

### Overview

The HP Insight Dynamics - VSE suite for HP ProLiant servers is an integrated command center that enables you to continuously analyze and optimize your adaptive infrastructure. This advanced infrastructure management software lets you reduce the cost of common data center asks by as much as 40 percent while keeping pace with your changing business. It enables you to plan capacity and power continuously, balance across physical and virtual resources, ensure cost-effective high availability and provision infrastructure consistently.

HP Insight Dynamics - VSE is at the core of the Matrix Orchestration Environment for HP BladeSystem Matrix <http://www.hp.com/go/matrix>. HP 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. The HP Insight Dynamics - VSE suite is also available in a software-only package for HP ProLiant servers and server blades.

HP Insight Dynamics - VSE is based on proven HP technologies, such as HP Virtual Server Environment, HP Insight Control and HP Systems Insight Manager, the world's most popular platform management tool. HP Insight Dynamics - VSE takes advantage of HP Virtual Connect to bring the flexibility of virtualization to a physical environment.

The Insight Dynamics - VSE suite for ProLiant includes capacity planning, advanced virtualization management, Insight Server Migration software and HP Insight Control. HP Insight Dynamics - VSE suite can be extended with optional Insight Orchestration capabilities for automated design and provisioning, and with Insight Recovery for disaster recovery capabilities.

Customers that have Insight Control can buy convenient upgrade packages. For HP BladeSystem infrastructures that include Virtual Connect, the Virtual Connect Enterprise Manager application (purchased separately) is strongly recommended to enable the full range of logical server management and movement delivered with Insight Dynamics - VSE bringing the flexibility of virtualization to physical resources.

One Insight Dynamics - VSE license is required for each HP ProLiant server to be managed, 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:** For Insight Dynamics - VSE installation and startup service is required 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 Dynamics - VSE, customers may purchase and add-on more Insight Dynamics - VSE licenses to meet future business requirements.

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### Overview

### What's New

HP Insight Dynamics -VSE suite for ProLiant 4.1

- Enhanced Capacity Planning features for managed servers
  - Support for select non-HP Windows-based x86 platforms including IBM and DELL,, for more information visit the HP Insight Capacity Advisor Consolidation Software web site at: [www.hp.com/go/capad](http://www.hp.com/go/capad)
  - Full agent support for HP ProLiant servers running Linux
- Expanded Hypervisor Support
  - Microsoft Hyper-V & VMware ESXi 3.5 embedded hypervisor
- Increased managed node scalability from 500 to 1000 operating system images
- Insight Control suite 3.00 or 3.10
- HP Insight Server Migration software version 3.6 or 3.7
- New optional extensions
  - HP Insight Orchestration: <http://www.hp.com/go/insightorchestration>
  - HP Insight Recovery: <http://www.hp.com/go/insightrecovery>
- Support for HP BladeSystem Matrix. BladeSystem Matrix is an integrated solution that provides an HP Adaptive Infrastructure environment to help customers achieve an operationally efficient, next-generation data center. It is built with HP BladeSystem, HP Virtual Connect, HP Insight software, HP StorageWorks, and fulfillment and installation capabilities (factory integration and onsite services). HP BladeSystem Matrix unites the tools, processes and architecture of your physical and virtual worlds to accelerate delivery of business service infrastructure and take costs out today and keep them out tomorrow.  
<http://www.hp.com/go/matrix>

### Models

#### Licenses and Media

#### HP Insight Dynamics -VSE suite for ProLiant 4.1

**NOTE:** The HP Insight Dynamics - VSE suite supports the HP ProLiant ML/DL 300, 500, 700 series servers and HP ProLiant c-Class blade servers, see the Technical Specifications section for more detail.

**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 Dynamics - VSE suite with Insight Control suite - HP ProLiant c-Class Blade Servers

**NOTE:** Allows customers to purchase the HP Insight Dynamics - VSE suite in one easy to order license package for HP ProLiant c-Class blade servers. Customers who already have Insight Control suite licenses for their servers should consider the upgrade license packages listed in a separate section below.

HP Insight Dynamics-VSE with Insight Control suite, 8-server license including 1 year of 24x7 Technical Support and Updates, Factory Integrated Only (FIO) 483521-B21

**NOTE:** This license supports HP ProLiant c-Class blade servers.

**NOTE:** Must be purchased as an option to an HP BladeSystem enclosure. FIO can only be ordered as part of a factory-configured platform. Customer will receive a printed license entitlement certificate via physical shipment.

