Introduction to the "Registered Information Security Specialist" (RISS) System

IPA Digital Human Resources Center (DHRC) April 2024





- 1. Background and Framework of the System
- 2. Features of the System
- 3. Benefits of the System
- 4. Registration and Training

1. Background and Framework of the System What is RISS?



The RISS system is the national qualification system for cyber security professionals.

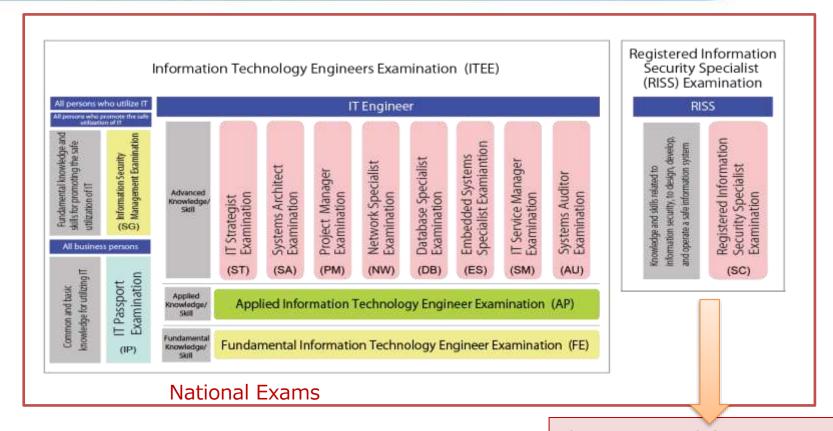
Legal name	情報処理安全確保支援士
English name	Registered Information Security Specialist (RISS)
Legal basis	Act on Facilitation of Information Processing

[RISS logo]



1. Background and Framework of the System National Exams and Qualification organized by IPA





The passers of the SC exam must go through the registration process to be qualified as RISS.

1. Background and Framework of the System Background of its establishment



Increase and evolution of cyber-attacks





Defense against cyber attacks is now essential

Highly-skilled cyber security professionals with practical expertise and ethical mindset are in need.



Human resource development scheme is required:

- · Assessing knowledge and skills of IT professionals
- Maintaining and updating knowledge and skills of IT professionals
- Increase the public visibility of the IT professionals
- Helping IT professionals to acquiring ethical sense etc.

The establishment of a national qualification system was proposed. The RISS system was started in October 2016 after revising the "Act on Facilitation of Information Processing."

1. Background and Framework of the System Framework of the System



Acquisition of qualification

Registration

Role and maintenance

- Pass the exam (SC)
 - OR
- Certified as eligible by the ministry
- Prepare and submit registration documents
- Submitted documents are reviewed

Background check

Disqualified if:

· A person was sentenced to imprisonment or a severer punishment, or punishment related to cybercrimes and 2 years have not yet elapsed from the date of the completion of execution of the sentence or the date when sentence becomes no more executable.

- Registrant's record added to a publicly searchable online database
- Exclusive use of the "RISS" title and logo is permitted
- 4 obligations as RISS
- Completion of required training
- Prohibition of discrediting acts
- Maintenance of confidentiality
- Renewal of registration

2. Features of the System How to access Registered Information (RISS Searching Service)







Registered information of RISS can be searched online. It can be searched by categories, such as place of employment and field of expertise.

https://riss.ipa.go.jp (Japanese)

2. Features of the System Outline of RISS Training and Renewal Cycle



RISS must complete required training to:

- Update and Improve Knowledge and Skills
- Develop an Ethical Mindset

Outline of RISS Training

4				Features of Training			
(Specialty)	Practical Training by IPA	Designated Training by Private Sector		 Training with simulation work, exercises or presentations once in the three years choose one course from Practical and Designated training 			
	Online Training by IPA			 Training to learn up-to-date knowledge and skill, and develop the ethical mindset once in a year receive training specified by IPA 			

(Range of Knowledge and Skill)

RISS Training and Renewal Cycle

Deadline for Renewal application (60 days before the date of renewal)

_			<u> </u>	
1st year	2nd year	3rd year		
Pra Designa ((Repeat the Cycle		
Online Training by IPA (once in a year)	Online Training by IPA (once in a year)	Online Training by IPA (once in a year)		
Date of Registration				Date of Expira

