

Overview

HP Insight Orchestration, an optional extension for HP Insight Dynamics - VSE, enables IT organizations to provision infrastructure consistently and automatically from pools of shared resources using a self-service portal. Whether you need a single virtual machine or a complex multi-tier environment with physical and virtual servers and associated storage, the time to provision infrastructure resources can be measured in minutes and hours, not days and weeks. And repurposing your infrastructure is as simple as a few mouse clicks.

HP Insight Dynamics - VSE with Insight Orchestration provides the advanced management and automated provisioning capabilities at the core of the Matrix Orchestration Environment for HP BladeSystem Matrix. BladeSystem Matrix is a fully integrated cloud infrastructure in a box that helps you accelerate business service delivery without chaos, and take costs out today and keep them out in the future.

HP Insight Orchestration lets you visually design your infrastructure services as standard templates that are published to a catalog accessible through a self-service portal. Create your own infrastructure templates, or start with best practice templates available from HP to help you get started. Log into the self-service portal to rapidly provision infrastructure for a specified lease period using automation and streamlined approval processes. Once your new infrastructure is provisioned, you can suspend or resume your infrastructure service, add or remove servers and storage, or delete your infrastructure service to free up resources. Insight Orchestration integrates with existing IT management tools and processes using an embedded workflow automation tool. Use available integrations to connect to your trouble-ticket system for change management approvals. Orchestrate across various roles and functions, such as architects, server, network, and storage administrators, and operations teams to make the infrastructure delivery process fast, efficient, and reliable.

HP Insight Orchestration is based on proven HP technologies, such as HP Insight Dynamics - VSE, HP Insight Control and HP Systems Insight Manager, the world's most popular platform management tool. It also includes an embedded version of the powerful HP Operations Orchestration workflow automation engine. Like HP Insight Dynamics - VSE, Insight Orchestration takes advantage of HP Virtual Connect to bring the flexibility of virtualization to a physical environment, and Virtual Connect Enterprise Manager (purchased separately) is required for customers that utilize this feature.

One Insight Orchestration license is required for each HP ProLiant server added to a resource pool, and licenses may not be transferred once assigned to a server. Licenses include 1 year of HP Technical Support and Software Updates, and care pack options are available to further extend this Service.

NOTE: Insight Orchestration Installation and Startup Service is mandatory for each instance of HP SIM Central Management Server (CMS) managing servers with the software. Installation and Startup Services are offered by, and need to be performed by, HP Services or HP Authorized Business Partners. After the HP SIM CMS is fully installed and operational with Insight Orchestration, customers may purchase and add-on more Insight Orchestration licenses themselves, as their business needs require.

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Overview

Models

Licenses and Media

NOTE: HP Insight Orchestration requires HP Insight Dynamics - VSE, and supports HP ProLiant c-Class blade servers and virtualized HP ProLiant ML/DL 300, 500, 700 series servers

NOTE: For each purchased license, a license entitlement certificate will be delivered. The license entitlement certificate contains information needed to register and redeem license activation key(s) online or via fax. For more information, please visit: <http://www.hp.com/go/ICE-license>.

HP Insight Orchestration software No Media 8-server license including 1 year of 24x7 Technical Support and Updates, FIO 517444-B21

NOTE: Must be purchased as an option to an HP BladeSystem enclosure. Customer will receive a printed license entitlement certificate via physical shipment.

HP Insight Orchestration software No Media 16-server license including 1 year of 24x7 Technical Support and Updates, FIO 517448-B21

NOTE: Must be purchased as an option to an HP BladeSystem enclosure. Customer will receive a printed license entitlement certificate via physical shipment.

HP Insight Orchestration software No Media 1-Server License including 1 Year of 24x7 Support and Updates 512277-B21

NOTE: This license supports HP ProLiant ML/DL servers and c-Class blade servers. Customer will receive a printed license entitlement certificate via physical shipment.

HP Insight Orchestration software No Media Flexible Quantity License including 1 Year of 24x7 Support and Updates 512278-B21

NOTE: This license can be used to purchase multiple licenses with a single activation key. Customer will receive a printed license certificate via physical shipment.

