

## Introduction

To use IQ-Enterprise, first install and activate the software. Administrator rights are required to install the software.

### Computer Requirements

- CPU Intel I5-540M (minimum) 32 or 64 bit
- RAM Memory 3GB
- Available disk space: 10 GB
- Screen resolution 1024 x 768
- Operating System: Windows 7, Windows 8, Windows Server 2008, or Windows Server 2013.

### Software Components

Three individual components need to be installed to run IQ-Enterprise. They are Standalone Service, User Interface and Mobile Website. A utility is also available to configure NCC Cartridges.

#### Standalone Service

This component provides core services and database management. It can only be installed on **one** computer on the network.

#### User Interface

This component is the graphical user interface (GUI) used to operate the system. This can be installed on **multiple** computers on the network to give many users access to the IQ-Enterprise system.

#### Mobile Website

This component provides access to IQ through web browsers running on PC's, smart phones or tablets. It can only be installed on **one** computer on the network.

There is also a utility available, the NCC Configurator, that is used to setup NCC Cartridges in ESP-LX controllers. It can be installed on any computer, such as a mobile laptop used in the field. It does not need any other IQ software to run.

### Download the Software

The installers can be downloaded from this web site:

<https://iqweb.rainbird.com/IQ/downloads/IQEnterprise.zip>

Unzip the file and save the folder on your hard drive or desktop.

## Software Installation

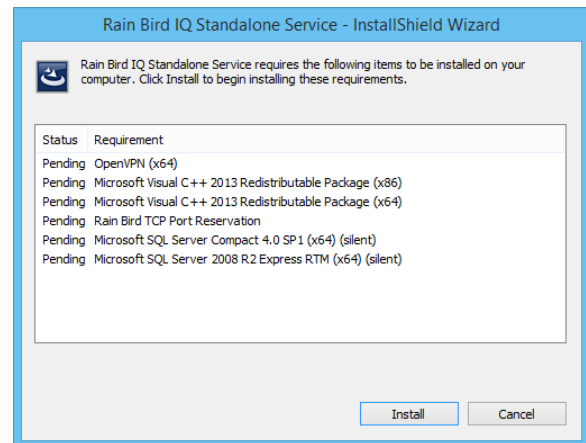
### Part 1 - Standalone Service

The **Standalone Service** component can only be installed on **one** computer on the network. It provides the IQ functionality, there is no user interface with this component but it is required for the **User Interface** to run.

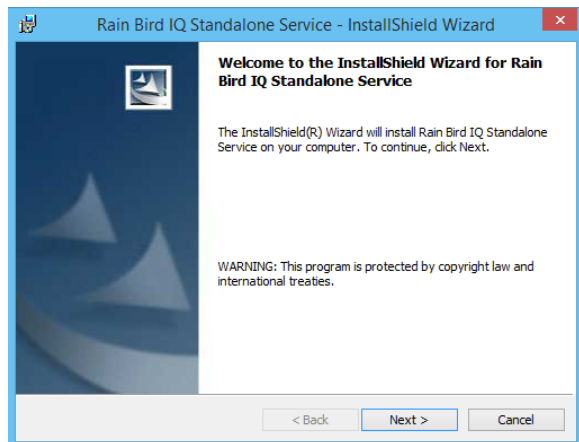
**!** **NOTE:** If a previous version of IQ software is installed on the target computer, the database from this installation will be preserved and will be upgraded to a version 3.0 database.

1. Close all open applications and browse to the IQEnterprise folder downloaded from the website.
2. Open the IQ Standalone Service Installer folder, and run the Setup.exe program.

**!** **NOTE:** If there is software that is required by IQ that is not on the computer, the installer will ask to install required items. Click Install to continue.



3. Follow the directions presented by the InstallShield Wizard.



4. When installation is complete, locate and record the Computer Name (or IP address) for the Standalone Service computer. It is required to install the **User Interface** and **Mobile Web** components.

Computer Name: \_\_\_\_\_

or

IP Address: \_\_\_\_\_

To find the Computer Name, open the Control Panel and select System (or System and Security). Network IP addresses can be found by typing **ipconfig /all** in a Command Prompt window.

- !** **NOTE:** A static IP address should be used. If all **User Interface** components will be installed on computers inside your network, a private IP address can be used. If any **User Interface** will be installed on a computer outside your network and you will be accessing the **Standalone Service** over the internet, the IP address needs to be a public IP address.

5. If the **User Interface** and **Mobile Web** components will be installed on DIFFERENT computers than the **Standalone Service** computer, you **MUST** do this step.

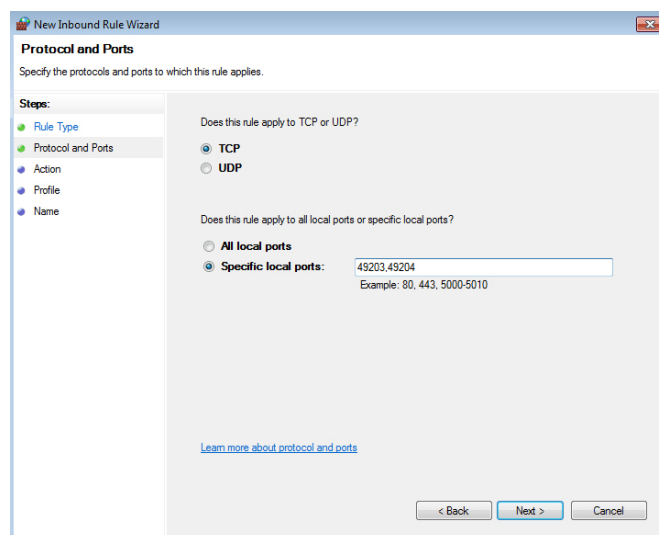
- !** **NOTE:** The **User Interface** and **Mobile Web** site components will communicate with the **Standalone Service** (when on different computers) over TCP ports 49203 and 49204. These ports need to be open for inbound and outbound traffic using the Windows Firewall.

The following general procedure will help guide you through the process for all versions of Windows.

#### To open TCP Ports:

- a. Open the Control Panel.
- b. Open the Windows Firewall feature. (Type “firewall” in the Search box if you can’t find it.)
- c. Find and click on Advanced Settings.
- d. Find and click on Inbound Rules.
- e. Find and click on New Rule.
- f. Create a new Port rule.
- g. Enter 49203 and 49204 in the Specific Local Ports window.
- h. Allow the Connection.

- !** **NOTE:** Here is a link to directions on opening ports in the Windows firewall:  
<http://windows.microsoft.com/en-us/windows/open-port-windows-firewall>

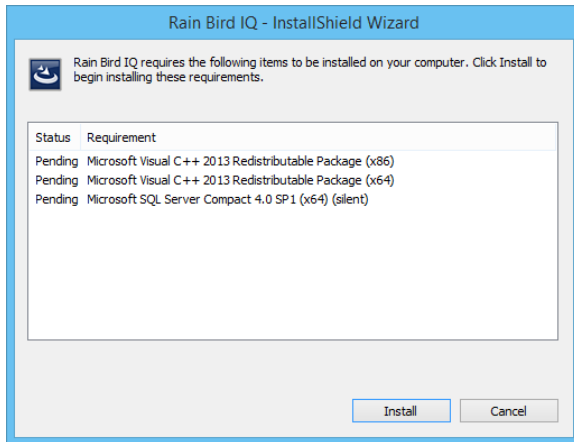


## Part 2 - User Interface

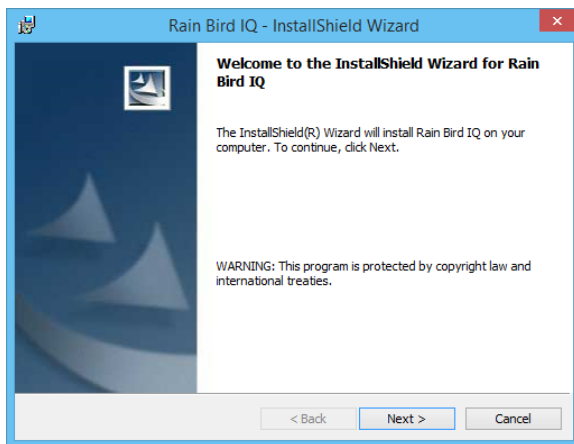
The **User Interface** component can be installed on **multiple** computers on the network.

1. Close all open applications and browse to the IQEnterprise folder downloaded from the website.
2. Open the IQ UI Installer folder, and run the Setup.exe program.

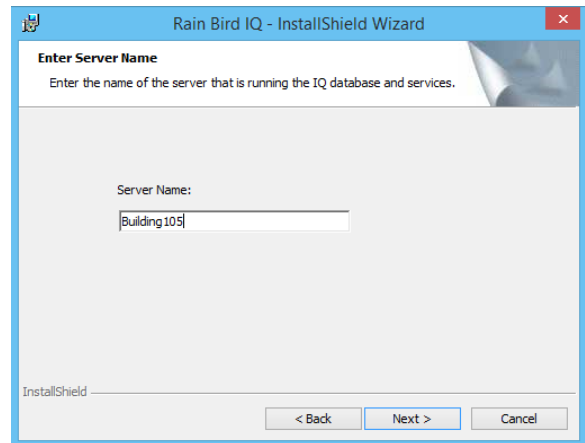
**!** **NOTE:** If there is software that is required by IQ that is not on the computer, the installer will ask to install required items. Click Install to continue.



