

# CSCE 4925: Project Aero Server Guide

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# Revisions

Below is a list of any revisions made to this document.

Date	Description of Change Made	Person Making Change
5/5/2018	Draft Created	Travis
5/5/2018	Draft Edited	Travis

# Installing Windows Server 2016

Installing Windows Server 2016 is a fairly straightforward process that is virtually identical to a regular Windows 10 installation. To start, insert your bootable media containing the Windows Server 2016 install files on it and boot from your media.

- The first screen you will see is titled “Windows Setup”. Select your language and region format, and keyboard layout and click Next.
- Click Install Now
- You will be prompted to enter your license key on the next screen
- Click Next and choose the default install setting
- Choose the drive that you wish to install on and format / partition it as desired
- Windows should now install and restart when finished
- When the restart is complete, you will be prompted to enter an Administrator password. Once you do this, installation will finish and you can login with the Administrator account.

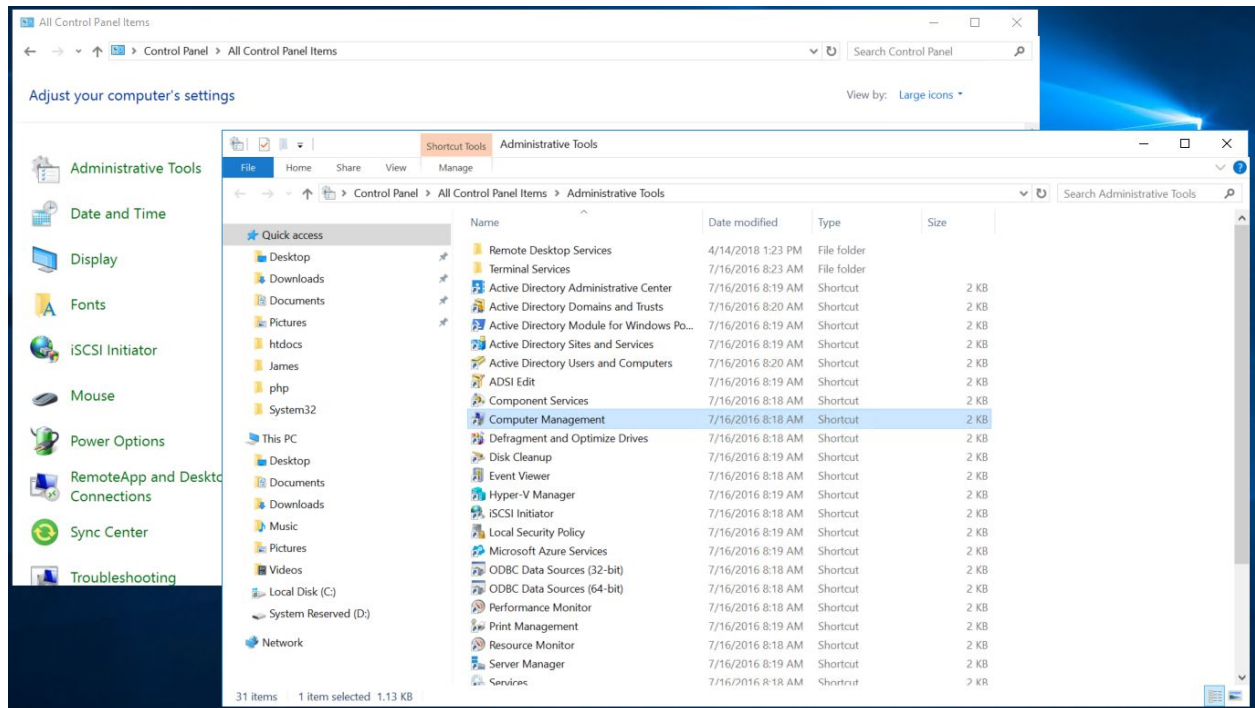
## Installing drivers

Some drivers such as those for ethernet adapters or your CPU may not come installed with Windows Server 2016. If this is the case, please refer to your chip manufacturer’s or device support page for driver downloads. For example, Intel has a list of supported drivers on Windows Server 2016 that can be found at:

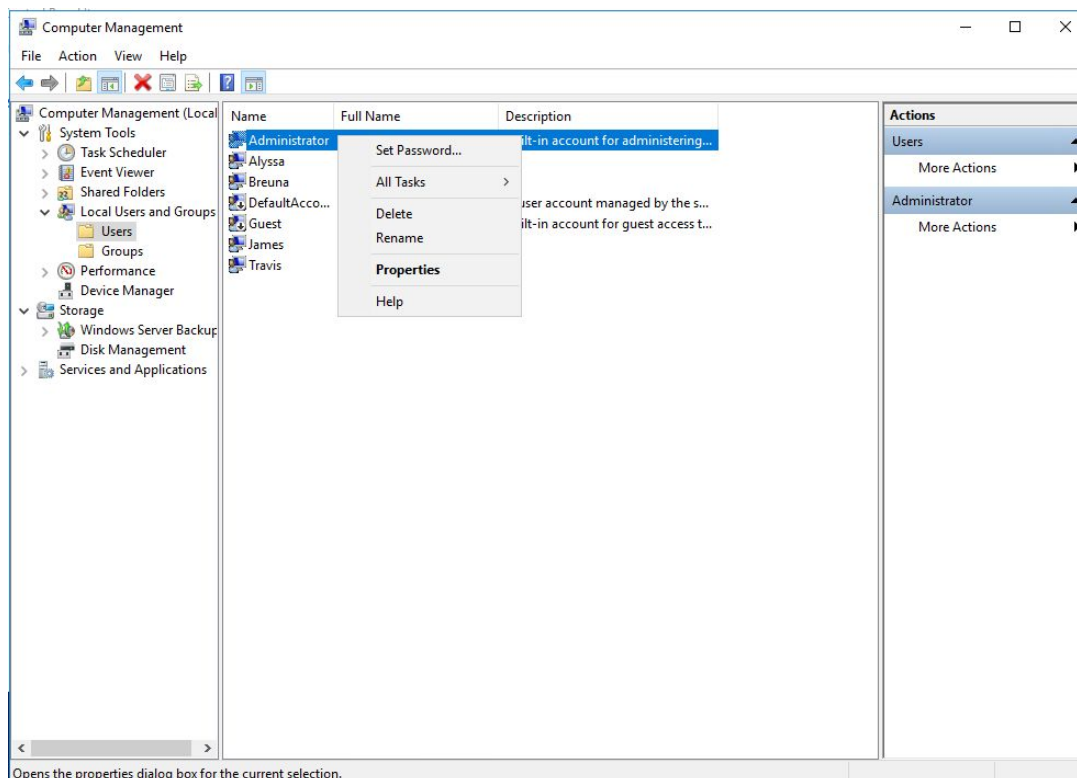
<https://www.intel.com/content/www/us/en/support/articles/000022599/network-and-i-o/ethernet-products.html>

## Setting up the Administrator account

To setup an administrator account, open the Control Panel and select Administrative Tools, then Computer Management.

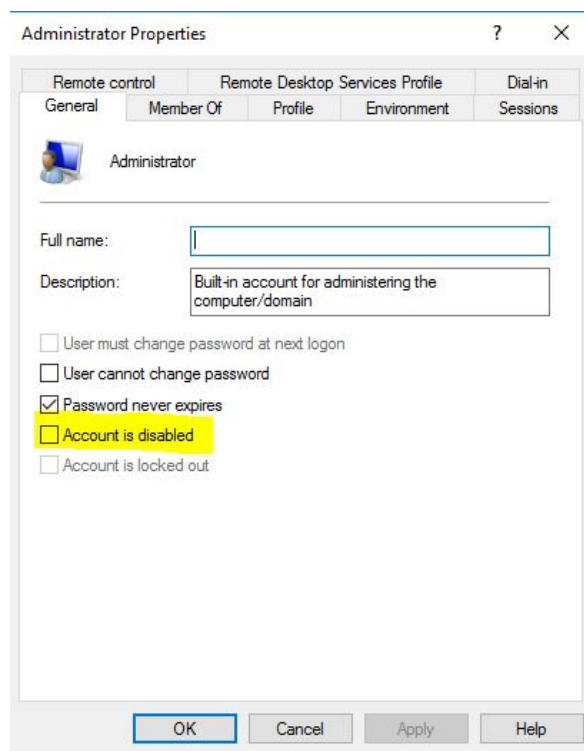


From Computer Management, you can modify users, set passwords, and manage groups among other things. To enable the Administrator account, go to Local Users and Groups > Users, and right-click on the Administrator profile and select Properties. You may also select Set Password... if you wish to change the Administrator password.