Date of Registration
Date of Renewal
(April 1st or October 1st)

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Date of Expiration (March 31st or September 30th)

2. Features of the System RISS Online Education



RISS Online Education (about 6 hours)

Receive training specified by IPA

Self-Study in e-Learning Style



Assessment of Understanding



Example: Online Education for FY2022 (Education materials are updated every year)

Knowledge	1h	• Expected Role and Knowledge as a RISS	
Skills	4h	 System Life Cycle and Security Measures System Life Cycle and Secure Operations Incident Handling <form of="" organizational="" point="" view=""></form> Incident Handling <form of="" point="" technical="" view=""></form> 	
Ethics	1h	Ethics and Compliance	
Assessment of Understanding (multiple choice question)			

2. Features of the System RISS Practical Training and Designated Training



RISS Practical Training and Designated Training

RISS chooses and receives one course depending on his/her interest and work content.

Practical Training by IPA

(1) Practical Training < Course A > Recommended for the 1st through 3rd year

Through group exercises for incident responses and others, participants acquire the specific techniques and methods for practicing cyber security that are required for RISS.

(2) Practical Training < Course B > Recommended for the 4th year or later

Through exercises in which a group considers security advice when starting a new business, participants acquire practical skills for use in their work.

(3) Cyber Resilience Enhancement eXercise by industry (CyberREX)

This cybersecurity exercise targets managers and deals with different scenarios by industry to learn how to strengthen responsiveness and resilience against cyber attacks.

(4) Cyber SecuriTy practIcal eXercise for industrial control system (CyberSTIX)

This exercise targets practitioners engaged in OT(Operational Technology) to deepen their understanding of industrial control system security by experiencing cyber attacks against a simulated system and its defense mechanisms.

Designated Training by Private Sector

Courses offered by private sector, which have been approved by the Minister of Economy, Trade and Industry, having equal or greater effect than RISS Practical training conducted by IPA.

2. Features of the System RISS Practical Training



Format: Self-Study (e-Learning) + Group Discussion with Web Conference Tool



Course Outline:

Practical Training < Course A>

- 1. Self-Study (e-Learning) (about 2 hours)
 - 1. Incident Response Method
 - 2. Ethics in Cyber Security
- 2. Group Discussion (10:00~17:00)

Case #1: Incident Response

Case #2: Preventive Measures

Case #3: Ethical Judgments and Actions

Practical Training < Course B>

- 1. Self-Study (e-Learning) (about 3 hours)
 - 1. Protection of personal information
 - 2. DX with Cybersecurity
 - 3. Preparation for Incident Response
- 2. Group Discussion (10:00~18:00)
 - 1.Case #1 Collaboration on Digital Transformation
 - 2.Case #2 Preparation for Incident Response
 - 3. Review of the Day

A summary of the most frequent comments for <Course A>

- I gained new perspectives.
- It was a good opportunity to practice incident handling.
- I got useful tips to improve my work performance.
- The group discussion was meaningful.

- <u>I learned that a good understanding of business</u> is a must when handling cyber security incidents.
- <u>I realized the importance of perceiving a situation</u> from alternative viewpoints.
- <u>I became more aware of the importance of being</u> ethical.

3. Benefits of the System Benefits for RISS and his/her Employers



RISS system not only helps to demonstrate the commitment to superior professionalism of the registrants, but also helps the industries become more secure and reliable.



RISS



User companies



Improvement of Capability



Business Benefit



<u>Updating</u> knowledge

Participating in the community of professionals

Preferential treatments to obtain related qualifications*

Understanding the <u>security</u> requirements from the client's standpoint

Planning, developing, and operating <u>secure</u> information systems

Strengthening their cybersecurity measures with top management

Defining and presenting security requirements for the information systems

Increased <u>opportunities</u> of employment

Meeting criteria for government procurement*

Improving <u>reliability and</u> <u>reputation</u>

Contribution to More Secure Society

3. Benefits of the System Bid requirements / Preferential treatments



1. Bid requirements

• In some bids, it is mandatorily required to have RISS in the project.