3. Follow the directions presented by the InstallShield Wizard.

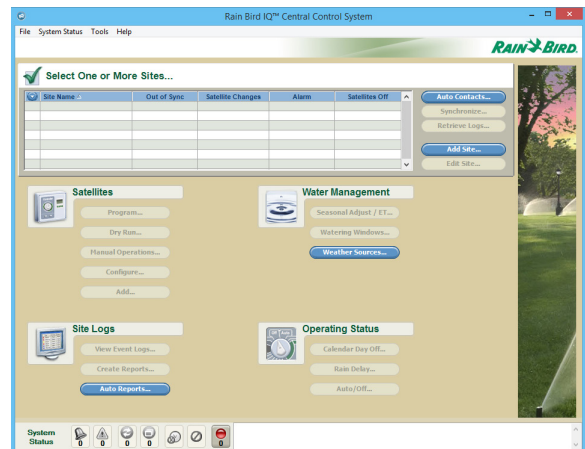


4. During installation, you will be prompted to enter the Computer Name that is running the **Standalone Service**.
  - If the **UI** is being installed on the same computer as the **Standalone Service**, use the default name that is displayed (localhost).
  - If the **UI** is being installed on a different computer, enter the Computer Name or IP address of the **Standalone Service** computer. (This was determined during the Part 1 - Standalone Service section.)



**!** **NOTE:** If you enter the wrong Computer Name and press Next, just Cancel the installation and start over.

5. Start the **User Interface** by clicking on the Rainbird IQ icon on the desktop.

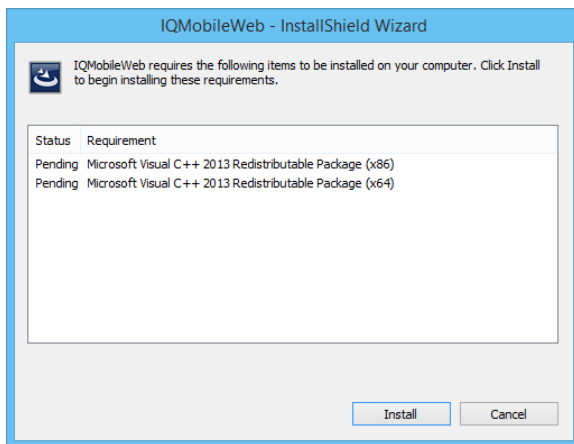


## Part 3 - Mobile Website

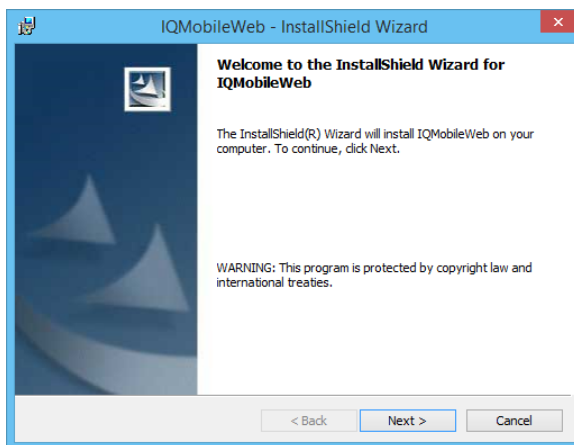
The **Mobile Website** component is only installed on **one** computer on the network.

1. Internet Information Services (IIS) must be configured on the computer hosting the **Mobile Website** before installation. Refer to the Appendix to configure IIS on your specific version of Windows before continuing with Step 2.
2. Close all open applications and browse to the IQEnterprise folder downloaded from the website.
3. Open the IQ Mobile Web Installer folder, and run the Setup.exe program.

**!** **NOTE:** If there is software that is required by IQ that is not on the computer, the installer will ask to install required items. Click Install to continue.

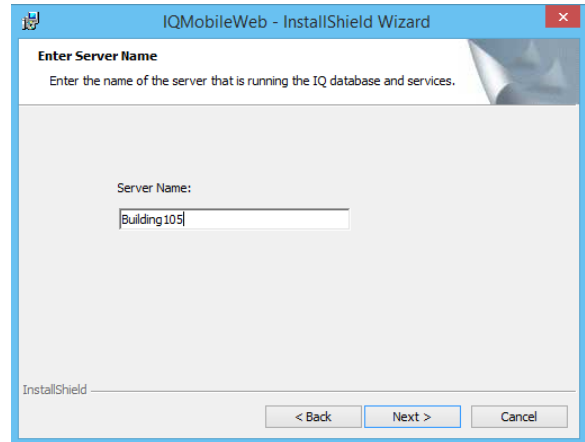


4. Follow the directions presented by the InstallShield Wizard.



5. During installation, you will be prompted to enter the Computer Name that is running the **Standalone Service**.

- If the **Mobile Web** is being installed on the same computer as the **Standalone Service**, use the default name that is displayed (localhost).
- If the **Mobile Web** is being installed on a different computer, enter the Computer Name or IP address of the **Standalone Service** computer. (This was determined during the Part 1 - Standalone Service section.)



**!** **NOTE:** If you enter the wrong Computer Name and press Next, just Cancel the installation and start over.

### To Access the Mobile Website:

The name of the mobile website is IQMobileWeb. The URL used to access the site can be a Computer Name in a Windows domain, the IP address of a computer, or a name has been registered with DNS.

Examples of URLs used to access the IQMobileWeb are:

- <https://iqweb.rainbird.com/IQMobileWeb>
- <https://localhost/IQMobileWeb>
- <https://192.168.1.5/IQMobileWeb>  
(where 192.168.1.5 is an example of an internal IP)
- <https://IQServer/IQMobileWeb>  
(where IQServer is an example of a Computer Name)

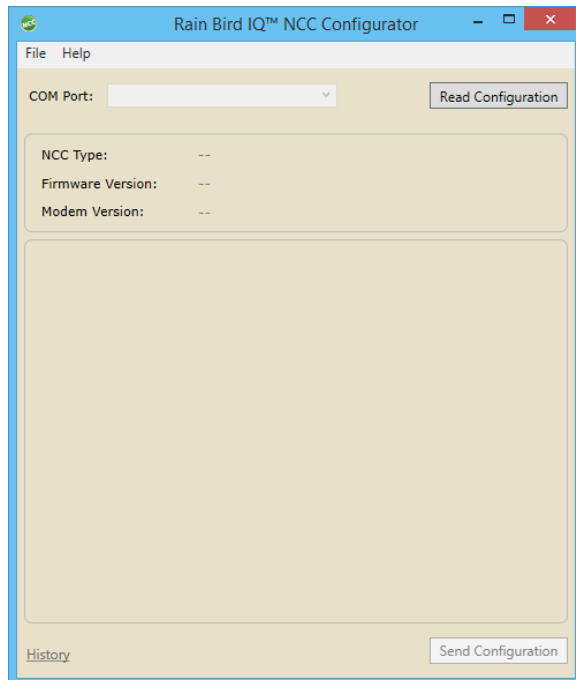
To access the IQ mobile web site via the internet, the computer must have a public static IP address. Access the website using the IP address or register an URL with DNS that resolves to that IP address.

**!** **NOTE:** Contact your Internet Service Provider (ISP) for more information on how to obtain a static IP address.

## Part 4 - NCC Configurator Utility

This utility is used to configure NCC Cartridges, typically in the field. It does not need any other IQ components to run and can be installed any computer.

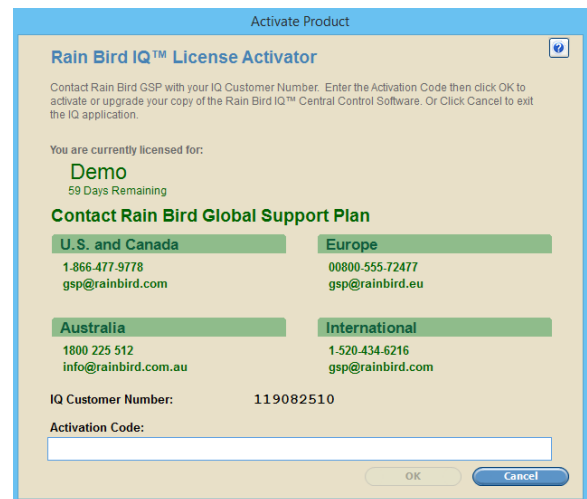
1. Close all open applications and browse to the IQEnterprise folder downloaded from the website.
2. Open the IQ UI Installer folder, open the NCCDockInstaller folder and run the NCCDockSetup.exe program. Follow the directions presented by the InstallShield Wizard.



