

# Cloudpath Enrollment System Alexa Voucher Configuration Guide, 5.7

Supporting Cloudpath Software Release 5.7

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# Preface

## 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
<b>bold</b>	User interface (UI) components such as screen or page names, keyboard keys, software buttons, and field names	On the <b>Start</b> menu, click <b>All Programs</b> .
<i>italics</i>	Publication titles	Refer to the <i>Ruckus Small Cell Release Notes</i> 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
<b>bold text</b>	Identifies command names, keywords, and command options.
<i>italic text</i>	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, <i>member</i> [ <i>member</i> ...].
\	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.

## 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](mailto:#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.ruckuswireless.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://training.ruckuswireless.com>.

## 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.ruckuswireless.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.

## Introduction to Using Alexa to Receive Vouchers

- 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://forums.ruckuswireless.com/ruckuswireless/categories>
- Knowledge Base Articles—<https://support.ruckuswireless.com/answers>
- Software Downloads and Release Notes—[https://support.ruckuswireless.com/#products\\_grid](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](https://support.ruckuswireless.com/case_management).

# Introduction to Using Alexa to Receive Vouchers

Alexa can be used to provide vouchers to users enrolling onto the Cloudpath system.

Cloudpath enrollment workflows can accept vouchers generated by Alexa that are sent to users who have the Alexa application installed on their device. All Alexa has to do first is learn a new skill - the Cloudpath network admin skill - available in the Alexa store. Then, the Cloudpath network administrator can obtain a necessary binding code from Alexa to enable communication between the Amazon Cloud and the Cloudpath Enrollment System.

Alexa can then also generate vouchers that users attempting to enroll onto Cloudpath can request themselves.

To get the binding code from Alexa and set up a corresponding workflow, follow the steps in these two sections:

1. [Binding Alexa to the Cloudpath Enrollment System](#) on page 7
2. [Setting Up the Alexa Workflow](#) on page 8

To understand how the user experience works, refer to [User Experience With Alexa Vouchers](#) on page 10.

To see what other administrative functions you can perform, refer to [Administrative Information for Alexa Vouchers](#) on page 11.

## Binding Alexa to the Cloudpath Enrollment System

You can bind Alexa to your Cloudpath system after your Alexa applications adds (or "learns") the Cloudpath network skill.

Follow these steps to have Alexa learn the necessary skill and provide you with a binding code:

1. Locate the Cloudpath network admin application in the Alexa store and add it to your device. There are instructions on the internet about how to add skills to Alexa.
2. Once Alexa has added the Cloudpath network admin skill, speak these exact words into your Alexa device: "Alexa, ask network admin to get me on the network."
3. Alexa should then ask you if you would like to have a binding code generated. Answer "yes."
4. Alexa then says the binding code out loud. Be sure to take note of this code, as you will need to enter it into the Cloudpath UI.
5. In the Cloudpath UI, navigate to **Administration > System Services**.
6. Scroll to the bottom of that page to locate "Alexa," then click on the arrow to expand the entry:

**FIGURE 1** Alexa in System Services Before Binding Occurs



7. Click **Bind**.
8. In the ensuing screen, enter the binding code that Alexa gave to you, then click **Save**.

**FIGURE 2** Alexa Binding Code Window



### NOTE

Once you have used a binding code, you cannot use the same one again.

## Setting Up the Alexa Workflow

9. If Alexa successfully binds to the Cloudpath system, a message should appear in the top of the System Services page: "Stored Alexa binding data!"

If binding was not successful, some possible reasons are:

- Entering the code incorrectly. If you receive a message that indicates an invalid code was entered, try typing the code in again.
- Connectivity issues between the Cloudpath system and the Amazon Cloud. If you receive a message indicating this type of issue, you might want to check how your firewalls are set up.

