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# Sentinel™ 5

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## Product Release Notes

### Product

Sentinel™ 5.1.2 with iTRAC™ Patch

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### Description

This is a patch Sentinel 5.1.2 release with iTRAC.

This release supports the following types of installations:

- Patching Sentinel 5.0 to Sentinel 5.1.2 on Windows and Solaris.
- Patching Sentinel 5.0.1.0 to Sentinel 5.1.2 on Windows and Solaris.
- Patching Sentinel 5.1.0.0 to Sentinel 5.1.2 on Windows and Solaris.
- Patching Sentinel 5.1.1.0 to Sentinel 5.1.2 on Windows and Solaris.
- Patching Sentinel 5.1.1.1 to Sentinel 5.1.2 on Linux and Windows.

**NOTE:** This release is only for patching an existing installation of Sentinel 5 to Sentinel 5.1.2. If you have an installation of Sentinel 4.2 and would like to migrate your data to Sentinel 5.1.2, you must use the Sentinel 5.1.2 full installer to do so. You must also use the Sentinel 5.1.2 full installer if you would like to perform a clean installation of Sentinel 5.1.2 or install additional components into an existing Sentinel 5.1.2 installation. To obtain the Sentinel 5.1.2 full installer, please contact Technical Support.

### Installation

This release includes three patch installers. You will only need to use one of these patch installers in order to patch from the version of Sentinel 5 you are currently using to Sentinel 5.1.2. To determine the patch installer that is appropriate for the version of Sentinel 5 you currently have installed, use the table below.

Current Version of Sentinel Installed	Use the Patch Installer in this Directory
5.0	patch_5.0.x.0_to_5.1.2
5.0.1.0	patch_5.0.x.0_to_5.1.2
5.1.0.0	patch_5.1.x.0_to_5.1.2
5.1.1.0	patch_5.1.x.0_to_5.1.2
5.1.1.1	patch_5.1.1.1_to_5.1.2

**NOTE:** To determine which version of Sentinel you currently have installed, check the value of the ESEC\_VERSION environment variable.

Instructions for running the patch installer are located in the Sentinel Install Guide for Sentinel 5.1.2. Follow the instructions in one of the following chapters as appropriate for the platform you are installing on.

- Chapter 6, Data Migration and Patch for Oracle on Solaris
- Chapter 7, Data Migration and Patch for MS SQL
- Chapter 8, Patch for Oracle on Linux

## New Features

- A new “Server View” screen has been added to the Admin tab of Sentinel Control Center. This screen provides the following functionality:
  - Provides a view of the status of all Sentinel Server processes across the system (requires the “Administration->Server Views->View Servers” privilege). This is similar to the existing Agents View, but instead displays Sentinel Server processes.
  - It allows you to Start, Stop, or Restart processes (requires viewing as well as “Administration->Server Views->Control Servers” privileges).

The screenshot shows a window titled "ALL GROUP BY SERVER HOSTNAME" with a tree view on the left and a table on the right. The tree view shows "Processes Health" expanded to "localhost.localdomain". The table lists various Sentinel Server processes with their status and version.

	Starts	AutoRestarts	StartTime	State	UpTime	Version
Communication Server	1	0	01/20/2006 19:47:09 EST	Running	11:01s	5.1.1.1
Correlation Engine	1	0	01/20/2006 19:48:14 EST	Running	9:56s	5.1.1.1
DAS_Binary	2	0	01/20/2006 19:51:59 EST	Running	6:11s	5.1.1.1
DAS_Query	3	1	01/20/2006 19:48:04 EST	Running	10:06s	5.1.1.1
DAS_RT	2	0	01/20/2006 19:47:54 EST	Running	10:16s	5.1.1.1
DAS_JTRAC	2	0	01/20/2006 19:47:54 EST	Running	10:16s	5.1.1.1
Query Manager	1	0	01/20/2006 19:48:14 EST	Running	9:56s	5.1.1.1
RuleLg Checker	1	0	01/20/2006 19:48:14 EST	Running	9:56s	5.1.1.1
Sonic Lock Remover	0	0		NOT_INITIALIZED		5.1.1.1

Ready Refresh Options Refreshed At: Fri Jan 20 19:57:26 EST 2006

**NOTE:** In order to use the Server View screen after the patch installation, you must grant the “Server Views” permission to your Sentinel user using the User Manager. The User Manager is located under the Admin tab of Sentinel Control Center.

