


A man with a beard and glasses, wearing a light blue button-down shirt, is smiling broadly while shaking hands with another person whose arm is visible on the right. The background is a blurred office setting.

CompTIA®

Battle Cards

A large, bold white plus sign is positioned on the left side of the image, partially overlapping the man's shirt and the text 'unlock potential'.

**unlock
potential**

CompTIA Overview

The Computing Technology Industry Association (CompTIA) is the tech-forward community of the \$5 trillion IT ecosystem, and the global hub for the more than 35 million professionals who design, deploy, manage and secure the technology that powers the modern economy. Through collaboration, education, certifications, advocacy and market research, CompTIA advances the industries and careers that rely on tech.

Mission

To deliver IT talent to the global workforce.

Vendor-Neutral Certifications

CompTIA certifications are mapped to skills and competencies needed for job roles versus vendor specific technology.

Vendor neutrality helps IT professionals develop learning agility. By having mastered baseline skills, CompTIA-certified IT professionals are equipped to learn and apply new information quickly.

Value of Certification

Gaining industry-recognized certifications can help learners differentiate themselves in a challenging job market. It's essential to validate skills and add valuable credentials to a resume or advance in an IT career. CompTIA certifications can assist with:

- A competitive edge in a highly technical job market
- Heightened career advancement opportunities

High-stakes Exam

- An extraordinarily high level of rigor is employed in developing CompTIA certifications.
- Each question created undergoes multiple layers of quality assurance and thorough psychometric statistical validation.
- CompTIA certifications are ISO/ANSI accredited.

For the Candidate:

- **Competitive Edge:** **91%** of employers believe IT certifications play a key role in the hiring process and are a reliable predictor of a successful employee.*
- **Job Satisfaction:** **76%** of CompTIA certified IT pros are satisfied with their job.**

For Corporate/Government:

- **Valuable Employees:** **82%** of employers recognize that certified employees are valuable to their organizations.***
- **Solid Foundation:** **92%** of military supervisors regard certification as important in setting a baseline of expertise among staff.****

Job Role Focused Certifications

CompTIA certifications, which are developed by IT professionals, validate skills and competencies needed for identified job roles.

Resources:

- Website: **CompTIA.org**
- Partner Portal: **Partners.CompTIA.org**
- CompTIA Blog: **CompTIA.org/blog**
- Trends and Analysis (Industry): **CompTIA.org/resources**

Benefits

Learners/Professionals

CompTIA certifications are the best way to future-proof a career in the IT industry. Certifications validate knowledge and skills required by employers to ensure their staff can get the job done.

By the numbers:

- **97%** of employers value certifications enough to provide support for IT employees obtaining IT certification.
- **76%** of CompTIA-certified IT pros are satisfied with their job
- **Three of the "Top 10** Certifications That Help IT Workers Get Jobs" are CompTIA certifications, according to The Dice Report.

Enterprise/Employer

IT pros need to keep their skills current in a constantly evolving industry. CompTIA certifications ensure skills meet the needs of the industry and organization. Save time and resources by using certifications to evaluate candidates. Feel confident that your staff has the competencies to get the job done.

By the numbers:

- **Loyal workforce:** **84%** of IT professionals stay with their employer after getting CompTIA certified.
- **Certified staff benefit**
- **85%** more confidence: Certifications create trust and a can-do attitude.
- **58%** more knowledge: Certifications improve expertise.
- **53%** more ability: Certified staff outperform non-certified staff in job-critical tasks.

Government

Certifications below are updated regularly and aligned to NICE Workforce Framework.

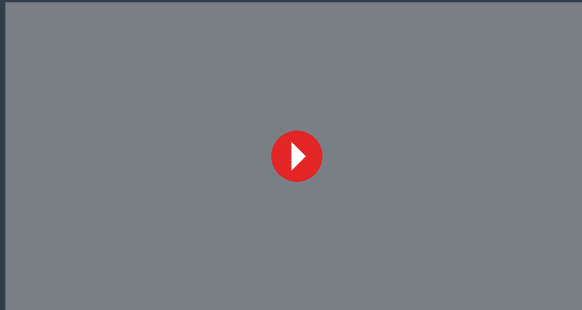
Government employees can verify their cyber knowledge and skills and fulfill government directives like FISMA and DoD 8570/8140.

- CompTIA A+
- CompTIA Network+
- CompTIA Security+
- CompTIA Cybersecurity Analyst (CySA+)
- CompTIA Advanced Security Practitioner (CASP+)

Sources:

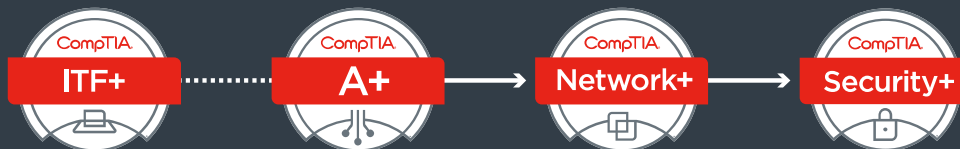
- * CompTIA Employer Perceptions of IT Training and Certification
- ** CompTIA 2nd Annual IT Career Insights
- ***CompTIA 2nd Annual IT Career Insights Study
- ****CompTIA IT Training and Certification: Insights and Opportunities Study
- *****CompTIA Military Career Path

Learn more about CompTIA



- Entry-level certifications for foundational IT knowledge
- For candidates with 0 – 3 years of education and/or experience

CORE SKILLS CERTIFICATIONS



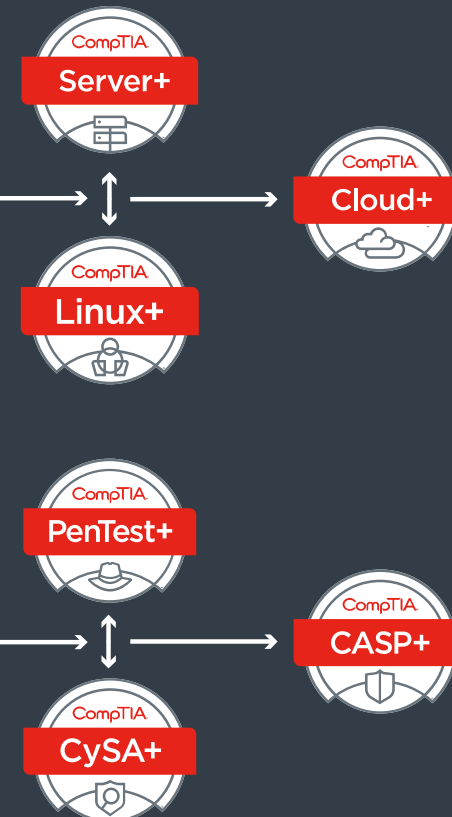
PROFESSIONAL SKILLS



- Specialized professional skills
- CompTIA's professional certifications cover versatile skillsets that help take careers to the next level

- Early to mid-career level certifications
- For candidates who have at least 18 months of general IT experience, and at least 9 months in their field of expertise

INFRASTRUCTURE PATHWAY



CYBERSECURITY PATHWAY

- Mid-career to advanced level certifications
- For candidates who have at least 3 years of hands-on information security or related experience

CompTIA IT Fundamentals (ITF+) (FC0-U61)

CompTIA ITF+ Intro

ITF+ is an introduction to basic IT knowledge and skills that helps professionals decide if a career in IT is right for them. It also helps organizations prepare non-technical teams for digital transformation.

VALUE Prop 1 (Career Changer/Student)

ITF+ provides an opportunity to explore all aspects of IT job roles. Learners gain digital literacy skills and are inspired to pursue a career in IT.

VALUE Prop 2 (Employer)

ITF+ is a certification that establishes an IT foundation necessary in preparation for digital transformation, and on-the-job success. It is appropriate for both non-technical and technical staff.

Key Differentiators:

- ITF+ establishes an IT education framework for students in middle school and high school.
- It's the only pre-career certification for students or career changers that validates a competency in information technology to help determine if IT is the right career path.
- It's the only certification that covers all areas of IT foundations, making it ideal for non-technical professionals.

Who would benefit from ITF+?

- Students considering a career in IT
- Professionals working in fields that require a broad understanding of IT
- Marketing, sales and operations staff in IT-based organizations

Resources:

- ITF+ additional information:
[CompTIA.org/certifications/it-fundamentals](https://comp-tia.org/certifications/it-fundamentals)
- Recommended Pathways:
[CompTIA.org/certifications/which-certification](https://comp-tia.org/certifications/which-certification)
- Posts:
<https://bit.ly/2JgDuAj>

Renewal:

The CompTIA IT Fundamentals+ certification is considered good for life and does not need to be renewed.