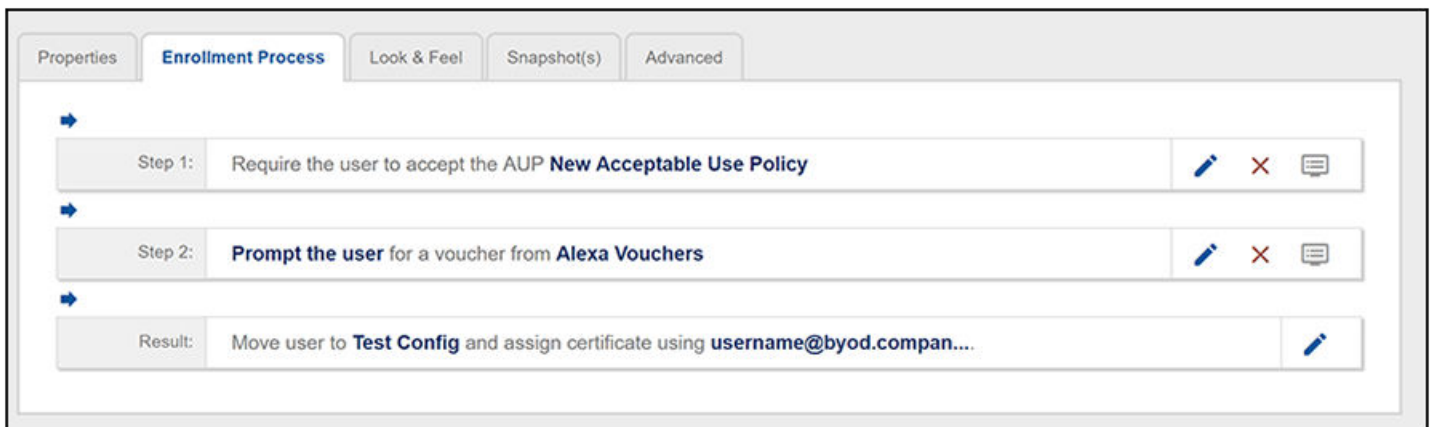
## Setting Up the Alexa Workflow

Once Alexa successfully binds to the Cloudpath system, you can set up a workflow that uses Alexa vouchers.

At this point, you create a workflow similar to any other workflow that asks the enrolling user to enter the voucher code they received. The only difference is that the voucher the user receives comes from their Alexa application as opposed to coming from the Cloudpath Enrollment System.

For example, a very simple workflow is shown below:

**FIGURE 3** Workflow With Alexa Voucher Step Included



The workflow shown above includes the step where vouchers are added (Step 2). When you are in the process of adding that step to your workflow, the screen you are presented with (see below) includes the question "Which Type of Step Should Be Added?" Click the "Authenticate using a voucher from a sponsor" button:



**FIGURE 4** Using the "Authenticate using a voucher from a sponsor" Option in Your Alexa Workflow

**Which Type Of Step Should Be Added?**

**Display an Acceptable Use Policy (AUP)**  
Displays a message to the user and requires that they signal their acceptance. This is normally used for an acceptable use policy (AUP) or end-user license agreement (EULA).

**Authenticate to a traditional authentication server**  
Prompts the user to authenticate to an Active Directory server, and LDAP server, RADIUS or a SAML server.

**Ask the user to name their device**  
Prompts the user to provide a name for the device, with the option to reuse or delete previously enrolled devices. This may suggest that old devices be removed or may limit the maximum number of concurrent devices.

**Ask the user about concurrent certificates**  
Prompts the user with information about previously issued certificates that are still valid. This may suggest that old certificates be removed or may limit the maximum number of concurrent certificates.

**Split users into different branches**  
Creates a branch or fork in the enrollment process. This can occur (1) visually by having the user make a selection or (2) it can occur automatically based on criteria associated with each option. For example, a user that selects "Guest" may be sent through a different process than a user that selects to enroll as an "Employee". Likewise, an Android device may be presented a different enrollment sequence than a Windows device.

**Authenticate to a third-party**  
Prompts the user to authenticate via a variety of third-party sources. This includes internal OAuth servers as well as public OAuth servers, such as Facebook, LinkedIn, and Google.

**Authenticate using a voucher from a sponsor**  
Prompts the user to enter a voucher previously received from a sponsor. The sponsor generates the voucher via the Sponsor Portal, typically before the user arrives onsite.

**Perform out-of-band verification**  
Sends the user a code via email or SMS to validate their identity.

**Request access from a sponsor online**  
Prompts the user for a sponsor's email address and then notifies the sponsor. The sponsor can accept or reject the request via the Sponsor Portal.

**Request access from a sponsor offline**  
Prompts the user to enter the required information for network access request approval from a sponsor. The sponsor can accept or reject the request and send a verification code to the user via user's Email/SMS.

