



TEAMCENTER

Subscription Administration

Teamcenter 2412

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1. Relating audit objects, audit logs, and subscriptions

Audit objects allow administrators to define what information to log for Teamcenter object and event combinations. For example, when:

- Specified item types are checked out.
- Specified forms are created, modified, or deleted.
- Users approve specified target types in specified workflows.
- The **Complete** action on any workflow task fails.
- Access requests are denied.

Audit logs record events that occur to objects in Teamcenter. Administrators can create audit logs for virtually any event that occurs to a Teamcenter object. For example, audit logs can be created to track when:

- Any change is made to a specific type of document revision.
- A specific assembly is checked out.
- A Word document is added as a dataset to a specific type of item revision.
- Status is changed on specified parts.

Audit logs can be searched and viewed from Teamcenter. End users view audit logs to see the history of actions performed on objects.

Subscriptions are created by end users. Subscriptions are requests to be notified when data is modified by another user or when the release status of an item revision changes.

Users are notified by Teamcenter mail when the specified events occur on the specified objects.

Administration tools related to auditing events

Audit Manager

Administrators use Audit Manager to manage audit logs.

Subscription Administration

In order to manage all the different subscriptions created by users, administrators use Subscription Administration to generate subscription reports and to manage subscription tables.

2. Getting started with Subscription Administration

Getting started with Subscription Administration

Subscriptions are requests from users who want to be notified when a specific event occurs to a specified object. For example, you can create a subscription requesting notification when you see this message:

Item *Part123* is checked out, send me a notification by e-mail.

As a Teamcenter administrator, use the Subscription Administration application to manage and troubleshoot subscriptions created using the **Subscribe** menu command in My Teamcenter. Specifically, you can:

- Generate subscription reports to determine which event types are most frequently subscribed to, which types of objects are most frequently subscribed to, and which users subscribe most frequently.
- Monitor and delete action objects in the action table. Action objects are a type of subscription object that have not yet occurred. They are displayed in the action table from the moment the subscription is created until the moment the defined event occurs upon the target object. Deleting action objects does not delete the user's subscription to the workspace object. Subscriptions are deleted in Subscription Manager, the tool used to find, delete, and modify active subscriptions.
- Monitor and delete event objects in the event table. Event objects are created at the time a specified event occurs upon a target object and exist in the event table only as long as it takes to process the event object. Typically, this is only a moment. A system failure may cause numerous event objects to back up in the event table. In this case, the event table can be used to delete an excess of event objects.

Note:

You can use the **Event Type** editor in Business Modeler IDE to view and create event types.

Before you begin

Prerequisites	You must be a user with system administration privileges or be granted authorization by a user with system administration privileges.
Enable Subscription Administration	To enable Subscription Administration, use the TC_subscription Subscription Administration preference. If you have trouble accessing Subscription Administration, see your system administrator. It may be a licensing issue.

Note:

You can log on to Teamcenter only once. If you try to log on to more than one workstation at a time, you see an error message.

Configure
Subscription
Administration

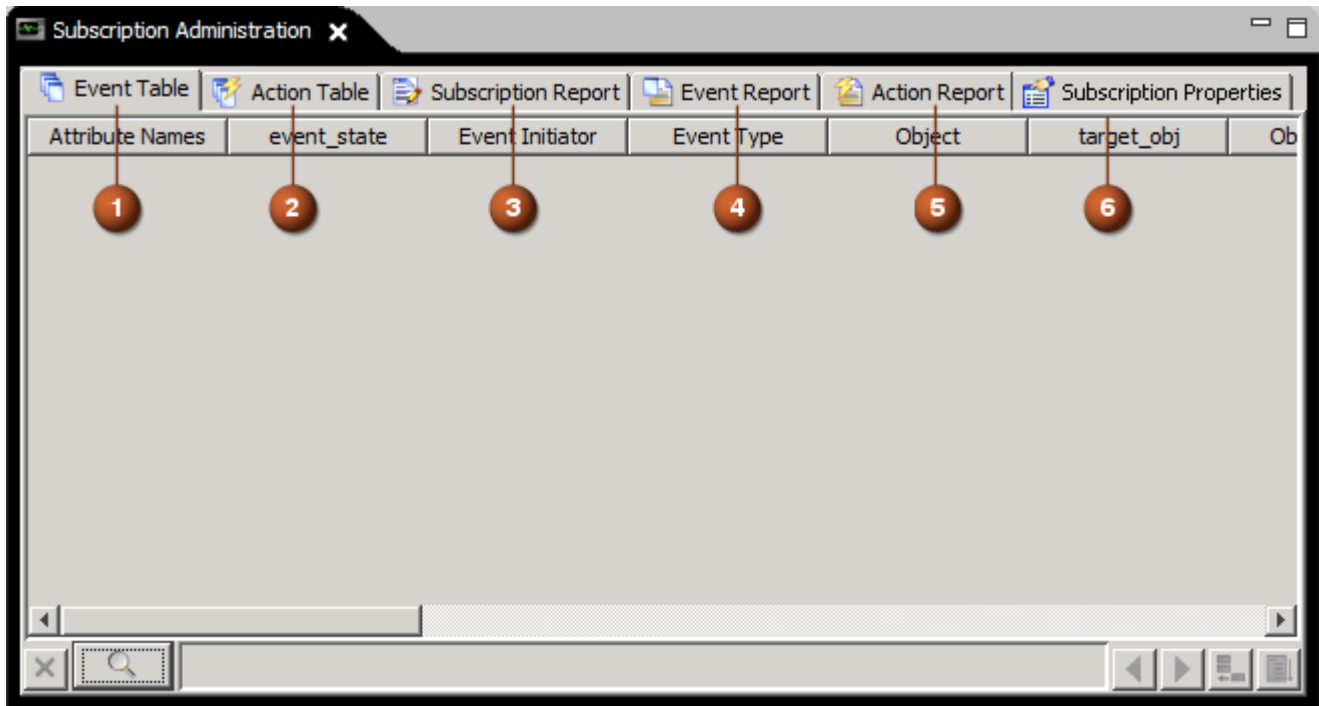
Use preferences to configure Subscription Administration.

