

Partner Demo Guide for RUCKUS® Cloud

Your guide for a flawless demonstration of RUCKUS Cloud from CommScope

As a CommScope Partner, you already know the value of our RUCKUS® Cloud platform. It's a converged network management-as-a-service platform that enables your customers to deliver exceptional user experiences, simply. With it, IT teams can easily provision, manage, optimize, and troubleshoot a high-performance enterprise wired and wireless network via a single web dashboard or native mobile app.

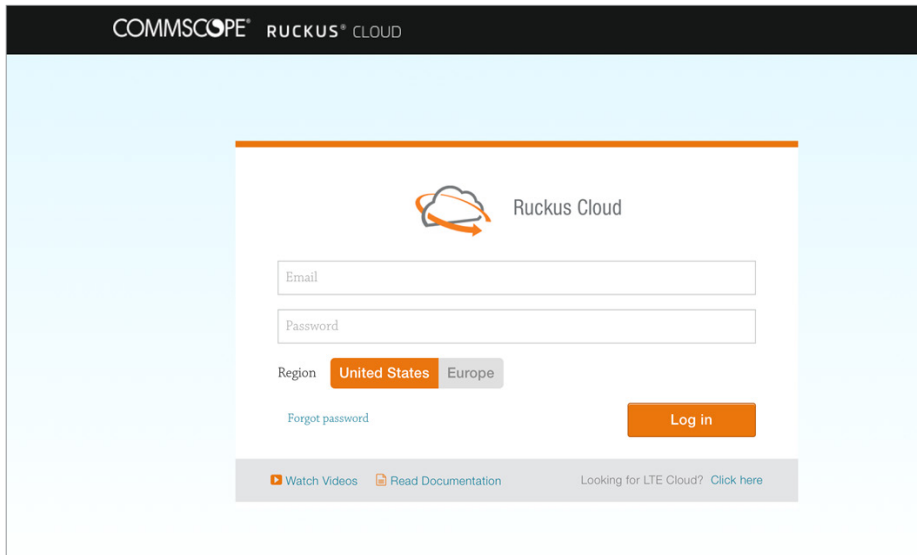
Now we want to help you demonstrate the value of RUCKUS Cloud to your customers. This cheat sheet provides an easy-to-use reference guide to help you successfully demo the platform to your customers. Here you'll find speaking points, screen shots and tips for a crisp and compelling presentation.

Should you have any questions about using this guide, we're just a call or click away. Contact your CommScope representative for assistance. Keeping you poised and ready for what's next—that's the value of partnering with CommScope.

RUCKUS® Cloud - Partner Demo Guide

WHAT YOU'RE DEMONSTRATING

INTRODUCTION



COMMScope® RUCKUS® CLOUD

Ruckus Cloud

Email

Password

Region **United States** Europe

[Forgot password](#)

Log in

[Watch Videos](#) [Read Documentation](#) Looking for LTE Cloud? [Click here](#)

SUGGESTED SPEAKING POINTS

Login to the demo account (<https://ruckus.cloud>)

Today, we're going to take a look under the hood of the CommScope RUCKUS Cloud platform.

It's a converged network management-as-a-service platform that enables you to deliver and manage exceptional user experiences across your network with incredible simplicity.

Specifically, I'm going to show you how easy it is to perform some day-to-day operational tasks using the RUCKUS Cloud web console.

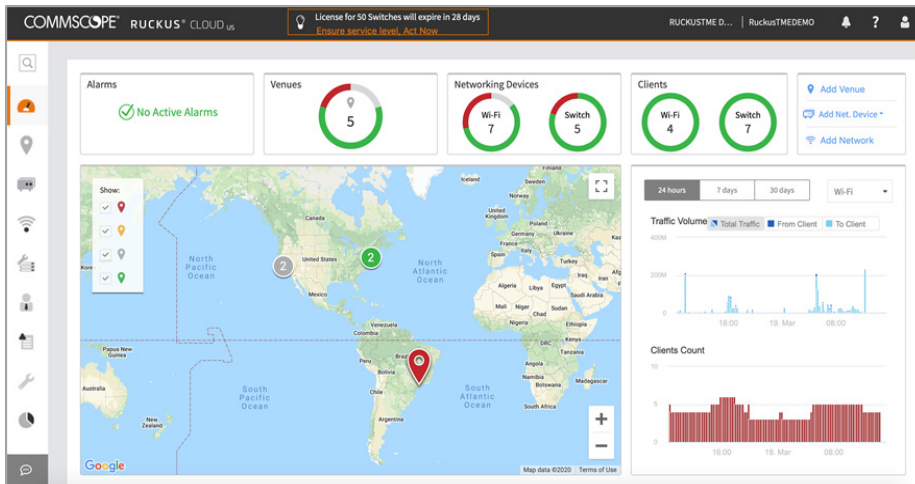
One thing you'll notice is how streamlined the platform is. The less time you need to spend managing your cloud environment, the more time you and your IT team have to focus on more business-critical projects.

