

Collections in HP Systems Insight Manager 5.1 or greater



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Introduction

A collection is simply a group of systems or events and can be viewed or used for a task. It can be temporary or saved to be used again.

What is a collection?

History

Compaq Insight Manager 7, a predecessor of HP Systems Insight Manager (HP SIM), used the term *query*. This term reflected its internal implementation as a database query. Attributes were specified, and when a query was run, the results were shown on a **Query Results** page. The query results could also be used for running a task. For example, **All Servers**, **All Printers**, or **All Critical Events** were queries. In addition, you could create customized queries.

It is important to note that a query ran at the time of use. This meant that if systems were added or removed from the managed network, the query results one day might be different from the results another day. Since events occurred continuously, event queries could often yield very different results each time they were used.

In HP SIM 4.x, groups of systems were referred to as *system lists* and groups of events were referred to as *event lists*. These were newer terms than query, but the implementation was the same.

In HP SIM 5.0, the grouping mechanism became more powerful. In addition to specifying database attributes, you could specify the exact systems you wanted to be included in the group. Therefore, in addition to predefined collections, such as **All Servers**, and queries based on the database, you could specify any number of specific systems and group them together. For example, SystemA, SystemB, and SystemC might be used as print servers and make up a small group of systems that you want grouped together. You could name this collection of systems `My PrintServers`.

Not only could individual systems be grouped together, but collections could be grouped together as well. To support this new hierarchy, HP SIM supported displaying collections as trees. For example:

- [-] DataFarm
 - [-] My PrintServers
 - SystemA
 - SystemB
 - SystemC
 - [-] My FinancialServers
 - ServerXYZ
 - ServerFOO
 - ServerBAR
- [-] My Database Servers
 - [-] Oracle Servers
 - ServerX
 - ServerY
 - ServerZ

- SQL/MSDE Servers
 - ServerXYZ
 - ServerABC
- + My Spare Servers
- ...
- MyEvents
 - Security Events
 - Power Events
 - Service Events
 - SecurityEvents on MyFinancialServers

HP SIM 5.1

In HP SIM 5.1, collections have more flexibility and improved ease of use, and you can combine system collections and event collections dynamically and easily.

While in previous versions, event collections could be defined that pertained only to specific systems, the process of specifying the systems could be tedious. The systems had to be listed one at a time, and once systems were defined, if you wanted to see the same set of events on a different set of systems, you had to start the process all over again.

Now, you can bind event collections and system collections together and use them either separately or together. For example, after you define a collection of **Security Events**, you can easily look at those events on any system collection, such as **Security Events on All Servers** or **Security Events on My FinancialServers**.

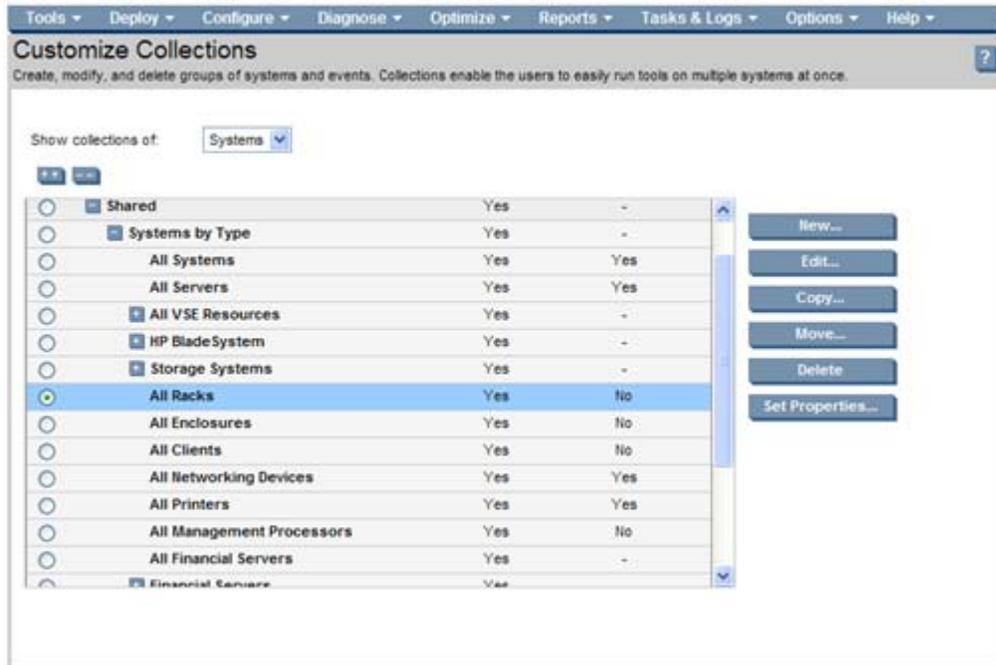
Conversely, you can choose a system collection, and view any set of events on those systems. For example, you can easily select **My FinancialServers** and look at **All Events**, **Login Events**, **Security Events**, or any other event collection as it applies to that collection of systems.

Customizing collections

You can create a collection several ways:

- Create a collection from the **Customize Collections** page.
 - Click the **Customize** link on the **System and Event Collections** panel. The **Customize Collections** page appears. Select **Events** or **Systems** and click **[New]**. The **New Collection** section is displayed.

Figure 1. Customize Collections page

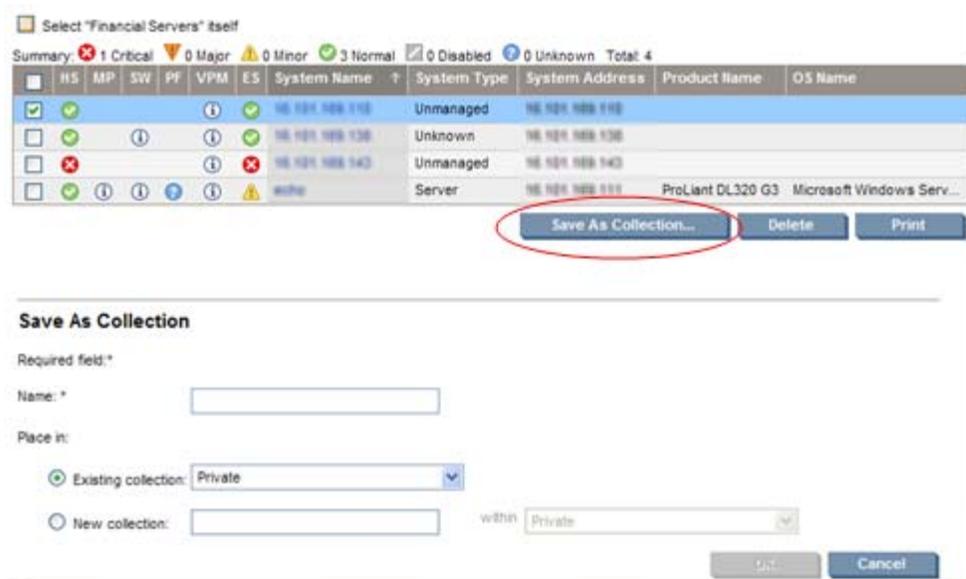


Note: Both systems and event collections can be created.

