

### Overview

The **HP Insight Foundation Suite for ProLiant** was formerly known as the HP ProLiant Essentials Foundation Pack and ships standard with HP ProLiant ML and DL 300, 500, 700 and BladeSystem c-Class BTO servers and as an orderable option on CTO servers. It provides a complete server maintenance solution by combining the Firmware Maintenance CD with two **SmartStart** CDs (one supporting 32 bit operating systems and one supporting 64 bit operating systems) and the Management DVD that includes HP Systems Insight Manager (SIM).

The HP Insight Foundation Suite for ProLiant keeps systems up-to-date, and its products are available as **free downloads** as well as for **purchase**. These tools and utilities provide management solutions that are designed to simplify a server's installation, configuration, and maintenance throughout the entire server life-cycle and provide customers with higher levels of operational efficiency and highly reliable solutions.

In an effort to support HP's commitment in reducing our overall environmental impact, the HP Insight Foundation Suite for ProLiant is now available as a selectable option for the HP ProLiant 300/500/700 Generation (G6) series servers and BladeSystems servers as well as newer servers at the time the servers are ordered through CTO. This will allow customers the flexibility to order the appropriate number of media kits that best meet their needs and eliminate receiving unnecessary duplicates. No change will be made to prior generations. BTO products will continue to ship with the HP Insight Foundation Suite for ProLiant.

### What's New

- Kit has been updated with Firmware Maintenance CD version 8.70
- SmartStart 8.30 and the Firmware Maintenance CD version 8.70 have been updated to include the HP USB Key Utility version 1.30 which is a Windows application that allows users to copy the SmartStart CD and the Firmware Maintenance CD contents from to a portable USB flash drive. Users may then boot and run the CD applications from a USB flash drive rather than from the CD. Especially beneficial in headless-server operations
  - This USB Key Utility is also now on both the SmartStart and Firmware Maintenance CDs as well as on the web.
  - Key benefit of using this utility is that your deployment CDs can be put on a single USB Key and you can customize the exact components you want
- SmartStart is significantly updated with an easy to navigate, fresh GUI suitable for both new users and SMB

### HP ProLiant Software Ordering Information

Keep up-to-date with the latest software for your ProLiant servers by purchasing one of the following options:

HP Insight Foundation Suite for ProLiant Pack Single Release 356604-B21

**NOTE:** Includes the current release of the following CDs: SmartStart, Firmware Maintenance CD and Management DVD.

HP Insight Foundation Suite for ProLiant Single Release Software, FIO 534516-B21

**NOTE:** This software is for Factory Integration Only (FIO).

**NOTE:** Images of SmartStart and Firmware Maintenance CDs are available at HP.com support site - <http://www.hp.com/cgi-bin/hpsupport/index.pl>. Images of the Management DVD are available at Software Depot - HP Insight Foundation Suite for ProLiant - Management DVD.

### Overview

### Websites

To ensure that customers continue to have access to the latest updates, the contents of this kit can also be downloaded from HP at the following HP web sites:

- HP Insight Foundation Suite for ProLiant: (<http://www.hp.com/go/foundation>)
- SmartStart CD: (<http://www.hp.com/cgi-bin/hpsupport/index.pl>) and <http://www.hp.com/servers/SmartStart>
- Management DVD: (<http://www.hp.com/go/foundation>)
- The Firmware Maintenance CDs delivers a collection of firmware for ProLiant servers and options: (<http://www.hp.com/go/foundation>)
- ProLiant Support Packs: (<http://h18013.www1.hp.com/products/servers/management/psp/index.html?jumpid=servers/psp>)

These Web sites include the following information and more:

- What's New information
- Subscription information
- Support Information
- Links to the latest ProLiant Software and Driver download pages