Competitors	Talking Points / ITF+ Advantages
Microsoft Technology Associate (MTA)	<ul style="list-style-type: none"> • ITF+ has a broad focus that allows entry to multiple IT-related paths. • ITF+ is 1 single exam with multiple choice; however, the knowledge, skills and abilities (KSAs) in MTA are spread out over 8 exams.
IC3 Digital Literacy Certification (IC3)	<ul style="list-style-type: none"> • IC3 prepares for digital skills only, while ITF+ prepares for digital skills as well as IT-readiness. • One ITF+ exam represents concepts covered in two IC3 certifications requiring a total of 4 IC3 exams.
European Computer Driving License (ECDL)	<ul style="list-style-type: none"> • ECDL requires an extensive time commitment - 12 exams to earn the credential. • One ITF+ exam represents concepts covered in five or more ECDL exams.

Skills and Competencies Acquired:

- Install software
- Establish basic network connectivity
- Identify/prevent basic security risks
- Explain troubleshooting theory and preventative maintenance of devices

CompTIA IT Fundamentals (ITF+) (FC0-U61)

How Does CompTIA Compare?

				
Certification	ITF+	Microsoft Technology Associate	IC3 Digital Literacy Certification	European Computer Driving License/ International Computer Driving License
Number of Exams	Single, multiple choice exam	8 exams	3 multiple choice exams	Modular set of 17 exams
Exam Focus	Pre-career assessment of competency for IT	Microsoft-specific content	End users who lack IT training	End user skills
Experience Level	Pre-IT career & Non-IT pros	Students interested in an on-ramp to a career requiring technical expertise in Microsoft products and services	Non-IT pros	Non-IT pros
Vendor Neutral	Yes	No	Yes	Yes

Learn more about ITF+



CompTIA A+ (220-1101 & 220-1102 Core Series)

BATTLE CARD

CompTIA A+ Intro

CompTIA A+ certified professionals are proven problem solvers. They support today's core technologies from security to networking to virtualization and more. CompTIA A+ is the industry standard for launching IT careers into today's digital world.

VALUE Prop 1 (Career Changer/Student)

CompTIA A+ is the industry standard entry-level certification that proves IT knowledge in networking, security, IoT technology, cloud-based storage, hardware and more. It also develops problem-solving skills required in entry-level technical support careers.

VALUE Prop 2 (Employer)

CompTIA A+ ensures help desk technicians and IT support specialists have skills required to perform entry-level job tasks and support a hybrid workforce. It is trusted by employers around the world to identify the go-to person in end point management & technical support roles. A+ is also the building block towards meaningful career progression.

Accredited by ANSI to show compliance with the ISO 17024 Standard. It is also approved by the DoD for Directive 8140/8570.01-M.

By the Numbers:

- **More than 337K** job postings by US employers for tech support specialists in last 12 months.
- **43K** U.S. IT job ads posted annually include A+ as a job requirement.
- **Over 1.2 million** active A+ certified professionals.

Additional Selling Points:

- CompTIA certifications mean proven competency on the job.
- CompTIA performance certifications validate the skills associated with a particular job or responsibility.

Resources:

- Average Salary:
 - Glassdoor.com (<https://s.comptia.org/3vO31dk>): IT Support Specialist
 - UK ITJobsWatch.co.uk (<https://s.comptia.org/3KmF803>): IT Support Specialist
- A+ Additional Information: [CompTIA.org/certifications/a](https://s.comptia.org/certifications/a)
- Recommended Pathways: [CompTIA.org/certifications/which-certification](https://s.comptia.org/certifications/which-certification)
- Posts: <https://bit.ly/32Hmnzo>

Job Roles:

- IT Support Specialist
- Helpdesk Technician
- Field Technician
- Tier I Support Specialist
- Desktop Support Specialist
- Associate Network Engineer
- Systems Support Technician
- Junior Systems Administrator

Companies that Endorse A+:

- BlueCross BlueShield
- Dell
- HP
- Intel
- Nissan
- Ricoh

Benefits:

Candidate: CompTIA A+ opens many avenues for career development. IT- certified pros can end up working in cybersecurity, network engineering, network administration, business analysis or data analytics.

Employers: Certified employees are trusted by employers around the world as the go-to person in end point management & technical support roles.

Skills and Competencies Acquired:





- Install and configure end-user devices and software
- Address connectivity problems
- Perform basic cybersecurity mitigations
- Troubleshoot common problems to diagnose and resolve issues
- Demonstrate basic knowledge of scripting, the cloud, and virtualization.

Key Differentiators:

- A+ is the only industry recognized credential with performance- based items to prove pros can think on their feet to perform critical IT support tasks in the moment.
- CompTIA A+ assess hands-on, real world troubleshooting skills. With available hands-on training to performance based items on certification exam, candidates know how to find the problem and fix it.
- A+ is regularly revised by IT experts to ensure that it validates core skills and abilities demanded in the workplace.

CompTIA A+ (220-1101 & 220-1102 Core Series)

CompTIA A+ Competitive Landscape

CompTIA A+ Alternatives	
 Microsoft Microsoft MCSA & MTA Infrastructure	These certifications are retiring as part of their overhaul of their certification program; MTA is retiring June 2022.
 Other industry certifications	Programs like CCNA indirectly compete with CompTIA A+, but they do not test the same entry-level skills.
 Training but not testing	<p>Some learners will train for their CompTIA A+ certification to develop the skills for the job, but never sit for the exam. Though they may complete the training, the only way for hiring managers to be able to validate candidates' knowledge is through completion of their certification exam, this is why CompTIA certifications are a requirement for many IT professionals.</p> <p>CompTIA certification exams are considered high-stakes exams, which means there is an extraordinarily high level of rigor put into their development, undergoing multiple layers of quality assurance and psychometric statical validation. This is how CompTIA certifications earn the ANSI/ISO 17024 accreditation and approved by the DoD for Directive 8140/8570.01-M.</p>
 Trying to skip CompTIA A+	More and more, candidates are skipping CompTIA A+ and going straight to more advanced certifications like CompTIA Security+. If candidates are already working in the job, this might work, but it can also mean learners might be missing key foundational skills needed to pass these more advanced certifications.

[Learn more about A+](#)



CompTIA Network+ (N10-008)

CompTIA Network+ Intro

CompTIA Network+ validates the technical skills needed to securely establish, maintain and troubleshoot the essential networks that businesses rely on.

The new CompTIA Network+ focuses on foundational networking tools and technologies used to create secure networks and guarantee the availability of critical business information.

VALUE Prop 1 (Career Changer/Student)

CompTIA Network+ certifies a professional-level understanding of the latest best practices and foundational networking tools and technologies, including network architecture, high availability, wireless standards and technologies. It is the building block of a successful career in IT Infrastructure.

VALUE Prop 2 (Employer)

CompTIA Network+ validates candidates have the technical and hands-on networking skills needed to create secure networks and guarantee the availability of critical business information that drive business objectives.

Accredited by ANSI to show compliance with the ISO 17024 Standard. It is also approved by the DoD for Directive 8140/8570.01-M

Key Differentiators:

- Network+ prepares candidates to support the network regardless of the platform.
- It forms the foundation professionals need before specializing in a vendor solution.
- Network+ is created by networking professionals who support all vendors so it teaches IT Pros how to support business needs demanded in the workplace.

By the Numbers:

- **12%** job growth expected for Network & Computer Systems Administrators, 2012 – 2022, according to the Bureau of Labor Statistics.
- **28%** of organizations say they have a shortage of network security specialists. (Cybersecurity Skills Shortage: A State of Emergency, ESG)
- Over **520k** Network+ certified professionals.
- Network+ is recognized as one of the top 10 most widely-held certs worldwide (Global Knowledge Report 2020)

Skills and Competencies Acquired:

- Implement enterprise-level wired and wireless network solutions
- Identify and troubleshoot network performance issues
- Harden networks against threats to mitigate security vulnerabilities

Resources:



- Average Salary
- U.S. Network Field Engineer: Glassdoor.com (<https://bit.ly/2RrR3BH>)
- UK Network Field Engineer: ITJobsWatch.co.uk (<https://bit.ly/355Kf02>)
- Network+ Additional Information: [CompTIA.org/certifications/network](https://www.comptia.org/certifications/network)
- Recommended Pathways: [CompTIA.org/certifications/which-certification](https://www.comptia.org/certifications/which-certification)
- Posts: <https://bit.ly/2pdQAaH>

Competitors	Talking Points / Network+ Advantages
Cisco CCNA Vendor-specific	<ul style="list-style-type: none"> • Unlike CCNA, CompTIA Network+ prepares IT pros to support the network regardless of the platform rather than just maintaining a single vendor's products. • CompTIA Network+, unlike Cisco, covers essential skills at the depth needed for early networking jobs. CCNA is so broad that it doesn't cover the depth of knowledge needed to set a firm foundation for networking expertise. • Trends including multi-vendor architecture, multi-vendor interoperability, & white box networking make it increasingly likely IT pros will encounter more than just Cisco appliances and IOS in the workplace.

