



IQ4 – EN Cartridge Setup

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IQ4 – EN Cartridge Setup

- **Steps to setup a NCC EN Cartridge for IQ4 - Cloud**
 - Work with the Site IT Network Personnel to setup the network parameters
 - Install the EN Cartridge
 - Configure the NCC EN Cartridge (NCC Configurator)
 - Setup controller in IQ4
 - Perform a Reverse Sync to load all controller data into IQ4 from the controller

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- **Work with the Site IT Network Personnel to setup the following:**
 - A. Setup a Network Static or Reserved IP Address and a unique Port Number for each IQ Satellite Controller
 - B. Provide the Network Subnet Mask and Gateway Address
 - C. Provide the Internet IP Address for the Router/ Fire Wall
 - D. Setup Port Forwarding (or Dynamic DNS) so IQ-Cloud can connect to the Network Router and be forwarded to the individual IQ Satellite Controllers
- **NOTE: Inbound communication from IQ4-Cloud (Amazon Servers) to the site network is identified on pages 6 - 9**

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- **The IQ4 web interface is served from <https://iq4.rainbird.com>. This interface also talks to an api server located at <https://iq4server.rainbird.com>**
- **If the firewall can be configured to whitelist sites by DNS names, these two will be sufficient. However, if the firewall can only be configured to whitelist by IP address, then additional steps must be taken**

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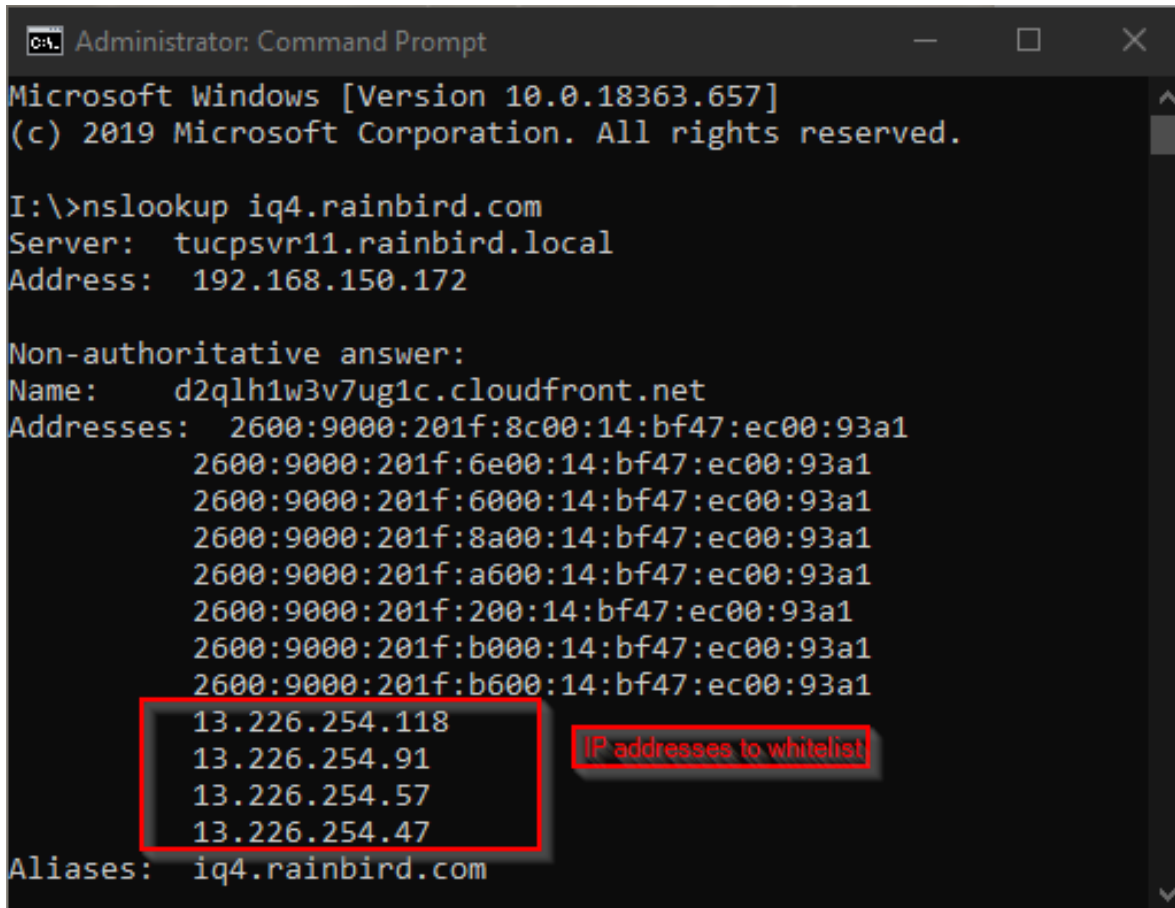
- **The iq4server.rainbird.com service is served from a set of static IP addresses:**
 - 54.183.11.63
 - 54.241.246.218
 - 54.183.30.162
 - 50.18.155.177
 - 54.219.42.103
- **The iq4.rainbird.com site is served via Amazon CloudFront, which is a CDN that provides caching and geographical distribution allowing for sites around the world to access the content from a fast, local data center. The following steps are required to find out what IP address your site is using to access IQ4 on CloudFront**

