



Tap In Systems, Inc. Cloud Management Service

QuickView Guide

Using Tap In's QuickView Console Application

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About QuickView

The Tap In *Management Service* is the core product in the Tap In Systems product suite and provides monitoring and control over a variety of networks, systems and applications. This service is an Amazon Web Services server instance that contains the programming extensions for mediator and consumer scripts. It also arbitrates communications among the various components using a defined IP socket protocol. Automation, correlation and client applications use this protocol to share event information. Mediators and consumer automation applications can run on the same platform as the management server or on remote systems, like Tap In agents. A management server can support connections to other management servers or Tap In clients.

QuickView is a client of the Tap In Management Server and is a high performance console that enables viewing of all open events on your management server. QuickView dynamically updates alarms as the management server processes events. It shows alarm information in a color-coded, text format. Alarms may be filtered and sorted according to operator requirements. QuickView is a Java based application and runs on any platform that supports Java, including most Windows, Linux, UNIX, or SUN operating systems.

Figure: Tap In Systems - QuickView Console Application

ID	ASTO	RTTO	SEV	GROUP	COUNT	FIRST	LAST
0000002	~	~	4	null	1	2009-01-13 13:23:03.134	2009-01-13 13:23:03.134
0000007	~	~	4	null	1	2009-01-13 13:26:19.994	2009-01-13 13:26:19.994
0000005	~	~	5		2	2009-01-13 13:26:17.922	2009-01-13 13:26:17.922
0000004	~	~	5		2	2009-01-13 13:26:17.913	2009-01-13 13:26:17.913
0000006	~	~	1		2	2009-01-13 13:26:19.932	2009-01-13 13:26:19.932
0000008	~	~	4		2	2009-01-13 13:26:22.993	2009-01-13 13:26:22.993

Total: 7

Filter:

Installing QuickView

The QuickView program operates with one Tap In Management Server at a time. However, you may have multiple instances of QuickView running, each connected to a different Tap In Management Server.

Prerequisites

- Operating Systems - QuickView is a Java client application typically installed on Windows or Linux systems.
- Java - QuickView is a Java client application and requires the installation of Java version 1.6 or later.
- Tap In Management Server - QuickView requires access to a running Tap In Management Server with a valid server log in. Refer to the *Tap In Systems Administrator Guide* for information regarding defining QuickView users on the Management Server.

Download and Install Java

- Go to the Java site at <http://www.java.com/en/download/manual.jsp> to download and install Java for the appropriate operating system.

Download and Install QuickView

Follow the steps below to download and install QuickView for Windows or Linux:

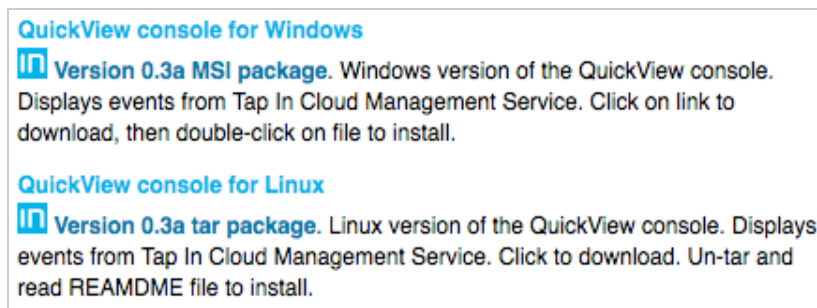
Windows

1. Download - Open a browser to Tap In's web site at <http://www.tapinsystems.com/> navigate to the Resources, Downloads page and select the QuickView Console for Windows download link.
2. Install - Windows packages are delivered as MSI files. Click the downloaded .msi file, you will be prompted through the install process.

Linux

3. Download - Open a browser to Tap In's web site at <http://www.tapinsystems.com/> navigate to the Resources, Downloads page and select the QuickView Console for Linux download link.
4. Install - Linux packages are delivered as tar files. Untar the downloaded .tar file.