Start Subscription
Administration

Click **Subscription Administration**  in the navigation pane.

Subscription Administration interface

Subscription Administration interface




- | | | |
|---|-------------------------|--|
| 1 | Event Table tab | Displays the Event Table pane. Event objects are created for every subscription. When the process daemons are running, event objects are typically cycled out of the event table quickly. |
| 2 | Action Table tab | Displays the Action Table pane. Action objects are subscription objects in which the defined execution time has not yet arrived. |

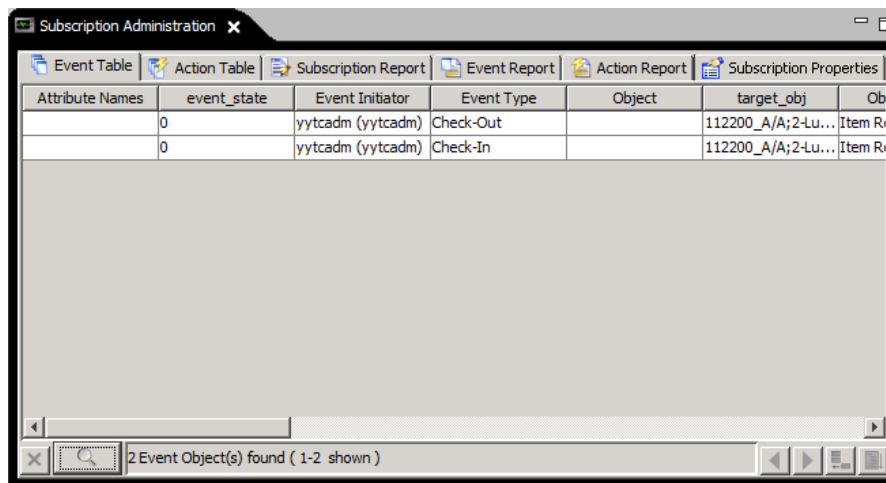
- | | | |
|---|------------------------------------|--|
| 3 | Subscription Report tab | Displays the Subscription Report pane. Use this pane to generate subscription reports based on event types, subscribers, and objects. |
| 4 | Event Report tab | Displays the Event Report pane. Use this pane to generate event object reports based on event types, event indicators, and objects. |
| 5 | Action Report tab | Displays the Action Report pane. Use this pane to generate action object reports based on event types, event indicators, and objects. |
| 6 | Subscription Properties tab | Displays the Subscription Properties pane. Use this pane to create subscription templates that use a closure rule for object traversal. |

Event Table pane

The **Event Table** pane displays the event objects in an event table.

The event table is useful when a system failure or other shutdown causes multitudes of subscriptions to back up in the queue because the system cannot process them. In this event, you can easily view and delete subscriptions that are no longer relevant.

Click the **Find** button  to list all event objects in the database.




Action Table pane

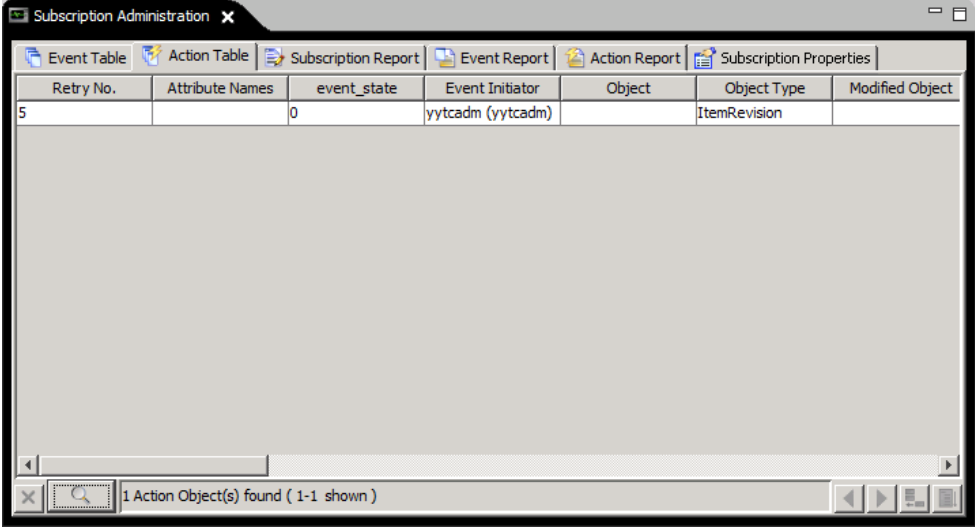
The **Action Table** pane displays the action report objects in an action table.

You can monitor and delete action objects in the action table. Action objects are a type of subscription object that have not yet occurred. They are displayed in the action table from the moment the

subscription is created until the moment the defined event occurs upon the target object. Deleting action objects does not delete the user's subscription to the workspace object.

Use the table to view pending subscriptions and easily modify or delete them.

Click the **Find** button  to list all action objects in the database.



