HP and Red Hat are announcing a specially priced software bundle for customers deploying Red Hat Linux on HP BladeSystem servers. HP will offer Red Hat Enterprise Linux and management bundle for HP BladeSystem™ that combines multiple instances of RHEL 4 OS and Red Hat Management & Provisioning modules, and the Red Hat Network Proxy server software – all under one subscription number. In addition, HP will include tools specifically developed for Red Hat Network (RHN) to ease deployment of multiple servers within an HP BladeSystem enclosure.

The bundle marks the first time HP will offer RHN worldwide, demonstrating HP’s commitment to building a Linux solution stack using Red Hat management components. The architecture of RHN contains management tools to help administrators keep systems up-to-date with the latest Red Hat security patches and errata changes. RHN also allows for rapid provisioning of HP BladeSystem servers as additional blades are brought online.

What's New

The Red Hat Enterprise Linux and management bundle for HP BladeSystem™ combines 8 instances of the RHEL 4 O S, 8 instances of the Red Hat Management & Provisioning modules, and the Red Hat Network (RHN) Proxy server software. All components of the bundle are registered under the same subscription number.

HP has specially priced this bundle to help customers deploy Red Hat Enterprise Linux on HP BladeSystem servers. HP also includes additional tools to ease deployment of multiple servers within an HP BladeSystem enclosure. HP BladeSystem Integration Toolkit for RHN v1.0 includes:

• Channel Setup Guide allowing customer to create their own HP channel in Red Hat Network providing “Up2date” access to HP’s drivers and management stack for Linux

The Red Hat Management & Provisioning modules manage the complete life cycle of a Linux infrastructure. Deploy, configure, manage, update, and then re-deploy your Linux systems, all from a single console – complete with all the necessary enterprise functionality and controls.

Red Hat Management module capabilities include:

• Systems grouping: Manage a group of systems as easily as you would manage a single system.

• Systems permissions: Group your systems according to your needs and then assign permissions to different administrators.

• Scheduled actions: Schedule an errata update for a system or group, taking advantage of scheduled downtime for errata maintenance.

• System search: Search systems or workgroups by packages, errata, or systems specifications. Advanced search offers even more granularity.

• Package profile comparison tools: Compare two systems directly against each other, or build a package profile of your own to compare against. Results let you see the differences on both machines.
Red Hat Enterprise Linux and management bundle for HP BladeSystem™

Red Hat Provisioning module capabilities include:

- **Bare metal provisioning**: Automatically provision a system using RH Kickstart to deploy OS, packages, and activation keys (groups, channels, policies and permissions) of your choice.

- **Existing state provisioning**: Automatically provision a system to take on the state of an existing system or a predefined installation with a simple point and click.

- **Multi-state rollback (includes snapshot based recovery)**: Records the state of all your systems every time an action is applied, serving as a repository for state information. Multi-state rollback allows your system to return to a previous state or configuration instantly.

- **Configuration management**: Easily configure text files for individual or groups of systems. Combine with Kickstart actions to enable a complete provisioning action.

- **RPM-based application provisioning**: More than just OS provisioning, Red Hat Network allows application-based provisioning for all RPM-based applications – completely integrated with the rest of RHN.

- **Kickstart configuration writer**: Write Kickstart configuration scripts with the Provisioning module, or point to an existing system and have RHN create the script to provision that system.

**Ideal environment**

The Red Hat Enterprise Linux and management bundle for HP BladeSystem™ is ideal for customers who want to manage Linux servers. For customers who want to manage both Linux and non-Linux servers from a Windows environment, HP’s Rapid Deployment Pack is available.

**Key benefits**

- Combines twenty-five (25) different software components under one subscription number.

- HP includes tools specifically developed for Red Hat Network (RHN) to ease deployment of multiple servers within an HP BladeSystem enclosure.

- The architecture of RHN contains administration tools to help administrators keep systems up-to-date with the latest Red Hat security patches and errata changes, as well as providing for rapid provisioning of HP BladeSystem servers.

- HP offers one stop shopping and single point of contact for customers deploying hardware and software in a Linux environment, with extensive services and support available worldwide.
Additional specs
There are three network architectures for the Red Hat Network:

Hosted model
The Hosted model is part of the standard Red Hat Network subscription. Servers receive updates individually from the Red Hat Network. Each server must have a subscription for Red Hat Network Update Entitlement. No centralized control capability. Features include:
- Simple Web user interface
- Priority email notification
- Errata information
- RPM dependency checking

Proxy model
When a Red Hat Proxy Server is introduced into the environment, content from the Red Hat Network is cached locally, reducing external network bandwidth consumption. Each server must have a subscription for Red Hat Network Update Entitlement (this is part of the OS subscription that comes with the Red Hat Enterprise Linux and management bundle for HP BladeSystem™). Features include:
- Custom channels
- Local package caching
- Single port access

