Service Account

The service account is used as the primary account for Azure DevOps Server. If you want to use the same account for all Azure DevOps related services including Reporting integration, you will need to enter a user account here.

○ Use a system account : NT AUTHORITY\NETWORK SERVICE

● Use a user account :

Account Name: demo\azdoservice ✓ Test

Password: •••••••••

- Choose **Use a user account**
- In the **Account Name** textbox, type the fully-qualified name of the service account. Example: *demo\azdoservice*
- In the **Password** textbox, enter the password for the service account
- Click the **Test** link to verify the credentials are correct
- Click **Next**

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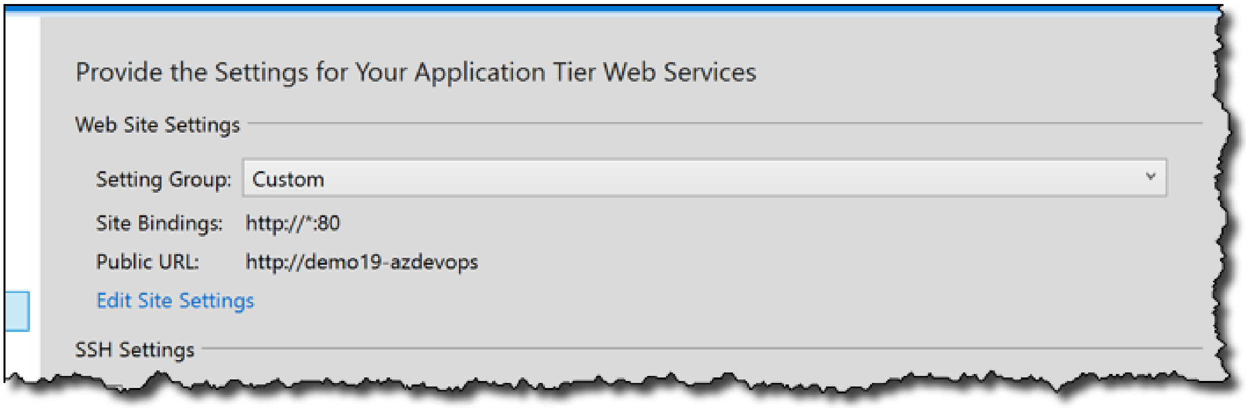
You should now see a page prompting you for the configuration of AzDO in IIS. You have some options about configuring SSL with AzDO but there's some complexity here that we're going to skip over for now. For the sake of simplicity, we're going to configure AzDO to run without SSL.

The default option should be set to **Custom**.



Provide the Settings for Your Application Tier Web Services

Web Site Settings

Setting Group: Custom

Site Bindings: http://*:80

Public URL: http://demo19-azdevops

- Make sure **Setting Group** is set to **Custom**
- If Setting Group is NOT set to Custom, just give up now. (Have you considered raising goats as a career?)

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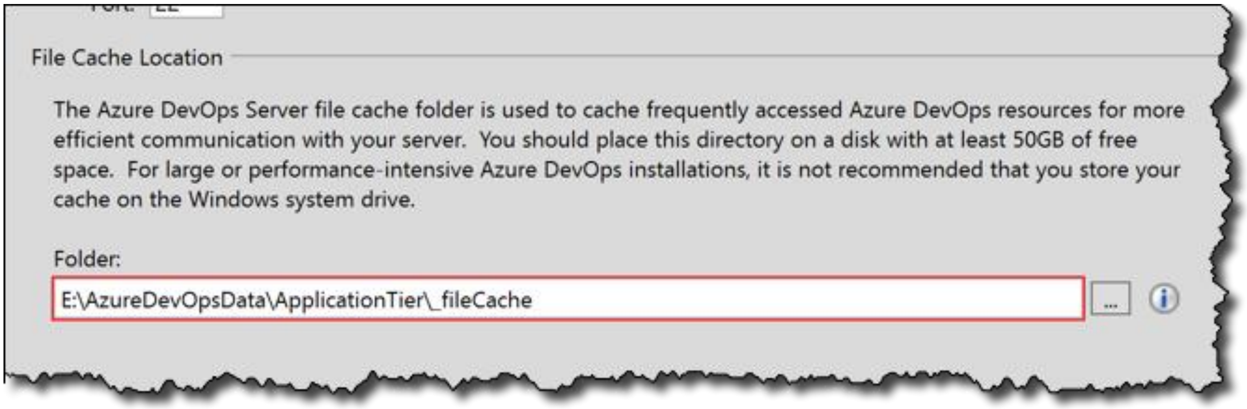
(Optional) At the bottom of this page, there's a section for **File Cache Location**. AzDO caches files for efficiency. The contents of this directory can become impressively large. For performance reasons and for disk space management reasons, you probably should put this on a separate disk – ideally on a different "spindle" – than your system/operating system drive.



File Cache Location

The Azure DevOps Server file cache folder is used to cache frequently accessed Azure DevOps resources for more efficient communication with your server. You should place this directory on a disk with at least 50GB of free space. For large or performance-intensive Azure DevOps installations, it is not recommended that you store your cache on the Windows system drive.

Folder: E:\AzureDevOpsData\ApplicationTier_fileCache

- (Optional) Change the **Folder** path to reference the desired location and disk.
- Click **Next**

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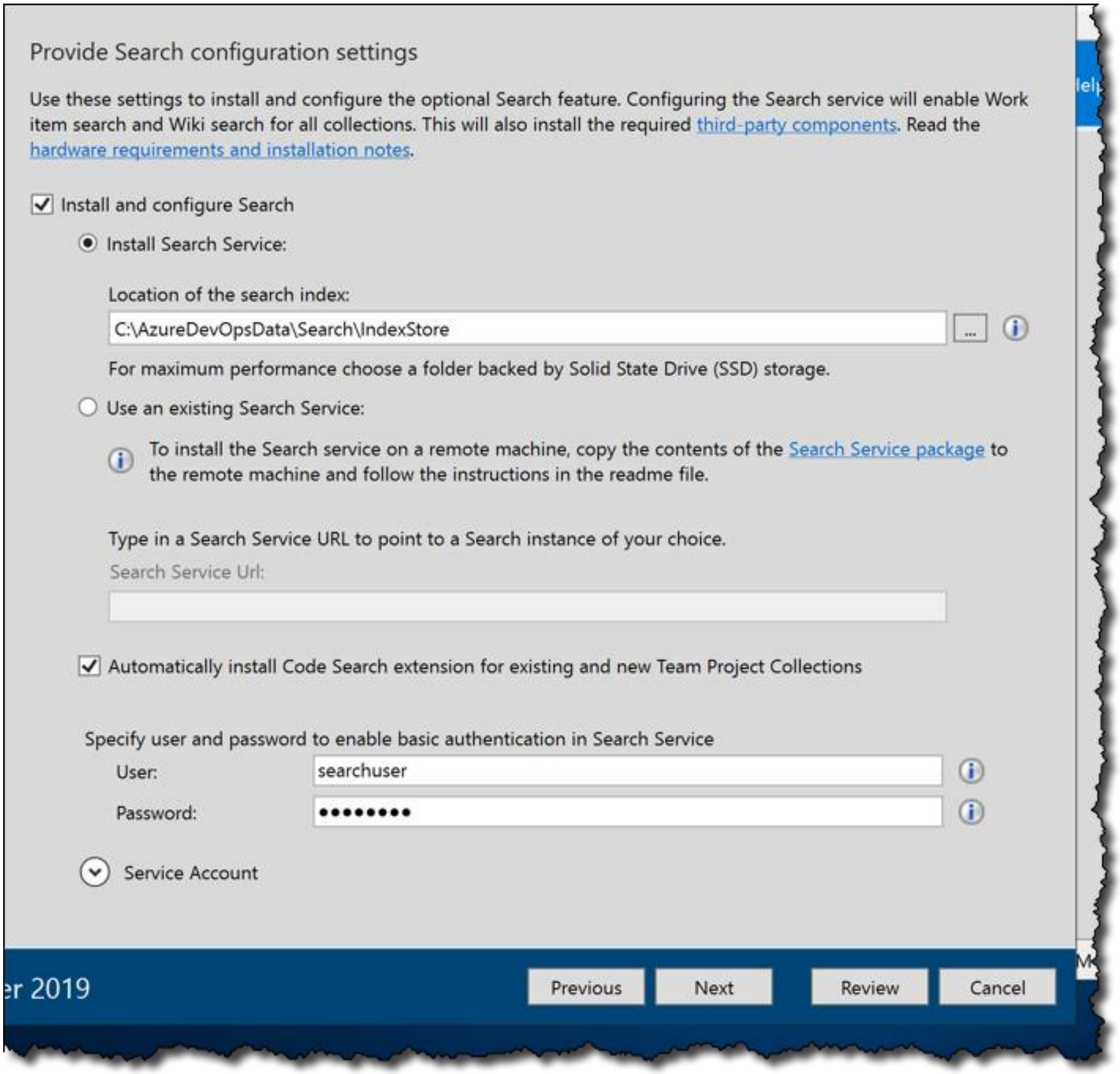
You should now be on the **Provide Search configuration settings** page of the wizard. This is an optional feature.

Option 1: If you *do not* want to install Search:

- Uncheck **Install and configure Search**
- Click **Next**

Option #2: Install Search

- Check **Install and configure Search**



Provide Search configuration settings

Use these settings to install and configure the optional Search feature. Configuring the Search service will enable Work item search and Wiki search for all collections. This will also install the required third-party components. Read the hardware requirements and installation notes.

☑ Install and configure Search

● Install Search Service:

Location of the search index:

C:\AzureDevOpsData\Search\IndexStore

For maximum performance choose a folder backed by Solid State Drive (SSD) storage.

○ Use an existing Search Service:

To install the Search service on a remote machine, copy the contents of the Search Service package to the remote machine and follow the instructions in the readme file.

Type in a Search Service URL to point to a Search instance of your choice.

Search Service Url:

☑ Automatically install Code Search extension for existing and new Team Project Collections

Specify user and password to enable basic authentication in Search Service

User: searchuser

Password: ●●●●●●●●●

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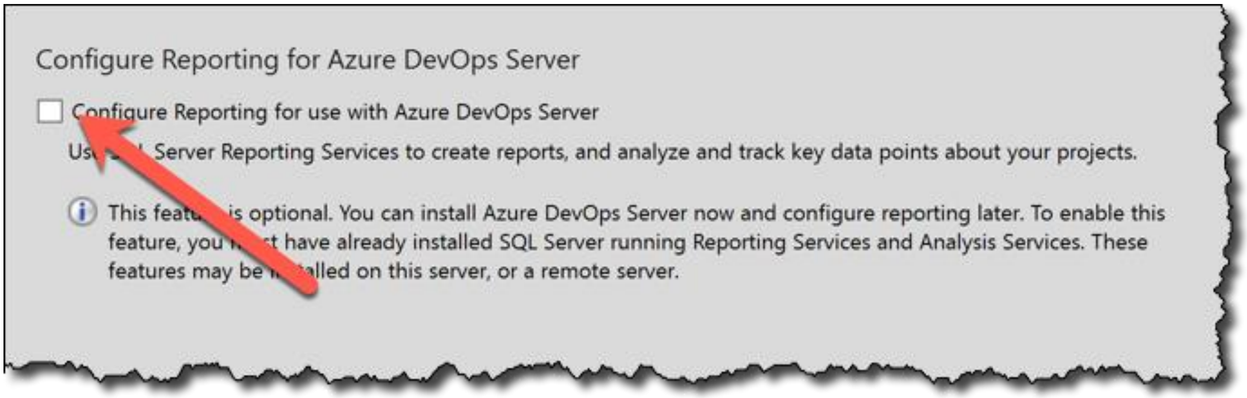
- Choose **Install Search Service**
- Set the **Location of the search index** to the drive and folder you want to use for search. For performance reasons, you'll probably want to keep this on a different drive than the system drive. If your AzDO installation is large and busy, you may want to put this on its own drive by itself.
- Under Specify user and password to enable basic authentication in Search Service, enter a user name and password. This is NOT a Windows username. I'd recommend using the username **searchuser** and then entering a password of your choice.
- Click **Next**

You should now see the **Configure Reporting for Azure DevOps Server** page. This is another optional feature. This feature is silly, adds next to no value, and pretty much just installs things that can break. If you like wasting your time debugging silly errors, then this feature is for you. If you like working really hard to get rid of silly errors only to be horribly disappointed once the feature actually starts working and you see how underwhelming it is, then this feature is for you.