### Benefits

- **Integral part of the HP server experience:** Delivered standard with HP ProLiant ML and DL 300, 500, 700 and BladeSystem BTO servers and as an orderable option on CTO servers. The HP Insight Foundation Suite provides convenient access to the suite of Intelligent Manageability products that are the essential management tools designed to simplify IT management in a dynamic and demanding 7x24x365 environment.
- **Reliable configuration:** By assisting with operating system installations, integrating server support software, and preventing configuration errors, SmartStart ensures consistency, and maximizes reliability and system uptime. SmartStart leverages embedded system utilities that provide either customized configuration or intelligent defaults for server hardware and array controller configuration.
- **Optimized configuration:** SmartStart integrates optimized ProLiant drivers with every assisted OS installation to achieve the maximum performance for your ProLiant server.
- **Manageable-ready system:** SmartStart completes your ProLiant server setup with installation of management agents, ready to be managed with HP Systems Insight Manager (SIM).
- **Firmware Maintenance:** Firmware Maintenance CD Powered by HP Smart Update Manager (HP SUM) provides the consolidated set of firmware updates for use by customers allowing for standardization and/or restoration of specific firmware versions on supported ProLiant servers or server options.
- **HP Insight Management Agents and WBEM Providers:**
  - Based on SNMP industry standard technology that enables the management of servers in enterprise, SMB, and Cloud Computing environments.
- **HP Insight Management WBEM Providers:** Supports Windows Server 2003/2008. These providers:
  - Based on industry standard technologies for accessing management information in an enterprise environment.
  - Supply system management data through the Windows Management Instrumentation (WMI) framework for ProLiant server platforms and options
  - Now available as an alternative to SNMP management agents
  - Supported by HP-SIM 5.2 or greater
  - Extend the Common Information Model (CIM) defined by the DMTF to provider a rich set of standards based management data that is specific to ProLiant systems.
  - Leverage the rich set of base-level instrumentation provided by the system management controllers and drivers.
  - Deliver in-depth hardware management, inventory, system state, and event notifications.
  - For more information go to: <http://www.hp.com/go/HPwbem>

### Standard Features

#### SmartStart

SmartStart is an essential single-server deployment tool that simplifies HP ProLiant server setup, providing a repeatable way to deploy reliable and consistent single-server configurations. SmartStart uses embedded ROM-based setup utilities (RBSU) to configure server and array controller hardware. Additionally, it assists with the OS installation process by preparing the system for installing "off-the-shelf" versions of leading operating system software and automatically integrating optimized HP ProLiant server support software drivers, utilities and management agents, known as ProLiant Support Packs. SmartStart users enjoy the following benefits:

- An easy-to-use, intuitive graphical interface that guides you through preparing your system for the OS installation process.
- Integration of key server software drivers and management agents through ProLiant Support Packs with every assisted installation.
- Dependency and validity checks to ensure that all supported ProLiant software can be installed.

#### Assisted OS Installation (For Windows)

To optimize the performance of your hardware platform, use the SmartStart assisted installation to help you prepare your system for the operating system installation process. Using an assisted installation, SmartStart enables you to install the operating system using the vendor-supplied CDs, and provides automated installation of server support software using ProLiant Support Packs (PSPs).

#### Manual OS Installation

If you prefer not to utilize the assisted installation, you may either use ROM-based setup (in RBSU-enabled systems), Option ROM Array Configuration (ORCA) or SmartStart to configure your server hardware before OS installation. After the operating system has landed, apply the latest PSP obtained from SmartStart by launching the Windows or Linux Autorun or by downloading it from: <http://www.hp.com/support> or from downloads tab at <http://www.hp.com/go/foundation>.

#### Autorun Features for Software Updates

The Autorun feature of the SmartStart and ProLiant Firmware Maintenance CDs are available for Windows and Linux environments. Autorun provides access to support software and useful product information also contained on the CD.

- To launch Autorun on a Windows system, either insert the CD in a CD-ROM drive and Autorun will automatically launch, or launch by executing `_autorun\autorun_win.exe` from the CD.
- To launch Autorun on a Linux system, insert the CD in a CD-ROM drive, log on to the root and mount the CD and run the Autorun file.

