

# XpressConnect Enrollment System

## Setting Up Sponsored Guest Access Within the XpressConnect Enrollment System

Software Release 4.2

December 2015

**Summary:** This document describes the Enrollment System sponsorship process, how to configure sponsored guest access, how to set up sponsors, and how to customize the sponsorship portal. This document also provides information for sponsors; including how to log in to the sponsorship portal, how to create and manage vouchers, how to manage user devices with vouchers, and sponsor management.

**Document Type:** Configuration

**Audience:** Network Administrator



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# Setting Up Sponsored Guest Access Within the XpressConnect Enrollment System

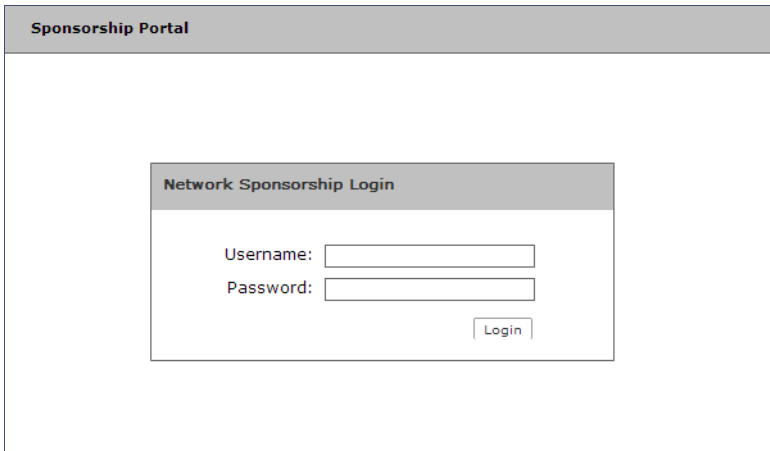
## Overview

Sponsored guest access allows authorized employees to grant network access to third-parties. It is most commonly used to provide secure wireless network access to corporate visitors and partners, and is typically time-restricted. By distributing authorization to employees, third-parties are able to quickly gain access without IT involvement and with appropriate traceability.

## Example Use Case - Generated Voucher Lists

During the setup of the XpressConnect Enrollment System, the network administrator specifies that visitors may gain network access if they are sponsored. The network administrator specifies that anyone belonging to the *Wireless Sponsors* group within Active Directory is allowed to sponsor a guest. Along with this, the network administrator specifies that access is valid for three days.

**FIGURE 1.** Enrollment System Sponsorship Login Page



The screenshot shows a web interface for the Sponsorship Portal. At the top, there is a header bar labeled "Sponsorship Portal". Below this, the main content area contains a "Network Sponsorship Login" form. The form has a title bar and two input fields: "Username:" and "Password:". Below the password field is a "Login" button.

Prior to the guest's arrival, the sponsor accesses the sponsorship portal. After authenticating with the Active Directory server, the sponsor can specify details about the guest user, including name, email address, and the reason for sponsorship. After doing so, a unique voucher is generated for the guest user.

A voucher is a one-time password (OTP) and is useful for controlling access to an enrollment process separate from, or in addition to, user credentials. The system may automatically email the guest user or the sponsor can communicate the voucher manually.

Upon arrival, the guest user accesses the onboarding wireless network. The guest user is redirected to the XpressConnect Enrollment System. The guest user completes the workflow specified by the network administrator, including specifying the voucher. Once authorized, the guest user is issued a certificate and moved to the secure wireless network.

## Example Use Case - Request Network Access

While the *Generated Vouchers* use case requires the sponsor to pre-sponsor a user by generating a voucher ahead of time, the *Request Network Access* use case allows the user to enter their information on a webpage during the enrollment process, and request access. The user is held in a pending state until the sponsor accepts or rejects the request. The request may go to a static user (like a receptionist), to a sponsor selected from a list by the user, or to a sponsor entered by the user.

In this use case, the Enrollment System is set up with a Request Access workflow plug-in, which allows the on-demand access to occur. This enrollment step allows the user to request access to the network as part of the enrollment process. It is not necessary to create a voucher list ahead of time.

FIGURE 2. Review Access Request

**Review Access Request**

The access request was submitted with the following information:

**Status:** Awaiting approval.  
**Name:** Test User  
**Company:** Cloudpath  
**Email:**  
**User's Reason:** Test  
**Access Days (Approval Only):**

**Reason**

**Reason For Admins:**

**Reason For User:**

Upon arrival, the guest user accesses the onboarding wireless network. The guest user is redirected to the XpressConnect Enrollment System. The guest user completes the workflow

specified by the network administrator, and when the guest encounters the request access step, they fill in the required information and this information is sent to an approved sponsor. The sponsor can approve the access request, which allows the user to continue with the enrollment process. Once authorized, the guest user is issued a certificate and moved to the secure wireless network.

## Sponsorship Process

### Sponsor Experience - Generated Voucher Lists

An administrator gives an employee permission to sponsor guest users by placing them in a Sponsor group in the corporate authentication server (AD or LDAP). When a visitor arrives, the employee sponsor checks the visitor in. To provide a guest user with network access, the sponsor must log in to the *Sponsorship Portal* to create a voucher for the guest user.

Sponsors can access the Sponsorship Login Portal from:

- ES Admin UI *Deployment Locations* page (Figure 3), or *Sponsor Portal* button.
- ES Admin UI *Voucher Lists* page (Figure 23).
- The Sponsorship URL `https://<SponsorshipLoginIPAddress>/portal/sponsor/`.

FIGURE 3. Link to Sponsorship Login Page - Deployment Locations Page

**Deployment Locations**

A deployment location represents a URL to where a workflow is deployed. Multiple locations may be used for a variety of reasons. For example, a production configuration may be deployed to /production, and a test configuration may be deployed to /test. Add Location

Location 1: Production ✎ ✕ ✓

Enrollment Portal: <https://anna44.cloudpath.net/>  
or <https://anna44.cloudpath.net/enroll/AnnaTest/Production/> Change

WLAN Redirect URL: <https://anna44.cloudpath.net/enroll/AnnaTest/Production/redirect>

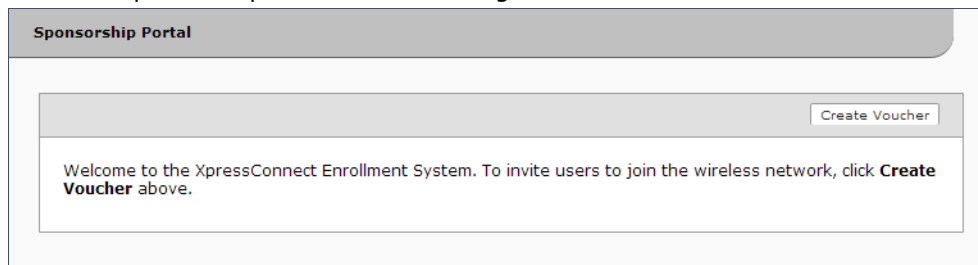
**Sponsorship Portal:** </portal/sponsor/AnnaTest/>

Go To: User Experience Sponsor Portal Get QR Code Explains Chrome Setup

**Snapshots:** Create New 🔍 ✕ 🔄

Name	Notes	Configuration	Version	Timestamp
Snapshot 4		Demo Data	5.0.191	20150513 1043 MDT

After sponsor credentials are checked against the corporate authentication server, the sponsorship portal *Welcome* page appears.

