What is it?
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.

Why is it different?
CompTIA A+ is the only industry recognized credential with performance testing to prove pros can think on their feet to perform critical IT support tasks. It is trusted by employers around the world to identify the go-to person in end point management & technical support roles. CompTIA A+ appears in more tech support job listings than any other IT credential.

About the exam
CompTIA A+ validates the skills required to install and configure end-user devices and software; connect devices to networks; perform basic cybersecurity mitigations; troubleshoot common problems to diagnose and resolve issues; and demonstrate basic knowledge of scripting, the cloud, and virtualization.

The CompTIA A+ Core 1 (220-1101) exam covers five domains.
- Mobile devices (15%)
- Networking (20%)
- Hardware (25%)
- Virtualization and Cloud Computing (11%)
- Hardware and Network Troubleshooting (29%)

The CompTIA A+ Core 2 (220-1102) exam covers four domains.
- Operating Systems (31%)
- Security (25%)
- Software Troubleshooting (22%)
- Operational Procedures (22%)
The new CompTIA A+ emphasizes the technologies and skills IT pros need to support a hybrid workforce.

- CompTIA A+ reflects the increased reliance on SaaS applications for remote work.
- The new CompTIA A+ focuses more than before on troubleshooting and how to remotely diagnose and correct common software, hardware or connectivity problems.
- A+ focuses on changing core technologies from cloud infrastructure and IoT device security to data management and scripting.
- Technicians encounter multiple operating systems on a regular basis, and A+ now covers the major systems, their use cases, and how to keep them running properly.
- CompTIA A+ reflects the changing nature of the job role, where many tasks are sent to specialized providers. Certified personnel are able to assess whether it’s best to fix something on site, or to save time and money by sending proprietary technologies directly to vendors.

CompTIA Certification Pathway

IT support professionals work with critical-path teams, including security operations center (SOC) team members, cloud and network administrators, and applications analysts. These teams offer a glimpse of future options and a gateway to career advancement. CompTIA A+ is the key to unlocking these options and setting you on the IT career pathway of your choosing.

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

Organizations that Use A+

- Best Buy/Geek Squad
- Blue Cross Blue Shield
- Canon
- Dell
- General Dynamics
- HP
- Intel
- Nissan
- Ricoh
- Sharp
- U.S. Department of Defense (DoD)
- Verizon
- Wells Fargo

Top CompTIA A+ Job Titles

- IT Support Specialist
- Helpdesk Technician
- Field Technician
- Tier I Support Specialist
- Desktop Support Specialist
- Associate Network Engineer
- Systems Support Technician
- Junior Systems Administrator
Technical Areas Covered in the Certification