HP Insight Dynamics-VSE with Insight Control suite, 16-server license including 1 year of 24x7 Technical Support and Updates, Factory Integrated Only (FIO) 483454-B21

**NOTE:** This license supports HP ProLiant c-Class blade servers.

**NOTE:** Must be purchased as an option to an HP BladeSystem enclosure. FIO can only be ordered as part of a factory-configured platform. Customer will receive a printed license entitlement certificate via physical shipment.

### Overview

HP Insight Dynamics - VSE suite with Insight Control suite - for HP ProLiant and HP ProLiant c-Class blade servers.

**NOTE:** Allows customers to purchase the HP Insight Dynamics - VSE Suite in one easy to order license package for HP ProLiant servers. Customers who already have Insight Control suite licenses for their servers should consider the upgrade license packages listed in a separate section below.

HP Insight Dynamics-VSE with Insight Control suite 1-server license including 1 year of 24x7 Technical Support and Updates 483527-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 Dynamics-VSE with Insight Control suite, 1-server license including 1 year of 24x7 Technical Support and Updates, Factory Integrated Only (FIO) 483453-B21

**NOTE:** This license supports HP ProLiant ML/DL servers and c-Class blade servers  
**NOTE:** Must be purchased as an option to an HP ProLiant ML, DL server or c-Class blade servers. FIO can only be ordered as part of a factory-configured platform. Customer will receive a printed license entitlement certificate via physical shipment.

HP Insight Dynamics-VSE with Insight Control suite, Flexible-Quantity License including 1 year of 24x7 Technical Support and Updates 483525-B21

**NOTE:** This license supports HP ProLiant ML/DL servers and c-Class blade servers.  
**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 Dynamics-VSE with Insight Control suite, Tracking License including 1 year of 24x7 Technical Support and Updates 483528-B21

**NOTE:** This license supports HP ProLiant ML/DL servers and c-Class blade servers.  
**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 Dynamics-VSE with Insight Control suite, Electronic License including 1 year of 24x7 Technical Support and Updates T9710AAE

**NOTE:** This license supports HP ProLiant ML/DL servers and c-Class blade servers. 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 (483525-B21) instead.

**HP Insight Dynamics - VSE suite without Insight Control suite (upgrade for Insight Control suite customers)**

**NOTE:** Allows existing Insight Control suite license owners customers to purchase HP Insight Dynamics - VSE Suite licenses as an upgrade for HP ProLiant servers. Not applicable to HP Insight Control suite for Linux.

HP Insight Dynamics-VSE without Insight Control suite, 16-server license including 1 year of 24x7 Technical Support and Updates 491735-B21

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

HP Insight Dynamics-VSE without Insight Control suite, 8-server license including 1 year of 24x7 Technical Support and Updates 491734-B21

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

### Overview

HP Insight Dynamics-VSE without Insight Control suite, 1-server license including 1 year of 24x7 Technical Support and Updates <b>NOTE:</b> This license supports HP ProLiant ML/DL and c-Class Blade servers. Customer will receive a printed license entitlement certificate via physical shipment.	483531-B21
HP Insight Dynamics-VSE without Insight Control suite, Flexible-Quantity License including 1 year of 24x7 Technical Support and Updates <b>NOTE:</b> This license supports HP ProLiant ML/DL and c-Class Blade servers. <b>NOTE:</b> This license can be used to purchase multiple licenses with a single activation key. Customer will receive a printed license entitlement certificate via physical shipment.	483540-B21
HP Insight Dynamics-VSE without Insight Control suite, Tracking License including 1 year of 24x7 Technical Support and Updates <b>NOTE:</b> This license supports HP ProLiant ML/DL and c-Class Blade servers. <b>NOTE:</b> 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.	483543-B21
HP Insight Dynamics-VSE without Insight Control suite, Electronic License including 1 year of 24x7 Technical Support and Updates <b>NOTE:</b> This license supports HP ProLiant ML/DL and c-Class Blade servers and is only available in Americas. Customer will receive via email a receipt and link to a license entitlement certificate. <b>NOTE:</b> Electronic LTUs are only available through limited points of sales; if not available, order a printed license entitlement certificate (xxxxx-B21) instead.	T9713AAE
<b>HP Insight Capacity Advisor Consolidation software for HP ProLiant servers and c-Class blade Servers</b>	
HP Insight Capacity Advisor Consolidation software, Flexible-Quantity License. <b>NOTE:</b> For ProLiant server licenses, the HP Insight Capacity Advisor Consolidation software includes a 24x7 Technical Support and Update Service (Support and Updates last for one year after first activation of a flex license group). <b>NOTE:</b> Allows customers to purchase HP Insight Capacity Advisor Consolidation software licenses with a 6 months activation period. Customer will receive a printed license entitlement certificate via physical shipment.	492632-B21
<b>Media</b>	
HP Insight Software Media Kit <b>NOTE:</b> The Insight Software version v3.10 media kit includes 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: <a href="http://h18013.www1.hp.com/products/servers/management/fpdownload.html">http://h18013.www1.hp.com/products/servers/management/fpdownload.html</a> <b>NOTE:</b> 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.	436222-B21