**FIGURE 4.** Sponsorship Portal Welcome Page

The sponsor clicks the *Create Voucher* button to create a voucher for the guest user.

**FIGURE 5.** Create Voucher for Guest User

**Create Voucher** Save

Name:

Company:

Email:

Email Voucher To User?

Phone Number:  United State

SMS Voucher To User?

Redeem Voucher By:

Reason:

---

**Note >>**

The entry fields displayed on the *Create Voucher* page are configured when you create the voucher list. See Adding a Voucher Prompt to the Enrollment Workflow.

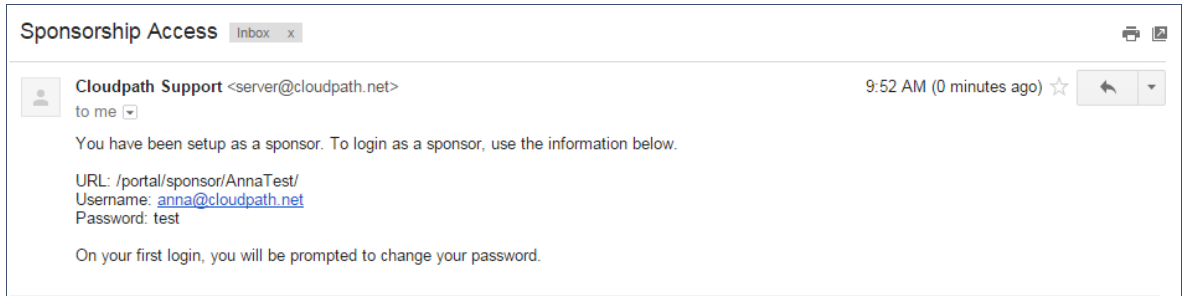
---

The sponsorship portal can be used to create vouchers, view voucher usage, and with the correct permissions, manage vouchers and sponsors. When finished, the sponsor must log out of the sponsorship portal.

## Sponsor Experience - Request Network Access

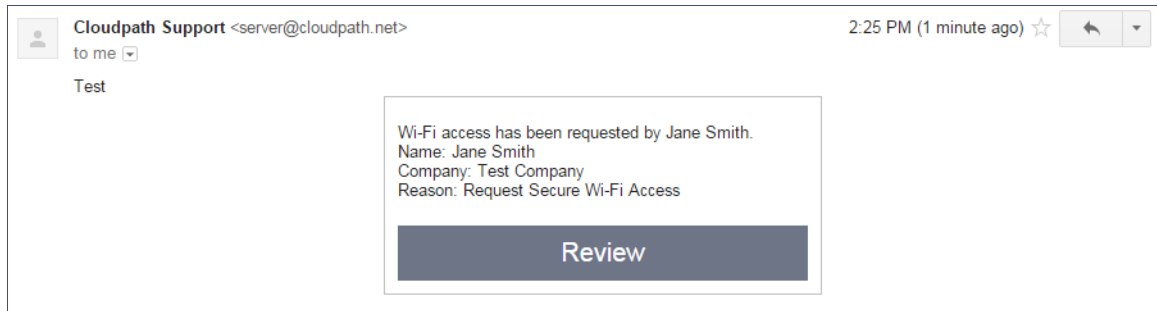
A sponsor receives an email notification that indicates they are approved for granting network access to guest users.

FIGURE 6. Email to sponsor



The sponsor receives and email from the guest user requesting access. This messaging is configurable.

FIGURE 7. Email from System



The sponsor clicks the Review button to review the request and respond to the user.

FIGURE 8. Sponsor Approves Guest Access

The screenshot shows a web interface titled "Review Access Request". At the top right, there are two buttons: "Reject" and "Approve". A mouse cursor is hovering over the "Approve" button. Below the buttons, the text reads: "The access request was submitted with the following information:"

**Status:** Awaiting approval.  
**Name:** Jane Smith  
**Company:** Test Company  
**Email:**

**User's Reason:** Request Secure Wi-Fi Access

**Access Days (Approval Only):**

**Reason**

**Reason For Admins:**

**Reason For User:** You have been granted access to our Secure Network.

Sponsor receives confirmation that access has been accepted.

FIGURE 9. Access Accepted Confirmation

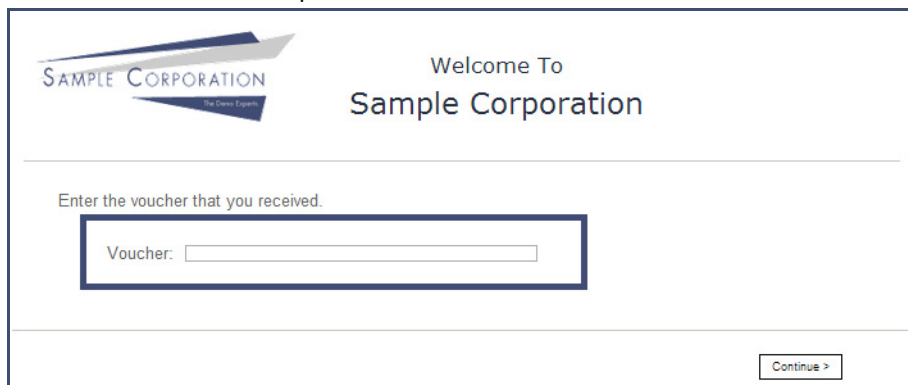
The screenshot shows a web interface titled "Test Sponsorship Portal". Below the title bar, there is a section titled "Request Result" with a light gray background. The text inside this section reads: "Access request has been accepted."

## Guest User Experience

### Guest User Experience - Generated Voucher Lists

The guest user receives the voucher from the sponsor (by email, SMS, or manual delivery), accesses the onboarding wireless network, and is redirected to the XpressConnect Enrollment System. As part of the enrollment process, the visitor is prompted for the voucher code.



**FIGURE 10.** Voucher Prompt for Guest User

The screenshot shows a web interface for 'SAMPLE CORPORATION' with the tagline 'The Cloud Experts'. The main heading is 'Welcome To Sample Corporation'. Below this, a prompt asks the user to 'Enter the voucher that you received.' There is a text input field labeled 'Voucher:' which is highlighted with a blue border. At the bottom right of the form is a 'Continue >' button.

The guest user enters the voucher code provided by the sponsor and continues with the enrollment process to gain access to the secure network.

### **Guest User Experience - Request Network Access**

The guest user comes within range of the onboarding SSID. If you have a captive portal configured, they are redirected to the XpressConnect Enrollment System to enroll their device for the secure SSID. If no captive portal is configured, an enrollment URL is provided to them.

As part of the enrollment process, the guest is prompted for to request access to the secure network. The guest must wait for approval before they can continue.

FIGURE 11. Enrollment Process Request Access Form

[Start Over](#) Powered by Cloudpath Networks

Your Logo Here

### Request Network Access

Complete the information below to request network access. Once approved, you will be granted network access.

