Communication Server
Setup Guide

Specifications

Communication Server Pro

Model number	C4-COMMSERV-PRO
Networking	
Ethernet	Broadcom quad-port 1GbE adapter Broadcom dual-port 1GbE adapter
USB port	2 USB 2.0 port—front 2 USB 3.0 port—rear 1 USB 3.0 port—internal
Power	
Power requirements	110-240VAC, 60/50 Hz
Power supply	250W internal power supply
Power consumption	Max: 250W 853 BTUs/hour
Other	
Enclosure	1U rack server
Mounting	ReadyRails™ II sliding rails for tool-less mounting in four-post racks with square or unthreaded round hole or tooled mounting in four-post threaded hole racks.
Dimensions (H × W × D)	1.75″ (44 mm) × 17″ (432 mm) × 20″ (508 mm)
Operating temperature	32˚ - 104˚F (0˚ - 40˚C)
Storage temperature	4˚ - 158˚F (-20˚ - 70˚C)
Weight	20 lbs (9.1 kg)
Shipping weight	25 lbs (11 kg)

Communication Server Lite

Model number	C4-COMMSERV-LITE
Networking	
Ethernet	Intel 10/100/1000 Mbps network adapter
USB port	2 USB 3.0 port—front 2 USB 3.0 port—rear
Power	
Power requirements	100-240VAC, 60/50 Hz
Power adapter	19V 65W wall-mount AC power adapter with multi-country plugs
Power consumption	Max: 65W, 222 BTUs/hour
Other	
Mounting	VESA-mount bracket and mounting hole support
Dimensions (H × W × D)	1.2″ (32 mm) × 4.3″ (111 mm) × 4.5″ (115 mm)
Operating temperature	32˚ - 104˚F (0˚ - 40˚C)
Storage temperature	4˚ - 158˚F (-20˚ - 70˚C)
Weight	2.1 lbs (.95 kg)
Shipping weight	2.2 lbs (.99 kg)

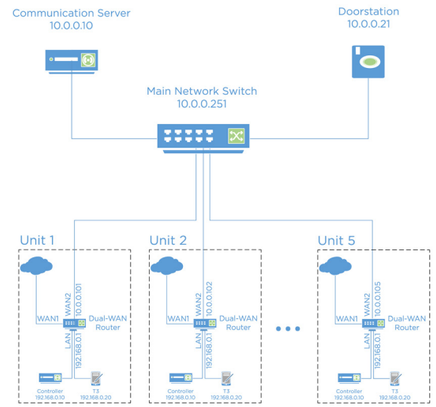
Requirements

- Communication Server (C4-COMMSERV-LITE/PRO) or controller to run as a communication server (CA-10 or EA-5)
- DS2 Doorstation
- Switch
- 1 dual-WAN router per unit
- 1 EA or CA-1 controller per unit
- At least 1 T3 touch screen per unit

Note: This document covers setup for Control4 systems running OS 3.1 or newer. For OS 3 and older, see the other versions of this document at ctrl4.co/commserver

Sample MDU network configuration

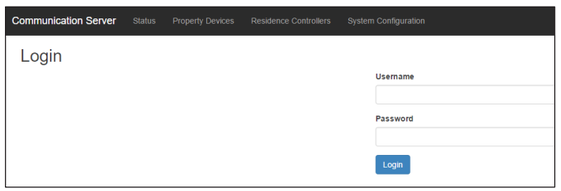
This graphic shows a sample MDU configuration. The setup guide follows this example, but you do not have to use the same IP scheme when configuring your MDU.



Configuring the Communication Server

Note: A EA-5 or CA-10 controller can also be used as a Communication Server. If you are not using a Communication Server Pro or Lite, skip to “Adding a Residence Controller”.

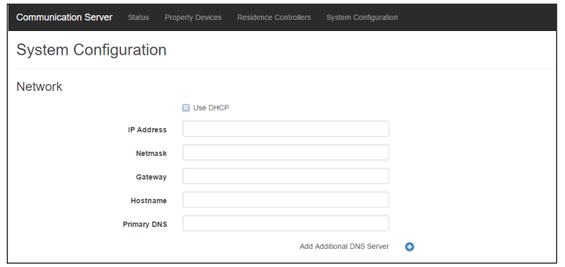
1. Connect the Communication Server to the main network switch.
2. Log in to the Communication Server by entering the **IP address** of the Communication Server into a web browser.



3. Enter the **username** and **password**. The default username is “admin”, and the default password is “admin”.

Network settings for the Communication Server

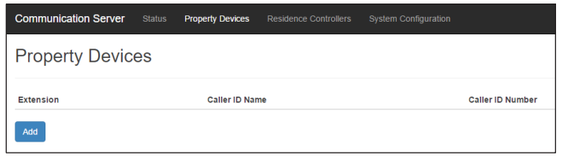
1. Click **System Configuration** in the menu.



