



CompTIA® **BATTLE CARDS**

Intro

CompTIA Inc. is the world's leading provider of vendor-neutral information technology (IT) training and certification products. CompTIA unlocks potential in millions of aspiring technology professionals and careers changers. Working in partnership with thousands of academic institutions and training providers, CompTIA helps students build career-ready skills through best-in-class learning solutions, industry-recognized certifications and career resources.

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.

Benefits

Learners/Professionals	Enterprise/Employer	Government
<p>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.</p> <p>By the numbers</p> <ul style="list-style-type: none"> • 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. 	<p>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.</p> <p>By the numbers</p> <p>Loyal workforce: 84% of IT professionals stay with their employer after getting CompTIA certified.</p> <p>Certified staff benefit</p> <ul style="list-style-type: none"> • 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. 	<p>By February 2025, all DoD civilian employees and military service members in DCWF work roles under the cybersecurity workforce element must be qualified in accordance with DoDM 8140.03. If you or your organization are in need of training and certification as it relates to DoDM 8140.03, CompTIA certifications can help.</p> <p>CompTIA currently has approval for 8 of their certifications across 31 work roles under DoDM 8140.03, including:</p> <ul style="list-style-type: none"> • CompTIA A+ • CompTIA Network+ • CompTIA Security+ • CompTIA CySA+ • CompTIA PenTest+ • CompTIA CASP+ / SecurityX • CompTIA Cloud+ • CompTIA Linux+ <p>To view the full mapping visit CompTIA.org/content/tools/CompTIA-and-dodm-8140</p>

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

CompTIA pathway to jobs



Intro

CompTIA Tech+ is the foundational certification program designed to solidify tech knowledge across essential domains, to guide learners toward a successful career in technology.

VALUE Prop 1 (Career Changers/Student)

CompTIA Tech+ 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 (Employers)

CompTIA Tech+ 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

- The only pre-career certification that helps students or career changers determine if they have a competency for technology and if it is the right career path for them.
- Establishes a tech education framework for students in middle school and high school.
- No other single certification covers all areas of tech foundations making it ideal for non-technical professionals.

Competitors	Talking Points/Tech+ Advantages
Microsoft Technology Associate (MTA)	<ul style="list-style-type: none">• Tech+ has a broad focus that allows entry to multiple IT-related paths.• Tech+ 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 Tech+ prepares for digital skills as well as IT-readiness.• One Tech+ 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 Tech+ exam represents concepts covered in five or more ECDL exams.

Skills and Competencies Acquired

- Understand and manage IT infrastructure and computing concepts.
- Troubleshoot and resolve common hardware and software issues.
- Recognize and address basic cybersecurity threats.
- Understand the increasing relevance of emerging technologies like AI and IoT.
- Pursue more advanced certification pathways, such as CompTIA A+.

Who would benefit from Tech+?

- 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


- Tech+ additional information: Partners.compTIA.org/certifications/CompTIA-tech-plus
- Recommended Pathways: CompTIA.org/certifications/which-certification
- Posts: CompTIA.org/resources/it-career-center

Renewal

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



CompTIA Tech+ (FC0-U71)

		ISACA Computing Fundamentals	IC3 Digital Literacy Certification	International Computer Driving License
Number of Exams	Single, multiple-choice exam	Multiple choice exam	3 multiple choice exams	Modular set of 17 exams
Exam Focus	Pre-career assessment of competency for technology	End users who lack IT training	End users who lack IT training	End user skills
Experience Level	Pre-IT career & Non-IT Pros	Entry-level	Non-IT pros	Non-IT pros
Vendor Neutral	Yes	Yes	Yes	Yes

Notes

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 Changers/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 (Employers)

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.

A+ is compliant with ISO/ANSI 17024 standards and maps to DCWF work roles used by U.S. DoD Directive 8140.03M.

- 411 - Technical Support Specialist
- 451 - System Administrator
- 521 - Cyber Defense Infrastructure Support Specialist

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, configure, and maintain computer equipment, mobile devices, and software for end users.
- Service components based on customer requirements.
- Understand networking basics and apply basic cybersecurity methods to mitigate threats.
- Properly and safely diagnose, resolve, and document common hardware and software issues.
- Apply troubleshooting skills and provide customer support using appropriate communication skills.
- Understand the basics of scripting, cloud technologies, virtualization, and multi-OS deployments in corporate environments.

