



# WHAT'S NEW IN RED HAT NETWORK SATELLITE 5.4?

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## FOCUS ON LIFECYCLE MANAGEMENT

Red Hat Network (RHN) Satellite is designed to provide the best Red Hat Enterprise Linux lifecycle management experience. The primary objective of lifecycle management is to deliver quality systems when promised and within cost estimates using an identifiable, measurable, and repeatable process. RHN Satellite brings a best-of-breed management process together with superior tooling to achieve this for managing Red Hat Enterprise Linux.

### Major release themes

RHN Satellite 5.4 adds support for managing Red Hat Enterprise Linux 6, enabling organizations to take advantage of the improved reliability, performance, scalability and infrastructure flexibility that Red Hat Enterprise Linux 6 offers. In addition, RHN Satellite provides improvements for:

- Compliance
- Content management
- Subscription management

## RED HAT ENTERPRISE LINUX 6 SUPPORT

Red Hat Enterprise 6 offers many new capabilities such as:

- Improved reliability
- Improved performance
- Increased scalability
- Large RPM support

Due to some changes in Red Hat Enterprise Linux 6, such as using SHA256 for checksums, several architectural changes were made in RHN Satellite in order to support Red Hat Enterprise Linux 6 clients. In order to deploy and manage Red Hat Enterprise Linux 6 clients via RHN Satellite, customers will need to upgrade to RHN Satellite 5.4.

## COMPLIANCE IMPROVEMENTS

RHN Satellite makes it easier and faster for IT organizations

to comply with various regulations such as PCI-DSS, FISMA, and HIPAA. In order to meet various compliance initiatives, it is critical that IT organizations be able to perform audits on their systems. RHN Satellite 5.4 offers two key compliance improvements:

- SELinux context deployment
- Reporting

### SELinux context deployment

Configuration management is a core piece of RHN Satellite's ability to provide extended management of Red Hat Enterprise Linux systems. SELinux support has been added to RHN Satellite 5.4 configuration management. Users can set SELinux context on configuration files within the RHN Satellite web user interface, which eases deployment of RHN Satellite-managed configuration files on an SELinux deployed client system.

### Reporting

RHN Satellite now provides an easy way to extract the valuable information it holds about all of the Red Hat Enterprise Linux systems it is managing via its reporting capabilities. These reports can be used to assist with audits and compliance-related activities. While some of these reports were introduced after the delivery of RHN Satellite 5.3, they have been updated to include channel data, packages to channel associations, and listing of all errata.

Available reports:

- System inventory — Lists all of the systems registered to the Satellite.
- Entitlements — Lists all organizations on the Satellite and sorted by system or channel entitlements.
- Errata — Lists all the errata relevant to the registered systems and sorts errata by severity as well as the systems that apply to a particular erratum.



- Users — Lists all the users registered to the Satellite, and lists any systems associated with a particular user.

## MORE FLEXIBLE CONTENT MANAGEMENT

One of RHN Satellite's most powerful capabilities has been its ability to scale up to manage thousands of systems. In addition, RHN Satellite's management capabilities extend beyond managing just Red Hat content. RHN Satellite can also manage applications, both third-party and customer, as well as firmware updates. This allows organizations to deploy content from Red Hat and third-party sources, such as OEMs and ISVs, using the same process in RHN Satellite. In addition, users can now stage content updates to complete within a scheduled maintenance window.

### External repository synchronization

RHN Satellite 5.4 now supports adding and managing external third-party content repositories. Users can add yum-based repositories to RHN Satellite and synchronize package content to make it available to one or more channels. This removes the manual process of downloading content, that can result in errors and delays, and ensures that the latest content is available to be used.

Examples of third-party content repositories that organizations may want to synchronize with include:

- Hardware vendors to receive firmware and device-driver updates
- ISVs for certified applications
- Extra Packages for Enterprise Linux (EPEL)

The advantage of this approach is that customers no longer have to manually download packages from trusted third parties. Now, whenever a third-party releases an updated package it will be automatically synced to RHN Satellite, in the same way RHN synchronizes with RHN Satellite. This results in a more automated environment, with less manual interaction and chance for error. This makes it even easier for organizations to use RHN Satellite to manage Red Hat Enterprise Linux and all of the applications running on it.

