

Cloudpath[®] Enrollment System Release Notes for Release 5.12 R7 (5.12.5614)

Supporting Cloudpath Software Release 5.12R7

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Document History

Version	Summary of Changes	Publication Date
Cloudpath Enrollment System Release Notes 5.12.5614 Revision A	EnhancementsResolved issues	March 19, 2024

Contact Information, Resources, and Conventions

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Contacting RUCKUS Customer Services and Support

The Customer Services and Support (CSS) organization is available to provide assistance to customers with active warranties on their RUCKUS products, and customers and partners with active support contracts.

For product support information and details on contacting the Support Team, go directly to the RUCKUS Support Portal using https://support.ruckuswireless.com, or go to https://www.ruckusnetworks.com and select **Support**.

What Support Do I Need?

Technical issues are usually described in terms of priority (or severity). To determine if you need to call and open a case or access the self-service resources, use the following criteria:

- Priority 1 (P1)—Critical. Network or service is down and business is impacted. No known workaround. Go to the **Open a Case** section.
- Priority 2 (P2)—High. Network or service is impacted, but not down. Business impact may be high. Workaround may be available. Go to the **Open a Case** section.
- Priority 3 (P3)—Medium. Network or service is moderately impacted, but most business remains functional. Go to the Self-Service Resources section.
- Priority 4 (P4)—Low. Requests for information, product documentation, or product enhancements. Go to the Self-Service Resources section.

Open a Case

When your entire network is down (P1), or severely impacted (P2), call the appropriate telephone number listed below to get help:

- Continental United States: 1-855-782-5871
- Canada: 1-855-782-5871
- Europe, Middle East, Africa, Central and South America, and Asia Pacific, toll-free numbers are available at https://support.ruckuswireless.com/contact-us and Live Chat is also available.
- Worldwide toll number for our support organization. Phone charges will apply: +1-650-265-0903

We suggest that you keep a physical note of the appropriate support number in case you have an entire network outage.

Self-Service Resources

The RUCKUS Support Portal at https://support.ruckuswireless.com offers a number of tools to help you to research and resolve problems with your RUCKUS products, including:

- Technical Documentation—https://support.ruckuswireless.com/documents
- Community Forums—https://community.ruckuswireless.com
- Knowledge Base Articles—https://support.ruckuswireless.com/answers
- Software Downloads and Release Notes—https://support.ruckuswireless.com/#products_grid
- Security Bulletins—https://support.ruckuswireless.com/security

Using these resources will help you to resolve some issues, and will provide TAC with additional data from your troubleshooting analysis if you still require assistance through a support case or RMA. If you still require help, open and manage your case at https://support.ruckuswireless.com/case_management.

Document Feedback

RUCKUS is interested in improving its documentation and welcomes your comments and suggestions.

You can email your comments to RUCKUS at #Ruckus-Docs@commscope.com.

When contacting us, include the following information:

- Document title and release number
- Document part number (on the cover page)
- Page number (if appropriate)

For example:

- RUCKUS SmartZone Upgrade Guide, Release 5.0
- Part number: 800-71850-001 Rev A
- Page 7

RUCKUS Product Documentation Resources

Visit the RUCKUS website to locate related documentation for your product and additional RUCKUS resources.

Release Notes and other user documentation are available at https://support.ruckuswireless.com/documents. You can locate the documentation by product or perform a text search. Access to Release Notes requires an active support contract and a RUCKUS Support Portal user account. Other technical documentation content is available without logging in to the RUCKUS Support Portal.

White papers, data sheets, and other product documentation are available at https://www.ruckusnetworks.com.

Online Training Resources

To access a variety of online RUCKUS training modules, including free introductory courses to wireless networking essentials, site surveys, and products, visit the RUCKUS Training Portal at https://commscopeuniversity.myabsorb.com/. The registration is a two-step process described in this video. You create a CommScope account and then register for, and request access for, CommScope University.

Document Conventions

The following table lists the text conventions that are used throughout this guide.