- Create a collection from the system view page.

Click [**Save As Collection**] at the bottom of any system view page. This command enables you to save the currently selected the systems (or collections) as a new collection.

Figure 2. Saving from the table view page



- Run a system search and save the search criteria as the attributes defining a collection.

Figure 3. Saving a collection from the Advanced Search page



See the *HP Systems Insight Manager 5.1 User Guide* for more information on saving collections.

Types of collections

By member

When you create a collection, you can select exactly which specific systems or collections you want to include. From the **Customize Collections** page, click **[New]**. The **New Collection** section appears. Select **Choose members individually**.

Figure 4. Creating a collection by member

Show collections of: Systems

++ --

	Name	Visible	Status displayed
<input type="radio"/>	Private	Yes	-
<input type="radio"/>	- Shared	Yes	-
<input type="radio"/>	- Systems by Type	Yes	-
<input type="radio"/>	All Systems	Yes	Yes
<input type="radio"/>	All Servers	Yes	No
<input type="radio"/>	+ All VSE Resources	Yes	-
<input type="radio"/>	+ HP BladeSystem	Yes	-
<input type="radio"/>	+ Storage Systems	Yes	-
<input type="radio"/>	All Racks	Yes	No
<input type="radio"/>	All Enclosures	Yes	No
<input type="radio"/>	All Clients	Yes	No
<input type="radio"/>	All Networking Devices	Yes	No
<input type="radio"/>	All Printers	Yes	No

New...
Edit...
Copy...
Move...
Delete
Set Properties...

New Collection

Choose members individually
 Choose members by attributes
 Choose members from the existing system and event collections

Choose from: Storage Systems

Available Items:
All Storage Arrays
All Storage Hosts
All Storage Systems
All Tape Libraries

Selected Members:
All Storage Switches

Remove ∩ ∪

Save As Collection... Cancel

Note: When you create event collections, you cannot select individual events. However, you can select event collections, which enables you to create a convenient hierarchy.

By attribute

When you create a collection, you can describe the contents of the collection by the attributes of its members. Collections defined by attributes are dynamic because each time they are invoked, the contents are determined again.

You can use many system attributes for creating collections, for example, system name (full or partial), operating system, or system type. For event collections, some of the attributes you can select are cleared status, type, severity, and time. You can combine multiple attributes to create the exact group of systems or events that you need.

To create collections by attribute, click [**Save As Collection**] from the **Advanced Search** page or click [**New**] from the **Customize Collections** page. Then, in the **New Collection** section, select **Choose members by attributes**. Select the attributes and click **Save As Collection**.

Because collections by attribute use a database query, collections that are complex take more system resources every time they are accessed. Keeping collections simple minimizes performance impact.

Figure 5. Creating a collection by attribute

Show collections of: Systems

++ --

<input type="radio"/>		Yes	-
<input type="radio"/>	+ HP BladeSystem	Yes	-
<input type="radio"/>	+ Storage Systems	Yes	-
<input type="radio"/>	All Racks	Yes	No
<input type="radio"/>	All Enclosures	Yes	No
<input type="radio"/>	All Clients	Yes	No
<input type="radio"/>	All Networking Devices	Yes	No
<input type="radio"/>	All Printers	Yes	No
<input type="radio"/>	All Management Processors	Yes	No
<input type="radio"/>	All Financial Servers	Yes	-
<input type="radio"/>	+ Financial Servers	Yes	-
<input type="radio"/>	+ Systems by Status	Yes	-
<input type="radio"/>	+ Systems by Operating System	Yes	-
<input type="radio"/>	+ Clusters by Type	Yes	-
<input type="radio"/>	+ Clusters by Status	Yes	-

New Collection

Choose members individually

Choose members by attributes

Choose members from the existing system and event collections

Search for systems :

where system type is Server

<< Add

View Save As Collection... Cancel

Combination collections

Combination collections are new in HP SIM 5.1. This new form of collections enables you to bind together a system collection and an event collection. Combination collections enable you to reuse and recombine system and event collections that you have created.

Figure 6. Creating a combination collection

Show collections of: Events ▼

++ --

	Name	Visible	Status displayed
<input type="radio"/>	Private	Yes	-
<input type="radio"/>	Shared	Yes	-
<input type="radio"/>	+ Events by Severity	Yes	-
<input type="radio"/>	+ Login Events	Yes	-
<input type="radio"/>	+ Service Events	Yes	-
<input type="radio"/>	+ Events by Time	Yes	-

New Collection

Choose members individually
 Choose members by attributes
 Choose members from the existing event and system collections