**Register device for MAC-based authentication**  
Registers the MAC address of the device for MAC authentication by RADIUS. This is used for two primary use cases: (1) to authenticate the device on the current SSID via the WLAN captive portal or (2) to register a device, such as a gaming device, for a PSK-based SSID. In both cases, the MAC address will be captured and the device will be permitted access for a configurable period of time.

**Display a message**  
Displays a message to the user along with a single button to continue.

**Redirect the user**  
Redirects the user to a specified external URL. This may be used to authenticate the user to the captive portal of the onboarding SSID.

**Prompt the user for information**  
Displays a prompt screen with customizable data entry fields.

**Authenticate via a shared passphrase**  
Prompts the user for a passphrase and verifies it is correct. A shared passphrase is useful for controlling access to an enrollment process separate from, or in addition to, user credentials.

**Generate a Ruckus DPSK**  
Generates a DPSK, either via DPSK pools (for use in Ruckus WLAN controllers as "External DPSK") or via a Ruckus WLAN controller.

**Send a notification**  
Generates a notification about the enrollment. Notification types include email, SMS, REST API, syslog and more. This step is invisible to the end-user.

**Charge user for service**  
Directs the user to pay for service via a third party payment service. This includes PayPal.

Then, when configuring information in the ensuing screen, **you must** select "Alexa Vouchers" in the Voucher List section near the bottom of the screen, as shown in the example below:

FIGURE 5 "Alexa Vouchers" Checkbox in Voucher List

The screenshot shows a configuration interface for a workflow step. The breadcrumb navigation at the top reads 'Configuration > Workflows > Modify Step'. There are 'Cancel' and 'Save' buttons in the top right corner. The page is divided into several sections:

- Modify Voucher Prompt:** Contains 'Display Name' (set to 'Prompt for token from 'Alexa Vouchers list'') and 'Description' (empty).
- Webpage Display Information:** Contains 'Page Source' (set to 'Standard Template'), 'Title' (empty), 'Prompt Text' (set to 'Enter the voucher that you received.'), 'Voucher Description' (set to 'Voucher'), 'Default Voucher' (empty), 'Help Link Caption' (set to 'Need Assistance?'), 'Help Link URL' (empty), 'Voucher Case' (set to 'Do not change.'), 'Voucher Regex' (empty), and 'Continue Button Label' (set to 'Continue >').
- Error Messages:** Contains four error messages: 'Invalid By Regex Error' (Voucher is incorrectly formatted.), 'Already Used Error' (Voucher has already been used.), 'Expired Error' (Voucher has expired.), and 'Invalid Voucher Error' (Voucher invalid.).
- Voucher Lists:** Contains a 'Voucher Lists' section with two checkboxes: 'Alexa Vouchers' (checked) and 'New Voucher List' (unchecked).

For more information about using vouchers in a workflow, refer to the *Cloudpath Enrollment System Sponsored Guest Access Configuration Guide*.

## User Experience With Alexa Vouchers

Enrolling users can request a voucher from Alexa before or during the enrollment process.

The sequence of steps for the user obtaining the voucher is:

1. The user must speak these exact words to the Alexa device or application: "Alexa, ask network admin to get me on the network."
2. Alexa then asks for the user's phone number to which to send an "access code."