TABLE 1 Text Conventions

Convention	Description	Example
monospace	Identifies command syntax examples	device(config)# interface ethernet 1/1/6
bold	User interface (UI) components such as screen or page names, keyboard keys, software buttons, and field names	On the Start menu, click All Programs .
italics	Publication titles	Refer to the RUCKUS Small Cell Release Notes for more information.

Notes, Cautions, and Safety Warnings

Notes, cautions, and warning statements may be used in this document. They are listed in the order of increasing severity of potential hazards.

NOTE

A NOTE provides a tip, guidance, or advice, emphasizes important information, or provides a reference to related information.

ATTENTION

An ATTENTION statement indicates some information that you must read before continuing with the current action or task.



CAUTION

A CAUTION statement alerts you to situations that can be potentially hazardous to you or cause damage to hardware, firmware, software, or data.



DANGER

A DANGER statement indicates conditions or situations that can be potentially lethal or extremely hazardous to you. Safety labels are also attached directly to products to warn of these conditions or situations.

Command Syntax Conventions

Bold and italic text identify command syntax components. Delimiters and operators define groupings of parameters and their logical relationships.

Convention	Description
bold text	Identifies command names, keywords, and command options.
italic text	Identifies a variable.
[]	Syntax components displayed within square brackets are optional.
	Default responses to system prompts are enclosed in square brackets.
{x y z}	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.
x y	A vertical bar separates mutually exclusive elements.
<>	Nonprinting characters, for example, passwords, are enclosed in angle brackets.
	Repeat the previous element, for example, member[member].
\	Indicates a "soft" line break in command examples. If a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash.

About This Document

The Cloudpath Enrollment System (ES) release notes contain information about new and updated features, system updates, bug fixes, and known issues.

For the latest versions of Cloudpath manuals, go to one of the following sites:

- https://support.ruckuswireless.com/
- https://docs.commscope.com

Enhancements

Following are enhancements for this release of the product.

- Newly created MAC Address Lists are now created with lowest priority sequence instead of highest priority sequence (as was done in previous releases).
- User interface for reordering the sequence of MAC Address Lists, RADIUS policies, and DPSK pools now supports direct input of the desired sequence number.
- In the Cloudpath Admin UI, Enrollment records for *Pending* sponsorship-based enrollments now includes the **Review** option in addition to **Approve** or **Deny**.
- SAML Authentication Server definitions now support Administrative login users and privilege levels by group.
- SAML authentication server definitions can now be used to authenticate sponsor users of the Cloudpath sponsorship portal web interface through the **Use For Sponsor Logins** option.
- Added new interface to display information about duplicate MAC registration list entries.
- Integration with Palo Alto Networks[®] firewalls now supports customizing the timeout value for User ID mappings.
- Behavior Change For MAC Registration based RADIUS requests, the logic has changed for determining list priority when multiple MAC
 Registration Lists qualify via SSID Regex Pattern and valid MAC Address match. Qualifying lists are sorted by SSID Regex pattern in
 character based descending order. List(s) at the beginning of this sort take priority. With this logic, specific SSID regex patterns take
 priority over match-all wildcard regex patterns. If a tie persists, the MAC Registration List containing the MAC Registration entry that was
 created most recently takes priority.
- General security enhancements including mitigation of CVE-2023-48795.

Resolved Issues

Following are resolved issues for this release of the product.

- Resolved an issue where Authentication Server definitions could not be removed.
- Resolved integration issues with LinkedIn® OAuth.
- Resolved the issues that occurred when duplicate MAC addresses were added to a MAC address list, which resulted in revoking all MAC address entries for the same address in all MAC address lists. You can have multiple valid entries for the same MAC address when duplicate entries are contained within lists that have a different SSID Regex pattern.
- Resolved the issue where spurious error messages were displayed during cannibalized upgrades.
- Resolved an issue that prevented property managers from changing tenant Wi-Fi passphrases when the permission for changing unit details was not enabled.

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How to Upgrade to Cloudpath Version 5.12.5614

The process you follow to upgrade to version 5.12.5614 depends on which version you are currently running.

Follow the steps in the applicable section(s).