The screenshot shows the 'Subscription Administration' window with the 'Subscription Report' pane active. The table displays the following data:

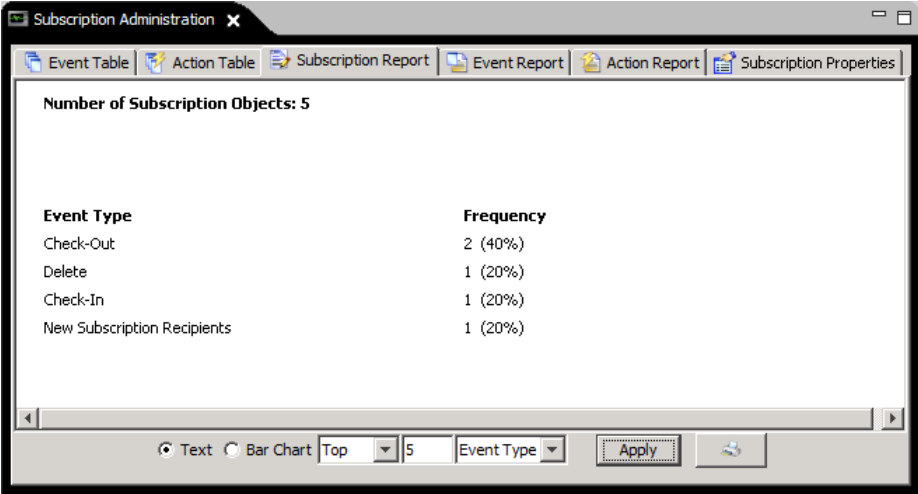
Retry No.	Attribute Names	event_state	Event Initiator	Object	Object Type	Modified Object
5		0	yycadm (yytcadm)		ItemRevision	

At the bottom of the window, a status bar indicates: "1 Action Object(s) found (1-1 shown)".

Subscription Report pane

The **Subscription Report** pane displays the subscription report, which enables you to determine which event types are most frequently subscribed to, which object types are most frequently subscribed to, and which users subscribe most frequently.

You can create a subscription report using either a text or bar chart format.



The screenshot shows the 'Subscription Administration' window with the 'Subscription Report' pane active. The report displays the following summary:

Number of Subscription Objects: 5

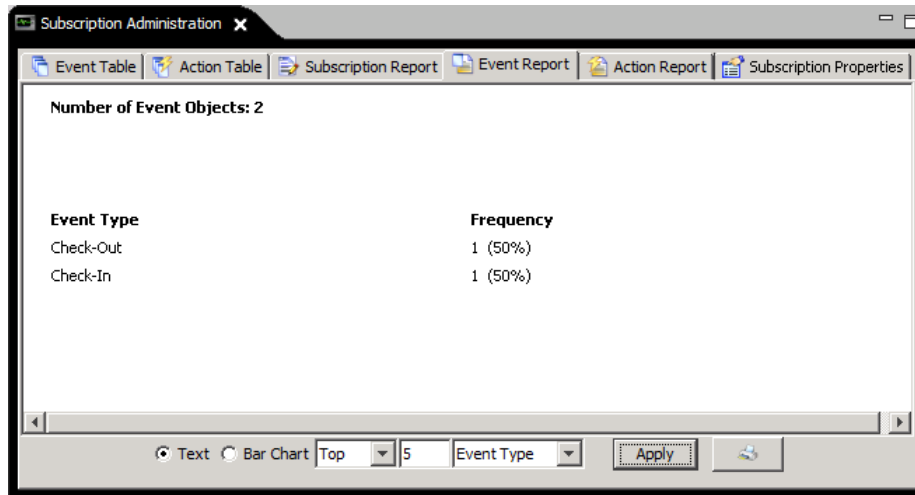
Event Type	Frequency
Check-Out	2 (40%)
Delete	1 (20%)
Check-In	1 (20%)
New Subscription Recipients	1 (20%)

At the bottom of the window, there are controls for the report format: Text Bar Chart, a dropdown menu set to 'Top', a text input field containing '5', another dropdown menu set to 'Event Type', and an 'Apply' button.

Event Report pane

The **Event Report** pane displays the event report, which contains the total number of even objects in existence.

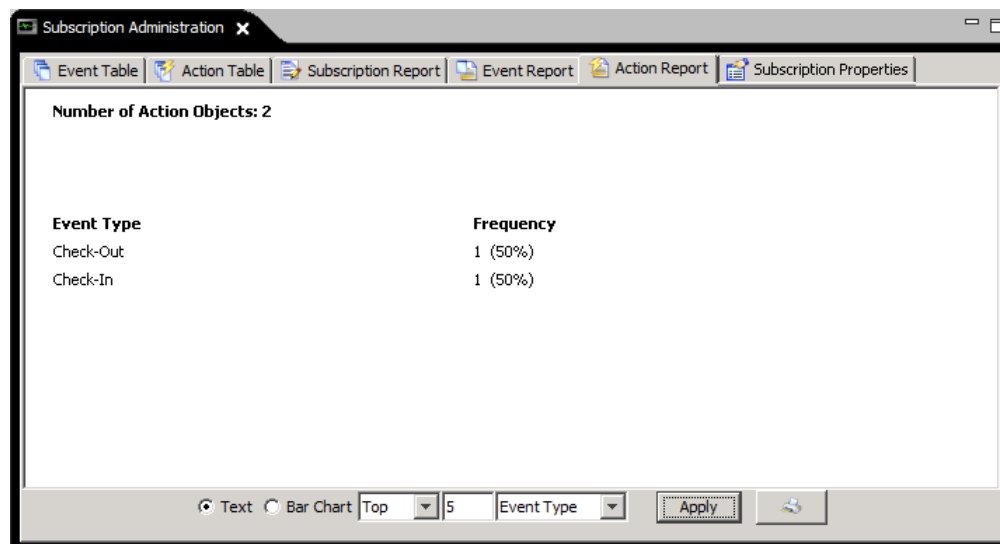
You can create an event report using either a text or bar chart format.