HP Insight Orchestration software No Media Tracking License including 1 Year of 24x7 Support and Updates 512279-B21

NOTE: For use with signed and implemented Activation Key Agreements (AKA) only. Purchase of this part number entitles the customer to deploy additional licenses under the terms of the existing AKA. No physical components or license keys are delivered in conjunction with the purchase of this part number.

HP Insight Orchestration software No Media Electronic License including 1 Year of 24x7 Support and Updates TA848AAE

NOTE: Customer will receive via email a receipt and link to a license entitlement certificate.

NOTE: Electronic LTUs are only available through limited points of sales; if not available, order a printed license entitlement certificate (xxxxx-B21) instead.

Media

HP Insight Software Media Kit 436222-B21

NOTE: The Insight Software version v3.00 or higher media kit includes HP Insight Orchestration, the HP Insight Dynamics - VSE suite, HP Virtual Connect Enterprise Manager, HP Insight Control and HP Systems Insight Manager.

The Insight Software can also be downloaded from the web at:

<http://h18013.www1.hp.com/products/servers/management/fpdownload.html>

NOTE: The Insight Software DVD Media Kit comes without licenses. It contains HP Systems Insight Manager and Insight software products licensed by Insight software suites and individual products. It uses an integrated installer to perform quick and accurate software installation and updates.

Standard Features

Licensing and Packaging **NOTE:** HP Insight Orchestration is licensed per server. One server license is required for every managed server. Licenses are non-transferable. Full details are contained in the End User License Agreement.

For each purchased license, a license entitlement certificate will be delivered. The license entitlement certificate contains information needed to redeem license activation key(s) online or via fax. For more information, please visit: <http://www.hp.com/go/ICE-license>.

HP Insight Orchestration is provided on DVD media included in the Insight Software Media Kit, and can also be downloaded from:

<http://h18013.www1.hp.com/products/servers/management/fpdownload.html>

NOTE: For more information regarding HP Insight Orchestration visit: www.hp.com/go/insightorchestration

NOTE: For more information regarding HP Insight Dynamic - VSE visit: www.hp.com/go/insightdynamics

HP Insight Orchestration Benefits HP Insight Orchestration extends HP Insight Dynamics - VSE with new features that allow enterprises to reduce their operational costs and quickly adapt their infrastructure to meet business needs. Specifically, HP Insight Orchestration helps enterprises:

- **Reduce costs:** Automated provisioning and self-service reduces the amount of time IT staff spends on tedious, manual provisioning tasks, freeing up valuable time that can be spent on more important projects. Shared pools of physical and virtual servers and storage with defined lease periods for use increases infrastructure utilization and reduces the pockets of idle resources.
- **Increase speed of change:** Rapidly provision and repurpose infrastructure resources through the Insight Orchestration self-service portal. Integration with existing processes streamlines the approval process and coordinates activities across different teams to reduce wait times. Repurposing infrastructure is as simple as a few mouse clicks. For example, repurposing a pool of servers can be done in hours or even minutes by suspending all infrastructure services currently running on that pool and then resuming other services or provisioning new infrastructure services to run on that pool. With traditional approaches, this can take days or weeks, and often requires extensive coordination between server, storage, networking and facilities groups.
- **Improve quality:** With automated provisioning based on standard template, Insight Orchestration delivers infrastructure more consistently, reducing configuration errors that lead to downtime, and helps ensure compliance with organizational standards.

Standard Features

Key Product Features

- Visually design a catalog of standard infrastructure templates:
 - Create templates for simple or complex infrastructure needs using visual drag-and-drop design tool
 - Capture detailed requirements for each required element, including physical and virtual servers, storage, and networks
 - Start with "best practice" templates available from HP for key applications such as Microsoft Exchange, Oracle, and SAP, or create your own from scratch
 - Publish templates into the self-service portal catalog to drive automated, repeatable provisioning
- Rapidly and consistently provision through a self-service portal
 - Browse and select from a catalog of infrastructure templates in the self-service portal
 - Streamlined approval processes reduce wait time
 - Once approved, requested infrastructure is automatically provisioned from designated pool of HP BladeSystem and virtualized ProLiant servers for the designated lease period
 - Service owners can manage their infrastructure services through the self-service portal
- Integrate with existing IT processes and management tools
 - Includes an embedded workflow automation engine powered by HP Operations Orchestration software for orchestrating across different user roles and tools
 - Connect into existing change management/approval processes with available/optional integrations to HP and 3rd party trouble ticket systems and CMDBs
 - Create your own custom workflows to automate key pre- and post-provisioning tasks
 - Use workflows and processes to enable smooth handoffs between different roles and teams