#### ProLiant Support Packs

The ProLiant Support Packs (PSPs) are an integral component for optimizing and managing your HP ProLiant server. Windows PSPs are powered by HPSUM even though they are on the SmartStart CD. PSPs help you maintain the software versions on your HP ProLiant servers and are operating system specific bundles of ProLiant optimized drivers, utilities, and management agents for Windows® Server 2003/2008 and Linux. These bundles of software are tested and released concurrently with HP SmartStart CD to insure proper installation and functionality. PSPs can be installed in a variety of ways:

- Using SmartStart assisted installation for Windows.
- Launching the installation from the Windows and Linux auto runs on the SmartStart CD
- Using the deployment utilities that are provided with the PSPs when

### Standard Features

downloaded from: <http://www.hp.com/servers/psp> or the SmartStart CD.

New drivers contained in release 8.30 are:

- HP NC522m Dual Port 10GbE BL-c Adapter
- HP StorageWorks x64 and x86 Brocade Storport Fibre Channel Host Bus Adapter Driver for Microsoft Windows Server 2003 and Microsoft Windows Server 2008

ACPI-Compliant Power Meter Device Identifier for Windows Server 2003/2008

#### Server Setup and Maintenance

#### Perform Server Setup through ROM-based embedded utilities

SmartStart uses ROM-based setup utilities (RBSU) to perform server and array hardware configuration. For legacy, non-RBSU server systems use SmartStart 5.50 or greater to perform server deployment. SmartStart is available for download at: <http://www.hp.com/go/foundation> off of the download tab.

- The ROM-Based Setup Utility (RBSU) performs a wide variety of server configuration activities: viewing system information to prepare the system for installation of the OS, configuring system devices and installed options and selecting the primary boot controller. RBSU is accessible by pressing F9 key after the system has booted.
- The Option-ROM Configuration for Arrays utility (ORCA) allows users to configure HP array controllers. ORCA is accessible by pressing F8 key after the system has booted. It allows the user to create and delete logical drives, set interrupts, and set boot controller order.
- The enhanced auto-configuration process will automatically configure the system for RAID selection without the user having to launch RBSU and ORCA. The RAID defaults are based on the following number of drives: 1 drive - RAID 0, 2 drives - RAID 1, 3-6 drives - RAID 5. The user always has the option of configuring the server through RBSU and ORCA.
- Dynamic Setup Support enables the operating system to automatically find necessary boot drivers on the Virtual Install Disk, to complete the OS installation without user intervention. This feature is only supported for Windows Server 2003.
- Selected set of system Diagnostics and Inspect utilities is available by pressing F10 key after the system has booted. F10 launches the System Maintenance Utilities.
- **Insight Diagnostics** - performs tests on system components. Insight Diagnostics displays information about a server's hardware and software configuration. You can perform hardware and software tests on the following subsystems: Processor, Input devices, Communication ports and devices, Storage devices, Graphics, Memory, Multimedia devices and now the remote management processor (iLO, RILOE II).
- **Array Configuration Utility (ACU) and Array Diagnostics Utility (ADU)** have been combined into a single utility that enables you to configure and perform device tests on newly added Smart Array controllers and associated storage devices. It is a web-based tool that has a configuration wizard that allows you to configure your Smart Array

#### Server and Systems Maintenance

#### Perform Server Maintenance

### Standard Features

controller, add additional disk drives to an existing configuration or reconfigure your existing disk drive array.

- **Erase Utility** - provides options to clean different areas of the system: attached drives, non-attached drives, BIOS, and non-volatile RAM (NVRAM)

#### Firmware Maintenance CD

The HP ProLiant Firmware Maintenance CD Powered by HP Smart Update Manager (HP SUM) provides a collection of firmware for your ProLiant servers and options. Beginning with the Firmware Maintenance CD 7.50, it includes the HP Smart Update Manager (HP SUM) utility that enables you to deploy firmware components from a single, easy-to-use interface that is supported in both Microsoft® Windows® and Linux environments. This utility enables legacy support of existing firmware components while simplifying the firmware deployment process. The CD also provides installation logic and version control that check for dependencies, installing only the correct updates for optimal system configuration. The ProLiant Firmware Maintenance CD can be downloaded at no cost from the HP website. The HP Smart Update Manager utility is available from the ProLiant Firmware Maintenance CD.