This guide assumes that you're NOT installing support for SQL Server Reporting Services with AZDO.



Configure Reporting for Azure DevOps Server

□ Configure Reporting for use with Azure DevOps Server

Use SQL Server Reporting Services to create reports, and analyze and track key data points about your projects.

ⓘ This feature is optional. You can install Azure DevOps Server now and configure reporting later. To enable this feature, you must have already installed SQL Server running Reporting Services and Analysis Services. These features may be installed on this server, or a remote server.

- Uncheck **Configure Reporting for use with Azure DevOps Server**
- Click **Next**

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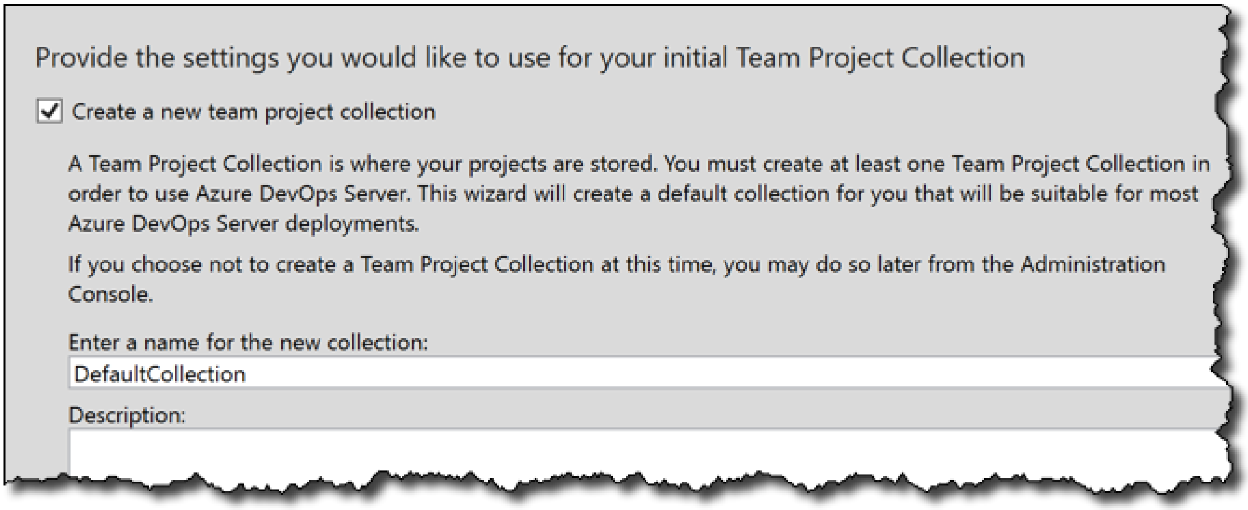
The installer will now prompt you to create a new Team Project Collection (TPC). The answer to this one (unless you're doing a migration) is yes.



Provide the settings you would like to use for your initial Team Project Collection

☑ Create a new team project collection

A Team Project Collection is where your projects are stored. You must create at least one Team Project Collection in order to use Azure DevOps Server. This wizard will create a default collection for you that will be suitable for most Azure DevOps Server deployments.

If you choose not to create a Team Project Collection at this time, you may do so later from the Administration Console.

Enter a name for the new collection: DefaultCollection

Description:

- Check **Create a new team project collection**
- Click **Next**

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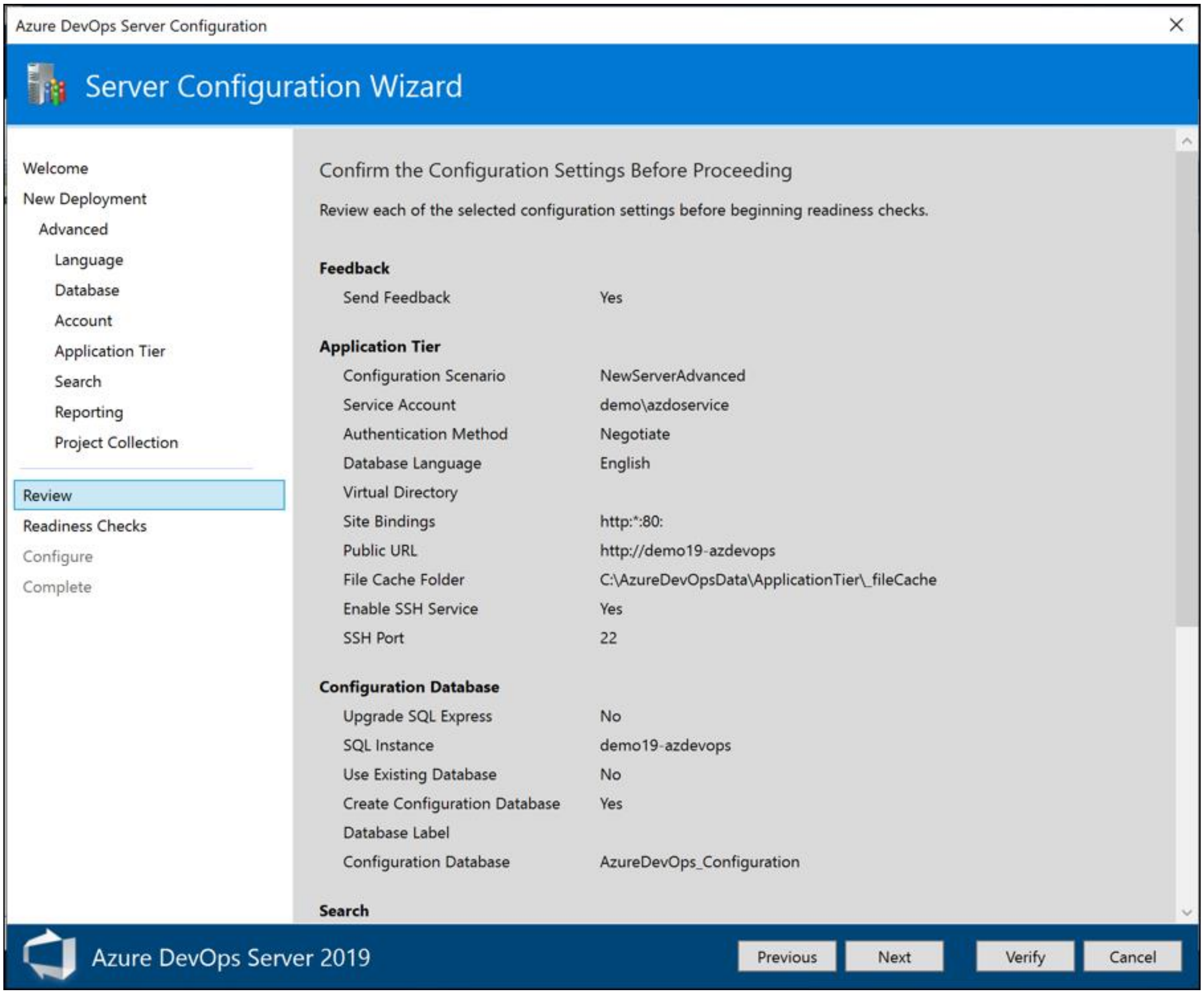
You should now be on the **Confirm the Configuration Settings Before Proceeding** page.



Confirm the Configuration Settings Before Proceeding

Review each of the selected configuration settings before beginning readiness checks.

Feedback

Send Feedback	Yes

Application Tier

Configuration Scenario	NewServerAdvanced
Service Account	demo\azdoservice
Authentication Method	Negotiate
Database Language	English
Virtual Directory	
Site Bindings	http:*:80:
Public URL	http://demo19-azdevops
File Cache Folder	C:\AzureDevOpsData\ApplicationTier_fileCache
Enable SSH Service	Yes
SSH Port	22

Configuration Database

Upgrade SQL Express	No
SQL Instance	demo19-azdevops
Use Existing Database	No
Create Configuration Database	Yes
Database Label	
Configuration Database	AzureDevOps_Configuration

Search

- Click **Next**

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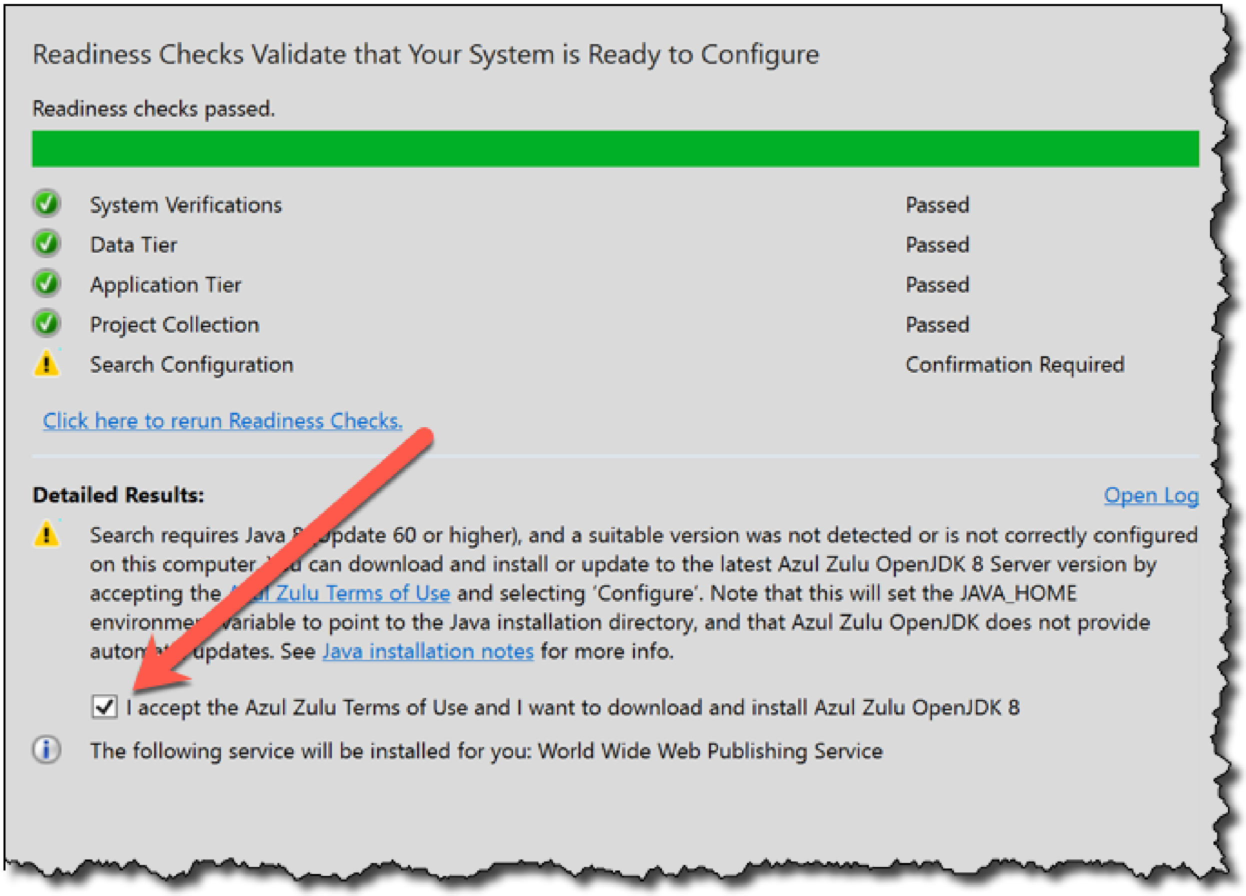
The installer will run some readiness checks. They should all come back as passed except for the Search Configuration item. The Search feature requires the Azul Zulu OpenJDK to be installed and this warning is prompting you to accept the licensing agreement for the JRK.