Action Report pane

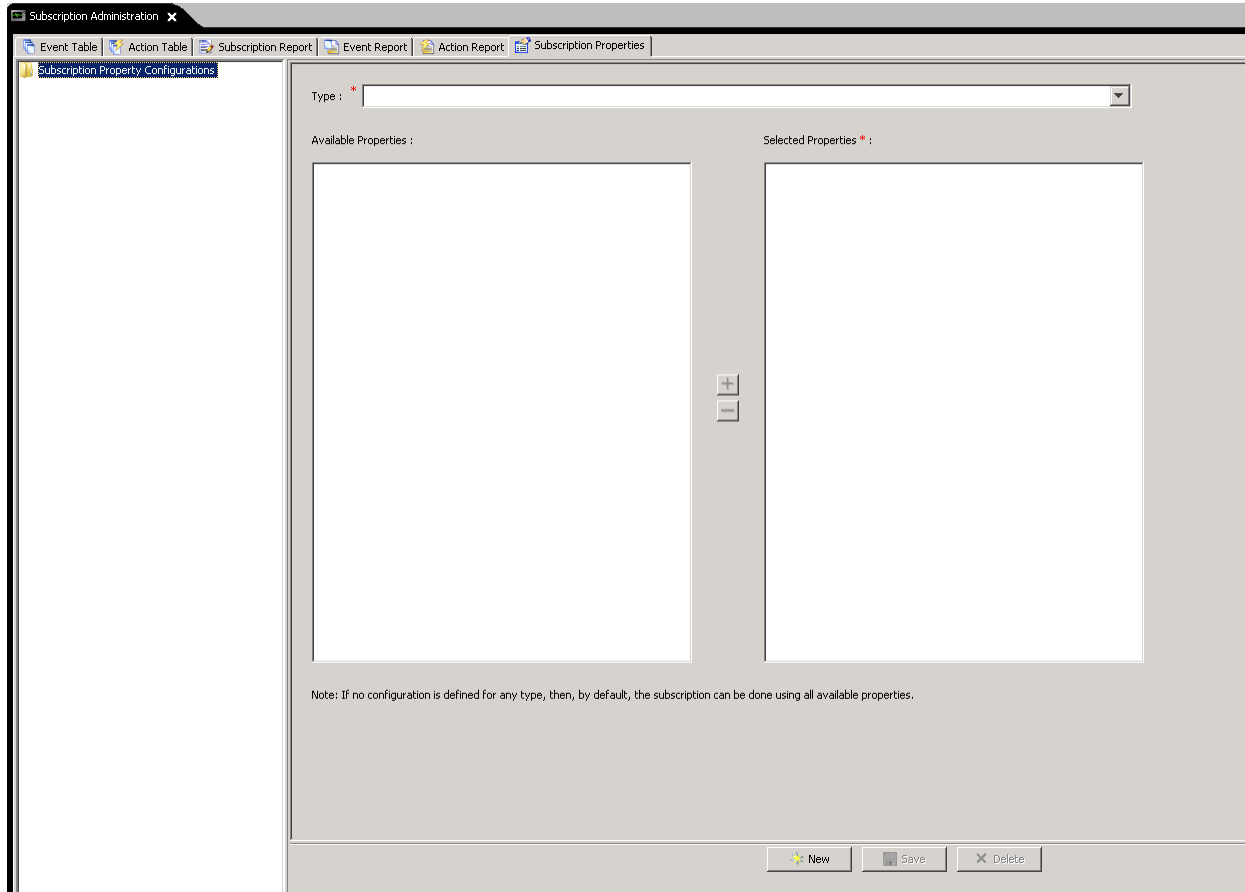
The **Action Report** pane displays the action report, which displays action objects based on the most frequent or least frequent occurrence depending on your selection.

You can create an action report using either a text or bar chart format.



Subscription Properties pane

The **Subscription properties** pane allows you to configure the properties on subscribable objects, such as **Item** or **ItemRevision**.



Basic concepts for using Subscription Administration

Basic concepts for using Subscription Administration

A subscription involves one or more targeted objects, an event to the target object, and a notification to the subscriber that the event has occurred to one or more of the target objects.

You can select one or more workspace objects of the same type to subscribe to, then select the type of event you want to be notified of, when it occurs. Typical subscriptions include:

- Subscribing to an item requesting notification when any of its item revisions are modified.
- Subscribing to a item revision requesting notification when a new **UGMASTER** dataset is created and attached to the item revision with a manifestation relation.

- Subscribing to an item requesting notification when any of its item revisions are released.
- Subscribing to a item revision requesting notification when any datasets attached to the item revision are checked out.
- Subscribing to a form requesting notification when the form is modified.

Users create subscriptions in various rich client applications, such as My Teamcenter, using the **Subscribe** command from the **Tools** menu. They can then use Subscription Manager to manage their created subscriptions.

System administrators use Subscription Administration to manage subscription modifications and to monitor and delete subscription events and actions for an entire site.

Subscription Administration uses two daemons to process subscription events, the Subscription Manager daemon, **subscriptionmgrd**, and the Action Manager daemon, **actionmgrd**. The demons process **TcEvent** objects and **TcAction** objects, respectively.

When a subscription event occurs, such as when an object is released, a **TcEvent** object is created. The object defines:

- Time of the event.
- User that triggered the event.
- Object for which the event occurred.

This object is placed in the event table and used by the **subscriptionmgrd** daemon to identify subscriptions.

Subscription Manager daemon

With each **TcEvent** object found, the daemon retrieves an associated action handler. The Subscription Manager daemon, **subscriptionmgrd**, determines if the action handler is to be executed immediately or not. When a subscription is created without a specified execution time, it is processed immediately. If an execution time is defined during the creation of the subscription, the daemon creates a **TcAction** object that contains all the information stored in the original **TcEvent** object and in the **Subscription** object.

Action Manager daemon

The Action Manager daemon, **actionmgrd**, processes **Subscription** objects which do not have **TcAction** objects. This daemon executes action handlers when:

- A subscription is created with a specific execution time.

- The **subscriptionmgrd** daemon fails to immediately execute a subscription with no defined execution time. In this case, the Action Manager daemon attempts to retry the handler as many times as the retry count in the action handler definition allows.
- An action handler is required to execute in a separate subprocess, such as the Teamcenter Multi-Site Collaboration automatic synchronization handler. In this case, the Action Manager daemon spawns a subprocess to execute the action handler.

Daemon processing times

By default, both the Subscription Manager and Action Manager daemons process their respective event-related objects every 10 minutes.

Action objects created from delayed subscriptions by the Subscription Manager daemon are processed at the specified execution time. If the current time has already passed the execution time, the object is processed the next day.

The default settings of both daemons can be modified in the site preferences file. You can also access the same help information by running the daemons as a utility with the **-help** switch.