Companies that Endorse Network+:			Job Roles:
• Apple (Consultants)	• Microsoft MSSA	• Ricoh	• Junior Network Administrator
• Blue Cross Blue Shield	• Motorola	• Sharp	• Datacenter Support Technician
• Cisco Academy	• New York State- Office of Technology	• Verizon	• Network Engineer
• HP / Dell		• Xerox	• System Administrator
• Konica Minolta	• NY City Union		• NOC Technician
• Lenovo	• Pomeroy		• Telecommunications Technician
			• Cable Technician

CompTIA Network+ (N10-008)

How does CompTIA Compare?

		
Certification	Network+	CCNA Vendor-specific
Performance-based Questions	Yes	Yes
Exam Length	1 exam, 90 minutes	1 exam, 90 min.
Experience Level	Early career	Early career
Exam Focus	Covers networking technologies across all vendors & solutions	Covers networking for only Cisco products & solutions.
Prerequisites	CompTIA A+ &/or a minimum of 9 months networking experience recommended	1-3 years experience

Learn more about Network+



CompTIA Security+ (SY0-701)

BATTLE CARD

CompTIA Security+ Intro

CompTIA Security+ is a global certification that validates the foundational cybersecurity skills necessary to perform core security functions and pursue an IT security career.

VALUE Prop 1 (Career Changer/Student)

The new CompTIA Security+ (SY0-701) represents the latest and greatest in cybersecurity, covering the most in-demand skills related to current threats, automation, zero trust, IoT, risk – and more. Once certified, you'll understand the core skills needed to succeed on the job – and employers will notice too.

VALUE Prop 2 (Employer)

CompTIA Security+ validates core knowledge required of any cybersecurity role, and emphasizing vendor-neutral, hands-on practical skills, ensuring the security professional is better prepared to problem solve a wider variety of today's complex issues.

Accredited by ANSI to show compliance with the ISO 17024 Standard.

Skills and Competencies Acquired:

- Assess the security posture of an enterprise environment and recommend and implement appropriate security solutions.
- Monitor and secure hybrid environments, including cloud, mobile, Internet of Things (IoT), and operational technology.
- Operate with an awareness of applicable regulations and policies, including principles of governance, risk, and compliance.
- Identify, analyze, and respond to security events and incidents.

Job Roles:

- Security Specialist
- Security Administrator
- Systems Administrator
- Help Desk Analyst
- Security Analyst
- Security Engineer

Key Differentiators:

- **Launch a Successful Cybersecurity Career.** Develop a core foundation of essential skills, paving the way for a fulfilling career. More job roles use Security+ for baseline cybersecurity skills than any other certification in the industry.
- **Assess On-the-Job Skills.** Security+ is the most widely adopted ISO/ANSI-accredited early career cybersecurity certification on the market with hands-on, performance-based questions on the certification exam. These practical questions assess your ability to effectively problem solve in real-life situations and demonstrate your expertise to potential employers immediately.
- **Embrace the Latest Trends.** Understand and use the most recent advancements in cybersecurity technology, terms, techniques, and tools. By acquiring early career skills in the latest trends such as automation, zero trust, risk analysis, operational technology, and IoT, you will be well-equipped to excel in the ever-evolving cybersecurity landscape.

Resources:

- Average Salary:
 - U.S. Security Administrator: Glassdoor.com (<https://bit.ly/3EA8pDX>)
 - UK Security Administrator: ITJobsWatch.co.uk (<https://bit.ly/3ZkPoiv>)
- Security+ Additional Information: [CompTIA.org/security](https://www.comptia.org/security)
- Recommended Pathways: (<https://bit.ly/42DCNb6>)
- Blog Posts: (<https://bit.ly/3sS2d7R>)

Competitors	Talking Points / Security+ Advantages
ISC2 Systems Security Certified Practitioner (SSCP)	<ul style="list-style-type: none">• Both SSCP and Security+ cover baseline security skills and are vendor-neutral; however, Security+ includes performance-based questions to validate hands-on skills.• SSCP requires working experience before taking the exam while Security+ does not.• Security+ is listed in 10% of cybersecurity job ads while SSCP is only listed in 3%.
GIAC Security Essentials (GSEC)	<ul style="list-style-type: none">• Both GSEC and Security+ cover baseline security skills, are vendor-neutral, and include performance-based questions to validate hands-on skills.• Security+ is listed in 10% of cybersecurity job ads while GSEC is only listed in 3%.• GSEC costs nearly 5x more.

Organizations That Helped Develop Security+:






- | | | |
|------------------------------|------------------------------|--|
| • Blue Chip Talent | • Growth Arbor | • SecureWorks |
| • Brotherhood Mutual | • Johns Hopkins University | • SenseOn |
| • Contentful | • Applied Physics Laboratory | • SS&C Technologies |
| • Cyber Warfare Tactics LLC | • L3Harris | • U.S. Navy Center for Information Dominance |
| • Deakin University | • Linford and Company LLC | • Washington State Patrol |
| • Deloitte | • Lippert Components | • Wells Fargo |
| • Fidelis Risk Advisory | • Microsoft | • Zoom |
| • Fidelity Investments | • MindPoint Group | |
| • Five9 | • Nationwide | |
| • General Dynamics IT (GDIT) | • Organon | |

By the Numbers:

- There are over **700,000** Security+ certified professionals.
- **24%** of the total employed cybersecurity workforce in the U.S. are Security+ certified.

CompTIA Security+ (SY0-701)

How does CompTIA compare?

					
Certification	CompTIA Security+	ISC2 Systems Security Certified Practitioner (SSCP)	GIAC Security Essentials (GSEC)	EC-Council Certified Ethical Hacker (CEH)	ISC2 Certified in Cybersecurity
Performance-Based Questions	Yes	No	Yes	No	No
Vendor Neutral	Yes	Yes	Yes	Yes	Yes
Experience Level	Early Career	Early career	Early career	Early career	Entry level
Exam Focus	Baseline cybersecurity skills, core cybersecurity knowledge	Security administrator job role	Security administrator job role	Pen testing and ethical hacking	Cybersecurity terms and concepts
Training Products	Full suite of online test prep tools, LOT, books	Self-paced online, LOT, courseware, mobile toolkit	In-person training and online	Online review course and answers database, courseware	Self-paced online, LOT

[Learn more about Security+](#)



CompTIA Linux+ (XK0-005)

BATTLE CARD

CompTIA Linux+ Intro

CompTIA Linux+ is a globally recognized certification that validates mastery of the tools and technologies required to manage, secure, optimize, and troubleshoot production Linux systems.

VALUE Prop 1 (Career Changer/Student)

CompTIA Linux+ validates the skills that modern IT professionals need to secure platforms and systems, power the cloud and keep critical business services running. It is the only foundational job-role-based Linux certification that confirms the most relevant skills demanded by hiring managers.

VALUE Prop 2 (Employer)

CompTIA Linux+ ensures candidates have the skills and knowledge required to configure, manage, operate, and troubleshoot Linux on-premises and cloud-based server environments while using best practices around security, scripting, containerization, and automation. It prepares staff to be proactive in securing organizations, scale and improve operations, and contribute to the bottom line.

CompTIA Linux+ meets the Computing Environment (CE) requirement to renew other CompTIA Certifications.

Key Differentiators:

- CompTIA Linux+ is the only job-focused Linux certification covering the latest foundational skills demanded by hiring managers.
- Unlike other certifications, the new exam includes performance-based and multiple-choice questions to identify the employees who can do the job.
- The exam covers tasks associated with all major distributions of Linux, setting the foundation for advanced vendor/distro-specific knowledge.

Skills and Competencies Acquired:

- Configure and manage software, storage, network tools and process and services
- Understand best practices for permissions and authentication, firewalls, and file management
- Create simple shell scripts, manage containers and execute basic BASH scripts, version control using Git, and orchestration processes
- Analyze system properties and processes and troubleshoot user, application and hardware issues

Resources:

- Average Salary:
 - U.S. Systems Administrator: Glassdoor.com (<https://bit.ly/30PwBxD>)
 - UK Systems Administrator: UK ITJobsWatch.co.uk (<https://bit.ly/37pFykb>)
- Linux+ Additional Information:
CompTIA.org/certifications/linux
- Recommended Pathways:
CompTIA.org/certifications/which-certification
- Posts: <https://bit.ly/2MXbuEb>

Competitors	Talking Points / Linux+ Advantages
Red Hat Certified Systems Administrator (RHCSA)	<ul style="list-style-type: none">• RHCSA targets a higher experience level, validates only one way to troubleshoot Linux systems and is performance-based ONLY.• CompTIA Linux+<ul style="list-style-type: none">• Targets mid-level professionals• Covers a wide scope of skills and knowledge• Should be used as a foundation to vendor specific certs like RHCSA.
Linux Professional Institute (LPIC-1 from LPI)	<ul style="list-style-type: none">• LPIC-1 is a two-exam certification still containing certain outdated topics with no performance-based questions creating greater risk for unqualified candidates.• CompTIA Linux+ is a single exam with refined objectives and performance-based questions designed to stay current with today's technology.
Linux Foundations LFCS	<ul style="list-style-type: none">• Linux Foundations LFCS only tests tools, does not cover knowledge of broader topics.• It is limited to Ubuntu/ CentOS; Content is all task-based

Job Roles:





- | | |
|----------------------------------|--------------------------------|
| • Linux Administrator | • Network Administrator |
| • Junior Cloud Engineer | • Web Administrator/ Developer |
| • Junior DevOps Support Engineer | • Cybersecurity Engineer |
| • Technical Support Specialist | • Linux Engineer |
| • Systems Administrator | |

Organizations that use Linux+:

- Amazon
- American Airlines
- Dell
- GEICO
- U.S. Department of Defense
- U.S. Navy

CompTIA Linux+ (XK0-005)

How does Linux+ Compare to Alternatives?