Upgrading From Cloudpath Version 5.7.4732 or Later

If you are updating from Cloudpath Version 5.7.4732 or later, navigate to **Administration > System Updates**, then proceed to download and install the update.

Upgrading From Cloudpath Version 5.6.4652 or 5.6.4580

To update from Cloudpath Version 5.6.4652 or 5.6.4580, you can use one of two methods.

The first method is to upgrade to 5.9.5324, then to subsequently upgrade from 5.9.5324 to the current release. The incremental upgrade is time-consuming and only recommended if deploying a new VM/OVA is not possible in your infrastructure.

- Upgrade to 5.9.5324 by following the instructions in the Cloudpath Enrollment System Release Notes for Release 5.9.5324.
- 2. Upgrade to 5.12.5614 by following the instructions in section Upgrading From Cloudpath Version 5.7.4732 or Later.

The second method, which is a faster method but requires deploying a new OVA, is to do the following:

- 1. Deploy a new 5.12.5614 OVA.
- 2. Import the database from the existing system using the command-line configuration utility (klish command) of the new OVA system:

```
#maintenance cannibalize [oldsystemhostname]
```

3. After the import is finished, you can accept the prompt to have the system automatically move the IP address to the new system and shut down the old system.

For more information about how to perform a database import for upgrades, refer to the Cloudpath Enrollment System Upgrade Guide.

Upgrading From Cloudpath Version 5.5.4464

To update from Cloudpath Version 5.5.4464, you can use one of two methods.

The first method is to upgrade to 5.8.5012, then to subsequently upgrade from 5.8.5012 to the current release. The incremental upgrade is time-consuming and only recommended if deploying a new VM/OVA is not possible in your infrastructure.

- 1. Upgrade to 5.8.5012 by following the instructions in the Cloudpath Enrollment System Release Notes for Release 5.8.5012.
- 2. Upgrade to 5.12.5614 by following the instructions section Upgrading From Cloudpath Version 5.7.4732 or Later.

Upgrade Information

How to Upgrade to Cloudpath Version 5.12.5614

The second method, which is a faster method but requires deploying a new OVA, is to do the following:

- 1. Deploy a new 5.12.5614 OVA.
- 2. Import the database from the existing system using the command-line configuration utility (klish command) of the new OVA system:

```
#maintenance cannibalize [oldsystemhostname]
```

3. After the import is finished, you can accept the prompt to have the system automatically move the IP address to the new system and shut down the old system.

For more information about how to perform a database import for upgrades, refer to the Cloudpath Enrollment System Upgrade Guide.

Upgrading From Cloudpath Version in the Range 5.2.3585 to 5.4.4284

To update from versions in the range of 5.2.3585 to 5.4.4284, you can use one of two methods.

The first method is to incrementally upgrade to 5.7.4774, then to subsequently upgrade from 5.7.4774 to the current release. The incremental upgrade is time-consuming and only recommended if deploying a new VM/OVA is not possible in your infrastructure.

- 1. Upgrade to 5.7.4774 by following the instructions in the Cloudpath Enrollment System Release Notes for Release 5.7.4774.
- 2. Upgrade to 5.12.5614 by following the instructions section Upgrading From Cloudpath Version 5.7.4732 or Later.

The second method, which is a faster method but requires deploying a new OVA, is to do the following:

- 1. Deploy a new 5.12.5614 OVA.
- 2. Import the database from the existing system using the command-line configuration utility (klish command) of the new OVA system:

```
#maintenance cannibalize [oldsystemhostname]
```

3. After the import is finished, you can accept the prompt to have the system automatically move the IP address to the new system and shut down the old system.

For more information about how to perform a database import for upgrades, refer to the Cloudpath Enrollment System Upgrade Guide.

Upgrading From Cloudpath Version in the Range 5.0.3314 to 5.1.3483

To update from versions in the range of 5.0.3314 to 5.1.3483, you can use one of two methods.

The first method is to incrementally upgrade to a 5.2 series version, then to subsequently upgrade from 5.2 to the current release. The incremental upgrade is time-consuming and only recommended if deploying a new VM/OVA is not possible in your infrastructure.