Select event collection: All Login and Logout Events ▼

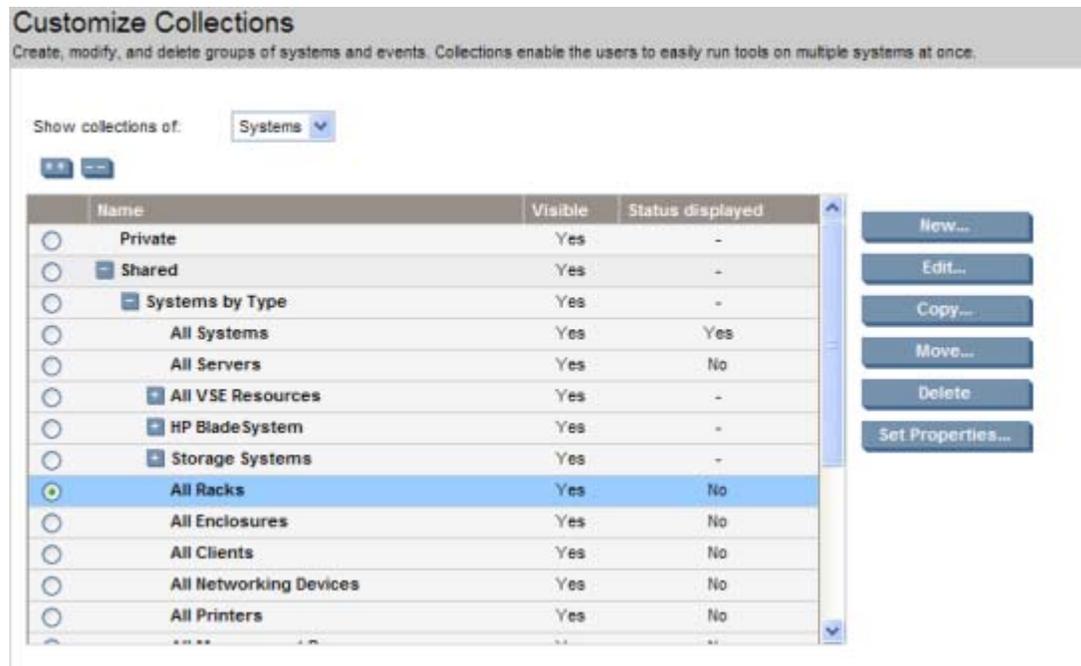
Select system collection: All Servers ▼

Note: There are two kinds of combination collections. If you are creating a *system* collection, then the combination collection returns a system list. If you are creating an *event* collection, then the combination collection returns an event list. For example, the two collections **All Servers** and **All Login and Logout Events** could be combined in two ways. One way yields all servers that have login and logout events. The other way yields all login and logout events that occurred on servers.

Other customization features

The **Customize Collections** page enables you to create and organize your collections in a way that works for you.

Figure 7. Customize Collections page



On the **Customize Collections** page, some collections show their contents and others do not. For example, in Figure 7, **All Systems**, **HP BladeSystems**, and **Storage Systems** are not collections by member because the expansion icon (+) is located beside the collection name, and when you click the icon, the contents of the collection are displayed.

Because collections by attribute are dynamic, determining their content and displaying it in this interface would be very time consuming. Therefore, their content is not displayed and you cannot set properties on members of these collections. Setting properties on systems that might not be part of the collection in the future would be of very limited value.

Edit

Any collection can be edited. However, collections cannot change type. For example, you can change the criteria for a collection that is defined by attribute, but you cannot change the collection type so the collection is a collection by member or a combination collection.

Copy

Copy is a new feature in HP SIM 5.1 and enables you to copy a collection from one place in the collection hierarchy to another. It is important to note that what is copied is independent of the original collection; any collections that are within the copied collection are themselves copied by reference.

For example, consider the following hierarchy (contents of the collections not relevant to the example are not shown):

```
CollectionA
    CollectionB
        CollectionC
```

```

                SystemA
                SystemB
            CollectionD
        CollectionE
    CollectionF

```

If CollectionB is copied to CollectionF, the hierarchy would look like the following:

```

CollectionA
    CollectionB
        CollectionC
            SystemA
            SystemB
        CollectionD
    CollectionE
CollectionF
    Copy of CollectionB
        CollectionC
            SystemA
            SystemB
        CollectionD

```

The new instance of CollectionB receives a new name, but its contents are copied directly. The contents, CollectionC and CollectionD, are copied by reference. Both CollectionB and Copy of CollectionB refer to the exact same instances of CollectionC and CollectionD.

Later, if SystemC is added to CollectionC, and SystemD is added to the original CollectionB, the result would be that SystemC appears in both places, and SystemD appears only in one place, as follows:

```

CollectionA
    CollectionB
        CollectionC
            SystemA
            SystemB
            SystemC
        CollectionD
            SystemD
    Collection E
CollectionF
    Copy of CollectionB
        CollectionC
            SystemA

```

SystemB

SystemC

CollectionD

There are two instances of SystemC in the view of the hierarchy because CollectionC is the same throughout the application. Any place that CollectionC is referenced, it will always contain the same systems. However, SystemD appears only under CollectionB. CollectionB and Copy of CollectionB are distinct and independent collections.

Move

Move is another new feature in HP SIM 5.1. It enables you to easily move a collection exactly where you want it in the hierarchy.

Note: Collections can be moved from **Private** to **Shared**, but not from **Shared** to **Private**.

Delete

Most collections can be deleted. However, there are some restrictions.

- Collections cannot be deleted if they are not empty.
- Collections cannot be deleted if they are in use. That is, if the collection is the target for a scheduled task, if it is used for the **System Status** panel, or if it is used in some other collection, then it cannot be deleted.
- The **All Systems** and **All Events** collections cannot be deleted.

After a collection is deleted, it cannot be recovered.

Set Properties

Collections have properties, and these properties define the way collections behave in the **System and Event Collections** panel and elsewhere in HP SIM.

- Visible property

It might be the case that there are system or event collections, that are either shipped with HP SIM or are user-defined, that you do not use, but at the same time, do not want to delete. If you do not use these collections, but you do not want to delete them, you can remove them from the user interface by using the **Visible** setting in the collection properties. When you select **No, do not show collection and its members in the user interface** for a collection, that collection no longer appears in the **System and Event Collections** panel, in the Task Wizard, or any place in the user interface (except the customization panel itself) where collections are shown.

Making collections invisible can make the **System and Event Collections** panel less cluttered, but note that once you make collections invisible, they are excluded everywhere in HP SIM including being removed from tasks. For example, if a task is scheduled to run with a certain collection, and that collection is made not visible, then the task will not run on that collection. You can change the visibility setting at any time

Figure 8. Selecting to show or not show a collection and its members in the user interface

Set Properties for: All Clients

Visible:

- Yes, show collection and its members in the user interface
- No, do not show collection and its members in the user interface

Status Displayed:

- Yes, show status in Systems and Events panel
- No, do not show status in Systems and Events panel

Default View:

- Status Displayed property

You can set the **Status Displayed** property to enable you to easily view the aggregate status of a particular collection. You can set this property only on individual systems or on collections by attribute, for example, the lowest level of the hierarchy (the leaves of the tree).

Figure 9. Table showing collections that cannot have status set to display

Customize Collections
Create, modify, and delete groups of systems and events. Collections enable the users to easily run tools on multiple systems at once.

