

دوره HP (اچ پی) | Introduction to HPE ProLiant Servers

شرح مختصر

آشنایی با مقدمات مربوط به سرورهای HP ProLiant

مروری بر دوره

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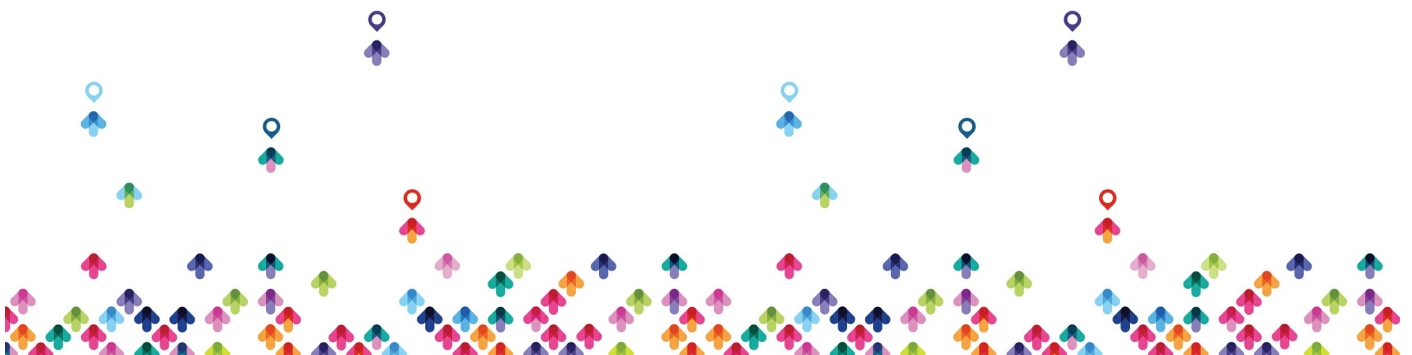
طراحی این دوره به گونه‌ای انجام شده است که Admin هایی که وظیفه مدیریت سرورهای ProLiant ML، DL و BL را بر عهده دارند با مقدمات HP ProLiant آشنا گردند. دانشجویانی که در این دوره شرکت می‌کنند مروری کوتاهی بر محصولات HPE، ابزارها، agent ها و نیز خدمات مناسب جهت راه‌اندازی، پیاده‌سازی، نظارت و نگهداری از سرورهای ProLiant خواهند داشت.

آزمایشگاه‌های عملی این دوره مبتنی بر سرورهای HP ProLiant Gen8/9 تدوین شده است.

آنچه در این دوره خواهید آموخت

آنچه خواهید آموخت

- آشنایی با سرویس‌ها و محصولات مربوط به سرورهای HP ProLiant
- آشنایی با مجموعه‌ای از قابلیت‌های کلیدی سرورهای HP ProLiant Generation 8/9
- آشنایی با iLO (Integrated Lights-Out)، در کنار Web UI، Infrared Remote Control و iLO command Line Interface (IRC)
- آشنایی با ابزارهایی که از آن‌ها می‌توان در جهت پیکربندی iOL بر روی سرور ProLiant استفاده نمود
- آشنایی با فرآیند بوت مربوط به HP ProLiant Generation 8/9 و چگونگی پیکربندی یک سرور با استفاده از Unified Extensible Option Rom (UEOR) و ROM-Based Setup Utility (RBSU)



(Firmware Interface (UEFI

- شناسایی و استفاده از کامپوننت های سازنده ۴ iLO
- چگونگی استفاده از Intelligent Provisioning جهت پیکربندی و استقرار یک سیستم عامل بر روی سرور و ProLiant Generation ۸/۹
- تشریح چگونگی استفاده از (SUM Smart Update Manager) و Service Pack for ProLiant (SPP) جهت به روزرسانی firmware و نرم افزار بر روی سرور ProLiant
- آشنایی با ابزارها و سرویس های HPE که می تواند برای نظارت و تعمیر و نگهداری سرور ProLiant مفید باشند
- که می توانند برای تنظیمات، استقرار، نظارت، تعمیر و نگهداری و پشتیبانی از یک سرور HPE آشنایی با وبسایت های استفاده شوند ProLiant