Basic tasks using Subscription Administration

Subscription Administration is a Teamcenter administrative application that is used to perform the following tasks:

- Manage subscription tables
- Create and manage subscription reports

3. Configure Subscription Administration

Configure Subscription Administration

You can configure Subscription Administration by setting preferences and environment variables to control the application's behavior. You can also change the default settings of the Action Manager and Subscription Manager daemons.

Configuring notifications for a two-tier environment

To use the notification functionality in a two-tier environment, you must manually configure the **TC_MESSAGING_MUX_URL** environment variable. Otherwise, alert information about new or changed messages is not sent from the server program to the user. This environment variable is configured correctly for four-tier environments. However, in stand-alone two-tier environments and dedicated hosts used for servers, such as the Subscription Manager daemon or the Dispatcher module, this environment variable must be configured manually:

```
TC_MESSAGING_MUX_URL=protocol://host:mux_port
```

host is the address of the host on which a server manager is installed, and *mux_port* is the value of the mux port set when the server manager was installed.

The following are examples of the configuration:

- On Microsoft Windows machines, add the following line to the **tc_profilevars.bat** file:

```
set TC_MESSAGING_MUX_URL=http://blserver1:8087
```

- On Linux machines, add the following line to the **tc_profilevars** file:

```
TC_MESSAGING_MUX_URL=${TC_MESSAGING_MUX_URL:=http://blserver1:8087}
```

Configuring notifications for a four-tier environment

If you have multiple server managers in a four-tier deployment, the value of the **TC_MESSAGING_MUX_URL** environment variable must depend on whether your environment uses a shared **TC_DATA** directory or unique **TC_DATA** directories:

```
TC_MESSAGING_MUX_URL=protocol://host:mux_port
```

If the four-tier deployment shares the same **TC_DATA** directory for all server managers in the environment, the **TC_MESSAGING_MUX_URL** host must be set to **localhost**.

If the four-tier deployment does *not* share the same *TC_DATA* directory (this is, each server manager has its own *TC_DATA*), the **TC_MESSAGING_MUX_URL** host must be set to the host on which the server manager is installed.

Subscription Administration preferences

Following is a list of Subscription Administration preferences.

Preference	Description
TC_subscription	Enables subscription functionality.
TC_refresh_notify	Enables refresh notification functionality.
TC_refresh_notify_scope	Determines at what level (site, group, or role) refresh notification functionality is enabled.
TC_refresh_notify_subscribe_to_types	Defines which types (Item or ItemRevision) can be selected for refresh notification.
<i>TypeName_subscribe_to_events</i>	Defines the list of events for which refresh notification is sent, whenever those events occur on the objects of the specified type.
TC_refresh_notify_pull_time_interval	Determines how often, in minutes, the system automatically performs a refresh notification.
TC_refresh_notify_list_maximum	Determines the maximum number of objects contained in the refresh notification list.
TC_automatic_refresh_waiting_time	Determines the waiting time, in minutes, before the system automatically refreshes data, upon receiving refresh notification.
TC_automatic_refresh_time_interval	Determines the time interval, in minutes, for performing each automatic refresh.
TC_automatic_refresh_list_maximum	Determines the maximum number of the objects the system refreshes at a time.
TC_refresh_notify_timed_out	Determines the time interval, in minutes, during which transient session

Preference	Description
	subscriptions are valid after a user's session is timed out.
Mail_subscription_notify_sub_groups_too	Determines whether to include subgroups in subscription notification.
TC_subscription_log_event_and_action_status	Determines whether to log the status of TcEvent and TcAction objects using the subscriptionmgrd and actionmgrd process daemons.
SCM_notification_history	Determines whether the notification history record is enabled or disabled.
SCM_notification_WorkspaceObject_props	Defines the default properties to be included in notification e-mails.
SCM_execution_day	Determines the day when the event will be processed by the daemon.
SCM_execution_frequency	Specifies the frequency when the event will be processed by the daemon.
SCM_execution_time	Specifies the time when the event will be processed by the daemon.

Configuring the subscriptionmgrd process daemon

Configuring the subscriptionmgrd process daemon

The **subscriptionmgrd** process daemon monitors the event queue for **TcEvent** objects. All event objects are processed in one of two ways:

- Event objects with no defined execution time are immediately processed and e-mail sent to all subscribers.
- For event objects with a specified execution time, an **TcAction** object is created.

Note:

Only system administrators can start this daemon. Siemens Digital Industries Software recommends autologon for security reasons. On Linux systems, run this process daemon in the background.

subscriptionmgrd

USAGE

subscriptionmgrd [-help] [-u=username -p=password -g=group -pf=password file -config_file=<>] [&]

PROCESSING

- If an error occurs when this daemon executes the subscription's action handler, it creates an action object so the **actionmgrd** daemon can retry the failed handler. This daemon does not retry any handler.
- If a subscription handler is defined in the database that requires a separate process to be executed, **subscriptionmgrd** creates an action object to defer the execution to the **actionmgrd** daemon that is capable of spawning a separate subprocess for handler execution.
- At regular intervals, this daemon searches for all **TcEvent** objects in the database and dispatches each event by searching for subscriptions that match the information in the **TcEvent** object.
- After dispatching the events, the daemon sleeps for a certain period of time. When it wakes up, it searches for **TcEvent** objects again and repeats the cycle.
- To avoid memory leak problems, the daemon clones and then terminates itself on a regular basis.

SITE PREFERENCES

Use the following site preferences to control the operation of the **subscriptionmgrd** daemon.