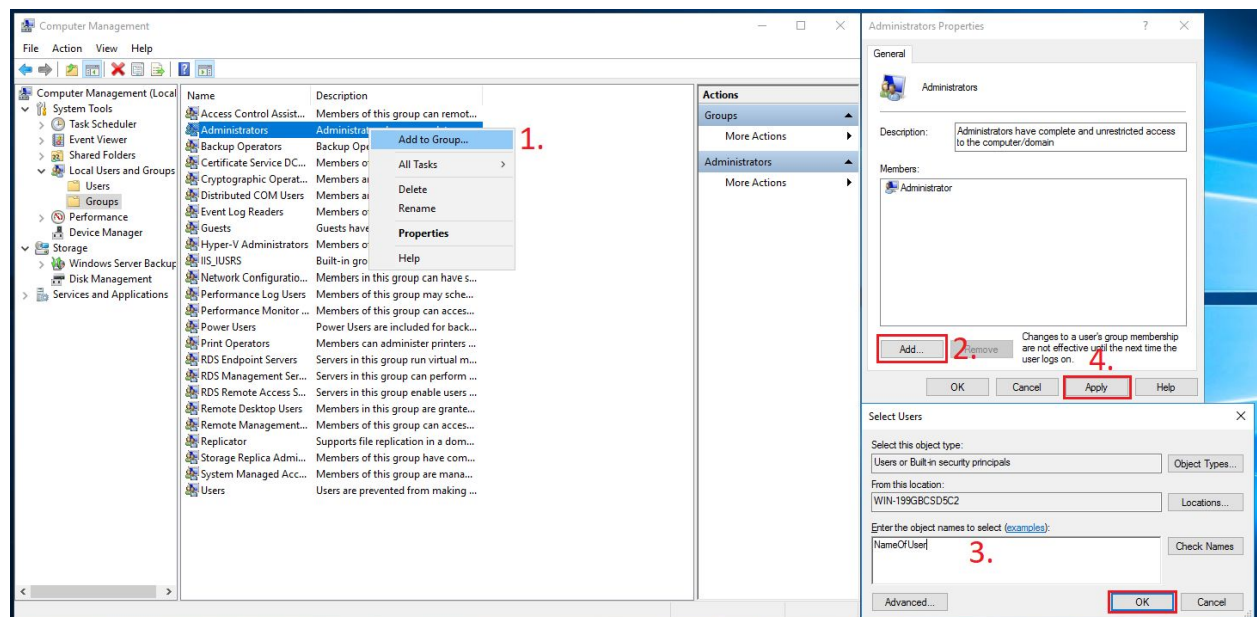


Opens the properties dialog box for the current selection.

By default, the Administrator account is disabled. Make sure to uncheck this.

