

| Technical Support Tasks and KSAs | | |
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| Tasks | | |
| SPECIFIC THINGS an entry level person would BE EXPECTED TO PERFORM on the job WITH LITTLE SUPERVISION. | | |
| Install, Configure, Update, Maintain | | |
| T-1 | Install and maintain network infrastructure device operating system software (e.g., IOS, firmware). | 3.0 |
| T-2 | Install and configure hardware, software, and peripheral equipment for system users in accordance with organizational standards. | 3.7 |
| T-3 | Manage changes/updates for both internal and external customers when policies and procedures change. | 3.4 |
| T-4 | Maintain computer hardware. | 3.6 |
| T-5 | Provide technical support for software maintenance or use. | 3.7 |
| Troubleshoot and Support | | |
| T-6 | Troubleshoot system hardware and software. | 3.8 |
| T-7 | Diagnose and resolve customer reported system incidents, problems, and events. | 3.8 |
| T-8 | Identify, test and implement solutions to computer hardware and software problems or escalate if required. | 3.5 |
| T-9 | Test software performance in relation to troubleshooting. | 3.4 |
| T-10 | Test computer hardware performance in relation to troubleshooting. | 3.8 |
| T-11 | Collaborate with others to resolve information technology issues. | 3.8 |
| T-12 | Identify and escalate issues to improve computer or information systems. | 3.4 |
| T-13 | Provide recommendations to others about computer hardware or software. | 3.0 |
| T-14 | Escalate computer hardware and software problems according to organization policies. | 3.6 |
| Monitor | | |
| T-15 | Monitor and report client-level computer system performance. | 3.3 |
| T-16 | Monitor computer system performance to ensure proper operation. | 3.5 |
| T-17 | Assess or monitor system for cyberattacks. | 3.3 |
| T-18 | Responds to crises/security incidents following SOPs. | 3.6 |
| Research and Evaluation | | |
| T-19 | Conduct research to gain information about products or processes. | 2.6 |
| T-20 | Learn continuously about emerging industry or technology trends (e.g., machine learning and AI). | 3.1 |
| T-21 | Evaluate utility of software or hardware technologies. | 2.7 |
| Administration | | |
| T-22 | Administer accounts, network rights, and access to systems and equipment. | 3.4 |
| T-23 | Perform asset management/inventory of information technology (IT) resources. | 3.1 |
| T-24 | Maintain incident tracking and solution database. | 3.7 |
| T-25 | Effectively document operational activities and enter results into the knowledge base and/or ticketing systems. | 3.0 |
| Knowledge | | |
| Knowledge focuses on the understanding of concepts. It is theoretical. An individual may have an understanding of a topic or tool or some textbook knowledge of it but have no experience applying it. For example, someone might have read hundreds of articles on health and nutrition, many of them in scientific journals, but that doesn't make that person qualified to dispense advice on nutrition. | | |
| K-1 | Knowledge of the basic operation of computers. | 3.9 |
| K-2 | Knowledge of computer networking concepts and protocols, and network security methodologies. | 3.5 |
| K-3 | Knowledge of operating environments, organizational software and applications. | 3.6 |
| K-4 | Knowledge of practices of internal, external, and global customers (as applicable). | 3.2 |

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| K-5 | Knowledge of internal organizational communication processes. | 3.3 |
| K-6 | Knowledge of customer support processes and practices. | 3.8 |
| K-7 | Knowledge of technical support operations, issues, and constraints. | 3.5 |
| K-8 | Knowledge of business issues regarding software licensing. | 2.8 |
| K-9 | Knowledge of interrelation between different organizational groups. | 2.7 |
| K-10 | Knowledge of organizational chart and roles/responsibilities of company personnel/departments. | 2.8 |
| K-11 | Knowledge of preventative maintenance procedures and processes. | 3.5 |
| K-12 | Knowledge of applicable backup and restoration procedures. | 3.6 |
| K-13 | Knowledge of system monitoring and diagnostic tools and processes. | 3.4 |
| K-14 | Knowledge of risk management processes (e.g., methods for assessing and mitigating risk). | 3.0 |
| K-15 | Knowledge of laws, regulations, policies, and ethics as they relate to cybersecurity and privacy. | 3.2 |
| K-16 | Knowledge of cybersecurity and privacy principles. | 3.3 |
| K-17 | Knowledge of cyber threats and vulnerabilities. | 3.4 |
| K-18 | Knowledge of specific operational impacts of cybersecurity lapses. | 3.3 |
| K-19 | Knowledge of measures or indicators of system performance and availability. | 3.3 |
| K-20 | Knowledge of systems administration concepts. | 3.1 |
| K-21 | Knowledge of physical computer components and architectures, including the functions of various components and peripherals. | 3.6 |
| K-22 | Knowledge of electronic devices (e.g., computer systems/components, access control devices, digital cameras, digital scanners, electronic organizers, hard drives, memory cards, modems, network components, networked appliances, networked home control devices, printers, removable storage devices, telephones, copiers, facsimile machines, etc.). | 3.6 |
| K-23 | Knowledge of file extensions (e.g., .dll, .bat, .zip, .pcap, .gzip). | 3.1 |
| K-24 | Knowledge of Cloud-based technologies and concepts (e.g. IAAS, SAAS, PAAS, file/sync/share). | 3.6 |
| K-25 | Knowledge of system administration concepts for operating systems such as but not limited to Unix/Linux, IOS, Android, and Windows operating systems. | 3.3 |
| K-26 | Knowledge of industry best practices for service desk (e.g. Machine learning and AI). | 3.3 |
| K-27 | Knowledge of organizational security policies. | 3.5 |
| K-28 | Knowledge of remote access processes, tools, and capabilities related to customer support. | 3.7 |
| K-29 | Knowledge of Personally Identifiable Information (PII) data security standards. | 3.4 |
| K-30 | Knowledge of Payment Card Industry (PCI) data security standards. | 3.0 |
| K-31 | Knowledge of Personal Health Information (PHI) data security standards. | 2.9 |
| K-32 | Knowledge of an organization's information classification program and procedures for information compromise. | 3.0 |
| K-33 | Knowledge of the operations and processes for incident, problem, and event management including escalation as needed. | 3.5 |
| K-34 | Knowledge of IT system operation, maintenance, and security needed to keep equipment functioning properly. | 3.5 |
| K-35 | Knowledge of procedures used for documenting and querying reported incidents, problems, and events. | 3.5 |
| K-36 | Knowledge of successful capabilities to identify the solutions to less common and more complex system problems. | 2.8 |
| K-37 | Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction. | 3.3 |
| K-38 | Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar. | 3.2 |
| K-39 | Knowledge of troubleshooting methods. | 3.9 |