### Standard Features

**Licensing and Packaging** **NOTE:** The HP Insight Dynamics - VSE suite 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>.

The HP Insight Dynamics - VSE suite is provided on DVD media included in the HP 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 Dynamic - VSE visit: [www.hp.com/go/insightdynamics](http://www.hp.com/go/insightdynamics)

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**HP Insight Dynamics -VSE Benefits** HP Insight Dynamics - VSE lets you cut operational costs and adapt your infrastructure as your business grows. For example, it helps you accelerate your top IT project schedules by weeks or months, easily repurpose resources to match your business priorities, extend the life of your datacenters with energy-aware capacity planning and free untapped resources for use where they are needed most. Specifically, HP Insight Dynamics - VSE helps you:

- **Reduce costs:** HP estimates the software will reduce the cost of common data center tasks by as much as 40 percent, reducing costs associated with capacity planning, provisioning, upgrades and changes, and energy. You can realize the cost benefits of virtualization faster by cutting analysis time for capacity planning and consolidation from months to days. Manually created Excel spreadsheets or resource intensive services engagements can be replaced by instantly available data.
- **Increase speed of change:** By collapsing steps and saving administrative time with key tasks, key IT projects can be accelerated. Administrators can reduce tasks associated with provisioning, upgrades and changes from weeks to days or even hours. For example, moving a workload from one server to another with a simple drag and drop takes minutes, while traditional approaches can take days or weeks, and often requires extensive coordination between server, storage, networking and facilities groups. With the Insight Orchestration option, you can provision the infrastructure for an entire IT service with the push of a button, resulting in faster time-to-production.
- **Improve quality:** Insight Dynamics - VSE software enables everyday high availability previously unavailable to many applications due to complex and redundant clustering requirements. By easily redeploying logical servers in the event of hardware failure, you can enjoy fast and affordable protection for a broader set of applications.
- **Manage energy:** Insight Dynamics - VSE makes the energy consumption of different data center configurations visible. In consolidation projects we typically see up to 40 % power savings which can be realized through the optimized hardware architecture you implement based on energy usage patterns and projections.

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### Key Product Features

#### Plan capacity and power continuously

State-of-the-art capacity planning uses deep insight into resource utilization with integrated monitoring and forecasting capabilities to plan for infrastructure optimization in real time, including for power

Eliminate guesswork and months of tedious capacity planning by using thousands of data points per server per day, for all of your HP servers and select non-HP Windows-based x86 platforms including IBM

### Standard Features

and DELL, to make informed capacity management decisions in real time

- Quickly generate consolidation solutions for reducing the number of physical servers and optimizing for energy efficiency using Smart Solver technology
- Use the 5-Star rating system to easily identify best-fit candidates for individual workload placement enabling fast relocation of servers for better resource utilization
- Enable on-going tuning of the environment using the integrated tools for rebalancing of virtual machines across existing resources

#### Balance physical and virtual resources

Based on precise historical and real-time utilization data combined with the flexibility of logical servers, which are server profiles that detach the logical identity from the physical resource, balance resources on the fly to provide better performance and service levels to the business.