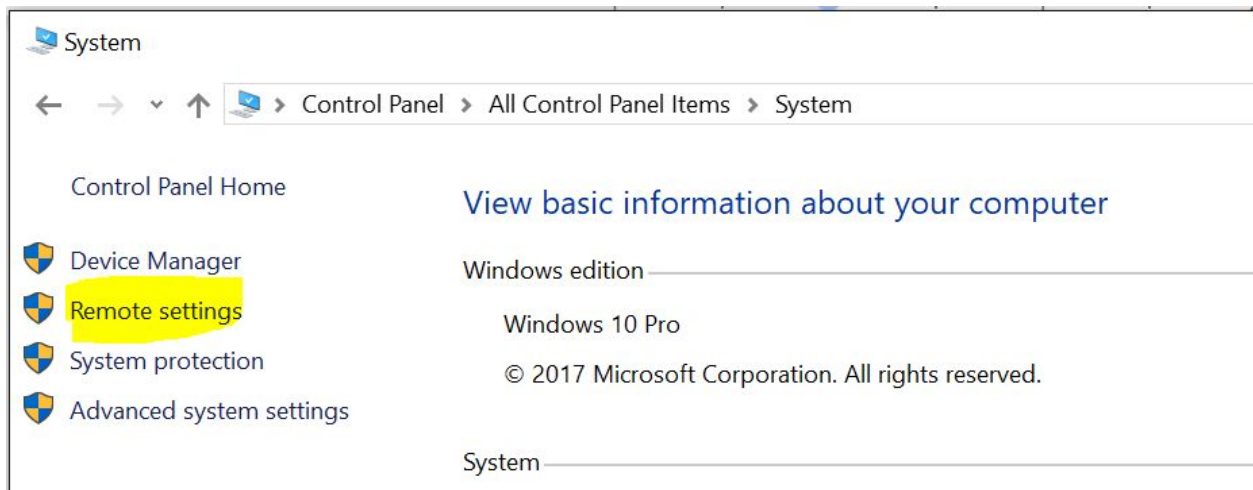


You can also give other users Administrator privileges. To do this, go to the Groups list and right-click on the Administrators group and click Add to Group. Next, click Add and enter the name of the user you wish to give admin rights into the box at the bottom. Finally, click Okay and Apply to apply these settings.

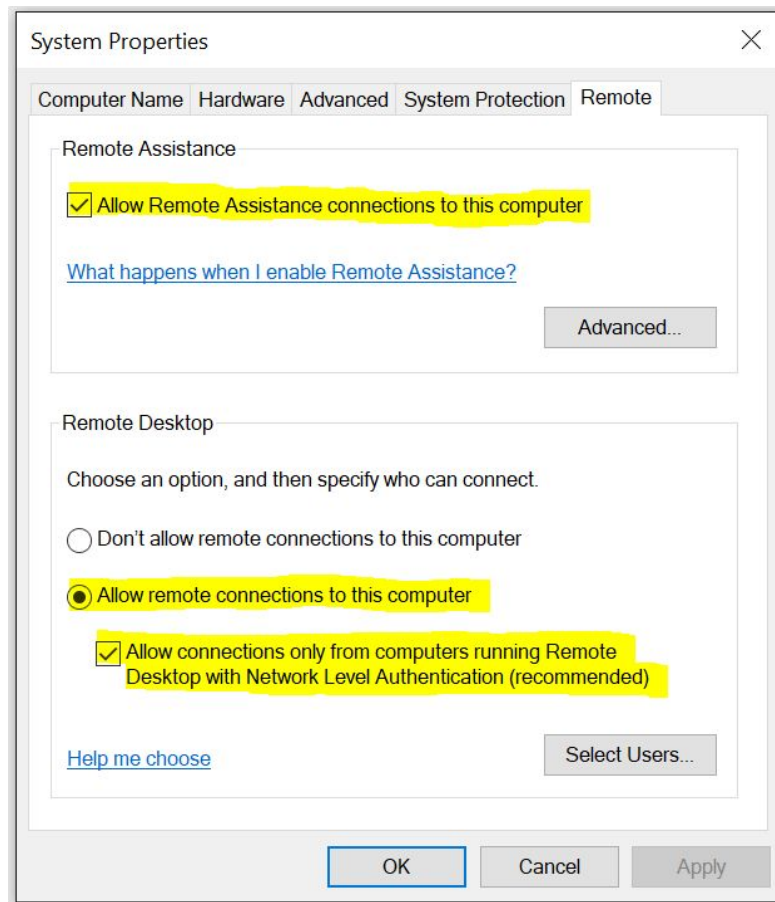


# Setting up Remote Desktop

If Remote Desktop is not already configured on both the Server and Client computers, it will need to be enabled in order to connect to the server from a remote client. To enable Remote Desktop on Windows, go to the Control Panel, select Large icons under the View by: menu, then select System. From here, select Remote settings from the top-left.



