Internetworking

Clothing Requirements
For men: Official SkillsUSA white polo shirt with black dress slacks, black socks and black leather shoes.

For women: Official SkillsUSA white polo shirt with black dress slacks or skirt, black socks or black or skin-tone seamless hose and black leather shoes.

Note: At the district level, if a student is not able to wear the dress requirements above, they may wear the official SkillsUSA attire instead of the polo. Please see www.skillsusa.org for the official clothing attire or talk to your SkillsUSA District 2 Board Member at your school. If student is not dressed according to these requirements, **there will be a 5 point penalty**.

Eligibility
Open to all active SkillsUSA members enrolled in a computer networking training program with internetworking as the occupational goal.

Equipment and Materials: Supplied by host school:
1. Computer workstation
2. V.35 Cables, Cisco routers, Cisco switches and all other support or test equipment

Equipment and Materials: Supplied by Contestant:
1. All students must have a **one-page**, typewritten resume which is to be turned in upon arrival at the competition site.

Scope of the Contest –
The contest will be a subset of the National Competition as defined in the latest Technical Standards.
The contest will consist of two parts – knowledge performance and skill performance.
This includes, but not limited to:
- Use network protocol models to explain the layers of communications in data network
- Design, calculate and apply subnet mask and addresses, including VLSM
- Build a simple Ethernet network using routers and switches
- Use Cisco CLI commands to perform basic router and switch configuration and verification
- Configure and verify router interfaces
- Demonstrate RIP, EIGRP or OSPF configurations
- Route summarization

Knowledge Performance

The contest will include 2 written exams assessing (1) general networking concepts as well as router specific and (2) VLSM and addressing designs. These will include the concepts from Cisco's Network Academy curriculum, CCNA Routing and Switching, Semester 1 and 2. For more information on what is contained in these semesters, please go to Cisco's website.

Skill Performance

The contest includes a troubleshooting problem and a hands-on evaluation to assess the student's skill performance which includes concepts covered in Cisco CCNA Routing and Switching Semester 1 and 2.

Internetworking Scorecard

Items Evaluated	Possible Points
Router Project	300
Written Exam	100
VLSM and Address Design	100
Résumé Penalty	-10
Clothing Penalty	-5
Total Possible Points	500

Note: No cell phones or other electronic devices may be used at any time during a competition; this includes using a calculator function on a cell phone for competitions in which calculators are permitted.