I'll also show you some useful tools for promoting your business and gaining a better understanding of how your network is being used.

So, let's get started.

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DASHBOARD **



This is your RUCKUS Cloud user interface. From here, you can view your entire network through a single dashboard and assess the health of your entire network at a glance.

Point out the top and left-hand side navigation bar

On the left are your operational conditions. These are all color coded:

- green means all good
- grey means in setup phase
- orange means temporarily degraded
- red items require attention

Show system status for Alarms, Venues, APs, Switches and Clients

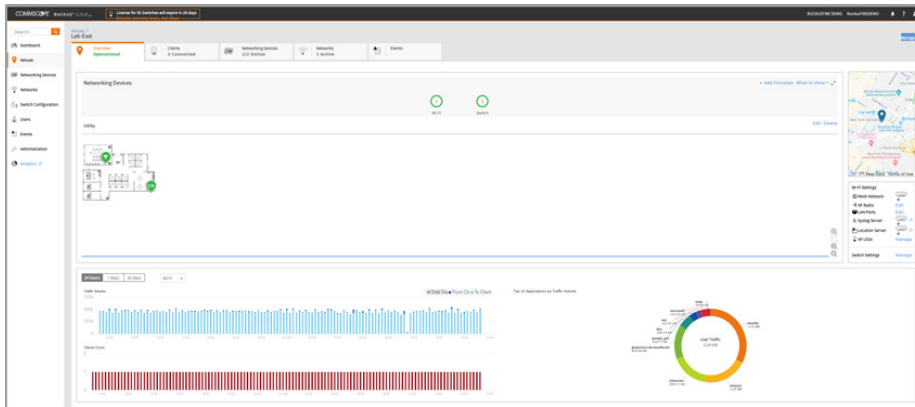
Along the top, you can see:

- Any active alarms
- All sites, or Venues, which also show up as green teardrops on the map
- The number of connected APs
- The number of connected Switches
- The number of connected clients on Wi-Fi and Switches

From this screen, you can perform common tasks and drill down for more in-depth information, which we'll do now.

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DRILL DOWN FOR MORE GRANULAR INFORMATION



Click on a Venue from the venue details page to view granular details

Say you want more information on your Venues. Select the one you want.

Now, you can see number of active networking devices, floor plans, placement of these devices

You can also check the Config settings for all devices in the venue, such as AP port settings, Syslog, Location server, Radio Settings etc.

THE WORKFLOW FOR BUILDING A NETWORK (WIRED+WIRELESS)

CREATE A VENUE

Venues (3)

0 selected

Search by name & description

All Cities

Venue	Description	City	Country	Networks	No. of APs	Switches
Lab-East		New York, New York	United States	1	1	2
Lab-West		Sunnyvale, California	United States	1	1	2
My-Venue	My-Venue	SUNNYVALE	United States	0	0	0

Now let's take a look at how you build a network in RUCKUS Cloud. Start by creating a venue.

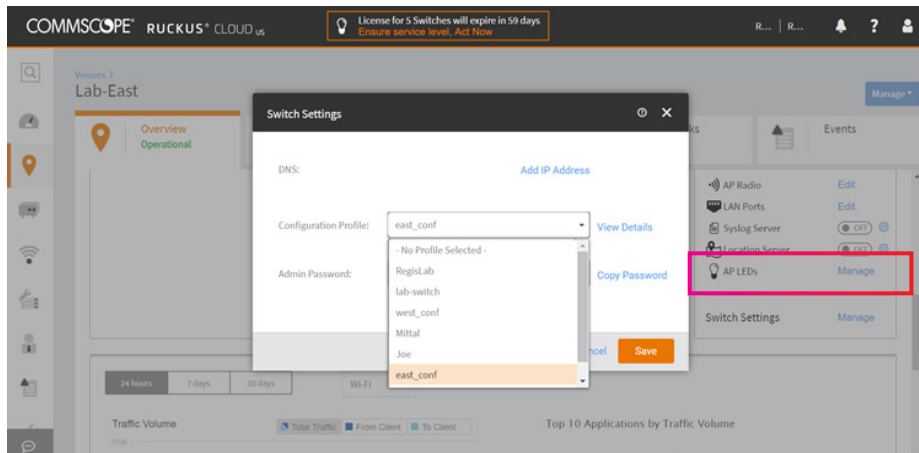
First, navigate to the Venues tab and click on **"Add Venue"**

Enter the information as shown.

