CONTEST DESCRIPTION

CONTEST AREA: IT Network Systems Administration	LEVEL: Secondary
COMPETITION SCHEDULE: Competition Date: Tuesday, April 12, 2022 Duration: 6 Hours Mandatory Registration – 8:00AM Mandatory Orientation – 8:30AM Start 9:00AM Lunch 12:00-12:30PM Ends – 3:30PM Submission due – 3:45PM	LOCATION: Competitor's School. See Competition Format information below LIVESTREAMED: YES– competitors will be required to remain on WebEx, but cameras can be turned off

COMPETITION FORMAT: (Virtual/ In School)

All secondary competitors will be competing with in their school environment and must arrange in advance with a teacher for a safe competition location, according to their school's Covid-19 safety policies. They will need to prepare their competition space with all of the required tools, equipment, materials, and technology (as listed below) that will be needed to complete the competition. Teachers and competitors will need to work together to ensure the competitor is ready for success on their competition day.

Each competitor must have a teacher/supervisor available throughout the day, in case of incident. (Teacher/Supervisor must be present at the competition orientation.)

Competitors and Teachers should be prepared to receive additional information about the competition projects, livestreams, shipping, etc. prior to the competition. Please ensure you are double checking for emails from Skills, including checking junk mail.

WEBEX LIVESTREAMS:
Competition Registration and Orientation: The competition will begin with a mandatory virtual registration. Competitors will join the assigned link that will be emailed to all registered competitors and registering teachers in advance. This will be the time that competitors are able to check in and ensure sound, cameras, and tech are working appropriately. The registration will be followed by competition orientation. Camera's MUST be on and competitors visible on the camera during the orientation.

PROJECT SUBMISSION LINK:
- https://form.jotform.com/SkillsAB/2022SCAVC
- Multiple files can be uploaded at once, each file has a maximum size of 1G. If file sizes are larger than 1G, please follow alternate instructions through the submission link.

ACCEPTED FILE TYPE: pdf, doc, docx, xls, xlsx, csv, txt, rtf, html, zip, mp3, wma, mpg, flv, avi, jpg, jpeg, png, gif. If you would like to submit a different type of file, please place it in a zip folder.

To create a zip file – Select all the files that you would like to submit and right-click your mouse, a menu will open, select Send To, and then click on Compressed (zipped) folder. A zip file will then be created containing your submission documents.
Submissions will be due within 15 minutes of the end of competition time. Please note: Late submissions sent after the date and time specified above will not be accepted.

SAFETY:
The health, safety and welfare of all individuals involved with Skills Canada Alberta are of vital importance. Safety is a condition of participation with Skills Canada Alberta and shall not be sacrificed for the sake of expediency. At the discretion of the judges and technical committees, any competitor can be denied the right to participate should they not have the required proper safety equipment and/or act in an unsafe manner that can cause harm to themselves or others.

Safety Checklist: It is the responsibility of each competitor and teacher to review the Safety Checklist in advance of the competition to ensure all safety requirements are met prior to the competition. During the official competition orientation, the Safety Checklist will be formally reviewed with competitors. The Safety Checklist is posted as a sperate document with the Contest Description.
Submission Link for Portfolio & Pictures: https://form.jotform.com/SkillsAB/2022SCAVC

AWARDS CEREMONY INFORMATION: Please join us for a live virtual awards ceremony on May 6th at 6:30PM.

Please note: This document is subject to change as competition information is updated. Competitors are responsible for staying up to date with the most recent information. Check the footer for last updated date. Changes will be highlighted in yellow.

CONTEST INTRODUCTION
Give competitors the opportunity to demonstrate their knowledge and challenge their skills in computer and network support functions.

SKILLS AND KNOWLEDGE TO BE TESTED:
- Secondary competitors will be identifying components of a computer and making recommendations for upgrading parts.
- Competitors will be expected to setup and do specific configurations of Windows 10 machines in a home or small business scenario.

- Competitors will complete help tickets on Windows 10 computers on a home network and build a network in a virtual environment using Packet Tracer software. Networking tasks at the secondary level will assume the use of a (virtual) Linksys wireless router.
- Cybersecurity activities will involve a written component and a practical component done within a Linux shell environment.