Figure: Tap In Systems - Downloads



Launching QuickView

Follow the instruction below to launch QuickView for Windows or Linux:



- Windows - Click on the Tap In QuickView icon  that was placed on your desktop after installation.
- Linux – Call the Java program directly using the command below. Make sure that you issue the command from the same directory as the jar files. Note also that the configuration XML file is referenced as the last parameter. If you wish to use a different configuration file, you will need to modify the file name referenced in this command line.

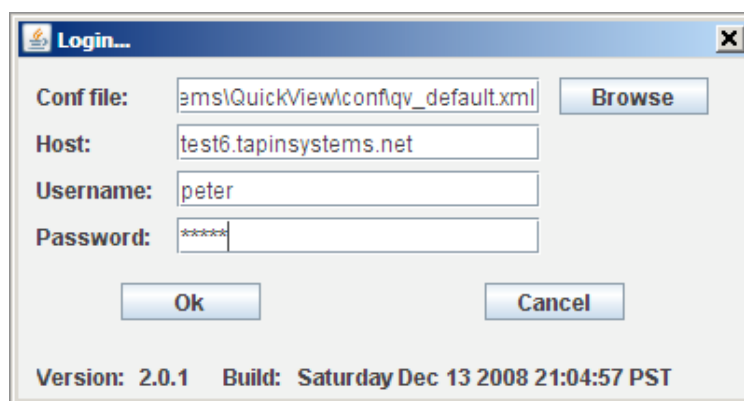
```
start javaw -classpath .\WmiProxy.jar;.\axis.jar;.\jaxrpc.jar;.\js.jar;.\jdom.jar;.\hsqldb.jar;.\servlet-api.jar;.\spark-1.2.jar com.spiderweb.quickview.Gui qvdefault_default.xml
```

QuickView Login Dialog

After launching QuickView a login dialog box will be displayed. Enter the following settings, click OK and QuickView will startup and connect to the Tap In Management Server. If the connection to the Tap In Management Server fails, you will see an error message dialog box. Usually this means the server is not running on the machine you specified, or you are using an invalid host name, username or password.

- Conf file - This is the configuration file containing the parameters for the session you are opening. Select *Browse* to navigate to the **Conf** subdirectory and select the `qv_default.xml` file. Once you are familiar with QuickView you can edit this file to set your own default session parameters; see *Automating QuickView Startup* in this document.
- Host - This is the management server. Enter the host name of the management server that you started (e.g. `test6.tapinsystems.net`).
- Username and Password - Enter the username and password that you defined as a **Consumer** user in the Management Server setup process. If you did not change these settings, you can use the default values `peter` and `peter`.

Figure: QuickView Login Dialog Box



Stopping QuickView

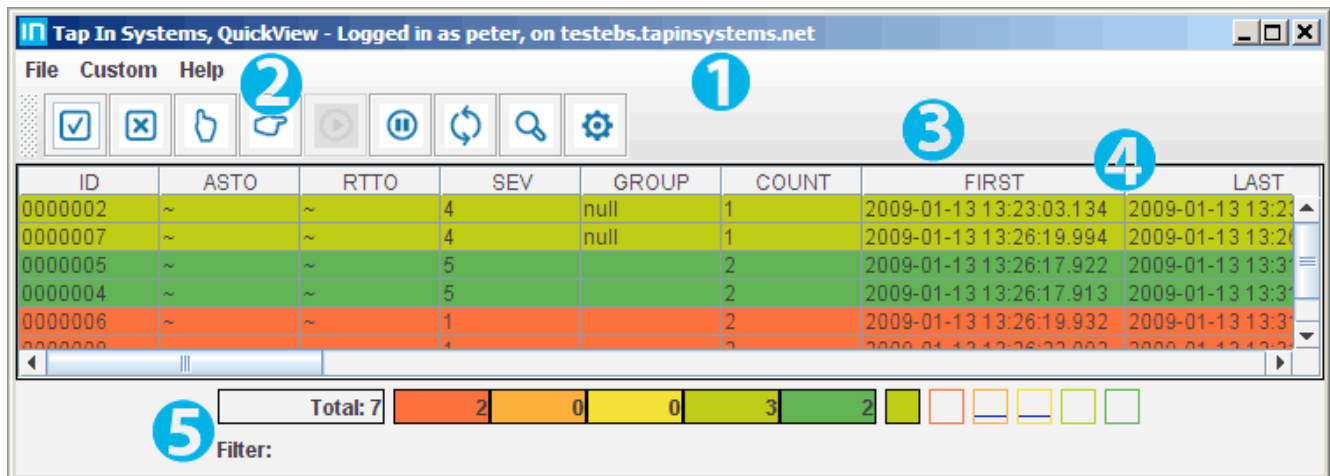
To stop the QuickView application, select *File, Logout* from the menu bar, or close the QuickView window by clicking the "X" in the top right corner of the application window.

