Wireless Communication Procedure

Procedure Number: PSU-NK-ITS-011
Date: February 15, 2018
Page Count: 3

Purpose:

This procedure establishes the standards for

1) the campus wireless infrastructure (hardware and software)
2) end-user wireless devices connecting to the campus wireless infrastructure

Only wireless devices that meet the criteria of this procedure or have been granted an exclusive waiver by the campus chancellor are approved for connectivity to the New Kensington Data Network.

Scope:

This procedure covers all wireless data communication devices connected directly to the New Kensington Data Network. This includes any communication device capable of transmitting data packets. Wireless devices and/or data networks without any connectivity to New Kensington campus data networks do not fall under the purview of this procedure.

Definitions:

802.1X – An Institute of Electrical and Electronics Engineers (IEEE) standard for port-based Network Access Control that allows network administrators to restricted use of IEEE 802 LAN service access points to secure communication between authenticated and authorized devices. This standard requires users to authenticate prior to being able to utilize Penn State New Kensington's wireless network.

Device – A computer, electronic tool or communication apparatus with the ability to connect to a data or communication network.

End-User Wireless Devices – Devices such as personal computers, PDAs, smartphones, tablets, etc. that are used to access the New Kensington data network wirelessly.

MAC (Hardware Address) – A unique address assigned by the device manufacturer to all devices with network interface adapters both wired and wireless. The address uniquely identifies the device when connected to a data network.

New Kensington Data Network – The technology infrastructure, hardware, and software installed at the campus which is used to facilitate the flow of digital information between (but not limited to)

computers, printers, servers, mobile devices, the Internet, etc. This includes both the wired and wireless networks at Penn State New Kensington.

NK ITS Department – The department that oversees IT resources at Penn State New Kensington to include the System Administrator, IT Specialist and IT Director.

User Authentication - A method by which the user of a wireless system can be verified as a legitimate user, independent of the computer or operating system being used.

VPN – (Virtual Private Network) – A technology used to allow a user or network to connect in a secure and virtual manner via open or public communication channels. A VPN grants a remote user (e.g. working from home) secure access to local network services as if he/she were sitting in his/her office.

Wireless Infrastructure Devices – Devices such as access points, switches, wireless controllers, etc. that are used to provide wireless service to end-user wireless devices and facilitate the bridge between wireless and wired networks.

Procedure:

To comply with this procedure, wireless infrastructure devices must:

- Only allow data network access via an approved University VPN or secure authentication solution (i.e. 802.1x) to ensure privacy, user authentication, and integrity of the wireless communications.
- Separate wireless traffic from other data communications on the New Kensington Data Network (network segmentation).
- Be configured and managed only by authorized NK ITS Department personnel.

To comply with this procedure, end-user wireless devices:

- Must maintain a hardware address that can be registered and tracked, i.e., a MAC (hardware) address.
- Must utilize an approved University wireless solution to ensure privacy, user authentication, and integrity of the wireless communications.
- Cannot be used for network sniffing/eavesdropping.

Enforcement:

Wireless infrastructure devices or end-user wireless devices failing to comply with this procedure will be disconnected from the New Kensington Data Network; if applicable, a hardware address will be blocked at the data network level. Furthermore, any employee found to have violated this procedure may be subject to disciplinary action by their administrative unit, the campus, or the University.

PennState
New Kensington

Policy History:

February 15, 2018 - Procedure created based off previous campus policy.