### Staged deployment scheduling

In the past it has been possible that RHN Satellite could not complete updating all of the systems that it needed to in the allotted maintenance window. Once a maintenance window closes, users may have to go through a painful and long change management process. Some of the most

common reasons that RHN Satellite fails to complete updating all of the systems are:

- Low bandwidth to remote site
- Too many systems requesting updating systems at the same time

In RHN Satellite 5.4, deployments can be staged by pushing packages to systems prior to a maintenance window opening. Packages will not be installed on the system, but rather staged in a local, temporary directory. At the scheduled maintenance start time, RHN Satellite will instruct the managed system to install the updated packages.

This allows for thousands of systems to be updated even during very short maintenance windows. In addition, in areas with low bandwidth, packages can be predeployed.

This also ensures that RHN Satellite or RHN Proxy only has to worry about start/end of events and not passing content down to client systems -- this is especially useful for very large sets of packages that need to be installed, or where it is multiple thousands of systems involved.

## IMPROVED SUBSCRIPTION MANAGEMENT

A key capability of RHN Satellite for many organizations is the ability to manage and track all of its Red Hat Enterprise Linux subscriptions. RHN Satellite 5.4 introduces capabilities that makes managing Red Hat Enterprise Linux subscriptions easier and more thorough.

### Flex Guest entitlement support

RHN Satellite 5.4 now offers two pools of entitlements that can be assigned to a Red Hat Enterprise Linux system.

- Standard entitlements for physical systems
- Flex Guest entitlements for virtual systems (\*Only available for certain subscription purchases, such as "Red Hat Enterprise Linux for Virtual Guests".)

Flex Guest refers to virtual guest entitlements that are not associated with an entitled host system. A host system can be Red Hat Enterprise Linux, VMware, Hyper-V, or Virtage.

All Flex Guests entitlements are in the same pool, regardless of how many hosts they are spread across. You are also able to move/migrate a system from standard to Flex Guest entitlements

### Remove duplicate profiles

It's common for any management platform to add systems a



number of times unintentionally. For example, duplicate profiles are generated. In RHN Satellite, multiple registrations of a system causes multiple system profile entries in the RHN Satellite DB. These duplicate profiles consume entitlements, and with large numbers of registered systems are extremely hard to locate and delete.

RHN Satellite 5.4 has improved its ability to detect when an apparently "new" system is added to management that really isn't. The fact that it is actually an already managed system is detected and managed as such. Information has also been added to the web interface to help manage suspect duplicate system entries so that an admin can take corrective action.

RHN Satellite users can now easily find and remove duplicated system registrations using the Duplicate Profile feature. Users can reclaim entitlements for re-provisioned and/or re-registered systems, alleviating the problem of one system taking two or more entitlements. Enhancements are also made within kickstart provisioning to eliminate the creation of duplicates over re-provisioning events.

### **Subscription reporting**

RHN Satellite now provides an easy way to report on all of the Red Hat Enterprise Linux systems that are registered to it. The following reports can be used to help manage Red Hat Enterprise Linux subscriptions:

- System inventory — Lists all of the systems registered to the Satellite.
- Entitlements — Lists all organizations on the Satellite and sorted by system or channel entitlements.

### **SUMMARY**

The focus of RHN Satellite is to provide the best systems management experience for all Red Hat Enterprise Linux customers. RHN Satellite 5.4 continues to deliver on this mission and builds upon previous releases by offering improved capabilities around:

- Compliance
- Content management
- Subscription management

RHN Satellite is a systems management platform that enables IT organizations to efficiently manage the lifecycle of Red Hat Enterprise Linux. It is a best-of-breed solution that provides superior patch management, provisioning, configuration management, and monitoring capabilities, ensuring Red Hat Enterprise Linux systems are properly secured, operating efficiently, and compliant with various standards. Compared to other commercial solutions, it is less complex and costly to implement and compared to homegrown solutions, it follows best practices and scales to manage Red Hat Enterprise Linux efficiently.