Wireless Networking

Wi-Fi

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an Information Technology Services Policy

Purpose

This policy explains the guidelines that have been developed to insure appropriate and effective use of the ETSU Wi-Fi network.

Motivation

ETSU provides wireless networking in all buildings on the main campus and at several off campus locations for the purpose of making the ETSU computer network and resources available wirelessly to ETSU students, faculty, and staff.

Responsibilities

Information Technology Services (ITS) is the East Tennessee State University (ETSU) department responsible for the implementation, maintenance, and troubleshooting of all issues related to the ETSU Wi-Fi network.

Policy & Guidelines for Wi-Fi Computing

The ETSU Wi-Fi network is an extension of the ETSU wired network and thus is governed by the ETSU ITS Code of Ethics which can be found at: http://www.etsu.edu/oit/policies/inftechcodeethics.aspx. The ETSU Wi-Fi network is designed as an enhancement to the wired network, and cannot be considered a substitute. Unlike the wired network connection, Wi-Fi is a shared medium with slower throughput speed and it is subject to interference. Wi-Fi should be viewed as a secondary network to accommodate mobility, and should not be utilized for mission critical functions such as interactive testing, bandwidth intensive and latency sensitive applications including but not limited to large file transfers, streaming media and Voice over Wi-Fi. A wired network jack should be installed in any location where work related computing is necessary. Desktop computers shall not be connected to the ETSU network via Wi-Fi. Departments can request installation of a new network jack by submitting a Telecommunications Requisition to ITS (http://www.etsu.edu/oit/documents/requisition.pdf).

Personal or departmental Wi-Fi devices located on the ETSU campus that are not managed by ITS are likely to disrupt ETSU Wi-Fi. Non-ETSU Wi-Fi devices utilize the same radio frequency spectrum as the ETSU Wi-Fi network which introduces interference. Interference created by non-ETSU devices greatly diminishes the quality and reliability of the ETSU Wi-Fi network therefore non-ETSU Wi-Fi devices are not permitted on the ETSU campus.

Wi-Fi interference is a greater problem in the residence halls where personal living spaces are located in close proximity to one another. Any Wi-Fi device that generates a Wi-Fi
network causes interference. Examples of these types of devices include game consoles, Wi-Fi printers, Apple TV, cell phone hotspots, Roku, Chromecast, ad-hoc network and Wi-Fi-direct will cause disruption to ETSU Wi-Fi for other students in rooms that are in close proximity to the non-ETSU devices. These devices continue to broadcast interference until they are powered down.

If interference is detected from a non-ETSU network device in an ETSU building, the interference should be reported to the ITS Help Desk at 439-4648 or ITSHelp@etsu.edu. The ETSU Wi-Fi network is designed to support laptop grade devices throughout all ETSU buildings. If ETSU faculty, staff, or students detect a low signal level on a laptop grade device, please notify the ITS help desk so the issue can be addressed.

Layers of security are in place to protect Information transmitted over the ETSU Wi-Fi network, however one should still exercise caution when transmitting personal information like credit card numbers, passwords, and other sensitive information. In addition to the security protections built into the ETSU Wi-Fi network, departments handling sensitive information that requires PCI or HIPPA compliance should employ additional security mechanisms to comply with state and federal regulations.

There are no filters on the ETSU network to comply with the Children’s Internet Protection Act (CIPA) so age groups K – 12 are restricted from usage. It is the responsibility of the computer account owner or sponsor requesting guest Wi-Fi access to safeguard children and ETSU by ensuring that the access they provide or request is not made available to ages K – 12.

All users are encouraged to have up-to-date virus protection to protect their personal device and data. ETSU is not responsible for the loss or alteration of data due to security breaches. Contact the ITS Help Desk for Wi-Fi general information and assistance with the initial setup and basic troubleshooting steps. You can reach the ITS Help Desk at 439-4648 or ITSHelp@etsu.edu.

Procedures & Guidelines

All students, faculty, and staff are provided a computer account upon enrollment or employment. All students and employees that have an active ETSU computer account can utilize the ETSU Wi-Fi network. The ITS Help Desk should be consulted (439-4648) if a user needs computer account information assistance.

Devices Requirements

Any Wi-Fi enabled device compliant with 802.11a, 802.11g or 802.11n will work on the ETSU Wi-Fi network. The newest available standard 802.11ac is backward compatible so these devices will also work but only at 802.11n capacity. Most devices that are seven years old or newer will be able to connect with one of the above standards.

Security Requirements
ETSU uses the Wi-Fi Protected Access 2 (WPA2) security protocol with Advanced Encryption Standard (AES) and MS-CHAPv2.

How to Connect

A Wi-Fi enabled device must first be configured with ETSU security parameters. If you device does not auto-configure during the connection process, please visit the ITS website for further instructions: http://www.etsu.edu/oit/networking/WireLessSetup.aspx or contact the ITS Help Desk at 439-4648 or ITSHelp@etsu.edu.

ETSU provides separate SSID’s for ETSU campus (ETSU) and for ETSU Residence Halls (ETSURESNET). Both SSID’s are available for all ETSU students, faculty, and staff and may be accessed by entering your username and password when prompted.

Vendor & Guest Access – Individual Visitors

ETSU faculty and staff can act as a sponsor and request guest Wi-Fi access on behalf of a vendor or guest. A temporary guest computer account will be provided. The ETSU faculty or staff sponsor is responsible for validating the need and usage of the guest computer account.

Guest Access for Events – Large Groups

ETSU faculty and staff can also act as a sponsor and request guest Wi-Fi access for group events. A new Wi-Fi network would be created for the event and the sponsor is provided a passphrase to be made available to the group to gain access. If an event is needed in more than a few locations or lasts longer than two weeks, individual guest computer accounts would need to be requested instead. There are no filters on the ETSU network to comply with the Children’s Internet Protection Act (CIPA) so age groups K – 12 are restricted from usage. It is the responsibility of the sponsor requesting guest Wi-Fi access to safeguard children and ETSU by ensuring that the access they request is not made available to ages K – 12.

ETSU guest Wi-Fi networks for group events utilize Wi-Fi Protected Access 2 Pre-shared key (WPA2 PSK) security protocol. These guest networks are less secure and thus are limited to internet only access.

Policy Dispute

The Chief Information Officer is charged with the responsibility to periodically review the policy and propose changes as needed.

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