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- 1. Open a command prompt by pressing the windows key and typing 'cmd' then pressing the enter key**
- 2. In the command prompt window, type 'nslookup iq4.rainbird.com' (without the quotes)**
- 3. The result will include a list of four IP addresses, which are your site's local CloudFront addresses**
- 4. Once the four addresses are found, whitelist these along with the IP addresses from the previous page**

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- Here is an example:



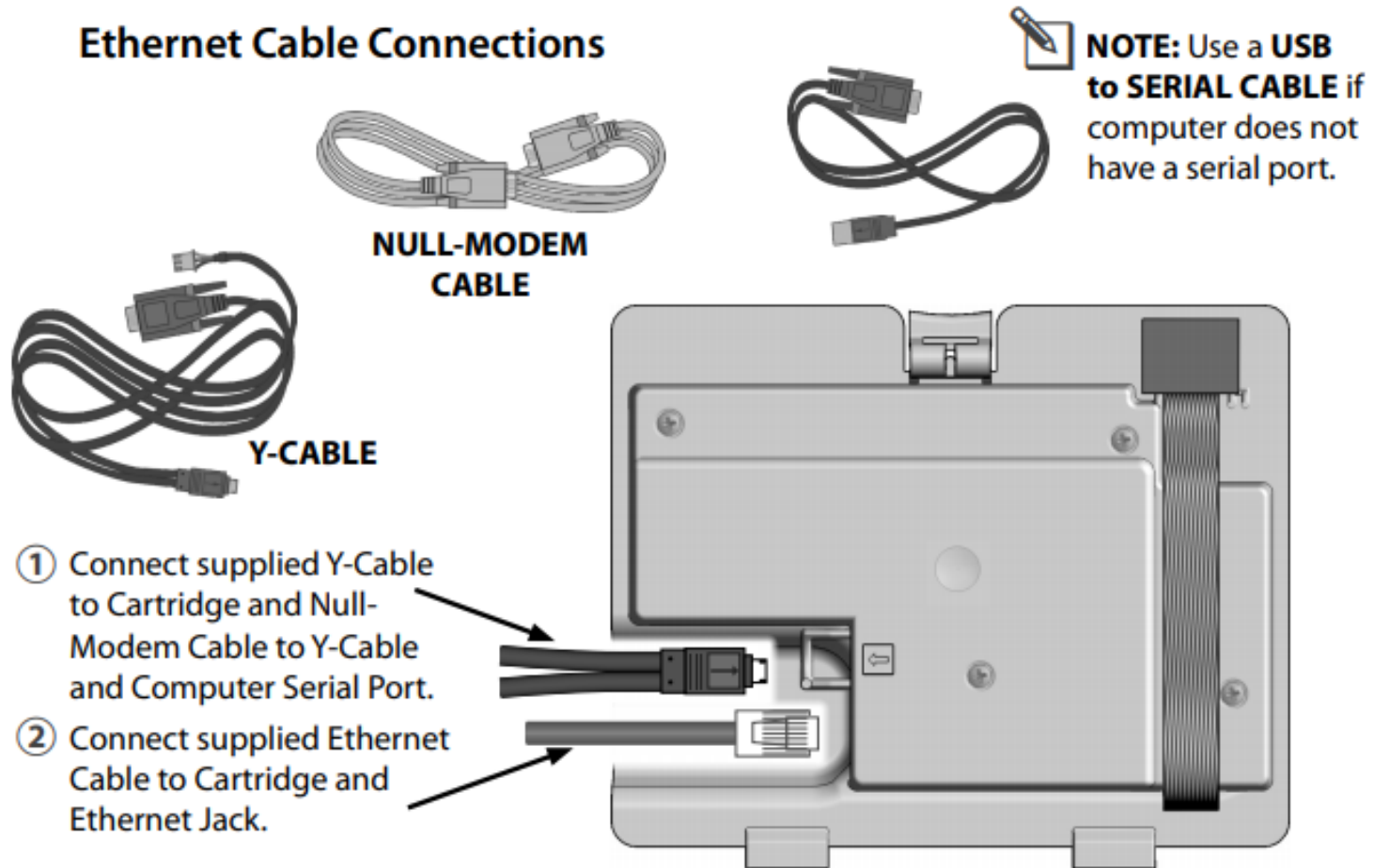
```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.18363.657]
(c) 2019 Microsoft Corporation. All rights reserved.

I:\>nslookup iq4.rainbird.com
Server:  tucpsvr11.rainbird.local
Address: 192.168.150.172

Non-authoritative answer:
Name:     d2qlh1w3v7ug1c.cloudfront.net
Addresses: 2600:9000:201f:8c00:14:bf47:ec00:93a1
           2600:9000:201f:6e00:14:bf47:ec00:93a1
           2600:9000:201f:6000:14:bf47:ec00:93a1
           2600:9000:201f:8a00:14:bf47:ec00:93a1
           2600:9000:201f:a600:14:bf47:ec00:93a1
           2600:9000:201f:200:14:bf47:ec00:93a1
           2600:9000:201f:b000:14:bf47:ec00:93a1
           2600:9000:201f:b600:14:bf47:ec00:93a1
           13.226.254.118
           13.226.254.91
           13.226.254.57
           13.226.254.47
Aliases:  iq4.rainbird.com
```

IQ4 – EN Cartridge Setup

Ethernet Cable Connections



IQ4 – EN Cartridge Setup

■ IQ-NCC Configurator Software

- Go to <https://www.rainbird.com/products/iq4-platform>, download, extract, and install the software on a Windows computer

IQ4-Cloud

IQ4-Cloud combines ultimate ease of use with mobile access and no annual fees. IQ4-Cloud allows you to share access with your team using multiple layers of user authority.



Mobile: Quickly program irrigation schedules on your smartphone or tablet.
Agile: Allows full manual operations to start and stop programs or stations.



No annual fees. Manage water intelligently and reduce costs. Also, using Wifi or Ethernet can help you avoid cellular data fees.



