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Report on Network and Security

The two main organisations recognized for certifications in System Security are the Certified Information Systems Auditor (CISA) and the Certified Information System Security Professional (CISSP). Both certifications are widely recognized, we will discuss their specifications individually. We will then talk about the CISCO certifications.

CISSP

The CISSP certification has been developed in 1990 in the US which makes it a quite old certification but is still considered as the hardest certification to get and ranked as best certification in cybersecurity by FORBES in 2019. This certification first requires 5 years of experience in the cybersecurity domain (or 4 years if the candidate has a four-year college degree or a master's in Information Security) and is valid for only 3 years with a credit system to extend the validity.

The CISSP covers a large variety of security topics, separated into categories as follow:

- Security and Risk Management
- Asset Security
- Security Architecture and Engineering
- Identity and Access Management
- Security Assessment and Testing
- Security Operations
- Software Development Security

As 2019 the top five countries with the most CISSP Member Counts was United States, United Kingdom, Canada, South Korea, Netherlands.

The standard exam costs 699 USD and a yearly fee to maintain the certification.

CISA

The CISA certification, is delivered by the ISACA organism and requires 5 years of experience in cybersecurity, that can be lowered to 3 years if the candidate earned a university diploma for example, bachelor's or master's degree that sponsors ISACA programs.

This certification mainly proves the ability of the holder in auditing, control, security. They demonstrate their knowledge, technical skills, and proficiency so they can meet the challenges of the modern organisations facing cybersecurity.

To keep the certification, it is important that every holder takes 20 hours of training per year and 120 hours in a three-year period. This way, the quality of the certification is maintained by making sure every holder is up to date in terms of methods and tools.

CCIE Certifications

This category of certifications proposed by CISCO covers a wide range of domains such as Enterprise Infrastructure, Enterprise Wireless, Data Center, Security, etc.

For example, the CCIE Security does not really have any prerequisites but a good understanding of the subject and the topics is required, and the candidates are recommended to have a 5-7 years' experience un cybersecurity before taking the exam. This certification is valid for three years and proposes a recertification program.

The CCIE Enterprise Infrastructure has the same format, no prerequisites but recommended to have 5-7 years of experience in the domain and to master the topics of infrastructure before taking the exam.

To pass these exam a lab exam is required, lasting 8 hours and covering all the lifecycle of a project, from the design to the deployment of the solution.

CCNA Routing and Switching

This certification can be considered as the basic certification in network, as it does not require any prior experience or knowledge. It is designed to teach the basic toolkit with the knowledge in fundamental technologies and make sure the holder is ready to adopt next generation technologies.

CCNP Routing and Switching

This certification is designer for people with at least one-year experience in the networking, wanting to advance their skills in more complex network solutions and the ability to work independently. This certification proves the skills of the holder as a network engineer, support engineer, system engineer or network technician as well.

This certification requires the CCNA Routing and Switching or any CCI certification to be delivered.