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

By the Numbers

- More than 235,000 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 1.3 million A+ certifications issued since inception.

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/3KmF8O3>): IT Support Specialist
- A+ Additional Information: [CompTIA.org/certifications/a](https://www.comptia.org/certifications/a)
- Recommended Pathways: [CompTIA.org/certifications/which-certification](https://www.comptia.org/certifications/which-certification)
- Posts: [CompTIA.org/resources/it-support-and-help-desk](https://www.comptia.org/resources/it-support-and-help-desk)



CompTIA A+ (220-1201 & 220-1202 Core Series)

Cisco Certified Support Technician (CCST)

CompTIA A+ offers a comprehensive and broad approach, covering a wide range of IT skills beyond just networking. This versatility allows for greater flexibility in job roles compared to the more networking-specific focus of Cisco CCST.

CompTIA A+ is widely recognized and respected in the IT industry, providing more versatility in career opportunities. In contrast, Cisco CCST is more niche, often requiring the desired job to specifically use Cisco technology, which may limit job flexibility and recognition.

Google IT Support Professional Certificate

CompTIA A+ offers a more comprehensive curriculum, covering a wide array of IT topics and job roles, whereas the Google IT Support Professional Certificate covers fewer job roles and is less extensive in its content.

CompTIA A+ is a well-recognized certification in the IT industry, with a formal exam process that validates skills and knowledge. In contrast, the Google IT Support Professional Certificate does not have an exam tied to the certificate, which may impact its recognition and perceived value in the IT field.

Training but not testing

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.

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.

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.

Notes

Intro

CompTIA Network+ is a global IT certification validating learners have core skills necessary to establish, maintain troubleshoot and secure networks regardless of technology or platform.

VALUE Prop 1 (Career Changers/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.

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

Skills and Competencies Acquired

- Establish network connectivity by deploying wired and wireless devices.
- Explain the purpose of documentation and maintain network documentation.
- Configure common network services.
- Explain basic data-center, cloud and virtual networking concepts.
- Monitor network activity and troubleshoot performance and availability issues.
- Implement network security hardening techniques.
- Manage, configure and troubleshoot network infrastructure.

Competitors	Talking Points/Network+ Advantages
Cisco CCNA Vendor-specific	<ul style="list-style-type: none">• Unlike CCNA, CompTIA Network+ is vendor neutral and prepares IT pros to support the network regardless of the platform rather than just maintaining a single vendor's products.• Troubleshooting is covered broadly in Network+, while CCNA limits troubleshooting to just Cisco devices. This is key because most troubleshooting issues happen outside of switches and routers - i.e., in areas not covered by CCNA.• The CCNA is focused on the key Cisco products - routers and switches - but does not cover other essential things, such as IoT, appliances, general security and security design concepts which are included in Network+.

Organizations That Use CompTIA Network+

- Amazon
- Apple
- Best Buy
- Bloomberg
- Blue Cross Blue Shield
- Booz Allen Hamilton
- General Dynamics
- Microsoft
- Motorola
- Northrop Grumman
- Raytheon
- Ricoh
- Sony
- Verizon
- The United States Department of Defense

Key Differentiators

- The only certification on the market aligned to job roles for early-career networking professionals.
- Network+ is a crucial stepping-stone for early career professionals seeking a high-growth career in networking and cybersecurity, validating a wide range of practical skills needed to harden networks, deploy wired and wireless solutions, and ensure critical network availability.
- Network+ exclusively validates vendor-neutral network management knowledge. Network+ is the premier vendor-neutral IT infrastructure certification, validating the fundamental skills required for early-career networking job roles and preparing candidates to effectively manage and maintain modern network environments, including cloud, virtualization, and IoT.