PROJECT DESCRIPTION

- Computer hardware identification and recommendations.
- Troubleshoot and document configuration and networking issues
- Configure and troubleshoot Windows 10
- Configure Linux in a command line environment
- Perform basic network administration tasks.
- Use packet tracer software to troubleshoot and configure a virtual network environment.
- Understand basic switch configurations using Cisco IOS.
- Understand basic routing and be able to set up and configure a (virtual) Linksys broadband router to manage a small home-based network and connect it to the Internet.
- Properly setup and secure network shares.
- Understanding of TCP/IP and ability to perform basic IPv4 subnet calculations and assign addresses.
- Understand IPv6 configuration
- Properly record system documentation.
- Time management.
- Understanding of general cybersecurity topics including common cybersecurity threats (i.e. phishing, malware, etc.), and common security practices (i.e. encryption, firewalls, etc.) to perform in a simulated incident and written component.

All competitors must always exhibit workplace safety procedures and conduct themselves professionally.

EQUIPMENT & MATERIALS

Equipment and Materials Competitors Must Supply:

A computer capable of running Windows 10 (not a Chromebook)	Clothing: Appropriate business attire.
Writing and documentation utilities.	

Supplied Software:

Windows 10	Windows 2016R2 Server
VMWare Workstation or VMWare player	Putty
Packet Tracer – available for download from the Cisco website	Linux

JUDGING CRITERIA

- Omitting specifics, competition description will include marking of all elements.
- Competitor's ability to upgrade and properly configure PC workstation.
- Proper installation of operating system and application software.
- Safely utilize trade tools and display of proper methodology.
- Neatness of work area and space management.

- Neat and proper documentation of PC inventory and configuration settings.
- In the case of a tie at the end of the competition, the winner will be determined by the highest score on the troubleshooting section will be the winner, if still tied, the highest score on the Windows Networking section will determine the winner, if still tied, the highest score on the Packet Tracer section will determine the winner, committee, if still tied, the highest score on the Hardware section will determine the winner.

EVALUATION BREAKDOWN:

- Computer Hardware and Troubleshooting 25%
- Server Challenges (Linux) 25%
- Network (Packet Tracer) 25%
- Cybersecurity 25%

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RELATED CAREER AND TECHNOLOGY STUDIES COURSES

Descriptions of all related courses can be found on:

http://education.alberta.ca/media/2205264/net.pdf

NET2020: Workstation Technology & Operations	NET2060: Network Protocols	NET3070: Routing Fundamentals
NET2030: Network Structures	NET2070: Local Area Networks	NET3090: Network Management
NET2040: Network Media & Devices	NET3050: Network Operating Systems	NET3100: Network Media & Devices, Security

ADDITIONAL INFORMATION

Skills Canada Alberta Regional and Provincial Rules and Regulations

Regional and Provincial Rules and Regulations

Competitor Registration

Registration for Secondary Skills Canada Alberta Virtual Competition will open online at https://portal.skillsalberta.com/ on January 26, 2022 at 8:30 AM. There will be no registration fee for competitors to compete. Late cancellation or drop-spots fees may apply.

Lunch

Lunch will NOT be provided.

Virtual Awards Ceremony

The Virtual Awards Ceremony will take place **Friday, May 6th at 6:30PM**. A link will be made available on the website with additional information.

Team Alberta Information

Top eligible medalists will compete virtually in the Skills Canada National Competition (SCNC) May 16-27, 2022. It is recommended that competitors review the SCNC contest description to be familiar with the national contest description and project at http://www.skillscanada.com/.

If a competitor is not able to attend the SCNC, competitors MUST notify Victoria Anderson Victoriaa@skillsalberta.com prior to the start of competition. If a gold medalist is not able to attend the SCNC, the next top-ranking individual will be asked to participate.

Ethical Conduct

We recognize that participants will be competing individually in their own unique environments. We expect all competitors to compete fairly, respecting and abiding by the established rules in the true spirit of Skills Canada Alberta.

Letter of Participation

Competitors who participate in the 2022 Provincial Skills Canada Competition are eligible for a Letter of Participation that can be downloaded on the Registration Portal after the competition ends.

Questions?

Please contact Mike Sury mikes@skillsalberta.com if you have any questions regarding the Contest Description.

COMMITTEE MEMBERS:

Gerald Chung	Brandon Peek-Philpott
Micky Langlois	Shan Kampen