



## 2010 13<sup>th</sup> ANNUAL SKILLS MANITOBA COMPETITION CONTEST SCOPE

**CONTEST NAME:** IT and Network Support

**CONTEST NO:** 39

**LEVEL:** Secondary / Post-secondary

**NOTE:**

Secondary Level: 1 competitor per school\*

Post Secondary Level: 1 competitor per school\*

\*depending on total number of registrations more competitors may be admitted

**CONTEST LOCATION:** Winnipeg Technical College, Room 207 & 209  
130 Henlow Bay, Winnipeg

**CONTEST START TIME AND DURATION:** 8:00am - 3:00pm (6 hours Maximum)

**PURPOSE OF CHALLENGE:** Participants will demonstrate IT Network Support knowledge and skills through typical technical support functions.

**SKILLS AND KNOWLEDGE TO BE TESTED:**

**Competitors\* will be required to:**

1. Set up and configure PC workstations and servers
  - a. Identify standard PC and Networking hardware
  - b. Troubleshoot hardware and software installation and configuration issues
  - c. Install and configure workstation and server operating systems (may occur within Vmware virtual environment)
    - i. Install Fedora Core 12 and/or S - Windows 2003, P - Windows 2008 on server hardware
    - ii. Install Windows XP and/or Ubuntu 9.10 on workstation hardware
    - iii. Install any additional software needed as required by project (e.g. imaging software)

- iv. Configure dual boot workstation according to provided specifications
  - v. Configure workgroup networking using TCP/IP
2. Administrate network resources
    - a. Identify appropriate cables as needed.
    - b. Connect two computers as peer-to-peer network using TCP/IP
    - c. Configure client/server DHCP
  3. Conduct administrative functions in client/server environment
    - a. Set up DHCP, DNS, and other services as indicated according to provided specifications
    - b. Set up shares, permissions, privileges, group policy and user profiles according to provided specifications
    - c. P - Install, configure and set up a simple welcome screen for FTP and HTTP services running on IIS
    - d. P - Install Terminal Services and Terminal Client as specified.
  4. Set up and configure a Cisco router and switch network.
    - a. S - Install a Cisco Linksys router  
P - Install a Cisco router and switch network. Packet Tracer may be used.
    - b. S - Install Cisco wireless NIC.  
P - Configure Routing protocol and VLANs.
    - c. Secure the Cisco equipment
  5. Troubleshooting (problem identification & resolution).
    - a. Common simulated problems on computer systems and/or written tasks that the technician will attempt to solve during the competition.
  6. User support skills
    - a. Client support questions
    - b. Written responses to routine situation
  7. Properly recorded system documentation
    - a. Keep a log of appropriate details as per tasks

*Note: A written component will be used to evaluate the competitor's ability to demonstrate user support for functions that can not be simulated within the project environment.*

**\* S denotes secondary only – P denotes post-secondary only**

### **POINT BREAKDOWN / 100% TOTAL:**

Practical tasks as per provided specifications – 60%

Written component – 20%

Troubleshooting - 10%

Documentation – 5%

Demonstrated proper use of trade tools, methodology, work area and appropriate dress – 5%

Ties will be decided by weighting the general knowledge questions. If a tie continues then the technician's documentation, neatness and attitude will be factored in.

**EQUIPMENT, TOOLS, MATERIALS TO BE PROVIDED BY COMMITTEE:**

All hardware, software, networking supplies and written documentation that will be required to complete the competition.

**EQUIPMENT, TOOLS, MATERIALS TO BE SUPPLIED BY COMPETITOR:**

Standard IT technician work bench tools including anti-static accessories  
Cable testers

**WORKSITE SAFETY RULES / REQUIREMENTS:**

All contestants should dress with appropriate clothing for the role of an IT support technician. Workbench area should be organized and managed appropriately throughout competition.

**SPECIAL CONDITIONS / ADDITIONAL INFORMATION:**

Requests for additional competitors will be considered, however, each institution may be limited to one competitor based on available equipment. Please email [ranhir@wtc.mb.ca](mailto:ranhir@wtc.mb.ca) with any questions.

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