



PORTrockIT

Quickstart Guide

Eli-v6.5.391

Bridgeworks

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1 Introduction

This guide is designed to help you through the steps required to power up and configure the basic settings on a Bridgeworks PORTrockIT. For more detailed configuration options please refer to the PORTrockIT Software Manual (<https://support.4bridgeworks.com/documents/manuals/>).

1.1 Definitions

Throughout this manual, selected terms will be used to describe pieces of equipment and concepts. This section provides an explanation of those terms.

1.1.1 Node

A Node refers to a PORTrockIT unit.

1.1.2 Endpoint

A host machine sending/receiving protocol data to be accelerated by PORTrockIT technology, as well as possibly other, non-accelerated data.

2 Pre-Install Checklist

Before connecting any equipment, or performing any patching, please ensure you have completed the pre-installation checklist below.

- How will the PORTrockIT devices be securely linked? Do you already have an active site-to-site VPN or dedicated secure network? The PORTrockIT has an option to set up an IPsec tunnel between Nodes if neither of those options are available
- Where will the PORTrockIT be placed within your network infrastructure? Refer to the Topology Overview Guide for help in making this decision (<https://support.4bridgeworks.com/documents/manuals/>).
- Virtual Machine Template File (if using a virtual PORTrockIT)
- IP Addresses for Management, LAN and WAN interface/s
- PC or Laptop connected to the Management LAN
- Routing rules planned (if required)
- Licence Key saved to local machine
- Keyboard and monitor (if using a hardware PORTrockIT)

3 Setup

3.1 Hardware

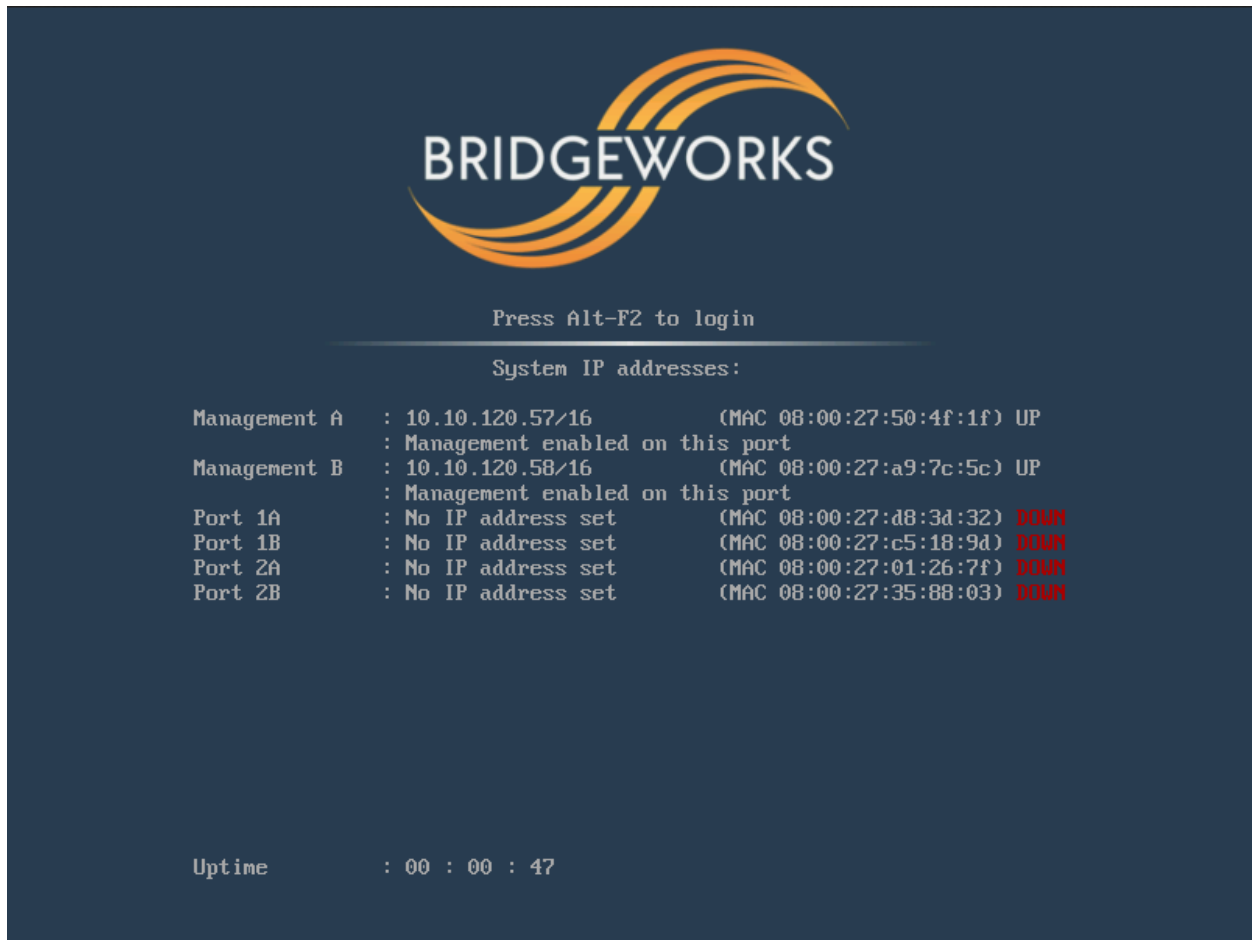
To set up a hardware PORTrockIT:

- Install the server into a rack using the included rails and ensure it is secure.
- Plug the power leads into the appropriate sockets.
- Connect an Ethernet cable to the management interface on Port A of the onboard Network Interface Controller (NIC).
- Connect an Ethernet cable to the WAN interface. On Series 100 and 200 this is Port B of the onboard NIC. On Series 400 and 800 the WAN licence is not assigned by default and can be mapped to any PCIe slot based Ethernet port.
- Connect the LAN interface.
- Connect the keyboard and monitor.



Warning: Ensure that the cables you are using are rated for the correct speed. If a cable is rated for a lower speed than the interface, the connection will not run at full capacity.

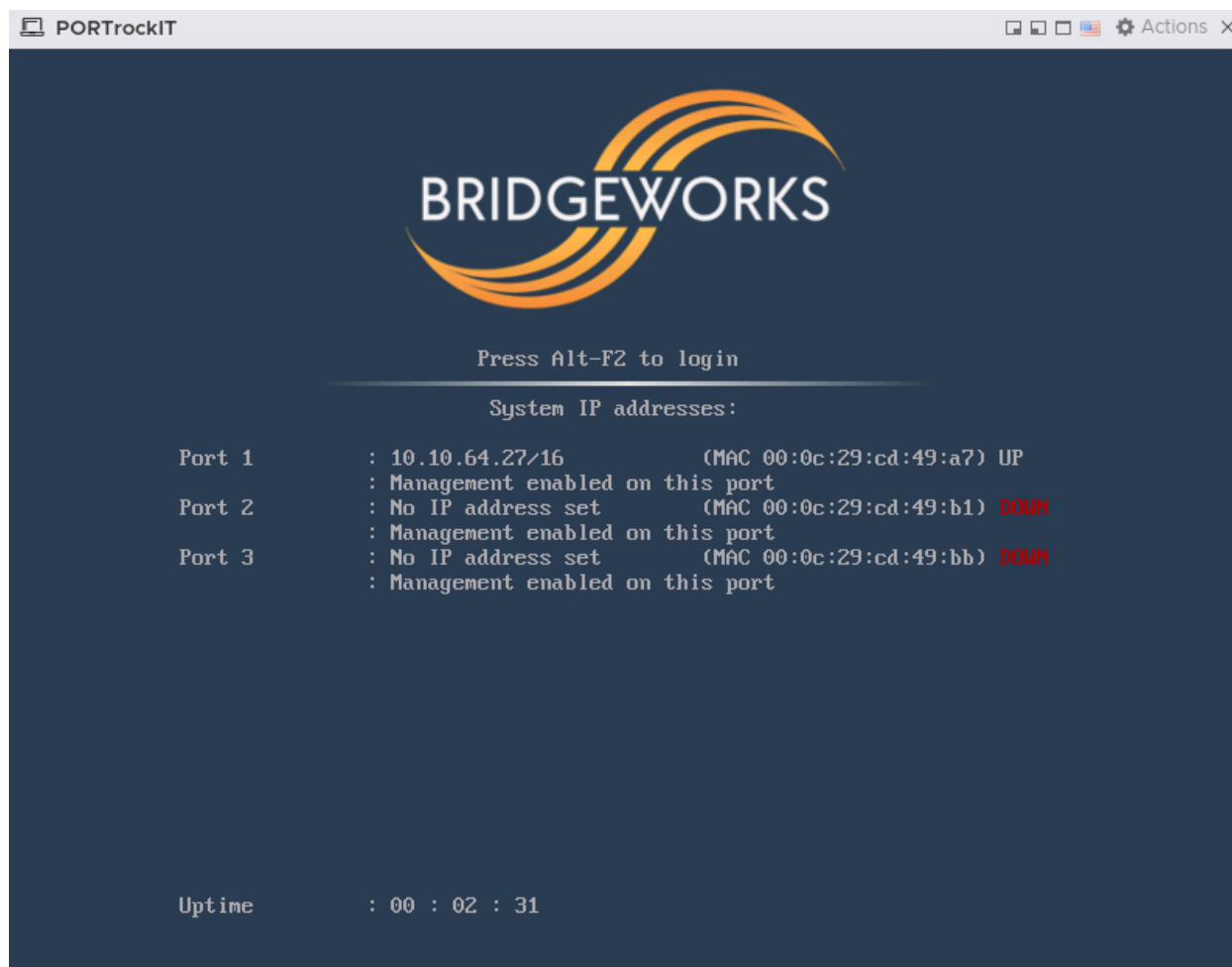
Now power on the device. The Node should boot with a display similar to the one below:



3.2 Virtual Machine

Depending on which Hypervisor you are using, you will have been provided with a template file with which to create your virtual machine. As per the physical set-up, ensure your host server is configured with the appropriate virtual networks for Management, WAN and LAN and these are assigned to the Virtual Machine. Usually the first network listed will be the management network/local LAN, the second network for WAN and the third one the LAN that the endpoint for acceleration is connected to. Once the installation is complete, you can power on your VM.

The PORTrockIT should boot with a display similar to the one below:



3.2.1 Configuring a Static IP

If the device is installed on a network that is not using DHCP you will need to configure a static IP Address so that you can access the Web GUI to complete the configuration of the Node.

Press *ALT-F2* to login to the Node.

As this will be the first time you have logged into the Node you will be required to set an administrator password for the device.

```
Bridgeworks Management Interface
No password configured - Enter new password: _
```

You can now log into the Node using the default username *admin*, and the password you set.

Within the Command Line Interface, you can select an option by entering the number next to it. Navigate to Network Connections using 1, then select the port you will be using to manage your Node.

```
1 Enable Port : Yes
2 MTU Size : 1500
3 Enable Forwarding : No
4 Use DHCP to assign an IP address automatically : Yes
5 DNS Registration : Yes
6 Use the following IP address : No
7 IP Address : 10.10.64.60
8 Netmask : 255.255.0.0
9 Gateway : 10.10.10.1

s Save
x Cancel
```

Ensure this port is enabled by checking the *Enable Port* option. If this says *No* next to it, select it, then press *y* to enable it.

DHCP will be enabled by default. To set a static IP address for your Node, select *Use the following IP address*.

Next, set your IP address by selecting *IP Address* and entering a valid IPv4 address. You may also need to adjust the netmask and default gateway. When you are done modifying your port settings, press *s* to save.

Once you have saved all your settings, press *r* to reboot your Node to apply them.