By the Numbers

- The median pay for Network Administrators in the U.S. is \$90,520. This is 95% higher than the median national wage for all occupations.¹
- Network administration is one of the largest tech occupation categories with an estimated base of 330,000+ employed US workers in 2023, with it expected to grow to almost 350,000 by 2028.²
- Over 600K Network+ certifications issued since inception.
- Close to 1 in 10 of all types of the 5.8 million tech jobs in 2023 are for Network Administrators.¹

Primary Job Roles

- Junior Network Administrator
- NOC Technician
- Systems Administrator

Secondary Job Roles


- Datacenter Support Technician
- Telecommunications Technician
- IT Support Manager
- Tier II Support Technician



CompTIA Network+ (N10-009)



Cisco CCNA

		Cisco CCNA
Experience Level	Early Career	Early Career
Performance-based Questions	Yes	Yes
Vendor Neutral	Yes	No
Exam Length	1 exam with a maximum of 90 questions, 90 minutes	1 exam, 120 minutes
Exam Focus	Job role based. Covers networking technologies across all vendors & solutions	Not job role based. Entry-level networking for Cisco-only products & solutions
Prerequisites	9-12 months in the IT networking field	1+ years of Cisco experience

Notes

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 Changers/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 (Employers)

CompTIA Security+ is compliant with ISO/ANSI 17024 standards and maps to 20 DCWF work roles used by U.S. DoD Directive 8140.03M.

View the approved work roles at CompTIA.org/blog/putting-8140-to-work-upskilling-the-dod-workforce

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.

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.
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.• GSEC costs nearly 3x more.

By the Numbers

- Over 850K Security+ certifications issued since inception.
- Over 63,000 Job postings are requesting candidates have CompTIA Security+. Source: Cyberseek

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 \(https://bit.ly/3EA8pDX\)](https://bit.ly/3EA8pDX)
 - UK Security Administrator: [ITJobsWatch.co.uk \(https://bit.ly/3ZkPoiv\)](https://bit.ly/3ZkPoiv)
- Security+ Additional Information: CompTIA.org/security
- Recommended Pathways: (<https://bit.ly/42DCNb6>)
- • Blog Posts: CompTIA.org/resources/cybersecurity

Primary Job Roles

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



CompTIA **Security+** (SY0-701)

		(ISC)2 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

Notes

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 Changers/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 (Employers)

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.

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.

Competitors	Talking Points/Linux+ Advantages
Red Hat Certified Systems	<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

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.

Job Roles

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

Organizations that use Linux+


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

Resources

- Average Salary:
 - U.S. Systems Administrator: [Glassdoor.com](https://www.glassdoor.com)
 - UK Systems Administrator: [UK ITJobsWatch.co.uk](https://www.itjobs.co.uk)
- Linux+ Additional Information: [CompTIA.org/certifications/linux](https://www.comptia.org/certifications/linux)
- Recommended Pathways: [CompTIA.org/certifications/which-certification](https://www.comptia.org/certifications/which-certification)
- Posts: [CompTIA.org/blog/listing/-in-tags/tags/linux](https://www.comptia.org/blog/listing/-in-tags/tags/linux)



CompTIA Linux+ (XK0-005)

		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

Notes

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 Changers/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 (Employers)

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.

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.

Renewal:

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

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 DCAPowerEdge 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.

- 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+.

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.

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
- ECOM
- General Mills
- U.S. Navy

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://www.glassdoor.com)
 - UK Server Administrator: [ITJobsWatch.co.uk](https://www.itjobswatch.co.uk)
- 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)



CompTIA **Server+** (SK0-005)

		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
Prerequisites	Recommended CompTIA A+ and two years of IT experience	None	1-3 years experience
Vendor Neutral	Yes	No	No

Notes

Intro

The CompTIA Cloud+ certification validates essential skills necessary to implement, maintain, optimize and troubleshoot cloud-based infrastructure services.

VALUE Prop 1 (Career Changers/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 (Employers)

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.

DoD 8140.03M is now being applied and Cloud+ is approved for select roles. CompTIA Cloud+ demonstrates that the candidate not only has the necessary knowledge, but also the skills to do the job right for the DOD approved work roles of:

- Network Operations Specialist (441)
- System Administrator (451)
- Enterprise Architect (651)
- Security Architect (652)

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. • Microsoft Certified Azure Administrator is not approved by the DoD 8140.03M.
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. • Amazon Web Services (AWS) IT Operations Pathway is not approved by the DoD 8140.03M. 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.