The Firmware Maintenance CD and its contents should be used only by individuals who are experienced and knowledgeable in their use. Before using HP Smart Update Manager to update firmware, be sure to back up the target server and take all other necessary precautions so that mission-critical systems are not disrupted if a failure occurs. HP Smart Update Manager stores host and group information from session to session. However, user names, passwords, and existing credentials are not stored.

You can run the Firmware Maintenance CD either online or offline. When performing an online deployment, you must boot the server from the operating system that is already installed and running. When performing an offline deployment, you can boot the server from the Firmware Maintenance CD or a USB drive key that contains the Firmware Maintenance CD contents.

#### HP Smart Update Manager (HP SUM)

HP Smart Update Manager deploys smart firmware components on a local host or one or more remote hosts. The remote hosts must be online and running the same operating system as the system running HP Smart Update Manager. For example, when the remote hosts are running Linux, the HP Smart Update Manager must also be running on a Linux operating system.

The HP Smart Update Manager does not support cross-platform deployments (for example, deployments from Linux systems to Windows® systems).

#### Online Deployment

HP Smart Update Manager supports online deployments of all ROM flash components for both Windows® and Linux including:

- HP Onboard Administrator for HP c-Class BladeSystem
- System hard-drive (SAS and SATA)
- Array-controller
- Lights-Out Management ROM flash components

**NOTE:** The Onboard Administrator is supported only in online deployments.

#### Offline Deployment

Offline deployment HP Smart Update Manager supports offline deployments of all ROM flash components including:

- System hard-drive
- Array-controller
- QLogic and Emulex Fibre Channel HBA
- Lights-Out Management ROM flash components

### Standard Features

<b>Multiple Host Installations Using HP SUM GUI</b>	HP Smart Update Manager provides an easy-to-use graphical interface that enables deployment and maintenance of firmware components easily. HP SUM builds an inventory of available updates via a series of screens.
<b>HP USB Key Utility</b>	<p>The HP USB Key Utility is a Windows® application that enables you to copy the Firmware Maintenance CD and SmartStart CD contents to a USB memory key. You can then run this application from a USB key instead of from the CDs to simplify server deployment. Users may then boot and run the CD applications from a USB flash drive rather than from the CD. Especially beneficial in headless-server operations.</p> <p>This USB Key Utility is also now on both the SmartStart and Firmware Maintenance CDs as well as on the web. Key benefit is that your deployment CDs can be put on a single USB Key using this utility and you can customize the exact components that you want.</p>
<b>Trusted Platform Module (TPM)</b>	The TPM, when used with BitLocker, measures a system state and, upon detection of a changed ROM image, restricts access to the Windows® file system if the user cannot provide the recovery key. HP Smart Update Manager detects if a TPM is enabled.
<b>Scripted Deployment</b>	The HP Smart Update Manager command line interface (CLI) enables you to script custom installations.
<b>Deploy Firmware and Software Simultaneously</b>	An advanced feature of the HP Smart Update Manager utility is that it enables you to deploy firmware and software components simultaneously. Note: Only Windows® online deployments support deploying firmware and software components from Windows® PSPs and server blade bundles simultaneously.

### Systems Insight Manager (SIM)

HP Systems Insight Manager (HP SIM) is the foundation for the HP unified server-storage management strategy. HP SIM is a hardware-level management product that supports multiple operating systems on HP ProLiant, Integrity and HP 9000 servers, HP StorageWorks MSA, EVA, XP arrays, and third-party arrays. Through a single management view of Microsoft® Windows®, and other OSes; HP SIM provides the basic management features of system discovery and identification, single-event view, inventory data collection, and reporting. The core HP SIM software uses Web Based Enterprise Management (WBEM) to deliver the essential capabilities required to manage all HP server platforms.

HP Systems Insight Manager is the foundation for HP's Insight Foundation Suite and Insight Control server management strategy and is available from the Management DVD and the web. It also offers a foundation of unified infrastructure management from HP:

- Enhances your ability to troubleshoot complex problems that span server and storage infrastructure
- Provides a single source for server and storage asset information
- Provides a comprehensive selection of value-added plug-ins for extended management HP ProLiant, Integrity, and StorageWorks platforms.
- Enables effective cross-training across domains of expertise
- Allows your IT organization to focus less on daily maintenance and more on meeting future business needs

For more information on HP SIM, go to <http://h18013.www1.hp.com/products/servers/management/hpsim/index.html>.