Using the location icon, you can also drag a location, then accept the new address.

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SWITCH PROFILES



Now let's look at how to access and manage your Switch Configuration Profiles. These help you pre-define network settings. When the profiles are attached to a venue, any switch that joins the venue will automatically get the configuration without manual intervention.

Go to the left navigation panel and click on Switch Configuration

While in the Profiles page, click on Add Switch configuration profile on the upper right-hand side

Click through the tabs and add VLANs, ACLs and you have an option to attach this profile to one or more venues.

Note: Attaching the profile to a venue can be done through Venues → Select the required venue → On the right side click on manage next to "switch settings" → from the drop down select the profile.

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SETUP WIRELESS NETWORK

Add Network

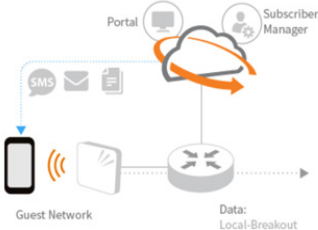
1 Network Details 2 Portal Type 3 Onboarding 4 Portal Web Page 5 Venues 6 Summary

* Network Name: Guest Pass
[Set different SSID](#)

Description:

* Network Type:

- ☐ Pre-Shared Key (PSK)
Require users to enter a passphrase (that you have defined for the network) to connect
- ☐ Enterprise AAA (802.1X)
Use 802.1X standard and WPA2 security protocols to authenticate users using an authentication server on the network
- ☐ Cloudpath
Use an authentication server and Cloudpath onboarding to authenticate users
- ☒ Captive portal
Users are authorized through a captive portal in various methods
- ☐ Open Network
Allow users to access the network without any



* Required field

[Cancel](#) [Next](#)

1 Network Details 2 PSK Settings 3 Venues 4 Summary

Select venues to activate this network [Activate on all venues](#) [Deactivate on all venues](#)

Venue	City	Country	Networks	No. of APs	Activate	APs	Radios
CommS...	Cidade Monç...	Brazil	1	3	<input type="checkbox"/>	OFF	
Lab-East	New York, N...	United States	1	1	<input type="checkbox"/>	OFF	
Lab-West	Sunnyvale, C...	United States	2	1/1/1	<input type="checkbox"/>	OFF	
My-Venue	, SUNNYVALE	United States	1	1	<input type="checkbox"/>	OFF	
Regis_L...	Yorktown He...	United States	1	1	<input type="checkbox"/>	OFF	

Want to set up a new wireless network? No problem.

Navigate to the **"Networks"** tab and click on **"Add Network"**

Enter the network name and select the type

Show the 5 different Network Types that are available

Five types are available.

From here, you can activate the new network for one or more venues

Or you can do this later using the **"Network → Manage"** tab.

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BRING UP A NEW SWITCH

Import Switches from File

Drop file to import, or [Browse](#)

- Download template or use file from latest import
- File format must be csv
- File may contain up to 50 entries
- File size cannot exceed 5 MB

[Cancel](#) [Import](#)

Networking Devices

WiFi

Switch

0 selected

[?](#) [i](#) All Status Categories All Venues All Models

Switch	Status	Model	Serial Number	MAC Address	IP Address
ICK7150-482P-C14U20	Operational	ICK7150-482P	FJN3221N012	60:9C:9F:EE:42:38	10.176.216.51
ICK7150-482P-C14U21	Operational	ICK7150-482P	FJN3221N013	60:9C:9F:EE:41:50	10.176.216.53
Rak_desk	Initializing	ICK7150-24F	FMH3213Q003		
Ravi-Desk-C08P	Operational	ICK7150-C08P	FMF3833Q0PL	C0:C5:20:B0:A7:55	172.16.113.142
Regis_Lab_7150B	Operational	ICK7150-C102P	FMD3833Q00M	C0:C5:20:B1:69:57	192.168.1.208

Now let's see how to bring a new switch online. First, navigate to **"Networking Devices → Switch"** tab

You can add one switch at a time by clicking on the **"Add Switch"** link.