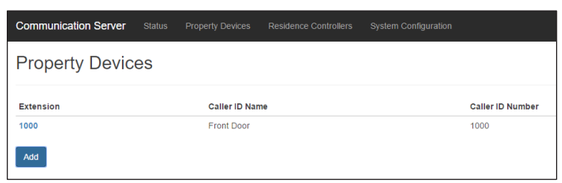
2. In the *Network* settings, de-select **Use DHCP**.
3. Enter **10.0.0.10** for the IP address.
4. Enter **255.255.255.0** for the netmask.
5. Leave the *Gateway* field blank, or enter the **IP address** for your gateway if you have one.
6. Enter **comm-server** for the hostname.
7. Click **Save** to save your changes and reboot the Communication Server.

Adding a doorstation

1. Click **Property Device** in the menu.
2. Click **Add**.



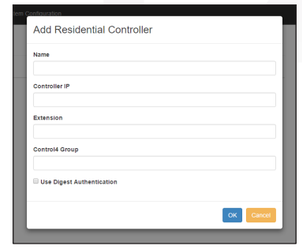
3. Enter **1000** for the extension.
4. Enter **test1234** for the password (or create your own password.)
5. Enter **Front Door** for the Caller ID name. This name can be changed to match the building layout, for example: Back Door or Lobby.
6. Enter **1000** for the Caller ID number.
7. Click **OK** to save your changes.



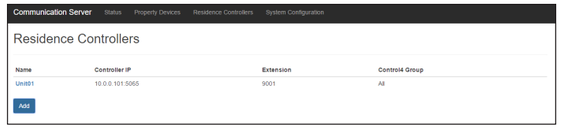
Adding a residence controller

Note: If you are using an EA-5 or CA-10 as the Communication Server, add residence controllers in the Communication agent > Communication Server tab.

1. Click **Residence Controllers** in the menu.
2. Click **Add**.



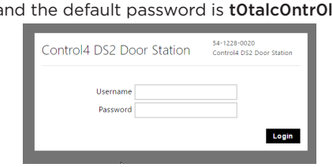
3. Enter **Unit01** (for example) or the name. Set this name as needed to describe the unit or tenant.
4. Enter **10.0.0.101:5082** for the controller IP. The network port is explained later in this document. The IP address here is the router’s WAN IP address in the residence.
5. Enter **9001** (or the number you want associated with the apartment) for the extension.
6. Enter **All** for the Control4 group. Alternatively, you can enter the name of an Intercom group defined in your project. The All group is configured by default in a Control4 project.
7. If you see the option for **Use Digest Authentication,** leave it de-selected.
8. Click **OK** to save your changes.



9. Repeat this step for each residence, adding the unique IP address (followed by port 5082) for the router in each residence.

Configure the DS2 doorstation

1. Connect the DS2 doorstation to the main network switch.
2. Log in to the DS2 doorstation by entering the **IP address** of the doorstation into a web browser.
3. Enter the **username** and **password**. The default username is **admin**, and the default password is **t0talcOntrOl4!**.

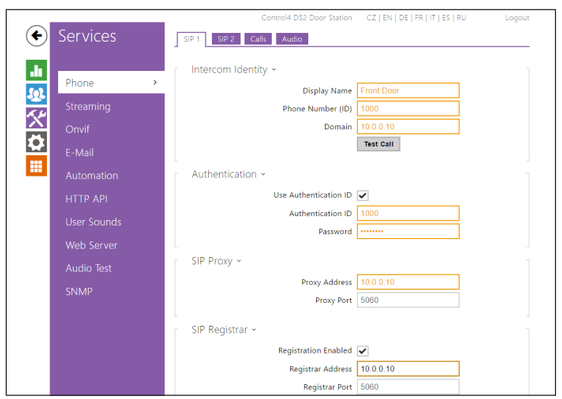


Account settings for the doorstation

1 Click on **Services** in the menu.

2 Click the **Phone** menu item.

3 Click the **SIP 1** tab.



4 Enter **Front Door** for the display name.

5 Enter **1000** for the phone number.

6 Enter **10.0.0.10** for the domain (the IP address of the Communication Server).

7 Leave **Use Authentication ID** selected.

8 Enter **1000** for the authentication ID.

9 Enter **test1234** for the password (or the password that you created in step 4 of *"Adding a doorstation"*.)

10 Enter **10.0.0.10** for the proxy address (the IP address of the Communication Server).

11 Leave **Registration Enabled** selected.

12 Enter **10.0.0.10** for the registrar address (or the IP address of the Communication Server).

13 Click **Apply**.

14 Click on **HTTP API**, then **Camera API**, and change security to **Unsecure** and **None**.

Note: To get an image preview on a call from the DS2, an alternate camera must be configured in the Control4 project. Add the 2N camera driver to the project to use as the alternate camera.

15 Click the **Back** button to go to the home page. The top-left section should now say account 1 is registered.

Directory settings for the doorstation

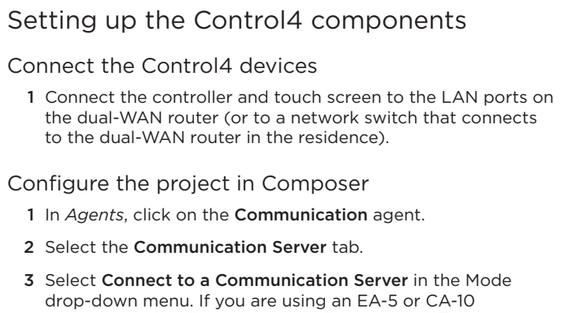
1 Click on **Directory** in the menu.