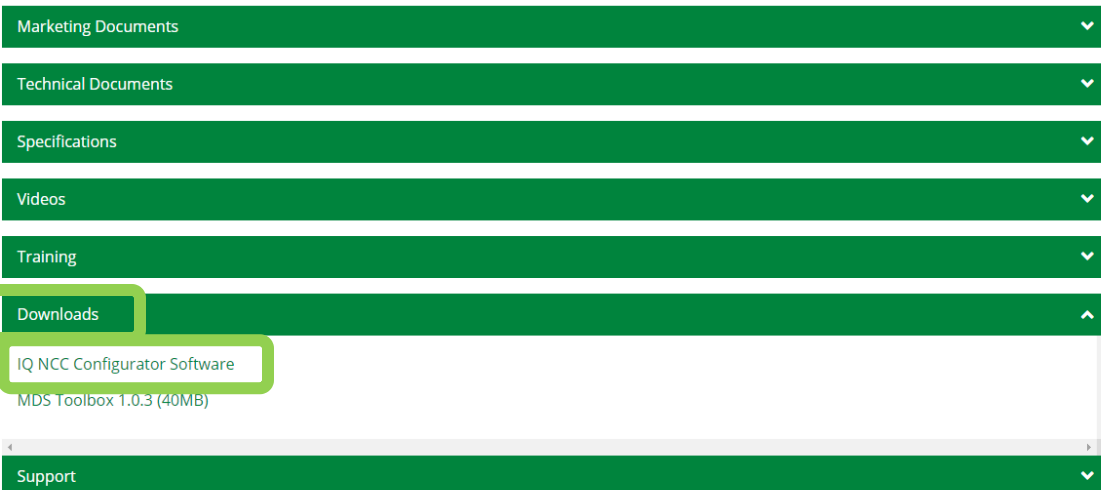
Multi-user access. Powerful access control tools allow you to restrict who can make changes to which site.



Access your data and settings 24/7. IQ4-Cloud is backed up regularly to ensure your settings and data are secure.



Easy to use. If you're familiar with previous versions of IQ3, or even if you're not, you'll love the easy-to-use interface.



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- **Use the NCC Configurator Software to Configure the Ethernet Settings**
 - A. Launch the NCC Configurator Utility on the computer.
 - B. Click the drop-down arrow to select the computer COM Port number to which the Null Modem Cable is connected.
 - C. Click on the Read Configuration button to retrieve the communication configuration settings from the NCC Cartridge.
 - The configuration setting fields will be blank or contain default values if the NCC Cartridge has never been configured previously.
 - D. Enter/edit configuration settings.
 - E. Click Send Configuration button to send configuration to the NCC cartridge.

The screenshot shows the 'Rain Bird IQ™ NCC Configurator' window. At the top, there is a 'File' menu and a 'Help' button. Below this, a 'COM Port:' dropdown menu is set to 'Direct Connect on COM1', with a 'Read Configuration' button to its right. A status section displays 'NCC Type: NCC-EN', 'Firmware Version: v0.31', and 'NCC Serial Number: 0XXXXXXXXXXXXX'. The main configuration area contains several input fields: 'Configuration Name:' (filled with 'NCC-EN 3/10/2018 1:30:22 PM'), 'IP Address:' (0.0.0.0), 'Port Number:' (50005), 'Subnet Mask:' (0.0.0.0), 'Default Gateway:' (0.0.0.0), and 'MAC Address:' (empty). At the bottom left is a 'History' link, and at the bottom right is a 'Send Configuration' button.

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- **Configure the Cartridge on controller**
 - The IQ Settings main menu is displayed. Use the UP or DOWN arrows to select **Setup Wizard**; press Next.
 - The **Setup - Satellite Type** screen is displayed. Use + or - to select **Direct**; press Next
 - NOTE: A Wireless Bridge (Ethernet to Wi-Fi Adapter) can be used to connect an IQNCCEN Ethernet Communication Cartridge to a wireless network. Download document "Wireless Bridge Configuration for Lantronix SGX5150" for set-up instructions.



For LX-IVM:

➡ **Turn the controller dial to Advanced Settings and choose Configure Cartridge.**

IQ4 – EN Cartridge Setup

- **Setup controller in IQ4**
 - See “IQ4 Quick Setup Training” preso at:
<https://www.rainbird.com/products/iq4-platform>
- **Perform a Reverse Sync to load all controller data into IQ4 from the controller**