- The password prompts for the following Wizard process connectors have been enhanced to attempt to mask the password as it is typed in on the command line:
  - dbconnector
  - rdep\_client

- The syslog connector is now installed with scripts that run on Windows and UNIX as well as improved configuration files. Additionally, the installation of the syslog proxy server as a service has been simplified. To install the syslog proxy server as a service with the default configuration, run the following commands:
  - On Windows:
    1. Log in as an Administrator.
    2. `cd /d %ESEC_HOME%\wizard\syslog`
    3. `.\syslog-server.bat install`
  - On UNIX:
    4. Log in as root.
    5. `cd $ESEC_HOME/wizard/syslog`
    6. `./syslog-server.sh install`

**NOTE:** If you were already using the syslog connector scripts from a version of Sentinel previous to 5.1.1.1 (i.e. – 5.0, 5.0.1.0, 5.1.0.0, or 5.1.1.0), you must start using the updated syslog connector scripts that are included in this patch. To switch from using the old syslog connector script to using the new syslog connector scripts, follow the instructions in the patch installation guide.

- The component that generates the Exploit Detection file `attackNomarlization.csv` file has been modified to use less memory. This will allow better performance on demo hardware.
- Additional configuration options for processes in `configuration.xml` file:
  - `name` [default: “Uknown”] – The name of the processes. This is a nice name given to the process that will appear as the process name in log files and in the Sentinel Control Center Server View.
  - `auto_restart_threshold` [default: “5,10”] – The format of the value is “<#restarts>,<#minutes>”. If the process is automatically restarted (e.g. – due to process exiting on its own or being killed via OS command) more then the specified number of restarts in the specified number of minutes, it will no longer be automatically restarted. This is used to prevent a process from being restarted forever when there is probably a configuration error. An “ProcessAutoRestartError” internal event is sent when this occurs.
  - `depends` [default: <no dependencies>] – The format of the value is a comma separated list of process names, as specified by the new “name” process attribute. The processes specified in the list are the processes that must be running before this process can successfully run.
  - `type` [default: “normal”] – Valid values are either “normal” or “container”. Container specifies that the process is an eSecurity Container process (i.e.- is launched using a container xml file) and can be shut down cleanly by sending a message to the container to shut itself down. Normal specifies all other processes.
- The functionality of the following processes have been rewritten in Java in order to provide better functionality or decrease complexity:
  - `watchdog` (now called “Sentinel” or “Sentinel Primary”)
  - `data_synchronizer` (now part of DAS)
- The Base Sentinel Services feature previously available for separate install has been folded into the DAS install feature. The processes that would previously get activated when Base Sentinel Services was selected for install

will now get activated when DAS is selected for install. This was done to decrease the complexity of the installer. Previously allowing this feature to be installed separately provided no known performance benefit.

**NOTE:** If you are patching from a version of Sentinel previous to 5.1.1.1 (i.e. – 5.0, 5.0.1.0, 5.1.0.0, or 5.1.1.0) and installed Base Sentinel Services and DAS on separate machines, after patching to 5.1.2 the processes query\_manager and rulelg\_checker will be set to run on the machine with DAS installed rather than the machine with Base Sentinel Services.

- Licensing verification has been enhanced to check the user specified license key against all available network interface cards (NICs). If any of the NICs has the correct MAC address, the license verification will succeed.

