

2021 PROVINCIAL SKILLS CANADA COMPETITION



Contest Description

CONTEST AREA: IT NETWORK SUPPORT ADMINISTRATION			LEVEL: Secondary										
<table border="1"> <tr> <td>Registration</td> <td>April 19</td> <td>8:15</td> </tr> <tr> <td>Orientation</td> <td></td> <td>8:30-9:00AM</td> </tr> <tr> <td rowspan="2">Competition</td> <td rowspan="2">April 19</td> <td>9:00AM-12:00PM</td> </tr> <tr> <td>12:30-3:30PM</td> </tr> </table>			Registration	April 19	8:15	Orientation		8:30-9:00AM	Competition	April 19	9:00AM-12:00PM	12:30-3:30PM	LOCATION: COMPETITOR'S SCHOOL. SEE COMPETITION FORMAT INFORMATION BELOW
Registration	April 19	8:15											
Orientation		8:30-9:00AM											
Competition	April 19	9:00AM-12:00PM											
		12:30-3:30PM											
DURATION: 6HOURS			REGIONALIZED: NO										
<p>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.</p> <p>Each competitor must have a teacher/ supervisor available throughout the day, in case of incident. (Teacher/Supervisor must be present at the competition orientation.)</p> <p>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.</p>													
<p>WEBEX LIVESTREAMS: Competition Orientation: The competition will begin with a virtual orientation. Competitors will join the assigned videoconference link that will be emailed to all registered competitors for the competition orientation. Camera's MUST be on and competitors visible on the camera during the orientation. An email with the WebEx link will be sent out in advance of the competition.</p>													
<p>PROJECT SUBMISSION DEADLINE: APRIL 19 BY 3:45PM PROJECT SUBMISSION LINK:</p> <ul style="list-style-type: none"> • https://form.jotform.com/SkillsAB/2021PSCC • 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. <p>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.</p>													

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To create a zip folder – 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 (<https://skillsalberta.com/additional-2021-competition-resources/>) in advance of the competition and ensure they are able to meet all safety requirements. During the orientation, the safety checklist will be formally reviewed.

AWARDS CEREMONY INFORMATION: Please join us for a live virtual awards ceremony on May 13th 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.

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- 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

School/ Competitors Supplied Equipment and Materials

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

School/Competitor Supplied Software:

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

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VIRTUAL COMPETITION RESOURCE SUPPORT FORM

A \$40 competition resource subsidy is available to all competitors. It is intended for items that were purchased to support competitors (e.g. food supplies, materials, technical equipment, tools, etc.). The form can be accessed at the following link: <https://skillsalberta.com/additional-2021-competition-resources/>

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%

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

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ADDITIONAL INFORMATION

Skills Canada Alberta Regional and Provincial Rules and Regulations

[Regional and Provincial Rules and Regulations](#)

Competitor Registration

Competition Registration will open online at <https://portal.skillsalberta.com/> on January 12, 2021 at 8:30AM for the Regional Skills Canada Competition and on January 14, 2021 at 8:30 AM for the Provincial Skills Canada Competition (PSCC)

Lunch

Lunch will be provided by Skills Canada Alberta

Virtual Awards Ceremony

The Virtual Awards Ceremony will take place **Thursday, May 13th at 6:30PM**. A link will be made available on the website with additional information.

Team Alberta Information

Team Alberta will be selected from competition Gold medalists who will then be eligible to participate at the Skills Canada National Competition (SCNC) in a virtual format May 25-30, 2021. It is recommended that competitors review the SCNC contest description to be familiar with the national contest description and project at <http://www.skillsalberta.com/>.

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 2021 Provincial Skills Canada Competition are eligible for a Letter of Participation that can be downloaded on the Registration Portal after the competition ends.

COMMITTEE MEMBERS:

Doug Warden (chair)	Brandon Peek-Philpott
Gerald Chung	Shan Kampen
Mehrshad Sahebsara	