Name:

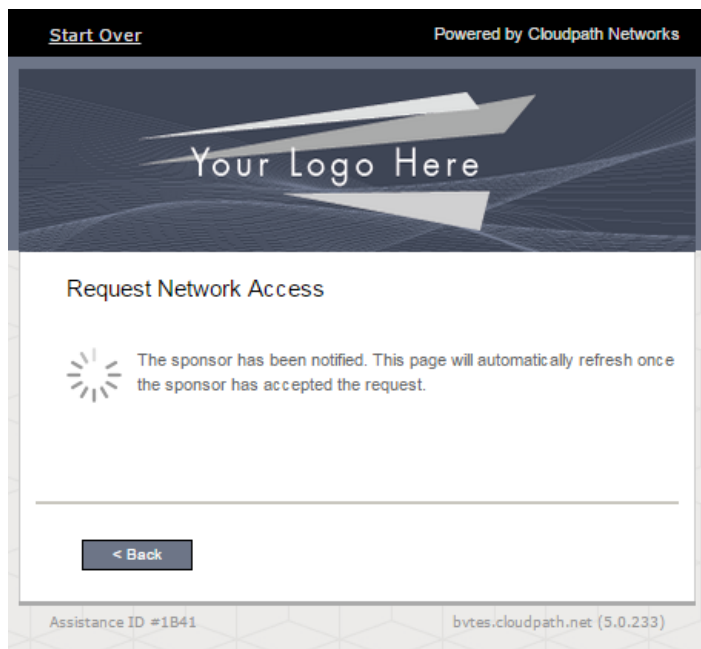
Company:

Reason:

Assistance ID #9D81      anna244.cloudpath.net (5.0.233)

The user enters the required information. The list of required fields is configurable.

FIGURE 12. Pending Access Request



If the access is approved, the user continues with the enrollment process. The next screen the users sees depends on how the network

## Prerequisites

### Authentication Server Setup

To configure the sponsored access feature, the network administrator must set up a sponsor group in the Corporate AD or LDAP server for employees that can be authorized as sponsors. For example, create a group named *Manager* or *Wireless Sponsors*.

This group name is used in the Enrollment System when configuring which users are able to log into the sponsorship portal and sponsor guest users.

## Configuring the Enrollment System

This section describes how to configure the Active Directory or LDAP server for sponsorship, add a voucher or request for access prompt to the enrollment workflow, and how to add vouchers and sponsors to the voucher list.

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**Note >>**

Administrators configure sponsors, the sponsorship portal, vouchers, and voucher lists from the Enrollment System Administrator user interface. Sponsors invite guest users and create vouchers from the sponsorship portal. See Sponsorship Portal on page 23 for more information.

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## **Authentication Server Configuration**

You must set up your Active Directory or LDAP server to support sponsorship.

### **How to Configure the Authentication Server for Sponsorship**

1. From the ES Admin UI, go to *Administration > Advanced > Authentication Servers*.
2. On the *Authentication Servers* page, edit the AD or LDAP server you will be using to authenticate sponsors and guest users.

FIGURE 13. Configure AD Server for Sponsorship Logins

**Add Authentication Server** < Back Next >

**Connect to Active Directory**  
Select this option to enable end-users to authenticate via Active Directory.

**Default AD Domain:** test.sample.local

**AD Host:** ldaps://192.168.4.2 \*

**AD DN:** dc=test,dc=sample,dc=local \*

**AD Username Attribute:** SAM Account Name

**Verify Account Status On Each Authentication**

**Perform Status Check:**

**Additional Logins**

**Use For Admin Logins:**

**Use For Sponsor Logins:**

**Test Authentication**

**Run Authentication Test?:**

**Connect to LDAP**  
Select this option to enable end-users to authenticate via LDAP (or LDAPs).

**Connect to RADIUS**  
Select this option to enable end-users to authenticate via RADIUS using PAP.

3. Select the *User For Sponsor Logins* box, to allow sponsors to log into the sponsorship portal using credentials from this authentication server.

## Adding a Voucher Prompt to the Enrollment Workflow

This section describes how to add a step in the enrollment workflow to prompt a guest user for a voucher or one-time password. Use this configuration if you plan to use generated voucher lists.

### How to Add a Voucher Prompt for Guest Users in the Workflow

1. From the ES Admin UI, go to *Configuration > Enrollment* and create an enrollment workflow for guest users.

## 2. Add an enrollment step that prompts guest users to *Authenticate via a voucher*.

FIGURE 14. Create Voucher Enrollment Step

What type of step should be added to the workflow? Cancel Next >

- 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 local server.**  
Prompts the user to authenticate to an Active Directory server, and LDAP server, or a RADIUS server.
- 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 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.
- 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 via a Ruckus WLAN controller.

3. Create a new voucher list for guest users.

FIGURE 15. Create Voucher List

**Create Voucher List**
Cancel < Back Next >

---

**Reference Information**

**Name:**  \*

**Description:**

**API ID:** OtpList-5804BFC1-0AFA-4EC0-B9A7-87DB98BAE01A

---

**Format**

**Length:**

**Characters:**

**Default Validity Length:**

**Default Days of Access:**

**Maximum Days of Access:**

**Require Username Match:**

---

**Notification**

**Email Subject:**

**Email Body:**

**SMS Subject:**

**SMS Body:**

---

**Sponsorship**

**Allow by LDAP Group:**

**Allow by LDAP Username:**

**Allow by LDAP Username DN:**

**Maximum Certificates:**

**Default Permissions:**

- Add/Edit/Delete Sponsors In Group
- Manage Devices Enrolled By Sponsor
- Manage Devices Enrolled By All
- Allow Bulk Creation

**New Sponsor Email Subject:**

**New Sponsor Email Template:**

---

**Fields Displayed To Sponsor**

**Name Field:**

**Company Field:**

**Email Field:**

**SMS Field:**

**Reason Field:**

**Redeem By Field:**

**Days of Access Field:**

---

**Initial vouchers**

**Initial Voucher #1:**

**Initial Voucher #2:**

**Initial Voucher #3:**

**Initial Voucher #4:**

**Initial Voucher #5:**

4. In the Sponsorship section, enter the appropriate information in the following fields:

- **Format** - In addition to defining the voucher format, determine if you want to enable *Require Username Match*.

---

**Note >>**

*Require Username Match* means that the user must authenticate with a username that matches the name specified in the voucher provided by the sponsor. This allows the voucher to be locked to a particular user.

---

- **LDAP Group Regex** - Defines which groups within LDAP are allowed to be sponsors. For example, if you enter *Wireless Sponsors*, this means that anyone in the *Wireless Sponsors* AD group can sponsor a guest user. *LDAP Username* defines which usernames within LDAP are allowed to be sponsors, *LDAP Username DN* defines which username DNs are allowed to be sponsors.
- **Maximum Certificates** - Maximum number of vouchers that a sponsor is allowed to create and allocate for a particular voucher list.
- **Default Permissions** - The permissions to be used for sponsors authenticated using the *Sponsorship AD Group Regex*.
  - *Add/Edit/Delete Sponsors In Group* - If checked, the sponsor can add, edit, and delete other sponsors within the group.
  - *Manage Devices Enrolled By Sponsor* - If checked, the sponsor can review and revoke devices enrolled via vouchers issued by that sponsor.
  - *Manage Devices Enrolled By All* - If checked, the sponsor can review and revoke devices enrolled via vouchers issued by any sponsor (within the Voucher List).
- **New Sponsor Email Subject** - When a new sponsor is added, an email is sent to the sponsor with this subject.
- **New Sponsor Email Template** - When a new sponsor is added, an email is sent to the sponsor with this message.