Readiness Checks Validate that Your System is Ready to Configure

Readiness checks passed.

✓	System Verifications	Passed
✓	Data Tier	Passed
✓	Application Tier	Passed
✓	Project Collection	Passed
⚠	Search Configuration	Confirmation Required

Click here to rerun Readiness Checks.

Detailed Results: Open Log

⚠ Search requires Java 8 (Update 60 or higher), and a suitable version was not detected or is not correctly configured on this computer. You can download and install or update to the latest Azul Zulu OpenJDK 8 Server version by accepting the Azul Zulu Terms of Use and selecting 'Configure'. Note that this will set the JAVA_HOME environment variable to point to the Java installation directory, and that Azul Zulu OpenJDK does not provide automatic updates. See Java installation notes for more info.

☑ I accept the Azul Zulu Terms of Use and I want to download and install Azul Zulu OpenJDK 8

ⓘ The following service will be installed for you: World Wide Web Publishing Service

- Check **I accept the Azul Zulu Terms of Use…**
- Click the **Configure** button

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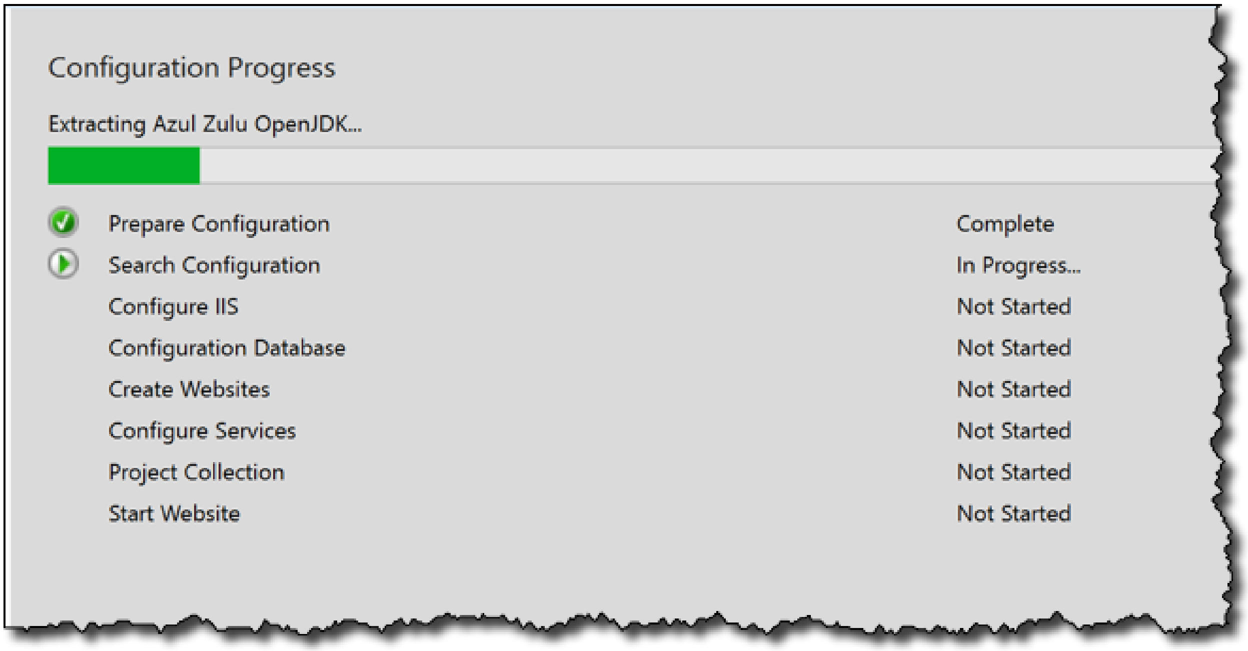
The configuration process should now be running.



Configuration Progress

Extracting Azul Zulu OpenJDK...

✓	Prepare Configuration	Complete
▶	Search Configuration	In Progress...
	Configure IIS	Not Started
	Configuration Database	Not Started
	Create Websites	Not Started
	Configure Services	Not Started
	Project Collection	Not Started
	Start Website	Not Started

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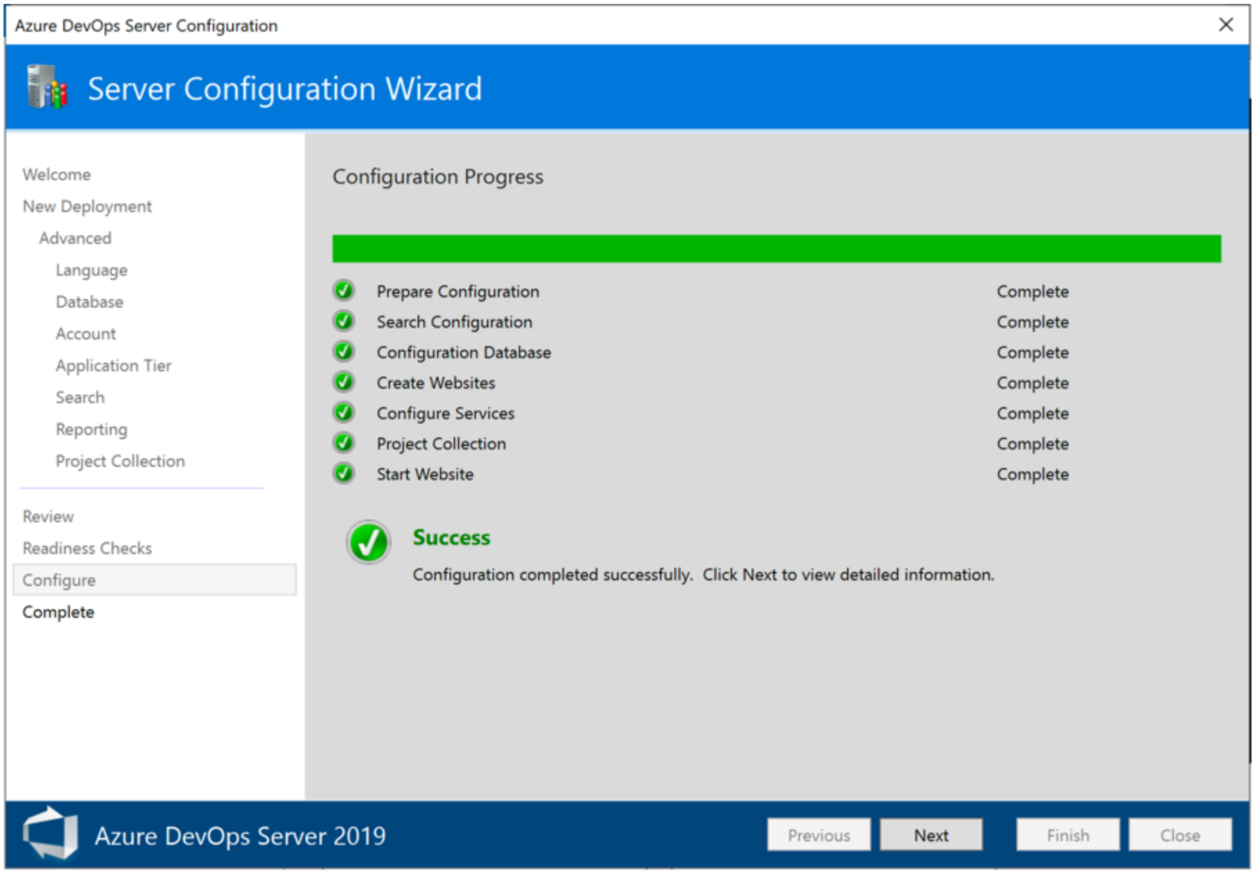
The configuration process should end with a message saying Success.



Configuration Progress

✓ Prepare Configuration	Complete
✓ Search Configuration	Complete
✓ Configuration Database	Complete
✓ Create Websites	Complete
✓ Configure Services	Complete
✓ Project Collection	Complete
✓ Start Website	Complete

✓ Success

Configuration completed successfully. Click Next to view detailed information.

- Click **Next**

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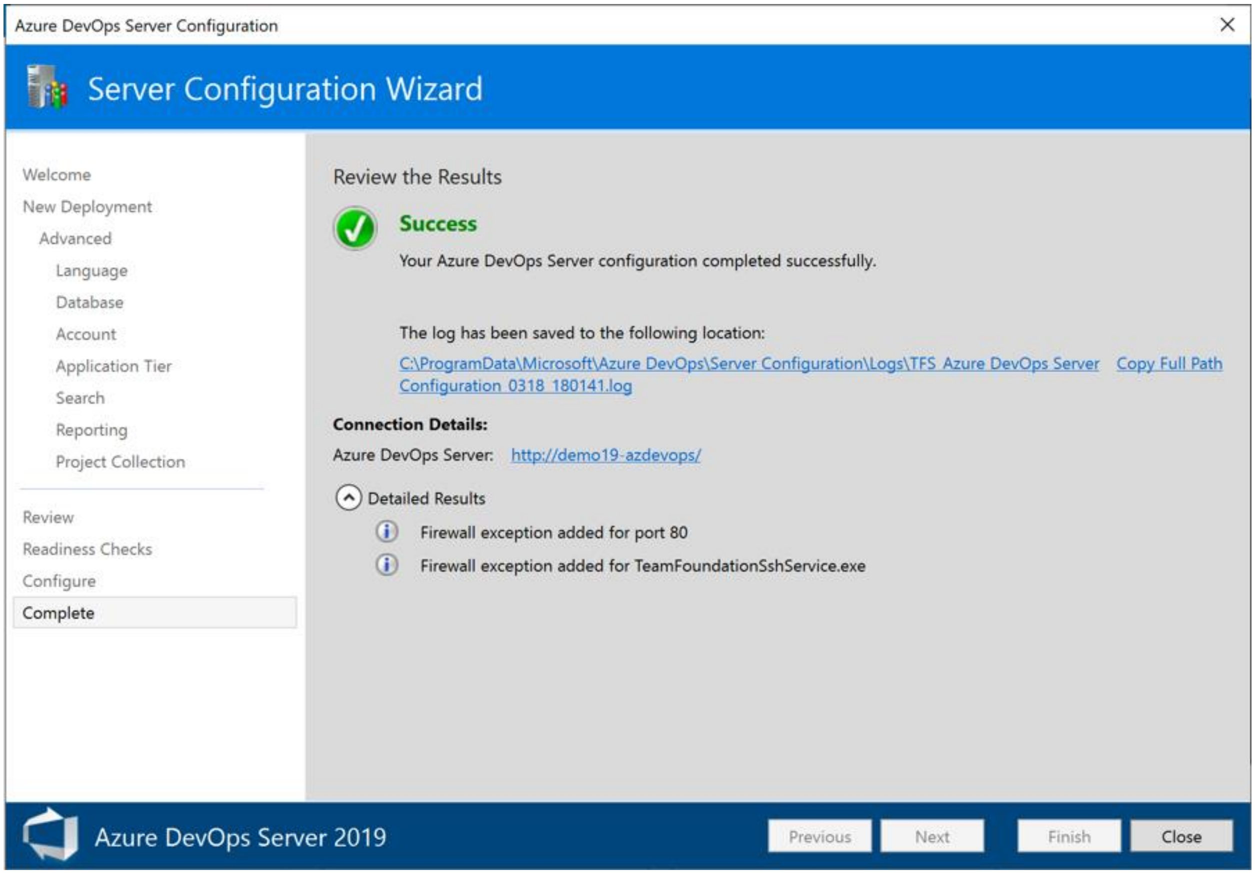
You should now be on the **Review the Results** page.



