Exam Candidate Information Guide





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ISACA CSX Cybersecurity Practitioner (CSX-P) Exam Candidate Information Guide

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ISACA CSX Cybersecurity Practitioner (CSX-P) Exam Candidate Information Guide

Introduction

ISACA's CSX[®] Cybersecurity Practitioner (CSX-P) exam was developed utilizing existing global cybersecurity frameworks and input from hundreds of subject matter experts. The CSX-P exam is conducted in a sandbox using realistic scenarios intended to measure and evaluate a candidate's ability to perform cybersecurity tasks aligned to the <u>Exam Content Outline</u>.

Exam Availability	March 2020
Exam Description	The CSX-P certification verifies that successful candidates have the knowledge and skills required to identify assets and remediate vulnerabilities; configure and implement protective technologies; and detect, respond and recover from incidents.
Content Areas	Domain 1-Business and Security Environment (Identity- ID) Domain 2-Operational Security Readiness (Protect - PR) Domain 3-Threat Detection and Evaluation (Detect - DE) Domain 4-Incident Response and Recovery (Respond - RS & Recover - RC)
Certification Requirements	 Pass CSX Cybersecurity Practitioner examination Compliance with ISACA's Code of Professional Ethics Compliance with ISACA's <u>CSX-P CPE Policy</u> is required to maintain certification
Type of Exam	Online lab-based performance exam delivered via remote proctor through PSI Testing Solutions.
Number of Items	20
Length of Exam	4 hours (240 minutes) to complete <u>and</u> score the exam. Candidates are strongly encouraged to submit their exam for scoring at 3 hours 45 minutes.
Languages	English only
Price	Refer to Cart for current pricing.
Re-Certification Requirements	Attain and report an annual minimum of twenty (20) CPE hours and one-hundred-twenty (120) CPE hours over a three-year cycle. A minimum of 50% of the annual and three-year cycle CPE hours must be obtained from skills-based training/lab activities. Refer to the <u>CSX-P CPE Policy</u> for details.

Summary of Certification Program

About the Exam

The ISACA CSX Cybersecurity Practitioner examination is a performance exam consisting of 20 items aligned to the <u>Exam</u> <u>Content Outline</u>. There are no multiple-choice questions. Each exam item consists of a prompt and exam taker responses are then evaluated against a pre-defined scoring criterion. Participants have 4 hours (240 minutes) to complete and score their exam. Candidates are strongly encouraged to submit their exam for scoring at 3 hours 45 minutes.

Exam Content Outline

1	Business and Security Environment (ID)	25%
1A	Business Environment	
1A1	Digital Infrastructure	
1A2	Enterprise Architecture	
1A3	Data and Digital Communication	
1B	Security Environment	
1B1	Network	
1B2	Operating Systems	
1B3	Applications	
1B4	Virtualization and Cloud	
2	Operational Security Readiness (PR)	25%
2A	Protection	
2A1	Digital and Data Assets	
2A2	Ports and Protocols	
2A3	Protection Technologies	
2A4	Identity and Access Management	
2A5	Configuration Management	
2B	Preparedness	
2B1	Threat Modeling	
2B2	Contingency Planning	
2B3	Security Procedures	
3	Threat Detection and Evaluation (DE)	25%
3A	Monitoring	
3A1	Vulnerability Management	
3A2	Security Logs and Alerts	
3A3	Monitoring Tools and Appliances	
3A4	Use Cases	
3A5	Penetration Testing	
3B	Analysis	
3B1	Network Traffic Analysis	
3B2	Packet Capture and Analysis	
3B3	Data Analysis	
3B4	Research and Correlation	
4	Incident Response and Recovery (RS&RC)	25%
4A	Incident Handling	
4A1	Notifications and Escalation	
4A2	Digital Forensics	
4B	Mitigation	
4B1	Containment	
4B2	Attack Countermeasures	
4B3	Corrective Actions	
4C	Restoration	
4C1	Security Functions Validation	
4C2	Incident Analysis and Reporting	
4C3	Lessons Learned and Process Improvement	

Taking the CSX-P Exam

To take the CSX-P Exam, you will need to perform the following tasks in the order listed.

