uCertify

Course Outline

Pearson: CompTIA A+ 220-901 and 220-902 Labs

Lab

Contents

1. Course Objective

Gain hands-on expertise in CompTIA A+ 901 and 902 exams with CompTIA A+ 220-901 and 220-902 performance-based labs. Performance-based labs simulate real-world, hardware, software & command line interface environments and can be mapped to any text-book, course & training. CompTIA A+ 901 and 902 performance-based labs provides expertise in assembling and maintaining devices and PCs by giving real-world experiences of all the aspects of security, handling windows operating systems, networking, hardware, and many more.

2. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

3. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

4. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assignments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

5. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 4 years:

- **2014**

1. Best Postsecondary Learning Solution

- **2015**
    1. Best Education Solution
    2. Best Virtual Learning Solution
    3. Best Student Assessment Solution
    4. Best Postsecondary Learning Solution
    5. Best Career and Workforce Readiness Solution
    6. Best Instructional Solution in Other Curriculum Areas
    7. Best Corporate Learning/Workforce Development Solution

- **2016**
    1. Best Virtual Learning Solution
    2. Best Education Cloud-based Solution
    3. Best College and Career Readiness Solution
    4. Best Corporate / Workforce Learning Solution
    5. Best Postsecondary Learning Content Solution
    6. Best Postsecondary LMS or Learning Platform
    7. Best Learning Relationship Management Solution

- **2017**
    1. Best Overall Education Solution
    2. Best Student Assessment Solution
    3. Best Corporate/Workforce Learning Solution
    4. Best Higher Education LMS or Learning Platform

6. Performance Based Labs

uCertify's performance-based labs are simulators that provides virtual environment. Labs deliver hands on experience with minimal risk and thus replace expensive physical labs. uCertify Labs are cloud-based, device-enabled and can be easily integrated with an LMS. Features of uCertify labs:

- Provide hands-on experience in a safe, online environment
- Labs simulate real world, hardware, software & CLI environment
- Flexible and inexpensive alternative to physical Labs
- Comes with well-organized component library for every task
- Highly interactive - learn by doing
- Explanations and remediation available
- Videos on how to perform

Lab Tasks

- Understanding file sizes sequence
- Identifying computer parts
- Inserting a CD in a laptop
- Identifying a port
- Identifying computer components
- Exploring installed hardware
- Identifying input and output devices
- Identifying video ports and connectors
- Identifying additional ports and connectors
- Understanding USB versions
- Identifying video card ports
- Modifying touchpad settings
- Identifying D-shell connectors
- Identifying desktop PC ports
- Identifying sound card ports
- Identifying components of a motherboard chipset
- Identifying computer cooling systems
- Understanding CPU removal procedure
- Identifying processor families
- Installing a processor
- Installing expansion cards on a motherboard

- Installing motherboard components
- Providing cooling and ventilation to a motherboard
- Identifying motherboard slots
- Identifying a PCI-bus slot
- Identifying a CPU socket
- Installing a PCI sound card
- Removing a damaged network card
- Identifying the CPU package types
- Describing boot files
- Identifying device manager error codes
- Enabling hardware virtualization
- Setting up a boot device priority
- Installing a USB 3.0 PCI Express card (2.0 x4)
- Installing firewire cards
- Viewing system properties
- Viewing interrupts for integrated ports
- Viewing the Generic USB Hub properties
- Changing the CMOS battery
- Clearing the CMOS settings
- Viewing memory addresses
- Enabling external USB ports
- Installing laptop components
- Disabling a touchpad
- Identifying computer power supply connectors
- Setting up a surge protected computer system
- Configuring the UPS
- Replacing the power supply
- Installing SMPS and connecting it to the motherboard
- Assembling computer components
- Using a UPS to power computer components and ensure network connectivity
- Identifying memory modules
- Identifying types of RAM
- Installing memory modules
- Configuring the virtual memory size

- Installing a floppy disk drive
- Identifying RAID BIOS configuration settings
- Identifying RAID level characteristics
- Formatting a pen drive
- Inserting a pen drive into the USB port
- Performing disk cleanup
- Cleaning up the hard disk drive
- Connecting the motherboard to the internal hard drive
- Supplying power to a SATA drive
- Examining the hard drive
- Inserting components of a computer
- Removing a pen drive from a computer
- Identifying I/O ports of a motherboard
- Identifying sound ports
- Identifying features of scanner file formats
- Connecting speakers to a computer
- Connecting a digital camera to a computer
- Identifying sound card driver version
- Copying files to a disc
- Installing an optical drive and PCI sound card
- Identifying video features
- Changing the color of the desktop
- Changing the system's screen saver
- Connecting a keyboard, mouse, and monitor to a computer
- Verifying properties of keyboards, disk drives, and network adapters
- Connecting a monitor and headset to a computer
- Changing the display settings of a laptop
- Stopping and restarting the print spooler service
- Describing error codes
- Installing memory into a laser printer
- Identifying the steps for using an inkjet cleaning solution
- Identifying a daisy-wheel printer
- Understanding the electrophotographic print process
- Identifying printer connectors