- CompTIA Cloud+ stands out as the only cloud certification specifically designed to map to real-world demands of cloud operations job roles, validating essential skills necessary for excelling in cloud environments.
- Cloud+ is the sole vendor-neutral certification that confirms the technical abilities necessary for secure cloud operations. The competencies tested by the exam are relevant across all cloud platforms.

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.

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](https://www.comptia.org/certifications/cloud)
- Recommended Pathways: [CompTIA.org/certifications/which-certification](https://www.comptia.org/certifications/which-certification)
- Posts: <https://bit.ly/2MVb6Gj>

Primary Job Roles


- System Administrator
- Security Specialist/Analyst
- Systems Engineer
- Cloud Specialist
- Cloud Engineer

Secondary Job Roles

- Tech Support Specialist
- Field Service Technician
- IT Manager/Team Leader
- Systems/Network Architect
- Network Engineer/Admin



CompTIA **Cloud+** (CV0-004)

		ISC2 Certified Cloud Security Professional (CCSP)	Amazon Web Services (AWS) Solutions Architect - Professional	Microsoft Certified Azure Solutions Architect Expert
Exam Length	1 exam with a maximum of 90 questions, 90 minutes.	3 hours	75 questions, either multiple choice or multiple response	40-60 questions, multiple-choice, drag and drop, and case studies
Prerequisites	About 5 years total IT experience, including 2-3 years as a systems administrator or cloud engineer	Five years cumulative. Three years in information security. One year in a CCSP domain	None	Holding an active Microsoft Certified: Azure Administrator Associate certification

Notes

Intro

CompTIA CloudNetX validates the advanced skills needed to design, engineer, and integrate secure, scalable networking solutions in hybrid environments.

Skills and Competencies Acquired

- Analyze business requirements to design and configure secure network architecture for on-premises and cloud environments.
- Analyze requirements to design for network security, availability, Zero Trust, and identity and access management technologies.
- Apply and configure concepts and tools related to network monitoring and performance, automation, and scripting.
- Troubleshoot network issues related to connectivity, performance, access, and security.
- Perform network operation and maintenance.

Key Differentiators

- The Premier Network Architecture Certification Uniquely Tailored to In-demand Job Roles
- CompTIA CloudNetX maps to real-world demands of hybrid network architecture job roles, validating advanced skills necessary for excelling in hybrid networking environments.
- Exclusively Validates Vendor-Neutral Hybrid Networking Expertise
- CompTIA CloudNetX is the only cloud certification on the market that confirms the technical and hands-on skills necessary for secure hybrid networking operations across all platforms.

By the Numbers

- The number of job listings for Network Engineer / Network Architect roles by U.S. employers over the last 12 months was 100,025. 230,000+ jobs were posted by U.S. employers over a 12-month period in May 2023.
- The projected employment base for Network Engineer / Network Architect job roles in 2030 is 192,627. \$103,500 was the median annual salary for Data Scientists in 2023, 123% higher than the median national wage for all occupations
- The median annual income for Network Engineer / Network Architect job roles is \$115,584.
- CompTIA CloudNetX validates the advanced skills needed to design, engineer, and integrate secure, scalable networking solutions in hybrid environments.

Recommended Experience

- A minimum of ten years of experience in the IT field and five years of experience in a network architect role, with experience in the hybrid cloud environment. Network+, Security+, and Cloud+ or equivalent experience.

CompTIA CloudNetX Exam Objectives

1.0 - Network Architecture Design	31%
2.0 - Network Security	28%
3.0 - Network Operations, Monitoring, and Performance	16%
4.0 - Network Troubleshooting	25%

Primary Job Titles


- Network Architect
- Security Architect

Resources:

- Average Salary:
 - U.S. Network Architect: [Indeed.com](https://www.indeed.com)
 - U.K. Network Architect: [ITJobsWatch.co.uk](https://www.itjobswatch.co.uk)
- CompTIA CloudNetX Additional Information: [CompTIA.org/certifications/CloudNetX](https://www.comptia.org/certifications/CloudNetX)



CompTIA **CloudNetX** (CNX-001)

		Cisco Certified Internetwork Expert (CCIE) Enterprise Infrastructure	Cisco Certified Design Expert (CCDE)	AWS Certified Advanced Networking - Specialty
Exam Length	1 exam with a maximum of 90 questions, 165 minutes.	2 exams: A 120-minute written core exam An 8-hour lab exam	2 exams: A 120-minute written core exam An 8-hour lab exam	1 exam with 65 questions, 170 minutes
Prerequisites	10 years, with 5 in a network architect role	No formal prerequisites necessary	No formal prerequisites necessary	Five years of hands-on experience architecting and implementing network solutions.

