

### Overview

HP Insight Capacity Advisor Consolidation software is a limited-time-use license for energy-aware capacity planning. It enables you to collect detailed server utilization data across several key metrics for a period of up to 6 months after license activation on your legacy systems. The legacy systems can be older HP ProLiant or HP Integrity servers as well as x86 Dell or IBM servers running Windows. For ongoing capacity planning with unlimited time use, the software is available as part of the HP Insight Dynamics - VSE suite for ProLiant or the HP Virtual Server Environment suite for HP Integrity.

You will be able to use the full power of capacity planning including 'Smart Solver' technology to analyze and optimize server capacity and power in order to plan a consolidation onto new HP BladeSystem, HP ProLiant servers or HP Integrity servers. In this way, you can save costs but still gain the full power of the industry's most advanced real-time capacity planning tool.

One Insight -Capacity Advisor Consolidation Software license is required for each server to be managed, and licenses may not be transferred once assigned to a server. The license term is for six-month after activation. Data collection can extend beyond six-months by using up an additional license if desired. Licenses include HP Technical Support and Software Updates.

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### Models

Licenses and Media	HP Insight Capacity Advisor Consolidation software for HP ProLiant, Flexible-Quantity License	492632-B21
	HP Insight Capacity Advisor Consolidation software for HP Integrity	T8710AC

### Standard Features

**Licensing and Packaging** **NOTE:** One HP Insight Capacity Advisor Consolidation software license is required for each server to be managed, and licenses may not be transferred once assigned to a server. Licenses include HP Technical Support and Software Updates.

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 Capacity Advisor Consolidation functionality is provided through 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 Capacity Advisor Consolidation software visit: <http://www.hp.com/go/capad>

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### HP Capacity Advisor Benefits

With the latest release of HP Insight Capacity Advisor Consolidation software, HP helps you make informed capacity management decisions when planning server consolidations.

- **Reduce costs:** Enterprises 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:** Quickly generate consolidation solutions for reducing the number of physical servers and optimizing for energy efficiency using Smart Solver technology
- **Improve quality:** Eliminate guesswork and months of tedious capacity planning by using thousands of data points per server per day to develop an optimal consolidation configuration. Works across all of your HP servers and 3rd party x86 platforms.
- **Manage energy:** Insight Capacity Advisor Consolidation software makes the energy consumption of different data center configurations visible. In consolidation projects there are typically 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 to optimize utilization
  - Measure utilization for CPU, memory, network, disk and power
  - Collect more than a thousand data points per server per day
  - Smart Solver technology developed by HP Labs automates consolidation or re-balancing analysis
  - 5-star rating system for best-fit placement
  - Non-intrusive agentless data collection option.
  - Find trends and forecast utilization based on business plans
  - Define utilization limits to better reflect service-level agreements
  - Create inventories and reports
  - Collect data for up to 1000 servers per Central Manager Server and handle the automatic scenario analysis of up to 100 workloads at one time.
  - Data collected remains on-site, and is not sent outside the firewall
  - Eliminates guesswork and months of tedious capacity planning and research
  - Make decisions faster, matching your business priorities

### Standard Features

#### Customer Usage Scenarios

**Consolidation Planning** Many customers are still using spreadsheets to do capacity planning. Many resources are still at less than 10-20% utilization on average. Often, spreadsheet calculations simply find the "sum of the peaks". This type of planning does not capture the virtualization benefits that you can get through resource sharing. This could result in sizing your servers for up to twice the capacity you actually need. Most tools do not give administrators real data that they can use to make decisions and act with confidence. Performance, 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, you can save valuable real estate, avoid costly expansion projects and extend the life of your data center
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**Energy Aware Planning** Power, cooling and space are top expenses as well as resource 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.

### 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.

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**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**

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). 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. With this service, HP -Capacity Advisor 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>.

For HP Integrity server licenses, support contracts are not included and can be purchased separately.

#### **Installation & Startup Service**

HP Insight Capacity Advisor Consolidation Software is customer installable. Customers who wish to have HP Services install HP Insight Capacity Advisor Consolidation Software, can purchase the HP Services Custom Ind Std Server Deployment SVC Service.

#### **Online Support Resources**

HP Service Essentials 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 Service Essentials 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 (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 and Integrity 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

#### HP Insight Software Media Kit

HP Insight Software Media Kit

436222-B22

**NOTE:** The ICM V2.30 or higher media kit includes the HP Insight Dynamics - VSE Suite, HP Virtual Connect Enterprise Manager, HP Insight Control and HP Systems Insight Manager.

The ICM software can be downloaded from the web at:

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

**NOTE:** The Insight Control Management DVD media comes without licenses. Contains Insight Manager and Essentials software products and components licensed by Insight Control Management suites. Uses an integrated installer to perform quick and accurate software installation and updates.

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#### Service and Support

**NOTE:** HP Insight -Capacity Advisor Consolidation Software includes 24x7 Technical Support and Update Service (Support and Updates last for one year after first activation of a flex license group). The following Service additions are also available.