Preference	Description
TC_subscriptionmgrd_sleep_minutes	Controls how long the daemon sleeps after dispatching events. This must be a positive integer up to 1440 (this is the number of minutes in a day). If the preference is not defined, it defaults to 10 minutes.
TC_subscriptionmgrd_max_subscriptions_to_dispatch	Controls how many subscriptions the daemon dispatches every time it processes TcObjects objects in the queue. This must be a positive integer up to 500, which specifies the maximum number of subscriptions (not TcEvent objects) that are dispatched per cycle. If

Preference	Description
TC_subscriptionmgrd_cloning_interval	the preference is not defined, it defaults to 50. Controls how often the daemon clones and terminates itself to avoid memory leak problems. This must be a positive integer from 20 to 200 and it specifies the number of dispatch-and-sleep cycles the daemon must complete before cloning and terminating itself. If the preference is not defined, it defaults to 100.

By default, the daemon goes through the dispatch-and-sleep cycle continuously. If you want to schedule the processing of events only at specified times of the day, set the **TC_subscriptionmgrd_processing_hours** site preference. The format of this preference is as follows:

```
TC_subscriptionmgrd_processing_hours=time_range1(sm, mtd);time_range2(sm, mtd);time_range3(sm, mtd);
```

Variable	Description
<i>time_range</i>	Time range in military time expressed in hours and minutes, such as 17:00–23:00 to indicate a range from 5 P.M. to 11 P.M.
<i>sm</i>	Sleep minutes applicable during that time range; if omitted, the value of TC_subscriptionmgrd_sleep_minutes is used.
<i>mtd</i>	Maximum subscriptions to dispatch that is applicable during that time range; if omitted, the value of TC_subscriptionmgrd_max_subscriptions_to_dispatch is used.

EXAMPLE

```
0:00–7:00;12:00–13:00(1,200);18:00–22:00(,50)
```

This example means that event processing is limited to the hours specified. Events are processed only during the time specified.

Time range	Action
0:00–7:00	Processing is allowed from midnight to 7 A.M.

Time range	Action
	Because <i>sm</i> and <i>mtd</i> are not specified, the values of the applicable site preferences are used.
12:00–13:00(1,200)	<p>Processing is allowed from noon to 1 P.M.</p> <p>Because <i>sm</i> = 1, the sleep time of the daemon is only for 1 minute during this time range.</p> <p>Because <i>mtd</i> = 200, the daemon dispatches 200 subscriptions after every 1 minute of sleep during this time range.</p>
18:00–22:00(,50)	<p>Processing is allowed from 6 P.M. to 10 P.M.</p> <p>Because <i>sm</i> is omitted, the value of the site preference TC_subscriptionmgrd_sleep_minutes is used.</p> <p>Because <i>mtd</i> = 50, the daemon dispatches 50 events every time it wakes up.</p>

You can run more than one **subscriptionmgrd** daemon. Additional daemons can run on the same node as the first daemon or on a different node. If several events are to be processed, Siemens Digital Industries Software recommends that you run the daemons on server nodes where users do not log on directly to minimize the impact of the daemons on their work.

When running multiple daemons, the operation of each daemon can be independently controlled by using separate site preference files in separate **TC_DATA** directories.

Setting subscriptionmgrd daemon default configuration values

The **subscriptionmgrd_config_template.xml** contains the default configuration values that the **subscriptionmgrd** daemon picks up for processing events. If this file is not supplied as input using the **-config** option, then the daemon reads the values from the parameters. The file is located in the **TC_DATA\subscriptionmgrd** directory.

Following is an example of the **subscriptionmgrd_config_template.xml** file.

```
<SubMgr>
  <Daemon id="">
    <SleepInterval value=""/>
    <MaxEventsToProcess value="50"/>
    <CloningInterval value="50"/>
    <ProcessingHours value="12:00-21:00;"/>
    <ProcessHighPriorityEventsFlag value="FALSE"/>
    <IncludeApplicationTypes>
      <Application>SUB_MAN</Application>
      <Application>PRINT</Application>
    </IncludeApplicationTypes>
    <FailedEventNotifierList>
      <User>tcadmin</User>
    </FailedEventNotifierList>
    <ExcludeApplicationTypes>
      <Application>EPM_WORKFLOW</Application>
      <Application>SCHED_MAN</Application>
    </ExcludeApplicationTypes>
    <IncludeEventTypes>
      <EventType>__Check_Out</EventType>
    </IncludeEventTypes>
    <ExcludeEventTypes>
      <EventType>__Delete</EventType>
      <EventType>__Modify</EventType>
      <EventType>__Check_In</EventType>
    </ExcludeEventTypes>
  </Daemon>
</SubMgr>
```

Use the following parameters to control the processing of the **subscriptionmgrd** daemon:

Parameter	Purpose	Value
Daemon id	Specifies the unique daemon ID for an instance, if configured. Uniquely identifies a daemon instance.	
SleepInterval	Controls the length of time the daemon sleeps after dispatching events.	Positive integer up to 1440 (number of minutes in a day).

Parameter	Purpose	Value
MaxEventsToProcess	Controls the maximum number of subscriptions the daemon dispatches every time it processes ImanObjects in the queue, or the maximum number of subscriptions (not ImanEvent objects) that dispatch per cycle.	Positive value up to 50. Default is 50.
CloningInterval	Controls the frequency that the daemon clones and terminates itself to avoid memory leak problems. Specifies the number of dispatch-and-sleep cycles the daemon completes before cloning and terminating itself.	Positive integer from 20 to 200. Default is 100.
ProcessingHours	Specifies the time of the day that events are processed.	
ProcessHighPriorityEventsFlag	Determines whether or not high priority events are processed alone.	If this value is set to TRUE, then only events with "high" priority are processed. If FALSE, then all events are processed regardless of priority.
IncludeApplicationTypes	Processes only those events from the applications specified. IncludeApplicationTypes and ExcludeApplicationTypes are mutually exclusive; do not use them simultaneously.	Applications types.
FailedEventNotifierList	Notifies users of subscription notification failures.	Users.
ExcludeApplicationTypes	Does not process the events from the applications specified.	Applications types.
IncludeEventTypes	Processes only those event types specified in this block for this daemon instance.	Event types.
ExcludeEventTypes	Does not process the event types specified.	Event types.

