Wireless Registration

User Guide

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1 Scope and Background

1.1 Scope

This document is relevant to the registration of an unregistered end-user device for use on the Harvard University (SSID) wireless network. It also addresses management of previously registered devices.

1.2 Background

Harvard University Information Technology (HUIT) University Network Services Group (UNSG) has been working toward a common, user-friendly wireless experience across the Cambridge campus areas formerly served by the Faculty of Arts Sciences (FAS) and University Information Services (UIS) Central Administration IT (CAIT) networks. Under the current Phase 1 of the project, three wireless networks (SSIDs) are being extended throughout the campus. These include:

- Harvard Guest
- Harvard Help
- Harvard Secure

1.2.1 Harvard Guest

The Harvard Guest SSID is a completely open network without any security and is rate limited to 256kbps. This is approximately six times faster than a dialup modem, and is suitable for such internet usage as email and light web browsing.

1.2.2 Harvard Help

In addition to providing access to the SecureW2 supplicant, Harvard Help provides a landing page with information on the four (4) SSIDs and contact information for each school’s support staff.

1.2.3 Harvard Secure

Harvard Secure is as the name suggests a secure, encrypted wireless network that is the preferred wireless net to be used for all University work. It requires use of a client software called the SecureW2 supplicant. Once installed, this client caches (saves) your credentials and allows you to access the Harvard Secure network where ever it is available without your having to log in or take any action. And because it is encrypted, there is an additional layer of protection for all the data exchanged with your machine over this network.
Once the supplicant is installed, Harvard Secure is extremely easy to use and is the recommended network for all University work over wireless.

If you wish to take advantage of the higher security provided by the Harvard Secure SSID, refer to the appropriate document for your client device or contact the Help Desk.

1.2.4 Harvard University

The Harvard University SSID has been in use in the two areas and consolidation of these two separate networks is anticipated under Phase 2 of this project. Graphically, this is represented by the following diagram:

![Diagram of Harvard University SSIDs]

The user’s experience with an unregistered device associating with the Harvard University SSID differs dependent upon the access point (AP) that is in range and selected by the user’s device at the time the device attempts to associate with a wireless network.

1.3 What is “Registration”

Registration is the process that associates the client device (computer, iPhone, iPad, Android, etc.) by its media access control (MAC) address to an authorized user of the network.

When a client device attempts to connect to the network, it is granted an IP address “lease” for a specified period of time. That IP address lease
may be renewed indefinitely or as a device moves about the campus, new IP address leases may be granted. It is the IP address that allows the device to reach and be reached by other devices on the network. This IP address can also be restricted to access only certain resources.

1.4 Applicability to Registered Devices

If your device is currently accessing the Harvard University (SSID) wireless network, it will continue to do so without regard for whether you are accessing a former FAS or UIS (CAIT) AP.

1.5 Applicability to Unregistered Devices

If you are attempting to connect a wireless device that has not been previously registered, this document applies and provides information on the process. Please note that devices that connect both wirelessly and via Ethernet wired connection must be registered for both media.

1.6 Two Registration Processes

Depending upon which AP your device accesses, upon opening a browser, you will be presented with one of the following two registration processes:

- UNSG Client Management System (“AutoReg”) for the former FAS APs
- Harvard University Core Network Registration Portal for the former CAIT APs

The following descriptions and screen shots detail the process of registering your device’s wireless MAC address under both conditions. Once it is registered under either process, it will be able to access the Harvard University (SSID) wireless network in both areas within minutes.

2 UNSG Client Management System

Frequently referred-to as “AutoReg,” the purpose of this application is to allow controlled access to the Harvard UNSG network, allowing for segments of the University to control clients within their network environment.

Clients with access to the wireless network come into the Harvard environment as unregistered and move through self-registration into a registered status. Clients are associated with users in the following categories:
2.1 Guest

Allowed only on certain networks and at certain times, such as Commencement, open Guest networks are controllable by the Network Operations Center or NOC.

Users are allowed self-registration of their client device, which expires early the next morning. The user’s name and a valid e-mail address are required. The devices may be re-registered as long the open Guest network is enabled. Guest registration provides for Internet access after registration and access to unrestricted network services such as networked printers which have accessible domain names. Guest access is not normally allowed on wireless networks, except for special occasions such as Commencement Week.

2.2 Student, Faculty, Staff, Contractor

Persons affiliated with Harvard University include Students (HUID), Faculty and Staff (HUID), Contractors and Temporary staff (XID added to an XID allowed list) may register their devices using the HUID or XID credential indicated. Credential holders are granted varying registration expirations, for example:

- Permanent
- Graduation date
- One year
- 14 days

Once registered, the device will have access to unrestricted network services including the Internet and such services as networked printers which have accessible domain names.

Additionally, these users may access http://autoreg.fas.harvard.edu where they may register other clients associated with the credential such as an Xbox, iPhone or printer.

