

# Sentinel™ 6.0 SP1 from Novell

Released August 27, 2007

The information in this ReadMe file pertains to Sentinel™ 6.0 SP1 from Novell®, which provides a real-time, holistic view of security and compliance activities, while helping customers monitor, report, and respond automatically to network events across the enterprise.

This Service Pack will apply the latest software fixes and enhancements to an existing installation of Sentinel 6.0.0.0. Sentinel 6.0.0.0 must already be installed before applying this Service Pack.

The Service Pack must be installed on all machines, client and server, with an existing Sentinel™ 6.0.0.0 installation. This includes machines with Sentinel Server, the Correlation Engine, Sentinel Database, Collector Manager, Sentinel Control Center, Collector Builder, and Sentinel Data Manager.

- If Sentinel is not installed yet, it must be installed using the Sentinel 6.0.0.0 installer. Please see the Sentinel Installation Guide for instructions
- If Sentinel 5.x is installed, it must be upgraded to Sentinel 6.0.0.0 using the upgrade installer. Please see the Patch Installation Guide for instructions.
- If Sentinel 4.x is installed, Sentinel 6.0.0.0 must be installed using the Sentinel 6.0.0.0 installer. Some data can be migrated to the Sentinel 6.0.0.0 installation. Please see the Patch Installation Guide for instructions.

The full product documentation and the most recent version of this file are available at the following URL: [http://www.novell.com/documentation/sentinel\\_6](http://www.novell.com/documentation/sentinel_6)

## What's New in Sentinel 6.0 SP1

Sentinel 6 SP1 is a maintenance release for Sentinel. In addition to bug fixes it contains a limited number of new and enhanced features.

### Red Hat Enterprise Linux 4 Support

Sentinel 6 SP1 adds support for Red Hat Enterprise Linux 4 on x86\_64 hardware.

### Enhancements to the Event Source Management Framework

The new Event Source Management framework in Sentinel 6 has been enhanced to improve performance and usability. The Graphical view now automatically contracts child nodes into the parent if more than 20 children are present, and adds a dedicated frame to manage child nodes. This prevents performance degradation and display clutter that can occur with large numbers of nodes. A new "Magnifying Glass" option is also included that enlarges a portion of the screen without changing the overall view.

### Export Raw Events to a File

A new configuration option on all Connector nodes allows the raw data from that connector to be saved to a text file. This can be used to store the raw data in unaltered form. This also is useful for debugging and testing Sentinel data collection.

### New Javascript Based Collector Engine

Sentinel 6 SP1 introduces a new technology that allows collector development using Javascript based event collectors in addition to the existing proprietary Sentinel collectors. This provides a platform for Novell's customers and partners to build high quality, feature-

rich collectors using an industry standard programming language. Sample collectors written in Javascript are available on request from Novell Technical Support.

## Installation

The instructions provided in this document are for installing this Service Pack only. This Service Pack must only be run against an existing installation of Sentinel™ 6.0.0.0.

This Service Pack comes with an automated installer that will backup the existing software components that will be replaced. The backup files are placed in a directory named “SP<id>\_<date>\_bak” under the ESEC\_HOME directory, where <id> is the numeric identifier of the service pack and <date> is the date of the Service Pack (for example, “SP1\_2007-08-24-GMT\_bak”).

### Installing the Service Pack

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**NOTE:** It is highly recommended that a complete backup be made of the machine on which you are installing the service pack. If this is not possible, then at a minimum a backup of the contents of the ESEC\_HOME directory should be made. This will help protect your system against unexpected installation errors.

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Follow these instructions to install the Service Pack fixes for software and database:

1. Login as an Administrator (Windows) or as root (Unix).
2. Extract the Service Pack zip file.
3. Close all Sentinel applications running on this machine, including:
  - Sentinel Control Center
  - Sentinel Collector Builder
  - Sentinel Data Manager
4. Shutdown Sentinel service running on this machine, including:
  - On Windows:
    - Use Windows Service Manager to stop the “Sentinel” services.
  - On UNIX:
    - `$ESEC_HOME/sentinel/scripts/sentinel.sh stop`
5. On the command line, go into the Service Pack top level directory that was just extracted.
6. Run the service\_pack script to start the Service Pack installer:
  - On Windows:
    - `.\service_pack.bat`
  - On Unix:
    - `./service_pack.sh`
7. When prompted, press the <ENTER> key to start the Service Pack installation procedure.
8. Repeat the steps above on every machine with Sentinel software installed. This is required for all machines with any Sentinel software, including Sentinel server and client software.
9. For the machine with the Sentinel Database installed, perform the following steps to patch the Sentinel Database:

### For Sentinel Database on Oracle

The majority of the Sentinel Database patch script for Oracle can be run from any machine that has Java version 1.5 and the Oracle client tools installed. If the script is run on a separate machine than where the Sentinel Database instance is located, the Sentinel Database patch script will remotely connect to the Sentinel Database instance to apply the patch. There is, however, one script that must be run on the machine where the Oracle instance is located. Instructions for running this script are included in the steps below.

