

Ruckus ICX Switch Quick Start Guide

Supporting the Ruckus ICX 7150, ICX 7250, ICX 7450, and ICX 7650 families of Ethernet switches

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Overview

Direct management of Ruckus ICX switches can be performed using either a command line interface (CLI) or a web graphical user interface (GUI). By default, only the CLI is enabled. This guide explains how to access the CLI, enable the web GUI, and secure all configuration access methods.

The web GUI allows full configuration and monitoring of Layer 2 functions, QoS, ACL, authentication, PoE, performing software updates, and more.

Connecting to the Console

There are two ways to connect to the configuration console of a new Ruckus ICX switch: either with a Telnet/SSH session over an IP network or directly through the serial interface.

Telnet or SSH

If a Ruckus ICX switch is connected to a network, it will automatically issue DHCP requests for an IP configuration, which will be provided by a DHCP server. Identifying the IP address that has been assigned to the switch can be done by viewing the address assignment list on the DHCP server or by the switch serial interface (using the **show ip** command).

Once the IP address of the switch is known, a Telnet or SSH session can be established using a terminal emulation program. Refer to [Accessing the CLI](#) on page 5.

NOTE

The ICX7150-24F, ICX7150-C08P, and ICX7150-C10ZP switches ship from the factory with SSH enabled and Telnet disabled. All other switches have Telnet enabled only.

Serial

Ruckus ICX 7150 and Ruckus ICX 7650

The Ruckus ICX 7150 presents a USB Type-C connection, which can be connected directly to the USB port on a PC using a standard USB cable. Any standard USB Type-C-to-Type-A cable can be used; if you wish to purchase the cable from Ruckus, the part number is CC-USBC-USBA.

The Ruckus ICX 7150 and ICX 7650 switches also present a standard serial interface through an RJ45 connector. An RJ45-to-DB9F cable is included with each switch and, if required, additional cables can be ordered from Ruckus using part number CC-RJ45-DB9, which is comprised of the following two parts:

- RJ45 to RJ45: Part number 50-1000117-01
- RJ45 to DB9F: Part number 50-0000112-01

Details of the pin allocations of the serial cable are available in the [Ruckus ICX 7150 Switch Hardware Installation Guide](#).

Ruckus ICX 7250 and Ruckus ICX 7450

The Ruckus ICX 7250 and ICX 7450 switches present their serial interface through a mini-USB type connector, and every switch is shipped with a serial cable that terminates on both RJ45 and DB9 connections. The following two parts ship with every switch:

- Mini-USB to RJ45: Part number 50-1000122-01
- RJ45 to DB9F: Part number 50-0000112-01

If required, these two parts can be ordered using part number CC-miniusb-RJ45.

To connect a PC to the serial interface, a DB9M-to-USB adapter is required; this adapter can be obtained from an online electronics supplier.

FIGURE 1 DB9M-to-USB Adapter



Once a serial connection to the switch has been made, a terminal emulation program can be used to access the CLI. Refer to [Accessing the CLI](#) on page 5.

Introduction to the CLI

Accessing the CLI

Once a network or physical connection has been made to the switch, a command line interface (CLI) session can be initiated using a terminal emulation program such as PuTTY (www.putty.org). When PuTTY is started, use the following settings depending on whether you are connecting by way of Telnet, SSH, or a serial interface.

FIGURE 2 PuTTY Telnet Settings

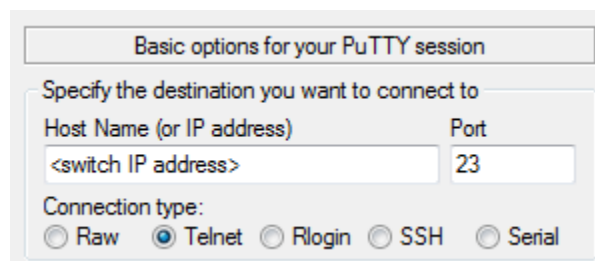
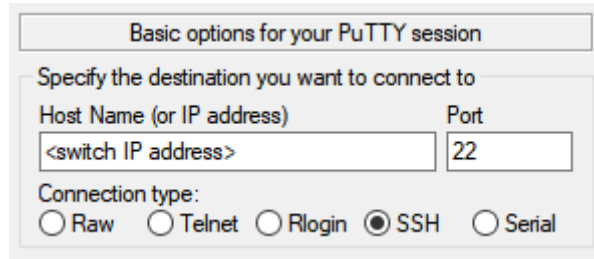
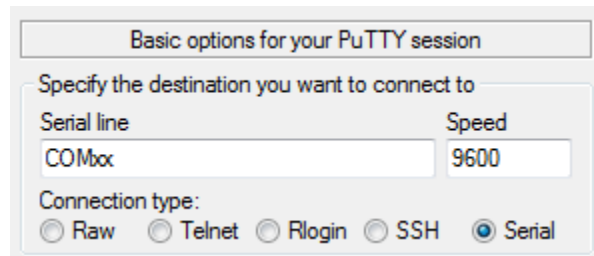


