Edited from National Version – This contest will be held at ECPI

PURPOSE

To evaluate each competitor's preparation for employment and to recognize outstanding students for excellence and professionalism in the field of internetworking.

First, download and review the General Regulations at: http://updates.skillsusa.org.

ELIGIBILITY

Open to active SkillsUSA members currently enrolled in programs with internetworking as an occupational objective. Each state may send one high school and one college/postsecondary competitor.

CLOTHING REQUIREMENTS

Class E: Competition Specific — Business Casual

- Official SkillsUSA white polo shirt
- Black dress slacks or black dress skirt (knee-length minimum)
- Black closed-toe dress shoes

Note: Wearing socks or hose is no longer required. If worn, socks must be black dress socks and hose must be either black or skin-tone and seamless/nonpattern.

These regulations refer to clothing items that are pictured and described at www.skillsusastore.org. If you have questions about clothing or other logo items, call 1-888-501-2183.

Note: Competitors must wear their official competition clothing to the competition orientation meeting.

<div align="center">**EQUIPMENT AND MATERIALS**</div>

1. Supplied by the technical committee:
   a.   Computer workstation (if available)
   b.   Cisco routers, switches and equipment not listed as supplied by the competitor
2. Supplied by competitor:
   a. Laptop computer with wireless, Ethernet connection and COM port (USB with adapter)
   b. Tools necessary to connect to a router or switch via an RS232 console connection (USB to serial adapter and console cable)
   c. One 6' multiple-outlet surge protector
   d. All competitors must create a one-page resume. See "Resume Requirement" below for guidelines.

RESUME REQUIREMENT

Competitors must create a one-page resume to submit online. SkillsUSA national competitors should submit their resume by June 1. The link for resume submission will be published on http://updates.skillsusa.org on May 1. Failure to submit a resume will result in a 10-point penalty.

Your resume must be saved as a PDF file type using file name format of "Last Name_First Name." For example, "Amanda Smith" would save her resume as **Smith_Amanda**. If you need assistance with saving your file as a PDF, visit the Adobe website for more information.

Note: Check the Competition Guidelines and/or the updates page on the SkillsUSA website at http://updates.skillsusa.org.

PROHIBITED DEVICES

Cell phones or other electronic devices not approved by a competition's national technical committee are *NOT* allowed in the competition area. Please follow the guidelines in each technical standard for approved exceptions. Technical committee members may also approve exceptions onsite during the SkillsUSA Championships if deemed appropriate.

Penalties for Prohibited Devices
If a competitor's electronic device makes noise or if the competitor is seen using it at any time during the competition, an official report will be documented for review by the SkillsUSA Championships director. If confirmed that the competitor used the device in a manner which compromised the integrity of the competition, the competitor's scores may be canceled.

The competition is defined by current industry technical standards.

STANDARDS AND COMPETENCIES

WORK 2.0 — Network Access
2.1.   Configure and verify VLANs (normal range) spanning multiple switches
    2.1.2.   Default VLAN
    2.1.3.   Connectivity
2.2.   Configure and verify interswitch connectivity
    2.2.1.   Trunk ports
    2.2.2.   802.1Q
    2.2.3.   Native VLAN
2.9.   Configure the components of a wireless LAN access for client connectivity using GUI.

WORK 3.0 — IP Connectivity
3.3.   Configure and verify IPv4 and IPv6 static routing
    3.3.1.   Default route
    3.3.2.   Network route

3.4.   Configure and verify single area OSPFv2
    3.4.1.   Neighbor adjacencies
    3.4.2.   Point-to-point

WORK 4.0 — IP Services
4.5.   Describe the use of syslog features including facilities and levels
4.6.   Configure and verify DHCP
4.8.   Configure network devices for remote access using SSH

WORK 5.0 — Security Fundamentals
5.3.   Configure device access control using local passwords
5.6.   Configure and verify access control lists
5.7.   Configure Layer 2 security features (port security)
5.10.   Configure WLAN using WPA2 PSK using the GUI

WORK 7.0 — Important Topics Outside the CCNA's Scope
7.1.   Configure and troubleshoot the following Routing Protocols
    7.1.2.   OSPFv2
    7.1.3.   EIGRP
    7.1.5.   Static Routing
7.2.   Configure and Troubleshoot Spanning-Tree Protocol (Rapid and regular)

7.3.   Configure and Troubleshoot VLAN Trunking

COMMITTEE IDENTIFIED ACADEMIC SKILLS

The technical committee has identified that the following academic skills are embedded in this competition.

Math Skills
- Use proportions and ratios to solve practical problems
- Solve problems using proportions, formulas and functions
- Binary number systems
- Bitwise shifting binary numbers
- Boolean logic functions