- Easily move logical servers across physical and virtual resources to ensure the environment's utilization is optimally balanced with drag and drop ease
- Migrate workloads from physical to virtual infrastructure, from virtual to physical, from non-HP x86 servers to HP Blades or ProLiant, or from one hypervisor type to another
- Visualize and manage all physical and virtual resources from single tool, with the ability to drill down as far as needed without logging into another tool

#### Ensure cost-effective availability

With the combination of the advanced visualization, real-time planning and the speed and ease of moving resources with logical servers, higher levels of availability and quality of service can be achieved more economically than with traditional clustering solutions

- Quickly move servers to spare capacity to maintain availability
- Reactivate stored templates to rapidly restart applications
- Shorten maintenance windows by creating and moving workloads as logical servers, and allowing for more proactive maintenance
- Insight Dynamics - VSE can also be extended with the Insight Recovery option for cost-effective disaster recovery from one location to another

#### Provision infrastructure consistently

HP Insight Dynamics - VSE enables IT organizations to consistently and efficiently manage the infrastructure lifecycle from planning to retirement. With the HP Insight Orchestration option you can accelerate the design and delivery of infrastructure resources through a self-service portal.

- Create logical server templates based on HP reference architectures that can be started, stopped and stored off line for re-use
- Rapidly provision infrastructure from pools of shared server and storage resources using automation and streamlined approval processes
- Integrates with existing IT management tools and processes using an embedded workflow automation tool
- Benefits all key IT roles and functions, such as architects/planners, server admins, networks admins, storage admins, and operations teams to make the infrastructure delivery process fast, efficient, and reliable

### Standard Features

#### Customer Usage Scenarios

**Continuous Consolidation** Many customers are still using spreadsheets to do capacity planning. Many resources, even after virtual machines are deployed are still at less than 40% utilization on average. Most tools do not give administrators real data that they can use to make decisions and act with confidence. Performance, consolidation, cost and power are usually rough estimates, validated only by trial and error.

**Benefits:**

- Lower cost of IT operations: fewer systems, smaller footprint, fewer software licenses and lower power requirements.
- Maintain higher service levels throughout the life of the applications.
- Up to 40% savings in capacity planning efforts (based on HP estimates)
- **Key Take-Away:** By optimizing utilization continuously, you can save valuable real estate, avoid costly expansion projects and extend the life of your data center

#### Energy Aware Planning

Power, cooling and space are top expenses and limitations in today's data centers. Energy not only costs more, but data centers are using more of it. It's no surprise then that energy expenditures are taking an ever larger bite out of operating expenditure (OPEX) budgets. And, regardless of the cost issues, some data centers are having trouble acquiring sufficient power to meet their energy needs. In this new era, power and cooling becomes a key consideration when planning an IT environment or adding hardware to an existing data center.

**Benefits:**

- Reduced energy consumption and cost
- Analyze power needs more efficiently
- By quickly identifying and consolidating inefficient servers onto fewer, more power efficient ones, you can reduce energy consumption, cut costs and extend the life of your data center.
- **Key Take-Away:** Power consumption analysis and planning saves on operating expenses.

#### Everyday High Availability

High system availability is now an imperative for an increasing number of applications. If your business depends on certain applications, it can't tolerate downtime for those applications. Yet in many cases the use of high availability (HA) failover is restricted to a limited number of business-critical applications in complex, clustered configurations.

Insight Dynamics - VSE can also be extended with the HP Insight Recovery option for cost-effective disaster recovery across metropolitan distances.

**Benefits:**

- Higher quality of service with lower risk
- Fast and affordable HA for non-mission-critical applications
- Shorter maintenance windows resulting in higher application up-time
- Cost-effective disaster recovery to quickly failover logical servers to a remote location with the push of a button
- **Key Take-Away:** You can now protect more of your systems and shrink maintenance windows using spare capacity that is fast and affordable to set up, using existing virtual machines or physical servers and also take advantage of disaster recovery capabilities with HP Insight Recovery.

### Standard Features

#### Dynamic Infrastructure Provisioning

Keeping up with requests for new infrastructure is a challenge for most IT organizations. It can take weeks or even months to get new servers set up along with storage and networks, and by then the needs have changed again. One good example is the inefficiencies that test and development teams wrestle with on an ongoing basis. Average server utilization in test environments is often in the single digits, and equipment can stand idle for long periods of time. Moving, testing or troubleshooting applications on standalone servers can be a cumbersome process that stretches across multiple organizations. Given these operating circumstances, test and development environments need more than static, stand-alone servers. They are best placed in an agile computing environment, in which individual servers or even multi-tier, multi node configurations can be easily and quickly provisioned and reallocated, via a self-service portal, delivered through the Insight Orchestration option. This significantly speeds up the test and development lifecycle, and accelerate time to production.