To add multiple switches at once, click on **"Import from file"** and download the template. Fill in the details. Switch name, Venue and Serial number are mandatory.

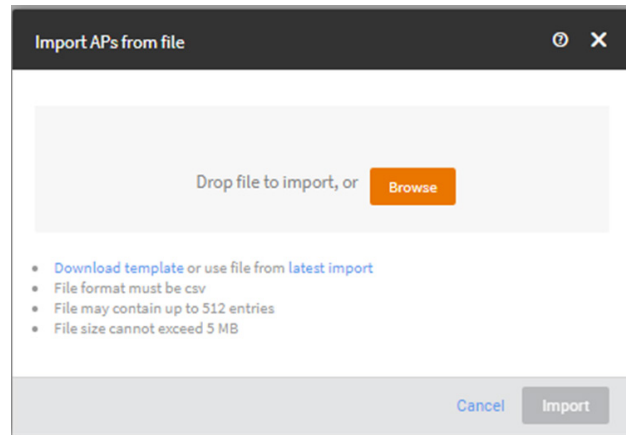
Once you've added one or more switches, they'll appear here in the switch tab. Initially, the status will be **"Never contacted cloud"**.

Connect the switch to the network and ensure it gets a valid DHCP and DNS address. Now the switch status changes to **"Initializing"**.

During initialization, the switch reboots and the venue's configuration is applied.

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BRING UP AN ACCESS POINT



Networking Devices **WiFi** Switch

APs (3) Host APs AP Groups

0 selected

Search for access points...

AP	Status	Model	IP Address	MAC Address	Venue	Switch
AP_east	Operational	R310	10.176.216.37	1C:B9:C4:08:0D:30	Lab-East	ICX7130-482P-C14/20
AP_Rak_dash	Never contacted cloud			S/N: 261809012166	My Venue	
AP_west	Operational	R310	10.176.216.36	1C:B9:C4:08:1C:F0	Lab-West	ICX7130-482P-C14/21

Networking Devices **WiFi** Switch

APs (3) Host APs AP Groups

0 selected

Search for access points...

AP	Status	Model	IP Address	MAC Address	Venue	Switch
AP_east	Operational	R310	10.176.216.37	1C:B9:C4:08:0D:30	Lab-East	ICX7130-482P-C14/20
AP_Rak_dash	Initializing			8C:FE:74:07:16:D0	My Venue	
AP_west	Operational	R310	10.176.216.36	1C:B9:C4:08:1C:F0	Lab-West	ICX7130-482P-C14/21

Networking Devices **WiFi** Switch

APs (3) Host APs AP Groups

0 selected

Search for access points...

AP	Status	Model	IP Address	MAC Address	Venue	Switch
AP_east	Operational	R310	10.176.216.37	1C:B9:C4:08:0D:30	Lab-East	ICX7130-482P-C14
AP_Rak_dash	Operational - applying configuration			8C:FE:74:07:16:D0	My Venue	
AP_west	Operational	R310	10.176.216.36	1C:B9:C4:08:1C:F0	Lab-West	ICX7130-482P-C14

Bringing up a new access point is essentially the same: navigate to **“Networking Devices → WiFi”** tab

Add one AP at a time by clicking on the **“Add AP”** link.

Or add multiple APs at once by clicking on **“Import from file”**. Download the template and fill in the details. AP name, Venue and Serial number are mandatory.

The new AP are now visible in the Wi-Fi tab. Initially, its status is listed as **“Never contacted cloud”**.

Connect the AP to the network and ensure it gets a valid DHCP and DNS address. The status should change to **“Initializing”**.

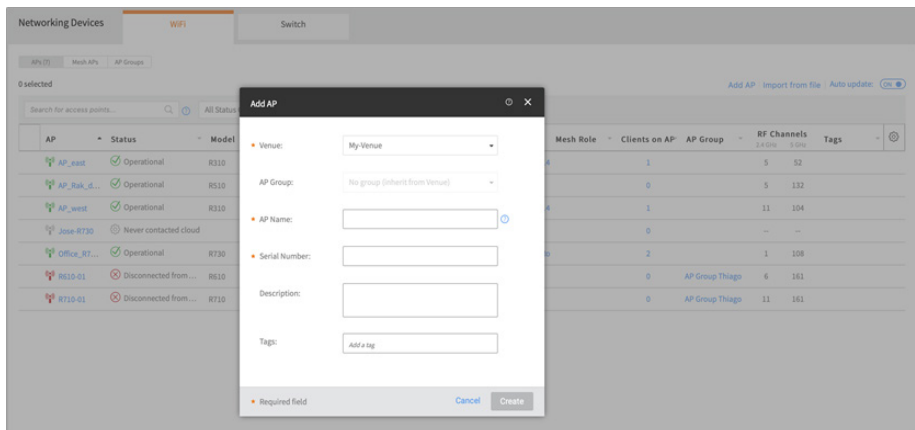
During initialization, the AP reboots and the venue’s configuration is attached to the AP.