## Part 5 - Activating the IQ Software

After installation, IQ-Enterprise operates in a Demo mode for 60 days. In order to continue, it must be activated.

1. Start the User Interface (Rainbird IQ icon) on any computer the UI and use the Help/Activate Product menu item.
2. You must call Rain Bird GSP (the telephone number is on the Activation Screen) and provide them the customer number shown at the bottom of the Activation screen.
3. They will provide you with an activation code that will enable product use with the features you have licensed.
4. Enter the activation code and press OK.



## Remote Access (non-Mobile Web)

There are multiple ways to access IQ-Enterprise from outside your local area network.

### Static IP Address

Use the public static IP address for the computer that hosts the **Standalone Service** and register that computer with DNS. In this configuration the **User Interface** should be able to access the **Standalone Service** from anywhere on the internet.

**!** **NOTE:** Contact your Internet Service Provider (ISP) for more information on how to obtain a static IP address.

### Virtual Private Network

Establish a VPN connection to your local area network. In this configuration the **User Interface** should be able to access the **Standalone Service** as if it were on your local area network.

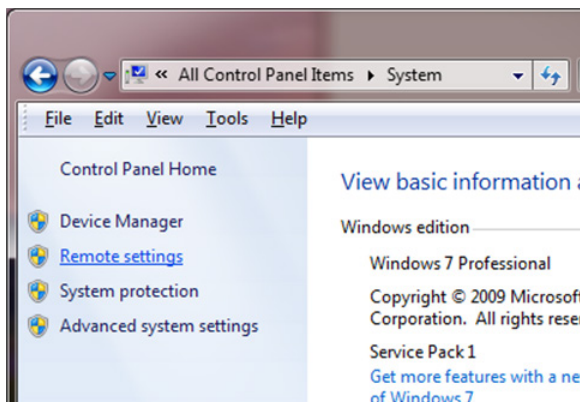
### Remote Desktop

Install the **User Interface** on a single computer (it could be the same computer as the **Standalone Service**) that is accessible using Remote Desktop Connection (RDP). Users can log onto this machine using RDP and run IQ.

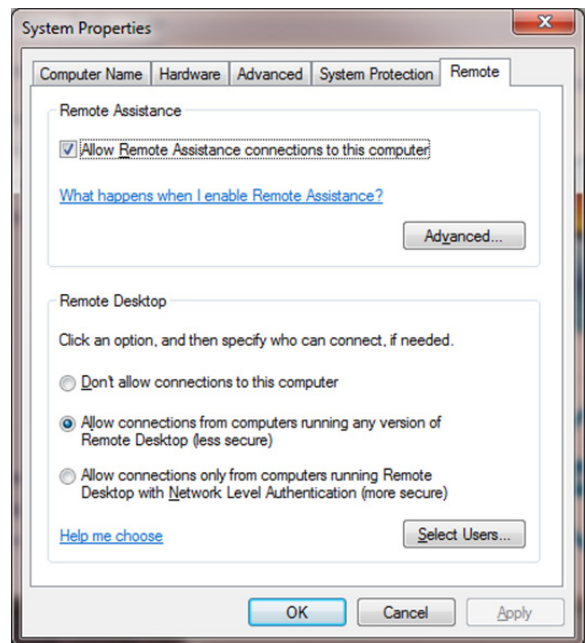
This type of configuration concentrates the UI computing resources on a single computer but has the advantage of a single UI installation. To allow multiple simultaneous RDP sessions the computer must be running a server version of Windows (i.e. Windows Server 2008 R2).

#### To enable remote connections:

1. On any Windows platform, open the Control Panel. Then select the System and Security category, then System. Select the "Remote settings" link at the top left of the window.



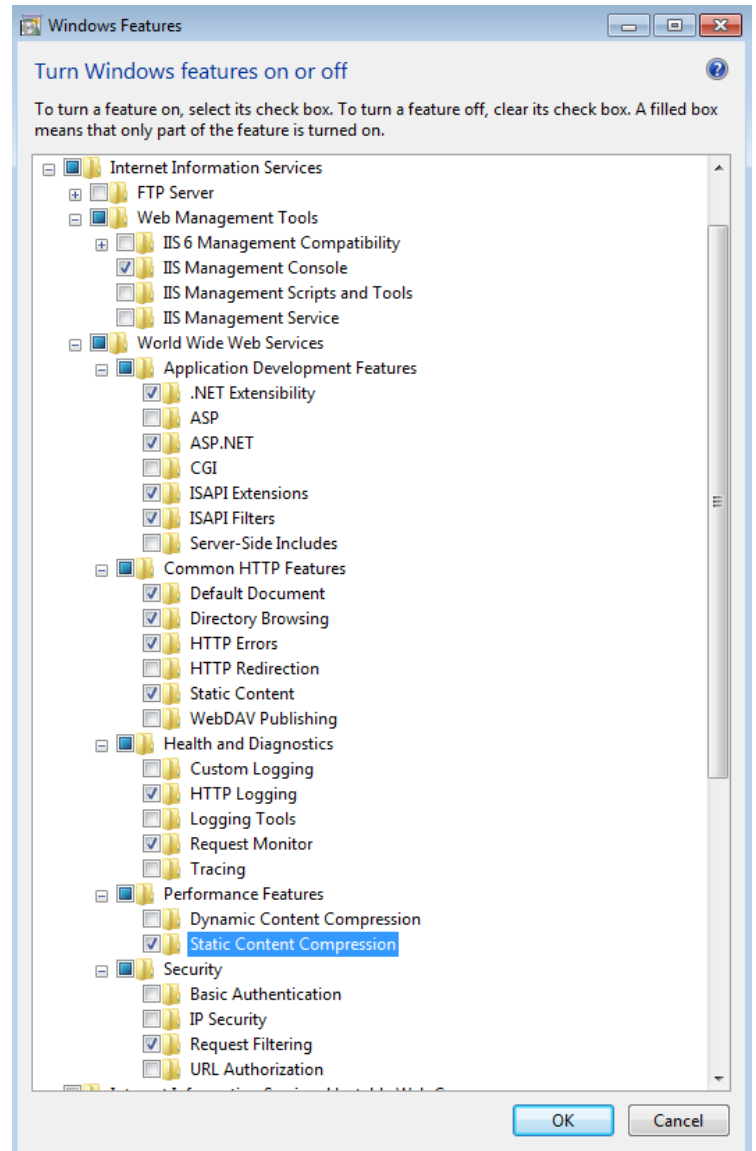
2. Set the remote desktop settings to allow connections.



## Installing IIS - WINDOWS 7

Follow these steps to configure Internet Information Services (IIS) using Windows 7.

1. Select Start -> Control Panel.
2. Select the Programs category, then Programs and Features.
3. In the left pane, select Turn Windows Features on or off.
4. Expand Internet Information Services in the menu tree, check all the boxes as indicated, and click OK.
5. You may be prompted to download files from Windows Update. Select Yes to download and finish configuration.