5. In the *Fields Displayed to Sponsor* section, select *Do not show*, *Show*, or *Show and require entry* to specify the information to be shown when a sponsor creates a voucher list for guest access.

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**Note >>**

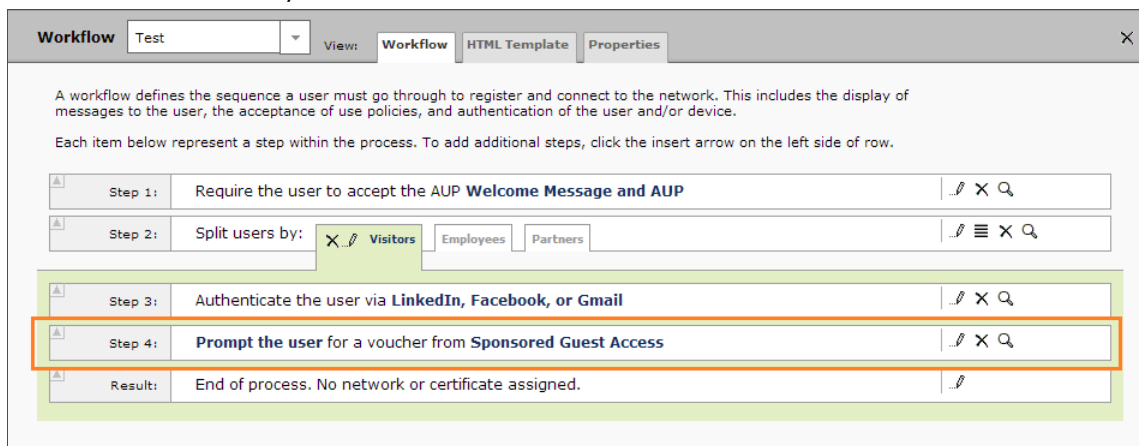
If a field is listed as *Do Not Show*, that field does not appear in the voucher list.

---

6. If needed, create one or more *Initial vouchers*.
7. Create a webpage that will prompt the user to enter their voucher and *Save*. The voucher prompt is saved in the workflow.



FIGURE 16. Enrollment System Workflow



### Best Practice >>

Sponsored access can be combined with additional options, such as authentication via Facebook, LinkedIn, or Google. When combined, the social media provides the authentication while the voucher provides the authorization. This method provides additional identity information and reduces the risk of the voucher being intercepted or misused.

## Adding a Request for Access Prompt

This section describes how to create a workflow plug-in that allows guests to request access via sponsorship upon arrival. Use this configuration if you want users to request immediate access from sponsors.

While the voucher list workflow plug-in requires the sponsor to pre-sponsor the guest, the request for access workflow plug-in allows the guest to enter their information on a webpage and then request access. The guest is held in a pending state until the sponsor accepts or rejects the request. The request may go to a static user (like a receptionist), to a sponsor selected from a list by the guest, or to a sponsor that is entered by the guest upon arrival.

### How to Add a Request for Access Prompt to the Workflow

1. From the ES Admin UI, go to *Configuration > Enrollment* and create an enrollment workflow for guest users.

2. Add an enrollment step that prompts guest users to *Request Access From a Sponsor*.

**FIGURE 17.** Create Access Request

Cancel   < Back   Save

**Reference Information**

Name:  \*

Description:

**Sponsors**

Sponsors:  ▼

Default Sponsor Email:

Default Days of Access:

**Sponsor Email Template**

Sponsor Email Subject:

Sponsor Email Message:

**Fields Visible To User**

Name Field:  ▼

Company Field:  ▼

Email Field:  ▼

Phone Field:  ▼

Reason Field:  ▼

**Fields Visible To Sponsor**

Sponsor Reason Field:  ▼

Days of Access Field:  ▼

Maximum Days of Access:

**User Webpage Information:**

Page Source:  ▼

Title:

Initial Message:

Waiting Message:

Submit Button Label:

**User Error Messages**

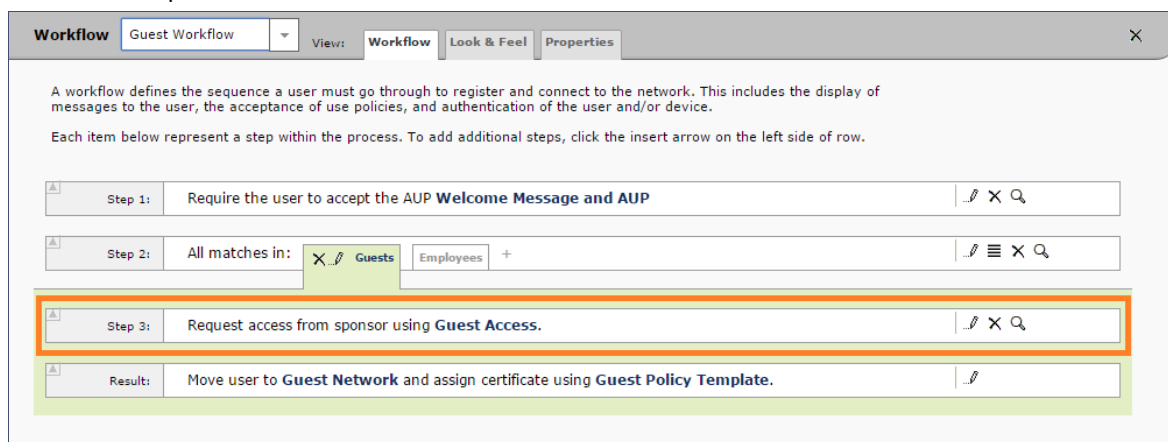
Unknown Sponsor Error:

Request Rejected Error:

Request Expired Error:

3. For *Sponsors*, enter the email address for a dedicated contact, create a drop-down list of sponsors, or allow the guest to enter the email address of a sponsor.
4. The *Sponsor Email Template* is the information sent to the sponsor when a guest is requesting access. Use the default sponsor email template or create a custom email subject and message.
5. Specify the fields to display to the guest user.
6. Specify the fields to display to the sponsor receiving the access request.
7. The *User Webpage Information* is the prompt that displays to the guest during the enrollment process. Use the default guest prompt, enter your own messaging, or upload a custom HTML file.
8. The *User Error Messages* display to the guest user if there is an issue with the access request.
9. Click **Save**.

**FIGURE 18.** Request for Access Workflow



The workflow now includes the step for requesting guest access.

## Adding Vouchers to a Voucher List

This section describes how to populate a voucher list. You can add a single voucher or upload multiple vouchers from a CSV file.

### Voucher Lists

1. From the ES Admin UI, go to *Sponsorship* > *Vouchers* to view the voucher lists. (Alternately, you access the *Voucher List* page by double-clicking the *Voucher List* link in the enrollment workflow.)
2. Expand the voucher list.

FIGURE 19. Voucher List

**Voucher Lists**

For voucher lists supporting sponsorship, sponsors may login at </portal/sponsor/>.

List 1: Test Voucher

**View Options:**  Show unused vouchers.  Show expired vouchers.  
 Show recently consumed vouchers.  Show all consumed vouchers.

**Vouchers:**

+ Voucher Status End-User Name Company Sponsor Expires

There were no results found.