سرفصل ها (حضوری)

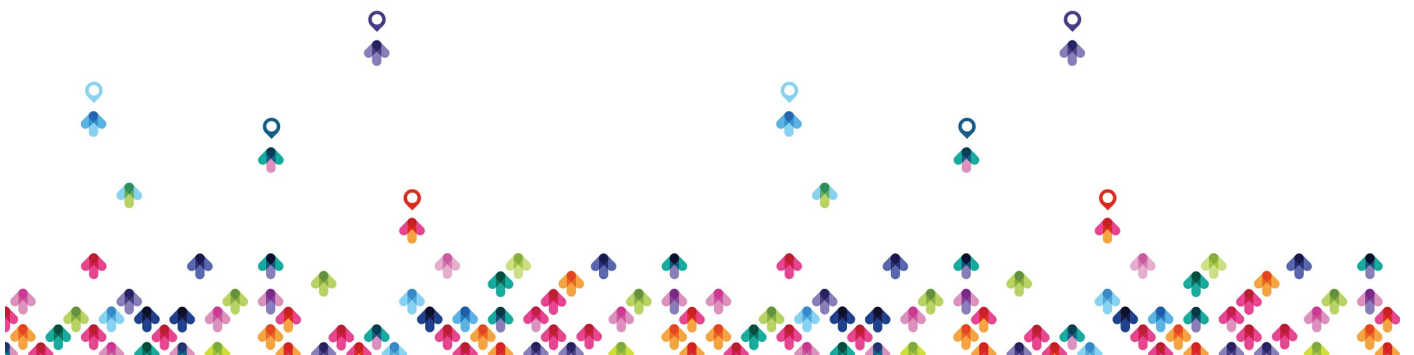
سرفصل ها

Module ۰:

- Introduction to ProLiant Servers
- Objectives
- Modules follow the basic steps for server configuration
- Introduction

Module ۱:

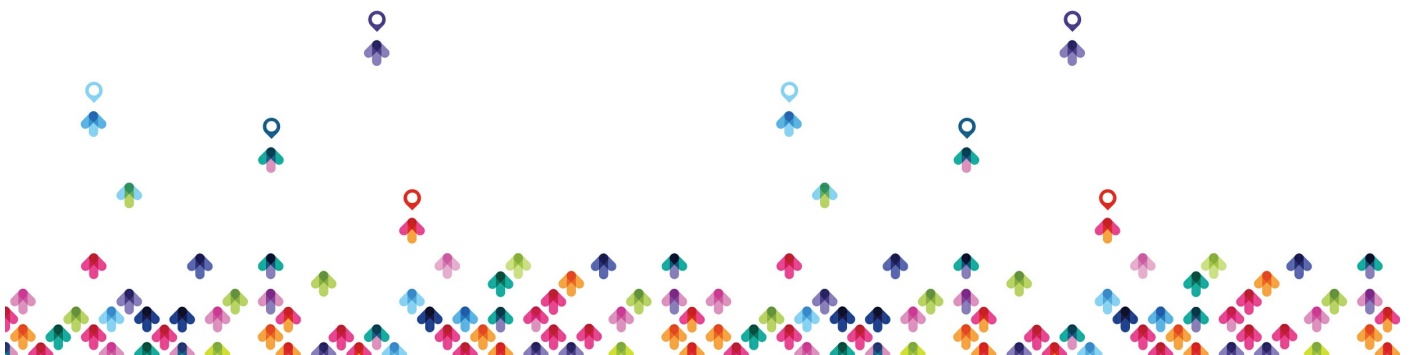
- HPE ProLiant family



- x۸۶ server portfolio
- HPE ProLiant Servers
- ProLiant rack and tower servers
- ProLiant Gen۹ rack and tower servers Series Numbers
- ProLiant ML & DL
- Finding the right server for your IT needs
- ProLiant BL server portfolio
- ProLiant BL line Gen۸ and Gen۹
- ProLiant SL line
- Transitioning to the HPE Apollo line
- Apollo Family ProLiant XL Servers
- PE Moonshot System
- HPE Moonshot ۱۵۰۰ Chassis
- ProLiant server features