		 Linux Professional Institute	 Red Hat	
Certification	Linux+	LPIC-1 from LPI	Red Hat Certified Systems Administrator (RHCSA)	Linux Foundations LFCS
Performance-based Questions	Yes, as well as multiple choice (single & multiple response) and drag and drop. Many of the questions are scenario-based.	No	Only tests tools, does not cover knowledge of broader topics	Only tests tools, does not cover knowledge of broader topics
Exam Length	1 exam with a maximum of 90 questions, 90 minutes	2 exams	10-15 hands-on assignments; 2 1/2 hours	2 hours
Experience Level	12 months as a Junior Linux Engineer	Early career	High-level Red Hat sys admin experience. Very hard to pass without significant hands-on experience and is recommended for advanced Linux professionals.	Linux system administrators early in their career
Exam Focus	Focuses on the latest technology and trends for IT professionals in an enterprise environment. Covers all major distributions of Linux. Recognized in job ads	Does not focus on working in an enterprise environment, therefore not all items are relevant or up-to-date for IT professionals	Covers only Red Hat systems. As a 100% performance-based exam, it is difficult to study for.	Limited to Ubuntu/CentOS; Content is all task-based
Prerequisites	Recommended CompTIA A+, CompTIA Network+ and 12 months as a Junior Linux Engineer	None	Recommended Red Hat sys admin experience. Though not a prerequisite, Linux+ makes an excellent "ramp-up" to this certification.	None

Learn more about Linux+



CompTIA Server+ (SK0-005)

CompTIA Server+ Intro

CompTIA Server+ validates the hands-on skills of IT professionals who install, manage and troubleshoot servers in data centers as well as on-premise and hybrid environments.

VALUE Prop 1 (Career Changer/Student)

CompTIA Server+ validates the skills necessary to be a server administrator. Server+ covers essential hardware and software technologies of on-premise and hybrid server environments including high availability, cloud computing and scripting, providing an opportunity to advance toward a rewarding career in infrastructure and cybersecurity.

VALUE Prop 2 (Employer)

CompTIA Server+ ensures your IT staff have the skills and competencies necessary to strategically leverage both sides of data centers and cloud environments to deliver a successful infrastructure that meets business objectives.

Skills and Competencies Acquired:

- Install, configure, and manage server hardware and server operating systems
- Implement proper server hardening and security controls
- Successfully troubleshoot common server problems
- Demonstrate an understanding of key disaster recovery, high availability, and backup concepts

Renewal:

The CompTIA Server+ certification is considered good for life and does not need to be renewed.



Key Differentiators:

- CompTIA Server+ certified candidates can work in any environment.
- It is the only certification not restricted to a single platform.
- It is the only industry certification that covers the latest server technologies of on-premise and hybrid server environments including high availability, cloud computing and scripting.
- CompTIA Server+ includes performance-based questions that require the candidate to demonstrate multi-step knowledge to securely deploy, administer and troubleshoot servers.

Additional Selling Points:

- CompTIA certifications mean proven competency on the job.
- CompTIA performance certifications validate the skills associated with a particular job or responsibility.

Resources:

- Average Salary:
 - U.S. Server Administrator: Glassdoor.com (<https://bit.ly/2RBmdoR>)
 - UK Server Administrator: ITJobsWatch.co.uk (<https://bit.ly/2rcn0I7>)
- Server+ Additional Information: [CompTIA.org/certifications/server](https://www.comptia.org/certifications/server)
- Recommended Pathways: [CompTIA.org/certifications/which-certification](https://www.comptia.org/certifications/which-certification)
- Posts: <https://bit.ly/2JzdQqJ>

Competitors

Talking Points / Server+ Advantages

Dell EMC Certified Associate	<ul style="list-style-type: none"> • DECA verifies the fundamental knowledge and skills only in the area of Dell EMC DCA-PowerEdge servers. • Unlike Dell EMC Certified Associate that only covers a single vendor, CompTIA Server+ focuses on multivendor products and implementations, based on industry standards.
CCNA	<ul style="list-style-type: none"> • CCNA covers networking for only Cisco products and solutions. • It is not specifically server administrator role. • Unlike CCNA, CompTIA Server+ doesn't just focus on networking but on skills needed to install, manage and troubleshoot servers.
<ul style="list-style-type: none"> • The closest competitors, MCSA Server Administration & CCNA Data Center have both been discontinued. • Not holding a certification is likely the closest “competitor” for CompTIA Server+. • 70% of jobs listings do not include any certification. Stand out from other IT professionals by validating skills with Server+. 	

Primary Job Roles:

- Systems Administrator
- Data Center Technician
- Server Administrator

Secondary Job Roles:




- Network Administrator
- Field Service Technician or Engineer
- IT Technician
- Data Center Engineer

Companies that Endorse Server+

- Microsoft
- Wells Fargo
- AECOM
- General Mills
- U.S. Navy

CompTIA Server+ (SK0-005)



			
Certification	CompTIA Server+	Dell EMC Certified Associate	CCNA
Exam Length	1 exam, 90 min.	1 exam, 90 minutes	1 exam, 90 minutes
Experience Level	Early career	Early career	Early career
Exam Focus	Focuses on multivendor products and implementations, based on industry standards	Verifies the fundamental knowledge and skills in the area of Dell EMC DCA-PowerEdge servers	Job role based. Networking for Cisco products & solutions
Pre-requisites	Recommended CompTIA A+ and two years of IT experience	None	1-3 years experience
Vendor Neutral	Yes	No	No

Learn more about Server+



CompTIA Cloud+ (CV0-003)

CompTIA Cloud+ Intro

CompTIA Cloud+ certification validates the skills needed of system administrators/system engineers to deploy and automate secure cloud environments that support business systems and data.

VALUE Prop 1 (Career Changer/Student)

CompTIA Cloud+ ensures IT infrastructure professionals have validated skills in the areas of cloud architecture and design, security, automation and virtualization, disaster recovery, providing a wide range of job opportunities.

VALUE Prop 2 (Employer)

IT professionals certified in Cloud+ can better realize the return on investment of cloud infrastructure services. Unlike other certifications, which may focus on a specific vendor or a single function like security or networking, Cloud+ reflects the breadth of skills needed to protect an organizations mission critical applications and data storage.

Accredited by ANSI to show compliance with the ISO 17024 Standard. It is also approved by the DoD for Directive 8140/8570.01-M.

Key Differentiators:

- IT professionals certified in Cloud+ demonstrate a high level of skill in cloud computing and infrastructure management in either a hybrid or cloud only environment.
- Cloud+ is the only independent, job-role based, vendor neutral cloud certification that validates the technical skills needed to operate in the cloud.

Skills and Competencies Acquired:

- Understand cloud architecture and design
- Deploy cloud services and solutions
- Successfully maintain, secure, and optimize a cloud environment
- Troubleshoot common issues related to cloud management

Research:

Challenge: Businesses report that a lack of expertise is among their top challenges.

Solution: Cloud+ ensures IT pros can fill the cloud technical skills gap.

Resources:




- Average Salary:
 - U.S. Cloud Developer: Glassdoor.com (<https://bit.ly/2TTZDdP>)
 - UK Cloud Developer: ITJobsWatch.co.uk (<https://bit.ly/2XyFk5O>)
- Cloud+ Additional Information: **CompTIA.org/certifications/cloud**
- Recommended Pathways: **CompTIA.org/certifications/which-certification**
- Posts: <https://bit.ly/2MVb6Gj>

Competitors	Talking Points / Cloud+ Advantages
Microsoft Certified Azure Administrator	<ul style="list-style-type: none"> • Azure Administrator covers only Microsoft products and solutions, while Cloud+ covers a variety of vendor solutions.
Amazon Web Services (AWS) IT Operations Pathway	<ul style="list-style-type: none"> • AWS covers only Amazon products and solutions. • AWS tests at a very high experience level- late systems admins, analyst, and engineer-level roles. Cloud+ tests a wide range from early-mid career. • CompTIA Cloud+ provides the foundation for future vendor specific certs like AWS.
ISC2 Certified Cloud Security Professional (CCSP)	<ul style="list-style-type: none"> • CCSP is not job role-based. Cloud+ maps to the skills needed for a cloud engineer. • CCSP only covers cloud security and not the complete range of topics needed to do the job.
<ul style="list-style-type: none"> • Only .5% of job ads ask for a certification. Stand out from other IT professionals by validating your skills and closing the skills gap with Cloud+. • CompTIA Cloud+ competes with security-based exams to meet requirements for the DoD. Cloud+ offers a unique infrastructure-focused certification in these categories. 	