- 1. Upgrade to any 5.2 series version by following the instructions in the Cloudpath Enrollment System Release Notes for Release 5.2.
- 2. Upgrade to 5.12.5614 by following the instructions in section Upgrading From Cloudpath Version in the Range 5.2.3585 to 5.4.4284.

The second method, which is a faster method but requires deploying a new OVA, is to do the following:

- 1. Deploy a new 5.12.5614 OVA.
- 2. Import the database from the existing system using the command-line configuration utility (klish command) of the new OVA system:

```
#maintenance cannibalize [oldsystemhostname]
```

3. After the import is finished, you can accept the prompt to have the system automatically move the IP address to the new system and shut down the old system.

For more information about how to perform a database import for upgrades, refer to the Cloudpath Enrollment System Upgrade Guide.

Upgrading From Cloudpath Version 5.0.3302 or Earlier

To update from version 5.0.3302 or earlier, you must perform the following steps:

- 1. Deploy a new 5.12.5614 OVA.
- 2. Import the database from the existing system using the command-line configuration utility (klish command) of the new OVA system:

#maintenance cannibalize [oldsystemhostname]

3. After the import is finished, you can accept the prompt to have the system automatically move the IP address to the new system and shut down the old system.

For more information about how to perform a database import for upgrades, refer to the Cloudpath Enrollment System Upgrade Guide.

Minimum Wizard Version

The Cloudpath server requires a minimum version of the wizard.

When performing a system update from the Admin UI or by using database import, the system automatically updates your Cloudpath wizard to the appropriate version.

Snapshots

When upgrading your system, all previous snapshots will remain in the system, will be labeled not compatible, and will not be selectable for active snapshots.

As part of the upgrade process, a new snapshot is created with the latest wizard build. This automatic snapshot creation allows the system to be fully updated and usable when the upgrade is finished.

Upgrading a Cluster to 5.12.5614

The process you follow to upgrade your cluster to version 5.12.5614 depends on which version you are currently running and on your infrastructure. Follow the steps in the applicable section(s).

Upgrading a Cluster Containing More than Two Nodes to 5.12.5614 from 5.7.4774 or Later

If you have a cluster of more than two nodes running 5.7.4774 or later, follow the steps below to upgrade to 5.12.5614:

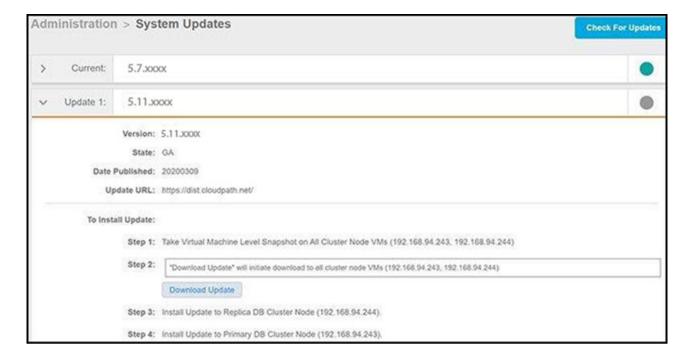
- 1. Remove all APP-only nodes from the cluster. Retain two DB nodes in the cluster. For instructions, refer to the *Cloudpath Enrollment System Replication Configuration Guide*, 5.7R2.
- 2. Individually upgrade all APP nodes to 5.12.5614. Refer to Upgrading From Cloudpath Version 5.7.4732 or Later on page 17 for guidance.
- 3. Upgrade the retained two-node DB cluster by following the steps in section Upgrading a Cluster Containing More than Two Nodes to 5.12.5614 from 5.7.4774 or Later.
- 4. Add all APP nodes back to into the cluster. For instructions, refer to the *Cloudpath Enrollment System Replication Configuration Guide*, 5.7R2.