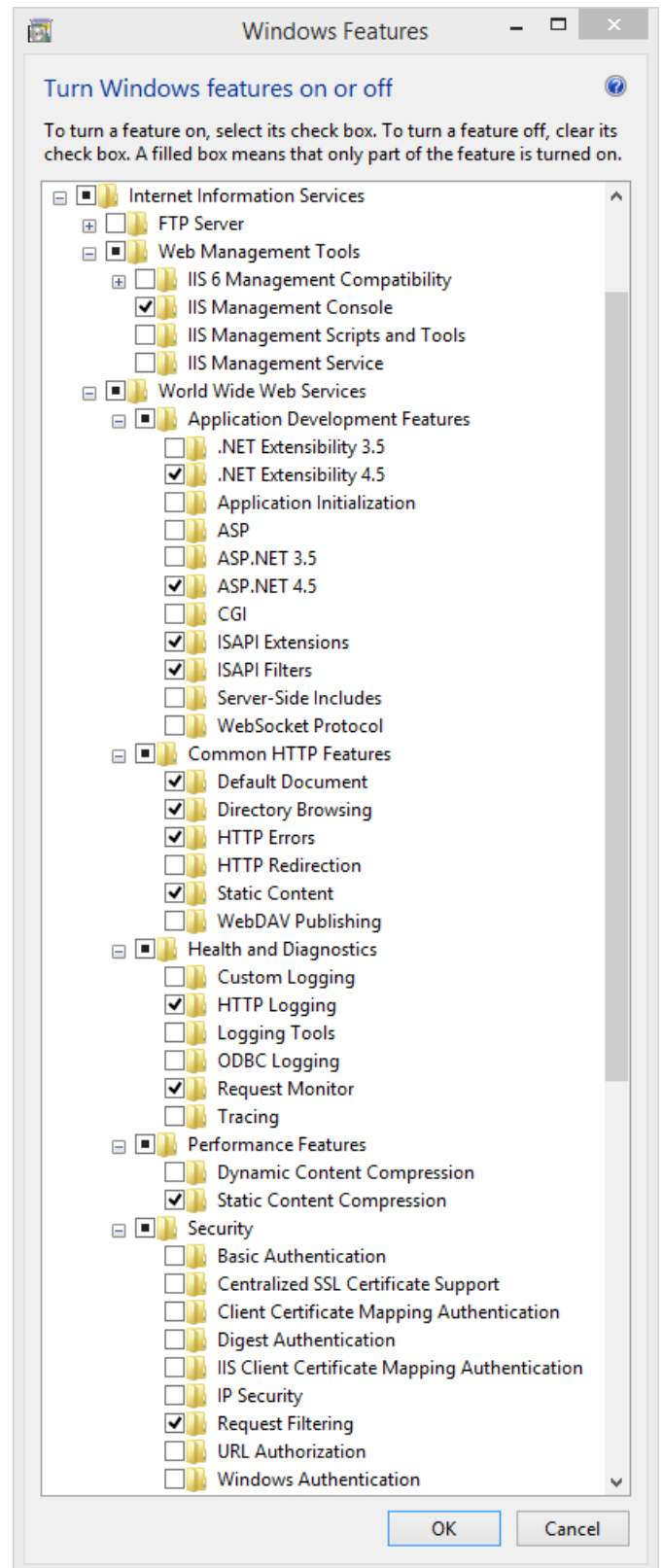




## Installing IIS - WINDOWS 8

Follow these steps to configure Internet Information Services (IIS) using Windows 8.

1. Open the Control Panel (open the Apps menu or right-click the Start button).
2. Select the Programs category, then Programs and Features.
3. In the left pane, select Turn Windows Features on or off.
4. Expand Internet Information Services in the menu tree, check all the boxes as indicated, and click OK.
5. You may be prompted to download files from Windows Update. Select Yes to download and finish configuration.

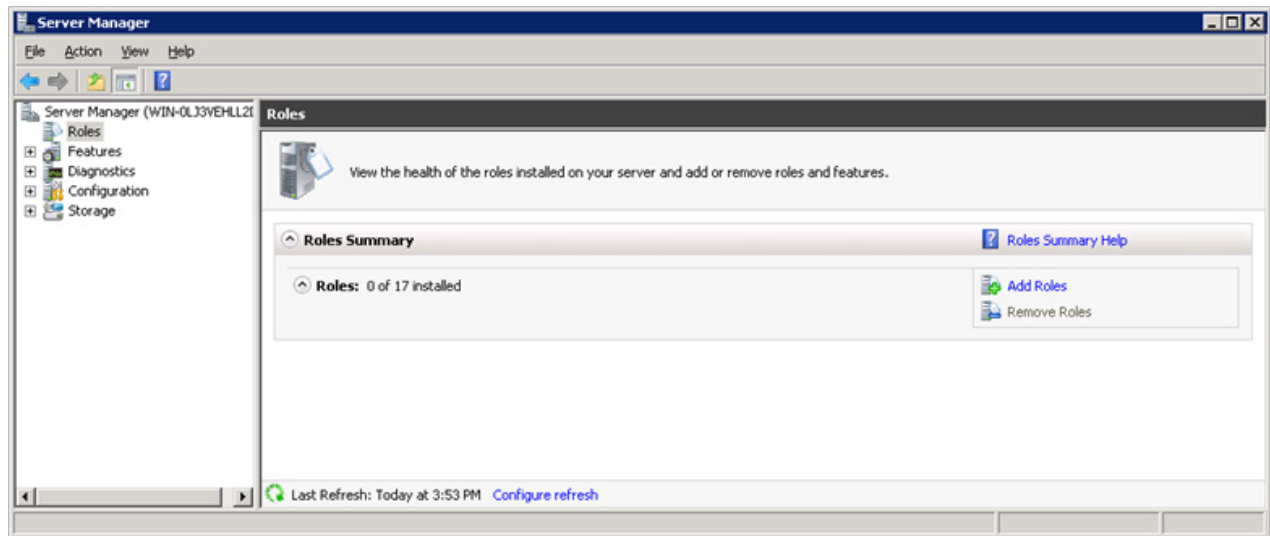




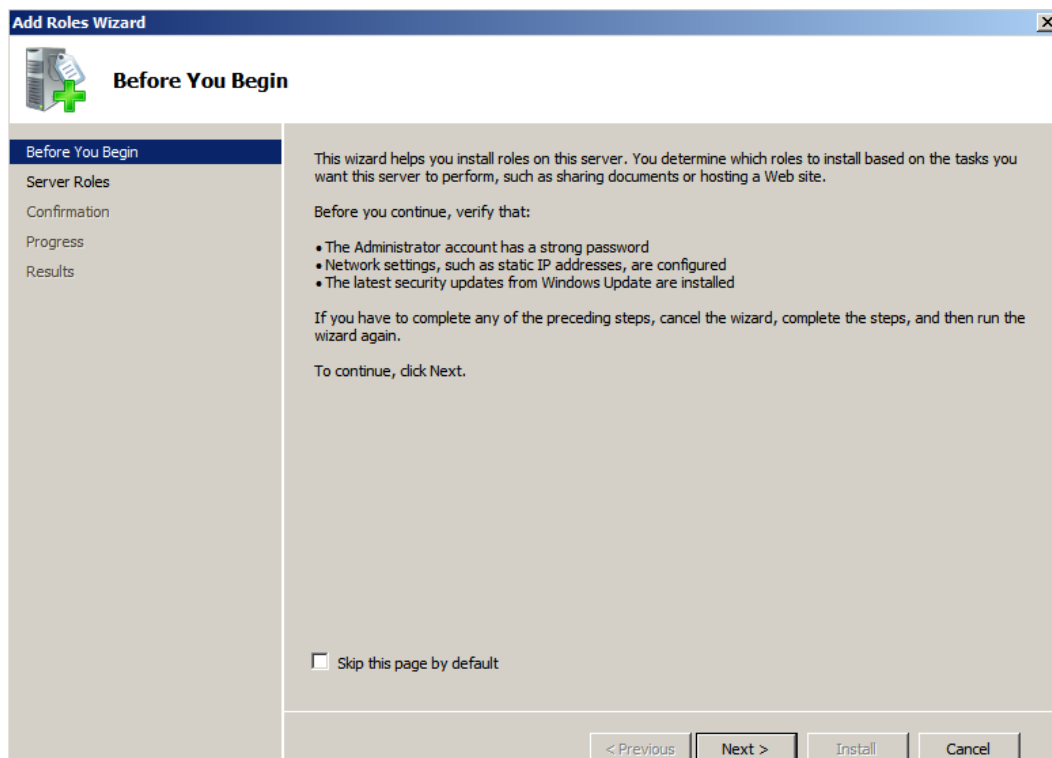
## Installing IIS - WINDOWS SERVER 2008 R2

Follow these steps to configure Internet Information Services (IIS) using Windows Server 2008 R2.

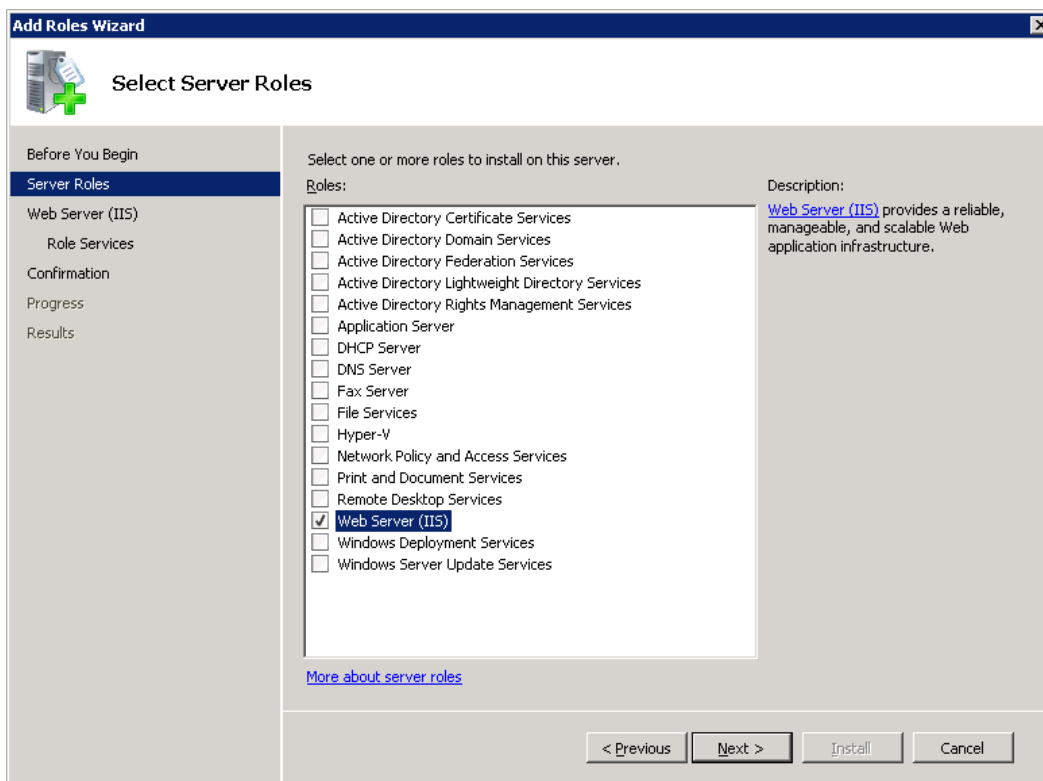
1. Select Start -> Administrative Tools -> Server Manager.
2. Expand the Roles option in the left pane. If Web Server is listed as an available Role under Roles Summary, click on Remove Roles and follow the wizard to delete the existing Web Server Role.
3. Click on Add Roles.