Companies that Endorse Cloud+	Job Roles:
<ul style="list-style-type: none"> • NTT Communications Corp. • Oracle • MacAulay-Brown, Inc. • General Dynamics Information Technology 	<ul style="list-style-type: none"> • MorphoTrust USA • BAE Systems • US Department of Defense • Sr. Systems Administrator • Systems Engineer • Cloud Engineer • Sr. Network Administrator • Sr. Network Engineer • Cloud Specialist • Cloud Project Manager

CompTIA Cloud+ (CV0-003)

How does CompTIA Cloud+ Compare to Alternatives?

				
Certification	CompTIA Cloud+	ISC2 Certified Cloud Security Professional (CCSP)	Amazon Web Services (AWS) Solutions Architect - Professional	Microsoft Certified – Azure Solutions Architect Expert
Exam Length	1 exam, 90 min.	125 questions, 4 hours	1 exam, 180 minutes	2 exams, 130 minutes each
Experience Level	2-3 years in system administration (5 years total IT experience)	5 years (3 in InfoSec & 1 in an exam domain)	2+ years hands-on experience with the AWS cloud	Intermediate career
Performance-based Questions	Yes	No	No	Varied
Exam Focus	Job role based; covers cloud technologies across all vendors and solutions	Not based on job roles; covers cloud security across job roles	Covers only Amazon products & solutions	Covers only Microsoft products & solutions
Prerequisites	No pre-requisites, but 24 to 36 months of systems administration experience recommended	Experience required	None	None
Vendor Neutral	Yes	Yes	No	No

Learn more about Cloud+



CompTIA PenTest+ (PTO-002)

CompTIA PenTest+ Intro

CompTIA PenTest+ is the most comprehensive cybersecurity exam covering all red team activities and is designed for cybersecurity professionals tasked with penetration testing and vulnerability management.

VALUE Prop 1 (Student)

PenTest+ is a unique exam that demonstrates hands-on skills and knowledge of the most relevant pen testing skills for the cloud, hybrid environments, web applications, customized systems (IoT), and traditional on-premises that employers seek to improve the overall resiliency of enterprise networks.

VALUE Prop 2 (Employer)

PenTest+ validates the most up-to-date skills and competencies needed to determine the resiliency of any network. It focuses on the latest pen testing techniques, attack surfaces, vulnerabilities management, post-delivery, and compliance tasks that are ideal for your company's red team employees to develop a robust security strategy that meets business objectives.

Accredited by ANSI to show compliance with the ISO 17024 Standard. It is also approved by the DoD for Directive 8140/8570.01-M.

Key Differentiators:

- PenTest+ is the most comprehensive exam covering all penetration testing stages. It uses both performance-based and knowledge-based questions to ensure all stages are addressed.
- PenTest+ is the only exam on the market to include all aspects of vulnerability management covering hands-on vulnerability assessment, scanning, and analysis, including planning, coping, and managing weaknesses, not just exploiting them.
- PenTest+ is the most current penetration testing exam covering the latest techniques against expanded attack surfaces, such as cloud, hybrid environments, web applications, customized systems (IoT), and traditional on-premises.

Skills and Competencies Acquired:

- Plan and scope a penetration testing engagement
- Understand legal and compliance requirements
- Perform vulnerability scanning and penetration testing using appropriate tools and techniques, and then analyze the results
- Produce a written report containing proposed remediation techniques, effectively communicate results to the management team, and provide practical recommendations

By the Numbers:

- The U.S. Bureau of Labor Statistics predicts that information security analysts will be the fastest-growing job category, with **31%** overall growth between 2019 and 2029.
- The penetration testing market is expected to grow **22%** from 2020 to 2025.

Resources:

- Average Salary:
 - U.S. Penetration Tester: Indeed.com (<https://indeedhi.re/2KN2Zdv>)
 - UK Penetration Tester: ITJobsWatch.co.uk (<https://bit.ly/2XyFh9K>)
- PenTest+ Additional Information: **CompTIA.org/certifications/pentest**
- Recommended Pathways: **CompTIA.org/certifications/which-certification**
- Posts: <https://bit.ly/2WvfkaJ>

Competitors	Talking Points / PenTest+ Advantages
EC-Council Certified Ethical Hacker (CEH)	<ul style="list-style-type: none"> • CEH assesses vulnerability tools, such as scanners, but NOT vulnerability management like PenTest+. • CEH does NOT cover soft skills, such as business processes, project flow, best practices and professionalism in penetration testing. PenTest+ cover both technical and soft skills. • CEH only covers penetration testing job roles, while PenTest+ covers two job roles, both pen testing and vulnerability assessment and management.
GIAC Penetration Tester (GPEN)	<ul style="list-style-type: none"> • Unlike GPEN, PenTest+ is based upon cybersecurity industry survey results, providing a heightened real-world applicability compared to other certs.
Offensive Security Certified Professional (OSCP)	<ul style="list-style-type: none"> • OSCP tests at an advanced level of experience and costs 2X as much. • OSCP is a 24 hour "capture the flag" exam making PenTest+ both cost and time efficient.

Companies that Endorse PenTest+:


- Paylocity
- SecureWorks
- Jon Hopkins University Applied Physics Laboratory
- Ricoh
- U.S. Navy Center for Information Dominance

Job Roles:

- Penetration Tester
- Security Consultant
- Cloud Penetration Tester
- Web App Penetration Tester
- Cloud Security Specialist
- Network & Security Specialist
- Information Security Engineer
- Security Analyst

CompTIA PenTest+ (PTO-002)

How does CompTIA Compare?

				
Certification	PenTest+	EC-Council Certified Ethical Hacker (CEH)	GIAC Penetration Tester (GPEN)	Offensive Security Certified Professional (OSCP)
Performance-based Questions	Yes	No. Second exam required, CEH Practical	No	Yes
Exam Length	1 exam, 90 questions, 165 minutes	1 exam, 4 hours	1 exam, 3 hours	1 exam, 24 hours
Experience Level	Intermediate	Beginner / Intermediate	Intermediate	Intermediate / Advanced
Exam Focus	Penetration testing and vulnerability management	Penetration testing	Penetration testing from a business-value	Real World-based with a lab and submitted report
Prerequisites	Network+, Security+ or equivalent knowledge. Minimum of 3-4 years of hands-on experience working in a security consultant or penetration tester job role.	CEH Training, 2 years information security experience, Endorsement	None	Must first complete the Penetration Testing with Kali Linux training course (self-paced)

Learn more about PenTest+



CompTIA CySA+ Intro

CompTIA Cybersecurity Analyst (CySA+) is an IT workforce certification that assesses the security analyst and incident response analyst skills needed to prevent, detect and respond to cybersecurity threats on networks and devices.

VALUE Prop 1 (Student)

CompTIA CySA+ proves candidates can detect and analyze indicators of malicious activity using the most up-to-date methods and tools, such as threat intelligence, security information and event management (SIEM), endpoint detection and response (EDR) and extended detection and response (XDR). IT pros gain unique skills sought after by organizations to protect and defend their networks.

VALUE Prop 2 (Employer)

CompTIA CySA+ qualifies employees to proactively monitor, identify and respond to cybersecurity threats, vulnerabilities and attacks. It is an internationally targeted validation of information security analyst skills and knowledge, making it ideal for any organization's blue team employees tasked with ensuring the protection of applications and systems across the organization.

Accredited by ANSI to show compliance with the ISO 17024 Standard.

Skills and Competencies Acquired:

- Detect and analyze indicators of malicious activity
- Understand threat hunting and threat intelligence concepts
- Use industry tools to mitigate attacks, threats & vulnerabilities
- Perform incident response
- Understand reporting and communication

Job Roles:

- Security Analyst
- Security Operations Center (SOC) Analyst
- Incident Response Analyst
- Vulnerability Management Analyst
- Security Engineer
- Threat Hunter

Key Differentiators:

- **Proactively Monitor and Detect.** Demonstrate skills in detecting and analyzing indicators of malicious activity using the most up-to-date methods and tools, such as threat intelligence, security information and event management (SIEM), endpoint detection and response (EDR) and extended detection and response (XDR).
- **Respond to Threats, Attacks, and Vulnerabilities.** Prove knowledge of incident response and vulnerability management processes and highlight the communication skills critical to security analysis and compliance.
- **Demonstrate Competency of Current Trends.** Show knowledge of current trends that affect the daily work of security analysts, such as cloud and hybrid environments.

