



userful.com/setup-video



On-Premise Server

Setup Guide

Version 4.4

August 2021

Introduction

This guide is intended to walk you through the process of configuring your hardware, network, IP settings, and zero clients.

Userful OS is a rapidly evolving platform that receives quarterly updates, so we recommend you refer to our online resources at support.userful.com for full product documentation.

Userful's On-Premise system represents a unique blending of IT and A/V technology. This guide is intended to help a variety of users and partners with different skill sets. If you find yourself struggling with any part of the setup process, please feel free to contact us, the information is on the final page of this document.

This guide makes a few assumptions about the state of the project before you begin deploying Userful. For best results, before beginning the following should be completed:

- All displays are mounted and powered
- Standard display installation procedures have been completed - RS232 daisy-chaining, IR receiver connected, and display alignment
- Active network drops are run to each display
- Zero clients are unboxed and connected to power, network, and displays
- Network/switch configuration is complete, per the diagram on Page 10
- You are using a Userful server appliance purchased directly from Userful, therefore no OS installation, testing, or licensing is required
- The Userful server is available for configuration, either in a temporary position or installed in the rack, with a temporary keyboard, mouse, and monitor attached to it.
- If at all possible, network connections with Internet access will allow Userful support staff to remotely assist should the need arise.

This guide will walk you through the basic steps of:

- Setting up the Userful Server
- Completing initial software configuration (user credentials and network settings)
- Pairing the server and the Zero Clients

Once these steps are completed, other tasks you may need to perform are documented on userful.com/support, including:

- Source configuration
- User access control and authentication
- Security, content, maintenance, and backup settings

Finally, if you have not made arrangements for guided user training (included as part of a Gold subscription package or as an add-on), contact your Userful Account Manager.

Section 1: Servers

Userful server appliances purchased directly from Userful come pre-configured with:

- The latest version of Userful OS at the time of shipping
- All devices (capture cards, adapters, GPUs) installed and configured
- Burn-in tests completed
- License installed

Steps that need to be completed by the user or integrator include:

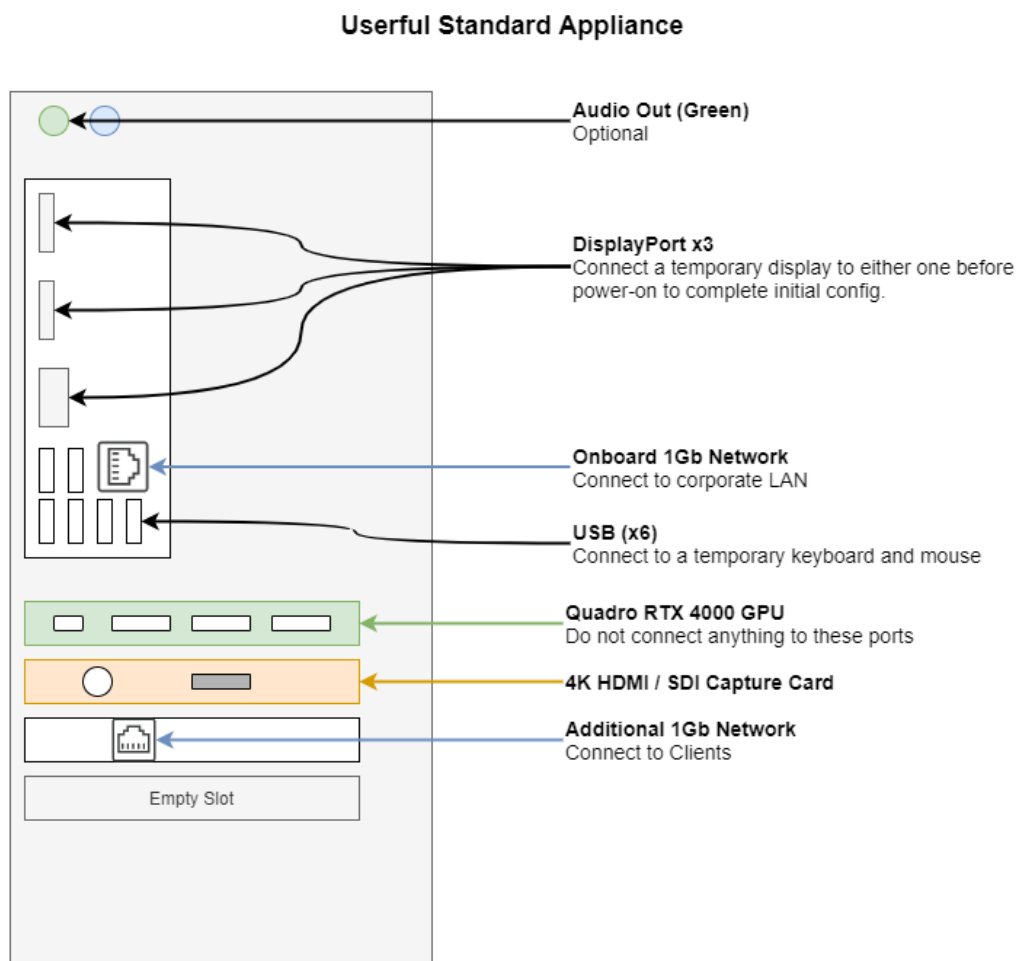
- Physical hookups and mounting
- Administrator user credentials set
- Network IP settings
- Content sources