- Perform a <u>compatibility check</u> to ensure <u>system requirements for remote proctoring</u> are met
- If necessary, request special accommodations
- Register and Purchase the CSX-P Exam from the ISACA website
- <u>Schedule</u> the exam date and time
- Take the exam
- Submit your Exam Results
- View/print the results (certificate, badge)

For detailed instructions on each of these steps, please refer to the sections to follow in this guide.

Exam Environment Familiarization

Candidates unfamiliar with the Learn on Demand Systems (LODS) platform are encouraged to view this lab tutorial. After the tutorial loads, you will notice that the Instructions for each task within the exam are located in the right-hand column.

On exam day, once you have been admitted into the exam, the exam environment will launch automatically and may take several minutes. Exam time begins after launch.

System Requirements for Remote Proctoring

Candidates are responsible for ensuring the computer used to take the exam meets the following requirements which can be verified with a compatibility check, as directed by PSI.

- Supported OS: Windows XP, Vista, 7, 8, Mac OS X and above, Linux, and Chrome OS
- Web browser: Google Chrome or Chromium version 32 and above
- Webcam/Microphone: Minimum VGA 640 x 480 resolution, enabled built in or external microphone
- You will need to download the PSI Secure Browser (This can be done NO MORE than 30 minutes prior to your scheduled exam time. If you are taking your exam from a work location, we advise contacting your local IT administrator to inform them that you will need to download the browser to your machine.)
 - o Browser settings: Your browser must accept 3rd party cookies for the duration of the exam ONLY
- Bandwidth: Minimum 1mb/s download and 1mb/s upload
- Hardware Requirements: 1GB RAM & 2GHz dual core processor, minimum 1280 x 800 resolution

It is highly recommended that before scheduling a CSX-P exam, candidates perform the <u>Compatibility Check</u> on the computer you will be using to take the exam. This can be accessed at any time directly from the PSI dashboard. We recommend performing a second compatibility check 72 hours prior to your scheduled exam time in case changes to your machine software or hardware have occurred since scheduling. Please contact PSI Technical Support if you have any questions about your compatibility test results:

- Inside the U.S. (844) 267-1017
- Outside 1-702-939-6734

Chat: <u>http://clientportal.softwaresecure.com/support</u>

ISACA PSIQA LARSC				
Compatibility Check				
PSI Secure Browser required to take exam				
The PSI Secure Browser is a web browser created to guarantee a se Browser. If you have already installed the Secure Browser, you may proceed to	ecurely proclored exam over a virtual connection. This online exam is taken using the PSI Secure Option 2.			
Option 1: Install the PSI Secure Browser	Option 2: Launch the Exam			
Lownload the Secure Browser Run the PSI Secure Browser Setup File Install Secure Browser	Launch your exam using the link below. You can relaunch the exam with the PSI Secure Browser desktop icon Launch the Exam			
Troubleshooting				
If at any point during the check-in process or the exam the application becomes unresponsive:				
 Chat with your proctor for additional instructions If chat is unavailable, close the application via File > Exit or the Ta Releanch the exam via PSI Secure Browser desitop icon 	sk Managar			
VERSION 1.2.0				

Audio/Video Check					
REQUIREMENTS	STATUS	YOUR SYSTEM			
Webcam	1	Integrated Webcam (0bda:57c3)			
Microphone	1	Default - Headset Microphone (Logitech Mono H650e) (046d:0a47)			
PSI Communication Protocol	1	Connected			
Testing System Access	1	Allowed			
PSI System Storage	1	Allowed			
PSI Video Streaming	✓	Allowed			
System Check					
REQUIREMENTS	STATUS	YOUR SYSTEM			
Browser and Version - Chrome 58.0 and above.	1	Chrome 79.0			
Platform - Windows 7.0, 8.0, 8.1, 10.0, Macintosh 10, or Linux (Chrome Extension).	1	Windows 10			
Javascript - Enabled.	1	Enabled			
Cookies - Enabled.	1	Enabled			
Connection Speed - Should be atleast 50 kbits per second	1	16606965			

When you schedule an exam, you can also view these requirements and perform another compatibility check. See <u>Scheduling</u> section of this Guide.

