# Attachment: Network Access Device Standards and Support

## The **Network Access Device Standards** document provides the client with the standardized devices (switches) the Telecommunications Division (TD) will support on the RUNet infrastructure.

The **Network Access Device Support & Maintenance** document provides the client with the support and maintenance levels TD provides for the network equipment they manage.

## These documents are provided as attachments to the Project Proposal.

# Current Network Access Device (Switch) Standard

### 8/2012

TD maintains ~ 2,000 devices on RUNet, and strives to ensure standards to maximize our toolset and resources. We regularly review hardware for fitness, suitability, and end-of-life. Minimizing device types throughout the network reduces support problems and increases efficiency.

Our analysis considers current and long-term requirements to support data/voice/and video. TD has standardized on several devices for network access infrastructure:

### Port capacity below 96:

Cisco WS-3560X-24P-L or WS-3560X-48P-L See [3560X](http://www.cisco-servicefinder.com/warrantyfinder.aspx)

(Available in 24 and 48 port)

### Port capacity 96 or more

Cisco WS-C4506E-S6L-bundle See [4500E](http://www.cisco-servicefinder.com/warrantyfinder.aspx)

(6 blade chassis)

All devices have been test proven on the network Each device has been selected based on its (1) ability to support the current bandwidth requirements (minimum 2MB per port); (2) high speed backplane; (3) best price point for managed device; (4) ability to support high bandwidth demand applications (QOS/COS strategies and PoE capabilities); (5) IPv6 support; (6) consoles port, telnet and snmp access; and (5) Lifetime warranty.

\*\*For information regarding data center switches, please contact the Network Operations Center at noc@rutgers.edu or 848.445.7541.

# Network Devices Support & Maintenance

## Document managed by Network Operations

The Telecommunications Division (TD) maintains and supports the majority of network access devices on the Rutgers (RUNet) and RBHS networks.

Telecommunications equipment installed or acquired by and/or through the Telecommunications Division (TD) within the Office of Information Technology is considered a fixed asset of the building regardless of funding source, and as such part of the University building’s infrastructure.

See: [Fixed Assets Policy](http://www.td.rutgers.edu/policies-guidelines/telecommunications-fixed-assets-policy/)

TD provides the following value added services for equipment purchased through its office:

* Inventory and stockroom management
* Remote device monitoring services
* Configuration management and backup
* On-site hardware replacement services for faulty equipment\*
* OS Software updates, maintenance releases, bug fixes, and minor and major releases\*\*

## \*No charge for installation services; no charge for equipment replacement either (1) covered under the TD Cisco SmartNet contract or (2) Cisco devices with a lifetime warranty.

Departments fund replacement devices for non-covered equipment.

\*\*Available for SmartNet-covered devices only.

This document does NOT apply to Wireless devices. See: [RUWireless Support](http://ruwireless.rutgers.edu/index.php?page=support)

**Cisco devices:**

For our Cisco core network devices, Layer 3 building devices (routers) and aggregation devices, TD maintains a Cisco SmartNet maintenance agreement. This maintenance agreement provides 8×5, next business-day replacement coverage.

Layer 2 devices (network access switches) are managed through a TD sparing model. Some models are covered via lifetime warranties. Equipment is also managed through a TD sparing model.

Some security appliances providing VPN services are centrally managed by TD for remote RBHS locations. These devices should be covered by a Cisco SmartNet maintenance agreement. This maintenance agreement provides 8×5, next business-day replacement coverage.

Should you have any questions regarding the status of specific equipment in your area, contact the Network Operations Center (NOC) at 848.445.7541 or noc@rutgers.edu.

**Support Description Details:**

1. Existing TD-purchased layer 2 (network access switch) device(s) purchased through TD: Equipment will be replaced via (1) SmartNet (if applicable); or (2) as required through the TD sparing model and/or lifetime warranty.
2. New Project-purchased Cisco Layer 2 (network access switch) device(s) purchased through TD: Cisco access devices purchased through TD after July 2010 may include lifetime warranty coverage. Customer may elect to pay for SmartNet coverage.
3. New Project-purchased security appliances providing VPN services purchased through TD: Equipment will be replaced via (1) SmartNet (if applicable); or (2) as required through the TD sparing model and/or lifetime warranty.
4. Existing Project-purchased Cisco Layer 2 (network access switch) device(s) purchased through TD: Departmentally/project-purchased Cisco devices without (1) SmartNet coverage and/or (2) a lifetime warranty do not have replacement coverage. TD will maintain and monitor this equipment.

Should the device fail, the department will be responsible to fund the device replacement. Upon receipt of the replacement device, TD will provide on-site replacement services. Please note this could result in 3-15 days without service during the time a purchase order is processed and equipment is received.

1. New server room/data center Layer 2 (data center infrastructure) : Department/local IT representative (customer) is responsible for installation and day-to-day management of server room/data center switch access devices (maintenance, upgrades, configuration, replacement.) TD will offer recommendation and consultation where requested.

# Replacement coverage:

## Several Cisco access devices have lifetime warranties:

Cisco 3560X device **10-day replacement coverage** upon receipt of the return. Cisco 4500X series has **10-day replacement coverage** upon receipt of the return. For specific SmartNet device information, see:

## [Cisco SmartNet Device Details](http://www.cisco-servicefinder.com/)

*\*Enhanced Limited Lifetime Hardware Warranty (WARR-ELTD-LIFE-HW)****.*** *TD will maintain and monitor this equipment. Should the device fail, TD will provide a spare in advance of receipt of the replacement device and TD will provide on-site replacement services.*

***Sparing Options*:**

## A department has the option of purchasing spare(s) for its area. The department can maintain the spare(s) device(s), or TD can manage those devices through its inventory system and secure stockroom. This would provide the department with the ability to have same-business day replacement of a non-covered faulty device. Please contact the NOC to discuss sparing options.

**TD does not support equipment purchased outside of TD.**

For Cisco SmartNet description, see: [Cisco SmartNet](https://www.cisco.com/en/US/products/svcs/ps3034/ps2827/ps2978/serv_group_home.html)

**For information regarding Power Over Ethernet, see:**

[Network Access Device – Power over Ethernet (PoE) Support](http://www.td.rutgers.edu/docs/data/poe/)