This guide will walk you through the first three steps. Beyond that, it's recommended to refer to our online resources.

Server Preparation (Standard Server)

To complete the initial configuration, a Userful Standard server should have connected to it:

1. USB keyboard and mouse
2. Temporary display (DisplayPort or VGA compatibility required)
3. Network drop from the corporate LAN to the Onboard network adapter



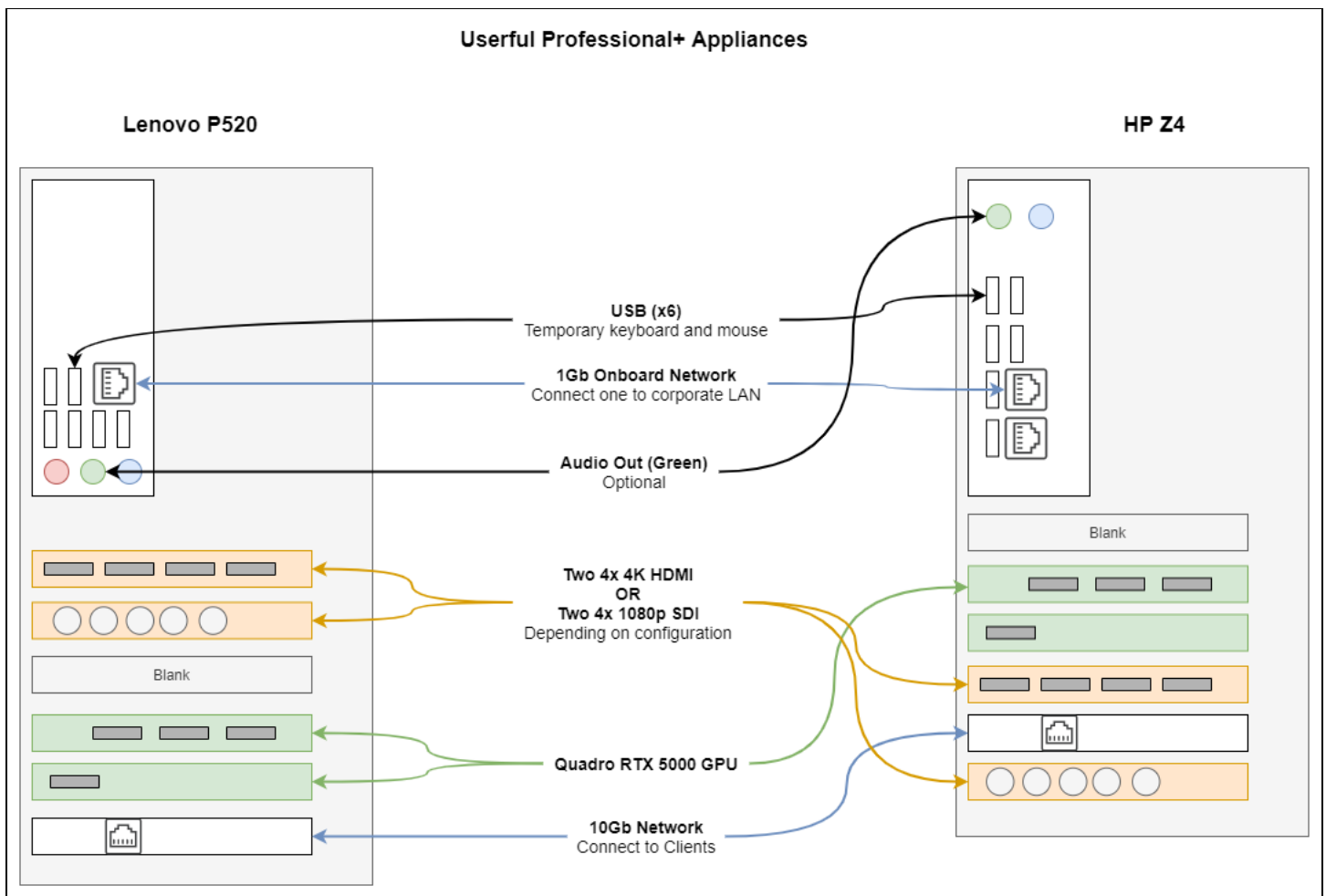
Userful Standard servers come with one Onboard 1Gb (1000Mbps) network adapter and one Additional 1Gb (1000Mbps) network adapter. Both adapters are identical in performance, but it is recommended to connect the Onboard adapter to your existing corporate network in case external monitoring tools or functionality are desired, such as Wake on LAN.