QuickView Operations

QuickView Main Window

Once launched, the QuickView program creates a window and displays events from the Tap In Management Server to which you are connected. A typical QuickView console view is shown below.

Figure: QuickView Console Main Window



1 Title Bar

The title bar shows whether a SSL connection is used, the username and the Tap In Management Server host name.

2 Menu Bar and Action Bar

The menu bar and action tool bar are positioned on the top of the window.

3 Event List and Scrolling

The event list displays all open events. Each event in the QuickView console is displayed horizontally across the screen. Each event has multiple attributes. The attributes form the columns on the console window. The initial console fields displayed and the order that they appear are defined in the configuration XML. You can scroll up and down or right and left using the scroll bars on the bottom and right edges of the window.

4 Column Sorting, Width, and Position

Columns in the event display can be sorted (ascending or descending) by clicking the column titles. To change the width of a field, drag the line separating the field. You can also change the order of the fields by dragging and placing the field in desired order.










5 Event Summary and Filter Name

A summary display on the bottom of the window shows the total number of events by severity. This area also lists an event filter name if one is being used.

Scrolling, Sorting, and Selecting Events

- Scrolling - Typically there is more information in the QuickView window than can be displayed on the screen. To view all attributes of an event, use the horizontal scroll bar. To view other events not displayed within the window, use the vertical scroll bar.
- Sorting - Sort by any event field by left clicking on the field name in the header row.
- Selecting Events - Users can take action on events by first selecting one or more events, then selecting an action. Selected event(s) will turn gray, and the window will be frozen. Select specific events by: Clicking on an event, Dragging over multiple events, or Clicking on an event, pressing CTL and selecting additional events.

QuickView Action Bar

Action	Description
	Select/Deselect All Events - If no alarms are selected, this will select all events in the QuickView window and freeze the window. If alarms are selected, this will un-select all alarms.
	Close Selected Events - This will clear this event from the active event list and the event(s) will be cleared for all other QuickView users and consumer applications.
	Accept Ownership of an Event - This indicates the selected event is “owned” by a user. This feature allows multiple users to identify which problems are under investigation and which are not. After selecting an event and selecting Assign, the user's ID in placed in this field.
	Route To - Route event ownership to another user. After selecting an event and selecting Route To, a list of users (consumers) is displayed. Selecting one of these users will place that user's ID in the Route To field and that user can see events routed to him. A user can then indicate acceptance of an event by selecting Assign whereby the Route To field will then be cleared.
	Resume Display - When this icon is selected updates to the console are enabled. Blinks when Stop icon is selected. The QuickView window is either in an “active” (resumed) state or “frozen” (stopped) state. When in active state, new events processed by the Tap In Management Server automatically update the event window. However the QuickView user may wish to freeze the window, preventing automatic updates, in order to examine events.
	Stop Display - Selecting the Stop option from the menu or action bar can do this. If the window is in frozen state, the Stop action icon will flash. Clicking the Resume icon will put the window back into active state, any queued events will update the window, and the icon will no longer flash.
	Resync - This forces a fresh set of active events to be sent by the Tap In Management Server to QuickView. Normally only new events are sent to QuickView. This option replaces the open event list in QuickView with the current copy from the server. If the view on the QuickView becomes corrupted for any reason, simply choose the File/Refresh menu selection and the display will be redrawn for you.
	Inspect - See all the details of a single event by double-clicking the event. If you select multiple events and then select the Inspect icon, the next/back buttons (“>>>” and “<<<”) will be active, allowing you to page to the next or previous event. You may also use this dialog box to copy and paste field values into other applications or documents.
	Set an SQL filter - Define filters that can be applied to the console event list. See <i>Defining a Console Filter</i> below for detailed steps.