Review the Results

Success

Your Azure DevOps Server configuration completed successfully.

The log has been saved to the following location:

C:\ProgramData\Microsoft\Azure DevOps\Server Configuration\Logs\TFS_Azure DevOps Server Configuration_0318_180141.log Copy Full Path

Connection Details:

Azure DevOps Server: http://demo19-azdevops/

Detailed Results

- Firewall exception added for port 80
- Firewall exception added for TeamFoundationSshService.exe

- Click **Close**

Azure DevOps Server 2019 is now configured and running.

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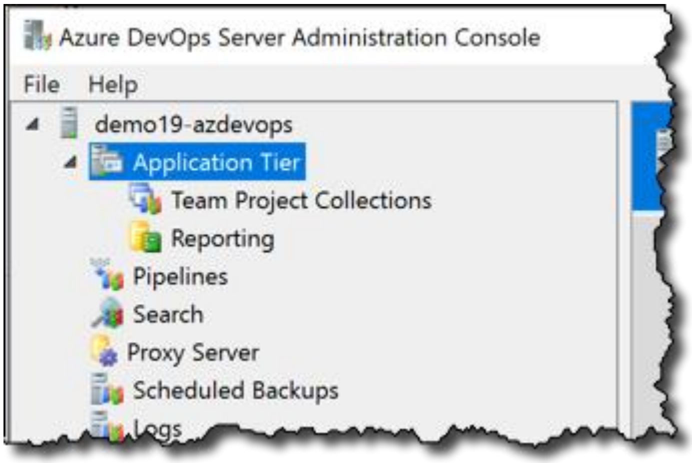
Chapter 4: Configure an SMTP Server for Azure DevOps Server

You'll definitely want to configure an SMTP server connection for Azure DevOps.

You probably already have an SMTP server available to you but, if you don't, you can enable the SMTP Server feature in Windows Server 2016.

- Log in to your Azure DevOps machine as an administrator
- Go to the Start menu
- Search for **Azure DevOps Server Administrator Console**

You should see the Azure DevOps Administrator Console.



- In the left column, click on **Application Tier**

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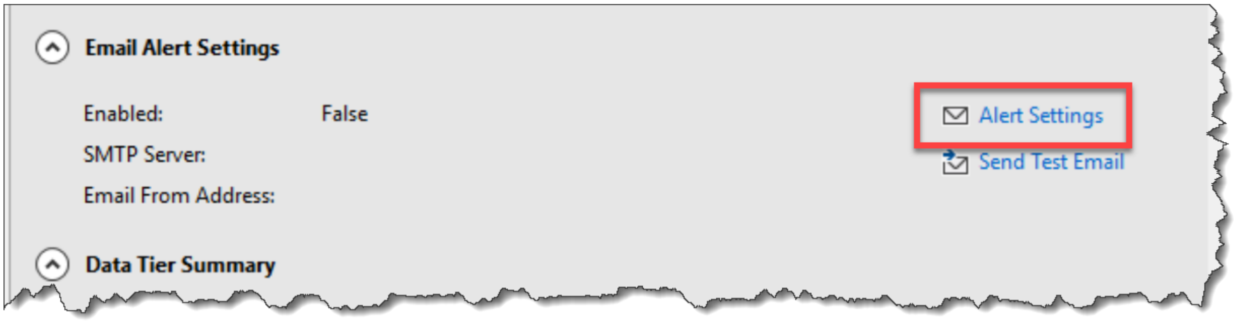
In the right panel, scroll down until you location the **Email Alert Settings.**



Email Alert Settings

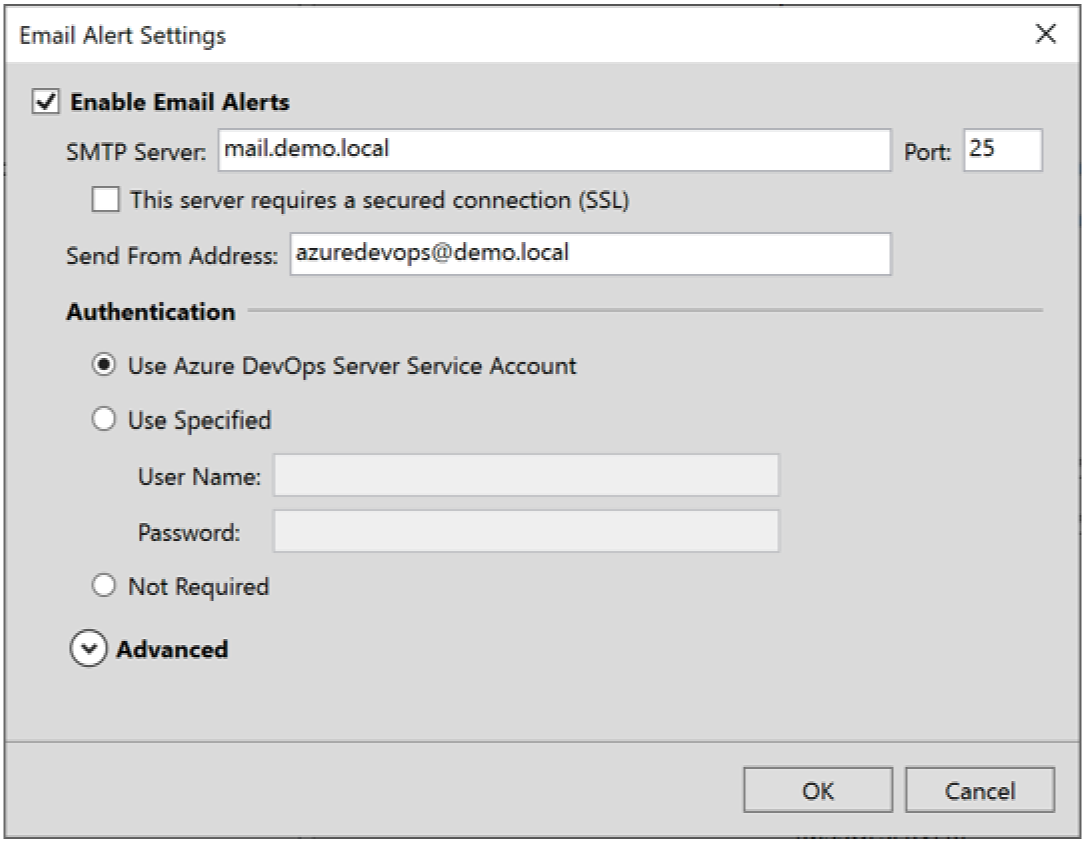
Enabled: False

SMTP Server:

Email From Address:

- Click **Alert Settings**

You should now see the **Email Alert Settings** dialog.



Email Alert Settings

☑ **Enable Email Alerts**

SMTP Server: mail.demo.local Port: 25

□ This server requires a secured connection (SSL)

Send From Address: azuredevops@demo.local

Authentication

● Use Azure DevOps Server Service Account

○ Use Specified

User Name:

Password:

○ Not Required

- Check **Enable Email Alerts**
- Set **SMTP Server** to the hostname or IP address for your SMTP server.
- Click **OK**

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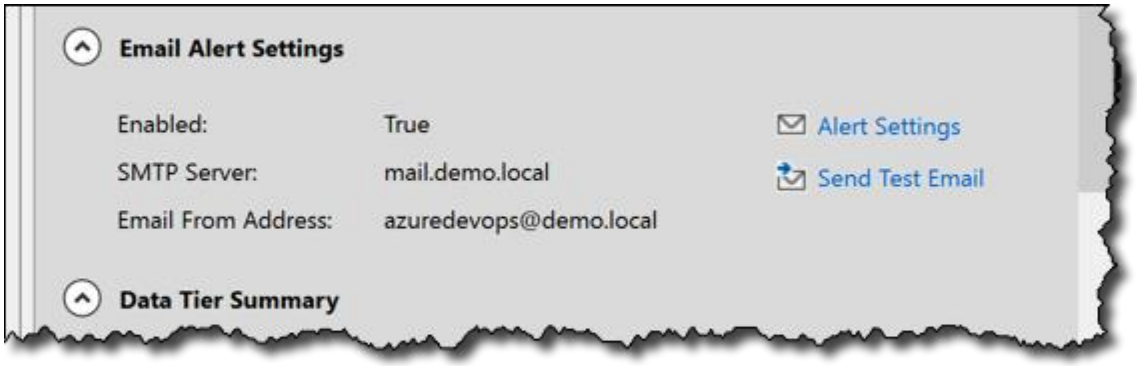
You should now be back on the main window of the admin console. The email alert settings should now be populated with your SMTP server.



Email Alert Settings

Enabled:	True
SMTP Server:	mail.demo.local
Email From Address:	azuredevops@demo.local

Your Azure DevOps is ready to send emails.

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Chapter 5: Install Azure DevOps Build & Release Agent on Windows Server

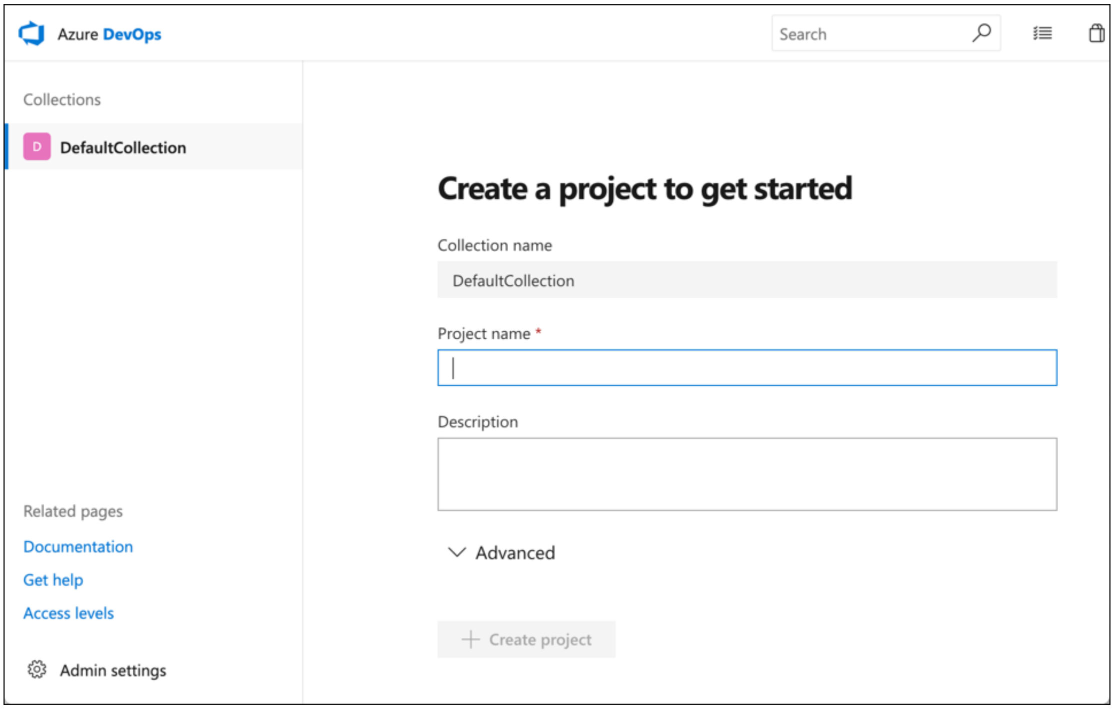
This chapter will walk you through the process of creating a build & release server on Windows. The build agent and the release agent are the same installer and process in Azure DevOps and a single installation of this agent will allow you to do "build" activities and also "release" activities.