The Additional adapter will serve a separate or isolated network segment that connects to the client devices. Do not connect this adapter yet.

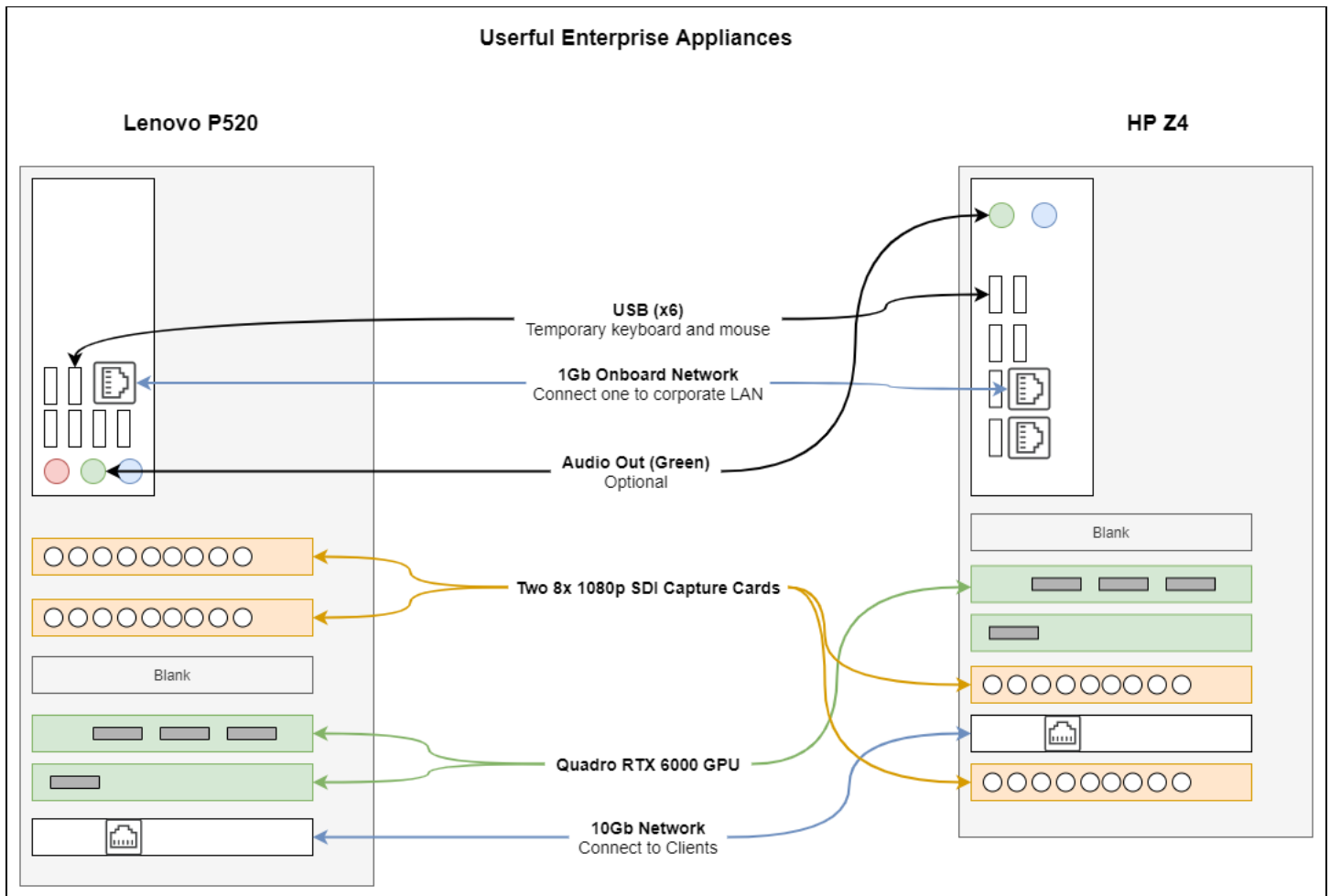
Server Preparation (Professional+ and Enterprise Appliances)