2 Click the **Users** menu item.

3 Click the **1** tab.

4 Select the option for **Position Enabled**.

5 Enter **Unit01** for the name (or the name you configured for the unit or apartment in step 3 of *Adding a residence controller"*.)



6 Enter **9001** for the phone number (same as Extension Number).

7 Click **Apply**.

Configure the router

1 Connect WAN1 to the residence Internet connection.

2 Connect WAN2 to the main network switch.

3 Configure the LAN with a 192.168.0.x / 255.255.255.0 subnet.

4 Configure the WAN2 connection with a static IP address of 10.0.0.101 and subnet of 255.255.255.0.

5 Enable port forwarding on WAN2. Forward ports 22, 5082, and 16384-32768 UDP to 192.168.0.10 (IP address of the controller running Director).

6 Optional: Instead of port forwarding to WAN2, add DMZ to the WAN2 connection.

Important! If the main network switch is connected to the internet, using a DMZ is not recommended.

Setting up the Control4 components

Connect the Control4 devices

1 Connect the controller and touch screen to the LAN ports on the dual-WAN router (or to a network switch that connects to the dual-WAN router in the residence).

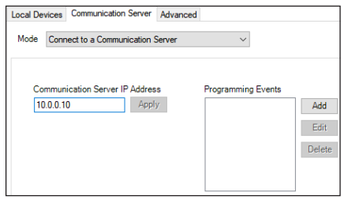
Configure the project in Composer

1 In *Agents*, click on the **Communication** agent.

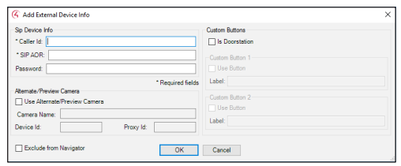
2 Select the **Communication Server** tab.

3 Select **Connect to a Communication Server** in the Mode drop-down menu. If you are using an EA-5 or CA-10 controller as the Communication Server, select **This Controller is a Communication Server**.

4 Enter **10.0.0.10** (IP address of Communication Server) in the Communication Server IP Address field, and click **Apply**.



5 In the **Advanced** tab, click **Add Device**.



6 Enter **Front Door** for the Caller ID (or the name from step 5 of *Adding a doorstation"*).

7 Enter **1000@10.0.0.10** for the AOR ([extension of the doorstation]@[IP address of Communication Server]).

8 Select the box next to **Is Doorstation**.

9 To enable custom buttons on the Intercom call screen, select the box next to **Use Button** and enter the name for the custom button in the *Label:* field.

10 Select checkbox for **Exclude from Navigator** to prevent calls to the front door.

11 To get a call preview with image/video on a call from the DS2, select **Use Alternate Camera**, and select a 2N camera driver configured to pull an image/video from the DS2.

12 **Refresh Navigators** to enable call preview from door station to show up.

13 Click **OK**.

Note: Do not add the DS2 driver into the Composer project. The driver is not needed for any communcation between the systems.

If you need use of the contact or relay, see Knowledgebase article #2006.

Network tests

Use these tests to verify your network setup and ensure communication between the Communication Server and the residence controller.

Testing with an SSH connection

From the LAN with the Communication Server and the main network switch:

1 SSH into the Communication Server with PuTTY. Login as: **control4** and the password is: **t0talc0ntr0l4!**

2 SSH to the residence controller by entering the command: ssh root@10.0.0.101 (IP of unit's router) and the password is: **t0talc0ntr0l4!**

If the connection is successfull, your port forwarding or DMZ is configured correctly.

Testing with Freeswitch

From the LAN with the Communication Server and the main network switch:

1 SSH into the Communication Server with PuTTY. Enter the IP address of the Communication Server and log in as: **control4** with the password: **t0talc0ntr0l4!**

2 From the command line, enter: **fs_cli**

3 Press the doorbell on the doorstation and you should see communication in the console window.

Tip: If no communication appears, then the DS2 may not be configured correctly. Check the doorstation configuration in Communication Server and the Services section on the DS2 again.

You can also run this test from the residence controller:

1 SSH into the controller with PuTTY.

2 From the command line, enter: **fs_cli**

3 Press the doorbell on the doorstation and you should see communication in the console window.

Tip: If no communication appears on the residence controller, make sure you can ping the Communication Server. If you can't, check the DMZ or port forwarding settings on the router.

If you can ping the Communication Server, check that the IP address of the Communication Server is correct in the Communication Server tab in Composer.

Regulatory/Safety information

To review regulatory information for your particular Control4 products, see the information located on the Control4 website at ctrl4.co/reg.

Warranty

Visit ctrl4.co/warranty for details.

More help

For the latest version of this document and to view additional materials, open the URL below or scan the QR code on a device that can view PDFs.

MOST RECENT VERSION

ctrl4.co/comserver-setup

MORE INFO ON COMM SERVER

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