### Standard Features

<b>HP Insight Remote Support Advanced</b>	Enhances HP SIM's event monitoring capabilities by sending automatic hardware event notification securely to HP, including entitlement, acknowledgement and status returns. It extends the intelligent analysis and diagnosis of events, optimizing availability and reducing manual intervention. Available as a feature of systems under warranty or contract obligation at no extra cost.
<b>Warranty and Contract Support</b>	Ability to automatically retrieve and download warranty and contract details. Provides predefined and custom reports. Automatic notification 90, 60, and 30 days before warranty or contract expires. Needs HP Insight Remote Support Advanced to be installed.
<b>Easy and rapid installation</b>	First time Wizard provides step-by-step, online guidance for performing the initial configuration of HP SIM, and helps you configure HP SIM settings on the Central Management Server (CMS).
<b>Automatic discovery and identification</b>	Automatically discovers and identifies devices attached to the network. Use Discovery Filters to prevent discovery of unwanted device types.
<b>Fault management and event handling</b>	Provides proactive notification of actual or impending component failure alerts. Automatic Event Handling allows users to configure policies to execute scripts, forward events, and to notify appropriate users of failures via e-mail, pager, or SMS gateway.
<b>Consistent multi-system management</b>	A single command from a CMS can initiate a task on multiple systems or nodes, eliminating the need for tedious, one-at-a-time operations on each system.
<b>Secure remote management</b>	Leverages OS security for user authentication and Secure Sockets Layer (SSL) and Secure Shell (SSH) to encrypt management communications.
<b>Role-based security</b>	Allows effective delegation of management responsibilities by giving systems administrators' granular control over which management operations users can perform on selected devices.
<b>Tool definitions</b>	Simple XML documents that allow customers to integrate off-the-shelf or custom command line and web-based applications or scripts into the HP SIM user interface.
<b>Data collection and inventory reports</b>	Performs comprehensive system data collection and enables users to quickly produce detailed inventory reports for managed devices. Save reports in multiple formats for easy incorporation into popular reporting packages.
<b>Snapshot comparisons</b>	Allows users to compare configuration snapshots of up to four different servers or configuration snapshots of a single server over time.
<b>HP Version Control</b>	Automatically downloads the latest BIOS, driver, and agent updates for ProLiant and Integrity servers running Windows and Linux. Identifies systems running out-of-date systems software and enables system software updates across groups of servers.
<b>Two user interfaces</b>	HP SIM provides a web browser graphical user interface (GUI) and a command line interface (CLI) to make it easy to incorporate HP SIM into your existing management processes.
<b>Support for HP-UX Serviceguard clusters</b>	HP-UX Serviceguard clusters are recognized and displayed in the HP SIM GUI. HP Serviceguard Manager is opened by clicking a Serviceguard cluster in a search list and provides information on the clusters.
<b>Web-Based Enterprise Management (WBEM) indications</b>	Subscribe and unsubscribe to WBEM indications for HP-UX, Linux, and Storage Management Initiative Specification (SMI-S) devices through the GUI or through the command line interface (CLI).

### Standard Features

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#### Service and Support

HP offers a complete choice of services to ensure the success of your ProLiant server deployment program. For more information on any of these below, go to: <http://www.hp.com/servers/smartstart>.