QuickView Menu Bar

Various actions can also be accessed from the QuickView menu bar. Below lists other actions that are only accessible for the menu bar.

Option	Description
File>Login	Login - This option is only active if you are logged out. This option displays the Login in dialog box.
File>Logout	Logout - Only active if you are logged in. This will disconnect QuickView from the Tap In Management Server but keep QuickView active. You can then log in to another Tap In Management Server. Log out by selecting File, Log Out, or just closing the window.
File>Print	Print - Accessed from the menu bar. This option allows the event list to be sent to a printer or saved to a file.
File>Close	Close - Accessed from the menu bar. This option closes the QuickView window and program.
Help	Help - Opens a browser to the QuickView help page on Tap In System's web site.
Help>About	About - Opens a window displaying the QuickView version.

Defining a Console Filter

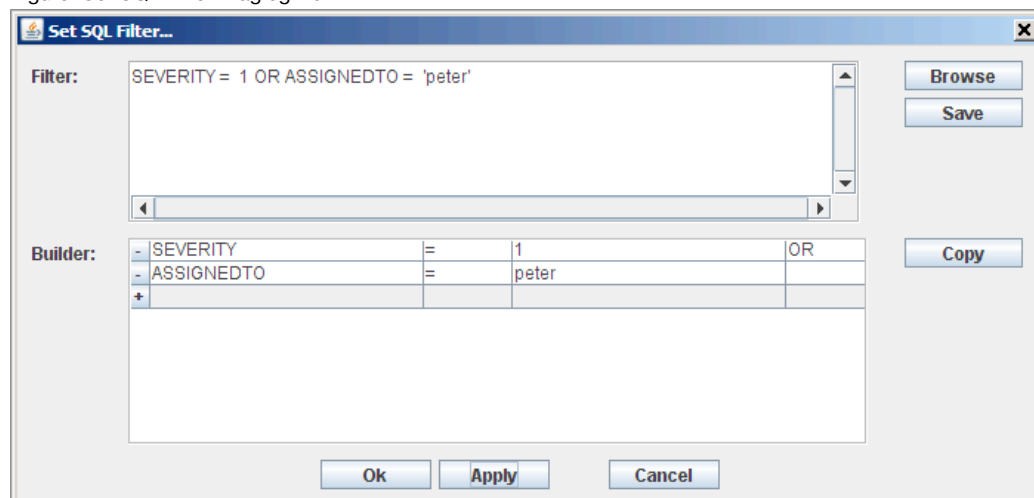
The Filter option allows you to filter the open event list and only show events that match an SQL select command, for example; show only Severity 1 events.

1. Select the action icon  or choose the *Custom>Filter* menu option. The Set SQL Filter dialog box will be displayed.
2. Select the "+" sign next to Builder to create a valid SQL statement.
3. Individually click in the cells above the "+" and select the filter criteria from the drop-down lists. For example: Field: **SEVERITY**, Operator: "=", and the Severity to match is "1". You can also type the SQL condition directly into the Filter section if you know the field names and conditions.

To create multiple conditions, select the Builder "+" sign again. The AND or OR operators can be used to build complex SQL conditions. The full SQL syntax is supported, including LIKE and IN operators.

4. Once the SQL condition is defined, select *Copy* to fill out the *Filter* area.

Figure: Set SQL Filter Dialog Box



- Next, select *Apply* and the event window will only show those alarms that match the *Filter* condition that was set. The filter details are shown at the bottom of the event window.