Upgrading a Two-Node Cluster to 5.12.5614 from 5.7.4774 or Later

If your two-node cluster is running 5.7.4774 or later, follow the steps below to upgrade the cluster to 5.12.5614:

1. Using the Cloudpath UI on the primary node in your cluster, navigate to **Administration > System Updates**. A screen such as the following indicates that there is a newer build to which you can upgrade your cluster (the build number is xxxx only for the purpose of the illustration):

FIGURE 1 System Updates Screen for Upgrading a Cluster from 5.7.4774 (or later) to 5.12.5614



- 2. Follow the instructions on the screen under the "To Install Update:" section.
- 3. After the update completes, you should see the following screen:

FIGURE 2 Download Completed for Update



4. Continue by clicking Install Update to Replica DB Cluster Node.

5. After successful replication DB installation, you should see the following screen to indicate that the replica database cluster node installation was successful:

FIGURE 3 Replica DB Installation Successful



6. Continue by clicking Install Update to Primary DB Cluster Node.

The system will be unavailable for several minutes during the upgrade.

7. After a few minutes, you can log in to both nodes to verify that they have been successfully upgraded to the new build. Be sure to collapse all navigation bars on the left side of the UI, then check the lower-left corner of the UI for the release and build number.

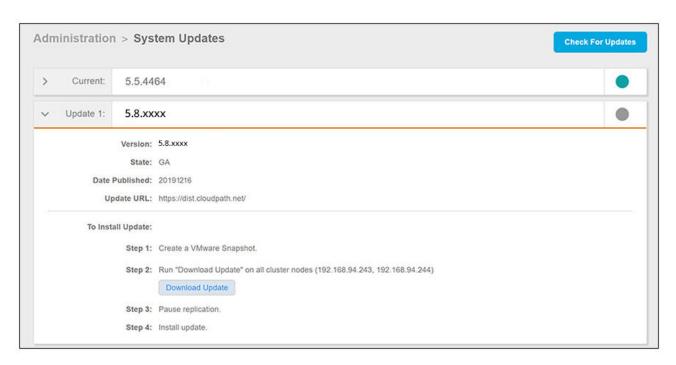
Upgrading a Cluster to 5.12.5614 from 5.6.4652, 5.6.4580, or 5.5.4464

If your cluster is running 5.6.4652 to 5.6.4580, you first must upgrade the cluster to 5.9.5324, then upgrade from 5.9.5324 to 5.12.5614.

If your cluster is running 5.5.4464, you first must upgrade the cluster to 5.8.5012, then upgrade from 5.8.5012 to 5.12.5614:

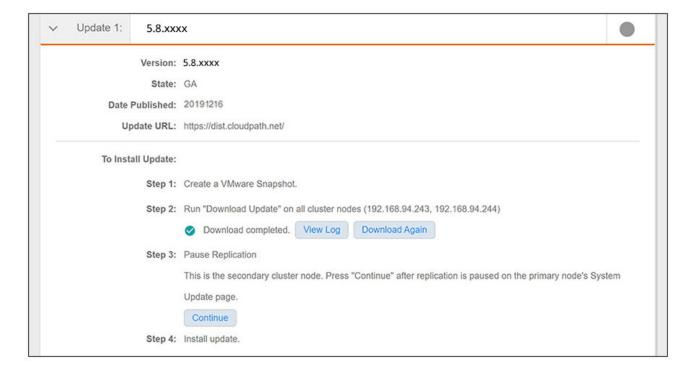
- 1. First, upgrade to either 5.9.5432 or 5.8.5012, depending on your current version:
 - a. Using the Cloudpath UI on the primary node in your cluster, navigate to **Administration > System Updates**. A screen such as the following indicates that there is a newer build to which you can upgrade your cluster (the build number is xxxx only for the purpose of the illustration):

FIGURE 4 System Updates Screen Example for Upgrading a Cluster from 5.5.4464 to 5.8.5012



- b. Create a VMWare Snapshot of the primary node.
- c. Click the **Download Update** button on the primary node.
- d. Using the Cloudpath UI on the secondary node in your cluster, navigate to Administration > System Updates.
- e. Create a VMWare Snapshot of the secondary node.
- f. Click the **Download Update** button on the secondary node.
- g. Return to the Cloudpath UI on the primary node and pause replication.
- h. On the secondary node, click **Continue** (see Step 3 in the following screen):

FIGURE 5 Secondary Node Updates Screen Before Pressing "Continue" Button



NOTE

Proceed with the cluster system updates in the following order: Secondary node *must be updated first*, then the primary node.

i. On the secondary node, click Install Update.