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| K-40 | Knowledge of change control procedures. | 3.0 |
| K-41 | Knowledge of documentation processes and procedures. | 3.3 |
| K-42 | Knowledge of technical presentation tools. | 2.7 |
| K-43 | Knowledge of continuous quality improvement. | 2.8 |
| K-44 | Knowledge of VOIP telecommunication systems, both cloud based and on premise, as well as the OSI model and common networking protocols. | 3.0 |
| K-45 | Knowledge of what is cloud based and what is on premises as well as the different support models for each. | 4.0 |
| K-46 | Knowledge of when to escalate to vendor or providers and how to monitor progress through solution. | 4.0 |
| K-47 | Knowledge of cybersecurity trends & effect of changes due to Cybersecurity event. | 3.2 |
| K-48 | Knowledge of change management approaches and communication. | 3.0 |
| K-49 | Knowledge of security threats. | 3.2 |
| K-50 | Knowledge of professional services automation and management (e.g. security patches that are automatically deployed). | 2.8 |
| K-51 | Knowledge of case management tools, processes and procedures. | 3.3 |
| K-52 | Knowledge of crisis management processes and procedures. | 3.1 |
| Skills | | |
| The capabilities or proficiencies developed through training or hands-on experience. Skills are the practical application of theoretical knowledge. Someone can take a course to gain knowledge of concepts without developing the skills to apply those concepts. Development of skills requires hands-on application of the concepts. | | |
| S-1 | Skill in identifying possible causes of degradation of system performance or availability as well as skill in initiating actions needed to mitigate this degradation. | 3.3 |
| S-2 | Skill in using the appropriate tools for repairing software, hardware, and peripheral equipment of a system. | 3.4 |
| S-3 | Skill in conducting research for troubleshooting novel client-level problems. | 3.1 |
| S-4 | Skill in configuring and validating network workstations and peripherals in accordance with approved standards and/or specifications. | 3.4 |
| S-5 | Skill in incident response for on premises or cloud service models. | 3.2 |
| S-6 | Skill in communicating with others. | 3.8 |
| S-7 | Skill in listening to others, not interrupting, and asking good questions. | 3.8 |
| S-8 | Skill in recognizing a problem and figuring out the best way to solve it. | 3.7 |
| S-9 | Skill in thinking about the pros and cons of different ways to solve a problem. | 3.7 |
| S-10 | Skill in writing for communicating with co-workers or customers. | 3.9 |
| S-11 | Skill in reading work-related technical information. | 3.6 |
| S-12 | Skill in monitoring workload, managing time, and prioritizing requests. | 3.3 |
| S-13 | Skill in adapting to and implementing change as a result of cybersecurity incident or AI directive. | 3.5 |
| Abilities | | |
| Abilities have historically been used to describe the innate traits or talents that a person brings to a task or situation. Many people can learn to negotiate competently by acquiring knowledge about it and practicing the skills it requires. A few are brilliant negotiators because they have the innate ability to persuade. In reality, abilities may be included under skills or may be separated out. | | |
| A-1 | Ability to analyze and interpret customer input for expressed and implied issues. | 3.8 |
| A-2 | Ability to accurately define incidents, problems, and events in the trouble ticketing system. | 3.8 |
| A-3 | Ability to follow, develop, update, and/or maintain standard operating procedures (SOPs). | 3.4 |
| A-4 | Ability to find solutions to less common and more complex system problems including escalating problems when needed. | 2.9 |
| A-5 | Ability to translate technical language into lay terminology when needed. | 3.3 |
| A-6 | Ability to communicate verbally, appropriately for different audiences and organizational levels. | 3.6 |

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| A-7 | Ability to communicate complex technical issues and business implications. | 3.2 |
| A-8 | Ability to read and interpret technical documents, diagrams, and decision trees. | 3.3 |
| A-9 | Ability to record data in knowledge bases using proper key words. | 3.5 |
| A-10 | Ability to listen and understand what people say. | 3.8 |
| A-11 | Ability to recognize and understand details. | 3.8 |
| A-12 | Ability to speak clearly. | 3.7 |
| A-13 | Ability to make order out of ambiguity. | 3.4 |
| A-14 | Ability to use rules to solve problems. | 3.6 |
| A-15 | Ability to communicate by writing. | 3.9 |
| A-16 | Ability to create appropriate presentation visuals for technical material. | 2.7 |
| A-17 | Ability to adjust to changing technology. | 3.8 |