HP Insight Dynamics - VSE Installation & Startup Service

UF819E

HP Insight Control Environment Installation & Startup Service

UF369E

### Technical Specifications

#### Managed servers

#### Managed Servers:

- Hardware (running the supported operating systems)
  - HP ProLiant ML/DL 100/300/500
  - HP ProLiant c-Class BladeSystem Servers
  - Non-HP x86 running Windows: Dell (2000, 6000, r800, r900); IBM (eServer e300 series, x300 series, and Blade HS and LS servers); and Hitachi (Blade Symphony and HA8000)
  - HP Integrity Servers and Blades
  - HP 9000 Servers
- Operating Systems (running on the supported hardware platforms, as applicable)
  - Windows Server 2008 Standard
  - Windows Server 2008 Standard (x64)
  - Windows Server 2008 Enterprise
  - Windows Server 2008 Enterprise (x64)
  - Windows 2003 R2 Standard SP2
  - Windows 2003 R2 Standard SP2 (x64)
  - Windows 2003 R2 Enterprise SP2
  - Windows 2003 R2 Enterprise SP2 (x64)
  - Windows 2003 Standard SP2
  - Windows 2003 Standard SP2 (x64)
  - Windows 2003 Enterprise SP2
  - Windows 2003 Enterprise SP2 (x64)
  - RedHat Linux-- RH EL 5 x86, Update 1
  - RedHat Linux-- RH EL 5 AMD64/EM64T, Update 1
  - RedHat Linux-- RH EL4 x86, Update 6
  - RedHat Linux-- RH EL4 AMD64/EM64T , Update 9
  - SUSE Linux - SLES 10 x86, SP1
  - SUSE Linux - SLES 10 AMD64/EM64T, SP1
  - SUSE Linux - SLES 9 x86, SP4
  - SUSE Linux - SLES 9 AMD64/EM64T, SP4
  - Windows Server 2008 Standard Japanese
  - Windows Server 2008 Enterprise Japanese
  - Windows 2003 Server SP2 Japanese
  - Windows 2003 Enterprise SP2 Japanese
  - Windows 2003 Server SP2 French
  - Windows 2003 Enterprise SP2 French
  - Windows 2003 Server SP2 Italian
  - Windows 2003 Enterprise SP2 Italian
  - Windows 2003 Server SP2 German
  - Windows 2003 Enterprise SP2 German
  - Windows 2003 Server SP2 Spanish
  - Windows 2003 Enterprise SP2 Spanish
  - Windows Server 2008 Itanium-based (IA64)
  - Windows 2003 DataCenter IA64
  - Windows 2003 Enterprise IA64
  - HP-UX 11i (11.11)
  - HP-UX 11i v2 Update 2 (11.23 PI - IA/PA)
  - HP-UX 11i v3 (11.31 IA/PA)
  - HP-UX 11i Japanese
  - HP-UX 11i v2 Update 2 (11.23 PI - IA/PA) Japanese
  - HP-UX 11i v3 (11.31 IA/PA) Japanese

### Technical Specifications

- Red Hat EL 5 IPF
- Red Hat H EL4 IPF
- SUSE Linux - SLES 10 IPF
- SUSE Linux - SLES 9 IPF
- Virtualization Platforms (HP hardware only; Requires HP's Virtual Machine Management software (VMM) for HP ProLiant)
  - VMWare ESX v3.0.1 or later (running guest OS Windows 32)
  - VMWare ESX v3.0.1 or later (running guest OS Linux 32)
  - VMWare ESX 3.5 w/ Console (Update 1 or later required)"
  - VMWare ESXi 3.5 embedded hypervisor
  - Microsoft Virtual Server
  - Microsoft Hyper-V
  - HP Integrity Virtual Machines Windows (running guest OS Windows)
  - HP Integrity Virtual Machines Linux (running guest OS Linux)
  - HP Integrity Virtual Machines HP-UX (running guest OS HP-UX 11i v2)
  - HP Integrity Virtual Machines HP-UX (running guest OS HP-UX 11i v3)

#### 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
- 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 EnterpriseVirtualization Platforms
  - Virtualization Platforms: VMware ESX Server 3.0.1 , 3.0.2, 3.03, or 3.5 Update 1 or later guest running supported Windows operating system HP SIM 5.3
- Servers with at least 2 cores, min processor speed 1.6 GHz (2GHz 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:
  - IE6 SP2 or IE7
  - FireFox 1.5 or 2.0

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

- HP ProLiant ML/DL
- HP ProLiant Blades
- HP Integrity Servers
- HP Integrity Blades

### Technical Specifications

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

#### Other product information

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

- Product Datasheet
- General FAQ
- White Papers

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

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

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

**HP Virtual Machine Management** For more information on HP Virtual Machine Management visit: <http://www.hp.com/go/vmm>

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

**HP Virtualization with Microsoft** For more information on HP Virtualization with Microsoft visit: <http://www.hp.com/go/microsoft>

#### 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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