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After bringing up a sample network, you can demo further by,

- Adding more APs and changing advanced wireless network settings
- Making switch-level config changes
- Troubleshooting
- Show reporting

GROWING YOUR WLAN **



So, the next topic is about scaling your network. And we really can't discuss scalability without mentioning how important the quality of your access points is.

For example, CommScope's RUCKUS APs support more clients per AP and offer better average throughput than competitive products. This means you're likely to deploy fewer APs as you grow, and save in AP costs, subscription fees and installation costs. Quality matters.

Okay, so let's say you're ready to grow your network by adding more APs. The simplified management of RUCKUS Cloud makes it easy.

Let's go back to the Detail Table, this time for APs. In the upper right-hand corner, click on the "Add AP".

The process here is highly automated. Just 3 mandatory fields to fill in—Venue, AP Name and Serial Number. Then click to automatically register the AP to the RUCKUS Cloud.

Show mobile app screen (if possible/applicable)

By the way, you can also add APs with the RUCKUS Cloud mobile app. Using your phone's camera, just scan the bar code on the back of the AP or the box.

Remember, adding APs might also mean adding more switches, using the simple process discussed earlier.

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CUSTOMIZING RADIO WI-FI SETTING

Radio Settings: AP_east

Custom radio settings View venue's settings Use Venue Settings

2.4 GHz ☒

Channel selection method: Background Scanning

Bandwidth: Auto

Tx Power adjustment: Full

Channel selection:

1 2 3 4 5 6 7 8 9 10 11

5 GHz ☒

Channel selection method: Background Scanning

Bandwidth: Auto

Tx Power adjustment: Full

Channel selection (Indoor AP):

36 40 44 48 52 56 60 64 100 104 108 112 116 120 124 128 132 136 140 144 148 152 156 160

Cancel Save

AP details page

On the left-hand navigation, click on a specific AP>Settings>Wi-Fi Radio>Edit

RUCKUS Cloud also enables you to easily customize your radio settings. Typically, these settings are the same for all radios within the same venue. But you can choose to edit individual AP settings to override Venue defaults.

For example, you can fine-tune your AP radio settings based on your users and environment, thereby optimizing performance.

Just select the RF bands (2.4 GHz /5GHz) you want to enable. For each band, you can customize:

- Channel Selection Method
- Background scan
- Bandwidth
- Tx Power Adjustment

For reference, the default configurations are channels 1, 6, and 11 on 2.4 GHz and all channels on the 5 GHz band.

Click on Save to save the setting.

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SETTING UP A CAPTIVE PORTAL

The screenshot shows the 'Add Network' wizard in the Ruckus Cloud interface. The progress bar at the top indicates six steps: 1. Network Details, 2. Portal Type (current step), 3. Onboarding, 4. Portal Web Page, 5. Venues, and 6. Summary. The main content area is titled 'Select the way users gain access to the network through the captive portal'. It lists five options with radio buttons: 'Click-Through' (Users just need to accept Terms and Conditions in order to access the network), 'Self Sign In' (selected; Users can sign in with their social media account or register their details in the portal and get personal password), 'Host Approval' (Users register their details in the portal including their host email - the host needs to approve the request), 'Guest Pass' (Users sign in with personal password which they need to get in advance from the network administration staff), and '3rd Party Captive Portal (WISPr)' (Users connect through a 3rd party captive portal, authenticated by a RADIUS server). To the right of the list is a diagram titled 'Self Sign In' showing a cloud icon connected to social media logos (Facebook, Google, LinkedIn, Twitter) and a 'Subscriber Manager' icon. Below the cloud, a 'Guest Network' icon (a smartphone) is connected via an 'SMS' icon to a 'Data: Local-Breakout' icon (a router).

Go to Dashboard and select Add Network in the upper right-hand corner

Note: You can also add a network from the navigation on the left-hand side.