Configuring the actionmgrd process daemon

Configuring the actionmgrd process daemon

The **actionmgrd** process daemon dispatches events that have a specified execution time or those subscription events that have failed to process for some reason.

This daemon processes events where the action handler is required to run as a subprocess as defined in the handler database. The Teamcenter Multi-Site Collaboration automatic synchronization handler is an example of such a handler.

This daemon dispatches an event by executing its action handler either by calling its associated handler function (that means the handler runs within the daemon's process context) or by starting a separate subprocess that executes the action handler (by spawning the executable image **action_handler** in the **TC_BIN** directory). This depends on how the action handler is defined in the database.

To avoid memory leak problems, this daemon clones and then terminates itself on a regular basis.

Note:

Only system administrators can start this daemon. Siemens Digital Industries Software recommends autologon for security reasons. On Linux systems, run this process daemon in the background.

actionmgrd

USAGE

actionmgrd [-help] [-u=*username* -p=*password* -g=*group* -pf=*password file*] [&]

SITE PREFERENCES

Use the following site preferences to control the operation of the **actionmgrd** daemon.

Preference	Description
TC_actionmgrd_sleep_minutes	Controls how long the daemon sleeps after dispatching events. This must be a positive integer up to 1440 (this is the number of minutes in a day). If the preference is not defined, it defaults to 10 minutes.
TC_actionmgrd_max_actions_to_dispatch	Controls how many events the daemon dispatches every time it processes action objects in the queue. This must be a positive integer up to 500 and includes only those objects that are found to be ready for execution. If the preference is not defined, it defaults to 50.
TC_actionmgrd_max_subprocess_to_start	Controls how many events the daemon dispatches by spawning a separate subprocess. Once this number is exceeded, the daemon does not dispatch any event that requires an action handler to execute in a separate subprocess. This preference must be a positive integer up to 50. If the preference is not defined, it defaults to 10.
TC_actionmgrd_cloning_interval	Controls how often the daemon clones and terminates itself to avoid memory leak problems. This must be a positive integer from 20 to 200, and it specifies the number of dispatch-and-sleep cycles the daemon has to complete before cloning and terminating itself. If the preference is not defined, it defaults to 100.

By default, the daemon goes through the dispatch-and-sleep cycle continuously. If you want to schedule the processing of events only at specified times of the day, use the **TC_actionmgrd_general_processing_hours** site preference. The format of this preference is as follows:

```
TC_actionmgrd_general_processing_hours=time_range1(sm, mtd);time_range2(sm, mtd);time_range3(sm, mtd);
```

Variable	Description
<i>time_range</i>	Time range in military time expressed in hours and minutes, such as 17:00–23:00, which indicates a range from 5 P.M. to 11 P.M.
<i>sm</i>	Sleep minutes applicable during that time range; if omitted, the value of TC_actionmgrd_sleep_minutes is used.
<i>mtd</i>	Maximum actions to dispatch that is applicable during that time range; if omitted, the value of TC_actionmgrd_max_actions_to_dispatch is used.

EXAMPLE

```
0:00–7:00;12:00–13:00(1,100);18:00–22:00(,50)
```

This example means that event processing is limited to the hours specified. Events are processed only during the time specified.

Time range	Action
0:00–7:00	Processing is allowed from midnight to 7 A.M. Because <i>sm</i> and <i>mtd</i> are not specified, the values of the applicable site preferences are used.
12:00–13:00(1,100)	Processing is allowed from noon to 1 P.M. Because <i>sm</i> = 1, the sleep time of the daemon is only for 1 minute during this time range. Because <i>mtd</i> = 100, the daemon dispatches 100 events after every 1 minute of sleep during this time range.
18:00–22:00(,50)	Processing is allowed from 6 P.M. to 10 P.M. Since <i>sm</i> is omitted, the value of the TC_actionmgrd_sleep_minutes site preference is used. Because <i>mtd</i> = 50, the daemon dispatches 50 events every time it wakes up.

You can run more than one **actionmgrd** daemon. The additional daemons can be run on the same node as the first daemon or on a different node. If there are several events to be processed, Siemens Digital Industries Software recommends that you run the daemons on server nodes where users do not log on directly to minimize the impact of the daemons on their work.

When running multiple daemons, the operation of each daemon can be independently controlled by using separate site preference files in separate **TC_DATA** directories.

Setting actionmgrd daemon default configuration values

The `actionmgrd_config_template.xml` file contains the default configuration values that the `actionmgrd` daemon picks up for processing the action events. If this file is not supplied as input using the `-config` option, then the daemon reads the values from the parameters.

```
<SubMgr>
  <Daemon id="">
    <SleepInterval value=""/>
    <MaxEventsToProcess value="50"/>
    <CloningInterval value="50"/>
    <ProcessingHours value="12:00-21:00;"/>
    <ProcessHighPriorityEventsFlag value="FALSE"/>
    <IncludeApplicationTypes>
      <Application>SUB_MAN</Application>
      <Application>PRINT</Application>
    </IncludeApplicationTypes>
    <FailedEventNotifierList>
      <User>tcadmin</User>
    </FailedEventNotifierList>
    <ExcludeApplicationTypes>
      <Application>EPM_WORKFLOW</Application>
      <Application>SCHED_MAN</Application>
    </ExcludeApplicationTypes>
    <IncludeEventTypes>
      <EventType>__Check_Out</EventType>
    </IncludeEventTypes>
    <ExcludeEventTypes>
      <EventType>__Delete</EventType>
      <EventType>__Modify</EventType>
      <EventType>__Check_In</EventType>
    </ExcludeEventTypes>
  </Daemon>
</SubMgr>
```

Use the following parameters to control the processing of the `actionmgrd` daemon:

Parameter	Purpose	Value
Daemon id	Specifies the unique daemon ID for an instance, if configured. Uniquely identifies a daemon instance.	
SleepInterval	Controls the length of time the daemon sleeps after dispatching events.	Positive integer up to 1440 (number of minutes in a day).
MaxEventsToProcess	Controls the maximum number of subscriptions the daemon dispatches every time it processes lmanObjects in the queue, or the maximum	Positive value up to 50. Default is 50.