## Bug Fixes

### Sentinel

#### 7424

**Issue:** exploitDetection.csv generation is missing some data.

**Fix:** Fixed exploit detection generator to add missing data to exploitDetection.csv file.

#### 7460

**Issue:** On UNIX, if Communication Server was installed by itself, it would never get started automatically. This is because the installer would not install “watchdog”, which is responsible for starting the Communication Server on UNIX.

**Fix:** Moved the Communication Server feature under Sentinel Services in installer, which ensures that “watchdog” gets installed too.

#### 7463

**Issue:** Exploit Detection Generator will start a 2nd regeneration even if there is one currently processing, causing additional CPU usage on DAS Query.

**Fix:** Exploit Detection Generator will only process one regeneration at a time.

#### SEN-2819

**Issue:** SDM % does not show progress when adding partitions, Stays at 0%.

**Fix:** Percentage value is continuously increasing according to the completion of SDM activity.

#### SEN-3684

**Issue:** Argument type in Incident Command Activity does not work.

**Fix:** All the parameters (None, Incident Output and Custom) as argument type are now working.

#### SEN-3713

**Issue:** Exploit Detection detecting only one attack for each vulnerability

**Fix:** Exploit Detection will now detect all attacks that are linked to a vulnerability in the Advisor feed as an exploit of that vulnerability if the vulnerability has been reported on the machine being attacked.

**SEN-3732**

**Issue:** No longer able to select the "Rejected" state in the Sentinel GUI Incident manager

**Fix:** The "Rejected" state is added to the Sentinel GUI Incident Manager.

**SEN-3760**

**Issue:** Problem passing parameters containing spaces when executing scripts from Right-Click Menu or Correlation Rules.

**Fix:** Fixed executor of Right-Click Menu and Correlation Rules commands to handle spaces in parameters properly.

**SEN-3763**

**Issue:** Exploit Detection does not work sometimes due to multiple Normalized Attack Id's for each Device Attack Name.

**Fix:** Exploit Detection will now detect all attacks that are linked to a vulnerability in the Advisor feed as an exploit of that vulnerability if the vulnerability has been reported on the machine being attacked.

**SEN-3764**

**Issue:** Limit the frequency with which the Exploit Detection Data will be regenerated

**Fix:** Regeneration is now limited to, by default, once every 30 minutes. This is configurable by editing the das\_query.xml file.

**SEN-3766**

**Issue:** When the call DAS RT makes to get user preferences fails, it removes all permanent filters

**Fix:** Error handling is improved to not remove all permanent filters if getting user preferences fails.

**SEN-3775 (Enhancement)**

**Issue:** Process event transformations for mapping service that have cyclical dependencies.

**Fix:** The mapping service will make a best effort to continue to process event transformations even if there is a cyclical dependency. The cyclical dependency must still be fixed by the user, but this enhancement allows the system to work as best as possible even if there is a cyclical dependency problem.

**SEN-3779**

**Issue:** The DAS JDBCLoadStrategy is not inserting the events fields RV37, RV38, and RV47-RV48 into the database.

**Fix:** Fixed JDBCLoadStrategy to insert the missing event fields.

**SEN-3781**

**Issue:** Advisor is unable to connect to the server through a proxy.

**Fix:** Fixed Advisor client so it can now connect to the server through a proxy over https.

**SEN-3785**

**Issue:** Seeing a SummaryUpdateFailure event in the SCC

**Fix:** Fixed error causing this event.

**SEN-3788**

**Issue:** Correlation rule "in" and "not in" rule lg is not working well.

**Fix:** Fixed these aspects of rule lg.

**SEN-3792**

**Issue:** When a Correlation Rule triggering results in a command getting executed and the parameter to the command is "%all%", the 26<sup>th</sup> argument passed to the command is the Event Name set in the Correlation Rule (same as 13<sup>th</sup> argument) rather than the Event Name from the actual Event that triggered the rule.

**Fix:** The 13<sup>th</sup> and 26<sup>th</sup> arguments are now the Correlation Rule "Event Name" and first Event "Event Name" (that was responsible for triggering the Correlated Event), respectively.