Make sure all the following options are selected on both the client and server computers so that you can use Remote Desktop connections:



Depending on your router settings, you may also need to allow the default RDP port 3389 in order to allow Remote Desktop connections. If problems still persist, check your firewall settings for any deny rules that would forbid connections on port 3389.

## Software Installation

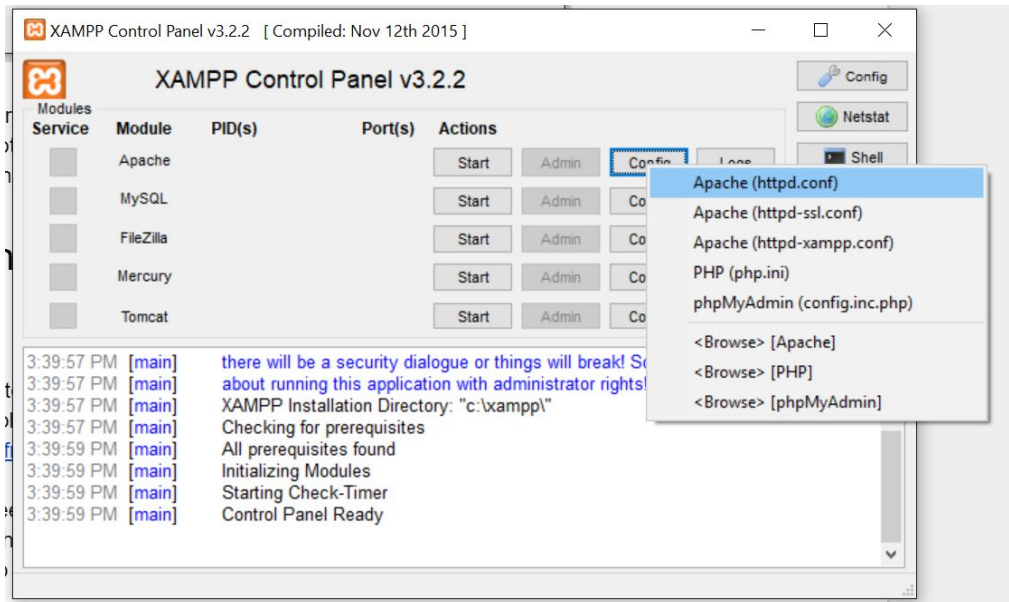
### XAMPP

XAMPP is required to host the website and process queries from the database. To install XAMPP, open the following link and select the Windows installation:

<https://www.apachefriends.org/index.html>

Once the file has been downloaded, simply follow the standard installation instructions. If necessary, edit the httpd.conf file and change the root directory for XAMPP to the folder containing your web documents like index.html





You may also need to uncomment (remove the semicolon at the beginning of the line) or add the following lines in the php.ini file in the “Windows Extensions” section to enable Apache to work with PostgreSQL:

```
extension=php_pdo_pgsql.dll
extension=php_pgsql.dll
extension=php_pdo_sqlite.dll
extension=php_pgsql.dll
```

## PostgreSQL

To install PostgreSQL, visit their download page for Windows:

<https://www.postgresql.org/download/windows/>

Once downloaded, follow the default setup. You will be asked to install a specific version of pgAdmin. I highly recommend version 3 instead of 4 since it has the most features and I feel is the easiest to use.

## Firefox

It is highly recommended that an additional browser such as Firefox or Chrome be installed for ease of use and compatibility. <https://www.mozilla.org/en-US/firefox/new/>