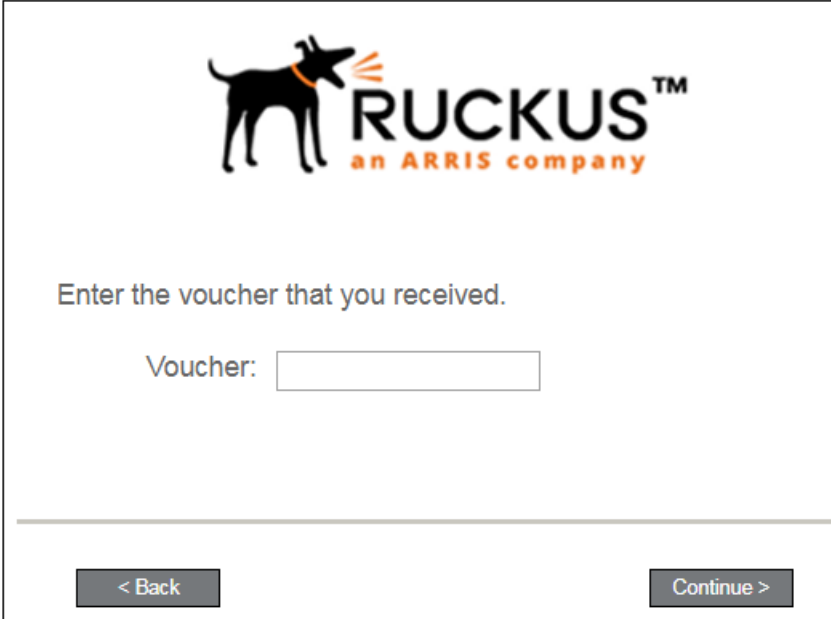
**NOTE**

If the user does not obtain the access code almost immediately, the user should repeat the step to obtain the code because Alexa may not have interpreted the phone number correctly.

3. The user speaks clearly to the Alexa device or application and provides his or her phone number, beginning with the country code.

During the enrollment process, when the user is presented with the following screen, he or she should enter the voucher code received from Alexa, then click **Continue**.

**FIGURE 6** Voucher Prompt the User Receives During Enrollment



The screenshot shows a mobile application interface for Ruckus. At the top, there is a logo featuring a black silhouette of a dog with an orange collar and three orange sound waves to its right. To the right of the dog is the text "RUCKUS™" in a bold, black, sans-serif font, with "an ARRIS company" in a smaller, orange, sans-serif font below it. Below the logo, the text "Enter the voucher that you received." is displayed in a grey, sans-serif font. Underneath this text is the label "Voucher:" followed by a white rectangular input field with a thin grey border. At the bottom of the screen, there are two grey buttons with white text: "< Back" on the left and "Continue >" on the right. A thin horizontal line is visible above the buttons.

The enrollment process continues. The secure network should appear in the user's WiFi list on their device so that they can connect to that network. You can refer to the Cloudpath Enrollment System user experience guide for your device for descriptions and screen shots about the remainder of the enrollment process.

## Administrative Information for Alexa Vouchers

There are many administrative functions available that relate to Alexa binding, vouchers, log files, and more.

### Binding, Unbinding, and Obtaining Log Files

Go to **Administration > System Services**, then scroll down to find Alexa and expand the information to see binding status:

FIGURE 7 Alexa Bind/Unbind and Log File Box

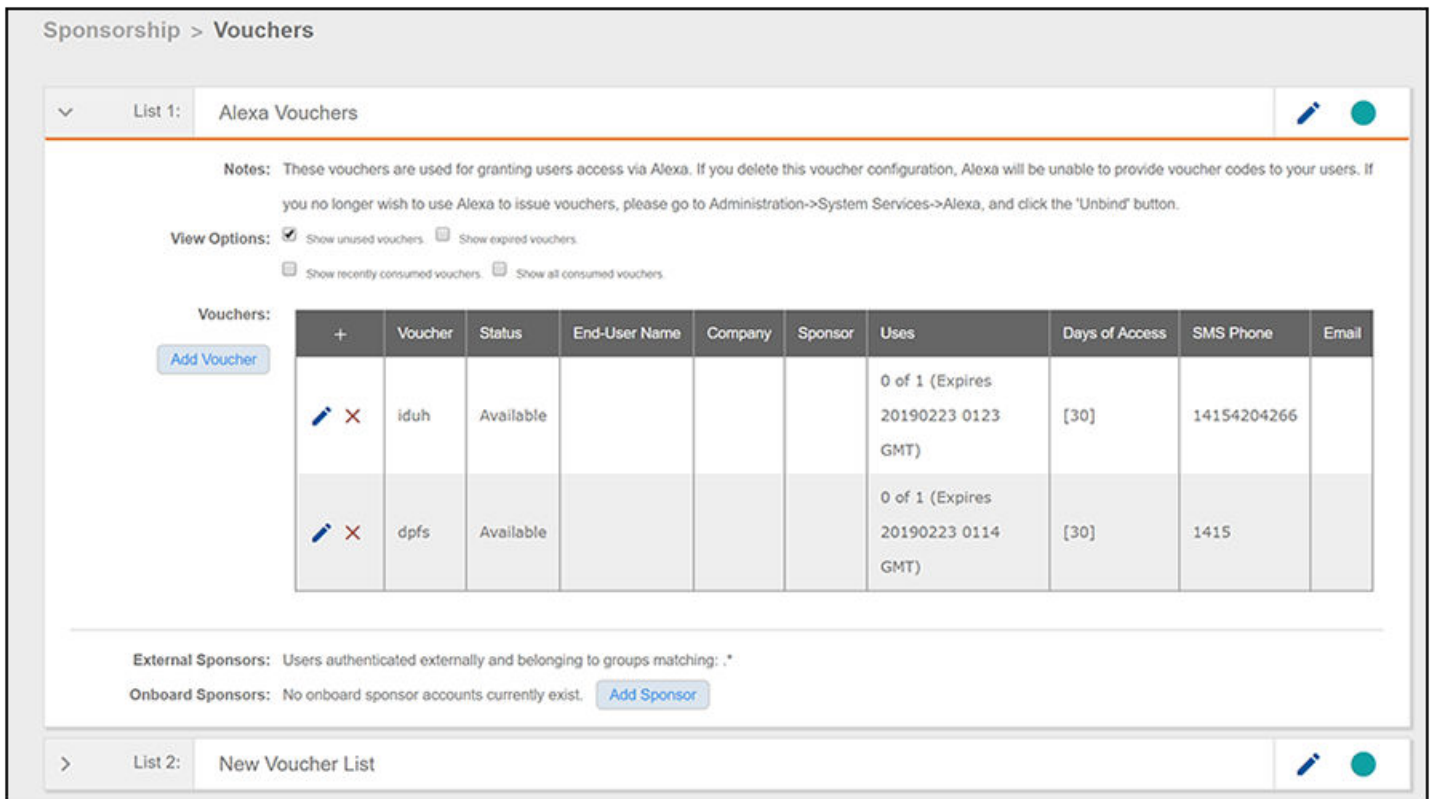


From here, you can bind or unbind Alexa, remove old binding data, or get Alexa log files. The "Remove old binding data" button can be useful when you want to start from scratch in case there is an issue with attempting to use the Bind function.

## Examining Alexa Vouchers

To view all Alexa vouchers that have been issued, navigate to **Sponsorship > Vouchers**, then expand the Alexa Vouchers list, as shown in the following example:

FIGURE 8 Alexa Voucher Information



You can use the checkboxes to display information about all vouchers, or just vouchers in various states of usage. You can also add a voucher here, and supply an onboarding user with the new voucher for enrollment.

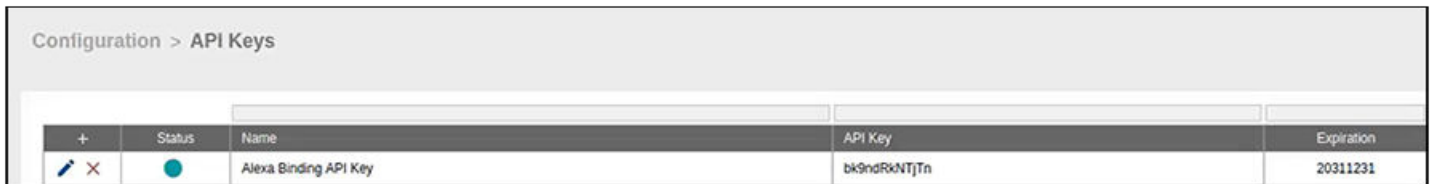
## Alexa API Key




Cloudpath creates an API key unique for Alexa. To locate this key, go to **Configuration > API Keys**, as shown in the figure below:

**NOTE**

**Do not change or remove the API key, or the Alexa functionality will cease to work.**

**FIGURE 9** Alexa API Binding Key



Configuration > API Keys				
	Status	Name	API Key	Expiration
 		Alexa Binding API Key	bk9ndRkNTjTn	20311231

## Notifications

Cloudpath creates a notification in the **Dashboard > Notifications** section about Alexa vouchers:

**FIGURE 10** Alexa Information in Notifications Area



Show: Notifications Events Scheduled Reports					
	Type	Address	Last Known Status	Timestamp	Email Subject
  	SMS	18018600707	SMS pending	20181130 1126 MST	

Results 1 - 1 of 1