Show collections of:

Name	Visible	Status displayed
<input type="radio"/> Private	Yes	-
<input checked="" type="radio"/> Shared	Yes	-
<input type="radio"/> Systems by Type	Yes	-
<input type="radio"/> All Systems	Yes	Yes
<input type="radio"/> All Servers	Yes	Yes
<input type="radio"/> All VSE Resources	Yes	-
<input type="radio"/> HP BladeSystem	Yes	-
<input type="radio"/> Storage Systems	Yes	-
<input type="radio"/> All Racks	Yes	No

Buttons: New..., Edit..., Copy..., Move..., Delete, Set Properties...

In the **System and Event Collections** panel, where the status is displayed, the status will “bubble up” to the higher levels of the hierarchy (the root of the tree) so that the most urgent statuses are always visible at any level.

For collections at higher levels, a dash in the **Status displayed** column indicates that the status cannot be set there.

However, you can choose to have the status displayed for collections *within* the highest-level collection, and after the status is set there, it will be visible at every level of the tree in the **System and Event Collections** panel, merging with other displayed statuses all the way to the **Systems** item at the top of the tree.

Statuses are merged so that the most significant is always displayed.

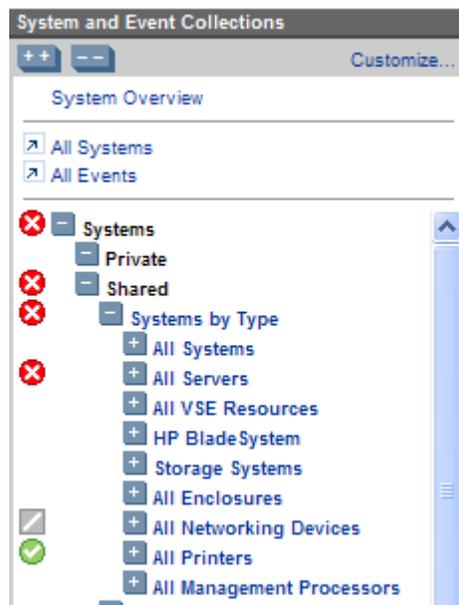
Note: Statuses at the top of the following list take priority over those at the bottom.

- Critical
- Major
- Minor
- Warning
- Normal
- Disabled
- Unknown
- Informational

For example, Figure 9 shows that the status cannot be set to be displayed for the **Systems by Type** collection, but the **All Systems** collection *within* the **Systems by Type** collection can be set to display the status.

In Figure 10, in the **System and Event Collections** panel, the **Systems by Type** collection will display the aggregate status of all collections that you have selected to show the status of. In this example, the selected collections are **All Servers**, **All Networking Devices**, and **All Printers**.

Figure 10. System and Event Collections panel displaying collection aggregate status



- Default View property

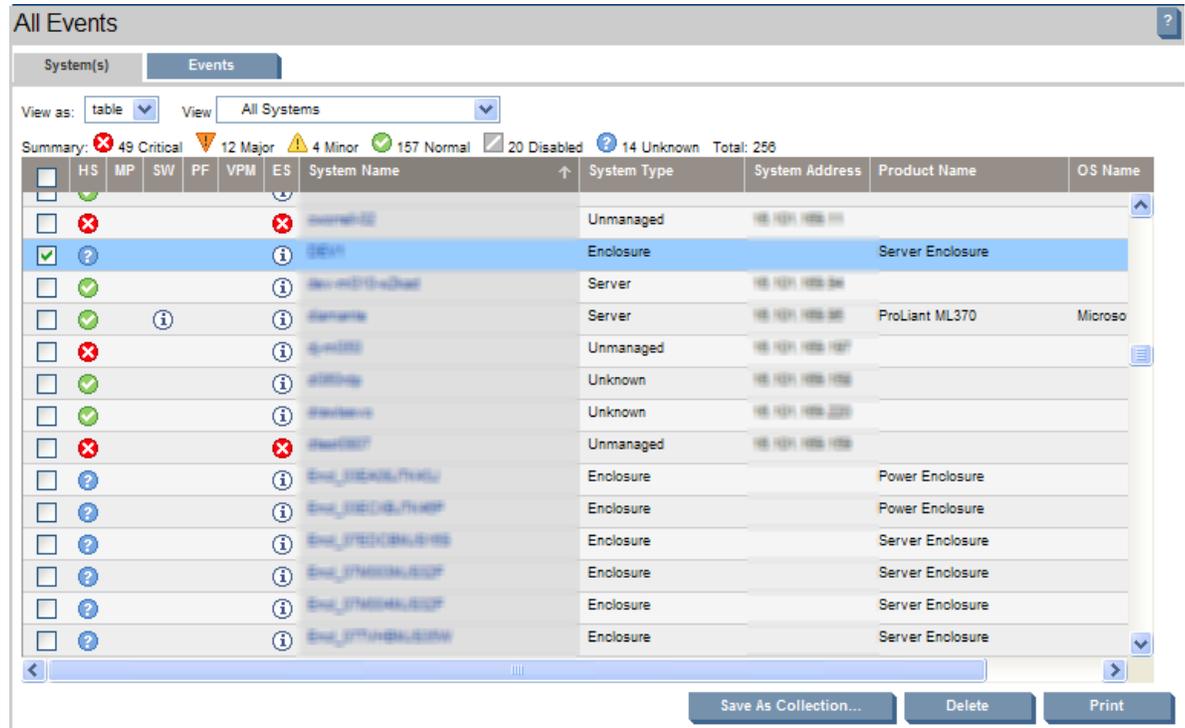
When you select a collection in the **System and Event Collections** panel, the contents of that collection are displayed in the workspace. By default, different types of collections are displayed in different ways. Collections by attribute and combination collections default to a table view, but they

can also be displayed as icons or a tree. Collections by members default to a tree view, but they can also be displayed as icons or a table. Special types of system collections default to picture views or special consoles. You can change the default view using this property.

Tabbed views

In HP SIM 5.1, the collection view pages contain two tabs.

Figure 11. Table view with System(s) and Events tabs



System(s) tab

For a system collection, the **System(s)** tab displays the list in table, tree, icon, or picture view.