The following steps all happen on the machine that is going to be the build server.

Download the Agent Installer

- Log in to the build server machine
- Open a web browser
- Navigate to your Azure DevOps Server web interface. Depending on what security settings you chose, this is probably one of the following:
  - https://servername
  - http://*servername*:8080/tfs
  - http://servername

You should see a screen that looks like this…



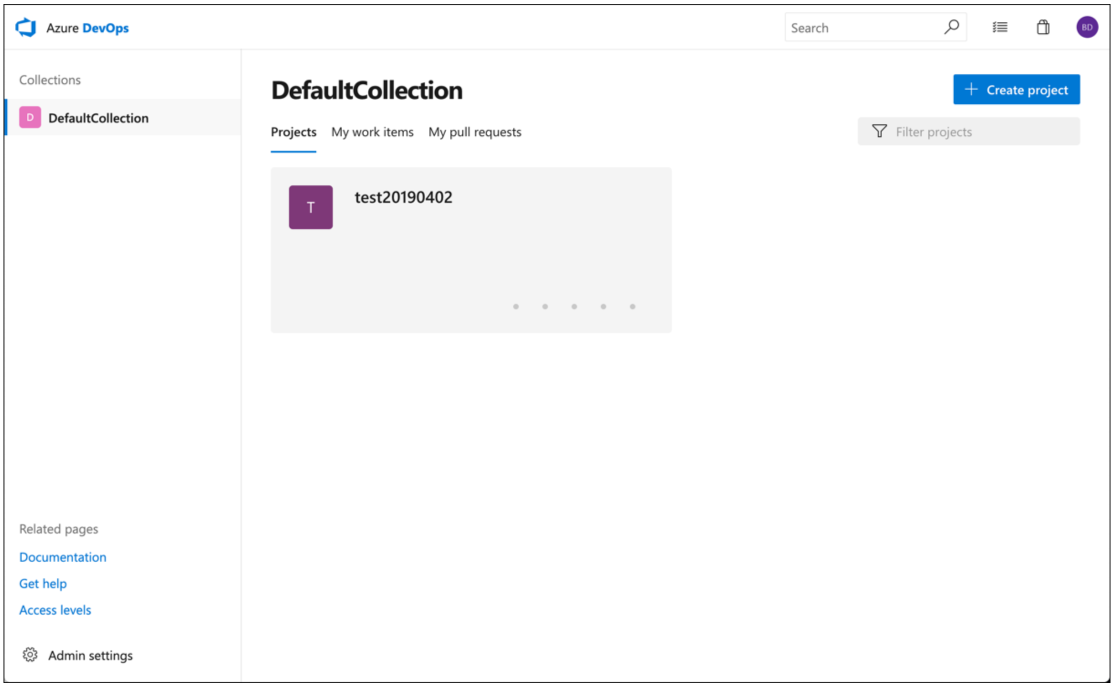
Create a project to get started

Collection name: DefaultCollection

Project name *

Description

…or perhaps a screen like this.



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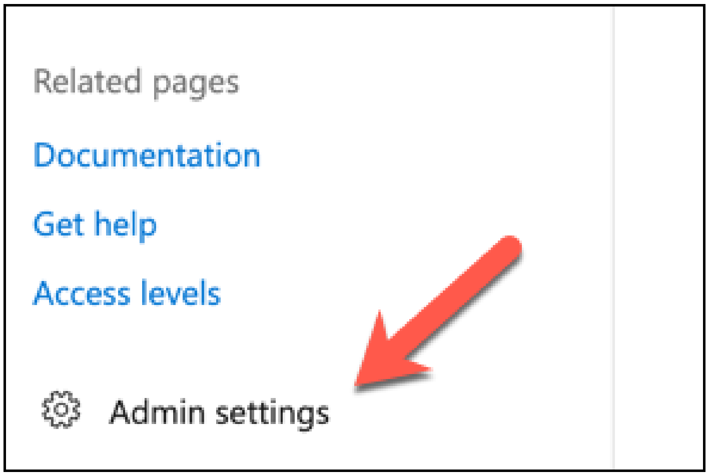
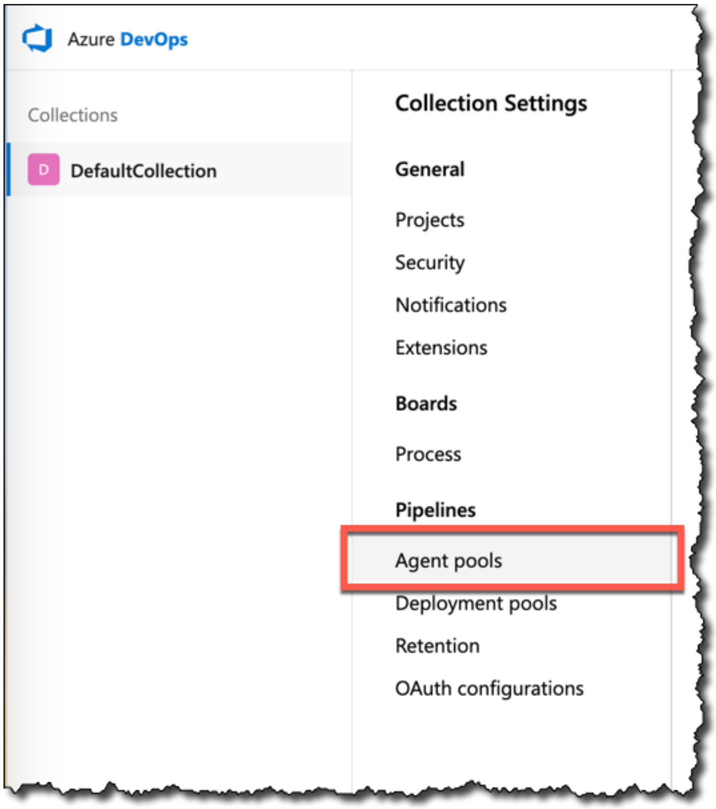
In the bottom left corner of the screen, you should see a button that says **Admin settings**.



- Click the **Admin settings** button

You should now be on the **Collection Settings** page for your project collection. In the **Pipelines** section of the menu bar, locate **Agent pools**.



- Click the **Agent pools** link

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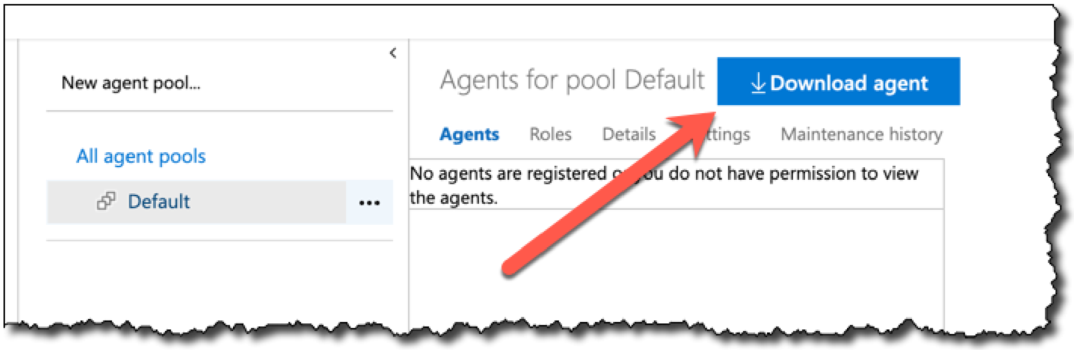
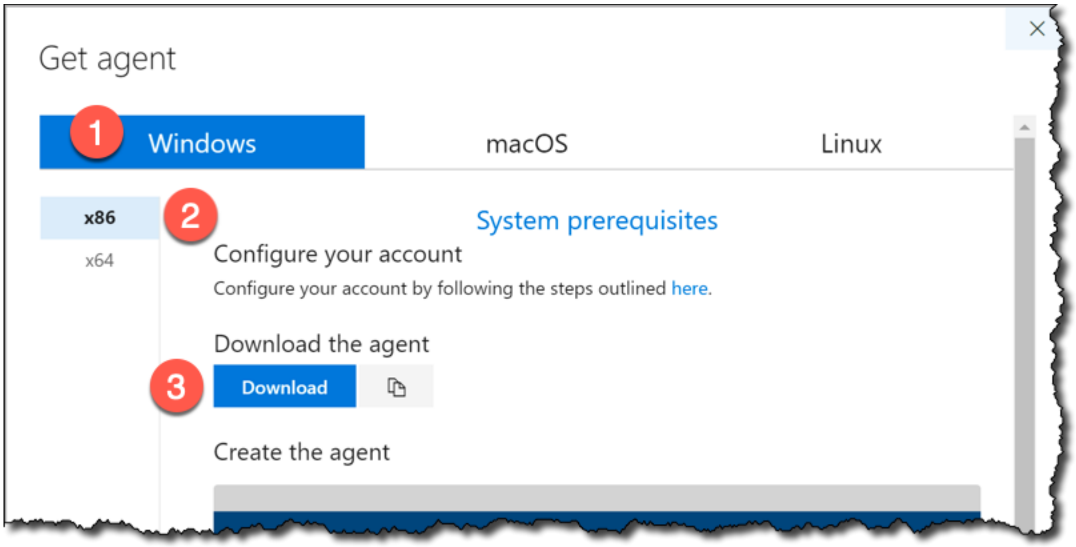
You should see the **Agents for pool Default** screen. The **Download agent** button will navigate you to the page that lets you choose the agent for the operating system of your choice.



No agents are registered or you do not have permission to view the agents.

- Click the **Download agent** button

You should see a dialog like this. This guide is assuming that you're installing the agent on Windows but the installation process is very similar on all operating systems.