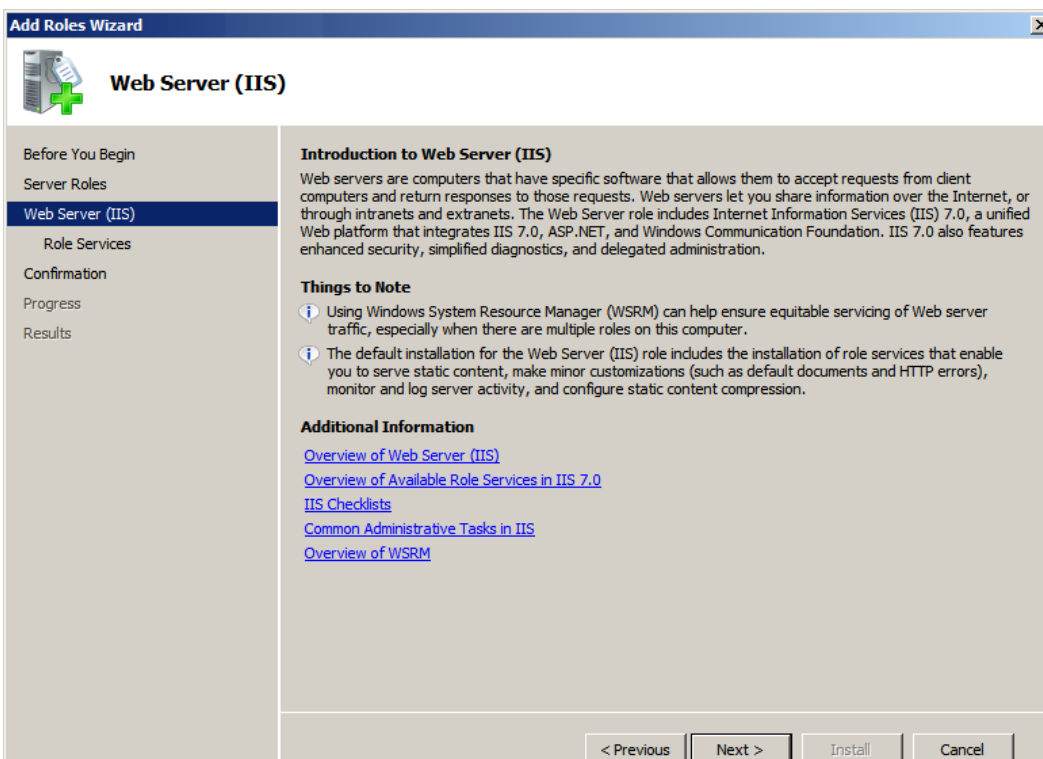
4. On the Before You Begin screen, click Next.



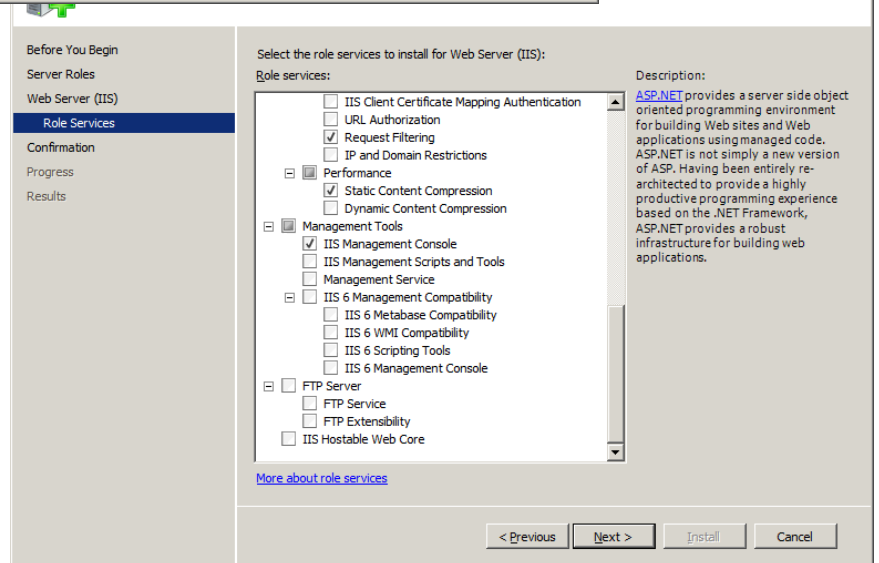
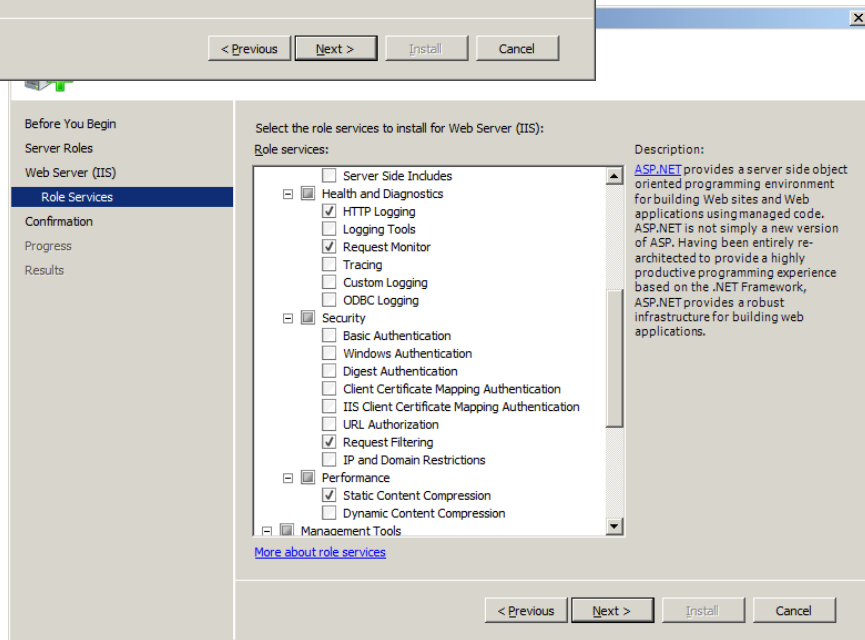
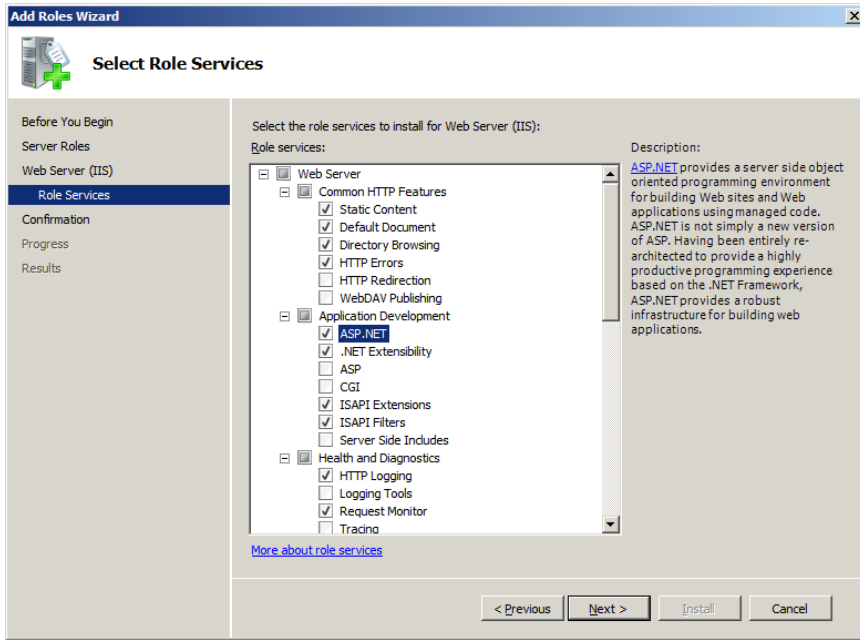
5. Check Web Server (IIS) and click Next.