- Warranty - HP will replace defective delivery media for a period of 90 days following the date of purchase of your server.
  - Startup technical software support - Available at no additional charge by calling HP Support up to 90 days from the date of purchase of your server. Phone support is available to assist customers with installation and set-up and standard usage questions. Worldwide numbers for HP Support are available at: [http://www.hp.com/hps/carepack/services/cp\\_sw\\_technical.html](http://www.hp.com/hps/carepack/services/cp_sw_technical.html).
  - SmartStart Support Forum - 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.
  - Software and Drivers download: (<http://www.hp.com/cgi-bin/hpsupport/index.pl>) or <http://www.hp.com/go/foundation> - download tab)
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#### Get Proactive Notification of Upcoming Software with Subscriber's Choice

Proactive delivery of Product Change Notifications (PCNs), Customer Advisories (CAs), and software driver alerts are delivered through Subscriber's Choice. We encourage you to begin taking advantage of the feature-rich notifications delivered from HP Subscriber's Choice at: <http://www.hp.com/go/subscriberschoice>.

### Operating System and ProLiant Server Support

#### Operating Systems and Virtualization Software Support for ProLiant Servers

The following released operating systems are supported by SmartStart for an assisted installation and by ProLiant Support Packs

- Microsoft Windows Server
- Microsoft Windows Server Hyper-V
- Red Hat Enterprise Linux (RHEL)
- SUSE Linux Enterprise Server (SLES)
- Oracle Enterprise Linux (OEL)
- Solaris
- NetWare
- VMware
- Citrix XenServer

**NOTE:** For more information on HP's Certified and Supported ProLiant Servers for OS and Virtualization Software and latest listing of software drivers available for your server, please visit our Support Matrix at: <http://www.hp.com/go/ossupport>. Microsoft Windows Server support includes support for multiple Windows OSes (Windows R2, Windows 2008, Windows SBS, etc) and the support matrixes show specific OSes for specific servers supported.

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#### Server Support

For Server Deployment:

- Use SmartStart 7.x and later for assisted installation and server maintenance operations on HP ProLiant BL Server Blades and HP ProLiant ML and DL 300, 500 and 700 series RBSU-based systems. Use SmartStart 5.50 for configuring and installing operating systems on pre-RBSU systems.

For Software Updates:

- Access the latest software and drivers from via: <http://www.hp.com/support> Download the latest version of HP Systems Insight Manager from Download the latest version of HP Systems Insight Manager from: <http://www.hp.com/go/hpsim>.

For an up-to-date list of supported ProLiant servers please view the following URL: <http://www.hp.com/servers/smartstart> - support matrixes

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### Operating System and ProLiant Server Support

#### Software Support

HP Care Pack offerings combine comprehensive Insight Software support with convenient access to software updates

#### Expert support for performance, availability, and productivity optimization

Insight Software technical support brings timely assistance and trustworthy advice on issues such as product features and use, problem diagnosis and resolution, and software defect identification. Service highlights include:

- **Ready access to technical resources** - Connect with experienced HP IT Response Center engineers via telephone, electronic communication, or fax for help with and Insight Software implementation or operations problems.
- **Problem analysis and resolution** - HP Services provides corrective support to resolve identifiable and reproducible Insight Software product problems, and to help you identify problems that are difficult to reproduce. You can also receive help with trouble-shooting and setting configuration parameters.
- **Software features and operational support** - HP provides information on the latest Insight Software features and known problems and solutions, plus operational advice and assistance.
- **Escalation management** - Established escalation procedures enlist specialized expertise from HP and selected third-parties.
- **Installation advisory** - Advisory support is available for help with installing and updating standalone or networked Insight Software products.
- **Choice of coverage windows** - Service is available 13x5 Monday-Friday or 24x7.

#### Productivity-enhancing software updates

This multifaceted service also brings updated Insight Software products, patches, and technical manuals as they become available. And it includes licensing to use and copy the new updates. Subscription-based purchasing gives you substantial savings vs. the cost of individual updates.

#### Service highlights include:

- **Software updates** - Complete Insight Software product and documentation updates are made available to your system manager.
- **Software licensing** - You receive a license to use and copy updates for all systems covered by your original software license.
- **Electronic software information** - Access HP's electronic support facility for Insight Software patches, a symptom-solution database, product descriptions, specifications, technical literature, and more

Care Packs services for Insight Software Operating Environments provide support for the following products.

**NOTE:** Supported products may change over time, the list of products:

- All Insight Control suites
- HP Systems Insight Manager
- HP iLO Advanced Pack

### Operating System and ProLiant Server Support

#### 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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