



Certification: HP ATA – Connected Devices

Overview

Achieving an HP certification provides relevant skills that can lead to a fulfilling career in Information Technology. HP Accredited Technical Associate (ATA) certifications are designed to provide practical experience with HP and industry standard technologies as an integrated part of an academic learning experience. HP certifications go well beyond simple concepts or product knowledge and focus on the application of knowledge in real world environments. HP ATA certifications teach and assess the ability to design, implement and support IT solutions in a small and medium business context. HP ATA certification directly applies to a broad range of IT job roles including:

- IT Architects
- System Engineers
- System Administrators
- Technical Support Engineers

Learning And Assessment Content

The HP ATA - Connected Devices certification provides the knowledge and experience required to discover a customer’s business objectives and to design a PC client and connected device solution that meets the customer’s requirements. In addition, knowledge and skill to deploy and troubleshoot the solution are also included. The following detailed testing and learning objectives are covered in the courseware and the exams.

Section	Objective
1. Explain and recognize industry standard client technologies and their implications on customer needs	1.1 Describe and recognize common desktop virtualization technologies and products <ul style="list-style-type: none"> • Describe the concept of desktop virtualization and virtual machines
	1.2 Describe and recognize mobile computing technologies and their implications on customer needs <ul style="list-style-type: none"> • Describe and contrast between Tablet, netbook, and phone form factors and their implications on customer needs • Describe the difference between x86 (Atom based) and ARM based architectures including processor and memory requirements • Describe the process to sync mobile devices to PCs • Describe mobile device network connectivity • Describe the need, security capabilities and requirements for mobile PCs
	1.3 Describe and recognize traditional PC technologies and their implications on customer needs <ul style="list-style-type: none"> • Describe and contrast desktop, notebook, tablet notebook form factors and their implications on customer needs • Identify the installed processor and its attributes • Describe and recognize the differences between various memory types • Describe common PC storage technologies • Explain and recognize the typical accessory bus technologies, including USB, Firewire, and other devices (SCSI) • Recognize the type of network interface in the system and describe the performance implications, including Ethernet 10/100/1000/10GB, Wi-Fi ABGN, GSM/CDMA, POTS (dial up), and PAN • Recognize and describe common PC video technologies, including display types, resolution, and touch technology

	<p>1.4 Describe and recognize thin client technology and solutions</p> <ul style="list-style-type: none"> Describe the elements of a thin client solution (terminal approach and virtualization approach only) Describe desktop virtualization technologies <p>1.5 Describe and recognize cloud technology as it relates to client solutions</p> <ul style="list-style-type: none"> Describe the concept of "user state" and what it means to maintain "state" across a number of devices Describe the mechanisms to synchronize "user state," including data storage and synchronization (mail, calendar, POP, IMAP) Describe the mechanisms that will provide an unified/integrated view of data from multiple sources (e.g. across various local data folders, websites, and applications) through a single application (such as calendars, contacts, and messaging) Contrast between local apps, online apps, and hybrid apps (e.g. Office, Office365, Google docs, OpenOffice) Describe the commonly available vertical applications (e.g. Salesforce.com and Quickbooks online) Identify and describe the common client operating systems and built-in applications
<p>2. Plan and design client solutions for SMB customers</p>	<p>2.1 Consult with an SMB customer to assess their business and technical needs and create a plan for a client solution</p> <ul style="list-style-type: none"> Gather and analyze customer business requirements (including existing assets, standards, and strategies), determine what business problems the customer is trying to solve, and anticipate current or future business problems that the customer may not be considering Plan for user requirements based on user characteristics, locations, and usage patterns (power users, administrators, etc.) Determine which form factors are appropriate to a particular role (desktop, laptop, netbook, tablet, etc.) Plan for network connectivity requirements - LAN, Wi-Fi, WWAN, POTS (dial up), PAN Plan for management and security requirements, including asset security, user security, and data security Plan for printing requirements based on user/job requirements and the implications on the print infrastructure Plan for cross-platform interoperability issues, including file sharing, printing, and application and file-level compatibility Plan for data archiving, data storage, and retrieval <p>2.2 Design a client solution to meet the customer needs identified in the planning stage</p> <ul style="list-style-type: none"> Use appropriate tools to size and validate a given situation, including HP website, white papers, QuickSpecs, and IT Resource Center Select the client platforms to be used - selection criteria includes application availability mobility and data security Design a business continuity strategy
<p>3. Install, configure, and upgrade client solutions for SMB customers</p>	<p>3.1 Create pre-installation checklist</p> <ul style="list-style-type: none"> Describe safety precautions, including personal and data safety, electrical shock protection and ESD protection Assess and implement acceptable environmental conditions, including physical surroundings, thermal conditions, humidity considerations, and magnetic interference <p>3.2 Set up a new PC (hardware)</p> <ul style="list-style-type: none"> Install and upgrade system and accessory components, Including: Verify UPS and overload and ground considerations from planning documents Configure BIOS, including identifying BIOS version, accessing BIOS, and configuring BIOS features

	<p>3.3 Install the OS (operating system)</p> <ul style="list-style-type: none"> • Restore HP factory software image • Describe OS and driver recovery media • Describe and use media to install factory image (QuickRestore) • Install operating system from OS media • Install OS-specific drivers • Configure user profile settings, including: • Install and configure applications <p>3.4 Set up a new mobile device</p> <ul style="list-style-type: none"> • Activate the device with the carrier • Set up user profile <p>3.5 Set up a thin client</p> <ul style="list-style-type: none"> • Install Peripherals • Customize and configure according to specs • Reset thin client image to factory defaults <p>3.6 Configure Management Tools and Resources</p> <ul style="list-style-type: none"> • Automated admin tasks • Describe how to create a standard PC software image/profile, including making, testing, and replicating <p>3.7 Conduct user training, handoff, and performance tuning</p> <ul style="list-style-type: none"> • Documentation, support information • User Customization
<p>4 Troubleshoot and perform repair/replacement procedures for client solutions for SMB customers</p>	<p>4.1 Troubleshoot common client issues using the HP 6-step troubleshooting methodology</p> <ul style="list-style-type: none"> • Gather information on the problem • Evaluate data to determine the problem • Develop an action plan to resolve the issue • Execute the plan • Test if the fault has been resolved using appropriate tools • Implement preventive measures by taking necessary steps to ensure the problem does not reoccur <p>4.2 Describe how to best use support resources</p> <ul style="list-style-type: none"> • 4.2.1 Evaluate Service Level Agreement (SLA) • 4.2.2 Recognize which contact method to use based on priority and urgency - contact methods include phone, e-mail, web, channel services network, instant support • 4.2.3 Know which information to have and where to find it before you call • 4.2.4 Recognize when to escalate
<p>5. Perform administrative and operational tasks</p>	<p>5.1 Perform change management and version control</p> <ul style="list-style-type: none"> • 5.1.1 Configure and update System software • 5.1.2 Configure Hardware <p>5.2 Perform backups</p> <ul style="list-style-type: none"> • 5.2.1 Describe the various backup procedures, test restores • 5.2.2 Perform Imaging/ghosting <p>5.3 Perform administrative and maintenance tasks</p> <ul style="list-style-type: none"> • 5.3.1 Describe how to start/stop/restart system services • 5.3.2 Understand and describe how to load/unload device drivers • 5.3.3 Understand and describe how to manage disks, partitions, and file systems and recover from failures • 5.3.4 Manage client solutions with HP and industry standard resources