Notes

Intro

CompTIA PenTest+ is the most comprehensive exam covering all penetration testing stages, and is for cybersecurity professionals tasked with penetration testing and security consulting.

VALUE Prop 1 (Career Changers/Student)

CompTIA 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 (Employers)

CompTIA 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.

PenTest+ is compliant with ISO/ANSI 17024 standards and maps to DCWF work roles used by U.S. DoD Directive 8140.03M.

- 121 - Exploitation analyst
- 212 - Cyber defense forensics analyst

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.

Competitors	Talking Points/PenTest+ Advantages
EC-Council Certified Ethical Hacker (CEH)	<ul style="list-style-type: none">• PenTest+ costs less, contains performance-based questions and can be earned immediately upon passing the exam.• CEH requires a second exam to assess performance-based skills called the CEH Practical and requires proof of 2 years full-time IT work experience.
GIAC Penetration Tester (GPEN)	<ul style="list-style-type: none">• PenTest+ costs less, contains performance-based questions, and is a closed-book, proctored exam.• GIAC certification exams are open book format, multiple choice, and cost 3x more.
Offensive Security Certified Professional (OSCP)	<ul style="list-style-type: none">• PenTest+ contains multiple-choice and performance-based questions.• OSCP focuses on performance-based simulations only and writing a mitigation report.• OSCP is more advanced and costs 2x more than PenTest+.

Key Differentiators

- **Demonstrate Competency of Current Trends:** Unlike other penetration testing exams that only cover a portion of stages, CompTIA PenTest+ uses both performance-based and knowledge-based questions to ensure all stages are mastered.
- **Prove You Know the Latest Techniques:** CompTIA PenTest+ is the only product on the market covering artificial intelligence (AI), hands-on inventory, scanning and analysis, attacks, lateral movement, as well as planning, scoping, and vulnerability management.
- **Perform Hands-on Tasks:** CompTIA PenTest+ requires a candidate to demonstrate key pen testing skills for all attack surfaces, including the cloud, web apps, APIs, IoT, on-premises and hybrid network environments.

Resources:

- Average Salary:
 - U.S. Penetration Tester: [Indeed.com](https://www.indeed.com)
 - UK Penetration Tester: [ITJobsWatch.co.uk](https://www.itjobswatch.co.uk)
- PenTest+ Additional Information: [CompTIA.org/Certifications/PenTest](https://www.comptia.org/certifications/pen-test)
- Recommended Pathways: [CompTIA.org/certifications/which-certification](https://www.comptia.org/certifications/which-certification)
- Posts: [CompTIA.org/resources/cybersecurity](https://www.comptia.org/resources/cybersecurity)

Skills and Competencies Acquired

- Plan, scope, and perform information gathering as part of a penetration test.
- Perform attacks that are aligned to and fulfill legal and compliance requirements.
- Perform each phase of a penetration test using and modifying appropriate tools and use the appropriate tactics, techniques, and procedures.
- Analyze the results of each phase of a penetration test to develop a written report, effectively communicate findings to stakeholders and provide practical recommendations.

Primary Job Roles


- Penetration tester
- Security consultant

Secondary Job Roles

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



CompTIA PenTest+ (PT0-003)

		EC-Council Certified Ethical Hacker (CEH)	GIAC Penetration Tester (GPEN)	Offensive Security Certified Professional (OSCP)
Performance-Based Questions	Yes	No	No	No
Experience Level	Intermediate	Beginner	Intermediate	Intermediate/Advanced
Exam Focus	Penetration testing and security consulting	Penetration testing	Penetration testing from a business-value	Penetration testing
Vendor Neutral	Yes	Yes	Yes	Yes

Notes

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 (Career Changers/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 (Employers)

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

CompTIA CySA+ is compliant with ISO/ANSI 17024 standards and maps to 10 DCWF work roles used by U.S. DoD Directive 8140.03M.