**Sponsor Groups:** [None]

**Individual Sponsors:**

+ Name Email Type

<input type="button" value="Edit"/>	<input type="button" value="Delete"/>	Anna Eichel	anna@cloudpath.net	ONBOARD
-------------------------------------	---------------------------------------	-------------	--------------------	---------

Results 1 - 1 of 1. 15

List 2: Partner Internal Access Vouchers

List 3: IT-Asset Vouchers

- Click *Add Vouchers* to create a single voucher or upload a list of vouchers. The *Create Vouchers* page opens.

FIGURE 20. Create Vouchers

**Create Vouchers**

Create a single voucher.

**Upload a CSV file containing a list of vouchers.**

The file must be formatted in the following sequence: vouchers, name, description, company, email, expiration date, sponsor, SMS phone number, SMS country code. If voucher is left blank, a voucher will be generated and emailed or SMSed to the user. A template file is available for [download](#).

**CSV File to Upload:**

Upload:  No file chosen

## How to Add a Single Voucher to a Voucher List

- On the *Create Vouchers* page, select *Create a single voucher*.

FIGURE 21. ES Admin UI - Create Single Voucher

The screenshot shows a web form titled "Modify Voucher". At the top right, there are three buttons: "Cancel", "< Back", and "Save". The form contains the following fields and controls:

- Voucher:** A text input field containing the value "zyop".
- Name:** An empty text input field.
- Company:** An empty text input field.
- Email:** An empty text input field.
- Email Voucher To User?:** A checked checkbox.
- Phone Number:** A dropdown menu showing "United State" and an empty text input field.
- SMS Voucher To User?:** A checked checkbox.
- Reason:** A large empty text area.
- Redeem Voucher By:** A text input field containing the value "20130729".

2. On the *Modify Voucher* page, enter the guest user information in the fields, as described below, and *Save*. Only the Voucher field is required.

- **Voucher** - This field is pre-populated, but can be changed.
- **Name** - Guest user name.

---

**Note >>**

If *Require Username Match* has been specified in the voucher list, the guest must authenticate with a username that matches the name specified in the voucher provided by the sponsor. This allows the voucher to be locked to a particular user.

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- **Company** - Guest user company.
- **Email** - Guest user email address.
- **Email Voucher to User?** - Checked by default. If checked and email is entered, voucher is sent to guest user by email.
- **Phone Number** - Select country and enter guest user phone number.
- **SMS Voucher to User?** - Checked by default. If this is checked and Phone Number is entered, voucher is sent to guest user by SMS.
- **Reason** - The reason the guest user is provided access.
- **Redeem Voucher By** - The date after which the voucher may longer be redeemed.

---

**Note >>**

Email and SMS notifications are stored on the *Notifications* tab on the Enrollment System Admin UI Dashboard.

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## How to Add Multiple Vouchers to a Voucher List

If you are using a comma-separated value (CSV) file to upload multiple vouchers, the information must be formatted according to the instructions on the *Create Vouchers* page. A template file is available for download.

1. On the *Create Vouchers* page, select *Upload a CSV file containing a list of vouchers*.
2. Click *Choose File* to navigate to the CSV file to upload and click *Next*.

FIGURE 22. Review Vouchers to Import

**Review Vouchers To Import** Cancel Save

Send Vouchers By TXT Message:

Send Vouchers By Email:

Voucher	Status	End-User Name	Company	Sponsor	Expires
401	Available			anna@cloudpath.net	20131230
402	Available			anna@cloudpath.net	20131230
403	Available			anna@cloudpath.net	20131230
404	Available			anna@cloudpath.net	20131230
405	Available			anna@cloudpath.net	20131230

Results 1 - 5 of 5. 15

3. Verify the vouchers to import and specify if voucher should be sent to user by email or SMS, and *Save*.
  - **Send vouchers by TXT messages** - If checked, the voucher is sent to the user by TXT, if a phone number is specified in the CSV file.
  - **Send vouchers by Email** - If checked, the voucher is sent to the user by email, if an email address is specified in the CSV file.

The *Voucher Lists* page shows which vouchers have been used, the expiration dates, and any guest user details that were entered when the sponsor created the voucher, or contained in the CSV file.

### Note >>

The voucher field must be listed as *Show* in the voucher list to see it on the voucher table. For example, if *Days of Access* is set to *Do Not Show* on the voucher list, and your spreadsheet includes *Days of Access*, they do not appear in the voucher table. You must change the setting to *Show* in the voucher list. See *Adding a Voucher Prompt to the Enrollment Workflow* for more information.

## Adding Sponsors to a Voucher List

Administrators can add sponsors to a voucher list. Sponsors can create vouchers and invite guest users to join the secure network.

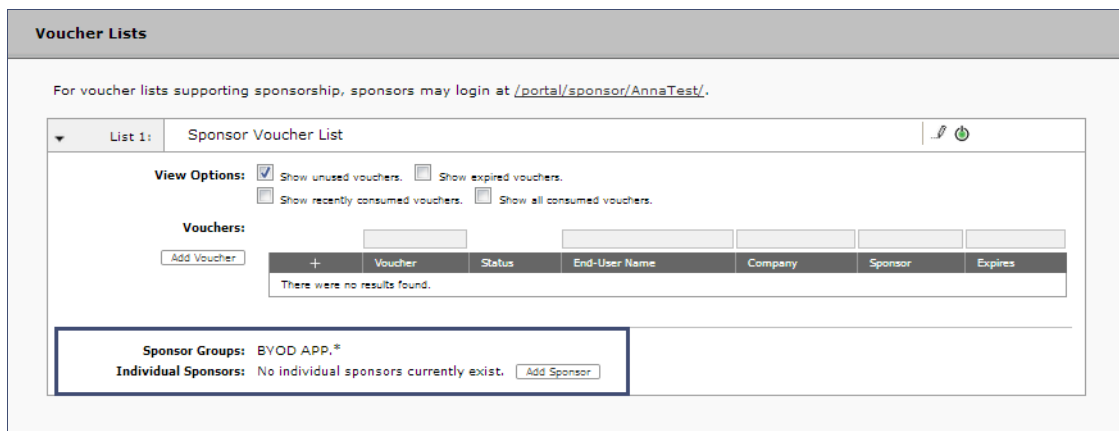
The Enrollment System supports Onboard and External sponsors. Onboard sponsors are created locally on the ES Admin UI. External sponsors can log into the Sponsorship Portal if they match a username or group name specified in the Authentication server.

## How to Add Onboard Sponsors

An onboard sponsor is created locally on the ES Voucher list.

1. From the ES Admin UI, go to *Sponsorship > Vouchers* to view the voucher list to be used for sponsors. (Alternately, you access the *Voucher List* page by double-clicking the voucher list link in the enrollment workflow.)