NOTE

The Admin UI on the secondary node is unavailable during the upgrade. However, you can use the **klish** commands (refer to the *Cloudpath Enrollment System Command Reference*) to determine when the secondary node reboot is complete. Then, proceed with the system update on the primary node.

j. On the primary node, click Install Update. The system will be unavailable for several minutes during the upgrade.

NOTE

Once the primary node completes the upgrade, both cluster nodes are accessible through the Admin UI. You can log in to the Admin UI on both systems to verify the system upgrades.

2. Next, upgrade from 5.8.5012 to 5.12.5614 by following the instructions in section Upgrading a Cluster Containing More than Two Nodes to 5.12.5614 from 5.7.4774 or Later.

Upgrading a Cluster to 5.12.5614 from 5.2 or Earlier

NOTE

As of release 5.5.4464, two-node clusters are supported.

Upgrade Information

Upgrading a Cluster to 5.12.5614

Two upgrade procedures are provided in this section to upgrade your cluster from 5.2 or earlier to 5.12.5584:

- Upgrading by deploying two new virtual machines. This is the recommended method, as long as you do not have constraints on the number of VMs in your environment.
- Upgrading without creating new virtual machines.

Upgrading a Cluster by deploying new VMs:

NOTE

When you first activate a new system, you are presented with a **System Setup** screen that contains the question: "Which Type Of Server is This?" For the node that will serve as your primary node in the cluster, select the **Standard Server (Default)** option. For the node that will serve as your secondary server, select the **Add On Server For Cluster** option.

- Deploy two new .OVAs as virtual appliances by following the instructions in either the Deploying Cloudpath as a Virtual Appliance on a
 VMware™ Server, Release 5.2 or Cloudpath Enrollment System Deploying Cloudpath as Virtual Appliance using Microsoft Hyper-V, Release
 5.2 document, as applicable.
- 2. Disable the replication service on all current cluster nodes by following the instructions in the *Setting Up Clustering With Cloudpath Servers* guide, 5.2 (or earlier).
- 3. Import the database from the old primary node to the new primary node using the command-line configuration utility (**klish** command) of the new OVA system:

#maintenance cannibalize [oldsystemhostname]

NOTE

For more information about how to perform a database import for upgrades, refer to the *Cloudpath Enrollment System Upgrade Guide*.

- 4. After the import is finished, you can accept the prompt to have the system automatically move the IP address to the new system and shut down the old system.
- 5. Configure the new secondary node to match the network settings of the old secondary node.
- 6. Once all the nodes have been upgraded, follow the steps in the applicable section of the *Cloudpath Enrollment System Replication Configuration Guide*, Version 5.6 or later, to recreate your cluster:

NOTE

Before you run the **replication setup** command, be sure you have activated both nodes.

- "Configuring an Active Standby Replication"
- "Configuring an Active Active Replication"

Upgrading a Cluster Without Deploying New VMs:

NOTE

This method is more complex and creates more system downtime than the preferred method described above where you deploy new VMs.

- 1. Disable the replication service on all current cluster nodes by following the instructions in the Setting Up Clustering With Cloudpath Servers guide, 5.2 (or earlier).
- 2. Upgrade each node to the new version using the Cloudpath UI **Administration > System Updates** page by following the instructions given on that page.

NOTE

If your current version is older than 5.2, you first need to upgrade all nodes to any 5.2.xxxx version by following the instructions in the *Cloudpath Enrollment System Release Notes for Release 5.2*.

- 3. Once all the nodes have been upgraded, follow the steps in the applicable section of the *Cloudpath Enrollment System Replication Configuration Guide*, Version 5.6 or later, to recreate your cluster:
 - "Configuring an Active Standby Replication"
 - "Configuring an Active Active Replication"

