CompTIA A+

What is it?

CompTIA A+ is the industry standard for establishing a career in IT.

Why is it different?

- A+ is not just about PC repair. A+ candidates are better prepared to troubleshoot and problem solve a wider variety of issues, ranging from networking and operating systems to mobile devices and security.
- Unlike other certifications, many of which only require covering one domain, CompTIA A+ covers a broader diversity of knowledge required of technicians today, making A+ relevant to many more job roles.

About the exam

CompTIA A+ is the preferred qualifying credential for technical support and IT operational roles. A+ certified professionals identify issues and problem solve more effectively than those without certification. CompTIA A+ supports the ability to connect users to the data they need to do their jobs regardless of the devices being used. In order to receive the CompTIA A+ certification, candidates must pass two exams: 220-901 and 220-902. Successful candidates will have the following skills to:

- Configure, install and upgrade operating systems, including: Windows, Apple OS X, Linux, iOS, Android, and Windows Mobile
- Install and image virtual machines
- Set up and troubleshoot peripheral devices
- Assemble and disassemble computing hardware
- Set up and support basic home and small office networks
- Implement cybersecurity controls appropriate to help desk and technical support roles
- Troubleshoot and support end user access to applications and data

Exam #
220-901 and 220-902

Release Date
December 2015

List Price
$205 per exam

Languages
English, German, Japanese, Portuguese, French and Spanish (Modern)

CE Required?
Yes

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

What's in this Version?

CompTIA's A+ 220-901 & 902 address the increased diversity of technologies in today's IT environments, from cloud computing and Linux to iOS and Android. The A+ 220-901 & 902 series has expanded coverage of several domains by adding:

- Expanded coverage of mobile devices and operating systems
- More security problem solving
- Fundamental cloud concepts
- Significant increase in troubleshooting

Training alone is not enough. A lot of training varies in scope, quality and content. A+ establishes a consistent standard that ensures the material one learns maps directly to job roles. CompTIA A+ certification validates that a candidate has mastered the foundational skills for that role.

How does A+ Compare to Alternatives?

	A+	Microsoft	Microsoft	CISCO
Certification	A+	MCSA	MTA Infrastucture	CCENT
Performance-based Questions	Yes	Yes	No	Yes
Exam Length	2 exams, 90 min. each	2-3 exams	4 exams	1 exam, 90 min.
Experience Level	Entry	Entry	Entry	Entry
Exam Focus	Vendor-neutral, technical & professional skills	Tied to specific products (e.g., MCSA Windows 8 or MCSA Server 2012)	Broad-based intro to IT. Gateway to Microsoft's product-centric certifications.	Entry level networking for Cisco products & solutions
Pre-requisites	None. 9-12 months experience recommended	None. Prior experience recommended.	None	None
Price	$205 each exam	$300-$450 ($150 per exam)	$460 ($115 per exam)	$150

CompTIA Certification Pathway

CompTIA certifications align with the skillsets needed to support and manage IT infrastructure. Enter where appropriate for you. Consider your experience and existing certifications or course of study.

INFRASTRUCTURE PATHWAY

CYBERSECURITY PATHWAY
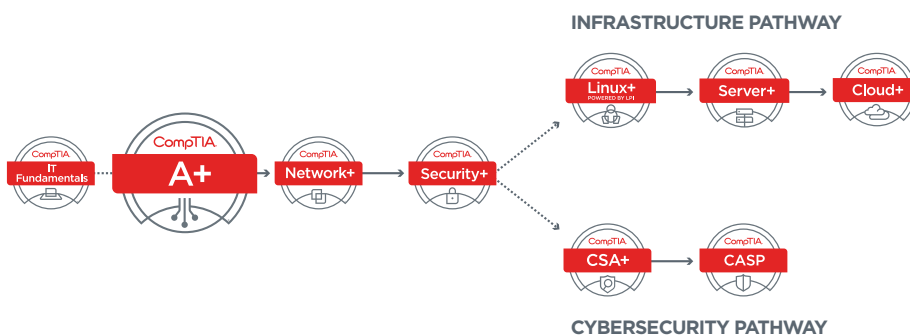
Top A+ Job Titles

- Service Desk Analyst
- Help Desk Tech
- Technical Support Specialist
- Field Service Technician
- Associate Network Engineer
- Data Support Technician
- Desktop Support Administrator
- End User Computing Technician
- Help Desk Technician
- System Support Specialist

Technical Areas Covered in the Certification

CompTIA A+ 220-901

Hardware
34%

- Configure settings and use BIOS/UEFI tools on a PC
- Explain the importance of motherboard components, their purpose, and properties
- Compare and contrast various RAM types and their features
- Install and configure PC expansion cards
- Install and configure storage devices and use appropriate media
- Install various types of CPUs and apply the appropriate cooling methods
- Compare and contrast various PC connection interfaces, their characteristics and purpose
- Install a power supply based on given specifications
- Select the appropriate components for a custom PC configuration, to meet customer specifications or needs
- Compare and contrast types of display devices and their features
- Identify common PC connector types and associated cables
- Install and configure common peripheral devices
- Install SOHO multifunction device / printers and configure appropriate settings
- Compare and contrast differences between the various print technologies and the associated imaging process
- Perform appropriate printer maintenance