Resources:

- Average Salary:
 - U.S. Security Analyst: Glassdoor.com (<https://bit.ly/44Zwznx>)
 - UK Security Analyst: ITJobsWatch.co.uk (<https://bit.ly/3lcq4Us>)
- CompTIA CySA+ Additional Information: ([CompTIA.org/CySA](https://bit.ly/42DCNb6))
- Recommended Pathways: (<https://bit.ly/42DCNb6>)
- Blog Posts: (<https://bit.ly/2N1JO12>)

Competitors	Talking Points / CySA+ Advantages
EC-Council Certified Security Analyst (ECSA)	<ul style="list-style-type: none"> • ECSA is a continuation of CEH and goes beyond the foundational ethical hacking skill set. CySA+ is not as advanced as ECSA because CySA+ is also focused heavily on vulnerability management, unlike ECSA. • CySA+ includes hands-on, performance-based assessments as well as multiple-choice questions, while ECSA is multiple choice only. • CySA+ costs only 1/3 of the price of ECSA and has more job roles associated with the exam.
GIAC Continuous Monitoring Certification (GMON)	<ul style="list-style-type: none"> • CySA+ includes hands-on, performance-based assessments as well as multiple-choice questions, while GMON is multiple choice only. • CySA+ and GMON both cover the core security analyst job role. CySA+ is hands-on, nearly 5x less expensive and covers additional job roles, such as application security analyst and incident response.
ISACA Certified Information Systems Auditor (CISA)	<ul style="list-style-type: none"> • CISA is for IT auditors and audit managers to validate their ability to assess vulnerabilities and institute IT controls for an organization. CySA+ covers more domains and is for security analysts who will audit as a part of their role. • CySA+ is available year-round. CISA is only available three times a year through ISACA. • CySA+ has performance-based questions and is half the cost of CISA • CySA+ maps to seven job roles in the U.S. DoD 8570.01-M approved job categories, including Auditor. CISA only maps to two categories.

Companies that Endorse CompTIA CySA+:





- Amazon Web Services
- Bank of Montreal (BMO)
- Booz Allen Hamilton
- Deloitte
- Fidelity Investments
- General Dynamics IT (GDIT)
- Microsoft
- U.S. Department of Defense
- U.S. Navy
- Visa
- Zoom

By the Numbers:

- Information security analyst is one of the fastest growing U.S. job categories, with 35% growth expected between 2021 and 2031.¹
- On average, there are over 30K job openings specifically looking for qualified cybersecurity analysts in the U.S. every year.²

CompTIA CySA+ (CS0-003)

How does CompTIA compare to alternatives?

				
Certification	CompTIA CySA+	EC-Council Certified Security Analyst (ECSA)	GIAC Continuous Monitoring Certification (GMON)	ISACA Certified Information Systems Auditor (CISA)
Performance-based Questions	Yes	No	No	No
Experience Level	Intermediate	Intermediate	Intermediate	Advanced
Exam Focus	Security analytics, intrusion detection and response	Pentesting methodology	Defensible security and continuous security monitoring	Auditing and vulnerability assessment
Training Products	Full suite of online test prep tools, live online training, books	Self-paced and live online training, courseware, mobile toolkit	In-person training and online	Online review course and answers database, courseware

Learn more about CySA+



CompTIA CASP+ (CAS-004)

CompTIA CASP+ Intro

CompTIA Advanced Security Practitioner (CASP+) is an advanced-level cybersecurity certification for security architects and senior security engineers charged with leading and improving an enterprise's cybersecurity readiness.

VALUE Prop 1 (Student)

CASP+ provides hands-on technical mastery and is the ideal certification for advanced practitioners of cybersecurity who require the necessary skills to design, implement, and manage cybersecurity solutions on complex networks to skillfully build a resilient enterprise and prevent the next attack.

VALUE Prop 2 (Employer)

CASP+ verifies the expertise and technical skills of an established IT security professional in security, governance, risk, and compliance, assessing enterprise cybersecurity readiness, and leading technical teams to implement enterprise-wide cybersecurity solutions.

It was born out of an industry need for a hands-on, advanced-level cybersecurity assessment for organizations that require mastery-level skills to work directly with cybersecurity technologies and tools that protect the organization and prevent future threats.

Accredited by ANSI to show compliance with the ISO 17024 Standard. It is also approved by the DoD for Directive 8140/8570.01-M.

Key Differentiators:

- CASP+ is the only hands-on, performance-based certification for advanced practitioners
- Unlike other certifications, CASP+ covers both security architecture and engineering
- It is the only certification that qualifies technical leaders to assess cyber readiness within an enterprise, and design and implement solutions to ensure the organization is ready for the next attack.

By The Numbers:

- **2.3 million** and growing CompTIA ISO/ANSI-accredited exams have been delivered since January 1, 2011. Regulators and government rely on ANSI accreditation because it provides confidence and trust in the outputs of an accredited program.
- Over the next ten years, positions aligned to CASP+ will experience an **18 percent growth rate**, according to Burning Glass.

Resources:




- Average Salary:
 - U.S. Information Security Analyst: Glassdoor.com (<https://bit.ly/2Tve4yk>)
 - UK Information Security Analyst: ITJobsWatch.co.uk (<https://bit.ly/2s2A0kd>)
- CASP+ Additional Information: **CompTIA.org/certifications/comptia-advanced-security-practitioner**
- Recommended Pathways: **CompTIA.org/certifications/which-certification**
- Posts: <https://bit.ly/2WwydtQ>

Competitors	Talking Points / CASP+ Advantages
(ISC)2 Certified Information Systems Security Professional (CISSP)	<ul style="list-style-type: none"> • Both CASP+ and CISSP assess advanced-level cybersecurity skills and are vendor-neutral, however: <ul style="list-style-type: none"> • CISSP does NOT use simulations to test hands-on skills to build cybersecurity systems and programs. CASP+ has both simulations and performance-based questions. • CISSP requires a minimum of five years cumulative paid work experience in two or more of the eight exam domains. • CASP+ is mandated by organizations like the U.S. Navy to assess cybersecurity roles of personnel not in management positions.
GIAC Certified Enterprise Defender (GCED)	<ul style="list-style-type: none"> • GCED costs almost 4x as much and requires a training bundle. CASP+ allows you to choose your preferred training methods.
ISACA Certified Information Security Manager (CISM)	<ul style="list-style-type: none"> • CISM focuses on management skills, while CASP+ assesses the skills of professionals who are actively engaged as individual contributors not only management roles.

Skills and Competencies Acquired:	Job Roles:	Companies that Endorse CASP+
<ul style="list-style-type: none"> • Architect, engineer, integrate, and implement secure solutions across complex environments to support a resilient enterprise. • Consider the impact of governance, risk and compliance requirements throughout the enterprise. 	<ul style="list-style-type: none"> • Security Architect • Senior Security Engineer • SOC Manager • Security Analyst • IT Cybersecurity Specialist/ INFOSEC Specialist • Cyber Risk Analyst 	<ul style="list-style-type: none"> • RxSense • Ricoh • U.S. Marine Corps • U.S. Navy Center for Information Dominance • U.S. Army

CompTIA **CASP+** (CAS-004)

How does CompTIA Compare?

		 Certified Information Systems Security Professional		 Certified Information Security Manager™ <small>An ISACA Certification</small>
Certification	CASP+	(ISC)2 Certified Information Systems Security Professional (CISSP)	GIAC Certified Enterprise Defender (GCED)	ISACA Certified Information Security Manager (CISM)
Performance-based Questions	Yes	No	No	No
Exam Length	90 questions, 165 minutes	100-150 questions, 3 hours	115 questions, 3 hours	150 questions, 4 hours
Experience Level	Advanced	Advanced	Advanced	Advanced
Exam Focus	Cybersecurity Practitioner Skills, Architect & Engineer	Cybersecurity Management Skills	Cybersecurity Practitioner Skills, Engineer	Cybersecurity Management Skills
Prerequisites	Recommend 10 years of IT administration, including 5 years hands-on, technical security experience.	Documented proof of minimum 5 years full-time IT work experience in two or more of the eight domains.	None. However, learners should be aware of the technical level required for the certification.	Documented proof of minimum 5 years IS work experience in three or more of the job practice analysis areas.

Learn more about CASP+



CompTIA Data+ (DA0-001)

CompTIA Data+ Intro

CompTIA Data+ is an early-career data analytics certification for professionals tasked with developing and promoting data-driven business decision-making. Data+ is an ideal certification for not only data-specific careers but other career paths outside of IT can also benefit from analytics processes and data analytics knowledge.

VALUE Prop 1 (Career Changer/Student)

Data+ ensures professionals have the confidence to bring data analysis to life. Data+ arms candidates with foundational, tool-agnostic data skills that help organizations listen and make critical business decisions.