Service and Support, HP Care Pack, and Warranty Information

Warranty HP will replace defective delivery media replacement for a period of 90 days following the date of purchase.

Software Support HP offers a number of software support services, many of which are provided to customers at no additional charge.

Software Technical Support and Update Service

HP Insight Orchestration includes one year of 24 x 7 HP Software Technical Support and Update Service. This service provides access to HP technical resources for assistance in resolving software implementation or operations problems. The service also provides access to software updates and reference manuals either in electronic form or on physical media as they are made available from HP. (Customers who purchase an electronic license to use are eligible for electronic updates only.) With this service, HP Insight Orchestration customers will benefit from expedited problem resolution as well as proactive notification and delivery of software updates. For more information about this service, see: <http://www.hp.com/services/insight>.

Installation & Startup Service

HP Insight Orchestration is not considered to be "customer installable/configurable".

NOTE: Installation and Start-up services are required for each HP SIM Central Management Server (CMS) where HP Insight Orchestration will be deployed. Installation and Start-up Services are offered by HP Services and Authorized Business Partners.

NOTE: Installation and Startup service for HP Insight Dynamics - VSE is a mandatory pre-requisite of the HP Insight Orchestration Installation & Startup Service.

Online Support Resources

HP Remote Support Pack incorporates industry-leading service tools that notify you when a significant system event has occurred or may potentially occur. You can configure and customize alert notification status for key hardware components including HP ProLiant servers. Integration of the HP Remote Support Pack with HP SIM brings you a comprehensive "phone home to HP" capability. For more information, please visit: www.hp.com/services/remotesupportpack.

Registration for Software Technical Support and Update Service

If the license information you received for your product instructs you to register for Software Technical Support and Update Service, please follow the instructions so that you will be eligible for telephone support and product updates.

How to Use Your Software Technical Support and Update Service

Once registered, you will receive a service contract in the mail containing the Customer Service phone number and your Service Agreement Identifier (SAID). You will need your SAID, when calling for technical support. Using your SAID, you can also go to the Software Update Manager (SUM) web page to view your contract online and elect electronic delivery for your updates.

Software and Drivers Download Pages

For selection of your country or region for localized technical support information please visit: <http://www.hp.com/support> Selecting "Servers" provides latest software and drivers for your HP ProLiant products.

Join the Discussion (<http://www.itrc.hp.com>)

The HP Support Forum is a community-based, user supported tool for HP customers to participate in discussions amongst the customer community about HP products. For discussions related to Insight

Service and Support, HP Care Pack, and Warranty Information

Control and HP ProLiant Essentials software, see the "Management Software and System Tools" area.

Management Security (<http://www.hp.com/servers/manage/security>)

HP is proactive in its approach to the quality and security of all its management software. Be sure to check the website often for the latest down-loadable security updates.

Obtain the Latest SmartStart Release (<http://www.hp.com/servers/smartstart>)

The SmartStart, Management, and Firmware CD/DVD's are now freely available for download following a simple registration from the SmartStart web site. If you wish to receive physical kits with each release you can order single release kits from the SmartStart web site. To receive proactive notification when SmartStart releases are available, subscribe to Subscriber's Choice at:

<http://www.hp.com/go/subscriberschoice>.

HP Worldwide Customer Service contact numbers are available at:

<http://www.hp.com/country/us/en/wwcontact.html>.