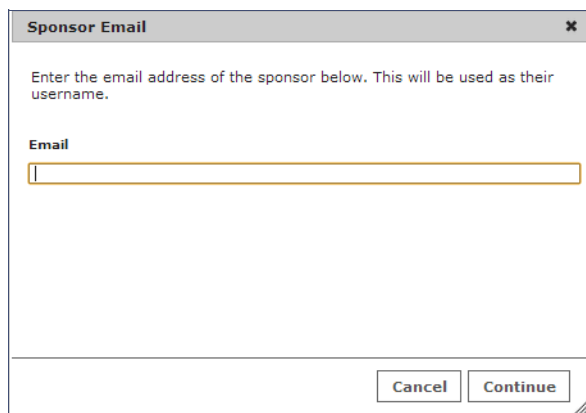
FIGURE 23. Voucher List - Add Sponsor



The screenshot shows the 'Voucher Lists' interface. At the top, it says 'For voucher lists supporting sponsorship, sponsors may login at </portal/sponsor/AnnaTest/>.' Below this, there's a dropdown menu for 'List 1:' set to 'Sponsor Voucher List'. Under 'View Options', there are four checkboxes: 'Show unused vouchers.' (checked), 'Show expired vouchers.' (unchecked), 'Show recently consumed vouchers.' (unchecked), and 'Show all consumed vouchers.' (unchecked). The 'Vouchers:' section has an 'Add Voucher' button and a table with columns: '+', 'Voucher', 'Status', 'End-User Name', 'Company', 'Sponsor', and 'Expires'. The table is currently empty with the message 'There were no results found.' Below the table, there's a section for 'Sponsor Groups: BYOD APP,\*' and 'Individual Sponsors: No individual sponsors currently exist.' with an 'Add Sponsor' button. A red box highlights the 'Add Sponsor' button in the 'Individual Sponsors' section.

2. In the *Sponsor Group* section, click *Add Sponsors*. The *Sponsor Email* pop-up appears.

FIGURE 24. Sponsor Email



The screenshot shows a 'Sponsor Email' pop-up dialog. It has a title bar with a close button. The main text says 'Enter the email address of the sponsor below. This will be used as their username.' Below this is a label 'Email' and a text input field. At the bottom, there are two buttons: 'Cancel' and 'Continue'.

3. Enter the email address of the sponsor for this voucher list and click *Continue*. The email address becomes their *Name*.

**FIGURE 25.** ES Admin UI - Modify Sponsor

The screenshot shows the 'Modify Sponsor' form with the following details:

- Modify Sponsor Section:**
  - Name:** Test User
  - Description:** (Empty text area)
  - Enabled:**
  - API ID:** Sponsor-A4174154-6857-42AA-B8B8-72C86EABCE6F
- Login Information Section:**
  - Email:** sponsor@company.net
  - Password:** (Masked with 4 dots)
  - Send Email:**
- Permissions Section:**
  - Permissions:**
    - Add/Edit/Delete Sponsors In Group
    - Manage Devices Enrolled By Sponsor
    - Manage Devices Enrolled By All
    - Allow Bulk Creation

4. On the *Modify Sponsor* page, enter the sponsor *Name*, *Description*, and *Enable* the sponsor.
5. In the *Login Information* section, enter the sponsor's *Email* address and *Password*. If you check the *Send Email* box, this information is emailed to the sponsor.

**Note >>**

The sponsor is prompted to change their password during the first login.

6. In the *Permissions* section, check the box for the appropriate sponsor permissions.
  - **Add/Edit/Delete Sponsors In Group** - If checked, the sponsor can add, edit, and delete other sponsors within the group.
  - **Manage Devices Enrolled By Sponsor** - If checked, the sponsor can review and revoke devices enrolled via vouchers issued by that sponsor.
  - **Manage Devices Enrolled By All** - If checked, the sponsor can review and revoke devices enrolled via vouchers issued by any sponsor (within the Voucher List).
  - **Allow Bulk Creation** - If checked, the sponsor can create vouchers in bulk by importing a spreadsheet of vouchers. A default template is provided.



7. Save the sponsor information. The sponsor information is displayed in the lower part of the voucher list.

**FIGURE 26.** ES Admin UI - Voucher Lists

The screenshot displays the 'Voucher Lists' interface. At the top, it indicates that for voucher lists supporting sponsorship, sponsors can log in at [portal/sponsor/AnnaTest/](#). Below this, the 'List 1: Sponsor Voucher List' is shown with various view options and a table of vouchers.

**View Options:**  Show unused vouchers.  Show expired vouchers.  Show recently consumed vouchers.  Show all consumed vouchers.

**Vouchers:**

+	Voucher	Status	End-User Name	Company	Sponsor	Expires
	eygf	Available				20130730
	ktkz	Available				20130730
	khtv	Available				20130730
	wisp	Available			anna@cloudpath.net	20130729
	yndp	Available	kil		anna@cloudpath.net	20130729

Results 1 - 5 of 5. 15

**Sponsor Groups:** BYOD APP.\*

**Individual Sponsors:**

+	Name	Email	Type
	anna@cloudpath.net	anna@cloudpath.net	ONBOARD
	test@company.net	test@company.net	ONBOARD

Results 1 - 2 of 2. 15

## External Sponsors

An external sponsor uses AD or LDAP credentials to log into the Sponsorship Portal. An external sponsor can create voucher, invite users to join the secure network, and if the voucher list permissions allow, they can manage other sponsors and enrolled devices. To set up sponsor permissions for a voucher list, see Adding Sponsors to a Voucher List on page 20.

If you want to allow sponsors to log in to the Sponsorship Portal using AD or LDAP credentials, the authentication server must be configured with the specified username or group name filter. To configure group filters for an authentication server, see Authentication Server Configuration on page 10.

## Sponsorship Portal

From the sponsorship portal, a sponsor can invite guest users to join the network by creating one or multiple vouchers, view outstanding, consumed, expired, and revoked vouchers, and manage devices, and sponsor accounts in your AD or LDAP group.

Use the Sponsorship Portal if guests access is managed using voucher lists.

**Note >>**

Only sponsors with manage permissions can manage sponsor accounts in the AD or LDAP group. Sponsor permissions are set per voucher list. See Adding Sponsors to a Voucher List on page 20.

**How to Customize Sponsorship Portal**

You can customize the labeling, images, and colors for the sponsorship portal.

1. From the ES Admin UI, go to *Sponsorship > Look & Feel*. The sponsorship portal *System Setup* page displays the titles and colors for the sponsorship portal.
2. Click *Edit* to customize the sponsorship portal.

**FIGURE 27.** Customize Sponsorship Portal

**Sponsorship Portal** Cancel Save

Page Source: Standard Template

Title: XpressConnect Enrollment System

Subtitle: Sponsorship Portal

Welcome Message: Welcome to the XpressConnect Enrollment System. To invite users to join the wireless network, click <b>Create Voucher</b> above.

**Look & Feel**

Login Title: Network Sponsorship Login

Leftbar Color: 333A4A Reset Default

Topbar Color: 666666 Reset Default

Lowerbar Color: C0C0C0 Reset Default

Login Color: C0C0C0 Reset Default

**Logo File**

The logo file to use in the upper-left corner. The image size should be 180 x 84 pixels.

Logo File: Choose File No file chosen

3. Modify titles and colors as needed.
4. To import a customized logo file to display in the upper-left corner of the sponsorship portal, the image size should be 180 x 84 pixels.
5. Save the customizations.

**How to Log in to the Sponsorship Portal**

1. Sponsors can access the sponsorship portal by entering the sponsorship URL `https://<SponsorshipLoginIPAddress>/portal/sponsor/`.
2. The portal login page opens.