Click through the screens of the wizard-guided process

Guest networks, including “captive portals” are very useful for delivering a secure, welcoming Wi-Fi experience for visitors and customers. With other WLAN management systems, setting up a guest network is not always straightforward.

Let me take you through how the Ruckus Cloud wizard helps you set up a secure, branded guest network in just a few clicks.

- Name the network
- Choose the type of guest network you want to set up (I’m selecting captive portal)
- Choose your user login preferences: you can receive login credentials via SMS or email. Or give users the ability to login using their social login credentials, such as Facebook, Google, LinkedIn or Twitter.
- You can also brand the captive portal by adding your display language, a custom image like your organization’s logo, a welcome greeting, and terms and conditions.
- The wizard builds a preview on the right-hand side as you work so you can approve your customized portal before it goes live.

Once the captive portal is up and running, you can update it whenever you need and just as easily.

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ADVANCED NETWORK SETTING

Advanced Network Settings

• VLAN ID:

Max number of devices: ⓘ

User Connection Settings

Allow the user to stay connected for Days ⓘ

Do not redirect to the portal when reconnecting within:
 Minutes since disconnection (Grace period) ⓘ

Load control

Max rate:

Max clients per radio: (1 to 512)

☒ Enable load balancing between 2.4GHz & 5GHz radios

☒ Enable load balancing between APs

Access control

Device Connection Policy: [Set up a policy](#)

Traffic Policy: [Set up a policy](#)

Wi-Fi Calling: ☐ OFF

[Reset to defaults](#) [Cancel](#) [OK](#)

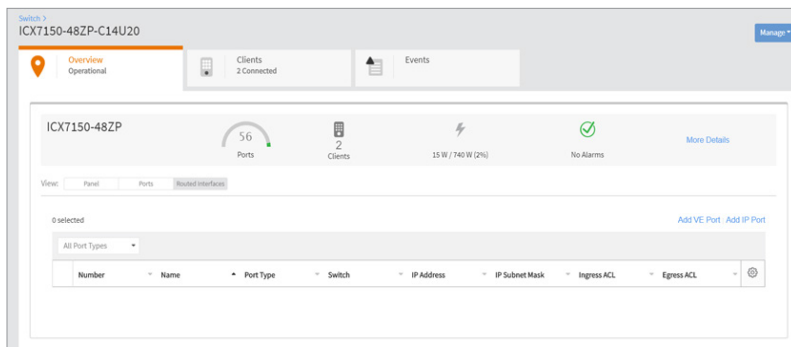
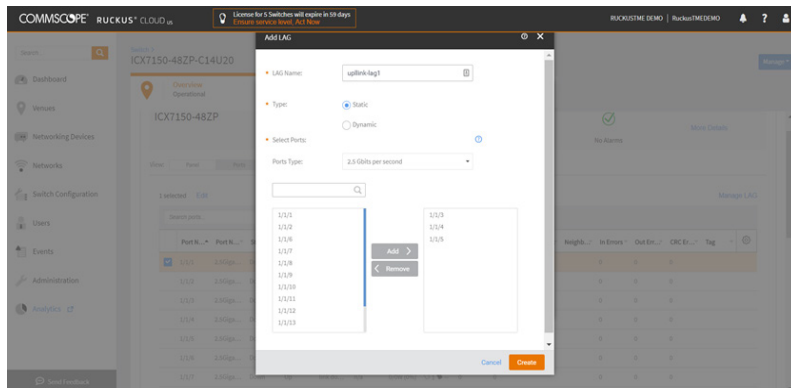
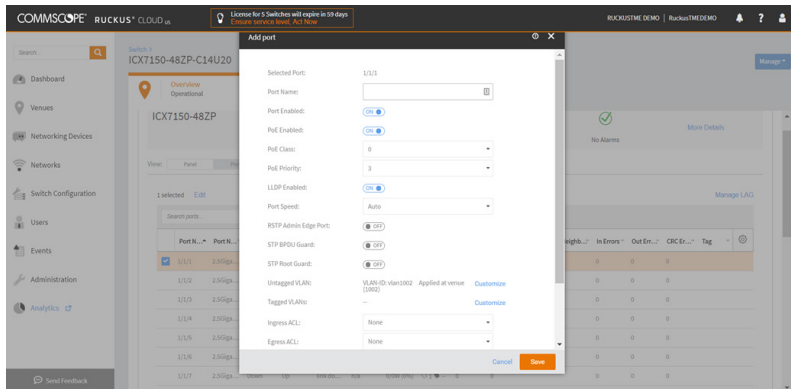
Want to go deeper into customizing and optimizing your WLAN resources? No problem. Go to: Advanced Network Settings.