<table>
<thead>
<tr>
<th>Mobile Devices</th>
<th>Networking</th>
<th>Hardware</th>
<th>Virtualization and Cloud Computing</th>
<th>Network and Hardware Troubleshooting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>15%</strong></td>
<td><strong>20%</strong></td>
<td><strong>25%</strong></td>
<td><strong>11%</strong></td>
<td><strong>29%</strong></td>
</tr>
<tr>
<td>• Install &amp; configure laptop hardware &amp; components</td>
<td>• Compare and contrast Transmission Control Protocol (TCP) &amp; User Datagram Protocol (UDP) ports, protocols, &amp; their purposes</td>
<td>• Explain basic cable types and their connectors, features, and purposes</td>
<td>• Apply the best practice methodology to resolve problems</td>
<td></td>
</tr>
<tr>
<td>• Compare &amp; contrast the display components of mobile devices</td>
<td>• Compare &amp; contrast common networking hardware</td>
<td>• Install and install storage devices</td>
<td>• Troubleshoot problems related to motherboards, RAM, CPU and power</td>
<td></td>
</tr>
<tr>
<td>• Set up &amp; configure accessories &amp; ports of mobile devices</td>
<td>• Compare &amp; contrast protocols for wireless networking</td>
<td>• Install and configure motherboards, central processing units (CPUs), and add-on cards</td>
<td>• Troubleshoot and diagnose problems with storage drives and RAID arrays</td>
<td></td>
</tr>
<tr>
<td>• Configure basic mobile-device network connectivity &amp; application support</td>
<td>• Summarize services provided by networked hosts</td>
<td>• Install or replace the appropriate power supply</td>
<td>• Troubleshoot video, projector and display issues</td>
<td></td>
</tr>
<tr>
<td>• Explain the characteristics of network topologies &amp; network types</td>
<td>• Install &amp; configure basic wired/wireless small office/home office (SOHO) networks</td>
<td>• Deploy and configure multifunction devices/ printers and settings</td>
<td>• Troubleshoot common issues with mobile devices</td>
<td></td>
</tr>
<tr>
<td>• Summarize the types of cables &amp; connectors and explain which is the appropriate type for a solution</td>
<td>• Compare &amp; contrast common network configuration concepts</td>
<td>• Install and replace printer consumables</td>
<td>• Troubleshoot and resolve printer issues</td>
<td></td>
</tr>
<tr>
<td>• Configure a subnet &amp; use appropriate IP addressing schemes</td>
<td>• Compare &amp; contrast Internet connection types, network types, &amp; their features</td>
<td>• Troubleshoot problems with wired and wireless networks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Explain common ports &amp; protocols, their application, &amp; encrypted alternatives</td>
<td>• Use networking tools</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Explain the use &amp; purpose of network services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Explain basic corporate &amp; data-center network architecture</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Summarize cloud concepts &amp; connectivity options</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operating Systems</th>
<th>Security</th>
<th>Software Troubleshooting</th>
<th>Operational Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>31%</strong></td>
<td><strong>25%</strong></td>
<td><strong>22%</strong></td>
<td><strong>22%</strong></td>
</tr>
<tr>
<td>• Identify basic features of Microsoft Windows editions</td>
<td>• Summarize various security measures and their purposes</td>
<td>• Troubleshoot common Windows OS problems</td>
<td>• Implement best practices associated with documentation &amp; support systems information management</td>
</tr>
<tr>
<td>• Use the appropriate Microsoft command-line tool</td>
<td>• Compare and contrast wireless security protocols and authentication methods</td>
<td>• Troubleshoot common personal computer (PC) security issues</td>
<td>• Explain basic change-management best practices</td>
</tr>
<tr>
<td>• Use features &amp; tools of the Microsoft Windows 10 operating system (OS)</td>
<td>• Detect, remove, and prevent malware using the appropriate tools and methods</td>
<td>• Use best practice procedures for malware removal</td>
<td>• Implement workstation backup &amp; recovery methods</td>
</tr>
<tr>
<td>• Use the appropriate Microsoft Windows 10 Control Panel utility</td>
<td>• Explain common social-engineering attacks, threats and vulnerabilities</td>
<td>• Troubleshoot common mobile OS &amp; application issues</td>
<td>• Use common safety procedures</td>
</tr>
<tr>
<td>• Use the appropriate Windows settings</td>
<td>• Manage and configure basic security settings in the Microsoft Windows OS</td>
<td>• Troubleshoot common mobile OS &amp; application security issues</td>
<td>• Summarize environmental impacts &amp; local environmental controls</td>
</tr>
<tr>
<td>• Configure Microsoft Windows networking features on a client/desktop</td>
<td>• Configure a workstation to meet best practices for security</td>
<td></td>
<td>• Explain the importance of prohibited content/activity &amp; privacy, licensing, &amp; policy concepts</td>
</tr>
<tr>
<td>• Apply application installation &amp; configuration concepts</td>
<td>• Explain common methods for securing mobile &amp; embedded devices</td>
<td></td>
<td>• Use proper communication techniques &amp; professionalism</td>
</tr>
<tr>
<td>• Explain common OS types &amp; their purposes</td>
<td>• Use common data destruction &amp; disposal methods</td>
<td></td>
<td>• Identify the basics of scripting</td>
</tr>
<tr>
<td>• Perform OS installations &amp; upgrades in a diverse OS environment</td>
<td>• Configure appropriate security settings on small office/home office (SOHO) wireless &amp; wired networks</td>
<td></td>
<td>• Use remote access technologies</td>
</tr>
<tr>
<td>• Identify common features &amp; tools of the macOS/desktop OS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Research and Statistics

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 Job Growth
In 2021, in the United States, there were almost 700K open tech support jobs. This number is expected to grow to 752K by 2031. CompTIA A+ is the most requested certification by employers hiring for these open jobs.\(^2\)

Salary Snapshot
The CompTIA IT Employment snapshot shows a median national salary for Tech Support jobs of $52,690.\(^2\)

\(^1\) https://www.bls.gov/ooh/computer-and-information-technology/computer-support-specialists.htm#tab-6

What does it mean to be a “high stakes” exam?
An extraordinarily high level of rigor is employed in developing CompTIA certifications. Each question created for a CompTIA exam undergoes multiple layers of quality assurance and thorough psychometric statistical validation, ensuring CompTIA exams are highly representative of knowledge, skills and abilities required of real job roles. This is why CompTIA certifications are a requirement for many professionals working in technology. Hiring managers and candidates alike can be confident that passing a CompTIA certification exam means competence on the job. This is also how CompTIA certifications earn the ANSI/ ISO 17024 accreditation, the standard for personnel certification programs. Over 2.3 million CompTIA ISO/ANSI-accredited exams have been delivered since January 1, 2011.

What does it mean to be a “vendor-neutral” exam?
All CompTIA certification exams are vendor-neutral. This means each exam covers multiple technologies, without confining the candidate to any one platform. Vendor-neutrality is important because it ensures IT professionals can perform important job tasks in any technology environment. IT professionals with vendor-neutral certifications can consider multiple solutions in their approach to problem-solving, making them more flexible and adaptable than those with training in just one technology.

What is a Performance Certification?
CompTIA performance certifications validate the skills associated with a particular job or responsibility. They include simulations that require the test taker to demonstrate multi-step knowledge to complete a task. CompTIA has a higher ratio of these types of questions than any other IT certifying body.