FIGURE 28. Sponsorship Portal Login

The screenshot shows a web interface for the Sponsorship Portal. At the top, there is a grey header bar with the text "Sponsorship Portal". Below this, the main content area is white and contains a smaller grey-bordered box titled "Network Sponsorship Login". Inside this box, there are two text input fields: "Username:" and "Password:". Below the "Password:" field is a "Login" button.

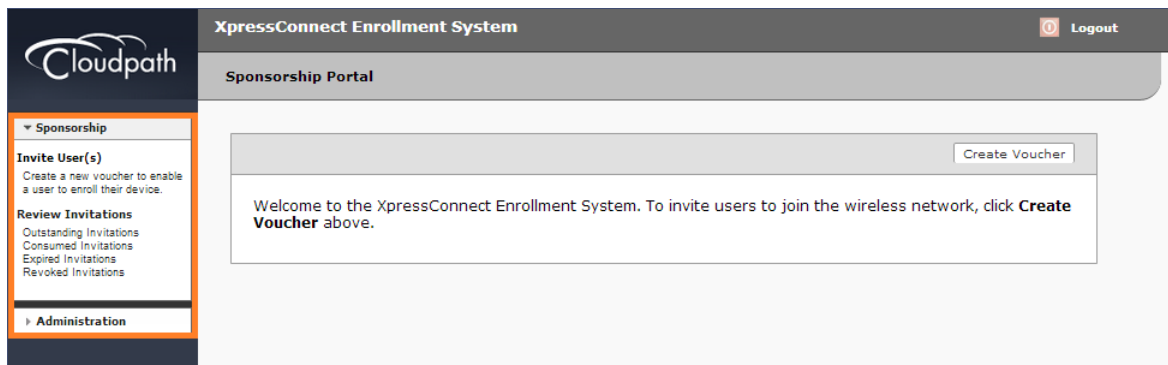
3. Sponsors enter the *Username* and *Password* that was sent when the voucher list was created. See Adding Sponsors to a Voucher List on page 20.
4. The first time a sponsor logs in, the password must be changed.

FIGURE 29. Sponsorship Portal - Change Password

The screenshot shows a web interface for the Sponsorship Portal. At the top, there is a grey header bar with the text "Sponsorship Portal". Below this, the main content area is white and contains a larger grey-bordered box titled "Change Password". In the top right corner of this box is a "Next >" button. Below the title, the text "Enter a new password below." is displayed. There are two text input fields: "New Password:" and "Confirm Password:", each with a small icon to its left.

5. After the password updates, the Sponsorship Portal opens. The left menu includes tabs for *Sponsorship* operations and *Administration* operations.

FIGURE 30. Sponsorship Portal Left Menu



### • Sponsorship tab

-**Invite User** - Allows sponsors to create a new voucher that will enable a guest user to enroll their device.

-**Review Invitations** - Allows sponsors to view outstanding, consumed, expired, and revoked invitations.

### • Administration tab

-**Sponsors** - If permissions allow, sponsors can add, change, or remove other sponsor.

## Managing Vouchers from the Sponsorship Portal

Sponsors can manage voucher lists and sponsored guest access invitations from the sponsorship portal.

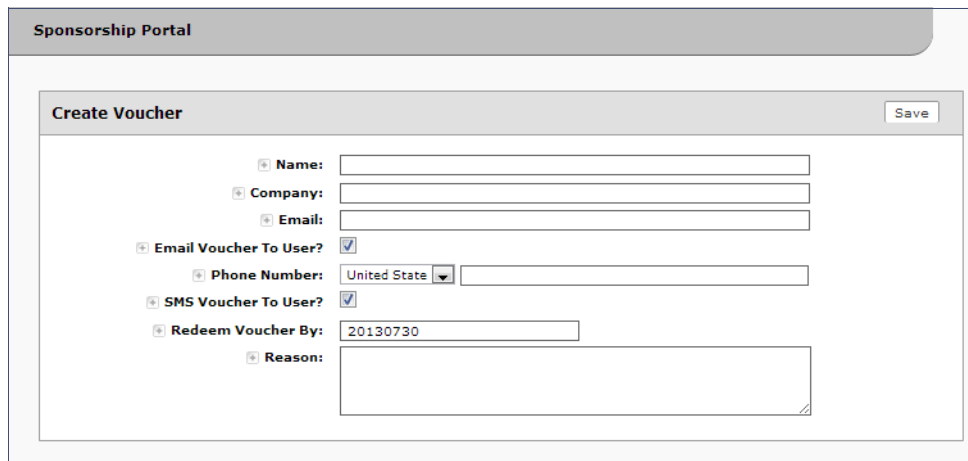
From the Sponsorship UI, select *Invite Users*. The *Create Voucher* page opens. You can create a single voucher, allow ES to generate multiple vouchers, or upload a list of vouchers from a CSV file.

FIGURE 31. Create Voucher Selection Page

## How to Create a Single Voucher

1. On the *Create Vouchers* page, select *Create one voucher*.

FIGURE 32. Sponsorship Portal - Create Voucher



The screenshot shows a web form titled "Sponsorship Portal" with a sub-section "Create Voucher" and a "Save" button. The form contains the following fields:

- Name:** Text input field.
- Company:** Text input field.
- Email:** Text input field.
- Email Voucher To User?:** Checkmark (checked).
- Phone Number:** A dropdown menu set to "United State" followed by a text input field.
- SMS Voucher To User?:** Checkmark (checked).
- Redeem Voucher By:** Text input field containing "20130730".
- Reason:** Large text area for notes.

2. Enter the guest user information and *Save*.

- **Name** - Guest user name.

### Note >>

If *Require Username Match* has been specified in the voucher list, the guest must authenticate with a username that matches the name specified in the voucher provided by the sponsor. This allows the voucher to be locked to a particular user.

- **Company** - Guest user company.
- **Email** - Guest user email address.
- **Email Voucher to User?** - Checked by default. If checked and Email is entered, a voucher is sent to guest user by email.
- **Phone Number** - Select country and enter guest user phone number.
- **SMS Voucher to User?** - Checked by default. If checked and Phone Number is entered, a voucher is sent to guest user by SMS.

### Note >>

Voucher notifications sent by Email or SMS are stored on the *Notifications* tab on the ES Admin UI Dashboard.

- **Redeem Voucher By** - The date after which the voucher may no longer be redeemed.

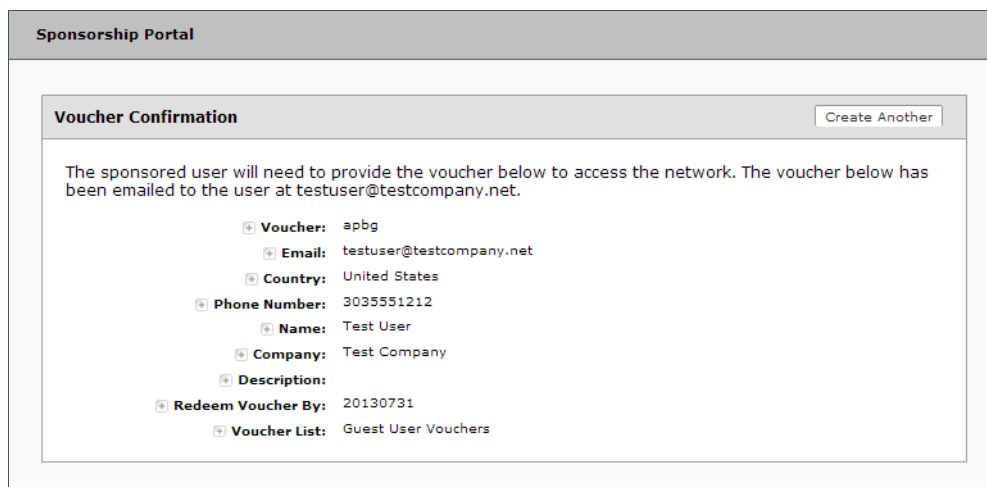
- **Reason** - The reason the guest user is provided access.