Here you can:

- Set upload and download speeds for individual clients
- Prioritize a network to allocate bandwidth to priority users
- Set access control lists, like allow/block, on L2/L3/L4

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SWITCH CONFIGURATION



In addition to the configuration profiles, RUCKUS Cloud also gives you the option to manage configurations at the switch level. This includes switch port level settings like speed, PoE, managing link aggregation groups, creating new virtual LANs and routing.

To manage your switch settings, navigate to “Networking devices” → “Switches” → Select the required switch

On the top right-hand side, under the Manage drop down click on “Edit Switch”.

On the Switch page, click on Ports view, select one or more ports and make port level config changes.

These changes will also be reflected at the venue level. For example: If you need to add a new VLAN, click on the “customize” link.

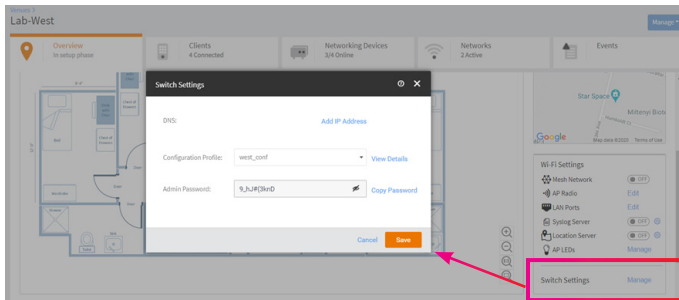
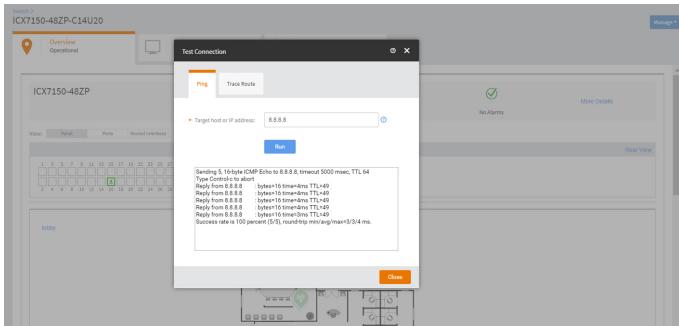
Add the VLAN and tag or untag ports and the you’ll see the change at the venue level.

The Switch Port view also enables you to form new link aggregation groups. Simply click on “Manage LAG” and follow the prompts.

Or, you can add additional switch ports. Click on Routed Interfaces and on the right side, you have the option to add a virtual Ethernet or an IP port. Just click and follow the prompts.

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SWITCH TROUBLESHOOTING



```
kowenSwitch1#show manager status
===== MGMT Agent State Info =====
Config Status: None      Operation Status: Enabled
State: CLOUD SSH CONNECTED  Prev State: CLOUD SSH CONNECTING Event: NONE

SWR List      : 34.70.176.200, 34.70.108.86
Active List   : 10.99.0.91, 34.70.108.86, 10.99.0.200, 34.70.176.200
DHCP Option 43 : No
DHCP Opt 43 List : None
Passive List  : None
Merged List   : 34.70.176.200, 34.70.108.86, 10.99.0.91, 10.99.0.200
Switch registrar host: 192.168.1.1
Switch registrar discovery retry count: 0
SZ IP Used    : 34.70.176.200
Query Status  :
Response Received

SSH Tunnel Status - :
Tunnel Status : Established
CLI IP/Port    : 127.255.255.253/6603
SNMP IP/Port   : 127.255.255.254/53898
Syslog IP/Port : 127.0.0.1/20514
HTTP SERVER IP/Port: 127.255.255.252/34681
HTTP CLIENT IP/Port: 127.0.0.1/5080

Time Status    : Not Running
```

RUCKUS Cloud also gives you powerful tools to help troubleshoot switch issues.

To check for connectivity from the switch to any IP, navigate to:

Networking Devices → switch → specific switch

From the dropdown, click on “Manage,” then select “Test Connection”. Enter the destination IP and run the test.