**SEN-3793**

**Issue:** No Events are displayed under `Selected Events` section of the Vulnerability Results Window.

**Fix:** Selected Events are now displayed in Vulnerability Results and Event to Vulnerability Graph.

**SEN-3812**

**Issue:** Files does not get deleted from \$ESEC\_HOME/sentinel/bin/eventfiles/done folder even if they are configured to be deleted after they are processed

**Fix:** The file will now get deleted after being processed.

**SEN-3814(Enhancement)**

**Issue:** Incident Command Activities Text output should return the text as XML

**Fix:** Added this functionality.

**SEN-3835**

**Issue:** If any filter that is saved in a user's preferences is invalid, then all active views with any filter for any user will be treated as a non-permanent active view.

**Fix:** Error handling is improved to resolve this issue.

**SEN-3851**

**Issue:** Quick query does not have options to save data

**Fix:** Added two buttons on Quick Query panel. One to save it to html file, the other to save it to CSV file.

#### **SEN-3877**

**Issue:** Events are not written to the DB if the transaction log is full.

**Fix:** Fixed the issue by adding components that will retry to insert events into the DB if there are is a DB error. These components are enabled by default by this installer.

#### **SEN-3880**

**Issue:** Workflow server runs out of connections and hangs after many processes are created via incidents triggered by correlation

**Fix:** Issue was fixed by ensuring workflow connections are closed after use

#### **SEN-3913**

**Issue:** SDM archive partition failed to archive file using windows authentication in MS SQL 2005.

**Fix:** Fixed SDM MSSQL 2005 archiving using Windows Authentication.

#### **SEN-3914**

**Issue:** Event insert retry functionality does not properly handle Correlated Events.

**Fix:** Fixed event insert functionality to properly handle Correlated Events.

#### **SEN-3916**

**Issue:** Taxonomy is out of date in correlation documentation and correlation rule seed data.

**Fix:** The correlation rules that are installed as part of the seed data have been updated to make sense with the next taxonomy. Additionally, chapter 7 of the reference guide has been updated to match the new taxonomy and the new correlation rules.

### **Wizard**

#### **7414 (HD 101689)**

**Issue:** Agent Builder crashing at login screen due to poor initialization of variables

**Fix:** Fixed by initializing variable properly.

#### **WIZ-1649**

**Issue:** Agent Manager truncates SNMP Trap data when a trap value is greater than 57 characters in length. This causes a loss of the entire trap.

**Fix:** The trap truncation has been fixed to accept large trap values (much larger than 57 characters).

**WIZ-1651**

**Issue:** Agent Manager SNMP support only handles “public” community traps.

**Fix:** Non-public community traps are now also handled by Agent Manager.

**WIZ-1656**

**Issue:** Agent Manager handles only SNMP v1 and v3 traps. Specifically, it does not handle SNMP v2 and v2c traps.

**Fix:** Added support for SNMP v2 and v2c traps in Agent Manager.

**WIZ-1661**

**Issue:** Setting the agent variables s\_VULN and s\_CRIT while using the EVENT command results in empty Vulnerability and Criticality tag fields.

**Fix:** These fields are now set properly when using the EVENT command.

**WIZ-1664**

**Issue:** If the delimiter is at the beginning of a new block of data read from the source (i.e. - file), that delimiter will be skipped by the Rx state.

**Fix:** Fixed this error.

**WIZ-1665**

**Issue:** If the delimiter size is >1 chars, and the delimiter appears across a block boundary, the Rx state will skip the delimiter.

**Fix:** Fixed this error.

**WIZ-1675**

**Issue:** Sometimes, Agent Manager gets into a state when it is using nearly 100% CPU but is not processing any event, even though agentengine are running.

**Fix:** Fixed error causing this scenario to occur.

**WIZ-1676**

**Issue:** Memory leak when using the Alert Command.

**Fix:** Fixed memory leak.

**WIZ-1682**

**Issue:** The database connector runs in an infinite loop when the query contains a table name that doesn't exist in the database.