#### Benefits:

- Accelerate time to production by quickly repurposing test and development infrastructure, taking advantage of the flexibility and efficiency of pooled resources
- Up to 30% increase in productivity for provisioning and change tasks.(based on HP estimates)
- **Key Take-Away:** By quickly creating servers for development or test environments and retiring or repurposing them as needed, you can significantly reduce the number of idle resources, and accelerate the time it takes to develop software and set up and conduct testing. With the HP Insight Orchestration option you can visually design and automatically provision resources via a self-service portal.

### 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**

The HP Insight Dynamics - VSE 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 Dynamics - VSE 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 Dynamics - VSE suite for HP ProLiant requires installation and startup services.

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

#### **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: <http://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 Smart-Update Manager (HP 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 Control and HP ProLiant Essentials software, see the "Management Software and System Tools" area.

### *Service and Support, HP Care Pack, and Warranty Information*

**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

<p><b>HP Insight Capacity Advisor Consolidation Software</b></p>	<p>HP Insight Capacity Advisor Consolidation software for HP ProLiant Flexible-Quantity License for HP ProLiant series servers and c-Class blade Servers. For ProLiant server licenses, the HP Insight Capacity Advisor Consolidation software includes a 24x7 Technical Support and Update Service (Support and Updates last for one year after first activation of a flex license group)</p> <p><b>NOTE:</b> Allows customers to purchase HP Insight Capacity Advisor Consolidation software licenses with a 6 months activation period. Customer will receive a printed license entitlement certificate via physical shipment.</p> <p><b>NOTE:</b> For additional license kits please see the QuickSpecs at: <a href="http://www.hp.com/go/capad">www.hp.com/go/capad</a></p>	<p>492632-B21</p>
<p><b>HP Insight Orchestration Software</b></p>	<p>HP Insight Orchestration Software, 1-Server License including 24 x 7 Support</p> <p><b>NOTE:</b> This license supports HP ProLiant ML/DL servers and c-Class blade servers. Customer will receive a printed license entitlement certificate via physical shipment.</p> <p><b>NOTE:</b> For additional license kits please see the QuickSpecs at: <a href="http://www.hp.com/go/insightorchestration">www.hp.com/go/insightorchestration</a></p>	<p>512277-B21</p>
<p><b>HP Insight Recovery Software</b></p>	<p>HP Insight Recovery Software, 1-Server License including 24 x 7 Support</p> <p><b>NOTE:</b> This license supports HP ProLiant ML/DL servers and c-Class blade servers. Customer will receive a printed license entitlement certificate via physical shipment.</p> <p><b>NOTE:</b> For additional license kits please see the QuickSpecs at: <a href="http://www.hp.com/go/insightrecovery">www.hp.com/go/insightrecovery</a></p>	<p>512451-B21</p>
<p><b>HP Insight Rapid Deployment Software (RDP)</b></p>	<p>HP Insight Rapid Deployment software, No Media 1-Server License including 1 year of 24x7 Technical Support and Updates</p> <p><b>NOTE:</b> This license formerly known as HP ProLiant Essentials Rapid Deployment Pack.</p> <p><b>NOTE:</b> This license allows 1 server to be deployed and managed via RDP. Customer will receive a printed license entitlement certificate via physical shipment. The license entitlement certificate must be redeemed online or via fax in order to obtain the license activation key(s). Includes one year of 24 x 7 HP Software Technical Support and Update Service.</p>	<p>452151-B21</p>
<p><b>HP BladeSystem Matrix</b></p>	<p>HP BladeSystem Starter Kit</p> <p><b>NOTE:</b> For complete ordering information guidance refer to the HP BladeSystem Matrix QuickSpecs: <a href="http://www.hp.com/go/matrix">www.hp.com/go/matrix</a></p>	<p>535888-B21</p>
<p><b>Service and Support</b></p>	<p><b>NOTE:</b> HP Insight Dynamics - VSE comes bundled with 1 Year, 24x7 Support &amp; Updates. The following Service Uplifts and additions are also available.</p> <p>HP 3year 24x7 HP Insight Dynamics with Insight Control suite SW Support</p> <p>HP 4year 24x7 HP Insight Dynamics with Insight Control suite SW Support</p> <p>HP 5year 24x7 HP Insight Dynamics with Insight Control suite SW Support</p> <p>HP 3year 24x7 HP Insight Dynamics with Insight Control suite 16-Svr SW Support</p> <p>HP 4year 24x7 HP Insight Dynamics with Insight Control suite16- Svr SW Support</p> <p>HP 5year 24x7 HP Insight Dynamics with Insight Control suite16-Svr SW Support</p> <p>HP 3year 24x7 HP Insight Dynamics with Insight Control suite 8-Svr SW Support</p> <p>HP 4year 24x7 HP Insight Dynamics with Insight Control suite 8-Svr SW Support</p> <p>HP 5year 24x7 HP Insight Dynamics with Insight Control suite 8-Svr SW Support</p> <p>HP 3year 24x7 HP Insight Dynamics without Insight Control suite SW Support</p> <p>HP 4year 24x7 HP Insight Dynamics without Insight Control suite SW Support</p> <p>HP 5year 24x7 HP Insight Dynamics without Insight Control suite SW Support</p>	<p>UK600E</p> <p>UK601E</p> <p>UK602E</p> <p>UK603E</p> <p>UK604E</p> <p>UK605E</p> <p>UK606E</p> <p>UK607E</p> <p>UK608E</p> <p>UK609E</p> <p>UK610E</p> <p>UK611E</p>