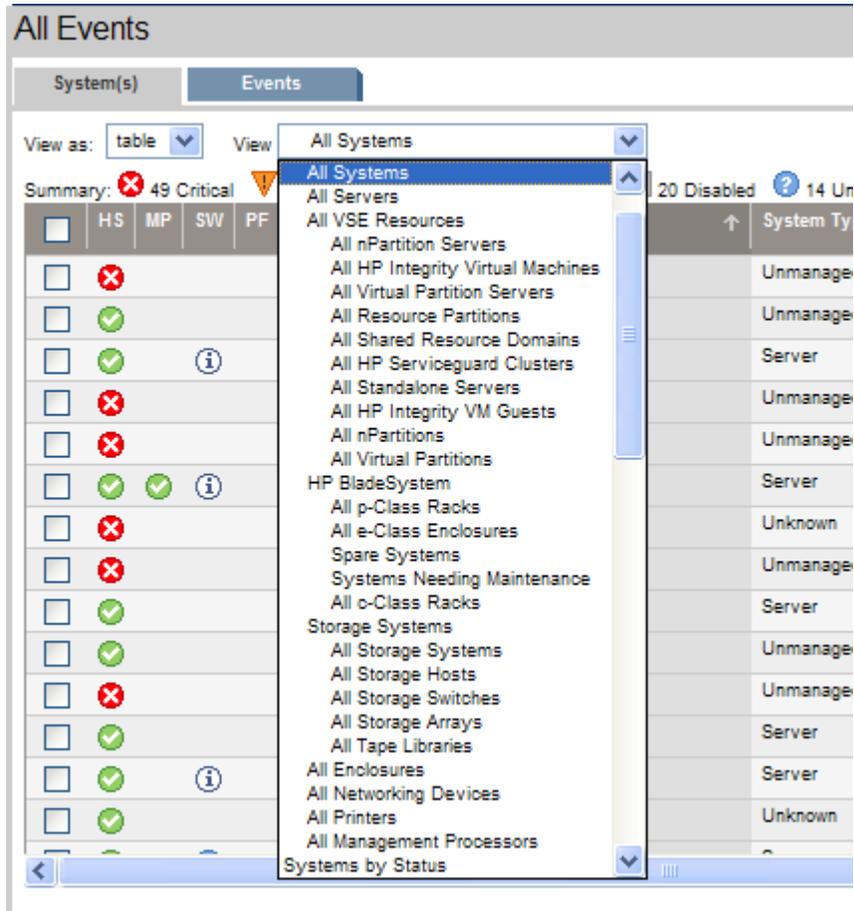
You can select the **Events** tab to view different event collections applied to the system collection. For example, if the **All Servers** collection is selected, you can access the **Events** tab and view, for example, **All Events on All Servers**, **All Failed Login Events on All Servers**, **Events older than 90 Days on All Servers**, or **MyImportantEvents on All Servers**.

Events tab

For an event collection, the **Events** tab displays the list of events.

You can select the **System(s)** tab to look at different system collections that include those events. For example, if the **All Failed Login Events** collection is selected, you can access the **System(s)** tab and view **All Systems with Failed Login Events**, **All Servers with Failed Login Events**, **AllMyFinancialSystems with Failed Login Events**, and so on.

Figure 12. Viewing system collections that include events for the selected collection



If the displayed collection is a combination collection, as described in “Combination collections,” the tabs are still available, but there is no dropdown control to select other event or system collections. In this case, a system collection and an event collection are already bound together permanently.

Figure 13. Combination collection with no option to select other collections

The screenshot shows the 'Financial Servers' collection view. At the top, there are tabs for 'System(s)' and 'Events', with 'Events' selected. Below the tabs, there is a 'View as:' dropdown menu set to 'table'. A checkbox labeled 'Select "Financial Servers" itself' is present. A summary bar shows: Summary: 0 Critical (red X), 0 Major (orange triangle), 0 Minor (yellow triangle), 4 Normal (green check), and 0 Disabled (grey slash). Below the summary is a table with columns: , HS, MP, SW, PF, VPM, ES, System Name, and System Type. The table contains four rows of system data.

<input type="checkbox"/>	HS	MP	SW	PF	VPM	ES	System Name	System Type
<input type="checkbox"/>	✓				i	✓	16.101.169.110	Unmanaged
<input type="checkbox"/>	✓		i		i	✓	16.101.169.138	Unknown
<input type="checkbox"/>	✓				i	✓	16.101.169.143	Unmanaged
<input type="checkbox"/>	✓	i	i	?	i	!	echo	Server

Selections for running tasks

Task wizard

When tools are run with one or more systems or events as the target, those groups are collections. You can select the targets either before or after selecting the tool. You can select the targets as single systems or any of the collection types. You can verify and modify the selection using the task wizard.

After the targets are verified, they appear in the title area of the tool.

Note: Some tools cannot work on multiple systems. In this case, a warning is displayed that states you can select only an individual system.

See the *HP Systems Insight Manager 5.1 User Guide* for more information on the task wizard.

Selecting systems

In any collection view (table, tree, icon, or picture), the systems or events have checkboxes next to them to indicate selection. Selecting a checkbox means that buttons (**[Save As Collection]**, **[Delete]**, and so on) on the page apply to what is selected. It also means that any tools you run at that point attempt to use that system as a target. Selecting the checkbox at the top of the column selects all the systems or events in that collection.