FIGURE 3 PuTTY SSH Settings



The SSH settings are required for the ICX7150-24F, ICX7150-C08P, and ICX7150-C10ZP switches.

FIGURE 4 PuTTY Serial Settings



In the PuTTY serial settings, xx is the number of the COM port, for example, COM5.

NOTE

The ICX7150-24F, ICX7150-C08P, and ICX7150-C10ZP switches ship from the factory with the following default credentials (these are the same as a Ruckus AP):

Username: super

Password: sp-admin

After logging in, you will be asked for a new password and the default password will be overwritten.

Once connected to the switch, the interface will present a console prompt. There are three privilege levels that are used to configure and manage a switch: user EXEC mode, privileged EXEC mode, and global configuration mode.

User EXEC Mode

The user is able to use basic commands to display the status and configuration of the device.

```
device>
```

Privileged EXEC Mode

At this level, the user can perform tasks such as saving the configuration, updating firmware, and performing other administrative tasks.

```
device>  
device> enable  
device#
```

NOTE

The **enable** command can be shortened to **ena**.

Global Configuration Mode

Global configuration mode is the highest level and allows the user to make configuration changes.

```
device>
device> enable
device# configure terminal
device(config)#
```

NOTE

The **configure terminal** command can be shortened to **conf t**.

From any prompt, the available commands can be listed by entering a question mark (?). Prompts can be auto-completed using the **Tab** key. The options available at any level can be listed by entering ? or pressing **Tab**.

```
device> show <tab>
device> show <?>
...
device> show version <tab>
device> show version <?>
<CR>
device> show version <CR>
...
```

The **exit** command is used to return to the next lowest command level.

Saving the Configuration

Any configuration changes made using the CLI should be saved using the **write memory** command.

NOTE

The **write memory** command can be shortened to **wr mem**.

```
device> enable
device# write memory

Write startup-config done.
Copy Done.
device#
```

Securing the Web, Serial, and Telnet Interfaces

The following commands enable web access and secure the web GUI, serial, and Telnet interfaces with a default username and password of your choice.

```
device> enable
device# configure terminal
device(config)# crypto-ssl certificate generate
device(config)# username <username> password <password>
device(config)# aaa authentication login default local
device(config)# aaa authentication web-server default local
device(config)# no telnet server
device(config)# enable aaa console
device(config)# web-management https
device(config)# password-change any
device(config)# ip ssh timeout 30
device(config)# ip ssh idle-time 20
device(config)# console timeout 30
device(config)# write memory
device(config)# exit
device#
```

Adding a Static IP Address with the CLI

Make sure that the username and password are secure and easy to remember. Once set, access to the CLI and web interface will be possible only when the password has been correctly entered.

IMPORTANT

For security reasons, Ruckus ICX switches *do not* provide any remote backdoor access or reset mechanisms for the CLI or web passwords. For details on resetting a lost password, refer to the hardware installation guide of the ICX switch.

The password can be changed by repeating the **username** *username* **password** *password* command or through the web interface under **Configure > System > Management > User Account**.

Cut and paste the following command set at the user EXEC prompt to apply the complete configuration outlined previously and set a default username of *super* with a password of *password*.

```
enable
configure terminal
crypto-ssl certificate generate
username super password password
aaa authentication login default local
aaa authentication web-server default local
no telnet server
enable aaa console
web-management https
password-change any
ip ssh timeout 30
ip ssh idle-time 20
console timeout 30
write memory
exit
```

TIP

In PuTTY, use the right button on the mouse to paste text at the console prompt.