### Related Options

HP Insight Dynamics - VSE Installation & Startup Service UF819E  
**NOTE:** Installation and Start-up services are required for each HP SIM Central Management Server (CMS) where HP Insight Dynamics - VSE will be deployed.

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

### Education Services

HP BladeSystem Virtualization Tools using Insight Dynamics - VSE HG812S

4-day customer training course, see the course datasheet:

<http://h10076.www1.hp.com/education/datasheets/hg812s.pdf>

<http://www.hp.com/education/courses/hg812s.html>

Virtual Connect for BladeSystem (includes Virtual Connect Enterprise Manager segment) 2-day customer training course HF837S

<http://www.hp.com/education/courses/hf837s.html>

HP Insight Software Curriculum

<http://www.hp.com/education/currpath/hp-proliant-essentials.html>

### Technical Specifications

#### Hypervisors

- VMware ESX Server
  - VMware ESX Server 3.0.1, 3.0.2, 3.0.3 and 3.5 U1 for HP ProLiant ML/DL Servers and BladeSystem servers
  - VMware ESXi 3.5 for HP ProLiant ML/DL Servers and BladeSystems
  - Virtual Center 2.0.1, 2.0.2, 2.0.2 U1 and 2.5 U1 for HP ProLiant ML/DL Servers and BladeSystem servers
  - For Logical Server Management, VMware ESX Server v3.0.2 (or higher versions of 3.0), v3.5 U1 (or higher updates of 3.5) and VMware ESXi 3.5 (Note: ESXi v3.5 host must be preconfigured on an HP ProLiant ML/DL/BladeSystem)
- Microsoft Hyper-V
  - Support for Capacity Advisor and Virtualization Manager
  - See Insight Server Migration software (formerly Server Migration Pack - Universal Edition) support matrix ([www.hp.com/go/migrate](http://www.hp.com/go/migrate))
- Microsoft Virtual Server
  - Microsoft Windows Server 2003 OS /MS Virtual Server 2005 R2 SP1 for HP ProLiant ML/DL Servers and BladeSystem servers
  - No Logical Server Management support