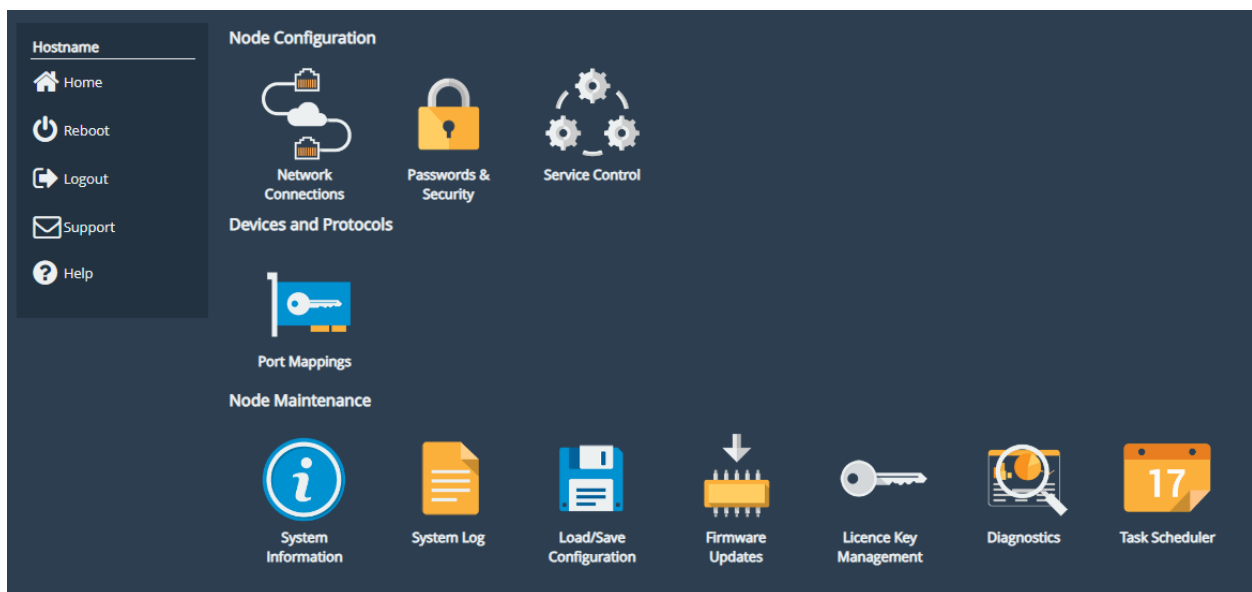
4 Configuration

You can now perform the rest of the configuration remotely via the web interface using the Management IP address.

If you have not used the CLI as above to configure an Admin password, you will be required to set the admin password for the device. This can be altered later on if required. Once set you will be returned to the login screen to enter the username "admin" with the password you have just configured.

Upon accessing the web interface for the first time, you will be required to accept the End User Licence Agreement.

You should now be on the Home page of the web interface for the PORTrockIT (as shown below).



A guide to configuring the following settings is shown below:

- Section 4.1: Changing the Hostname (Optional)
- Section 4.2: Installing the Licence Key
- Section 4.3: Network Configuration and Port Mappings
- Section 4.4: Establishing a Link Between Nodes
- Section 4.5: Adding Services and Enabling Acceleration

During the configuration process you will be required to reboot the device several times.

4.1 Changing the Hostname (Optional)

To set the hostname for the device, first return to the Home page using the *Home* button in the sidebar on the left. Then select *Network Connections* and then *General Settings*. You can change

the hostname for the device here. If you wish to display the hostname of the node on the login page select the checkbox labelled "Hostname on Login Page:"

Once you've amended the settings, click *Save* and select *OK* to the prompt that appears. You can make additional configuration changes before rebooting the device.

Return to the Home screen by selecting *Home* at the top left.

4.2 Installing the Licence Key

The licence key for your device contains the licences for the protocols you can accelerate.



Important: If the licence key is not uploaded you will not be able to add the Port Mappings to the ports later on!

To upload the licence key, first navigate to the Home page using the *Home* button in the sidebar on the left. Next select *Licence Key Management*, then *Browse* and locate the licence key file saved to your local machine.

Select the licence key file and then click *Upload*. You should now see which protocols are licensed for your device in the window.

Hostname
 Home
 Reboot
 Logout
 Support
 Help

Installed Licence Keys

ID	Feature Type	Limit	Expires
2021750559	WAN	1	N/A
	File Transfer Protocol	1	

Remove *Download*

Licence Key Upload
Licence Key File:

Choose file No file chosen

Upload

The device requires a reboot for the licence key to take effect. Select *Reboot* from the menu on the left and restart the device.

4.3 Network Configuration and Port Mappings

After the device has restarted, and you have logged in, the next step is to configure the network settings for the Nodes and add the Port Mappings to the connections. How they are configured will depend on the type of network topology you have chosen. Please refer to the relevant configuration guide that matches your chosen network topology for assistance in configuring these settings.

The guides are all available on the Bridgeworks support website (<https://support.4bridgeworks.com/documents/manuals/>).

- Topology Overview
- Bridged Physically-In-Path
- Out-of-Path
- Logical-In-Path

Once you have completed the network configuration and have been able to verify that the Nodes can see each other, return to this section of the Quick Start Guide and continue with the setup process.

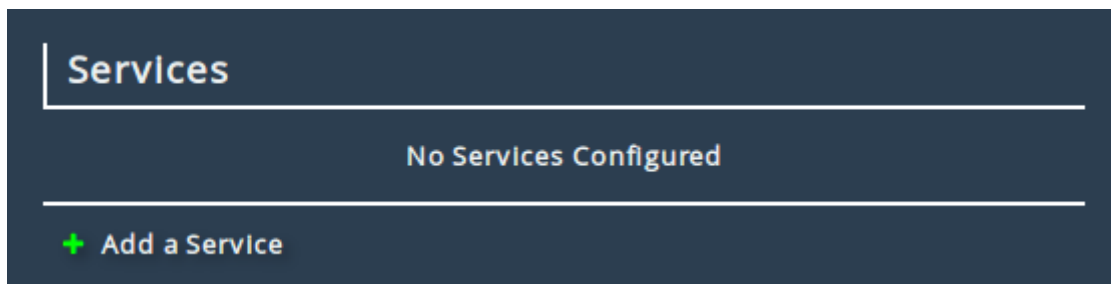
4.4 Establishing a Link Between Nodes

This is covered in the relevant Network Topology Configuration Guide. See Section 4.3: Network Configuration and Port Mappings

4.5 Adding Services and Enabling Acceleration

4.5.1 Adding a Service

Select *Service List* from the Home Page, then select *Add a Service*.