Networking
21%

- Identify the various types of network cables and connectors
- Compare and contrast the characteristics of connectors and cabling
- Explain the properties and characteristics of TCP/IP
- Explain common TCP and UDP ports, protocols, and their purpose
- Compare and contrast various WiFi networking standards and encryption types
- Install and configure SOHO wireless/wired router and apply appropriate settings
- Compare and contrast Internet connection types, network types, and their features
- Compare and contrast network architecture devices, their functions, and features
- Use appropriate networking tools

Mobile Devices
17%

- Install and configure laptop hardware and components
- Explain the function of components within the display of a laptop
- Use appropriate laptop features
- Explain the characteristics of various types of other mobile devices
- Compare and contrast accessories & ports of other mobile devices

Hardware & Network Troubleshooting
28%

- Troubleshoot common problems related to motherboards, RAM, CPU and power with appropriate tools
- Troubleshoot hard drives and RAID arrays with appropriate tools
- Troubleshoot common video, projector and display issues
- Troubleshoot wired and wireless networks with appropriate tools
- Troubleshoot and repair common mobile device issues while adhering to the appropriate procedures
- Troubleshoot printers with appropriate tools

CompTIA A+ 220-902

Windows Operating Systems
29%

- Compare and contrast various features and requirements of Microsoft Operating Systems
- Install Windows PC operating systems using appropriate method
- Apply appropriate Microsoft command line tools
- Use appropriate Microsoft operating system features and tools
- Use Windows Control Panel utilities
- Install and configure Windows networking on a client/desktop
- Perform common preventive maintenance procedures using the appropriate Windows OS tools

Other Operating Systems & Technologies
12%

- Identify common features and functionality of the Mac OS and Linux operating systems
- Setup and use client-side virtualization
- Identify basic cloud concepts
- Summarize the properties and purpose of services provided by networked hosts
- Identify basic features of mobile operating systems
- Install and configure basic mobile device network connectivity and email
- Summarize methods and data related to mobile device synchronization

Security
22%

- Identify common security threats and vulnerabilities
- Compare and contrast common prevention methods
- Compare and contrast differences of basic Windows OS security settings
- Deploy and enforce security best practices to secure a workstation
- Compare and contrast various methods for securing mobile devices
- Use appropriate data destruction and disposal methods
- Secure SOHO wireless and wired networks

Software Troubleshooting
24%

- Troubleshoot PC operating system problems with appropriate tools
- Troubleshoot common PC security issues with appropriate tools and best practices
- Troubleshoot common mobile OS and application issues with appropriate tools.
- Troubleshoot common mobile OS and application security issues with appropriate tools

Operational Procedures
13%

- Use appropriate safety procedures
- Given a scenario with potential environmental impacts, apply the appropriate controls
- Summarize the process of addressing prohibited content/activity, and explain privacy, licensing, and policy concepts
- Demonstrate proper communication techniques and professionalism
- Explain the troubleshooting theory

Organizations that Use A+

- Best Buy/Geek Squad
- Blue Cross Blue Shield
- Canon
- Dell
- Fry's Electronics
- General Dynamics
- HP

- Intel
- Nissan
- Ricoh
- Sharp
- U.S. Department of Defense (DoD)
- Verizon
- Wells Fargo

Research and Statistics

Great First Impression

Certification makes a great first impression. **96% of HR managers use IT certifications** as screening or hiring criteria during recruitment.[1]

More Domain Knowledge

CompTIA A+ staff have more core domain knowledge than uncertified staff with the same amount of experience. In addition, **CompTIA certified staff with less than 1 year experience even demonstrate more domain knowledge** than uncertified staff with 3 years experience.[1]

Long Term Knowledge

After 10 years of support experience, CompTIA A+ certified staff have **25% more core domain knowledge** than those with the same experience but without a CompTIA certification.[1]

Future Jobs

The Bureau of Labor Statistics predicts a **13% growth in computer support jobs** over the next 10 years.[2]

Long Term Job Growth

The CompTIA IT Employment snapshot showed a **2.3% growth** from 2015 to 2016 with a **16% growth forecasted for the next 10 years**. More than 23,500 job postings in 2016 required applicants to have CompTIA A+ certification.[3]

Salary Snapshot

The CompTIA IT Employment snapshot shows an average salary of **$48,620 for computer user support specialists**.[3]

"My primary job is to repair computer systems and networks. Obtaining A+ and Network+ certifications exposed me to easily recognizing — and thus repairing and troubleshooting — problems."

Tony Carmichael
USAF Veteran

"We look for technicians who possess the CompTIA A+ certification. Without that, we're not even granting them an interview."

Angel Pineiro
Senior VP, Services, ASI System Integration, Inc.

1. IDC White Paper, sponsored by CompTIA, IT Support and Security Performance: The Impact of CompTIA Certification on Organizational Performance, IDC #252603, December 2014
2. https://www.bls.gov/ooh/computer-and-information-technology/computer-support-specialists.htm#tab-6
3. https://comptia.app.box.com/s/l8ojaxnwrtl9d6fu9e5auxyh6uaooqb7

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