Configure your account

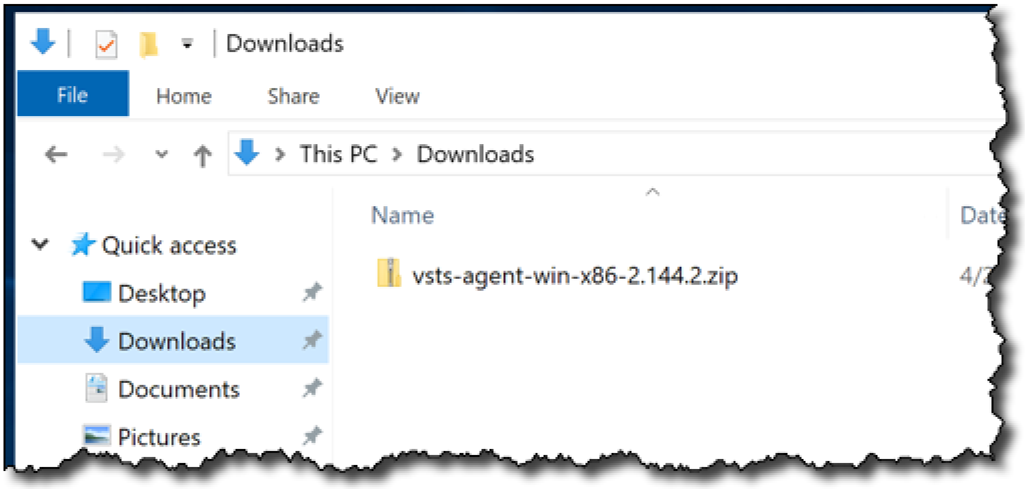
Configure your account by following the steps outlined here.

Download the agent

Create the agent

- From the operating system list, click the **Windows** tab
- Choose either the **x86** or **x64** version
- Click the **Download** button to start the download. (NOTE: this guide assumes you're doing the default browser behavior and downloading the agent zip to the download directory for your user profile.)

To verify that you saved this file to the expected location for this guide, open Windows Explorer (explorer.exe) and navigate to the Downloads directory. You should see a zip file that has a name that starts with “vsts-agent-“. The actual filename might not be the same as the image below because the agent version may have been updated.



vsts-agent-win-x86-2.144.2.zip

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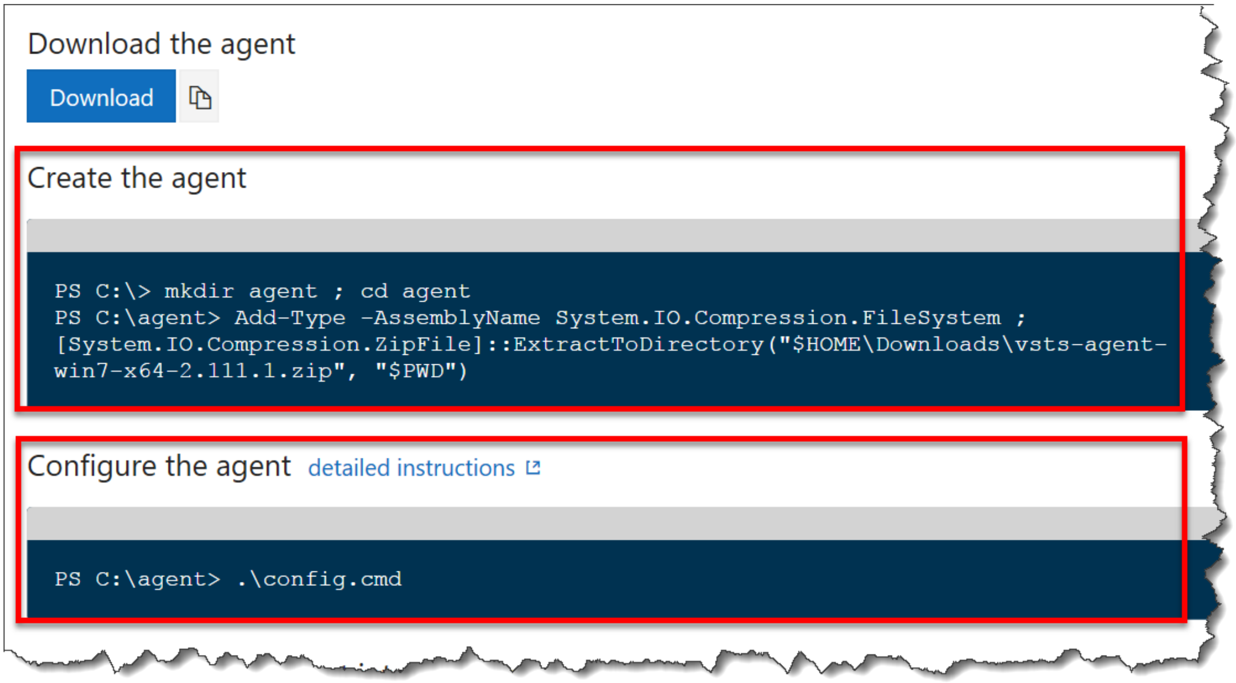
Extract the Agent

Now that you've downloaded the bits for the agent, you'll do the actual installation using PowerShell. This is actually done in two parts. Part 1: Extract the agent bits from the ZIP. Part 2: Configure the Agent. Let's do the first part.

That dialog that you used to download the agent has two different commands: "Create the agent" and "Configure the agent". In an ideal world, you'd be able to just copy and paste the commands and not have to think about anything – but this isn't an ideal world so buckle up. (Actually, it's not that bad…it's just enough friction to be a little bit annoying.)



Create the agent

```
PS C:\> mkdir agent ; cd agent
PS C:\agent> Add-Type -AssemblyName System.IO.Compression.FileSystem ;
[System.IO.Compression.ZipFile]::ExtractToDirectory("$HOME\Downloads\vsts-agent-
win7-x64-2.111.1.zip", "$PWD")
```

Configure the agent detailed instructions

```
PS C:\agent> .\config.cmd
```

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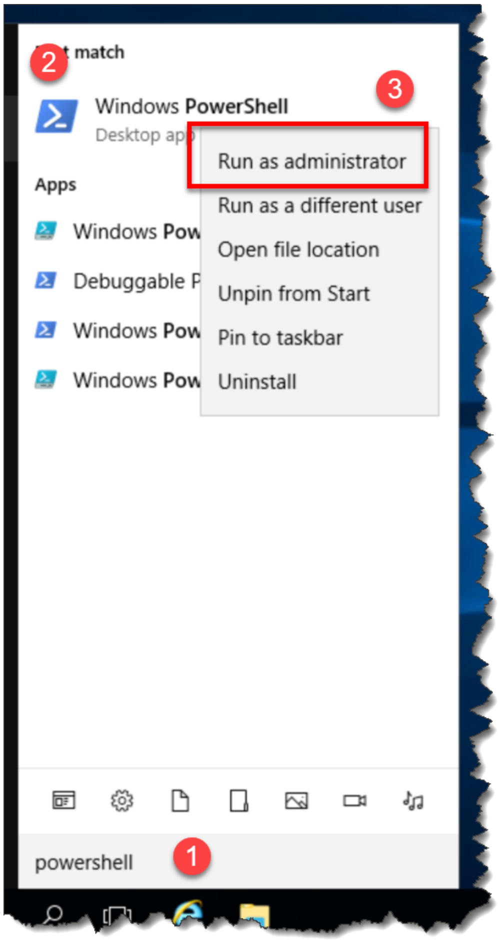
First up, it's time to run PowerShell.



- Press the **Windows key** on your keyboard to bring up the search menu and type **PowerShell**
- From the search results, right-click **Windows PowerShell**
- From the context menu for PowerShell, choose **Run as administrator**

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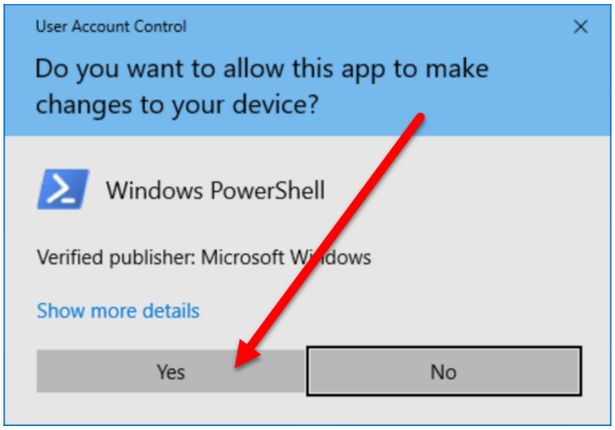
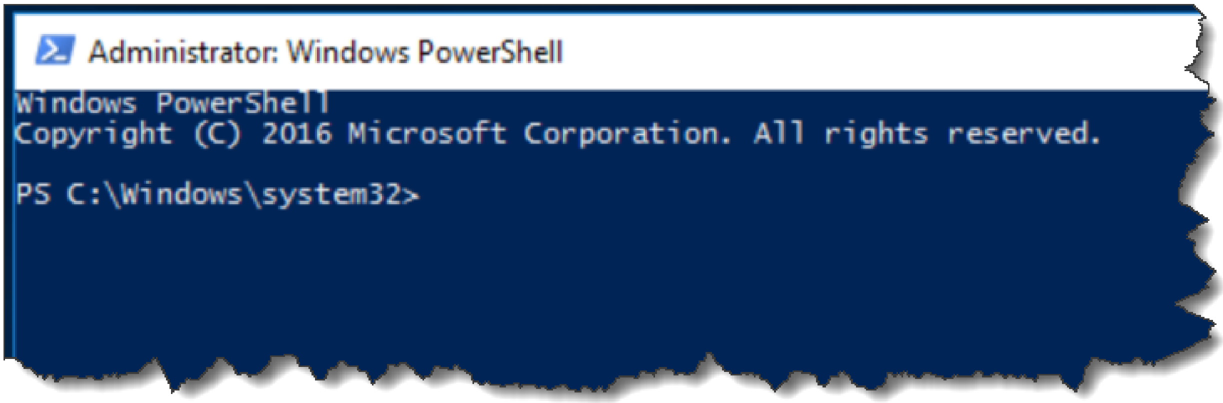
You'll see a User Account Control dialog.



User Account Control
Do you want to allow this app to make changes to your device?
Windows PowerShell
Verified publisher: Microsoft Windows
Show more details
Yes
No

- Click **Yes**

You should now see a Windows PowerShell window with the title "Administrator: Windows PowerShell".



```
Windows PowerShell
Copyright (C) 2016 Microsoft Corporation. All rights reserved.

PS C:\Windows\system32>
```