Note that purchases are nonrefundable, so please check your system requirements prior to purchasing your CSX-P exam.

Special Accommodations

Upon request, ISACA will make reasonable accommodations in its exam procedures for candidates with documented disabilities. Consideration for reasonable alterations must be requested **before scheduling an exam**. If you require a special accommodation, you will need to:

Complete an ISACA Exam <u>Special Accommodation Request Form</u> and submit it to ISACA at <u>SPECIALaccom@isaca.org</u> for approval. If a special accommodation is required, scheduling of a CSX-P exam CANNOT be completed until the special accommodation form has been reviewed and approved.

Note: Special Accommodation Form must be completed by you and your health care professional. All requests must be submitted to ISACA no later than 4 weeks prior to your preferred exam date and are only valid for that one exam administration.

Purchase and Scheduling

Purchase

The registration process and payment must be completed before you can schedule an exam. Exam fees are non-refundable and non-transferable. When you complete the online registration process, you are agreeing to adhere to and accept ISACA's Exam Consent Form. It is important that you understand this agreement prior to registration.

- 1. Sign in to or create your <u>ISACA</u> account using your username and password.
- 2. Click Register Now on the CSX-P Exam page to register for the CSX-P exam and add it to your shopping cart
- 3. Make your payment. You may choose to pay by check, bank transfer, or credit card. Follow the onscreen instructions to complete your purchase.

Prior to purchase, we recommend candidates review hardware and software requirements outlined in the <u>Remote Proctoring</u> <u>Requirements</u> section to ensure the computer being used will not block the downloading of required software. Candidates must perform compatibility checks on the computer being used to take the exam, as directed by PSI.

Exams are valid for 6 months from the purchase date. Exams not taken within this period will result in forfeiture of fees. Membership pricing is based on membership status at time of exam purchase. If you are not an ISACA member, consider joining during the registration process to enjoy the member discount on your exam purchase. Membership purchase requires at least 1 business day prior to exam purchase to receive the discounted rate. Exam fees are not refundable nor transferrable.

Scheduling

To schedule your remotely proctored exam, you will need to do the following:

- Log-in to your ISACA Account
- Click Certification & CPE Management tab
- Click Schedule Your Exam and you will be taken to the PSI dashboard to schedule your exam. Note: PSI is the third-party that manages the online exam and remote proctoring.
- ISACA recommends you perform another compatibility check prior to scheduling your exam. You may do so directly from your PSI dashboard by clicking the **Click Here** link below the scheduling box. We recommend that you perform this check from the computer you plan on using to take the exam.
- Click Schedule Exam and follow the instructions:
 - Language will default to English
 - Enter your **Country** and **Time zone**.
 - \circ ~ Select an available \mbox{Date} and \mbox{Time} on the calendar
 - Confirm Schedule Details and click Continue.

You will receive a confirmation email from <u>no-reply@psiexams.com</u> confirming your exam appointment.

Be sure to read through the important information regarding Exam Day Expectations, Cancellation and Rescheduling Policy, No-Show Policy and Equipment Needs.

Rescheduling

Should you need to reschedule your exam, you can do so up to 48 hours before your originally scheduled day and time. To reschedule an appointment, Log-in to your <u>ISACA</u> Account. From the **MyISACA Dashboard**, click on **Certification & CPE Management**, click the **Take**, **Re-Schedule or Cancel Exam** button next to the exam you wish to reschedule. This will take you to the PSI website where you can reschedule the exam.

- Click on View Details
- Click Reschedule
- Confirm that you want to reschedule your exam
- Follow the Scheduling instructions above

Fee schedule:

- At least 48 hours prior to scheduled exam: no fee
- Within 48 hours: forfeit exam fees
- Exam Registrations may not be cancelled at any time
- Exam eligibility is valid for **6 months**. Exam registration fees will be forfeited if you do not take the exam within 6 months from the date of purchase.