6. Click Next.



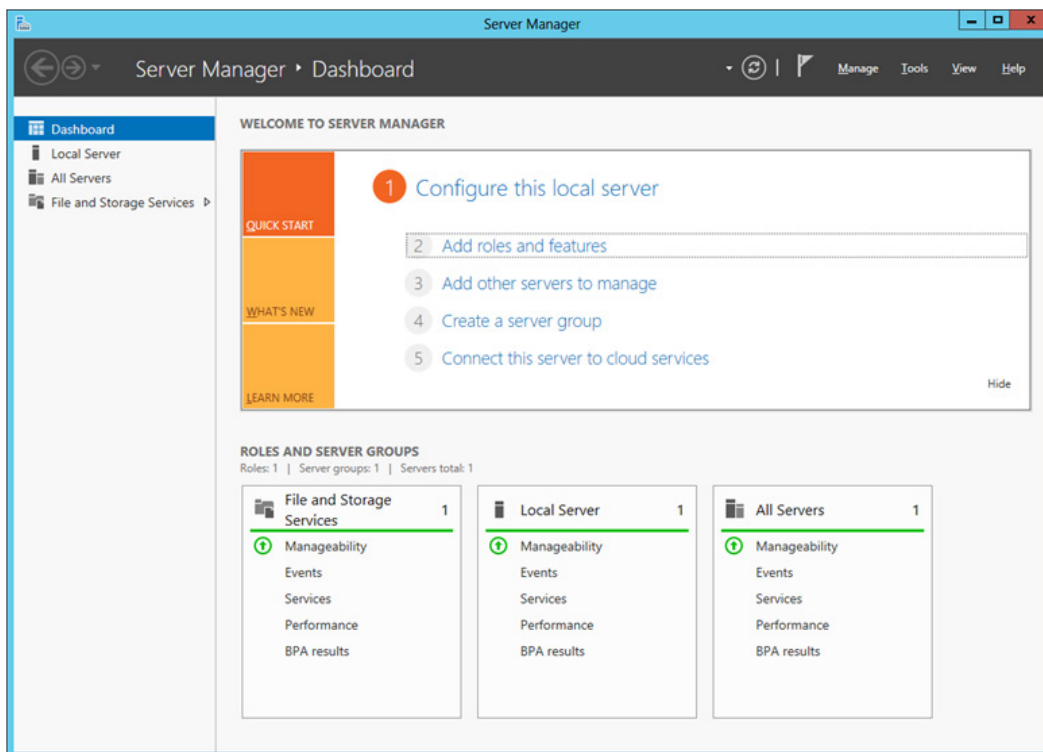
7. Expand Web Server in the menu tree, check all the boxes as indicated, click Next and then Install.



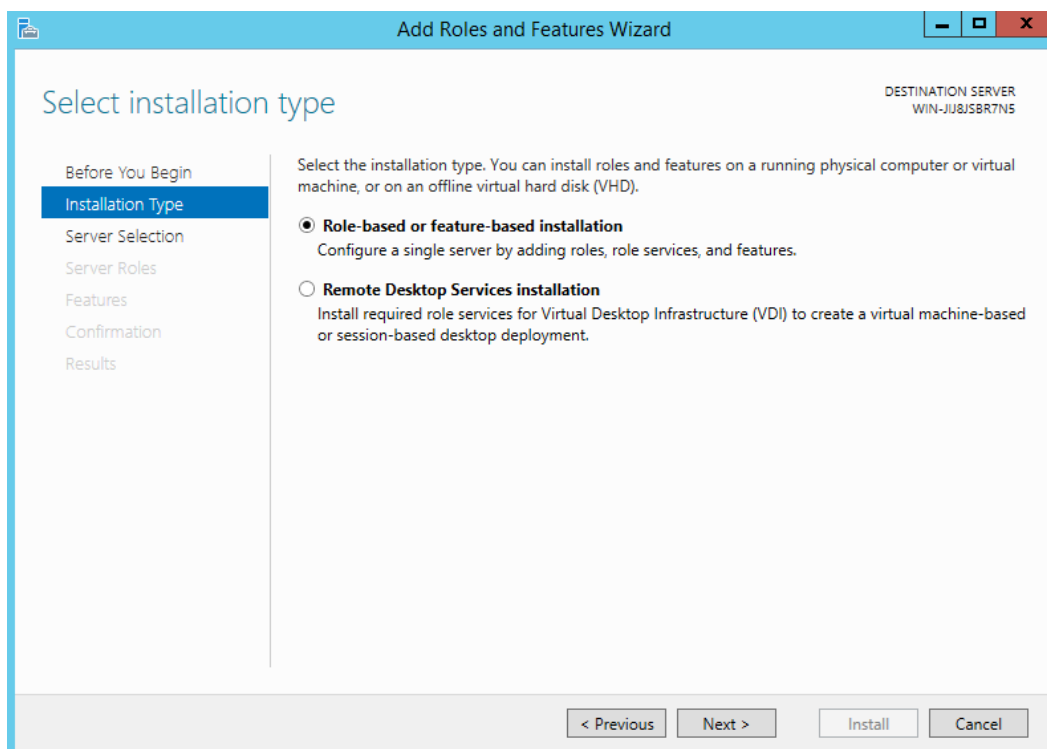
## Installing IIS - WINDOWS SERVER 2012

Follow these steps to configure Internet Information Services (IIS) using Windows Server 2012.

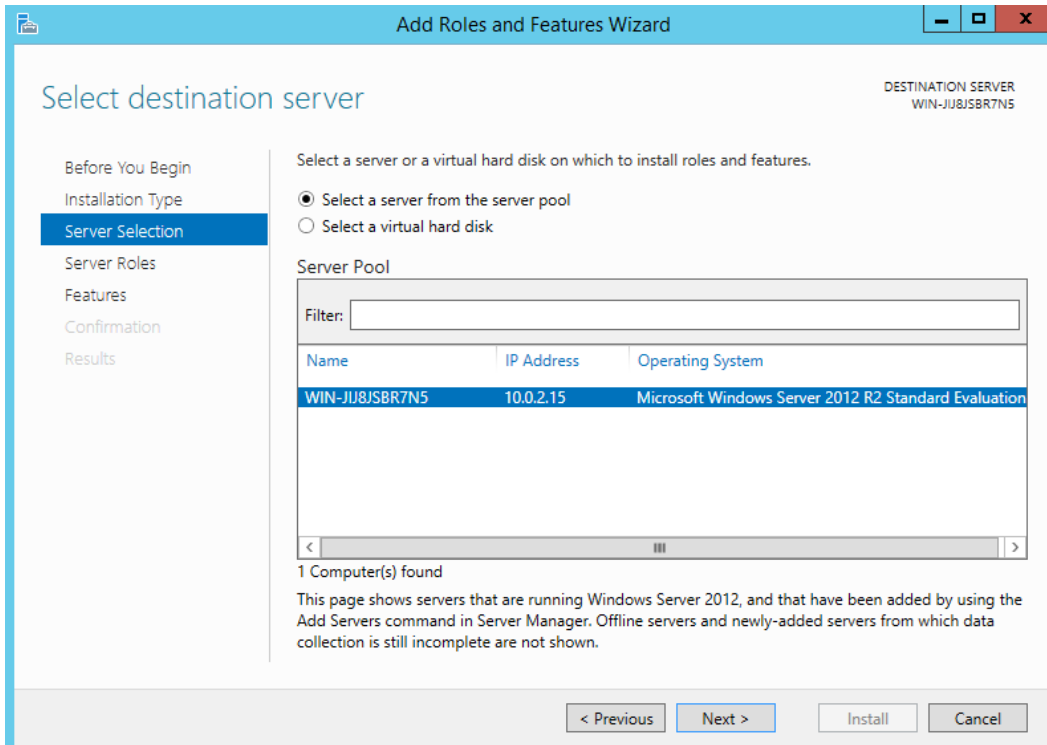
1. Select Server Manager from the Start menu. Select Add Roles and Features.