Satellite model (available 4Q 05)
Red Hat Satellite Server can be added in place of the Proxy Server. With Satellite Server, all Red Hat Network functionality is hosted within the customer environment. Connection back with RHN is only required for update acquisition. Each server must have a subscription for Red Hat Network Update Entitlement. Features include:
- Local database repository
- Channel cloning and management tools
- Channel permissions
- Errata cloning and management
- Complete off-network capability
- PXE boot provisioning
- Integrated network install tree
- Configuration management profiles

Enhanced features are available for the Provisioning Tool when you use the Satellite Server RHN architecture. These include base metal PXE boot provisioning, integrated network install tree, and configuration management profiles.
## Q&A’s

### Q. Can I purchase this bundle for HP ProLiant ML/ DL servers or HP’s Integrity servers?

A. This specially priced bundle is currently only available for HP BladeSystem servers.

### Q. How is this different from HP’s current provisioning tool for Linux?

A. HP and Red Hat offer complementary products for management of HP ProLiant servers running Red Hat Enterprise Linux. Both HP’s Rapid Deployment Pack and the RHEL bundle provide automated and centralized deployment and maintenance of servers running Red Hat Enterprise Linux.

The Red Hat Linux Enterprise Linux bundle is ideal for customers who want to manage Linux servers. For customers who want to manage both Linux and non-Linux servers from a Windows environment, HP’s Rapid Deployment Pack is available.

### Managed Platforms

<table>
<thead>
<tr>
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<tr>
<td>Heterogeneous systems running Red Hat Enterprise Linux or Solaris (although some functions only available for x86-architecture Linux systems)</td>
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### Coverage

<table>
<thead>
<tr>
<th>Managed Platforms</th>
<th>Coverage</th>
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<tr>
<td>HP platforms primarily with operating system coverage for Red Hat Enterprise Linux, SUSE Linux Enterprise Server, Microsoft Windows 2000, Windows XP &amp; Windows Server 2003, HP-UX, NSK and, to a lesser extent, NetWare, OpenVMS and Tru64 Unix. Support for third party hardware through industry standards.</td>
<td>Detailed hardware knowledge of servers &amp; server blades, blade infrastructure, storage, printers, desktops, portables and handhelds.</td>
</tr>
<tr>
<td>Only within the context of the operating system; no hardware platform knowledge</td>
<td></td>
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### Hosting

<table>
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<tr>
<th>Managed Platforms</th>
<th>Hosting</th>
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<tr>
<td>Some functions hosted on Linux; others may require another operating system to provide functionality to a Linux target.</td>
<td>At Red Hat corporate or in the customer’s environment hosted on Red Hat Enterprise Linux.</td>
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</table>

### Management

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<th>Managed Platforms</th>
<th>Management</th>
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<tr>
<td>Comprehensive fault management, scheduled actions, asset inventory, reporting and notifications. Optional features for automation, performance, virtual machine management as well as service-level and business-process management.</td>
<td>At the operating system level only and includes scheduling actions, reporting on the operating system and what is installed</td>
</tr>
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</table>

### Provisioning

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<tr>
<th>Managed Platforms</th>
<th>Provisioning</th>
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<tbody>
<tr>
<td>True bare-metal installations via script or image; optional end-to-end provisioning incorporates access to SAN and VLAN as part of process.</td>
<td>Scripted installations on prepared hardware through Kickstart scripts; Kickstart profiler for customization</td>
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</table>

### Updates

<table>
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<tr>
<th>Managed Platforms</th>
<th>Updates</th>
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<tbody>
<tr>
<td>Incorporates vulnerability scanner along with update distribution; not limited to RPM format. Requires a current Red Hat Network Update subscription for every system to which updates are distributed.</td>
<td>Uses basic 'up2date' infrastructure to distribute new or updated RPMs. Requires a current Red Hat Network Update subscription for every system to which updates are distributed</td>
</tr>
</tbody>
</table>
**Q. Will this work with other HP ProLiant Essential management tools?**

A. The RHEL bundle from HP provides the ability to auto-detect and configure HP ProLiant Integrated Lights Out (iLO) remote management that comes standard with every HP BladeSystem server.

**Q. How is this different from HP’s current provisioning tool for Linux?**

A. HP and Red Hat offer complementary products for management of HP ProLiant servers running Red Hat Enterprise Linux. Both HP’s Rapid Deployment Pack and the RHEL bundle provide automated and centralized deployment and maintenance of servers running Red Hat Enterprise Linux.

The Red Hat Linux Enterprise Linux bundle is ideal for customers who want to deploy Red Hat Linux operating systems to servers and prefer the Red Hat Network method of deployment. The ProLiant Essentials Rapid Deployment Pack Linux Edition is more hardware-centric in its deployment tasks (e.g. associating tasks to a blade slot). For customers who want to deploy both Linux and non-Linux servers from a Windows environment, RDP WE is available.
Q. HP already has management software such as HP Systems Insight Manager, ProLiant Essentials, Rapid Deployment Pack, and HP OpenView. What is the benefit of using this bundle?

A. HP is recognized as having industry leading management products that support a wide range of customer environments. In addition, HP supports third party solutions to extend that range of options for customers even further.