**Note >>**

When you create a single voucher, a voucher is automatically generated according to the format specified when you created the voucher list. See Adding a Voucher Prompt to the Enrollment Workflow on page 11.

Details are displayed on the *Voucher Confirmation* page.

**FIGURE 33.** Voucher Confirmation



## How to Generate Multiple Vouchers

You can have ES generate voucher for you. The automatically generated vouchers contain only the one-time password and expiration date, and are in the format specified in the voucher list. The generated vouchers can be downloaded as a CSV or TXT file.

1. On the *Create Vouchers* page, select *Generate multiple vouchers*.
2. Enter the number of vouchers to create.

FIGURE 34. ES-Generated Vouchers

**Auto-Generated Vouchers**
Done

**Result:** 10 vouchers have been auto-generated.

**Download:** Spreadsheet Text File

**Vouchers:**

Voucher	Expiration Date
xcqn	20131230
pojy	20131230
cviz	20131230
cirz	20131230
lepu	20131230
rics	20131230
hqlo	20131230
dyid	20131230
njrs	20131230
hjsa	20131230

3. Click *Done*. The auto-generated vouchers are added to the voucher list.

### How to Upload a List of Vouchers from a CSV file

Uploading a CSV file on the Sponsorship Portal is the same process as uploading a CSV file from the ES Admin UI.

If you are using a comma-separated value (CSV) file to upload multiple vouchers, the information must be formatted according to the instructions on the *Create Vouchers* page. A template file is available for download.

1. On the *Create Vouchers* page, select *Upload a CSV file containing a list of vouchers*.
2. Click *Choose File* to navigate to the CSV file to upload and click *Next*.

FIGURE 35. Review Vouchers to Import

**Review Vouchers To Import**
Cancel Save

**Send Vouchers By TXT Message:**

**Send Vouchers By Email:**

Voucher	Status	End-User Name	Company	Sponsor	Expires
401	Available			anna@cloudpath.net	20131230
402	Available			anna@cloudpath.net	20131230
403	Available			anna@cloudpath.net	20131230
404	Available			anna@cloudpath.net	20131230
405	Available			anna@cloudpath.net	20131230

Results 1 - 5 of 5.
15
Y X

3. Verify the vouchers to import and specify if voucher should be sent to user by email or SMS, and *Save*.

- **Send vouchers by TXT messages** - If checked, the voucher is sent to the user by TXT, if a phone number is specified in the CSV file.
- **Send vouchers by Email** - If checked, the voucher is sent to the user by email, if an email address is specified in the CSV file.

The *Voucher Lists* page shows which vouchers have been used, the expiration dates, and any guest user details that were entered when the sponsor created the voucher, or contained in the CSV file.

---

**Note >>**

The voucher field must be listed as *Show* in the voucher list to see it on the voucher table. For example, if *Days of Access* is set to *Do Not Show* on the voucher list, and your spreadsheet includes *Days of Access*, they do not appear in the voucher table. You must change the setting to *Show* in the voucher list. See *Adding a Voucher Prompt to the Enrollment Workflow* for more information.

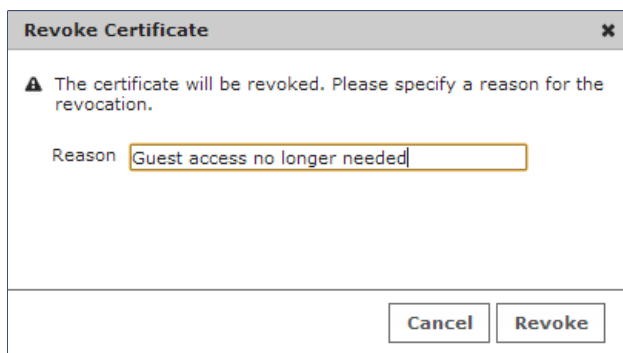
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## Managing Guest User Devices

With the correct permissions, sponsors can manage devices that have enrolled under their own sponsorship, or enrolled under any other sponsor. See *Adding Sponsors to a Voucher List* on page 20 for more information about setting Sponsor permissions.

1. From the Sponsorship UI, select *Sponsorship > Review Invitations*.
2. Select the appropriate link to view outstanding, consumed, expired, and revoked voucher invitations.
3. To revoke a voucher, use the delete icon.
4. On the Revoke Certificate pop-up, list the reason for revocation and click *Revoke*. The voucher is no longer usable.

**FIGURE 36.** Revoke Certificate



**Revoke Certificate** ✕

⚠ The certificate will be revoked. Please specify a reason for the revocation.

Reason



## Managing Sponsors

With the correct permissions, you can manage sponsors in your Active Directory or LDAP Group. Permissions are set when sponsors are added to the voucher list using the Enrollment System Administrator user interface. See [Adding Sponsors to a Voucher List](#) on page 20.

1. From the Sponsorship UI, select *Administration* > *Sponsors*. The tables show which sponsors are able to log onto the sponsorship portal and sponsor guest users using each voucher list.

**FIGURE 37.** Sponsors per Voucher List

The screenshot shows the 'Sponsorship Portal' interface. At the top, it says 'The page below controls which sponsors are able to log into the sponsorship portal and sponsor users.' Below this, there is a dropdown menu for 'List 1:' set to 'Guest User Vouchers'. Underneath, there is a section for 'Individual Sponsors' with an 'Add Sponsor' button. A table lists three sponsors:

	Name	Email	Type
✎ ✕	Test User 1	testuser@company.net	ONBOARD
✎ ✕	Test User 2	testuser2@company.net	ONBOARD
✎ ✕	Sample User	sampleuser@samplecompany.net	ONBOARD

At the bottom of the table, there are pagination controls showing 'Results 1 - 3 of 3', a page size dropdown set to '15', and a search icon.

2. From this page, eligible sponsors can add or delete other sponsors, edit sponsor login information, or modify sponsor permissions within their AD or LDAP group.

For details on configuring an authentication server for sponsors, see [Authentication Server Configuration](#) on page 10.

## About Cloudpath

Cloudpath Networks, Inc. provides automated device enablement (ADE) solutions that simplify the adoption of standards-based Wi-Fi security, including WPA2-Enterprise, 802.1X, and X.509, in diverse BYOD environments. Founded in 2006, Cloudpath Networks invented the modern onboarding model for personal devices and continues to drive the industry's adoption of standards-based security en masse. The Cloudpath XpressConnect solutions are proven worldwide to bring simplicity to secure networks through automated and easy-to-use form and function. To learn more, visit [www.cloudpath.net](http://www.cloudpath.net).

If you need technical assistance, discover a bug, or have other technical questions, email support at [support@cloudpath.net](mailto:support@cloudpath.net).

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