



Provincial Scope Document

IT PC & NETWORK SUPPORT (Post-Secondary) 2008

Contest Length: 66 hrs

Registration: 8:00
Contest Start: 9:00

Purpose of the Challenge:

To avail participants the opportunity to demonstrate their knowledge and challenge their skills in PC maintenance, Server maintenance, directory configuration and network support functions.

Project Scenario:

For the purpose of this competition the competitor is considered to be a Junior IT Technician, also known as a Computer Technician. The competitor is employed by a company (the employer) that has a contract to support the computer network of an industrial company (the company).

Project Tasks

- Assemble or troubleshoot a PC
- Manage a virtualized environment
- Install PC OS and application software.
- Connect computers in a client/server environment.
- Conduct administrative functions in a client server environment.
- Integrate PC's and users in a directory-based network environment to company specifications.
- Set up and configure Cisco routers and switches consistent with a CCNA level
- Set up, configure and troubleshoot a Wireless Local Area Network client in either a Windows or Linux environment.
- Set up and configure a Wireless Local Area Network device and integrate it into a wired network
- Maintain a written log of all activities and prepare/update appropriate documentation as work proceeds.
- Set up and configure Cisco routers and switches consistent with a CCNA level
- All competitors must exhibit workplace safety procedures and conduct themselves professionally at all times.

Skills Required

- Find faults and troubleshoot or assemble PC hardware.
- Install various operating systems.
- Establish predefined desktop settings.
- Identify, test, and use a variety of network cabling as required.
- Install Applications.
- Establish various network topologies.
- Understand routing concepts and how they are implemented on Cisco routers.
- Set up network administration & security.
- Optimize network & system performance.
- Perform basic network administration.
- Understand switching concepts such as VLANs, Spanning Tree and Ethernet port characteristics.
- Configure a Cisco 2500/2600/2800 series router.
- Configure a Cisco 2900/3500 series switch.
- Use packet capture software to capture specific events.
- Answer a series of general questions on various operating systems such as UNIX, Apple, Windows, etc.
- Understand various network protocols.
- Answer a series of general questions on hardware and Networking technologies.
- Properly record system documentation.

Equipment / Tools / Materials

Supplied by Competitor:

- Work bench tools including pliers, screwdrivers, and proper anti-static accessories.

Supplied by Committee as required:

Software:

- Windows XP Professional
- Windows 2003 Server
- Red Hat Linux
- Novell SuSe Linux
- VMWare Server
- Office Suite
- Wireshark
- Software appropriate to support documentation

Hardware:

- Workstation class PC(s)
- Wireless-capable PC(s)
- Server class PC(s)
- Network printer
- Suitable work surface

- Power bars / surge protector

Additional Hardware:

- Additional computer upgrade hardware as required.
- Additional network components as required.
- Raw materials for task completion as required.
- Suitable anti-static work area or earth ground connection available to each competitor

Clothing Requirements:

- Competitors are to be dressed in a clean and safe manner.
- No jewellery on hands or wrists.

Safety Requirements:

Safety awareness/requirements will be maintained at the minimum industry standards at all times. A contestant will not be allowed to compete without the safety equipment noted on this scope document.

Judging Criteria:

- Ability to upgrade and properly configure PC workstations & servers.
- Ability to properly install operating systems and application software.
- Ability to properly implement and configure directory services.
- Ability to properly connect and configure networking equipment.
- Safe utilization of trade tools and display of proper technique.
- Neatness of work area and space management.
- Complete, appropriate and neat documentation.
- In the case of a tie at the end of the competition, the competitor with the higher score in the general knowledge questions will be declared the winner. If the tie continues, then professionalism will be the deciding factor.

Technical Committee:

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