Exam Day Information

Confidentiality

By taking an ISACA exam, the candidate understands and agrees that the exam (which includes all aspects of the exam, including, without limitation, the test, scenarios/questions, responses, examples and other information presented or contained in the exam and exam materials) belongs to ISACA and constitutes ISACA's confidential information (collectively, "Confidential Information"). At time of purchase, the candidate agrees to maintain the confidentiality of ISACA's Confidential Information at all times and understands that any failure to maintain the confidentiality of ISACA's Confidential Information may result in disciplinary action against the candidate by ISACA or other adverse consequences, including, without limitation, nullification of his/her exam, loss of his/her credentials, and/or litigation. Specifically, the candidate understands that he/she may not, for example, discuss, publish or share any exam scenarios/question(s), his/her responses or thoughts on any questions(s) or the exam's format in any forum or media (e.g., via email, Facebook, LinkedIn).

Exam Requirements

Candidates are responsible for choosing a suitable test environment. The following will minimize issues on exam day. Failure to comply will result in your exam being voided with no refund given.

- Choose a **quiet area** to take the exam. Avoid choosing an area that may contain loud noises (i.e. TV, family, music, pets, visitors, etc.), and public places (i.e. coffee shops, restaurants, parks, etc.).
- You will need a **valid photo ID** (see Identification Requirements below). If your ID has expired, the proctor will ask that you reschedule the exam, so you can provide a valid photo ID. Your photo on the ID should be made clearly visible to the camera when prompted by the proctor. The name on the ID must be the same as the name that appears in the candidate's *My ISACA* profile.
- You will need a **web cam** and **microphone**.
- You will need to have a **clean work area** with **no reference materials** available.
- You MUST access the online exam environment **15 minutes prior** to the scheduled start time. It is recommended you do so to connect with the remote proctor and launch the exam properly.
- Be sure your computer has **sufficient battery life** and/or is plugged into a power source for the duration of the exam.
- You must have **stable Internet connectivity** (**Note:** Internet speeds and quality vary and can impact a candidate's exam experience in the form of slower lab responses (i.e. lag). Although PSI remote proctoring and LODS labs can function at slower speeds, ISACA recommends minimum speed for labs of 5 mbps down and 2 mbps up internet speeds for the duration of the exam. If you lose Internet connectivity during the exam, your session may be terminated, and results voided.
- You must take the exam in **full screen mode**.
- There will be **no reschedule requests** granted within 48 hours of the scheduled exam. **Exam cancellations** are not allowed and not showing up for your exam will result in a forfeiture of your registration fee.

Note: Failure to comply with any of the above will result in your exam being voided and forfeiture of your exam fees. If you have any questions regarding these requirements, please contact ISACA Support at https://support.isaca.org/app/ask/p/361/c/498.

Identification Requirements

Candidates are required to present acceptable identification as outlined below. Failure to provide sufficient identification prohibits testing and constitutes forfeiture of exam fees. The form of identification must bear the candidate's signature and a recent photograph. The name on the identification must be the same as the name that appears in the candidate's *ISACA* profile.

Identification must be from the following list of forms of identification (ID) and must include the candidate's signature and a recent recognizable photograph. The Primary ID must be valid and current (not expired):

- Valid driver's license with photo
- State identity card (non-driver license)
- Military ID card with photo
- National ID card with photo
- Green card
- Alien registration
- Permanent resident card
- Valid passport or passport card with photo

Candidates will not be allowed to take the exam if the remote proctor believes they have not sufficiently proven their identity and there will be no refund of the exam fee. Being allowed to take the exam and completion of the examination does not imply that the identification is valid or that the score will be official. ISACA reserves the right to review all exam irregularities brought to our attention.