HP and Red Hat offer complementary products for deployment of HP ProLiant servers running Red Hat Enterprise Linux (RHEL). Many customers have already chosen to deploy using the Red Hat Network method. This bundle makes it easy for those customers to acquire subscriptions for their HP BladeSystem.

The Red Hat Linux Enterprise Linux bundle with Red Hat Network is ideal for customers who want to deploy Red Hat Linux servers. For customers who want to manage both Linux and non-Linux servers and don’t require a solution hosted on Linux, the HP BladeSystem Management Suite (includes licenses for RDP, Performance Management Pack and Vulnerability and Patch Management Pack) may provide a better option.

HP Systems Insight Manager and Systems Management Homepage licenses are included with every ProLiant server, and it is recommended to be used in addition to the Red Hat Network features in order to track hardware, provide error reporting and give pre-failure alerts on CPUs, memory and hard drives.

Red Hat Network provides a trusted stream of content from Red Hat. Red Hat delivers all the updates and security fixes to the user’s enterprise, so you don’t need to track hundreds of open source projects. They also have robust dependency checking, so you know that an update will include all the packages needed to maintain the integrity of your applications. Red Hat Network is an enterprise-class solution for deploying all those updates to your systems. You can use RHN to group systems together and update that group just like you would a single system. This allows you to update hundreds of blades with just a few simple clicks in the RHN web interface.

Q. Is this a new version of RHEL?

A. No, RHEL 4 is the version included in the bundle. The bundle combines 8 instances of the RHEL 4 OS, 8 instances of the Red Hat Management and Provisioning modules, and the RHN Proxy server software.

Q. What is the difference between the ES and the AS bundles?

A. Red Hat Enterprise Linux ES is for small to mid-size departmental server deployments such as email, web, and file/print. Red Hat Enterprise Linux ES supports a maximum 2 cpus and 16GB memory.

Red Hat Enterprise Linux AS is for larger-scale corporate and departmental server deployments such as mission critical databases and corporate applications and supports much larger processor and memory configurations.
Q. How can customers that are running RHEL 3 take advantage of this?  
A. While the media kit is for the latest version, a subscription to RHEL is version independent. Using Red Hat Network, customers can download to version 3 if they so choose.

Q. What specific components of Red Hat Network are included?  
A. The bundle includes the Update module that comes standard with Red Hat Enterprise Linux, as well as the Provisioning & Management modules. A Red Hat Network Proxy is also included.

Q. What are the HP part numbers?

<table>
<thead>
<tr>
<th>Sold with a HP BladeSystem enclosure only</th>
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<tbody>
<tr>
<td><strong>North America:</strong></td>
</tr>
<tr>
<td>404042-B21 SW bundle: RHEL 4 U1 AS for Blades 24x7 1YR RHN</td>
</tr>
<tr>
<td><strong>World Wide:</strong></td>
</tr>
<tr>
<td>399058-B21 RHEL 4 Update 1 AS for Blades; 1 YR RHN Access</td>
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<tr>
<td><strong>North America:</strong></td>
</tr>
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Q. Who do I call for support?  
A. HP services are available for any support issues. Customers purchase a HP CarePack for incident-based and unlimited support calls.

Q. What if I have use BL3Xp blades that can get up 16 blades in one enclosure?  
A. Customers can purchase two bundles in this situation. In this case, there will be two subscription numbers for the enclosure, as each bundle provides one unique subscription number.
Q. Is this bundle available for both Intel Xeon based blades and AMD Opteron based blades?
A. Yes, this product is available to work with the entire range of HP BladeSystem servers.

Q. Does HP's indemnification still work here?
A. Yes, HP is committed to the success of its enterprise customers and to driving Linux into the enterprise. From October 1, 2003, qualified customers can obtain indemnification from HP against legal action from SCO. HP is making this offer to protect customers to continue Linux deployments plans without unnecessary risk or distraction. For more info, go to http://www.hp.com/go/linuxprotection

Q. What is the advantage of buying from HP?
A. HP offers one stop shopping and single point of contact for customers deploying hardware and software in a Linux environment, with extensive services and support available worldwide. In addition, HP includes tools specifically developed for Red Hat Network (RHN) to ease deployment of multiple servers within an HP BladeSystem enclosure.

Q. Where can I get more information?
A. North America - HP Linux Call Centre - 1-888-HPLinux (1-888-475-4689)
HP World Wide Sales and Services Directory -

Q: Is information available on your website?
A:
Linux for ProLiant
www.hp.com/go/linuxproliant

HP Services for Linux
http://h20219.www2.hp.com/services/cache/10666-0-0-225-121.html

Linux for HP BladeSystem
www.hp.com/go/linuxbladesystem

Red Hat Enterprise Linux and management bundle for HP BladeSystem
www.hp.com/go/rhel4bladebundle

WW HP & Red Hat partner site
http://www.hp.com/go/redhat
Links to support & certification matrices, software, drivers, and other information

HP ProLiant Server Management Software

HP ProLiant Advantage