Related Options

HP Insight Capacity Advisor Consolidation Software	HP Insight Capacity Advisor Consolidation Software for HP ProLiant, 100 server License NOTE: Allows customers to purchase 100 capacity planning consolidation pack licenses with a 6 months activation period. Customer will receive a printed license entitlement certificate via physical shipment. NOTE: For additional license kits please see the QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/13050_div/13050_div.html	483546-B21
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HP Insight Recovery Software	HP Insight Recovery Software, 1-Server License including 24 x 7 Support NOTE: This license supports HP ProLiant ML/DL servers and c-Class blade servers. Customer will receive a printed license entitlement certificate via physical shipment. NOTE: For additional license kits please see the QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/13194_div/13194_div.html	512451-B21
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Service and Support

NOTE: HP Insight Orchestration comes bundled with 1 Year, 24x7 Support & Updates. The following Service Uplifts and additions are also available.

HP 3year 24x7 HP Insight Orchestration SW Support	UM675E
HP 4year 24x7 HP Insight Orchestration SW Support	UM676E
HP 5year 24x7 HP Insight Orchestration SW Support	UM677E
HP 3year 24x7 HP Insight Orchestration 16 Svr SW Support	UM681E
HP 4year 24x7 HP Insight Orchestration 16 Svr SW Support	UM682E
HP 5year 24x7 HP Insight Orchestration 16 Svr SW Support	UM683E
HP 3year 24x7 HP Insight Orchestration 8 Svr SW Support	UM678E
HP 4year 24x7 HP Insight Orchestration 8 Svr SW Support	UM679E
HP 5year 24x7 HP Insight Orchestration 8 Svr SW Support	UM680E
HP Insight Orchestration Installation & Startup Service	UK829E
HP Insight Dynamics - VSE Installation & Startup Service	UF819E
HP Insight Control Environment Installation & Startup Service	UF369E
HP Virtual Connect Enterprise Manager Installation & Startup Service	UF816E
HP Boot From SAN Installation & Startup Service	UF820E

Technical Specifications

Hypervisors

- VMware ESX Server
 - VMware ESX Server 3.0.2, 3.0.3, and 3.5 U1, U2, and U3 for HP ProLiant ML/DL Servers and c-Class BladeSystem servers
 - VMware ESXi 3.5 U1, U2, and U3 for HP ProLiant ML/DL Servers and c-Class BladeSystem servers
 - Virtual Center 2.0.2, 2.0.2 U1 and 2.5 U1, U2, and U3 for HP ProLiant ML/DL Servers and BladeSystem servers
- Microsoft Hyper-V
 - Windows Server 2008 with current Microsoft patch level
- Supported operating systems running on virtual machines
 - Microsoft Windows (VMware and Hyper-V. Visit VMware and Microsoft for list of supported versions on each platform)
 - Red Hat Enterprise Linux for x86 (VMware only. Visit VMware for list of supported versions)
 - SUSE Linux Enterprise Server x86 (VMware only. Visit VMware for list of supported versions)

Managed servers

Managed Servers:

- HP ProLiant DL/ML rackmount and tower server series 300, 500 and 700
 - HP ProLiant DL and ML servers are only supported running hypervisors listed in section above
- HP ProLiant c-Class BladeSystems
 - Microsoft Windows Server 2003 R2 Standard SP2
 - Microsoft Windows Server 2003 R2 Standard SP2 (x64)
 - Microsoft Windows Server 2003 R2 Enterprise SP2
 - Microsoft Windows Server 2003 R2 Enterprise SP2 (x64)
 - Microsoft Windows Server 2003 Standard SP2
 - Microsoft Windows Server 2003 Standard SP2 (x64)
 - Microsoft Windows Server 2003 Enterprise SP2
 - Microsoft Windows Server 2008 Standard
 - Microsoft Windows Server 2008 Enterprise
 - Red Hat Enterprise Linux 5.1, 5.2, 5.3 for x86
 - Red Hat Enterprise Linux 4.6 for x86
 - SUSE Linux Enterprise Server 10 x86, SP1, SP2
 - SUSE Linux Enterprise Server 9 x86, SP3, SP4

NOTE: HP Workstation blades and HP ProLiant BL2x220c servers are NOT supported for as managed nodes.