- Connecting a USB printer to a computer
- Calibrating the printing device
- Installing a printer
- Inserting ink cartridges into a printer
- Identifying symptoms of problems with the mobile OS
- Configuring email in Android
- Setting up a VPN in Android
- Turning on personal hotspot of an iPhone
- Disabling cellular data on an iPhone
- Downloading Instagram from the App Store
- Downloading Instagram from the Google Play Store
- Activating Google Now
- Identifying USB cables of devices
- Viewing the iOS version
- Turning on airplane mode of an iPhone
- Replacing the battery of a smartphone and inserting a memory card
- Viewing the version of an Android smartphone
- Locking an iPhone with a password
- Establishing a Bluetooth connection
- Understanding Bloom's Taxonomy
- Identifying computer troubleshooting steps
- Comparing desktop and laptop components
- Identifying features of a laptop and tablet
- Investigating startup processes
- Running Microsoft Security Essentials and removing infected files
- Identifying network connectors
- Connecting the cable Internet access for your network
- Connecting an iPhone to the Wi-Fi network
- Connecting a new workstation to the Internet
- Preparing for a video conference on Skype
- Understanding Wibro
- Understanding QoS levels
- Understanding network card properties
- Configuring the TCP/IP values

- Identifying network cabling tools
- Describing 802.11 modulation techniques
- Connecting to a wireless network
- Identifying key steps to plan a network
- Describing 802.11 networking standards
- Identifying IP address class values
- Understanding advantages and disadvantages of topologies
- Describing network functions
- Troubleshooting the Wi-Fi connection issues
- Identifying a network topology
- Identifying OSI layer functions
- Identifying TCP/IP layers
- Identifying TCP/IP model layers
- Identifying network types
- Identifying the purpose of OSI layers
- Identifying OSI layers
- Connecting a remote desktop
- Connecting a star topology
- Identifying types of a cable
- Identifying components of a coaxial cable
- Connecting a workstation to the LAN and configuring IPv4 properties
- Configuring Internet settings on a router
- Connecting a router to the laptop
- Installing a NIC
- Connecting systems to the Internet through a firewall router
- Adding and removing an IPv6 address
- Changing the refresh rate in Windows 7
- Creating a homegroup
- Connecting to a remote desktop
- Running different parameters of the chkdsk command
- Changing the time zone
- Observing the Control Panel options in different views
- Understanding elements of a notepad window
- Viewing the paging file information

- Examining file permissions
- Auto-hiding the taskbar
- Analyzing the TCP/IP configuration with netstat
- Analyzing network paths with tracert
- Analyzing domain names with nslookup
- Running different parameters of the net share command
- Renewing an IP address
- Identifying file extension purposes
- Encrypting a folder
- Viewing free disk space and file system type
- Changing the visibility of a folder
- Listing files and folders
- Listing the computer's drive letters
- Viewing information related to the network adapter
- Sharing a folder with another user
- Creating, renaming, and deleting a file
- Changing the startup type of a service utility to automatic
- Hiding a folder
- Labeling the Start menu of Windows 8
- Showing hidden and system-protected files
- Viewing the status of a disk
- Mounting a drive to a folder
- Configuring Windows 7 for media streaming
- Running Disk Defragmenter in Windows 7
- Exploring installed applications
- Customizing user account notification settings
- Running power troubleshooter
- Turning on Windows 7 firewall logs
- Rolling back to a restore point
- Configuring password policies
- Installing Windows 7 using VMware
- Changing a basic disk into a dynamic disk
- Viewing processes details in the task manager
- Viewing sound card driver version

- Configuring Performance Monitor
- Disabling certain applications and services at startup
- Creating a virtual PC machine
- Setting automatic Windows update
- Creating a user account and a user group
- Creating backup and restoring registry
- Creating a backup of a local disk
- Setting the account with a password
- Customizing notification area icons
- Configuring system in the event of a BSOD
- Configuring notification settings
- Installing Windows 8
- Adding hardware to a Windows PC
- Creating a restore point
- Rolling back a device driver
- Creating a bootable VHD using Disk Management
- Understanding Linux commands
- Working with local Ethernet connection
- Modifying ownership of a file
- Listing files/directories
- Verifying the working directory
- Creating and listing directories
- Listing files of the current directory
- Identifying tools used in Mac OS and Linux
- Obtaining file listings
- Changing the root directory
- Changing the file access and modification time
- Counting the words of a file
- Understanding email protocols
- Configuring Windows 7 to use a proxy server
- Using Google's cloud services
- Configuring settings to allow pop-ups
- Configuring BitLocker for an identification field
- Disabling the guest account

- Describing types of viruses
- Identifying types of firewall
- Understanding the BIOS security options
- Configuring Windows Firewall with advanced security
- Recording the system failure event
- Securing a system from an unauthorized login
- Viewing security center service properties
- Configuring success and failure audit events
- Encrypting flash drive with BitLocker
- Enabling auditing of files, folders, and printers
- Configuring password policy
- Turning on Windows Firewall
- Turning on system protection
- Identifying guidelines for effective communication
- Understanding personal safety while moving equipment
- Preparing a system for upgrade
- Starting the print spooler service
- Running Windows Program Compatibility troubleshooter
- Using Windows troubleshooter tools
- Troubleshooting a USB printer

Here's what you get

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PERFORMANCE BASED LAB	**VIDEO TUTORIALS**	**HOURS**

Have Any Query? We Are Happy To Help!

GET IN TOUCH:

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