



SkillsUSA Maryland 2019 Internetworking State Competition

Items to be supplied by the contestant:

1. **Hard copy of resume**
2. Tools for making cables
3. Cable tester
4. Safety glasses with side shields
5. Official SkillsUSA attire
6. **Pencil & paper**
7. ****NOTE: Laptop NOT required**

Competition Objectives

The competition consists of three parts...

1. Cable Making
2. Router configuration
3. TAC Tech Support Call simulation
4. Written Exam

Cable Making

The objective of the cable making is to measure each contestant's ability to make three different cables used in networking. The cables to be built are a Patch Cable, a Crossover Cable, and Punch down cables.

Router Configuration

The contest will use Packet Tracer for the router configuration activity. The objective of router configuration is for each contestant to review a network

configuration and then make configuration changes to allow a computer and servers to communicate.

TAC Tech Support Call simulation

Each contestant will participate in a simulated TAC Tech support call. The contestant will assist with the troubleshooting of a problem in a conversation with one of the judges.

Written Exam

The exam will evaluate the contestant's general knowledge of networking terms, protocols and standards. The questions will focus on the following areas.

- The OSI model and industry standards
- Network topologies
- IP addressing (VLSM)
- Networking components
- Basic network design
- Router configurations and troubleshooting
- LAN-switching theory and VLANs
- WAN theory and design
- Network troubleshooting