Userful Professional+ and Enterprise appliances omit the dedicated onboard video and come with additional network adapters.

Userful **Professional+** appliances come equipped with two 4-port, 4K-capable HDMI capture cards, or two 4-port, 1080p60-capable SDI capture cards, depending on the configuration agreed upon at time of sale.



Userful Enterprise servers come equipped with two 8-port, 1080p-capable SDI capture cards, and include SDI-to-HDMI converters.



Both onboard network adapters have identical performance, connect either (but only one) to your corporate network.

The 10Gb adapter must serve a separate or isolated network segment that connects to the client devices. Do not connect this adapter yet.

Note: 10Gbps uplinks must be used if you are running more than 12 Zero Client devices.

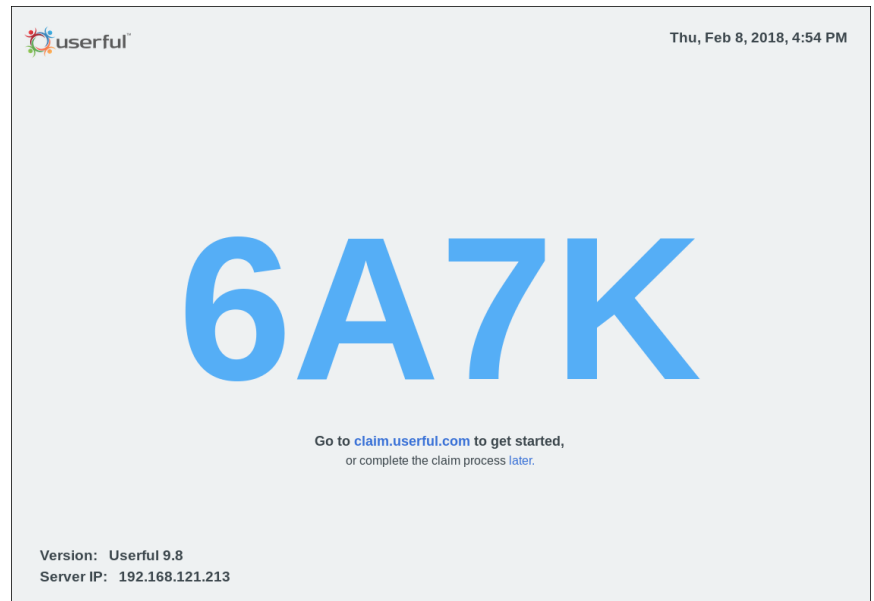
Software Configuration


Once the physical connections are complete, power on the Userful system, and use the attached display, keyboard, and mouse to complete some initial setup tasks.



Userful Manager registration can be done now (if the system has Internet access), later, or skipped altogether.

The Initial Setup screen allows you to set administrator credentials, network IP settings, time zone settings, and accept license terms.

On some configurations of Pro+ or Enterprise servers, you may be presented with this on your display instead of the above screens:



 **Initial Setup**

System Settings
User Name:
Password: 
Repeat: 
Hostname:

Network Settings

Network Interface	Link Status	IP Address	DNS	
eno1	Up - 1000Mbps	192.168.121.180	192.168.123.227	<input type="button" value="Edit"/>

Date and Time Zone
Tue, Feb 20, 2018, 11:52 AM [Change](#)
America/Edmonton [Change](#)

Licensing

This Userful host is licensed.

By clicking Get Started, you acknowledge that you agree to [Userful License Agreement](#) and [Blackmagic Design License Agreement](#).

```
Userful 10.x  
Userful Control Center 0.10.5381.3548e9e now online at:  
  
http://192.168.0.10:9000/ucc.html  
  
Please open this URL to manage your Userful product.
```

Enter the displayed URL in your browser to continue.