View the approved work roles at [CompTIA.org/blog/putting-8140-to-work-upskilling-the-dod-workforce](https://www.comptia.org/blog/putting-8140-to-work-upskilling-the-dod-workforce)

Job Roles

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

Competitors	Talking Points/CySA+ Advantages
EC-Council Certified	<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.

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.

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.



CompTIA **CySA+** (CS0-003)

		EC-Council Certified Security Analyst (ECSA)	GIAC Continuous Monitoring Certification (GMON)	Certified Information Systems Auditor (CISA)
Performance-Based Questions	Yes	No	No	No
Vendor Neutral	Yes	Yes	Yes	Yes
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

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://www.comptia.org/CySA)

Recommended Pathways: <https://bit.ly/42DCNb6>

Blog Posts: [CompTIA.org/resources/cybersecurity](https://www.comptia.org/resources/cybersecurity)

Notes

Intro

CompTIA SecurityX (formerly CASP+) is an expert-level cybersecurity certification for security architects and senior security engineers charged with leading and improving an enterprise's cybersecurity readiness.

VALUE Prop 1 (Career Changers/Student)

CompTIA SecurityX 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 (Employers)

CompTIA SecurityX 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.

SecurityX (formerly CASP+) is compliant with ISO/ANSI 17024 standards and maps to 19 DCWF work roles used by U.S. DoD Directive 8140.03M.

View the approved work roles at CompTIA.org/blog/putting-8140-to-work-upskilling-the-dod-workforce

Primary Job Roles

- Security Architect
- Senior Security Engineer

Secondary Job Roles

- Information Security Officer

Competitors	Talking Points/SecurityX Advantages
(ISC)2 Certified Information Systems Security Professional (CISSP)	<ul style="list-style-type: none"> • CISSP has no Performance Based Questions. • CISSP pre-requisites requires documented proof of minimum 5 years full-time IT work experience in two or more of the eight domains.
GIAC Certified Enterprise Defender (GCED)	<ul style="list-style-type: none"> • GIAC certification exams are open book format and cost 3x more.
ISACA Certified Information Security Manager (CISM)	<ul style="list-style-type: none"> • CISM has no Performance Based Questions. • ISACA prerequisites require documented proof of a minimum 5 years IS work experience in three or more of the job practice analysis areas.

Key Differentiators

- SecurityX is the only hands-on, performance-based certification for advanced practitioners — not managers — at the advanced skill level of cybersecurity. While cybersecurity managers help identify what cybersecurity policies and frameworks could be implemented.
- Unlike other certifications, SecurityX covers both security architecture and engineering. SecurityX is the only certification on the market that qualifies technical leaders to assess cyber readiness within an enterprise, and design and implement the proper solutions to ensure the organization is ready for the next attack.
- As the most current advanced-level certification, SecurityX covers technical skills in on premises, cloud native, and hybrid environments, governance, risk, and compliance skills, assessing an enterprise's cybersecurity readiness, and leading technical teams to implement enterprise-wide cybersecurity solutions.

Skills and Competencies Acquired


- Architect, engineer, integrate, and implement secure solutions across complex environments to support a resilient enterprise.
- Use automation, monitoring, detection, and incident response to proactively support ongoing security operations in an enterprise environment.
- Apply security practices to cloud, on-premises, and hybrid environments.
- Consider cryptographic technologies and techniques, as well as the impact of emerging trends (e.g., artificial intelligence) on information security.
- Use the appropriate governance, compliance, risk management, and threat modeling strategies throughout the enterprise.