## Notepad++

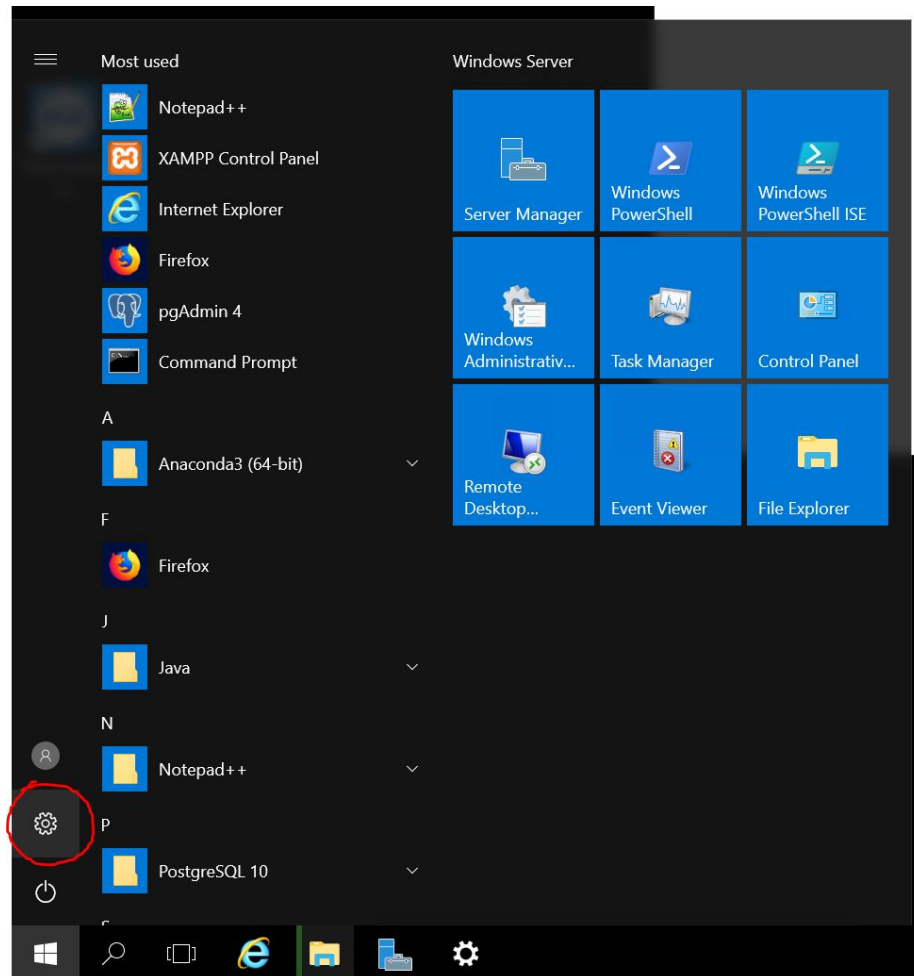
Optionally, you may find it helpful to install some kind of source code editor if you plan to edit any code within the server. Notepad++ is a good choice for simple code editing.