Access to the web interface is now possible, and all access methods are protected by a username and password.

IMPORTANT

To ensure that your switches are secure from unauthorized access, always set a secure password. Never leave a switch with the default username and password settings.

Adding a Static IP Address with the CLI

If you wish to add a static IP address to the switch before using the GUI, you can do so from the CLI using the following commands.

```
device> enable
device# configure terminal
device(config)# ip address <IP address> <subnet mask>
device(config)# ip default-gateway <IP address>
device(config)# write memory
device(config)# exit
device#
```

NOTE

When setting the IP address, the *IP address/mask* syntax is also permitted; for example, 192.168.1.10/24.

NOTE

The commands listed previously are applicable to Ruckus ICX switches running Layer 2 switch code that is the factory default for the Ruckus ICX 7150, Ruckus ICX 7250, Ruckus ICX 7450, and Ruckus ICX 7650.

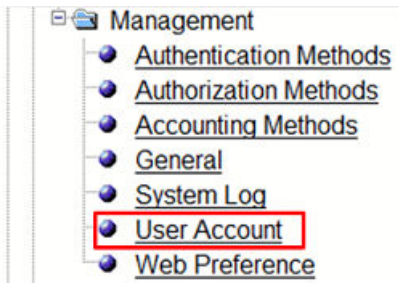
Accessing the Web GUI

You can now access the web interface of the switch. Enter the IP address of the switch into the address bar using either HTTP or HTTPS; for example, <https://192.168.2.79/>.

Creating Additional Web Interface Users

The first task is creating usernames and passwords to secure access to the switch. This is done on the **User Account** page, which can be found under **Configure > System > Management > User Account**.

FIGURE 5 Accessing the User Account Page



Users can be created with one of three permission levels: Read-Write, Port-Config, or Read-Only.

TABLE 1 Permission Levels

Level	Description
0 Read-Write	Full read-write access for all system parameters.
4 Port-Config	Read-write access for specific ports, but not for global system parameters.
5 Read-Only	Read-only access for configuration and system parameters.

Deleting the Default Username and Password

If the default username and password were used for the initial configuration, they must be deleted to protect the system. Once you have created a new Read-Write user, delete the existing users and save the configuration.

FIGURE 6 Replacing the Default Username and Password

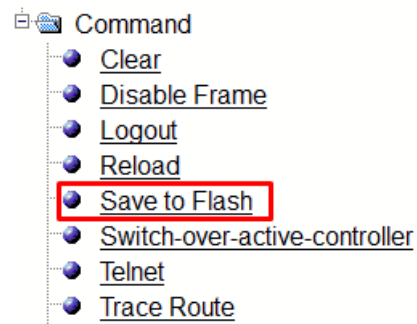
Username	Password	Encrypt	Privilege	
Admin	\$1\$4CkeC7TI\$wyHh7qeLBJg8pvD3sccUA1	Enabled	0 (Read-Write)	Delete
brocade	\$1\$WensxNT7\$S28SU7ddHqDb2abHH4hTo1	Enabled	0 (Read-Write)	Delete
Username	Password	Encrypt	Privilege	

Saving Configuration Changes

Changes made to the configuration are not automatically saved during a session. An option to save changes is provided when logging out of the web interface.

To save the configuration manually, use the **Save to Flash** option on the **Command** menu.

FIGURE 7 Save to Flash Option



Documentation

All documentation for Ruckus ICX switches can be found on the support page for each product at <https://support.ruckuswireless.com/>.

Web Interface User Guide

The *Ruckus FastIron Web Management Interface User Guide* is available at <https://support.ruckuswireless.com/documents/2124-fastiron-08-0-70-web-management-guide>.

Additional Information

Accessing Support

The Ruckus Support pages provide access to all product documentation, software updates, technical assistance resources, and Ruckus communities. To register, go to <https://support.ruckuswireless.com/>.

To access the full range of services, register your products at https://support.ruckuswireless.com/warranty_registration.

Obtaining Software Updates

Access to software updates is available through the Ruckus Support portal at https://support.ruckuswireless.com/product_families/21-ruckus-icx-switches.

Lifetime Warranty Hardware Replacement

All Ruckus ICX switches include a lifetime hardware replacement warranty. Full details are available at https://support.ruckuswireless.com/programs-warranty_registration.



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