Candidates who can effectively analyze data and validate those skills with an industry-recognized certification could be considered an invaluable asset to any team.

VALUE Prop 2 (Employer)

CompTIA Data+ validates candidates have the knowledge and skills to effectively mine data, confidently interpret insights, and analyze complex datasets while adhering to governance and quality standards that drive business priorities and promote data-driven business decision making.

Key Differentiators:

• Better Analyze and Interpret Data

Mine data more effectively. Analyze with rigor. Avoid confounding results.

• Communicate Insights

Highlight what's important. Produce reports that persuade, not confuse. Make informed data-driven decisions.

• Demonstrate Competency

Proof of data literacy means employability and more upward mobility

• Recruit and Train (Employers)

Develop teams that have the right talent and training to make the best use of company data.

Skills and Competencies Acquired:

- Identify basic concepts of data schemas and understand the difference between common data structures and file formats
- Explain data acquisition concepts, reasons for cleansing and profiling, and techniques for data manipulation
- Apply the appropriate descriptive statistical methods and summarize types of analysis
- Translate business requirements to form the appropriate visualization
- Summarize important data governance concepts and apply data quality control concepts

By the Numbers:

- **20%** job growth expected for positions aligned to Data+ over the next ten years, according to Burning Glass.
- **70%** of data job roles fall outside of Tech Occupations (Burning Glass, Feb 2022)

Resources:

- Average Salary:
 - U.S. Data Analyst: Glassdoor.com (<https://bit.ly/3FWZFpJ>)
 - UK Data Analyst: ITJobsWatch.co.uk (<https://bit.ly/3KAMDSq>)
- Data+ Additional Information: **CompTIA.org/data**
- Recommended Pathways: <https://s.comptia.org/3baRBTQ>
- Posts: <https://s.comptia.org/3qLrnAl>

Vendor Neutral

CompTIA Data+ is the only data analyst certification that covers baseline data analytics skills, assesses hands-on abilities and is vendor neutral.





Vendor-neutral certifications provide analyst skills needed to perform various job roles regardless of the specific programs and tools being used. Compare this to vendor-specific certifications, which equip your team to work with just one platform (such as SAS, Tableau, or Microsoft).

Competitors	Talking Points / Data+ Advantages
SAS® Certified Specialist: Visual Business Analytics	SAS Certified Specialist: Visual Business Analytics is designed for analysts who are using SAS® Visual Analytics to analyze data and design reports.
Tableau Certified Data Analyst	A Tableau Data Analyst is designed for analysts specifically using Tableau to make business decisions by understanding the problem, identifying data to explore, and delivering actionable insights.
Microsoft Certified: Data Analyst Associate	Those who earn Microsoft Certified: Data Analyst Associate are proficient in data preparation, data modeling, data visualization and data analysis in the context of Power BI.

Companies That Contributed to Data+:		Job Roles:	
• University of Maryland Global Campus	• Woz U	• Data Analyst	• Business Data Analyst
• Discover Financial Services	• CDW	• Business Intelligence Analyst	• Operations Analyst
• Rogers Communications	• Sears Home Services	• Reporting Analyst	• Marketing Analyst
• PayPal	• Cars.com	• Clinical Analyst	
• Molina Healthcare	• SunSource		

CompTIA Data+ (DA0-001)

How does Data+ Compare to Alternatives?

				
Certification	Data+	SAS® Certified Specialist: Visual Business Analytics	Tableau Certified Data Analyst	Microsoft Certified: Data Analyst Associate
Vendor-neutral	Yes	No	No	No
Performance-based Questions	Yes	Yes	Yes	No
Exam Length	1 exam, 90 minutes	1 exam, 100 minutes	1 exam, 2 hours	1 exam, 180 minutes
Experience Level	Early-career	Beginner	Beginner	Beginner
Exam Focus	Transform business requirements in support of data-driven decisions	Data analysts using SAS® Visual Analytics to analyze data and design reports	Comprehensive functionality and Tableau expertise	Designing and building data models and enabling analytic capabilities with Microsoft Power BI
Prerequisites	18-24 months of experience in a report/business analyst role	Experience or training using either version, including VA on SAS Viya 8.3 or later	None, but suggest 6+ months product experience	Passed the Analyzing Data with Microsoft Power BI exam

Learn more about Data+



CompTIA DataSys+ (DS0-001)

BATTLE CARD

CompTIA DataSys+ Intro

The CompTIA DataSys+ exam sets a unified standard of skills for the successful management and securing of data assets. It covers what database administrators need to deploy, manage, and maintain systems, including employing the fundamentals of scripting and programming in a database environment while using security and business continuity best-practices.

Value Prop 1 (Career Changer/Student)

Comprehensive Skill Set: CompTIA DataSys+ certification provides a standardized and comprehensive skill set required for database administrators, covering database fundamentals, deployment, management, security, and business continuity.

Value Prop 2 (Employer)

The new CompTIA DataSys+ proves certified professionals have the skills to oversee, maintain and protect the increasing quantity of data organizations are collecting. It ensures that IT pros have the database management skills to do the job securely, accurately and efficiently, supporting and driving data-driven business strategies.

Key Differentiators:

- DataSys+ is the only vendor-neutral data management certification available, and was developed following ANSI/ISO processes; pending approval.
- DataSys+ includes performance-based questions in the certification exam, proving individuals have working skills rather than memorized theoretical knowledge.
- DataSys+ is a springboard to both vendor-specific database certifications as well as more advanced level data science certifications.

Skills and Competencies Acquired:

- An understanding of database structure types and the ability to develop, modify and run code provides the groundwork for database administrators to gather, store, and drive data assets.
- Compare and contrast the different aspects of database planning and design and explain the various phases of the implementation, testing, and deployment of collected data.
- Understand the purpose of monitoring and reporting database performance, explain common database maintenance processes, and produce critical documentation.
- Secure databases, protect against attacks, and control authorization while ensuring governance and regulatory compliance.
- Prepare for and recover from incidents by implementing best practices for backup and restoration of data.

Resources:

- Average Salary:
 - U.S. Database Administrator: Glassdoor.com (https://www.glassdoor.com/Salaries/database-administrator-salary-SRCH_K00,22.htm)
 - UK Database Administrator: ITJobsWatch.co.uk (<https://www.itjobswatch.co.uk/jobs/uk/dba.do>)
- CompTIA DataSys+ Additional Information: ([CompTIA.org/certifications/datsys](https://www.comptia.org/certifications/datsys))
- Recommended Pathways: (<https://bit.ly/42DCNb6>)
- Blog Posts: (<http://bit.ly/3K16Lyq>)

By the Numbers:





- The 10-year projected growth rate for database administrators is 35% above the national rate.¹
- The need for database administrators will continue to grow, reaching about 163,000 by 2033.²

Competitors	Talking Points / CySA+ Advantages
IBM Associate Certified DBA - Db2 12 for z/OS Fundamentals	<ul style="list-style-type: none">• Is limited to IBM's specific database - Db2 12 for z/OS - without a discussion of other database options.• Security is only a small portion of the IBM certification (8%), while it is a significant portion of DataSys+ (23%).
Oracle Database Administration 2019 Certified Professional Certification	<ul style="list-style-type: none">• Is limited to Oracle's specific database - Oracle's certification is vendor-specific.• Oracle requires passing two exams (Oracle Database Administration I and II) making it more cost effective for learners to sit for CompTIA DataSys+.
Microsoft Certified: Azure Database Administrator Associate	<ul style="list-style-type: none">• Microsoft is limited to SQL databases - ours is not. DataSys+ includes various popular database tools, such as such as Cassandra, MongoDB, Neo4j, and Amazon DynamoDB.• DataSys+ goes into more detail regarding logging and documenting issues.

Job Roles:	Organizations that Contributed to the Development of DataSys+
<ul style="list-style-type: none">• Database Administrator• Sr. Database Administrator• System Database Administrator• Task-Oriented Database Administrator• Application Database Administrator	<ul style="list-style-type: none">• Cloud Database Administrator• Specialist Database Administrator• Performance Database Administrator• Database Manager
	<ul style="list-style-type: none">• BlueOwl LLC• Cisco Systems Inc• City of Alexandria• Uganda Registrations Services Bureau• University Of Utah• IBM• Pom Analytics, Inc.• CriticalRiver• EITZAC LLC• TAPFIN

CompTIA DataSys+ (DS0-001)

How does CompTIA compare to alternatives?