If the Userful server can not receive a DHCP IP address, you may be presented with this:

```
Userful 10.x  
Userful Control Center 0.10.5381.3548e9e now online at:  
  
  
  
Please open this URL to manage your Userful product.
```

It is recommended that the server be allowed to take a DHCP lease. By default, all adapters are configured to accept DHCP leases.

If you are not able to give Userful a DHCP IP, contact Userful Support (see the end of this document).

Network Configuration

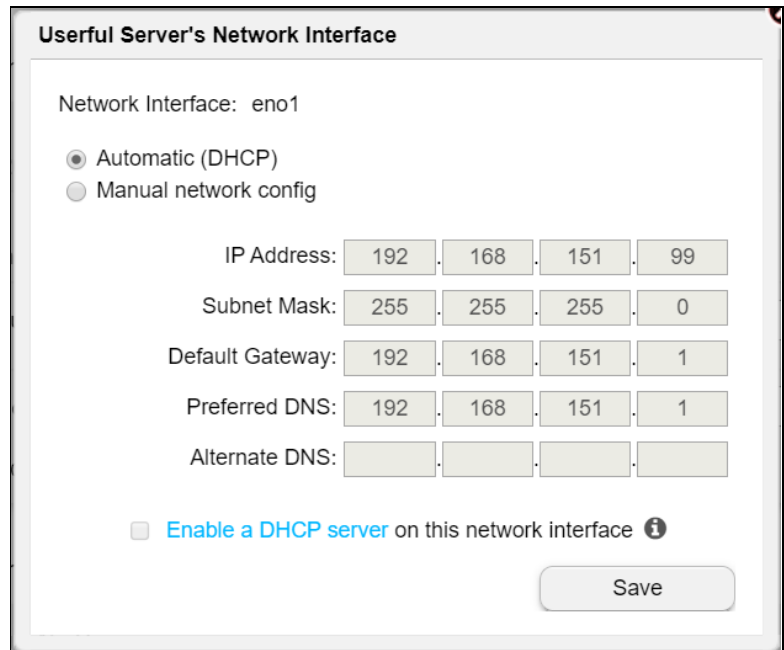
Primary (1Gb) Network Adapter

The primary adapter, connected to your corporate network, should be given a fixed IP address - either a static IP or a DHCP reservation, as that address will be used to manage Userful. This IP address should be provisioned during the Initial Setup screen.

At this point in the setup, you should now be managing Userful via a web browser from your device:

- Open a tab in a Web browser. Chrome on a laptop or desktop is recommended
- Enter the IP address of the Userful server, displayed on the network adapter, into the address bar
- You should be presented with the Cloud registration screen as above. If this is the case, click "Get Started" from the keyboard/mouse/monitor connected to the system, then switch to your device's browser to continue setup
- Disconnect the keyboard, mouse, and monitor from the server

IMPORTANT NOTE: Managing Userful using peripherals connected to the system is not recommended as several key features will not work as intended. Using a web browser from your device is the recommended method of administering Userful.



Userful Server's Network Interface

Network Interface: eno1

☒ Automatic (DHCP)
☐ Manual network config

IP Address: 192 . 168 . 151 . 99

Subnet Mask: 255 . 255 . 255 . 0

Default Gateway: 192 . 168 . 151 . 1

Preferred DNS: 192 . 168 . 151 . 1

Alternate DNS:

☐ Enable a DHCP server on this network interface ⓘ

Save

Secondary / Client Network Adapter

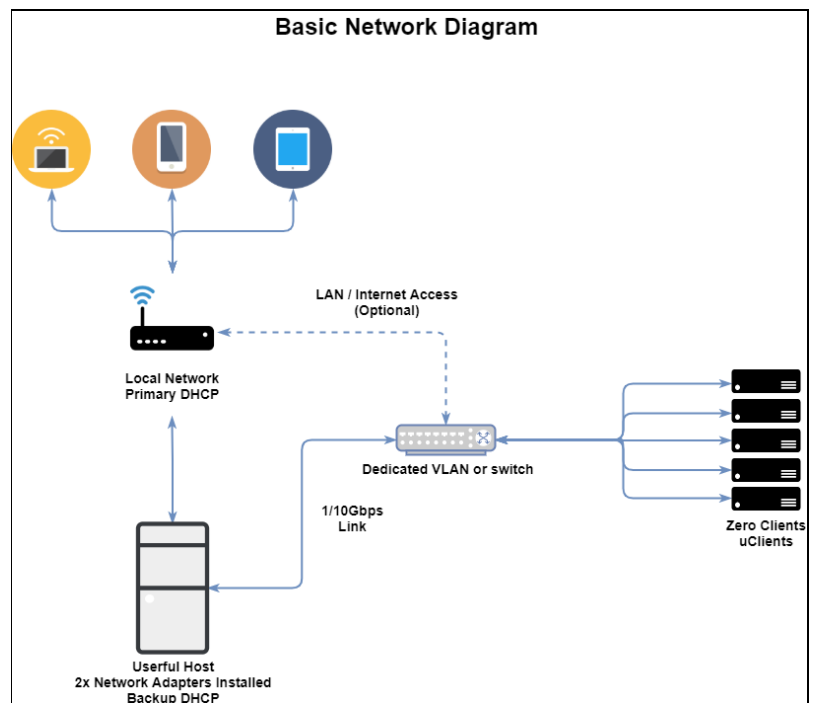
The Additional (on a Standard appliance) or 10Gb (on a Professional or Enterprise appliance) must be connected to a network segment designated for the Userful client devices. This segment can be provisioned either in L2 (physical separation) or L3 (VLANs) depending on your needs and equipment. It is required that Userful client devices be separated from other network traffic to ensure proper performance and support.

All IP addresses on this network should be fixed - either through static assignments or reservations.

Zero Client devices require a DHCP server to allow proper initial provisioning. This can be temporary while devices are unboxed and configured, or permanent. If the network itself does not have a DHCP server, the Userful interface can be configured to provide one, if given a static IP address:

In an otherwise empty network, the shown settings can be used to provide simple connectivity for clients. Note the Default Gateway setting - if this is not properly set, you will experience connectivity issues when managing the server via a web browser. DNS servers are not necessary.

Once the above settings are set, and all connections between the Userful server and Zero Clients are connected, you can begin powering on Zero Clients, and move to the next section.



Userful Server's Network Interface

Network Interface: enp0s8

☐ Automatic (DHCP)
 ☒ Manual network config

IP Address:

Subnet Mask:

Default Gateway:

Preferred DNS:

Alternate DNS:

☒ Enable a DHCP server on this network interface ⓘ

Save










Section 2: Zero Clients

Zero Clients are simple, secure devices. They will only pair with a Userful server and must be managed from that server in all respects.

Zero Clients must obtain an IP address before they can be associated with a server. A Zero Client new out of the box will request an automatically-assigned (DHCP) IP address from the network. If your network is not configured for DHCP, or if the Zero Clients are to be deployed on a completely isolated network segment, Userful can be configured to be a DHCP server, either temporarily (recommended) or permanently (see the previous page).

If the Zero Client is not able to obtain an IP address, it will assign itself an IP of 10.254.10.10. In this state, the Zero Client is not configurable from the server, so it must be given a DHCP IP.

After that is done, power cycle the zero clients, and they will come online with valid IP addresses and be ready for assignment.

<input type="checkbox"/>	Lock to Sales-demo-3		Userful Server	Name	Location	Network	Speed	Model	Version
<input type="checkbox"/>		Available		Display1	SD3	192.168.151.114 54:16:c5:1a:0c:84	1000Mbps	Generic Zero-Client	121.042
<input type="checkbox"/>		Available		Display2	SD3	192.168.151.140 54:16:c5:18:cf:13	1000Mbps	Generic Zero-Client	121.042
<input type="checkbox"/>		Available		Display3	SD3	192.168.151.128 54:16:c5:18:cc:38	1000Mbps	Generic Zero-Client	121.042
<input type="checkbox"/>		Available		Display4	SD3	192.168.151.110 54:16:c5:1a:05:af	1000Mbps	Generic Zero-Client	121.042

Before you assign Zero Clients to the server, you may want to complete some operations ahead of time, including:

- Set “Name” and “Location” fields (simple text, for your reference)
- Set a static IP address
- Re-number the displays to a more logical order (use the “Show IDs” button to help with this)

Assign each zero client to the server by selecting the “Lock” icon at the top of the list, then clicking “Apply” in the bottom-right corner of the screen. The zero clients will assign to the server and are now ready for use.

Next Steps, Training, and Contact Information

You are ready to get started with Userful! Go to docs.userful.com for our full online documentation.