By The Numbers:

- The advertised median annual salary for security architects in the US is \$150,270. This is 213% higher than the median national wage for all occupations. Security Architects in the US, depending on experience and skillsets, can expect to make from \$106,240 for early career to \$197,380 for more advanced careers.¹
- There were more than 130,400 job postings by employers seeking Security Analysts, Engineers and Architects in the US during the 12-month period through August 2024.¹



CompTIA SecurityX (CAS-005)

		EC-Council Certified Security Analyst (ECSA)	GIAC Continuous Monitoring Certification (GMON)	Certified Information Systems Auditor (CISA)
Performance-Based Questions	Yes	No	No	No
Experience Level	Advanced	Advanced	Advanced	Advanced
Exam Focus	Cybersecurity Practitioner Skills, Architect & Engineer	Cybersecurity Management Skills	Cybersecurity Practitioner Skills, Engineer	Cybersecurity Management Skills
Vendor Neutral	Yes	Yes	Yes	Yes

Resources:

- Average Salary:
 - U.S. Information Security Analyst: [Glassdoor.com](https://www.glassdoor.com)
 - UK Information Security Analyst: [ITJobsWatch.co.uk](https://www.itjobswatch.co.uk)
- SecurityX Additional Information: [CompTIA.org/certifications/securityx](https://www.comptia.org/certifications/securityx)
- Recommended Pathways: [CompTIA.org/resources/cybersecurity](https://www.comptia.org/resources/cybersecurity)
- Posts: [CompTIA.org/resources/cybersecurity](https://www.comptia.org/resources/cybersecurity)

Notes

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 Changers/Student)

CompTIA 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 (Employers)

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.

By The Numbers:

- **20%** job growth expected for positions aligned to Data+ over the next ten years¹
- **70%** of data job roles fall outside of Tech Occupations¹

Job Roles

- Data Analyst
- Business Intelligence Analyst
- Reporting Analyst
- Business Data Analyst
- Operations Analyst
- Marketing Analyst

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.

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).

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.

Resources


- Average Salary:
 - U.S. Data Analyst: [Glassdoor.com](https://www.glassdoor.com)
 - UK Data Analyst: [ITJobsWatch.co.uk](https://www.itjobs.co.uk)
- Data+ Additional Information: [CompTIA.org/data](https://www.comptia.org/data)
- Recommended Pathways: <https://s.comptia.org/3baRBTQ>
- Posts: <https://s.comptia.org/3qLrnAl>

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.



CompTIA Data+ (DA0-001)

		EC-Council Certified Security Analyst (ECSA)	GIAC Continuous Monitoring Certification (GMON)	Certified Information Systems Auditor (CISA)
Vendor Neutral	Yes	No	No	No
Performance-Based Questions	Yes	Yes	Yes	No
Experience Level	Beginner	Beginner	Beginner	Beginner
Exam Focus	Transforming business requirements in support of data-driven decisions	Data analysts using SAS® Visual Analytics to analyze data and design reports	Analysts using Tableau to make business decisions by identifying data to explore and deliver actionable insights.	Designing and building data models and enabling analytic capabilities with Microsoft Power BI

Notes

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 Changers/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 (Employers)

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.

Job Roles

- Database Administrator
- Sr. Database Administrator
- System Database Administrator
- Task-Oriented Database Administrator
- Application Database Administrator
- Cloud Database Administrator
- Specialist Database Administrator
- Performance Database Administrator
- Database Manager

Competitors	Talking Points/DataSys+ 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.

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)
 - UK Database Administrator: [ITJobsWatch.co.uk](https://www.itjobswatch.co.uk)
- CompTIA DataSys+ Additional Information: [CompTIA.org/certifications/datasys](https://www.comptia.org/certifications/datasys)
- Recommended Pathways: [CompTIA.org/certifications/which-certification](https://www.comptia.org/certifications/which-certification)

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.

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 2033.¹



CompTIA DataSys+ (DS0-001)

		Microsoft Certified: Azure Database Administrator Associate	Oracle Database SQL Certified Associate	IBM Associate Certified DBA - Db2 12 for z/OS Fundamentals
Vendor Neutral	Yes	No	No	No
Performance-Based Questions	Yes	No	No	No
Experience Level	Foundational	Intermediate	Entry-Level	Entry-Level
Exam Focus	Deploy, manage, and maintain databases, including	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 courses	Self-paced training	Instructor-led training

Notes

Intro

CompTIA DataX is the premier skills development program for highly experienced professionals seeking to validate their competency in the rapidly evolving field of data science.