#### Managed servers

##### Managed Servers:

- HP ProLiant DL/ML rackmount and tower server series 300, 500 and 700
  - Microsoft Windows Server 2003 R2 Standard SP2
  - Microsoft Windows Server 2003 R2 Standard SP2 (x64) - 32 bit mode
  - Microsoft Windows Server 2003 R2 Enterprise SP2
  - Microsoft Windows Server 2003 R2 Enterprise SP2 (x64) - 32 bit mode
  - Microsoft Windows Server 2003 Standard SP2
  - Microsoft Windows Server 2003 Standard SP2 (x64) - 32 bit mode
  - Microsoft Windows Server 2003 Enterprise SP2
  - Microsoft Windows Server 2003 Enterprise SP2 (x64) - 32 bit mode
  - Microsoft Windows Server 2008 Standard
  - Microsoft Windows Server 2008 Standard (x64) - 32 bit mode
  - Microsoft Windows Server 2008 Enterprise
  - Microsoft Windows Server 2008 Enterprise (x64) - 32 bit mode
  - Red Hat Enterprise Linux 5.0, 5.1, 5.6 for x86
  - Red Hat Enterprise Linux 5.0, 5.1, 5.2 for AMD64/EM64T
  - Red Hat Enterprise Linux 4.4, 4.5, 4.6, 4.7 for x86
  - Red Hat Enterprise Linux 4.4, 4.5, 4.6, 4.7 for AMD64/EM64T
  - Red Hat Enterprise Linux 3.9 x86\*\*
  - Red Hat AMD64/EM64T 3.9\*\*
  - Red Hat Linux 9\*\*
  - Red Hat Linux 8\*\*
  - Red Hat Linux 7.3 Workstation\*\*
  - SUSE Linux Enterprise Server 10 x86, SP1, SP2
  - SUSE Linux Enterprise Server 10 AMD64/EM64T, SP1, SP2
  - SUSE Linux Enterprise Server 9 x86, SP3, SP4
  - SUSE Linux Enterprise Server 9 AMD64/EM64T, SP3, SP4
  - SUSE Linux Enterprise Server 8/UL 1.0 for x86 or AMD64/EM64T\*\*\*
- HP ProLiant c-Class BladeSystems\*
  - Microsoft Windows Server 2003 R2 Standard SP2
  - Microsoft Windows Server 2003 R2 Standard SP2 (x64) - 32 bit mode
  - Microsoft Windows Server 2003 R2 Enterprise SP2

### Technical Specifications

- Microsoft Windows Server 2003 R2 Enterprise SP2 (x64) - 32 bit mode
- Microsoft Windows Server 2003 Standard SP2
- Microsoft Windows Server 2003 Standard SP2 (x64) - 32 bit mode
- Microsoft Windows Server 2003 Enterprise SP2
- Microsoft Windows Server 2003 Enterprise SP2 (x64) - 32 bit mode
- Microsoft Windows Server 2008 Standard
- Microsoft Windows Server 2008 Standard (x64) - 32 bit mode
- Microsoft Windows Server 2008 Enterprise
- Microsoft Windows Server 2008 Enterprise (x64) - 32 bit mode
- Red Hat Enterprise Linux 5.0, 5.1, 5.2 for x86
- Red Hat Enterprise Linux 5.0, 5.1, 5.2 for AMD64/EM64T
- Red Hat Enterprise Linux 4.4, 4.5, 4.6, 4.7 for x86
- Red Hat Enterprise Linux 4.4, 4.5, 4.6, 4.7 for AMD64/EM64T
- Red Hat Enterprise Linux 3.9 x86\*\*
- Red Hat Enterprise Linux 3.9 AMD64/EM64T\*\*
- Red Hat Linux 9\*\*
- Red Hat Linux 8\*\*
- Red Hat Linux 7.3 Workstation\*\*
- SUSE Linux Enterprise Server 10 x86, SP1, SP2
- SUSE Linux Enterprise Server 10 AMD64/EM64T, SP1, SP2
- SUSE Linux Enterprise Server 9 x86, SP3, SP4
- SUSE Linux Enterprise Server 9 AMD64/EM64T, SP3, SP4
- SUSE Linux Enterprise Server 8/UL 1.0 for x86 or AMD64/EM64T\*\*\*

\* HP Workstation blades and HP ProLiant BL2x220c servers are NOT supported as managed nodes.

\*\* Partial support. The VSE utilization Provider is not supported on RHEL 3.9, Red Hat 8, 9, and 7.3. But data collection for VMs running this operating system is supported through VMM. The Utilization Provider (utild) is a light-weight daemon that records system-utilization data on a five-minute interval. System-utilization data includes: CPU, memory, disk, and network. This product also includes a WBEM provider for access to the utilization data. Utilization data will only be reported in HP Insight Dynamics - VSE if those OS versions are running on a ProLiant VM host or guest being managed by VMM.

\*\*\*Partial support. The VSE Utilization Provider is not supported on SLES 8. But data collection for VMs running this operating system is supported through VMM. The Utilization Provider (utild) is a light-weight daemon that records system-utilization data on a five-minute interval. System-utilization data includes: CPU, memory, disk, and network. This product also includes a WBEM provider for access to the utilization data. Utilization data will only be reported in HP Insight Dynamics - VSE if those OS versions are running on a ProLiant VM host or guest being managed by VMM.