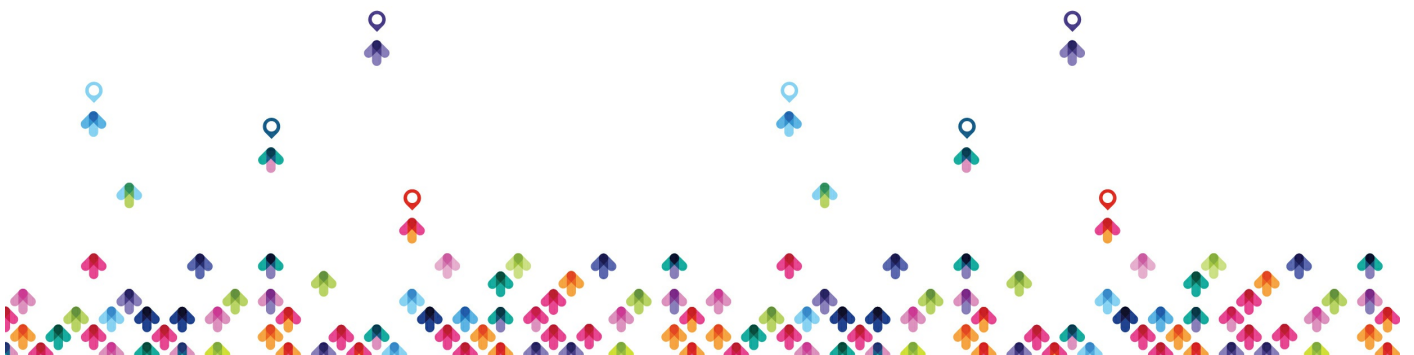
- Innovations in ProLiant Gen9 servers
- Additional new technologies and improvements for ProLiant Gen9
- Insight end-to-end infrastructure management
- iLO 4
- HPE ProLiant Management Portfolio
- Insight Remote Support
- Flexible Network Adapters
- ProLiant Smart Storage
- HPE Insight Control
- HPE OneView
- Operating systems for HPE ProLiant servers
- Determining operating system support
- Server matrices
- Additional product information



- HPE Services Media Library
- Quick Reference Mobile Experience
- HPE QuickSpecs

Module ۲:

- HPE integrated Lights-Out Features and functions
- Universal Server Administrator Requirements
- HPE's answer to universal server admin requirements
- Features in HPE Integrated Lights-Out ۴
- RESTful API with UEFI and iLO
- What is Redfish?
- HPE iLO and the NAND
- Connect the server to the network with iLO Standard
- iLO NAND partitioning
- iLO architecture
- Customer needs addressed by HPE iLO



-iLO Mobile App

-Server Lifecycle

-Additional iLO ۴ functionality

-HPE iLO ۴ FW version Enhancements (۲.۳۰ and ۲.۴۰)

•HPE iLO licensing

-HPE Integrated Lights-Out license types

-HPE iLO Advanced or iLO Scale-Out License provide full management implementation of iLO Federation

-iLO Advanced licensing

•Accessing and using iLO through the WebAdministration Interface

-iLO ۴ web interface browser support

-iLO user interface

-Power Management

-iLO Federation

-iLO Virtual Media



-iLO Advanced: Directory Services Integration

- iLO Integrated Remote Console

- iLO Remote Administration

- IRC and Java (Linux) IRC

- Accessing the IRC

- IRC options

- Accessing the Java (Linux) IRC

- iLO command line interface

- Accessing the iLO CLI

- Text-based Remote Console

- Examples of managing iLO with the SMASH CLP scripting language

- Configuring iLO

- iLO configuration utilities



-iLO Online Configuration Utility GUI for Windows®

-iLO Online Configuration Utility CLI

-RIBCL/XML scripting

-HPQLOCFG utility for Windows

-LOCFG.PL Utility

-HPE Scripting Tools for Windows PowerShell

-RESTful Interface API and tool

•iLO Federation

-HPE iLO Federation overview

-Configuring iLO Federation Management

-iLO Federation Management GUI

-Multi-System View health status

-Group Virtual Media

-Virtual Group Power control

-Automatic Group Power Capping



-iLO firmware and System ROM group update

-Group Configuration

-Configuring multicast options

-Additional Resources

Module ۳:

•HPE ProLiant Gen۸ and Gen۹ System ROM

-HPE ProLiant Gen۸ and Gen۹ ROM features

-Standardized ProLiant Gen۸/۹ ROM

-HPE Advanced Error Detection Technology

-Early Video Progress Indicators

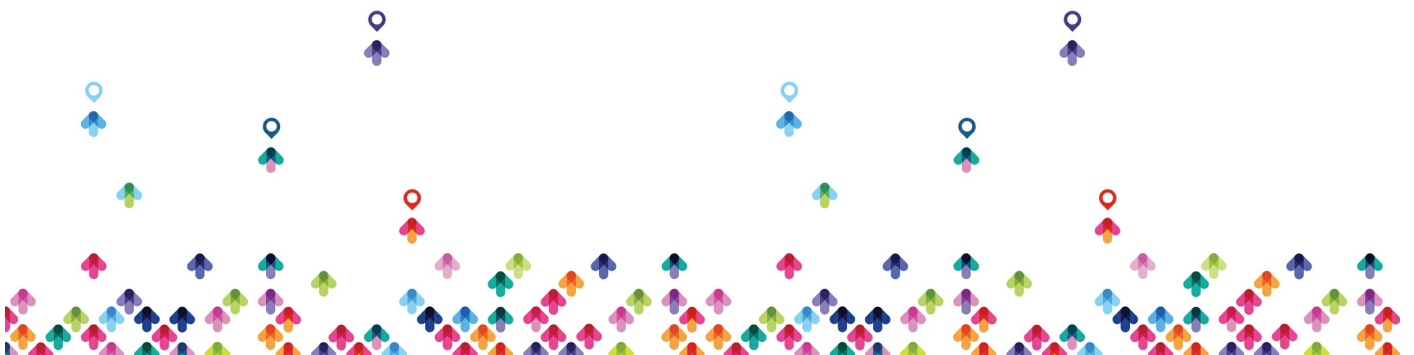
-Early Video Boot Screen

-Fault detection messaging

-Once the POST functions are complete

-Active Health System log

-ROM support for SmartMemory



-Digital signature

•HPE ProLiant Gen۸ and Gen۹ boot process

-Early video boot screen

-Main boot screen

-Overview of UEFI

-UEFI overview

-Benefits of UEFI compared to legacy BIOS

-Important HPE UEFI Requirements for HPE ProLiantGen۹ servers

-HPE ProLiant DL۵۸۰ Gen۸ Server was first ProLiant to use theUEFI boot process

-Selecting the UEFI Mode

-UEFI System Utilities

-Additional UEFI Resources

•Using the RBSU

-RBSU main menu



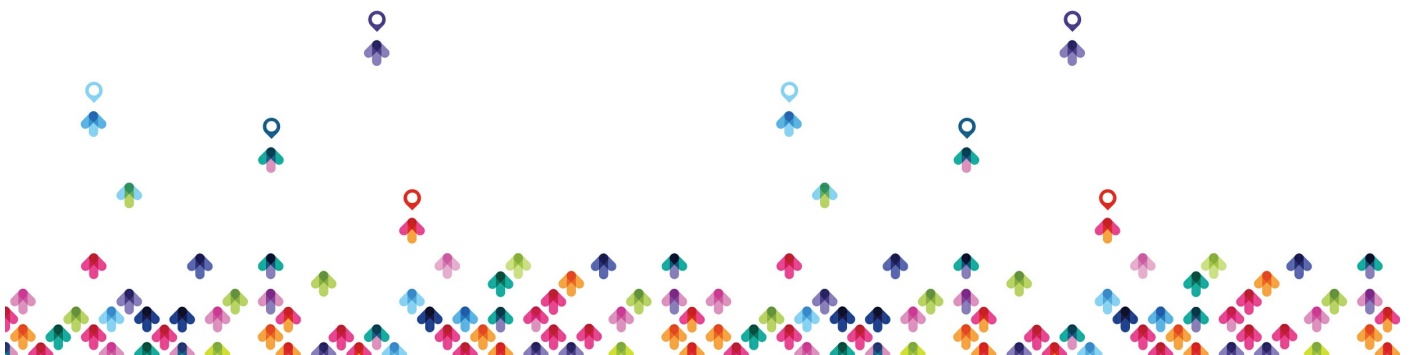
- RBSU configuration example
- Redundant System ROM configuration example
- Configuring iLO via the RBSU
- iLO configuration overview Gen λ
- Accessing the iLO Configuration Utility Gen λ
- Using ORCA and SSA
- ORCA overview
- Accessing ORCA Gen λ or earlier
- Accessing SSA Gen λ
- SSA Interface