If the switch status shows as “Disconnected from cloud”, there may be a connection issue between the switch and the cloud application. To debug this issue, do the following

- Ping the Switch IP from a server within the same network as the switch.
- If the switch IP is reachable, open an SSH or console connection to the switch using the following credentials
 - Username is “admin”
 - The password is listed in the Switch settings in the venue where the switch was registered on the RUCKUS cloud
- After logging in, try to ping a device that’s connected to the switch from within the console. Also ping a website like <https://www.commscope.com/> to check connectivity to the internet.
- Run the following command on the switch: “show manager status” and check the output is as shown below.
- Find the switch CLI output. If the “show manager status” command is “CLOUD SSH disconnected” and the Tunnel status is something other than “Established”, then run the following commands on the switch CLI

Switch#manager disconnect

Switch#manager connect

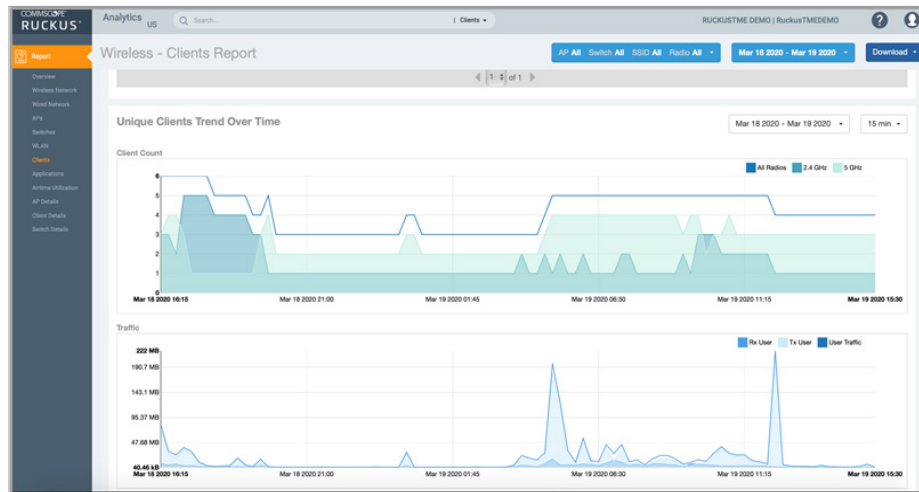
Or

Switch#manager reset

- This resets the switch control and tries to re-connect to the cloud.
- Next, ensure the switch can connect to the internet by pinging a website like <https://www.commscope.com/>.
- Finally, ensure cloud connectivity by checking the “show manager status” command output in the switch CLI as described earlier.

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REPORTING



Because RUCKUS Cloud includes RUCKUS Analytics, you have access to a wide variety of pre-packaged reports to help you understand how your network is being used. This can help with network planning and issue analysis.

Reports are available for a period of 12 months. Let's look at one.

Start by clicking on Clients.

The Clients report uses multiple widgets to give you an overview of your network. You can view activity based on all clients, top clients by traffic and other variables.

The Unique Clients Trend Over Time report helps you understand how capacity-hungry users are utilizing bandwidth.

All the charts can be filtered with different parameters. This can be very helpful when comparing metrics across venue or across different network types and across periods of time.

ADMIN DELEGATION

3rd Party Administrator			Invite 3rd Party Administrator
You can delegate access rights to a 3rd party administrator.			
Partner Name	Status	Action	
Ruckus TME VAR	Access granted	Revoke access	

Finally, I want to show you how you can invite your partner to manage or provide technical support as an administrator.

Go to left hand navigation panel and click on Administration and then the Administrator tab, Administration>Administrators

Click on Invite Ruckus Partner

From the left navigation panel, select Administration then the Administrator tab.

Click on Invite Ruckus Partner

Just type in your partner's email address and click OK. The system validates that the partner is an authorized Ruckus partner.

Note that you can revoke this access at any time.

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WRAP UP

Hopefully, you now have a better understanding of how RUCKUS Cloud from CommScope works.

It's an innovative and intuitive platform that enables you and your customers to provision, manage, optimize, and troubleshoot complex, high-performance enterprise networks with greater speed, ease and insight.

And it's all supported in a way that only CommScope can. So, you know you're prepared to help your customers handle whatever is next.

Speaking of "handling", why don't we open it up for your questions.

CommScope pushes the boundaries of communications technology with game-changing ideas and ground-breaking discoveries that spark profound human achievement. We collaborate with our customers and partners to design, create and build the world's most advanced networks. It is our passion and commitment to identify the next opportunity and realize a better tomorrow. Discover more at commscope.com



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