<https://notepad-plus-plus.org/download/v7.5.6.html>

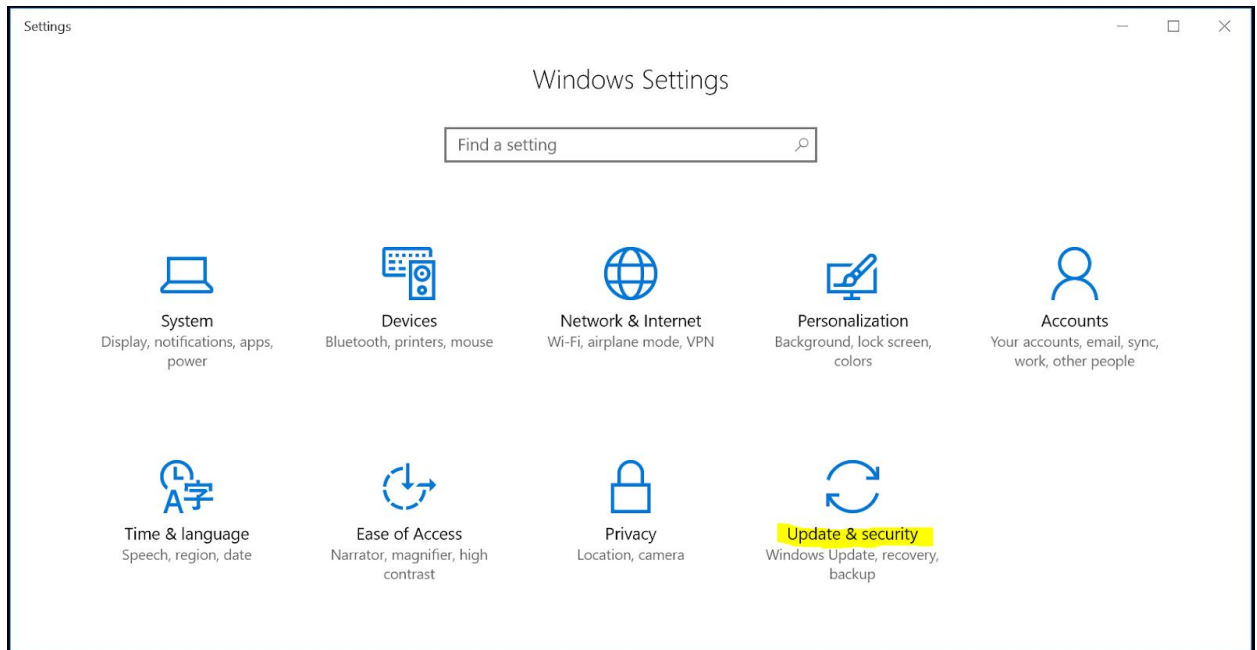
## Routine Maintenance

### Installing updates

To install updates, click the Windows (Start) icon and go into Settings



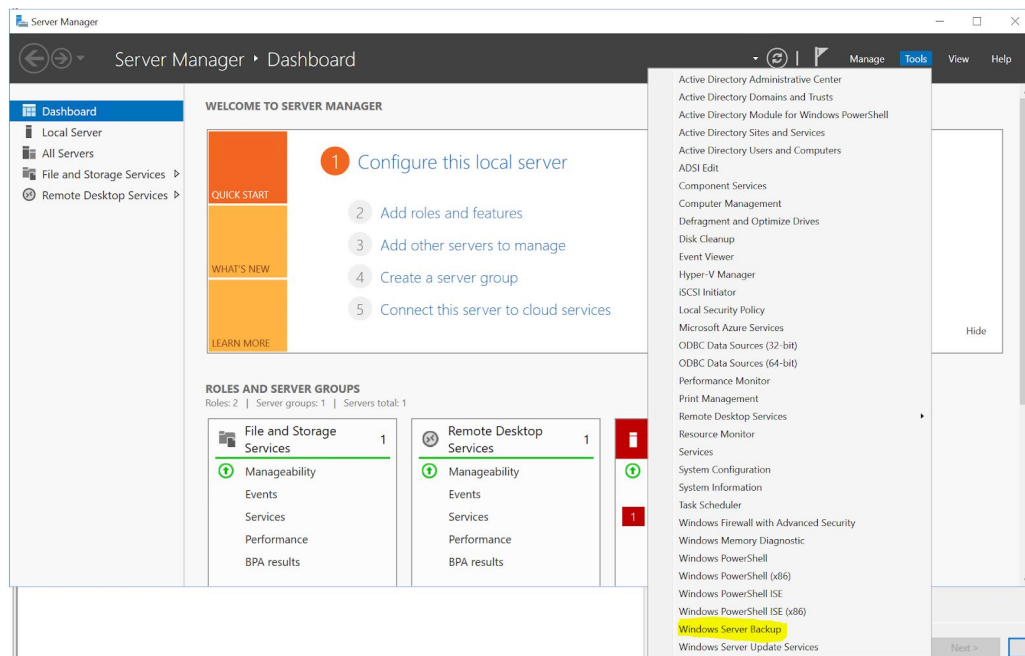
Next, select Update & Security



From this screen you can manually check for new updates or schedule times to automatically install updates

## Backups

Backups are scheduled and configured via the Windows Server Manager too. As a prerequisite, Windows Server Backup needs to be installed in Server Manager > Add roles and features > Next > Role-based or feature-based installation > Next > Next > Next > Select “Windows Server Backup” and Install.



To create a new backup, go to the Server manager and select Tools > Windows Server Backup. From here, you can schedule backups, create a system image, and restore from a system image. To create a system image click Backup Once under the Actions menu and follow the setup. A Full Metal backup will create a system image with all of the current programs and settings preserved. To restore from this image, choose the Recover option under Actions and select your system image file.