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**NOTE:** If the Sentinel 6 Service Pack install was run on the machine where you are performing the Sentinel database patch, then it is likely Java version 1.5 is installed in the `$ESEC_HOME/jre` directory. The permissions on the `$ESEC_HOME/jre` directory, however, only allow `root` or a user in the `esec` group to access the directory. Therefore, to enable your current user to access this directory, you can add the user to the `esec` group, modify the permissions on the directory, or install a new instance of Java. Alternatively, you can run the Sentinel Database patch as the `esecadm` user, which is a member of the `esec` group.

If you need to install Java version 1.5, you can download it from the Java website [http://java.sun.com/javase/downloads/index\\_jdk5.jsp](http://java.sun.com/javase/downloads/index_jdk5.jsp) by clicking on the *Download* button next to the text *Java Runtime Environment (JRE) 5.0*.

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1. Ensure Sentinel Server processes are not running.
2. Run `PrePatchDb_60sp1` script. This script requires that it be run on the machine where the Oracle Sentinel Database instance is located as a user that has Oracle DBA operating system group permissions. To run this script change directories to the following directory under the extracted Service Pack directory:

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**NOTE:** This pre-patch script does not require Java.

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`db_patch/bin`

3. Enter the following command.

```
./PrePatchDb_60sp1.sh <database_name>
```

For Example

```
./PrePatchDb_60sp1.sh ESEC
```

After the script completes, continue to the next step to perform the main database patch installation.

4. Login into a machine that is running one of the UNIX operating systems that are supported by Sentinel as a user that has the Oracle client application `sqlplus` in its `PATH` as well as the environment variable `ORACLE_HOME` set appropriately.
5. Check your environment variables to ensure that java (version 1.5) is in your `PATH`. You can perform this check by executing the following command on the command line:

```
java -version
```

If the above command does not succeed or does not point to java 1.5, then either locate where java 1.5 is installed on your system or download and install java 1.5. Then, update your `PATH` environment variable to include the java executable. For example, if java is installed in the directory:

```
/opt/novell/sentinel6/jre
```

Then add the following to the beginning of your PATH environment variable:

```
/opt/novell/sentinel6/jre/bin:
```

6. Extract the Service Pack zip file.
7. On the command line, go into the Service Pack top level directory that was just extracted.
8. Change directories to the following directory under extracted Service Pack top level directory.

```
db_patch/bin
```

9. Enter the following command.

```
./PatchDb.sh
```

10. At the prompt, enter the hostname or static IP address of the Oracle Sentinel Database that you want to patch.
11. At the prompt, enter the port number of the Oracle Sentinel Database that you want to patch.
12. At the prompt, enter the Database net service name.
13. At the prompt, enter the Database service name of the Oracle Sentinel Database that you want to patch.
14. At the prompt, enter the 'esecdba' user password. The script will verify the entered information and begin the database patch.
15. After the script is done applying the patch, check for any errors. If there are no errors, you are done with the Sentinel Database patch. If there are errors, resolve the errors and re-run the PatchDb utility.

#### For Sentinel Database on MSSQL (with 'esecdba' as Windows Authentication Login)

1. Ensure Sentinel Server processes are not running.
2. If you have not already, at the database machine, login as the 'esecdba' Windows Domain user.
3. If you have not done so already on this machine, extract the Service Pack ZIP file.
4. Open a command prompt.
5. Change directories to the following directory under the extracted Service Pack directory:

```
db_patch\bin
```

6. Enter the command:

```
.\PatchDb.bat
```

7. At the prompt, enter the hostname or static IP address of the SQL Server of the Sentinel Database that you want to patch.
8. At the prompt, enter the SQL Server Database instance name if any otherwise press return and go to next step.
9. At the prompt, enter the database port number.
10. At the prompt, enter the name of the SQL Server Sentinel Database to patch.
11. At the prompt, enter option 1 for Windows Authentication.
12. The script will verify the entered information and continue to the next step if the authentication information is valid.
13. At the prompt, enter the language character set support option. 1 for Unicode Database or 2 for ASCII Database.