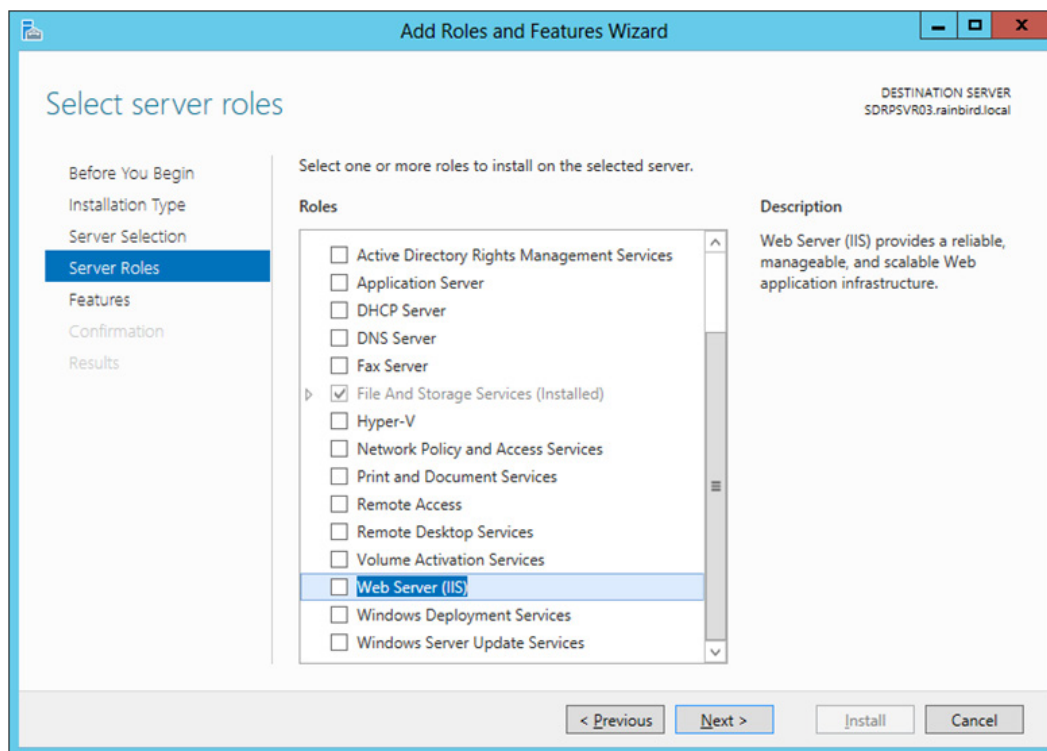
2. If a Before You Begin dialog window is displayed, click Next. Then select the Role-based or feature-based installation option and click Next.



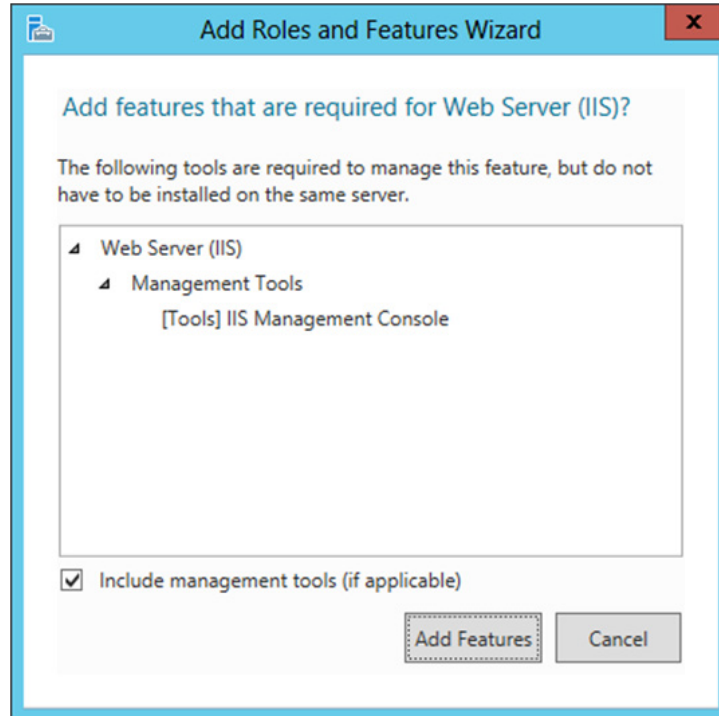
3. In the Select Destination Server window, select the computer you are on and click Next.



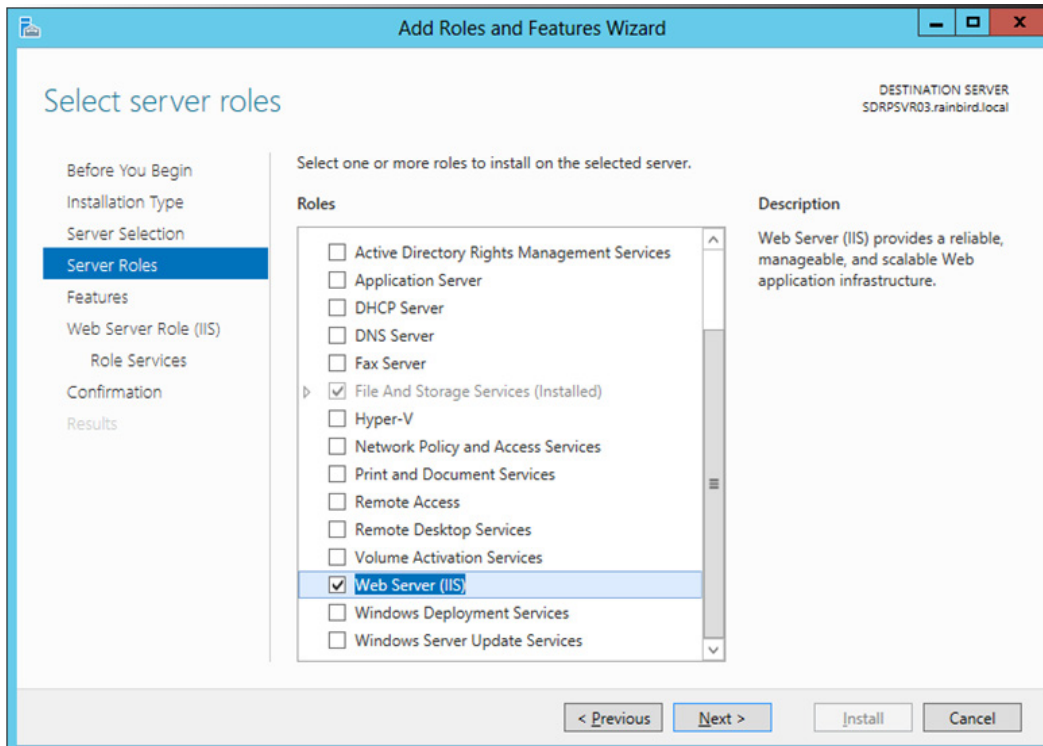
4. Check the Web Server (IIS) role.



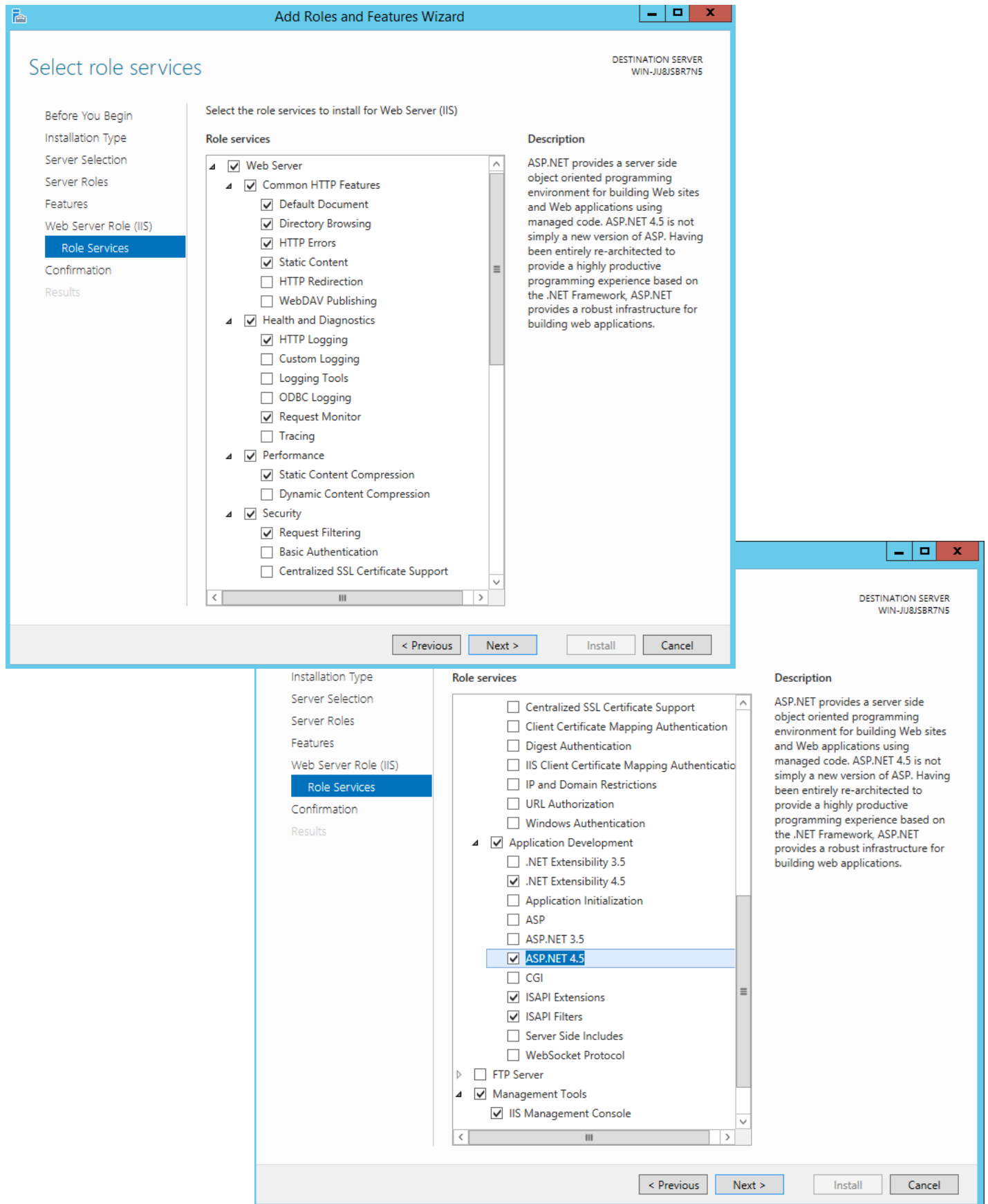
5. A dialog window will pop up. Click on Add Features.