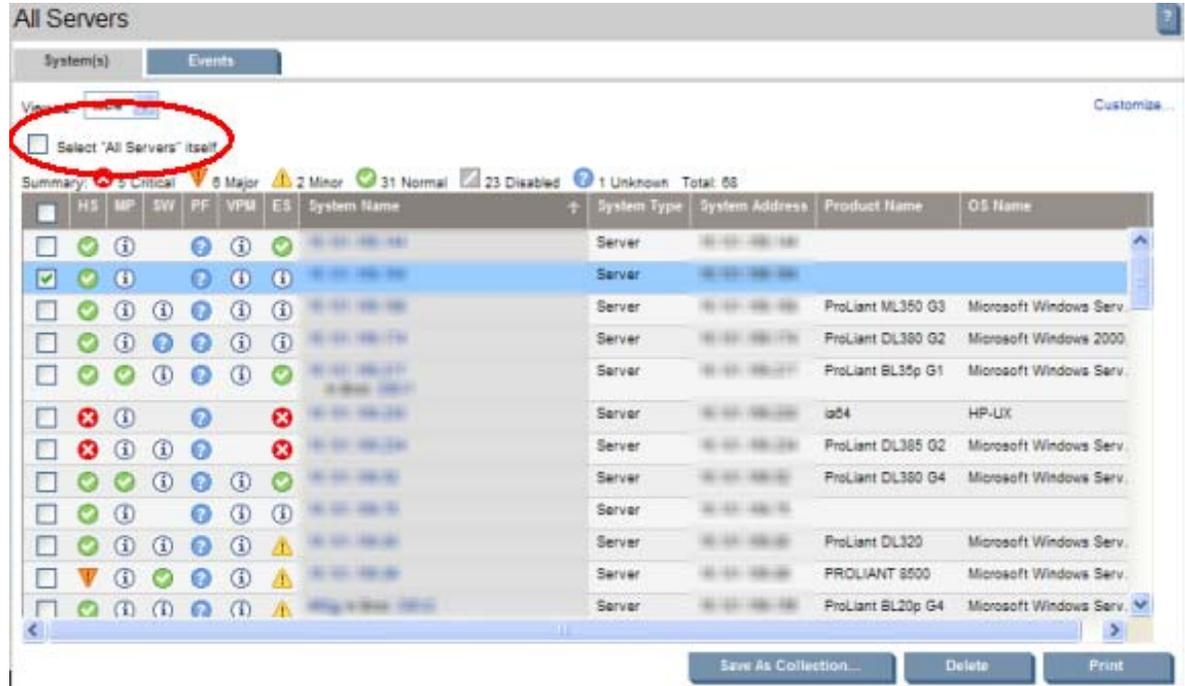
Selecting events

Selecting events can be very powerful. You can select the events on which to use commands that are on the event view page (**[Clear]**, **[Delete]**, **[Assign to]**, and so on). In addition, you can select events to preload the task wizard with a target selection for tools that work on events, and you can select events as a way to select systems. Because every event has a system associated with it, selecting the event implicitly selects the associated system. For example, you might want to view systems with **Important Uncleared Events**, select them all, and then run ping to get additional information on those systems.

Selecting a collection itself

In addition to the checkboxes for each line item, there is also a special checkbox at the top of each view labeled **Select collection name itself**.

Figure 14. Selecting a collection itself



This checkbox is useful for tasks that are scheduled. Because collections are evaluated and their members determined only at the time of use, a target collection might have different content tomorrow than it does today. Choosing the collection itself ensures that tasks always work on the most up-to-date set of systems.

For example, the task **Delete Events Older Than 90 days** runs once per week and uses the target collection **Events Older than 90 days** itself.

If instead, you set up a task and select all events older than 90 days by selecting the checkbox at the top of the column, and you schedule the task to run weekly, the task works the first week, but in the second and subsequent weeks, it fails because it tries to delete the same events again.

Figure 15. Example of table view with events older than 90 days

The screenshot shows the HP SIM interface with the 'Events' tab selected. At the top, there are two tabs: 'System(s)' and 'Events'. Below the tabs, there is a summary bar that reads: 'Summary: 1058 Critical 3 Major 15 Minor 0 Warning 1006 Normal 491 Informational Total: 2573'. Below the summary bar, it says 'Displaying Page 1 (results 1-500 of 2573)' and has navigation links '1 | 2 | 3 | 4 | 5 | 6 Next >'. The main part of the screenshot is a table with the following columns: State, Severity, Event Type, System Name, Event Time, Assigned To, and Comments. The table contains 15 rows of data. The first row is 'Successful Login' with a severity of 'Informational'. The next four rows are 'System is unreachable' with a severity of 'Critical'. The remaining ten rows are 'System is reachable' with a severity of 'Normal'. At the bottom of the screenshot, there is a toolbar with five buttons: 'Clear', 'Delete', 'Assign To...', 'Enter Comment...', and 'Print'.

State	Severity	Event Type	System Name	Event Time	Assigned To	Comments
Not cleared	Informational	Successful Login	HP-System	12/14/08 11:28:48		
Not cleared	Critical	System is unreachable	HP-System	12/14/08 11:22:48		
Not cleared	Critical	System is unreachable	HP-System	12/14/08 11:22:48		
Not cleared	Critical	System is unreachable	HP-System	12/14/08 11:22:48		
Not cleared	Critical	System is unreachable	HP-System	12/14/08 11:22:48		
Not cleared	Normal	System is reachable	HP-System	12/14/08 11:22:48		
Not cleared	Normal	System is reachable	HP-System	12/14/08 12:22:48		
Not cleared	Normal	System is reachable	HP-System	12/14/08 12:22:48		
Not cleared	Normal	System is reachable	HP-System	12/14/08 12:22:48		
Not cleared	Normal	System is reachable	HP-System	12/14/08 12:22:48		
Not cleared	Normal	System is reachable	HP-System	12/14/08 12:22:48		
Not cleared	Normal	System is reachable	HP-System	12/14/08 12:22:48		
Not cleared	Normal	System is reachable	HP-System	12/14/08 12:22:48		
Not cleared	Normal	System is reachable	HP-System	12/14/08 11:22:48		

Global selection of target systems

Whenever you select systems or collections in the HP SIM workspace, either on the collection view page or with the task wizard, this affects the global selection. When a tool is selected, the task wizard displays what is in the global selection of the target systems for the tool and asks you to verify systems. After a tool is run, the global selection remains, enabling you to easily run subsequent tools on the same set of targets.

If you do not want to verify systems each time you run a task, you can modify the task wizard settings by selecting **Options>Task Wizard Settings** and selecting **Bypass target verification page when all targets are valid**. See the *HP Systems Insight Manager 5.1 User Guide* for more information. This option is not available in HP SIM 5.3 or greater.

There is an exception to the global selection rule. Some tools launch separate windows, and the task wizard appears in a window other than the main window. In this case, changes to the targets in those tools do not affect the global selection. For example, System Management Homepage launches in a separate window. When you make a target selection for this tool, within the separate window, it does not affect the global selection.

Tabs

Because collection views have tabs at the top, you can make some selections on the **System(s)** tab, then change to the **Events** tab and make additional selections. When you switch between tabs, the previous selections are maintained.

Because you can select different systems on the **System(s)** tab or systems can be implicitly selected on the **Events** tab, HP SIM uses whichever selection is currently being viewed as the global selection when you select a tool.

Filtering

When you select the targets for a task, you can combine system collections and event collections on a temporary basis by using filters. For example, if you want to run a tool on all the servers in a collection that have important events, select **All Servers**, and then click **[Add Event Filter]**. This process enables you to select an event collection, in this case **All Important Events**, to use as a filter. Only one event collection can be used as a filter at a time.

Figure 16. Adding a filter to collection

Step 1: Verify Target Systems

The tool will run on the following systems. If you are happy with this selection, click "Next".