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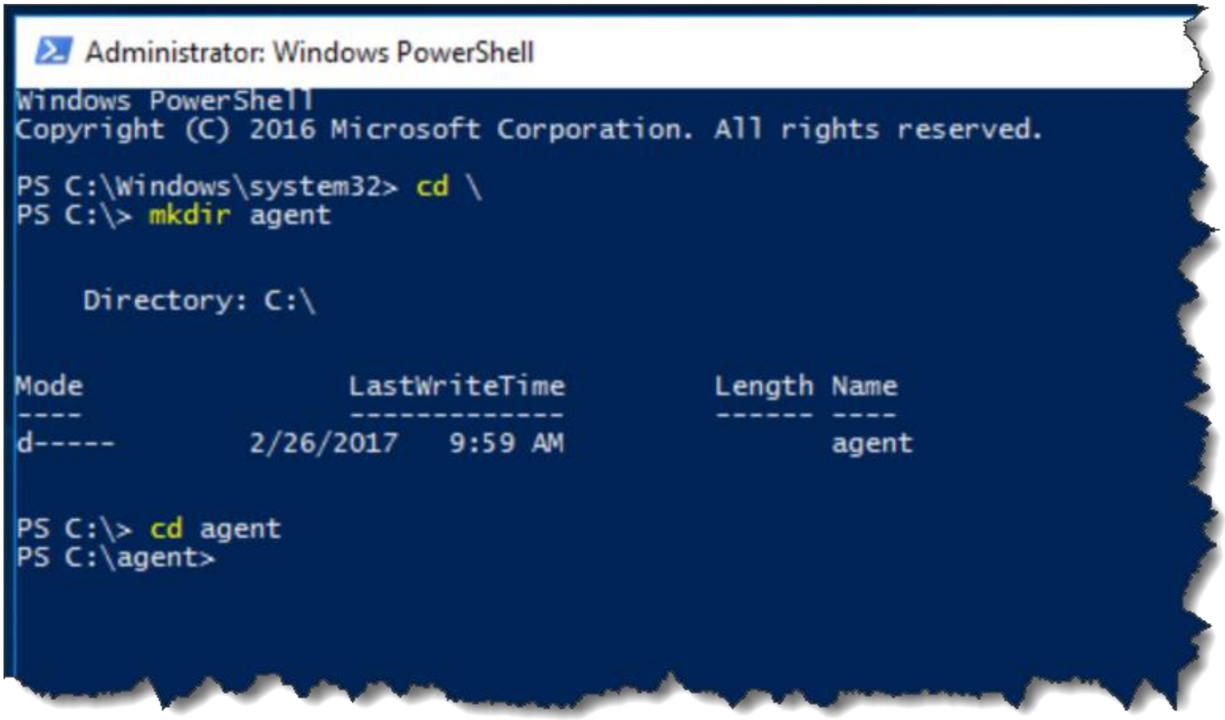
You're now going to run a handful of commands to create the folder structure that you'll be installing the build agent in to.



```
Windows PowerShell
Copyright (C) 2016 Microsoft Corporation. All rights reserved.

PS C:\Windows\system32> cd \
PS C:\> mkdir agent


    Directory: C:\


Mode                LastWriteTime         Length Name
----                -------------         ------ ----
d-----        2/26/2017   9:59 AM                agent


PS C:\> cd agent
PS C:\agent>
```

- Type "cd \" and press Enter
- Type "mkdir agent" and press Enter
- Type "cd agent" and press Enter

When you're done with these commands, your screen should look almost exactly the same as the image above. It's extremely important that the PowerShell screen is showing you

PS C:\agent>

on the last line because this indicates that you've correctly created a directory called Agent and entered that directory.

If your PowerShell window doesn't show you "PS C:\agent>", abandon all hope and reconsider all of the life choices that you've made to date. ☺

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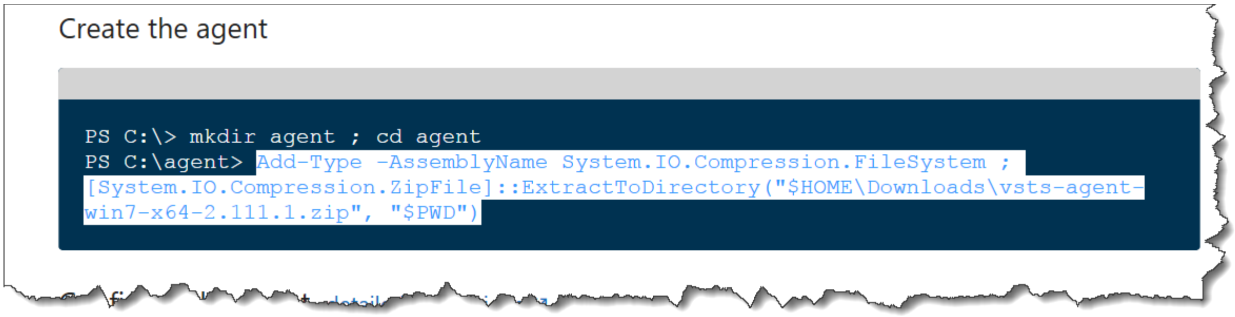
Next, you'll run the PowerShell command that will extract the zip into the agent directory. This is some fiddly typing and the exact text will change as Microsoft updates the build agent install zip filename. It's probably easiest to just copy and paste the value from the **Create the agent** section of the download dialog. You WILL NOT be copying the whole command. You'll only be copying part of the line. In the image below, it's important to notice that I am NOT selecting the portion of the line that starts with "PS C:\agent>".

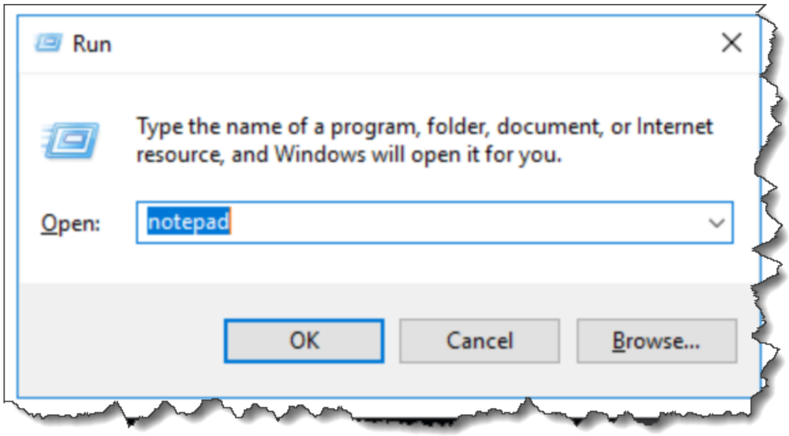


Create the agent

```
PS C:\> mkdir agent ; cd agent
PS C:\agent> Add-Type -AssemblyName System.IO.Compression.FileSystem ;
[System.IO.Compression.ZipFile]::ExtractToDirectory("$HOME\Downloads\vsts-agent-
win7-x64-2.111.1.zip", "$PWD")
```

- In the web browser, copy the text of the command that starts with "Add-Type"

Because nothing is ever easy, the command that you just copied probably has some extra characters in it. Let's use Notepad to fix it.



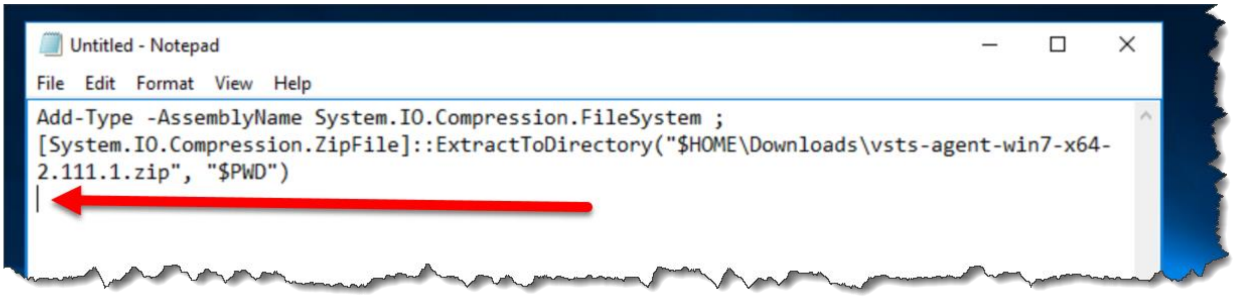
Run

Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.

Open: notepad

- Type Windows-R to bring up the Run dialog
- Type notepad
- Click OK
- Paste the copied command into Notepad

You should now see the command in Notepad. If everything is on one long line, go to the Format menu and choose Word Wrap. You might notice in the image below that my cursor is sitting on an empty line by itself. It's this extra line that's causing us to do this Notepad step.

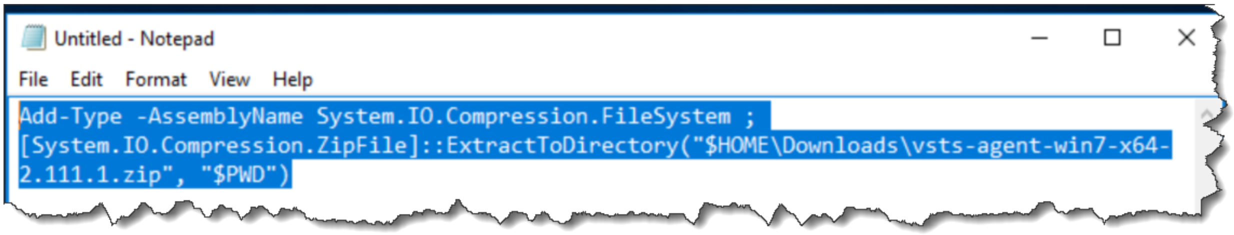


```
Add-Type -AssemblyName System.IO.Compression.FileSystem ;
[System.IO.Compression.ZipFile]::ExtractToDirectory("$HOME\Downloads\vsts-agent-win7-x64-
2.111.1.zip", "$PWD")
```

- Delete the extra empty blank line at the end
- If there are any whitespace characters before "Add-Type", delete those, too.

There's a chance that the "ExtractToDirectory" doesn't have the name of the zip file that you downloaded. Make sure that the ExtractToDirectory command has the name of the zip file rather than just "$HOME\Downloads\" for the first argument. If it's not there, you'll need to add it in to your command in notepad.

You should have a clean command that you can just paste into PowerShell and run.



```
Add-Type -AssemblyName System.IO.Compression.FileSystem ;
[System.IO.Compression.ZipFile]::ExtractToDirectory("$HOME\Downloads\vsts-agent-win7-x64-
2.111.1.zip", "$PWD")
```

- Select the command
- Press CTRL-C to copy the selected command to the clipboard

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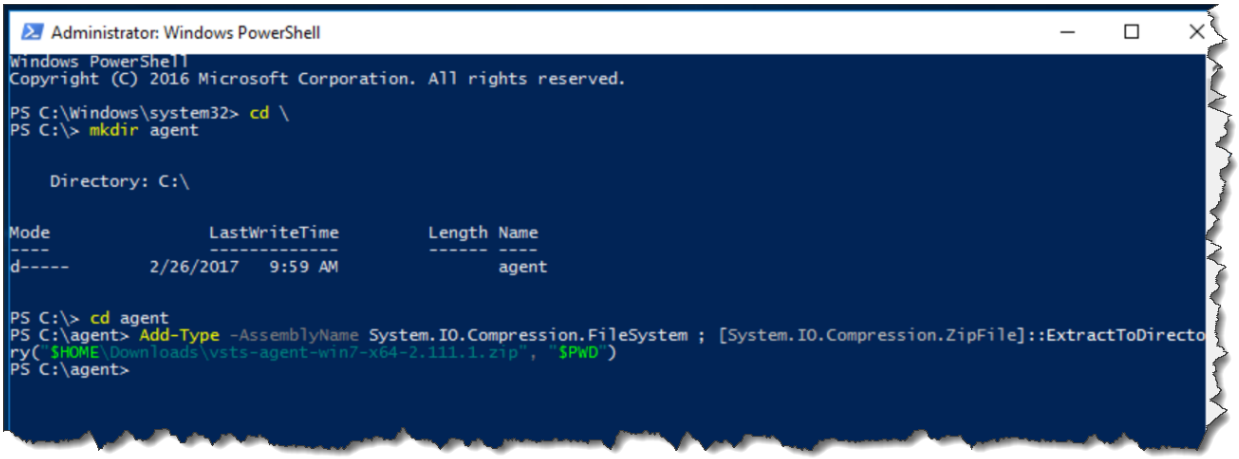
Now you'll run the command in PowerShell.