		 Microsoft		
Certification	CompTIA DataSys+	Microsoft Certified: Azure Database Administrator Associate	Oracle Database SQL Certified Associate	IBM Associate Certified DBA - Db2 12 for z/OS Fundamentals
Performance-based Questions	Yes	No	No	No
Vendor Neutral?	Yes	No	No	No
Experience Level	Foundational	Intermediate	Entry-Level	Entry-Level
Exam Focus	Deploy, manage, and maintain databases	Implement and manage cloud-native & hybrid data platform solutions built on SQL Server and SQL database services	Demonstrate understanding of fundamental SQL concepts needed to undertake any database project	Acquire the basic skills to administer a Z/OS database
Training Products	Full suite of online test prep tools, books, labs, and instructor-led training	Self-paced and instructor-led training	Self-paced training	Instructor-led training

Learn more about DataSys+



CompTIA Project+ (PKO-005)

BATTLE CARD

CompTIA Project+ Intro

CompTIA Project+ gives IT professionals hands-on project management skills to coordinate small - to medium-sized projects using waterfall and agile methodologies.

VALUE Prop 1 (Career Changers/Student)

Project+ certifies that IT professionals have the skills needed to succeed within a project team, hit deadlines and meet compliance goals in order to drive business outcomes.

VALUE Prop 2 (Employers)

Project+ is ideal for professionals who need to manage smaller, less complex projects. It provides candidates with a more expansive skillset to oversee IT projects that meet goals and drive business outcomes.

Skills and Competencies Acquired:

- Manage the project life cycle.
- Coordinate small-to-medium-size projects.
- Establish a communication plan, manage resources and maintain documentation
- Support the completion of larger projects within an IT environment.

Key Differentiators:

- Project+ is the only baseline IT project management certification aimed at providing IT pros with the knowledge to coordinate projects and communicate with teams as part of other job duties.
- Project+ is now mapped to Jr. Project Manager and Project Coordinator job roles that could lead to full time employment after successfully certifying.
- The new exam includes performance-based and multiple-choice questions to identify the employees who can do the job.

Renewal:

The CompTIA Project+ certification is considered good for life and does not need to be renewed.



By the Numbers:

- **20%** of IT hiring managers request project management skills in their IT job openings.
- A report by the Project Management Institute (PMI) on the talent situation for project management professionals reveals there will be a need for around **25 million** new project management professionals by 2030.
- Over **86K** and growing Project+ certified professionals.

Project Management is one of the most in-demand skill sets.

Resources:

- Average Salary:
 - U.S. Junior IT Project Manager: Glassdoor.com (<https://s.CompTIA.org/3cyJfLu>)
 - UK Junior IT Project Manager: ITJobsWatch.co.uk (<https://s.CompTIA.org/3v4MUqx>)
- Project+ Additional Information: [CompTIA.org/certifications/project](https://s.CompTIA.org/certifications/project)
- Recommended Pathways: [CompTIA.org/certifications/which-certification](https://s.CompTIA.org/certifications/which-certification)
- Posts: <https://bit.ly/2C5Cjic>

Competitors

Talking Points / Project+ Advantages

PMI CAPM	<ul style="list-style-type: none">• CAPM is intended for entry-level project managers or those starting a project management career.• Follows specific PMI management methodology.• Leads into the more rigorous PMP exam.
PMI PMP	<ul style="list-style-type: none">• PMP follows one specific methodology.• PMP is designed for full-time project managers who manage medium to large scale enterprise projects, whereas Project+ is for IT Pros who manage small to medium sized projects (which may be outside of other job duties).• Unlike Project+, PMP has extensive requirements, including:<ul style="list-style-type: none">• 4,500 hours leading and directing projects,• a post-secondary degree and• 35 hours of project management education
Axelos PRINCE2 Foundation	<ul style="list-style-type: none">• Prince2 focuses on a process-based project management method for enterprise management, recognized largely within the UK industry for a pathway for career project managers

Compared to Other Certifications:

1. Project+ covers a high-level introduction to Agile as part of one of the objectives. If a candidate would like to focus on Scrum, he/she would take Scrum Alliance's Certified Scrum Master certification.
2. Project+ is cost and time-efficient given its exam length.

Job Roles:




- | | |
|----------------------------------|-------------------------------|
| • Junior IT project manager | • Product owners |
| • Project coordinator | • Associate/business analysts |
| • SCRUM masters | • QA leads |
| • Level II help desk technicians | • Project control analysts |
| • Development leads | • (PMO team members) |

Organizations that contributed to the development of Project+:

- | | | |
|------------------------|-----------------------------------|-----------------------------------|
| • Accenture | • GDIT | • U.S. Army |
| • Advantage Health | • HP | • U.S. Department of the Interior |
| • Canon | • John Hopkin Applied Physics Lab | • U.S. Navy |
| • Dell | • KirkpatrickPrice | • Western Governors University |
| • Fayetteville College | • Microsoft | |
| • Fuji Xerox | | |

CompTIA Project+ (PKO-005)

How does CompTIA Compare to Alternatives?

			
Certification	Project+	PMI CAPM	Axelos PRINCE2Foundation
Vendor-neutral	Yes	Yes	Yes
Performance-based Questions	Yes	No	No
Exam Length	1 exam, 90 questions, 90 minutes	1 exam, 150 questions, 3 hours	1 exam, 60 questions, 60 min
Experience Level	Entry	Entry	Entry
Exam Focus	IT Project Management Small- to medium-sized projects	Enterprise Management Medium- to large projects following PMI methodology	Enterprise Management Medium- to large projects following PRINCE2 framework
Prerequisites	No prerequisite, but at least 6–12 months of hands-on experience managing projects in an IT environment	Secondary degree (high school diploma, associate's degree or equivalent) and 23 hours of project management education	No prerequisites, but must have some understanding of Project Management

Learn more about Project+



CompTIA Cloud Essentials+ (CL0-002)

CompTIA Cloud Essentials+ Intro

CompTIA Cloud Essentials+ ensures that IT Professionals and other business decision makers who either work for cloud service providers - or who may need to guide their organization in the utilization of cloud services – have the skills they need.

VALUE Prop 1 (Career Changer/Student)

Cloud Essentials+ demonstrates learners ability to function within any company, regardless of what cloud platform they are using, in order to participate in creating assessments and make business decisions regarding cloud products and services.

VALUE Prop 2 (Employer)

Cloud Essentials+ certification validates that both technical and non-technical staff are prepared to evaluate and make decisions related to the cloud that will ultimately increase efficiency, manage costs, and reduce security risks.

Cloud Essentials+ Advantages:

- Cloud Essentials+ is the ONLY vendor-neutral cloud business certification.
- It's job-focused and aligned with employers needs.
- It's current with today's cloud environment- the technology and how it works.
- Cloud Essentials+ should be viewed as a foundation to vendor specific certifications such as:
 - AWS Certified Cloud Practitioner
 - MTA Cloud Fundamentals
 - Azure Fundamentals

Cloud Essentials+ ensures the fundamental principles of business decisions are well understood within any cloud platform.

Skills and Competencies Acquired:

- Explain cloud principles, identify cloud networking concepts and storage techniques, and understand cloud design aspects
- Comprehend the financial aspects of engaging a cloud provider, as well as the business aspects of managing vendor relationships in cloud adoptions
- Explain aspects of operating within the cloud, such as data management, availability, and monitoring
- Understand how DevOps plays a role in cloud environments, such as with provisioning or API integration
- Understand risk management concepts related to cloud services and identify the importance and impacts of compliance in the cloud

Resources:

- Average Salary:
 - U.S. Business Analyst: Glassdoor.com (<https://bit.ly/342bNUf>)
 - UK Business Analyst: ITJobsWatch.co.uk (<https://bit.ly/2pwq7W3>)
- Cloud Essentials+ Additional Information: CompTIA.org/certifications/cloud-essentials
- Recommended Pathways: CompTIA.org/certifications/which-certification
- Posts: <https://bit.ly/2JLnd6M>

Key Differentiators:

- It ensures an ability to analyze information using business principles to make cloud product and service decisions.
- It has strong coverage of business principles including creating cloud assessments based on financial and business aspects.
- Covers a broad range of technology options, setting a solid foundation for vendor-specific certifications.

By the Numbers:

- **#1** concern of today's organizations regarding their IT Pros is a lack of business acumen, according to Quartz.
 - **Solution:** Cloud Essentials+ helps fill this unmet need in the market.
- **90%** of all companies have moved at least some work to the cloud and need decision makers, analysts, and process owners who understand cloud principles from a business and operations perspective.

Objection	Response
Candidate: I don't think I want to be in management.	Whether or not you choose to manage people, understanding how cloud business decisions are made gives you perspective, a potential "voice at the table" on the decisions that impact your job, and makes you more valuable to employers.
Candidate: It isn't listed in the job role.	Business skills are a benefit in any job and certifying in those skills demonstrates a pro-active desire and competency for professional growth and upward-moving positions.
Employer: I think my people already make good business decisions.	The benefit to Cloud Essentials is that it ensures your staff is solid in their cloud-specific business decisions, as opposed to having general business acumen. It is also ideal for employees who may have a very strong technical background, but do not have a business degree.



Renewal:

The CompTIA Cloud Essentials+ certification is considered good for life and does not need to be renewed.

**Learn more about
Cloud Essentials+**