Give the service a name that is unique and easily recognisable. In the *Address* box enter the IP Address of the local endpoint that traffic will be accelerated to.



Important: Services should be configured for the PORTrockIT Node on the receiving side, with the IP Address of the local endpoint. Do not use the IP Address of the remote endpoint.

If you are accelerating more than one protocol, choose the relevant protocol from the list.

Select the outgoing interface from the drop down list. This will either be the WAN port, or the Bridge port, depending on the type of network configuration.

Add New Service

Name

FTP Transfer 1

Address

192.168.70.11

Protocol

File Transfer Protocol

Port

21

Outgoing Interface

Out of Path

☐

Cancel

Add Service

If the node is in an Out of Path configuration, please ensure the *Out of Path* tick box is checked.

If accelerating more than one protocol, repeat the steps above for each individual service.

4.5.2 Enabling Acceleration

With all the services added, you can now establish the relationship between nodes and enable acceleration.

From the Home Page on the same PORTrockIT Node, select *Node Management*, then choose the node you want to accelerate traffic from.

Hostname

Home

Reboot

Logout

Support

Help

Add Remote Node

Transfer Statistics

Access Control

IPsec Configuration

Configured Nodes

1 / 1 Nodes Online

Hostname

192.168.71.2

Online / Symmetric

Non-Configured Nodes

0 / 0 Nodes Online

No non-configured nodes

Select *Relationships* from the next screen.

The screenshot shows a dashboard with a dark blue background. At the top, a 'Node Status' box contains the following information:

State:	Online	Active Paths:	1 / 1
Model:	100	Negotiated Bandwidth:	119 MB/s
TX/RX:	1 KB/s / 1 KB/s	Remote Configuration:	Present

Below this is the 'Node Configuration' section with three icons: 'Path Configuration' (a map), 'Transfer Statistics' (a bar chart), and 'Remove Node' (a cloud with nodes). At the bottom is the 'Applications & Utilities' section with five icons: 'Relationships' (a network diagram), 'WCCPV2' (a triangle with arrows), 'VPN' (a shield), 'Remote Control' (a key), and 'Learn' (a magnifying glass over a document).

You will see a list of the available services that can be accelerated, with a toggle to enable or disable each one.

The screenshot shows a configuration screen with a dark blue background. On the left is a sidebar with a 'Hostname' header and a list of links: Home, Nodes, Reboot, Logout, Support, and Help. The main area has a notification bar at the top that says 'Turning off a service doesn't stop existing connections'. Below this is the 'Active Services' section, which contains a single service entry: 'FTP Transfer 1 (FTP - 21)' with IP '192.168.70.11' and 'Port 4'. To the right of this entry is a toggle switch labeled 'ON'. At the bottom of the main area are three buttons: 'Configure Services' (with a left arrow), 'Cancel', and 'Save'.

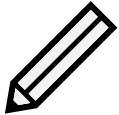
Toggle the switch from *OFF* to *ON* for each service you want to accelerate, then click *Save*.

4.5.3 Performing a Learn

Before running any tests or accelerating any traffic, you should run a Learn on both nodes. This gives the AI time to adjust to the network conditions, ensuring it can provide high performance as soon as it starts accelerating your data.

From the Home Page, select *Node Management*, select the Node you wish to optimise the connection to, then click *Learn*.

On the next screen, select *Start Learn*, and wait for the Learn to complete. The time taken varies with network conditions, but is typically less than 5 minutes.



Note: If you make any changes to your network configuration, it is always advisable to run another Learn before accelerating data.

5 Additional Features

Congratulations on finishing the basic setup of your PORTrockIT. Consider browsing the manuals for a complete list of capabilities (available at <https://support.4bridgeworks.com/documents/manuals/>).

The following sections are recommended starting points for some useful additional features.

5.1 IPsec Encryption

IPsec can be enabled to encrypt data and control messages sent between your PORTrockIT Nodes.

To enable IPsec, see the IPsec section of the PORTrockIT Software Manual.

5.2 Remote Access

Remote Access allows administration of remote PORTrockIT Nodes from your local Node over a secure tunnel.

To enable Access Control, see the Access Control section of the PORTrockIT Software Manual.

6 Useful Links

Further documentation and support is available through our website: <https://support.4bridgeworks.com/>

If your question is not answered in our documentation, please submit a ticket: <https://support.4bridgeworks.com/contact/>