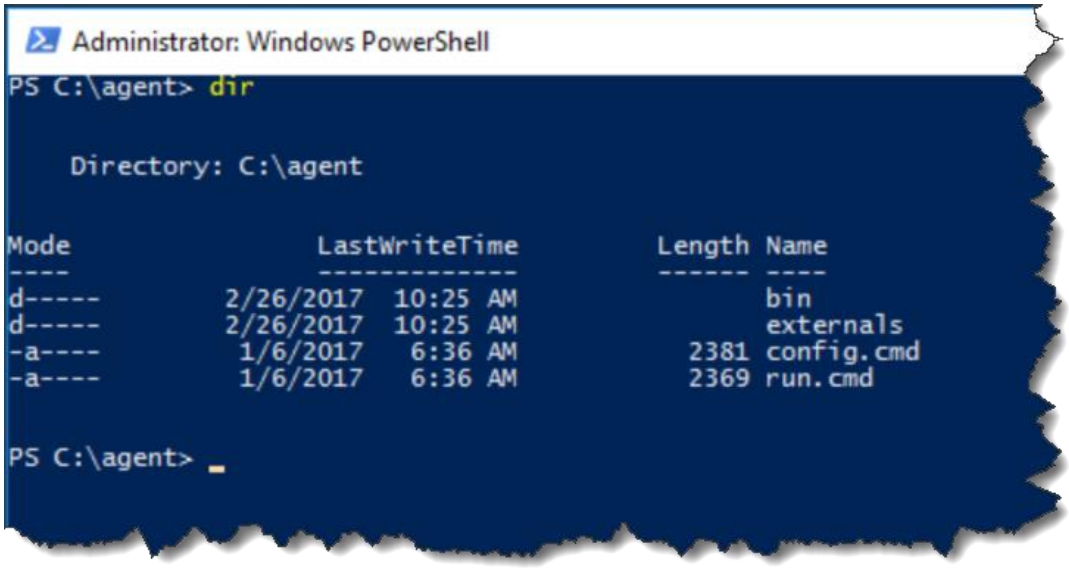


```
Windows PowerShell
Copyright (C) 2016 Microsoft Corporation. All rights reserved.

PS C:\Windows\system32> cd \
PS C:\> mkdir agent


    Directory: C:\


Mode                LastWriteTime         Length Name
----                -------------         ------ ----
d-----        2/26/2017   9:59 AM                agent


PS C:\> cd agent
PS C:\agent> Add-Type -AssemblyName System.IO.Compression.FileSystem ; [System.IO.Compression.ZipFile]::ExtractToDirecto
ry("$HOME\Downloads\vsts-agent-win7-x64-2.111.1.zip", "$PWD")
PS C:\agent>
```

- In the PowerShell window, type **CTRL-V** to paste the command
- Press **Enter** to run the command

When the command is done, you should not see any errors and the prompt should say "PS C:\agent>". (NOTE: this might take a few minutes to run.)

Let's verify that this extracted as expected.



```
PS C:\agent> dir


    Directory: C:\agent


Mode                LastWriteTime         Length Name
----                -------------         ------ ----
d-----        2/26/2017  10:25 AM                bin
d-----        2/26/2017  10:25 AM                externals
-a----         1/6/2017   6:36 AM           2381 config.cmd
-a----         1/6/2017   6:36 AM           2369 run.cmd


PS C:\agent> _
```

- (Optional) To clear the screen, type "cls" and press Enter
- Type "dir" and press Enter

The screen should look something like the image above.

Configure the Agent

Now that the agent bits are deployed to disk, you're ready to start configuring it. This guide assumes that you're planning to run this agent in a Windows domain and that the TFS machine is in the same domain as the agent. I'm also assuming that you intend to run this agent as a service rather than as an interactive process.

Recommendation: The agent can be configured to run as NT AUTHORITY\NETWORK SERVICE but I think that this makes permissions management confusing when you're creating and running builds. I strongly recommend that you run the agent as a service using a known service account that is based on an Active Directory user rather than one of the build-in service accounts like NETWORK SERVICE. This guide will assume that you're following this recommendation.

You're going to be prompted for a handful of values during the configuration process:

- **Azure DevOps Server URL:** This is the same URL that you used to access the Azure DevOps Server web interface. By default this will be something like http://*servername* or http://*servername*:8080/tfs or if you're using SSL/HTTPS, it'll be something like https://*servername*.
- **Authentication Type:** By default, authentication is based on the service account's Windows logon. This mode is called Interactive. In order support more complex scenarios and multiple platforms, there are also several other options. This guide will show you how to do Interactive mode.
- **User name & password for the agent service:** These are the credentials for the service. In my case, I've created an Active Directory user named "azdobuild". The fully qualified username for this user is "DEMO\azdobuild".

When you've got these values, you're ready to run the config process.

- In the PowerShell window, type "**.\config.cmd**" and press Enter

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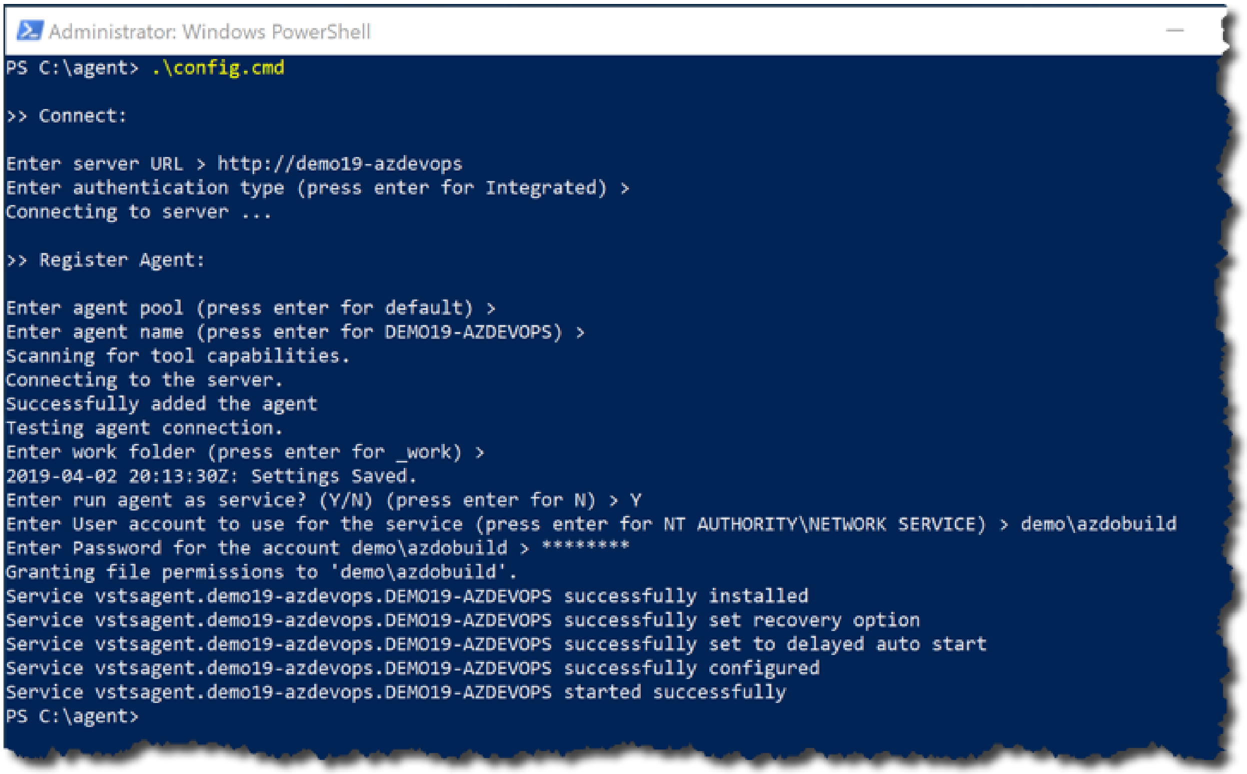
When prompted, enter the following values. NOTE: You might be tempted to accept the defaults for each one but you're **NOT** going to do that because you'll mess up the "run as a service" part and you'll be deeply unhappy.



```
PS C:\agent> .\config.cmd

>> Connect:

Enter server URL > http://demo19-azdevops
Enter authentication type (press enter for Integrated) >
Connecting to server ...

>> Register Agent:

Enter agent pool (press enter for default) >
Enter agent name (press enter for DEMO19-AZDEVOPS) >
Scanning for tool capabilities.
Connecting to the server.
Successfully added the agent
Testing agent connection.
Enter work folder (press enter for _work) >
2019-04-02 20:13:30Z: Settings Saved.
Enter run agent as service? (Y/N) (press enter for N) > Y
Enter User account to use for the service (press enter for NT AUTHORITY\NETWORK SERVICE) > demo\azdobuild
Enter Password for the account demo\azdobuild > ********
Granting file permissions to 'demo\azdobuild'.
Service vstsagent.demo19-azdevops.DEMO19-AZDEVOPS successfully installed
Service vstsagent.demo19-azdevops.DEMO19-AZDEVOPS successfully set recovery option
Service vstsagent.demo19-azdevops.DEMO19-AZDEVOPS successfully set to delayed auto start
Service vstsagent.demo19-azdevops.DEMO19-AZDEVOPS successfully configured
Service vstsagent.demo19-azdevops.DEMO19-AZDEVOPS started successfully
PS C:\agent>
```

- "Enter server URL":
  Type the **URL for your TFS instance** and click **Enter**
- "Enter authentication type (press enter for Integrated)":
  Press **Enter**
- "Enter agent pool (press enter for default)":
  Press **Enter**
- "Enter agent name (press enter for *[local server name]*)":
  Press **Enter**
- "Enter run agent as service? (Y/N)":
  Type '**Y**' and press **Enter**
- "Enter User account to use for the service":
  Type the **fully qualified name of the service account** (example: demo\azdobuild) and press **Enter**
- Enter Password for the account *[service account]*":
  Enter the **password for the service account** and press **Enter**

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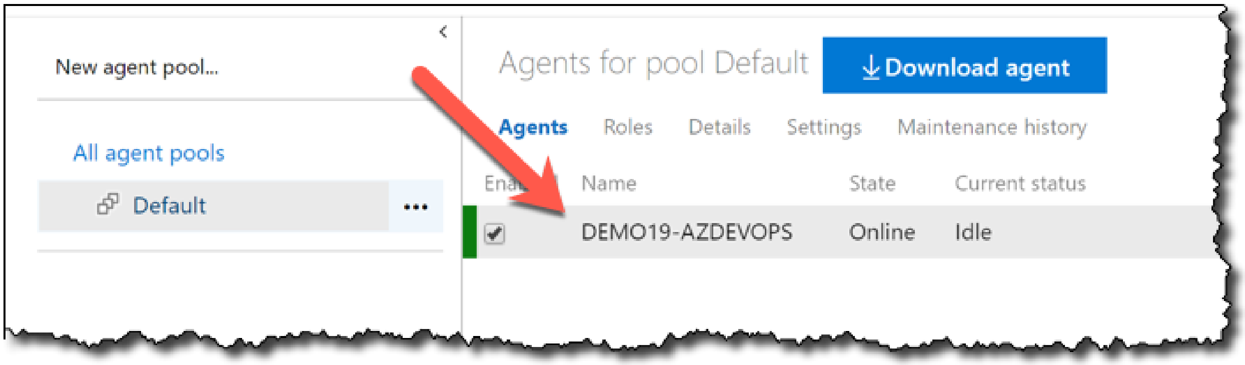
When the config process has completed, you should see a message that says something like "Service vstsagent.demo19-azdevops.DEMO19-AZDEVOPS started successfully".

If you open the browser and go back to the Agent Pools tab for Azure DevOps, you should now see your new build agent in the list of Agents.



Ena	Name	State	Current status
☑	DEMO19-AZDEVOPS	Online	Idle

You've successfully configured a build agent.

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