**Fix:** Fixed by initializing the result set variable properly

**Database****DAT-145**

**Issue:** When dropping partitions, SDM failed to rename index partition P\_TEMP to P\_MIN

**Fix:** When dropping partitions, SDM now renames index partition P\_TEMP to P\_MIN.



**DAT-147**

**Issue:** SERVICE\_PACK\_ID missing from ADV\_ATTACK\_PLUGIN\_RPT\_V

**Fix:** The SERVICE\_PACK\_ID column is now in the ADV\_ATTACK\_PLUGIN\_RPT\_V view.

**DAT-151**

**Issue:** Database installer fails if user has TNS\_ADMIN set and tnsnames.ora file in a directory other than \$ORACLE\_HOME/network/admin.

**Fix:** The database installer has been fixed to handle this situation properly.

**DAT-157**

**Issue:** SDM failed to archive EVT\_DEST\_SMRY\_1

**Fix:** Fixed two cases causing SDM to fail to archive EVT\_DEST\_SMRY\_1. One is a unique constraint caused by the ARCH\_SEQ column being too short and the other is on MSSQL logging into SDM using Windows Authentication.

**DAT-161(Enhancement)**

**Issue:** Separate archive and delete partitions of summary table from events tables

**Fix:** Summary table partitions are now not dropped when dropping event table partitions.

## Known Issues

**Installer**

- Attempting to take a screenshot of the installer by typing Alt+PrintScreen results in the graphics in the installer being garbled. This is caused by a bug in InstallShield. The workaround is to use only the PrintScreen button.

**Sentinel**

- WorkFlow will not proceed beyond the Start Eradication Process when attempting to execute arp -a command. Workaround is to:
  1. Login to machine running the DAS component as user esecadm.
  2. Open the '.bash\_profile' file under esecadm user's home directory and modify it so that the PATH environment variable includes the directory '/usr/sbin'.
  3. Modify the template activity to run a different activity.
- When setting a filter in the view options for incidents, agents, agent managers or iTRAC, the attribute fields that hold dates may fail to work properly if included as part of the filter.
- In Sentinel Control Center > Admin Tab, Active User Sessions will temporarily display a session for a user that has logged in to Agent Builder.
- If the Analyst role is empty (on product install it is empty) and an auto response workflow is instantiated, the server assigns \_WORKFLOW\_SERVER. But when a user is later added to the Analyst role,

the assignments are not recalculated and the new user does not get workitems associated with that process. The workarounds follow:

- Before starting any workflow process, make sure that all assigned groups have at least one user. This will prevent the previously described problem.
- If an iTRAC process was instantiated without a assigned group having at least one user, perform the following steps to resolve the issue:
  - Add a user to the affected group.
  - Edit the corresponding template and save. No change to the template is required for this. You may just double click on the manual activity to popup the customizer dialog, select the same resource again, click OK and save the template.

This should force recalculation of workitem assignments. Users in the analyst group will now see workitems for that activity.

- Cannot edit while creating a user-defined template in the same template customizer after saving. The workaround is after saving the newly created template, to make modifications on the template, close the template window and open again.

#### **Wizard**

- When using "Populate Network" capability in Agent Builder, UUIDs are not reset in the copied port configurations. This results in the events from copied port configurations having the same Source Id.
- [WIZ-1684] When debugging an Agent using the Agent Builder, the Agent Builder may exit unexpectedly. This is less likely to happen if the Agent Builder "Execute One Command" and "Resume Command Execution" debugger buttons are clicked slowly (less than once every two seconds).

#### **Product Support**

- For Technical Support, email at [support@esecurity.net](mailto:support@esecurity.net)
- For information, email at [info@esecurity.net](mailto:info@esecurity.net)
- Website: [www.esecurity.net](http://www.esecurity.net)
- For 24x7 support, call technical support directly at 800-474-3131