By searching the "Government Procurement Portal" (https://information1.gov-procurement.go.jp/en/) managed by the Small and Medium Enterprise Agency, 416 tender notices require to assign technical staff with RISS or equivalent qualification (as of July 28, 2023)

2. Preferential Treatments to obtain related qualifications

- RISS enjoys the benefit when obtaining the qualification to assist information security audit.
 - While 5-day training is required for obtaining the assistant auditor's qualification, it is shortened to 1-day for RISS.
 - Exemption of written examination
 Please refer to the website below for more information:
 Japan Information Security Audit Association "Special Schemes on Advanced Information Security Qualification"
 https://www.jasa.jp/qualification/info_secure_supporter.html (Japanese)
- RISS enjoys the benefit when applying for the Qualified Security Assessor (QSA) employee qualification, a certified individual assessor of PCI DSS*.
 - RISS is accredited as one of the information security qualifications required to apply for the QSA employee.
 - * The Payment Card Industry Data Security Standard (PCI DSS) is a set of information security standards to handle credit card information. Please refer to the website below for more information: https://www.pcisecuritystandards.org/minisite/ja-ja/ (Japanese)

4. Registration and Training Number of Registrants and their Background



As of April 1, 2024

The number of RISS is 22,692 (as of April 1, 2024)

Age	Registrants	%		
10 - 19	7	0.0%		
20 - 29	1,632	7.2%		
30 - 39	5,541	24.4 %		
40 - 49	9,177	40.4 %		
50 - 59	5,314	23.4 %		
60 - 69	996	4.4%		
70 - 79	24	0.1%		
80 - 89	1	0.0%		
Average	44.0 years	.0 years old		

Occupation	Registrants	%
Information processing/information service	7,534	39.3%
Software industry	4,337	22.6%
Manufacturing industry	1,589	8.3%
Transport or telecommunication industry	1,329	6.9%
Service industry	840	4.4%
Government or public interest groups	813	4.2%
Finance, insurance business, or real estate industry	644	3.4%
Manufacturing or sales of computers and peripheral devices	612	3.2%
Construction industry	315	1.6%
Education (school/research institute)	261	1.4%
Wholesale, retail business, or restaurants	196	1.0%
Electricity, gas, heat supply, or waterway industry	164	0.9%
Medical, or welfare industry	92	0.5%
Research industry and advertising business	41	0.2%
Agriculture, forestry, fishery, or mining	6	0.0%
Other (students, not entered, etc.)	397	2.1%

4. Registration and Training Number of Registrants based on Prefectures



As of April 1, 2024

Region	Prefecture	Registrants	%	Region	Prefecture	Registrants	%
Hokkaido (North)	Hokkaido	276	1.2		Kyoto	277	1.2
	Aomori	45	0.2	12: 1:	Osaka	1,338	5.9
	Iwate	89	0.4	Kinki (Mid-West)	Shiga	93	0.4
Tohoku	Miyagi	253	1.1		Hyogo	639	2.8
(North-East)	Akita	46	0.2		Nara	141	0.6
	Yamagata	43	0.2		Wakayama	43	0.2
	Fukushima	58	0.3		Tottori	35	0.2
	TOKYO	7,280	32.1	Chugoku	Shimane	48	0.2
	Ibaraki	354	1.6	Chugoku (West)	Okayama	109	0.5
Kanto	Tochigi	85	0.4		Hiroshima	211	0.9
(Capital Area)	Gunma	117	0.5		Yamaguchi	52	0.2
(Capital Al Ca)	Saitama	1,897	8.4	Shikoku	Tokushima	39	0.2
	Chiba	1,879	8.3		Kagawa	105	0.5
	Kanagawa	4,154	18.3	(South-West)	Ehime	65	0.3
	Niigata	113	0.5		Kochi	26	0.1
	Toyama	128	0.6		Fukuoka	498	2.2
	Ishikawa	142	0.6		Saga	37	0.2
	Fukui	53	0.2	Kyushu/ Okinawa (Far West/	Nagasaki	59	0.3
Chubu/Tokai	Yamanashi	45	0.2		Oita	49	0.2
(Mid-East)	Nagano	163	0.7		Kumamoto	76	0.3
	Gifu	150	0.7	South)	Miyazaki	33	0.1
	Shizuoka	236	1.0		Kagoshima	30	0.1
	Aichi	899	4.0		Okinawa	95	0.4
	Mie	86	0.4	Overseas	Overseas	3	0.0

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Further Information



• For further information on the system and registration etc., please see IPA website below.

https://www.ipa.go.jp/jinzai/riss/index.html (Japanese)