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

**NOTE:** 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 2008 Enterprise

Central Management  
Server (CMS) with HP  
Systems Insight Manager

### Technical Specifications

- Virtualization Platforms
  - VMware ESX Server 3.0.1, 3.0.2, 3.0.3, or 3.5 Update 1 (or later updates of 3.5) guest running supported Windows operating system
- HP SIM 5.3 or 5.3.1 (SIM 5.3.1 required to fully support G6 series servers)
- Servers with at least 2 cores, minimum processor speed 1.6 GHz (2GHz or faster recommended)
- At least 4 GB of memory (up to 6GB 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
- Capacity Advisor requires a maximum of 4 GB of disk space for every 100 workloads to maintain 4 years of historical data.
- 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

HP Systems Insight Manager Windows Central Management Server can manage the following supported platforms:

- HP ProLiant ML/DL servers
- HP ProLiant blade servers
- HP Integrity servers
- HP Integrity blade servers

**NOTE:** A Windows-based SIM CMS on HP ProLiant is required to support all of the functionality for HP Insight Dynamics - VSE. It is also capable of managing all of the HP Virtual Server Environment for Integrity.

**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.

**NOTE:** Insight Server Migration software has requirements for specific generations of supported destination servers. Please refer to the Insight Server Migration software (formerly Server Migration Pack Universal Edition) Support Matrix for specific information.

**NOTE:** VCEM and Logical Server Management (LSM) are only supported on a Microsoft Windows-based CMS.

**NOTE:** A separate Integrity server running HP SIM on HP-UX can manage Integrity servers (No VCEM, LSM support).

**NOTE:** Insight Dynamics - VSE functionality for HP Integrity servers is delivered through the HP Virtual Server Environment suite for Integrity.

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

### Other Hardware and Software Requirements and Options

- Software
  - HP Insight Software v3.00 or v3.10 Media Kit
  - Insight Control suite Licenses (Windows). The HP Insight Control suite includes the following software components:
    - HP Systems Insight Manager
    - HP iLO Advanced
    - HP Insight Rapid Deployment software
    - HP Insight Power Manager software
    - HP Insight Performance Manager module
    - HP Insight Vulnerability and Patch Manager module
    - HP Insight Virtual Machine Manager software for ProLiant

### Technical Specifications

**NOTE:** Unlimited HP Insight Server Migration software (formerly Server Migration Pack Universal Edition) migrations are available when an HP Insight Dynamics -VSE license is applied to a destination server or virtual machine host. If no Insight Dynamics -VSE license is applied to the destination server or virtual machine host, then a license for HP Insight Server Migration software is required in the HP Insight Server Migration software License Manager. For more information about HP Insight Server Migration software licensing, see the Insight Server Migration software User Guide.

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

- Virtual Connect Enterprise Manager (VCEM) v1.2 or v1.3
- 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
- The storage validation feature of logical servers with Insight Dynamics - VSE 4.1 is supported on the following HP StorageWorks Disk Arrays:
  - MSA1000/1500
  - EVA3000/5000/4x00/6x00/8x00

Options:

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

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### Other product information

The following product materials are available on HP Insight Dynamics - VSE web page at: <http://www.hp.com/go/insightdynamics>

Product Datasheet

User Guide

General FAQ

Quick Start Installation Poster

White Papers

**HP BladeSystem Matrix** For more information on BladeSystem Matrix <http://www.hp.com/go/matrix>

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

**HP Insight Orchestration Software** For more information on HP Insight Orchestration Software <http://www.hp.com/go/insightorchestration>

**HP Insight Recovery Software** For more information on HP Insight Recovery Software <http://www.hp.com/go/insightrecovery>

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

**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>

### Technical Specifications

HP Insight Control suite	For more information on HP Insight Control visit: <a href="http://www.hp.com/go/insightcontrol">http://www.hp.com/go/insightcontrol</a>
HP Virtual Server Environment suite for Integrity	For more information on the HP Virtual Server Environment Suite for Integrity visit: <a href="http://www.hp.com/go/vse">http://www.hp.com/go/vse</a>
Insight Server Migration Software	For more information on the Insight Server Migration software visit: <a href="http://www.hp.com/go/migrate">www.hp.com/go/migrate</a>
HP Virtualization with VMware	For more information on HP Virtualization with VMware visit: <a href="http://www.hp.com/go/vmware">http://www.hp.com/go/vmware</a>

### 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.

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