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**NOTE:** For the character set support prompt, select the same option you selected when you initially installed the Sentinel 6.0 Database. If your database was initially installed using Sentinel 5.x, select option 2 for ASCII database.

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14. After the script is done applying the patch, check for any errors. If there are no errors, you are done with the Sentinel Database patch. If there are errors, resolve the errors and re-run the PatchDb utility.

**For Sentinel Database on MSSQL (with 'esecdba' as SQL Authentication Login):**

1. Ensure Sentinel Server processes are not running.
2. If you have not already, log into the database machine.
3. If you have not done so already on this machine, extract the Service Pack ZIP file.
4. Open a command prompt.
5. Change directories to the following directory under the extracted Service Pack directory:  
`db_patch\bin`
6. Enter the command:  
`.\PatchDb.bat`
7. At the prompt, enter the hostname or static IP address of the SQL Server of the Sentinel Database that you want to patch.
8. At the prompt, enter the SQL Server Database instance name if any otherwise leave it empty.
9. At the prompt, enter the database port number.
10. At the prompt, enter the name of the SQL Server Sentinel Database to patch.
11. At the prompt, enter option 2 for SQL Authentication.
12. At the prompt, enter the 'esecdba' user password. The script will verify the entered information and begin the database patch.
13. At the prompt, enter the language character set support option. 1 for Unicode Database or 2 for ASCII Database.

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**NOTE:** For the character set support prompt, select the same option you selected when you initially installed the Sentinel 6.0 Database. If your database was initially installed using Sentinel 5.x, select option 2 for ASCII database.

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14. After the script is done applying the patch, check for any errors. If there are no errors, you are done with the Sentinel Database patch. If there are errors, resolve the errors and re-run the PatchDb utility.

## Defects Fixed in this Release

DAT-160 – Import summary table partitions function has been fixed for SQL Server 2005.

DAT-216 – Summary table insertions are now successful even if SQL Server 2005 is writing to P\_MAX.

DAT-284 – Multiple Sentinel Data Manager jobs may now run simultaneously with no conflict.

DAT-294 – Attempting to “archive and drop” partitions that are already archived on SQL Server 2005 will now archive the selected unarchived partitions and then drop all selected partitions.

DAT-305 – On SQL Server 2005, aggregation functions properly at high event rates.

DAT-306 – On SQL Server 2005, attempting to archive and drop partitions when the archive destination is invalid will now result in an error. The partitions will not be dropped without being archived in this situation..

SEN-4066 – Users with only View Status permissions for Event Source Management are now unable to start and stop nodes, even if multiple nodes are selected simultaneously.

SEN-5284 – Starting a child node in Event Source Management will now start its parent node(s) also. Stopping a parent node in Event Source Management will not stop its child node(s).

SEN-5843 - When installing the Collector Manager with it set connect to Sentinel Server via the proxy, it is no longer necessary to restart DAS.

SEN-6198 – With Collectors that do not have an Event Source (e.g., ODBC collectors), “Trust Event Source Time” cannot be set in the Event Source Management GUI. Now “Trust Event Source Time” may be set at the Collector level and will apply to all child nodes.

SEN-6532 – Users can no longer import scripts into the Plug-in Repository with only “View Scratch Pad” permissions.

SEN-6591 – When modifications or deletions are performed on a subrule during the creation of a composite rule and the Cancel button is clicked, the modifications or deletions are now rolled back.

SEN-6629 – When the parameters of a Collector Script plug-in are changed and the changes are imported into Sentinel, the parameters for any deployed Collectors using that plug-in are now immediately updated.

SEN-6703 – Event Sources used to show connections to both the Event Source Server and the Connector. For clarity when there are a large number of Event Sources, connections are now shown between Event Sources and their Connector and between the Event Source Server and its Connector. Event Source Servers are no longer connected to Event Source nodes in the interface.

SEN-6747 – Collector imports from 511\_SP2\_06\_GA now work properly.

SEN-6779 – Users are now prevented from creating a sequence rule without subrules.

SEN-6783 – Windows Authentication users may now be created in Sentinel Control Center even if the user is already in the SQL Server 2005 list of user logins.

SEN-6784 – Deployed correlation rules can now be selected or copied. By design, deployed correlation rules still may not be edited.

SEN-6818 – The "Error" checkbox in the "Attribute Filter" in Event Source Management now displays filtered nodes properly.