Module ۴:

- Intelligent Provisioning overview
- What's new
- Intelligent Provisioning ۲.۴۰ Operating Systems Support
- What does Intelligent Provisioning do?



- Accessing Intelligent Provisioning
- Accessing Intelligent Provisioning for the first time
- System Software Update setting
- Intelligent Provisioning main options
- Perform Maintenance
 - Perform Maintenance menu
 - HPE Smart Storage Administrator
 - Firmware Update
 - Deployment Settings
 - Using deployment profiles
 - Insight Diagnostics
- Configure and Install
 - Step ۱—Hardware Settings
 - Step ۲—OS Selection



-Step ۳—OS Information

-Step ۴—Review

-Intelligent Provisioning and partition size

-Installing drivers automatically VID

•Multi-server provisioning

-Current server provisioning offerings from HPE

-HPE Insight Control server provisioning features

-Resources

•Updating Intelligent Provisioning and component firmware

-Firmware updates with Intelligent Provisioning

-Updating Intelligent Provisioning

-Boot to the recovery media and flash an IntelligentProvisioning image

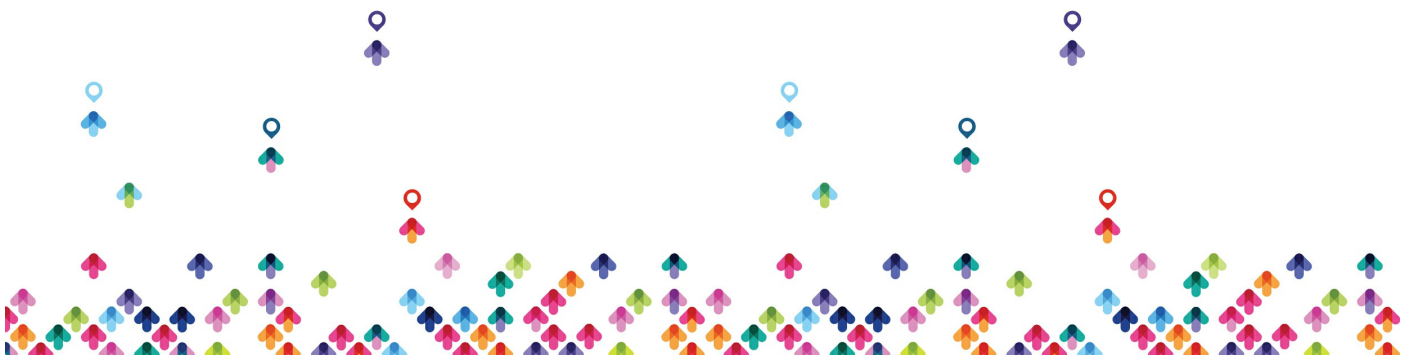
-Resources for updating Intelligent Provisioning



Module ۵:

- HPE Smart Update solution overview
 - HPE Smart Update Solution
 - HPE Smart Update technology
 - HPE Smart Update deployment mode definitions

- HPE Service Pack for ProLiant
 - Overview
 - HPE Service Pack for ProLiant access update
 - HPE SPP features
 - Downloads
 - SPP documentation
 - HPE Smart Update and Linux
 - HPE Software Delivery Repository
 - Linux-HPE Smart Update for VMware ESXi and VMware vSphere®
 - HPE Online Depot in the SDR



—VMware

-HPE SPP Supplement Release

-SPP Hot Fixes -HPE SPP support policy

-HPE Smart Update Manager

-HPE Smart Update Manager (HPE SUM)