<input type="checkbox"/>	Name	OS	Type	Tool launch OK?
<input type="checkbox"/>	All Financial Servers			Yes

[Next >](#)

Add filter by selecting from:

- select -

- select -

Events by Severity

Important Events

Important Uncleared Events

Informational Events

Login Events

 All Login and Logout Events

 All Failed Login Events

Service Events

 All HP Service Events

Events by Time

Note: This tool only accepts attribute-driven event collections.

[Cancel](#) [Apply](#)

If you run a tool that requires events as targets, then you can add one or more system collections as filters. For example, if you want to delete events that are older than 90 days, but only on the print servers and the database servers, you would select **Events older than 90 days** as the event collection and then add **All Print Servers** and **All Database Servers** as filters.

Figure 17. Collection with filters added

Step 1: Verify Target Events

The tool will run on the following events. If you are happy with this selection, click "Schedule" or "Run Now".

<input type="checkbox"/>	Name	OS	Type	Tool launch OK?
<input type="checkbox"/>	Events older than 90 days			Yes

Filtered By:

<input type="checkbox"/>	Name
<input type="checkbox"/>	All Print Servers
<input type="checkbox"/>	All Database Servers

[Modify Targets](#) [Remove Targets](#) [Add System Filters](#) [Remove Filters](#) [Schedule](#) [Run Now](#)

If the selected event collection is a combination collection, then additional system filtering is not an option.

Automatic event handling

Before HP SIM 5.1, users of HP SIM had to recreate their event collections every time they wanted to monitor events on different systems, even if the events were the same. This was often a labor-intensive process. With HP SIM 5.1, the process has been streamlined so you can apply the same event collection to multiple system collections, without having to start over each time.

Figure 18. Creating automatic event handling task– Step 2

Automatic Event Handling - New Task
Create a new task for handling incoming events automatically

Step 2 of 6

- ✓ Select name
- Select events**
- Select systems
- Select actions
- Select time filter
- Review summary

Select event collection

use this event collection: All Failed Login Events [View Definition](#)

use event attributes that I will specify

< Previous Next >

As before, you can either select an existing event collection or create a set of events for automatic event handling from within the wizard. You can do the same thing with systems. You can select a system collection that already exists or you can create a group of systems from within the wizard.

Figure 19. Creating automatic event handling task– Step 3

Automatic Event Handling - New Task
Create a new task for handling incoming events automatically

Step 3 of 6

- ✓ Select name
- ✓ Select events
- Select systems**
- Select actions
- Select time filter
- Review summary

Select system collection

use this system collection: Financial Servers [View Definition](#)

use system attributes that I will specify

< Previous Next >

Unlike before, when system criteria were permanently embedded in event collections, you can now mix and match event collections and system collections.

Note: If you select a combination collection for the events collection, then the systems are already specified within that collection. In this case, the **Select systems** step of the Automatic Event Handling wizard is skipped. When you get to this step, the systems have been specified already.

Reports

A new feature in HP SIM 5.1 is event reporting. You can view event information for your managed systems. For example, you could run a report to see the severity, event type, and system name of all your financial server events.

Figure 20. Event Summary report

Event Summary ?

Associated systems: All Financial Servers

Report date and time: Wednesday, January 17, 2007 8:50:39 AM PST

Show SQL queries

Event Summary				
System Name	Severity	Type	Cleared Status	Received Time
HP SIM 1000 0100	Critical	System is unreachable	Cleared	Mon, 12/18/2006, 9:47 AM PST
HP SIM 1000 0100	Critical	System is unreachable	Cleared	Mon, 1/8/2007, 12:34 PM PST
HP SIM 1000 0100	Critical	System is unreachable	Cleared	Tue, 12/12/2006, 8:47 AM PST
HP SIM 1000 0100	Critical	System is unreachable	Cleared	Thu, 12/21/2006, 9:49 AM PST
HP SIM 1000 0100	Critical	System is unreachable	Cleared	Fri, 12/22/2006, 8:35 AM PST
HP SIM 1000 0100	Critical	System is unreachable	Cleared	Thu, 12/21/2006, 10:35 AM PST
HP SIM 1000 0100	Critical	System is unreachable	Cleared	Thu, 12/21/2006, 12:09 PM PST
HP SIM 1000 0100	Critical	System is unreachable	Cleared	Fri, 12/22/2006, 8:49 AM PST
HP SIM 1000 0100	Critical	System is unreachable	Cleared	Mon, 1/8/2007, 11:54 AM PST
HP SIM 1000 0100	Normal	System is reachable	Not cleared	Tue, 12/12/2006, 8:47 AM PST
HP SIM 1000 0100	Normal	System is reachable	Not cleared	Mon, 12/18/2006, 9:47 AM PST
HP SIM 1000 0100	Normal	System is reachable	Not cleared	Thu, 12/21/2006, 12:09 PM PST
HP SIM 1000 0100	Normal	System is reachable	Not cleared	Thu, 12/21/2006, 9:49 AM PST
HP SIM 1000 0100	Normal	System is reachable	Not cleared	Thu, 12/21/2006, 10:35 AM PST
HP SIM 1000 0100	Normal	System is reachable	Not cleared	Fri, 12/22/2006, 8:35 AM PST
HP SIM 1000 0100	Normal	System is reachable	Not cleared	Fri, 12/22/2006, 8:49 AM PST
HP SIM 1000 0100	Normal	System is reachable	Not cleared	Mon, 1/8/2007, 11:54 AM PST
HP SIM 1000 0100	Normal	System is reachable	Not cleared	Mon, 1/8/2007, 12:34 PM PST
HP SIM 1000 0100	Informational	Discovered System	Not cleared	Wed, 12/6/2006, 2:12 PM PST
HP SIM 1000 0100	Informational	Discovered System	Not cleared	Wed, 12/6/2006, 2:14 PM PST
HP SIM 1000 0100	Critical	System is unreachable	Cleared	Thu, 12/14/2006, 9:57 AM PST
HP SIM 1000 0100	Informational	Discovered System	Not cleared	Wed, 12/6/2006, 2:14 PM PST
HP SIM 1000 0100	Normal	System is reachable	Not cleared	Thu, 12/14/2006, 9:57 AM PST
HP SIM 1000 0100	Critical	System is unreachable	Cleared	Mon, 12/18/2006, 9:47 AM PST
HP SIM 1000 0100	Normal	System is reachable	Not cleared	Mon, 12/18/2006, 9:47 AM PST
HP SIM 1000 0100	Informational	Discovered System	Not cleared	Wed, 12/6/2006, 2:15 PM PST

If you want to refine this report to show only the Important events, you can add an event filter in the task wizard.