SEN-6821 – The updateMapData command in the Sentinel Data Manager command line interface has been removed. Maps may be updated using the Sentinel Control Center->Admin->Mapping Configuration GUI or using either %ESEC\_HOME%\MapUpdateUtility.bat or \$ESEC\_HOME/MapUpdateUtility.sh.

SEN-7239 – *Switch View* in the Servers View now works as expected.

## Known Issues and Limitations in this Release

### Installation Issues

SEN-5895 – Sentinel installation fails if the installer is run from a directory which contains a special character in its path. The workaround is to copy the installer directory to a directory that does not contain spaces in its path.

SEN-3994, SEN-5524 – On Windows only, if the Sentinel components are installed into a directory with non-ASCII characters, the Sentinel Control Center and Sentinel Uninstall shortcuts

do not work. The workaround for Sentinel Control Center is to execute the %ESEC\_HOME%\bin\control\_center.bat. The workaround for the Sentinel Uninstall is to perform the Manual Uninstall steps as described in the Sentinel Install Guide

SEN-5610 – Uninstalling the Sentinel Database on SLES 10 does not remove all database files that were created during installation (\*.dbf, \*.ctl, \*.log). The workaround is to remove these files manually using the instructions in the Installation Guide.

SEN-6041 – Sentinel cannot start the Oracle 10 database due to errors in the Oracle dbstart and dbshut scripts. The instructions for modifying the two scripts for Oracle 10 on Solaris 10 and Red Hat 3 can be found in the Install Guide. No modifications are necessary on SUSE Linux Enterprise Server 10.

SEN-6542 – On Oracle only, when installing DAS and the Sentinel Database, the language you run the installer in must be supported by the installed Oracle software. For example, if the Sentinel installer is run in French to install DAS and the Sentinel Database and the Oracle database is installed with English support only, there will be NLS errors in the das\_query\_\*.log file. See TID 3306569 on the Novell Support Site.

SEN-6881 – If the user clicks “Back” from the Communication port prompt until the feature selection page and unchecks some components to be installed, the installer may continue to prompt for Communication ports that are not necessary. The workaround is to specify the correct ports even though they may not be used by the components currently selected to be installed. If additional components are installed later, the ports will be used at that time.

SEN-6882 – When the wrong hostname or port is entered when installing Collector Manager with it set to connect to Sentinel Server via the proxy, continuing the installation until the prompt for the "Sentinel username and password that has permissions to register the trusted client" causes errors. If you go back and edit hostname or port in the installer, the configuration.xml is not updated with the new information and the trusted client registration will not succeed. The workaround is when the installer is on the screen with the register trusted client prompt, manually edit the hostname or ports in the ESEC\_HOME/config/configuration.xml file. When the register trusted client username and password are re-entered, the installer will pick up the change to the configuration.xml file and continue properly.

SEN-6884 – When installing a Collector Manager with a proxy connection and with the installer in GUI mode, the user will be prompted with three options to make the trust registration with the DAS Proxy. The user must choose “Accept Permanently” (not “Accept”) in order for the Collector Manager to work.

SEN-6885 - On Windows only, using Windows Authentication for the Sentinel Application user (esecapp), if the database and other non-DAS process are installed, the Sentinel service will be set to install as the Windows Authentication user but the necessary password will not be set. Therefore, the service will not start up. The workaround is to set the service to run as the "Local System" account using the Windows Service Manager. The service does not need to run as the Sentinel Application user (esecapp) if it is not running DAS.

SEN-6886 - On Windows only, if the DAS component is added to a machine with other Sentinel Server components already installed on it and if the Sentinel Application user (esecapp) uses Windows Authentication, after the installation of DAS completes the Sentinel Service will incorrectly still be set to run as the "Local System" user. The workaround is to manually set the Sentinel Service to run as the Sentinel Application user using the Window Service Manager.

SEN-6920 – During installation, some screens (particularly the user authentication screens) may not paint completely. The workaround is to go back and forward in the InstallShield wizard or minimize and then maximize the window to force it to redraw the wizard screen.

## Other Issues

DAT-280 – If the Sentinel Data Manager is left open for an extended period of time, an error occurs: “ORA-01000: maximum open cursors exceeded.” The workaround is to close SDM when finished with it.

DAT-325 – On Oracle only, when the time of scheduled partition jobs is changed, the job will run at the scheduled time once and then revert to the time specified during installation.

SEN-3515 – Users can terminate iTRAC processes even though they have not been given permission.