3 UNSG Client Management System Workflow

When connecting via an AP located in the former FAS wireless network the workflow for registering an unregistered client device contains the following steps:

3.1 Step 1: Welcome Page

When connected to the Harvard University SSID, opening a browser the user is presented with the Welcome page, which also displays the user agreement. A user is required to accept the agreement in order to
continue. It is during this very first request that Client Detection occurs.

3.2 Step 2: Computer Registration

The next page asks the user to enter their Harvard University ID and PIN which is submitted to the HUIT LDAP server for validation.

Where appropriate the Temporary Guest Access button will appear and the user can click this button and be prompted for their name and a valid e-mail address to gain access to the network for one day.
3.3 **Step 3: Account Information**

The third page asks the user to make sure their personal information is current and up to date. Fields are pulled from the Harvard registrar’s information and if incorrect should be corrected through the ID Office. Additional user-defined fields are available for secondary email and phone information.

![Personal Information](image)

3.4 **Step 4: Security Check and Antivirus Software**

A series of pages will be presented based upon the information gathered on computer type. A user may be asked to and aided in turning on a firewall as well as given other information to increase the security on their system. A window similar to this one will appear. All the information should be read and then the continue button at the bottom of the page clicked to move through the sequence.

![Secure Your Computer](image)

Harvard UNSG offers an antivirus program free to faculty, staff, and students. FAS users need to contact the help desk to install it on their
system. Harvard Law faculty, staff, and students are offered a different package.

### Install Antivirus Software

The next step is to install antivirus software. FAS IT offers antivirus software free to FAS faculty, staff, and students. If you would like to obtain FAS distributed antivirus software, please contact FAS IT Support at help@fas.harvard.edu or 617.495.9000. FAS students may also visit the FAS IT Support clinic in the basement of the Science Center in the B14 lab area to obtain antivirus software for their personal computers.

If you are a Law School student, [click here](#) to find information about antivirus software at the Law School.

If you already have an active and up-to-date antivirus program on your computer, click the Finish button to finish registering your computer.

### Step 5: Registration

Please Wait... – This screen is presented while the system registers the user to the UNSG network. This takes about 30 seconds to complete. (Time is required to allow the short pre-registration lease to expire and for a new registered lease to be obtained from the system with a new IP address.)

### Registration Complete

Registered – displayed after the 30 seconds have elapsed and the user now has a new registered lease from the system. The user is prompted to close and reopen their browser window to begin browsing. **NOTE: if your browser brings you back to the Welcome Page, please release/renew or reboot to get access to the Internet.**
3.7 Additional Screens

3.7.1 Quarantine
If the computer has been quarantined due to suspected malicious activity, such as an infectious virus, a Quarantine Notification page will be displayed, with instructions to contact the Help Desk.

**Quarantine Notification**

_Sorry, your computer has been quarantined. You will not be able to gain access to the Internet._

Please call the FAS Computer Services Help Desk at 617-495-9000 for assistance.

Thank you.

3.7.2 System Availability
If a part of the registration system (such as a database, UIS LDAP, or UNSG DHCP/DNS server) is out of service, or not responding to requests in a timely manner, a Technical Difficulties page will be displayed along with a number to call: 617-495-9000.
3.7.3 Out of Service Due to Maintenance
If the application is not available for a short time, typically due to a maintenance event, a Temporary Outage page will be displayed.

**Temporary Outage**

The site is temporarily down. It should be available again shortly.

We apologize for any inconvenience.

4 Harvard University Core Network Registration Portal
This section describes how to register a device when accessing the Harvard University SSID from an AP that is part of the former UIS (CAIT) wireless network. Guest

4.1 Guest
There is a guest button for those who do not have Harvard credentials. You must have obtained Guest credentials from the Help Desk or a sponsor. Guest registration is typically valid for up to 30 days.
5 Portal Registration Workflow

When connecting via an AP located in the former UIS (CAIT) wireless network the workflow for registering an unregistered client device contains the following steps:

5.1 Step 1: Authentication

When connected to the Harvard University SSID, opening a browser the user is presented with the Authentication page. Harvard affiliates enter their HUID and PIN. Some contractors and other users are granted an XID credential which also uses a PIN. Sponsored guests enter a guest name and password as assigned.

After entering the credentials, click Authenticate.
5.2 Step 2: Acceptable Use Policy (AUP)

The next screen displays the AUP. A user is expected to read and required to accept the agreement in order to continue.
5.3 Step 3: Registration

Please wait while the system registers the device MAC address. The following screen will be displayed.

5.4 Registration Complete

When registration is complete, the following screen will be displayed:

The client device may now access resources on the network from any AP via the Harvard University SSID.

6 Support Resources

If you experience difficulties and require help, please contact the Harvard University IT help desk at 617.495.7777 or ithelp@harvard.edu.