-What's new in HPE Smart Update Manager ۷.۴.۰

-Enhancements to Smart Update Manager (SUM) ۷.۴.۰

-Easy Mode and Advanced Mode in Deployment screen

-What's New with Smart Update Manager (SUM) ۷.۵.۰

•Features

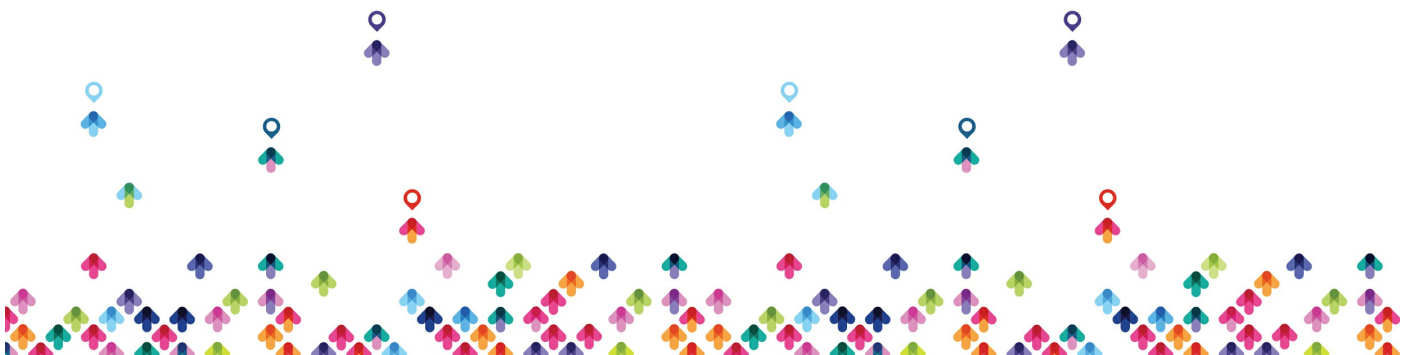
-HPE SUM ۷.x configurations

-HPE SUM ۷.x workflow

-HPE SUM integration with HPE OneView

-Home screen

-The major areas of the GUI



-Baselines

-Nodes

-Deploy a node

Course data sheet Page ۴

- Reports

- Logging out of the HPE SUM GUI

- HPE SUM v.x operating system deployment support

- HPE SUM CLI deployment

- Scriptable interface

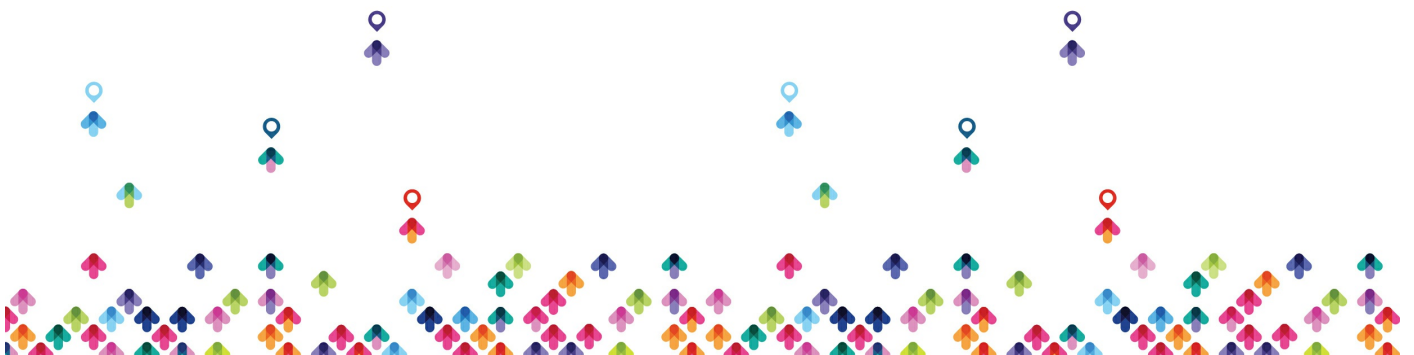
- Additional information

Module ۶:

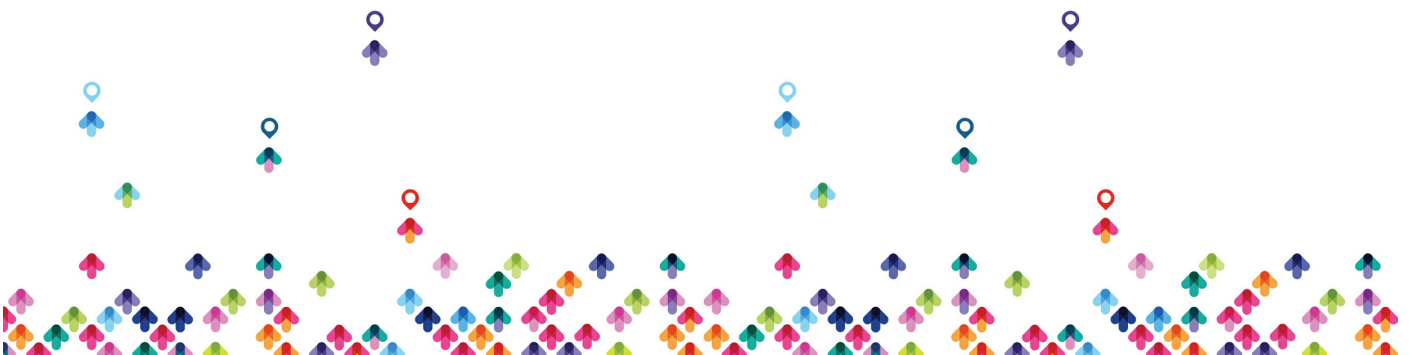
• Agentless management with the AMS

- Traditional SNMP/WBEM based System Management and Monitoring

- Agentless Management Architecture



- What is Agentless Management?
 - Agentless Management data collection components
 - Agentless Management is operating system independent
 - Advantages of Agentless Management
 - Agentless Management Service
 - Managing the AMS in Windows environments
 - Managing the AMS in Linux environments
 - Managing the AMS in VMware environments
 - Enabling Agentless Management
 - iLO interface has a System Information tab
 - Where to find the AMS
- HPE SNMP agents and WBEM providers
 - Overview
 - Subsystem coverage iLO only no agents, no AMS
 - Agents and agentless comparison



- Active Health System
- AHS architecture
- Types of data storage
- AHS log
- Active Health System log download
- HPE data collection policy for AHS
- HPE SIM and HPE OneView support

- System Management Homepage
 - SMH overview
 - SMH layout
 - HPE Insight Diagnostics
 - Overview
 - HPE Insight Diagnostics Online
 - Survey tab
 - HPE Insight Diagnostics Offline



- Test, Log, and Status tabs

Module ۷:

- HPE warranty and support
 - HPE ProLiant servers
 - HPE ProLiant hardware support
 - Service Pack for ProLiant
- Support options
 - A New Kind of Support
 - Always-on support from HPE
 - Foundation Care
 - Proactive Care
 - Datacenter Care
 - Lifecycle Event Services



- HPE Insight Remote Support
 - Remote Support overview
 - Connected Support from Hewlett Packard Enterprise
 - Connection options
 - Insight Remote Support registration
 - Remote support built into iLO
 - Remote support with a direct connection
 - HPE Insight Online with Insight RS v.x

- HPE Support Center
 - Support Center overview
 - Downloading an SPP
 - Finding advisories, bulletins, and notices
 - Submitting and managing support cases

- HPE Insight Online



- Insight Online overview
- Insight Online Dashboard
- Useful links

Module ۸:

- Course Closing
- Course review
- HE۶۴۳S: Introduction to HPE ProLiant Servers
- Course objectives review
- Next steps
- Training from HPE Education Services

مخاطبان دوره

مخاطبان دوره

- ادمین ها، مهندسين و مشاورينی که وظیفه نصب، پیکربندی و پشتیبانی از سرورهای HP ProLiant را بر عهده دارند.

پیش نیازها

پیش نیازها



دانشجویان در این دوره می‌بایست با مبانی کار با سیستم عامل‌های زیر آشنا باشند:

Microsoft Windows Server® ۲۰۱۲ Standard

SUSE Linux Enterprise Server ۱۱

VMware® ESXi™ ۵.x