SEN-3897 – The Server View Manager will display processes that are not installed a particular machine with a state of NOT\_INITIALIZED. For example, Sentinel on Windows will show the "UNIX Communication Server" process as NOT\_INITIALIZED and Sentinel on UNIX will show the "Windows Communication Server" process as NOT\_INITIALIZED. The processes that are displayed with a state of NOT\_INITIALIZED should be ignored.

SEN-4617 – On UNIX only, only the Sentinel Administrative User (esecadm) is able to run the Sentinel Control Center. To enable other users to run the Sentinel Control Center, please see the Technical Information Document (TID) titled "On UNIX only, only the Sentinel Administrative User (esecadm) is able to run the Sentinel Control Center" (TID #3515705) on the Novell Technical Services web site.

SEN-5931 – If a Collector reaches a Stop state in the debugger mode, the Step Into, Pause, and Stop buttons are still enabled but will not have any effect. The workaround is to close the debugger and reopen it.

SEN-6182 – If a running Collector Script reaches a Stop state, the child nodes of the Collector will not stop. Therefore, the Collector may be stopped, but its Connectors and Event Sources will still appear to be running in the Live View for Event Source Management. No events will be processed. The workaround is to right click on the Collector and stop it manually.

SEN-6265 – Stopping a Collector does not always stop its child Connector and Event Source.

SEN-6397 - When setting Formatter Name to “xml” in a Send Email action in the Correlation Action Manager, the body of the email is sent in name value pair format.

SEN-6398 - When the Send Email action is triggered for a correlation rule, the email attachment is blank.

SEN-6429 - If you create two role names in the Role Manager on the Admin tab that differ only in case (e.g., Admin and admin), user additions and deletions to one role will also impact the other role. The workaround is to ensure that all role names differ by more than just case.

SEN-6473 – In the Event Source Management Live View, when a filter condition is added to a node from a raw data tap and then the OK button is selected to save the new filter condition, the state of the node will be set back to what it was before the raw data tap was opened.

SEN-6573 – If all attributes are selected in the Attribute List as “group by” fields in a composite, aggregate, or sequence rule, an “invalid RuleLg” message is displayed.

SEN-6608 – Maps added to the top level "Maps" folder in the Mapping Service GUI are not visible until a refresh occurs. The workaround is to create new maps in a subfolder.

SEN-6698 – The correlation rule language does not support the e.all operator. Rules imported from previous versions of Sentinel that use e.all will not work.

SEN-6701 – Moving or cloning a node that is related to an Event Source Server, either directly or through a parent or child, fails. The workaround is to export the node and then import it.

SEN-6732 – The “Help” button does not work from the “Connect To Event Source” wizard. The workaround is to click on the “Help” button from within one of the other dialogs (e.g., Add Collector wizard or Edit Collector dialog).



SEN-6800 – Correlation rules containing an inlist operator referring to a dynamic list are not functional after they are imported into Sentinel. The workaround is to recreate correlation rules with inlist instead of importing them.

SEN-6895 – On Windows only, if a non-Unicode database is selected at install time, there is no enforcement of Latin characters in the GUI.

SEN-6896 – Mnemonics (hotkeys) do not exist for most buttons.

SEN-6932 – The embedded browser in the Sentinel Control Center does not format reports properly. The workaround is to configure the Sentinel Control Center to use an external browser.

SEN-7190 – Imported correlation rules that contain new line characters cannot be deployed or read by the correlation engine manager. The workaround is to open the rule in edit mode and save it before attempting to deploy it.

SEN-7238 – If a user adds multiple Global Filters or Color Filters, clicks the X button, and selects “No” in the *Save Changes* dialog, the filters still show when the Global Filters or Color Filters is reopened. The workaround is to restart the Sentinel Control Center.

SEN-7246 – Running a right-click command from an event table (such as in the Active View or Historical Event Query) that opens in a browser generates a run-time exception.

SEN-7257 – Some Collectors that were deployed in a Sentinel 5.1.3 system must be redeployed manually and may require some modifications. The *Sentinel User's Guide* and the documents under the *Migrating to Sentinel 6* section of the Sentinel documentation page provide helpful information. These documents may be found at <http://www.novell.com/documentation/sentinel6>.

SEN-7413 – When debugging a Javascript Collector with the FILE Connector, the debugger throws a “RuntimeException - Sentinel-EOF” when the end of the input file is reached.

WIZ-1839 – The ALERT command in the collector scripting language does not automatically send the ConnectorID (RV23), EventSourceID (RV24), and TrustDeviceTime fields. The workaround is to append these fields to the alert message in any Collectors that use the ALERT command or to update Collectors to use the EVENT command. For code samples, see the Sentinel Reference Guide.

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