Central Management Server (CMS) with HP Systems Insight Manager

Windows CMS on HP ProLiant requirements:

- Hardware
 - HP ProLiant DL/ML rack-mount and tower server series 300, 500 and 700, G3 or higher recommended
 - HP ProLiant c-Class BladeSystems (HP Workstation blades and HP ProLiant BL2x220c servers are NOT supported for CMS.)
- Operating Systems
 - Microsoft Windows Server 2003 Standard SP2
 - Microsoft Windows Server 2003 R2 Standard SP2
 - Microsoft Windows 2003 Server Enterprise SP2
 - Microsoft Windows Server 2003 R2 Enterprise SP2
 - Microsoft Windows Server 2008 Standard
 - Microsoft Windows Server 2008 Enterprise

Technical Specifications

- Virtualization Platforms
 - VMware ESX Server 3.0.1, 3.0.2, 3.0.3, or 3.5 Update 1 or later guest running supported Windows operating system
- HP SIM 5.3
- Servers with at least 2 cores, minimum processor speed 1.6 GHz (2GHz or faster recommended)
- At least 4 GB of memory (up to 8 GB of memory if supporting the maximum number of managed nodes. The maximum number of nodes is 1000.)
- 900 MB of free disk space or more to install HP SIM
- 800 MB of free disk space to install HP Insight Dynamics - VSE management software
- At least 6GB of paging and swap space
- Supported browsers:
 - Microsoft Internet Explorer version 6 SP2 or version 7
 - Mozilla FireFox version 2.0 or 3.0

NOTE: While operating a SIM CMS in a VM is a supported configuration, for best performance, HP highly recommends using dedicated hardware for the CMS.

Other Hardware and Software Requirements and Options

Software

- HP Insight Software V3.00 Media Kit

Hardware

The following infrastructure elements are required to enable logical server management capabilities on physical (bare metal) blade servers:

- Virtual Connect Enterprise Manager (VCEM) v.1.2
- Virtual Connect Ethernet and Fibre Channel modules
- BladeSystem c7000 or c3000 enclosure(s)
- Storage Area Network with boot from SAN capability is required.
- Any Fibre Channel storage solution which supports the Virtual Connect environment and boot from SAN capability (boot volume as a pre-presented LUN)
- The recommended FC SAN solutions are HP StorageWorks (XP, EVA, and MSA) Disk Arrays

Options:

- NIC Options - c-Class embedded GbE adapters and mezzanine cards
- HBA Options - c-Class mezzanine FC HBAs (QLogic and Emulex)

Technical Specifications

Other product information

The following product materials are available on HP Insight Orchestration web page at: <http://www.hp.com/go/insightorchestration>

Product Datasheet

User Guide

General FAQ

Quick Start Installation Poster

White Papers

HP Insight Dynamics - VSE For more information on HP Insight Dynamics - VSE visit: <http://www.hp.com/go/insightdynamics>

HP Insight Capacity Advisor Consolidation Software For more information on HP Insight Capacity Advisor Consolidation software, visit: <http://www.hp.com/go/capad>

HP Virtual Connect Enterprise Manager For more information on HP Virtual Connect Enterprise Manager visit: <http://www.hp.com/go/vcem>

HP Virtual Connect For more information on HP Virtual Connect visit: <http://www.hp.com/go/bladesystem/virtualconnect>

HP Systems Insight Manager For more information on HP Systems Insight Manager visit: <http://www.hp.com/go/hpsim>

HP Insight Control suite For more information on HP Insight Control visit: <http://www.hp.com/go/insightcontrol>

HP Virtual Server Environment Suite for Integrity For more information on the HP Virtual Server Environment Suite for Integrity visit: <http://www.hp.com/go/vse>

HP Insight Server Migration software For more information on HP Insight Server Migration software visit: <http://www.hp.com/go/migrate>

HP Virtualization with VMware For more information on HP Virtualization with VMware visit: <http://www.hp.com/go/vmware>

Environment-friendly Products and Approach

End-of-life Management and Recycling

Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to <http://www.hp.com/go/green>. To recycle your product, please go to: <http://www.hp.com/go/green> or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: <http://www.hp.com/go/green>. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

Technical Specifications

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