Skills and Competencies Acquired

- Understand and implement data science operations and processes.
- Apply mathematical and statistical methods appropriately and understand the importance of data processing and cleaning, statistical modeling, linear algebra and calculus concepts.
- Apply machine learning models and understand deep learning concepts.
- Utilize appropriate analysis and modeling methods and make justified model recommendations.
- Demonstrate understanding of industry trends and specialized data science applications.

Key Differentiators

- The Premier Vendor-Neutral Data Science Certification: Validate expert-level data science skills regardless of vendor tools.
- A Standardized Skill Set: DataX defines and confirms a consistent skill set appropriate for certified data scientists.
- Ever-Growing Demand: The growing quantity of data available to organizations continues to increase the need for skilled data scientists.

By the Numbers

- Data scientist jobs are projected to be among the fastest-growing occupations from 2023 to 2033.
- 230,000+ jobs were posted by U.S. employers over a 12-month period in May 2023.¹
- Over the next 10 years, data scientist roles are projected to grow 35%.¹
- \$103,500 was the median annual salary for Data Scientists in 2023, 123% higher than the median national wage for all occupations ¹

Organizations that Contributed to the Development of DataX

- IBM
- Cisco Systems Inc
- University of Utah
- Octo
- Tishbyte Analytics
- Flatiron School
- COLSA
- Chapman University
- HyperPlanar
- SuccessKPI

Primary Job Roles


- Data Scientist
- Quantitative Analyst
- Machine Learning Engineer/Specialist
- Predictive Analyst
- Artificial Intelligence (AI) Engineer

Resources:

- Average Salary:
 - U.S. Data Scientist: [Indeed.com](https://www.indeed.com)
 - U.K. Data Scientist: [ITJobsWatch.co.uk](https://www.itjobswatch.co.uk)
- CompTIA DataX Additional Information: [CompTIA.org/certifications/datax](https://www.comptia.org/certifications/datax)
- Blog Posts: [CompTIA.org/resources/data-and-analytics](https://www.comptia.org/resources/data-and-analytics)



CompTIA DataX (DY0-001)

		MIT xPRO Professional Certificate in Data Science and Analytics	UCLA Extension Data Science Certificate
Certification or Certificate Program	Certification	Academic Certificate Program	Academic Certificate Program
Vendor Neutral	Yes	Yes	Yes
Experience Level	Advanced	Intermediate	Intermediate
Content Focus	Validates expert-level knowledge and a comprehensive understanding of critical data tools and concepts	Data science fundamentals, foundational and advanced AI/ML concepts	Data management and visualization, machine learning, statistical models
Training	Diagnostic pre-test to assess exam readiness, simulated and live hands-on labs	Online	In-person or online
Prerequisites	5+ years of experience in data science or a similar role is recommended	Familiarity with Excel datasets, data visualization and basic knowledge of Python coding recommended	Prior programming, statistics, or data analytics knowledge
Length to Complete	Flexible	6 months, online 15–20 hours per week	6–24 months

Notes

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)

CompTIA 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)

CompTIA 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.

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.

Job Roles

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

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

- 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.
- Project+ is cost and time-efficient given its exam length.

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 100K Project+ certifications issued since inception.
- Project Management is one of the most in-demand skill sets.

Renewal


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

Resources

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



CompTIA Project+ (PK0-005)

	 CompTIA Project+ CERTIFIED Plus Series	PMI CAPM	Axelos PRINCE2 Foundation
Experience Level	Entry	Entry, Intermediate	Entry
Exam Focus	Small to medium sized projects	Medium to large projects following PMI methodology	Medium to large projects following PRINCE2 framework

Notes

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 Changers/Student)

CompTIA 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 (Employers)

CompTIA 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.

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 proactive 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.

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.

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.

Resources

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



CompTIA Cloud Essentials+ (CLO-002)

		AWS Certified Cloud Practitioner	MTA Cloud Fundamentals	Azure Fundamentals
Exam Focus	Foundational business assessments for cloud services	Covers basic familiarity of AWS cloud technology, value proposition, pricing and billing	Covers fundamental knowledge of and basic skills using Microsoft cloud services	Covers cloud concepts at a foundational level with the focus on Azure
Experience Level	Entry	Entry	Entry	Entry
Vendor Neutral	Yes	No	No	No

Notes



CompTIA®