Exam Rules

The exam is an online, remotely proctored exam. Cheating is not tolerated. The proctor will stop the exam immediately if he/she observes any rule violations. Failure to comply will result in the exam being voided with no refund given. While the session is in progress, all exams are continuously monitored by audio and video by a remote proctor. PSI retains the video stream only. The audio is not available after the exam. The remote proctor is authorized to terminate the exam for rule and regulation violations.

To ensure that all candidates are tested under equally favorable conditions, the following are **NOT** allowed during testing:

- Candidates are not allowed to bring reference materials, written notes, published materials, testing aids, blank paper, note pads or language dictionaries into the testing area.
- Using an instant messenger tool/system
- Note taking or taking screen captures of the computer screen/exam content
- Eating or drinking
- Walking around the room
- Other people standing in or walking through your testing area
- Unauthorized personal items may not be brought into the testing area. Such items include, but are not limited to: outerwear, hats, food, drinks, purses, briefcases, notebooks, pagers, watches, cell phones, recording devices and photographic equipment.
- Candidates are not allowed to bring or use a calculator in the testing area.
- Electronic equipment is not permitted in the testing room at any time. This includes, but is not limited to, cameras, surveillance or recording devices, pagers, cell phones, etc.
- Unscheduled breaks (without approval from the proctor)
- Accessing other programs on your system such as viewing documents, web browsing, email access, etc.

Taking the Exam

Note: You must have scheduled a date and time to sit for the exam before you can take it. See <u>Scheduling</u> of this Guide for instructions on how to schedule. Refer to the <u>CSX-P Exam Day Guide</u> for what to expect on exam day.

- 1. Log-in to your <u>ISACA</u> Account
- 2. Click Certification & CPE Management tab
- 3. Click on **Take, Re-Schedule or Cancel Exam** and you will be taken to the PSI site to take your exam. **Note:** PSI is the third-party that manages the online exam and remote proctoring.
- 4. You will be prompted to download the PSI Secure Browser prior to launching your exam. Please ensure that your computer is able to download software. This is available 30 minutes prior to your scheduled exam time. If you are taking the exam from a work or other restricted access environment, please inform your IT administrator when you are planning to take the exam, so they are available in case you need assistance downloading the secure browser.
- 5. Click Launch Exam.

Note 1: The Launch button will be available 30 minutes prior to the start of the exam.

Note 2: Before launching the exam, be sure you have read and understand the exam rules, please refer to <u>Exam Rules</u> section of this Guide.

Note 3: Be aware that your exam proctor can see you through your web cam; however, you will not be able to see the proctor. You can communicate with the proctor via the Live Chat.

6. Click the Enter Full Screen button.

Note: You are required to take the exam in full screen mode. Please refer to Exam Requirements section of this Guide.

- 7. Click the **Connect** button(s) to connect the web cam and your computer with the proctor.
- 8. Click the Entire Screen button.
- 9. Click the **Share** button.

Misconduct

Candidates who are discovered in violation of the exam rules or engaging in any kind of misconduct including but not limited to the activities listed below will be subject to disqualification including voiding of their exam results. All cases of misconduct will be reported to ISACA for review to render any decision necessary.

- Giving or receiving help; using notes, papers or other aids
- Attempting to take the exam for someone else
- Possession of communication, surveillance or recording device, including, but not limited to, cell phones, tablets, smart glasses, smart watches, mobile devices, etc., during the exam administration
- Attempting to share test information contained in the exam (as such are the confidential information of ISACA), including sharing test information after the exam
- Leaving the testing area without permission (these individuals will not be allowed to return to the work area)
- Accessing items or personal belongings without notice and approval of the remote proctor or bringing items into the testing area that are not permitted
- Attempting to alter, bypass, or otherwise defeat scoring mechanisms

If Absent or Late for the Appointment

Candidates MUST access the online exam environment 15 minutes prior to the scheduled start time, to allow enough time to connect with the remote proctor and launch the exam properly.

Candidates who miss their appointment or Log-in more than 15 minutes late are not allowed to test and must purchase another exam prior to scheduling a new appointment. If candidates are unable to attend the scheduled exam due to personal hardship, please refer to the guidelines below. ISACA reserves the right to request documentation to support any personal hardship.