6. Click on Role Services (under the Web Server IIS menu option).



7. Expand Web Server in the menu tree, check all the boxes as indicated, click Next and then Install.





## Initial Satellite Communication Setup

### NCC-3G and NCC-RS Cartridges

To set up communication with 3G or RS cartridges, refer to the **IQ Central Control System NCC Configurator Instructions** document found on the Rain Bird website: [https://www.rainbird.com/documents/turf/man\\_IQ\\_NCC\\_Configurator\\_Instructions.pdf](https://www.rainbird.com/documents/turf/man_IQ_NCC_Configurator_Instructions.pdf)

### NCC-EN and NCC-WF Cartridges (Private Network, No Internet Connection)

To set up communication with EN or WF cartridges over a local, private network that is not using an Internet connection, follow the steps in this section.

1. On the IQ computer, type **ipconfig /all** and press Enter in a Command Window to see the private IP address of your router (the Default Gateway address).
2. Use the NCC Configurator software to setup the NCC cartridge:
  - IP Address: Enter any valid IP address that will not conflict with other devices on the network.
  - Port Number: 50005
  - Default Gateway: Router private IP address
  - For WF cartridges, enter wireless encryption info (SSID, password)

Rain Bird IQ™ NCC Configurator - Ethernet NCC

File Help

COM Port: COM1 Read Configuration

NCC Type: NCC-EN  
Firmware Version: v1.35  
Modem Version: VERSION 0.22 Nov 30 2010 17:24:25 E

Configuration Name: NCC-EN 001  
IP Address: 192.168.0.75  
Port Number: 50005  
Subnet Mask: 255.255.255.0  
Default Gateway: 192.168.1.1  
MAC Address: 00:08:00:D3:91:DD

**!** **NOTE:** For more information, refer to the **IQ Central Control System NCC Configurator Instructions** document found on the Rain Bird website: [https://www.rainbird.com/documents/turf/man\\_IQ\\_NCC\\_Configurator\\_Instructions.pdf](https://www.rainbird.com/documents/turf/man_IQ_NCC_Configurator_Instructions.pdf)

3. Use the IQ software to set up a Satellite using the Default Gateway address and Port Number entered in Step 2.

Satellite

Configuration Stations

Satellite Name: Satellite 001  
Type: LXME version 3.55  
NCC-EN version 1.35. CIC Modem Version VERSION 0.22 Nov 3  
Connection Type: IP Connection  
Phone Number / IP Address: 192.168.0.75  
Port: 50005  
 Rain Bird cellular service  
Description:

**!** **NOTE:** For more information, check the IQ Help files or the Resources section of the Rainbird IQ website: <https://iqweb.rainbird.com/iq>

## NCC-EN and NCC-WF Cartridges (Public Network, Internet Connection with Port Forwarding)

To set up communication over a local, private network that will use an Internet connection to communicate with the cartridge (with a private IP address), follow the steps in this section.

1. Open a web browser (IE, Firefox, etc.) and enter the router's IP address in the address bar. (The default IP address for most routers is usually listed in the supplied instructions. You can also type **ipconfig /all** and press Enter in a Command Window.)
2. Enter the User Name and Password for the router. The default login is also usually found in the supplied instructions.
3. Find the Port Forwarding screen, commonly found under something similar to Port Forwarding, Applications and Gaming, Virtual Servers, or Advanced Settings.

**!** **NOTE:** Another helpful resource for port forwarding: <http://www.portforward.com>

4. Create a custom entry by adding the following information. Field labels may vary slightly but the info is the same for all routers.
  - Application or Service Name: Enter Rainbird IQ in a Name field. (Do not use any pre-configured entries in any dropdown menu.)
  - IP Address: Enter any valid IP address that will not conflict with other devices on the network.
  - Ports: Enter 50005 in all Port fields.
  - Protocol: Select either TCP or both TCP/UDP options.
  - Check any Enable box for the entry if applicable.

5. Save the entry by selecting a Save or Apply settings button.

6. Use the NCC Configurator software to setup the NCC cartridge:

- IP Address: IP address entered in Step 4
- Port Number: 50005
- Default Gateway: Router private IP address (type **ipconfig /all** and press Enter in a Command Window to see the private IP address of your router)
- For WF cartridges, enter wireless encryption info (SSID, password)

Rain Bird IQ™ NCC Configurator - Ethernet NCC

File Help

COM Port: COM1 Read Configuration

NCC Type: NCC-EN  
Firmware Version: v1.35  
Modem Version: VERSION 0.22 Nov 30 2010 17:24:25 E

Configuration Name: NCC-EN 001  
IP Address: 192.168.0.75  
Port Number: 50005  
Subnet Mask: 255.255.255.0  
Default Gateway: 192.168.1.1  
MAC Address: 00:08:00:D3:91:DD

**!** **NOTE:** Refer to the **IQ Central Control System NCC Configurator Instructions** document found on the Rain Bird website: [https://www.rainbird.com/documents/turf/man\\_IQ\\_NCC\\_Configurator\\_Instructions.pdf](https://www.rainbird.com/documents/turf/man_IQ_NCC_Configurator_Instructions.pdf)

7. Use the IQ software to set up a Satellite using the Default Gateway address and port number entered in Step 6.

Satellite

Configuration Stations

Satellite Name: Satellite 001  
Type: LYME version 3.55  
NCC-EN version 1.35, CIC Modem Version VERSION 0.22 Nov 3  
Connection Type: IP Connection  
Phone Number / IP Address: 192.168.0.75  
Port: 50005  
 Rain Bird cellular service  
Description:

**!** **NOTE:** For more information, check the IQ Help files or the Resources section of the Rainbird IQ website: <https://iqweb.rainbird.com/iq>

## NCC-EN and NCC-WF Cartridges (Public Network, Internet Connection without Port Forwarding)

To set up communication over a local, private network that will use an Internet connection to communicate with the cartridge (with a public static IP address), follow the steps in this section.

**!** **NOTE:** Contact your Internet Service Provider (ISP) for more information on how to obtain a static IP address.

1. On the IQ computer, type **ipconfig /all** and press Enter in a Command Window to see the private IP address of your router (the Default Gateway address).
2. Use the NCC Configurator software to setup the NCC cartridge:
  - IP Address: Public, static IP address of cartridge
  - Port Number: 50005
  - Default Gateway: Router private IP address
  - For WF cartridges, enter wireless encryption info (SSID, password)

The screenshot shows the 'Rain Bird IQ™ NCC Configurator - Ethernet NCC' window. The 'COM Port' is set to 'COM1'. The 'NCC Type' is 'NCC-EN', 'Firmware Version' is 'v1.35', and 'Modem Version' is 'VERSION 0.22 Nov 30 2010 17:24:25 E'. The 'Configuration Name' is 'NCC-EN 001'. The 'IP Address' is '68.8.5.216', 'Port Number' is '50005', 'Subnet Mask' is '255.255.255.0', 'Default Gateway' is '192.168.1.1', and 'MAC Address' is '00:08:00:D3:91:DD'. A 'Read Configuration' button is visible.

**!** **NOTE:** Refer to the **IQ Central Control System NCC Configurator Instructions** document found on the Rain Bird website:  
[https://www.rainbird.com/documents/turf/man\\_IQ\\_NCC\\_Configurator\\_Instructions.pdf](https://www.rainbird.com/documents/turf/man_IQ_NCC_Configurator_Instructions.pdf)

3. Use the IQ software to set up a Satellite using the Default Gateway address and port number entered in Step 2.

The screenshot shows the 'Satellite' configuration window. The 'Satellite Name' is 'Satellite 001'. The 'Type' is 'LXME version 3.55 NCC-EN version 1.35. CIC Modem Version VERSION 0.22 Nov 3'. The 'Connection Type' is 'IP Connection'. The 'Phone Number / IP Address' is '68.8.5.216' and the 'Port' is '50005'. There is a checkbox for 'Rain Bird cellular service' which is unchecked. A 'Description' field is also present.

**!** **NOTE:** For more information, check the IQ Help files or the Resources section of the Rainbird IQ website:  
<https://iqweb.rainbird.com/iq>