Figure: Filtered Results

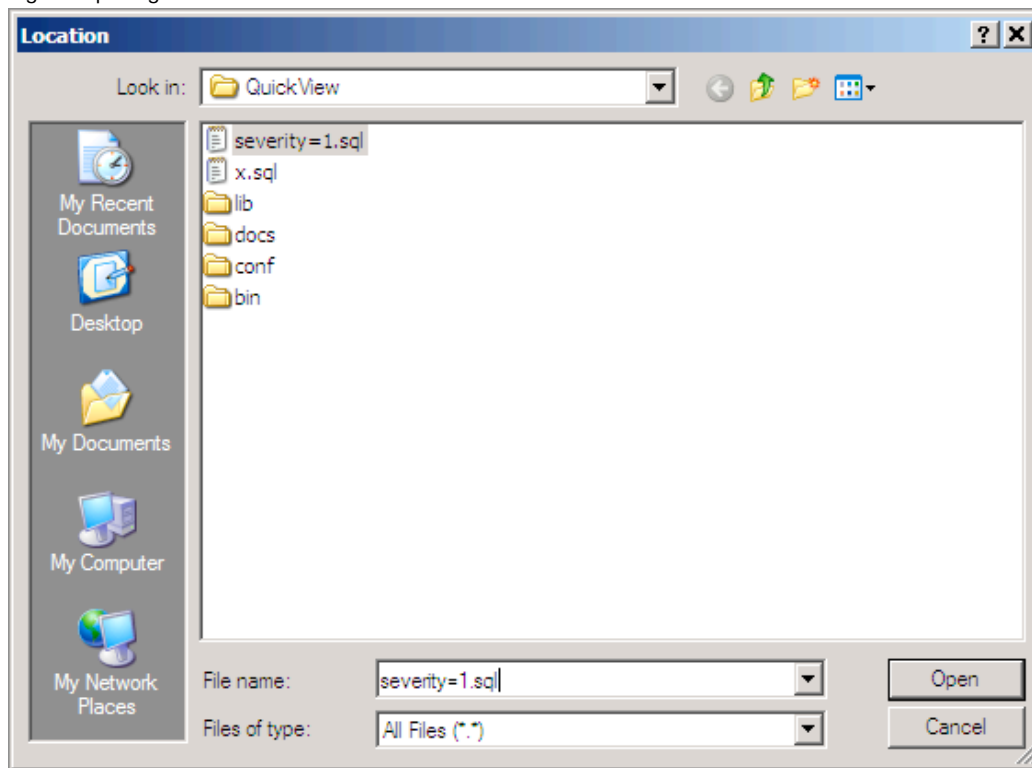
ID	ASTO	RTTO	SEV	GROUP	COUNT	FIRST	LAST
0000003	peter	~	5		14	2009-01-15 11:32:06.844	2009-01-15 12:37:07
0000004	peter	~	5		14	2009-01-15 11:32:06.844	2009-01-15 12:37:07
0000005	peter	~	1		14	2009-01-15 11:32:08.893	2009-01-15 12:37:09
0000006	~	~	1		14	2009-01-15 11:32:10.883	2009-01-15 12:37:11

Total: 4 2 0 0 2

Filter: SEVERITY = 1 OR ASSIGNEDTO = 'peter'

- Once you create an SQL definition, you can select *Save* and recall the saved filter another time. To use a saved filter, open this dialog box, select *Browse* and select your saved filter file.

Figure: Opening a Saved Filter



Configuring QuickView Default Settings

Configuration XML

QuickView uses a configuration file to set the connection and display parameters. You can configure your default QuickView settings by editing this configuration XML file.