Figure 21. Creating a new report to show Important events

New Report
Create a report for the target systems

Step 1: Verify Target Systems
The tool will run on the following systems. If you are happy with this selection, click "Next".

<input type="checkbox"/>	Name	OS	Type	Tool launch OK?
<input type="checkbox"/>	All Financial Servers			Yes

Filter

Add filter by selecting from:

- Important Events
- select -
- Events by Severity
 - Important Events
 - Important Uncleared Events
 - Informational Events
- Login Events
 - All Login and Logout Events
 - All Failed Login Events
- Service Events
 - All HP Service Events
- Events by Time
 - Events older than 90 days
 - Delete Events

Note: This tool only accepts attribute-driven event collections.

Cancel Apply

You can also create the report to show only the events that happened in, for example, the past week. Create an event collection first using **Customize Collections** in the **System and Event Collections** panel.

Figure 22. Creating an event collection to use when you create a report

Customize Collections ?

Create, modify, and delete groups of systems and events. Collections enable the users to easily run tools on multiple systems at once.

<input type="radio"/>	All Virtual Machine Management Events	Yes	-
<input type="radio"/>	All Server Migration Events	Yes	-

Set Properties...

New Collection

Choose members individually

Choose members by attributes

Choose members from the existing event and system collections

New Collection

Search for events

where event time is newer than 7 day(s)

<< Add

View Save As Collection... Cancel

Save As Collection

Required field:*

Name: * Events of last week

Place in:

Existing collection: Private

New collection: within Private

OK Cancel

After the event collection exists, you can select that specific event collection from the **Verify Target Systems** page when you generate reports.

Figure 23. New report using new event collection

<input type="checkbox"/>	Name	OS	Type	Tool launch OK?
<input type="checkbox"/>	All Financial Servers			Yes

Add filter by selecting from:

- select -
- select -
- Events by Severity
 - Important Events
 - Important Uncleared Events
 - Informational Events
- Login Events
 - All Login and Logout Events
 - All Failed Login Events
- Service Events
 - All HP Service Events
- Events by Time
 - Events older than 90 days
 - Delete Events
 - Events of last week

Note: This tool only accepts attribute-driven event collections.

See the *HP Systems Insight Manager 5.1 User Guide* for additional information on running reports.

Authorizations

Collections can be in the Private collection or in the Shared collection. Private collections are visible only to the user that created them. Shared collections are viewable by all users. However, only users with full configuration rights can create, edit, or delete shared collections.

The contents of any collection are determined by the authorizations of the user viewing the collection contents. While a collection might include many systems when viewed by one user, it might be empty for another user that is not authorized for any of the systems in the collection. Collection contents are controlled by authorizations, even for users with full configuration rights.

Command line interface

The command **mxcollection** enables you to perform operations on a collection that was created by specifying members individually. These operations include add, modify, remove, list collections, and list members within the collection. The command **mxquery** is used to add, modify, list, remove, and execute collections that were created by specifying attributes (also known as query collections). To get a list of all of your collections, you must combine the list output from both of the command line interface (CLI) commands.

New **mxcollection** CLI options include move, copy, and the ability to create combination collections.

Copy

Use the **mxcollection -cp** command to copy a collection under another collection, using a new name that you specify. The original collection and all its children remain in the original location. When the collection is moved, the children from the original collection appear under the new

collection. These children are the original children, not copies. The syntax for the **mxcollection** command using the copy option is:

```
mxcollection -cp existcollname -from fromparentcollname  
-to toparentcollname [-branch sysbranch|evbranch]
```

For example, to copy a collection called *sample collection*, rename it to *sample collection copy*, and assign the parent collection Coll in the Events list, enter the following:

```
mxcollection -cp "sample collection" -name "sample collection copy"  
-to Coll -branch evbranch
```

Move

Use the **mxcollection -mv** command as described in the “Copy” section, except that the original collection is deleted. The syntax for the **mxcollection** command using the move option is:

```
mxcollection -mv existcollname -from fromparentcollname  
-to toparentcollname [-branch sysbranch|evbranch]
```

For example, to move a collection called *test collection* from the parent collection *parent1* to the parent collection *parent2* in the list of System collections, enter the following:

```
mxcollection -mv "test collection" -from "parent1" -to "parent2"
```

Combination collections

Use the **mxcollection -a combo** command to create a combination collection using two existing collections. This combination collection is created under another collection that you specify. The syntax for the **mxcollection** command using the option function is:

```
mxcollection -a combo newcombocollname -syscoll systemcollname  
-evcolleventcollname -parent toparentcollname [-branch sysbranch|evbranch]
```

For example, to create a combination collection named *another new combo* that includes the system collection **All Servers** and the event collection **Important Events**, and is saved in the list of Event collections under the parent collection *Login Events*, enter the following:

```
mxcollection -a combo "another new combo" -syscoll "All Servers"  
-evcoll "All Important Events" -to "Login Events" -branch evbranch
```

See the *HP SIM Command Line Interface Reference Guide* and the *Infrastructure management using the HP SIM command line interface* white paper located at <http://h18013.www1.hp.com/products/servers/management/hpsim/infolibary.html> for details on the CLI command syntax of **mxcollection** and **mxquery**.

Upgrading

Users of previous versions of HP SIM might have event collections (or queries) that have system attributes.

In HP SIM 5.1, this collection format is no longer used and these types of collections are migrated to the new format. In the previous example, the old collection **MyEventsOnFinancialServers** is migrated to three new collections:

- **MyEventsOnFinancialServers-combination**—The same collection in the new format
- **MyEventsOnFinancialServers-systems**—The system part of the collection
- **MyEventsOnFinancialServers-events**—The event part of the collection

In this way, collections that you spent a long time customizing for your environment not only still work, but they are usable with the new mix-and-match functionality of HP SIM 5.1. Therefore, if the event part of the example collection is complex, you can apply it to different system collections without having to recreate it. If you do not need the extra collections, you can delete them.

Any tasks that relied on collections created with previous versions of HP SIM continue to work.

For more information

HP SIM 5.1 overview and features:

<http://h18013.www1.hp.com/products/servers/management/hpsim/index.html>

HP SIM Quickspec documents:

<http://h18013.www1.hp.com/products/servers/management/hpsim/quickspecs.html>

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