Personal Hardship Guidelines

One of the following events must have occurred less than three days before the scheduled appointment and require documentation noted. ISACA reserves the right to request documentation to support any personal hardship. All hardship requests must be communicated to ISACA within 48 hours of the exam date. Such requests should be sent to csxexam@isaca.org.

- Candidate Illness: Doctor's note, emergency room admittance, etc.
 - Must be signed by a licensed doctor and include the date of medical visit
 - Must include contact information for the licensed doctor
 - Does not need to give details of the illness or emergency, but the doctor should indicate that the candidate should not test
- Death of an immediate family member:
 - Must include the date of death and deceased name and relationship to the deceased
 - Note: immediate family member is defined as spouse, child/dependent, parent, grandparent or sibling
 - Traffic Accidents: Police report, receipt from the mechanic or towing company
 - Must include the date and contact information
- Court Appearance: Court or jury summons, subpoena
 - Must include the date and specifically name the candidate
- Call to Active Military Duty
 - Military documentation MUST be provided

Exam Day Comments

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Exams are only administered via remote proctoring. Candidates who wish to address comments or concerns about their experience, including exam day issues or content, must contact ISACA by email (<u>csxexam@isaca.org</u>) within 48 hours of their exam date. ISACA will review complaints prior to the release of official exam scores. Correspondence shall include: Full name, ISACA ID number, exam day and time, and any relevant details on the specific issue. Only those comments received by ISACA within 48 hours of the exam date will be considered in the final scoring of the exam.

After the Exam

Exam Results

You must grade your exam prior to time expiring. You will receive your exam results immediately upon clicking the Submit button after completing the exam. You will get a message to confirm submission, noting any unanswered items. Please be sure you are ready to submit the exam, as you will not be able to go back into the exam to modify or answer any previous questions.

Official results are communicated within 10 business days of the exam to the email address listed in candidate's ISACA profile. To ensure the confidentiality of scores, exam results are not reported by telephone or fax. To prevent email notification from being sent to spam folders, candidates should add <u>donotreply@f.isaca.org</u> to their address book, whitelist or safe-senders list. Once released, results will also be available on the <u>Certifications and CPE Management</u> page of the ISACA Dashboard. Candidates who pass the CSX-P exam earn certification without further action. A PDF containing a printable certificate of certification will be available on the <u>Certifications and CPE Management</u> page.

Claiming & Sharing Your Digital Badge

If you are successful in passing the exam, within 10 business day of the exam you will receive an email with instructions on how to claim your digital badge and share it via social media.

Retesting Policy

Candidates who are unsuccessful in passing the exam may purchase subsequent exam attempts.

ISACA Code of Professional Ethics

ISACA sets forth a Code of Professional Ethics to guide the professional and personal conduct of members of ISACA and/or its certification holders. ISACA certification holders are required to abide by the Code. Failure to comply with this Code of Professional Ethics can result in an investigation into a certification holder's conduct and, ultimately, in disciplinary measures. The ISACA Code of Professional Ethics can be viewed online at https://www.isaca.org/credentialing/code-of-professional-ethics.

ISACA CSX-P CPE Policy and Recertification

All CSX-P certification holders must meet recertification requirements annually. These requirements are detailed within the <u>CSX-P CPE Policy</u>.

Open Badges/Digital Certificates

ISACA offers digital badges to all that hold an ISACA certification as validation of certification. An additional email will be sent from ISACA containing information on how to accept the CSX-P digital badge. The badge, once accepted, provides a link to a page that verifies that you have earned the certification as well as provides an explanation of the achievement. Open badges are also able to be shared through social networking. Please go to https://www.isaca.org/credentialing/credentialing-badges to read more.

CSX-P Exam Contact Information

If you have questions regarding your CSX-P Certification or your ISACA Membership, contact us at:

ISACA Support

https://isaca.force.com/support/s/contactsupport (Select "Learning Solution / CSX/Nexus") or email csx@isaca.org