Sample settings and descriptions for `qv_default.xml`:

```

<QUICKVIEW
  debug="none" # Setting ON displays additional messages to the console.
  Host="" # Hostname of the Tap In Management Server
  username="" # Username defined on the Tap In Management Server
  password="" # Username's password defined on the server
  sev1color="255" # Override the display color settings for severities.
  Sev2color="32767" # Can be specified as decimal or hex if preceded by numbers.
  sev3color="65535" # Are justified left. Example:"255", "#FF", and "#FF0000" all
  sev4color="16776960" # represent the color red.
  sev5color="597">
  <SSL keyStore="C:\tapinsystems\spider.bin" # If SSL option is used, this is the location of the
    keyStorePassword="spideradmin"/> # SSL certificate. If SSL is not used, delete this line.
  <LOG stdout="C:/stdout.txt" # Log file output files.
    stderr="c:/stdout.txt"/>
  <COLUMNS> # Define the event columns to display, order and width.
    <ID width="80"/> # ID - The event's unique identifier
    <ASTO width="0"/> # Assigned To - ID of the consumer accepting ownership
    <RTTO width="0"/> # Route To - ID of the consumer event routed to
    <SEVERITY width="80"/> # Severity - The severity of an event
    <PRIORITY width="80"/> # Priority of an event
    <COUNT width="80"/> # Count - The number of redundant events
    <FIRST width="120"/> # First Time - Creation time of this event
    <LAST width="120"/> # Last Time - Last time this event was updated
    <CLASS width="100"/> # Class - A class designation assigned by the server
    <GROUPING width="200"/> # Group - A group designation assigned by the server
    <EMS width="80"/> # EMS - The category of the event
    <RULE width="100"/> # Rule - The rule name generating an event
    <T1 width="0"/> # T1/N1-T3/N3 - Unique identifier for an event based
    <N1 width="200"/> # on the HRL fields in the form of T1:N1, T2:N2, T3:N3.
    <T2 width="0"/>
    <N2 width="150"/>
    <T3 width="0"/>
    <N3 width="150"/>
    <MESSAGE justify="left" width="800"/> # Text message associated with an event
    <STAT width="0"/> # Status of the event - assigned, accumulates, times out, etc.
    <GA width="0"/> # Graph Attribute - Attribute name associated with an event
    <GV width="0"/> # Graph Value - Attribute values associated with an event
  </COLUMNS>
  <SPARKLINE type="line" title="SEV1" limit="60"> # Define the event-input-rate graph displayed on the bottom
  </SPARKLINE> # of the QuickView window.
  <SPARKLINE type="line" title="SEV2" limit="60"> # Valid types are line and bar.
  <SPARKLINE type="line" title="SEV3" limit="60"> # Limit shows the last number of incoming events to include
  </SPARKLINE> # in the graph.
  </SPARKLINE>
  <SPARKLINE type="line" title="SEV4" limit="60">
  </SPARKLINE>
  <SPARKLINE type="line" title="SEV5" limit="60">
  </SPARKLINE>
</QUICKVIEW>

```

Automating QuickView Startup

You can automatically connect to QuickView and a Tap In Management Server with a single click. This automation process launches the console while bypassing the Login dialog box that normally prompts you for host information and login credentials. This process includes a command (or a Windows batch file) that includes reference to the defined host, username, and password settings defined in the configuration .xml file and connects to the defined host. Follow the steps below to edit your configuration file and launch QuickView.

If you wish to enter these settings manually upon startup, you can leave your configuration file settings blank and enter them in the login dialog box. Entering these parameters in the dialog box will override the configuration file settings; host, username and password.

1. First you need to have the host, username, and password settings defined in your configuration .xml file.

```
<QUICKVIEW
  debug="none"
  host="testbs.tapinsystems.net" # Hostname of the Tap In Management Server
  username="peter"              # Username defined on the Tap In Management Server
  password="peter"              # Username's password defined on the Tap In Management Server
```

2. Next, you can open a command prompt window and execute the following command (on a single line with quotes). Or for convenience you may want to create a batch file with the following command and place a short cut to the batch file on your desktop.

```
"C:\Program Files\Tap In Systems\QuickView\quickview.exe" "C:\Program Files\Tap In Systems\QuickView\conf\qv_default.xml"
```

3. Entering the command line or executing a batch file will open QuickView to the host specified in your configuration file (e.g. qv_default.xml).

Glossary

This section defines terms relating to the Tap In QuickView application.

QuickView	A Tap In software application that converts Tap In Management Server data into a human-readable display of color-coded monitoring events.
Tap In Management Server	Tap In software that runs in the Amazon Web Service (AWS) cloud as an Elastic Compute Cloud (EC2) instance, and converts events from systems and other technology components into a neutral format stream of events for use by consumer programs.
Mediator	A program that monitors status of a device or system and sends events to the Tap In Management Server.
Consumer	A program that uses Tap In Management Server events for special purpose management functions. QuickView is a consumer program.
Event	A discrete piece of information describing a real-world situation, as described by the Tap In Management Server system and displayed by QuickView. An event has identifying attributes such as a severity, priority, text message, and ID number. Event is used interchangeably with the term “alarm”.
Open and Closed Events	Events that are open represent current problems in the managed environment. QuickView only shows open events as events that are closed do not represent current problems or are not of interested to operators. An operator can use QuickView to close an open event. Closed events are logged in the Tap In Management Server database.
Event Display	The main window of the QuickView application that displays Tap In Management Server events in detailed. The events are presented in a line-by-line format.
Filter	A Structured Query Language (SQL) specification used to screen alarms before being displayed to the user. SQL statements can be defined and saved by the QuickView user, then applied to the current event display.
Alarm	A discrete piece of information describing a real-world situation, as described by the Tap In Management Server system and displayed by QuickView. An alarm has identifying attributes such as a severity, priority, text message, and ID number. Alarm is used interchangeably with the term “event”.
Perl	An interpreted language, optimized for scanning and extracting information for use in management systems. Most mediators are constructed using Perl scripts.
Attributes:	Discrete attributes or elements that comprise each Tap In Management Server event:
EMS	Element Management System - This field indicates the source of the alarm, and is set by the Tap In Management Server to its host name.
CLASS	A user-definable class designation typically set to the category of managed devices. For example, all events from the Linux Agent may have a class designation of “Linux_Agent”.
GROUP	A user-definable group, typically defining a common field across different classes. For example, events from different managed devices that affect a specific application may have the same group setting.
RULE	The rule name generating an event designating the type of alarm. For example, for in the Linux Agent class, an event showing available memory space might have a rule called “free_memory”.
HRL	Hierarchical Resource List - A series of name-value string pairs, T1 through T3, and N1 through N3. These fields represent the origin of an alarm. Each level

	<p>contains a type field and a name field. For each event, the HRL indicates the affected component as specifically as possible. For example, if an event is received from a network component that affects a specific a card and port, the HRL might look like the following:</p> <p>T1 – Host N1 – 192.168.1.200 T2 – Card N2 – A T1 – Port N1 – 101</p>
COUNT	The number of redundant events with the same class, rule and HRL. The mediator determines whether an alarm will increment this count when redundant alarms appear, or whether a new alarm will be generated.
SEVERITY	The severity of this event, ranging from 1 (highest) to 5 (lowest). The color of the alarm indicates its severity. The default colors are red (severity 1), orange (severity 2), yellow (severity 3), cyan (severity 4) and green (severity 5).
PRIORITY	The priority of this event, ranges from 1 to 99.
FIRST TIME	The first time an event was viewed.
LAST TIME	The last time an event was viewed for redundant events.
EVENT ID	The unique identifier of an event.
ASTO	A consumer name assigned to this event.
RTTO	A consumer name to which an event is to be routed (not yet accepted).
STATUS	The status of the event. Can be a combination of single character designations used to indicate how the management server will process the event.
TEXT	The textual message associated with this event.
GA	A graph attribute that is interpreted by the reporting program as an item to be graphed
GV	A graph value that is interpreted by the reporting program, associated with the GA, as the value or number to be graphed.