Parameter	Purpose	Value
	number of subscriptions (not ImanEvent objects) that dispatch per cycle.	
CloningInterval	Controls the frequency that the daemon clones and terminates itself to avoid memory leak problems. Specifies the number of dispatch-and-sleep cycles the daemon completes before cloning and terminating itself.	Positive integer from 20 to 200. Default is 100.
ProcessingHours	Specifies the time of the day that events are processed.	
ProcessHighPriorityEventsFlag	Determines whether or not high priority events are processed alone.	If this value is set to TRUE, then only events with "high" priority are processed. If FALSE, then all events are processed regardless of priority.
IncludeApplicationTypes	Processes only those events from the applications specified. IncludeApplicationTypes and ExcludeApplicationTypes are mutually exclusive; do not use them simultaneously.	Applications types.
FailedEventNotifierList	Notifies users of subscription notification failures.	Users.
ExcludeApplicationTypes	Does not process the events from the applications specified.	Applications types.
IncludeEventTypes	Processes only those event types specified in this block for this daemon instance.	Event types.
ExcludeEventTypes	Does not process the event types specified.	Event types.

4. Managing subscription tables

Managing subscription tables

Use subscription tables to easily view and delete subscription objects. Two daemons process each subscription event, first as an event object, and then, if necessary, as an action object:

- Event objects

When subscriptions are running as scheduled, event objects are typically cycled out of the event table quickly.

Use the event table when a system failure or other shutdown causes multitudes of subscriptions to backup in the queue because the system cannot process them. In this event, you can easily view and delete subscriptions which are no longer relevant.

- Action objects

Action objects are subscription objects in which the defined execution time has not yet arrived; they are listed in the action table.

Use the action table to view pending subscriptions and easily delete them.

Managing subscriptions that have not yet executed (action table entries)

Use the action table to display and manage action objects. Action objects are subscription objects in which the defined execution time has not yet arrived.

Managing unprocessed or unwanted event objects (event table entries)

Managing unprocessed or unwanted event objects (event table entries)


Use the event table to display and manage event objects. Event objects are created for every subscription. When the process daemons are running, event objects are typically cycled out of the event table within seconds; therefore, the table is usually empty.

Use the event table when a system failure or other shutdown causes multitudes of subscriptions to backup in the queue because the system cannot process them. In this event, you can easily view and delete subscriptions that are no longer relevant.

Populate and view the event table





1. In Subscription Administration, click the **Event Table** tab.

The event table appears with empty fields.

2. Click the **Find** button  to list all event objects in the database.

A defined number of event objects display in the table as defined in the rich client's load limit. By default, the number of entries displayed in the table is 30.



View ranges of entries by performing the following substeps:

- a. Click  to display the next 30 entries if they exist.
- b. Click  to display the previous 30 entries if they exist.
- c. Click  to append an additional 30 entries in the display.
- d. Click  to display all entries in the table.

Delete entries from the event table

1. In Subscription Administration, click the **Event Table** tab.

The event table appears with empty fields.

2. Click the **Find** button  to list all event objects in the database.
3. Delete an event object by selecting the entry to be deleted and clicking the **Delete** button .

The object is deleted.

Note:

Deleting an event object does not delete the corresponding subscription that is defined for the object. Delete subscriptions using the Subscription Manager functionality available from the **Tools** menu.

5. Creating and managing subscription reports


Creating and managing subscription reports

Use subscription reports to determine which event types are most frequently subscribed to, which object types are most frequently subscribed to, and which users subscribe most frequently.

You can create the following reports in a text or bar chart format:

- **Subscription report**
- **Event report**
- **Action report**

Create a subscription report

1. In Subscription Administration, click the **Subscription Report** tab .
2. Choose the output format of the report by selecting either **Text** or **Bar Chart** at the bottom of the **Subscription Report** pane.
3. Display either the most frequently or least frequently occurring subscriptions by selecting either **Top** or **Bottom**, respectively. Select **All** to display all the subscriptions.
4. Define the number of occurrences to be displayed by typing an integer between 1 and 99,999.
5. Define the report focus by selecting **Event Type**, **Subscriber**, or **Object**. Select **All** to generate a report for all of these types.
6. Click **Apply** to generate the report.


The report displays in the **Subscription Report** pane. The total number of subscription objects in existence is displayed at the top of the report, regardless of the number of occurrences you selected to display in the report.

7. Click the **Print** button  to print the report.


To create another subscription report, modify the report selections as required, and then click **Apply**.

A new subscription report is generated.

Create an event report

1. In Subscription Administration, click the **Event Report** tab .
2. Choose the output format of the report by selecting either **Text** or **Bar Chart** at the bottom of the **Event Report** pane.
3. Display either the most frequently or least frequently occurring event objects by selecting either **Top** or **Bottom**, respectively. Select **All** to generate a report for all of these types.
4. Define the number of occurrences to be displayed by typing an integer between 1 and 99,999.
5. Define the report focus by selecting **Event Type**, **Event Initiator**, or **Object**. Select **All** to generate a report for all of these types.
6. Click **Apply** to generate the report.


The report displays in the **Event Report** pane. The total number of event objects in existence is displayed at the top of the report, regardless of the number of occurrences you selected to display in the report.

7. Click the **Print** button  to print the report.


To create another event report, modify the report selections as required, and then click **Apply**.

A new event report is generated.

Create an action report

1. In Subscription Administration, click the **Action Report** tab .
2. Choose the output format of the report by selecting either **Text** or **Bar Chart** at the bottom of the **Action Report** pane.
3. Display either the most frequently or least frequently occurring action objects by selecting either **Top** or **Bottom**, respectively. Select **All** to generate a report for all of these types.
4. Define the number of occurrences to be displayed by typing an integer between 1 and 99,999.
5. Define the report focus by selecting **Event Type**, **Event Initiator**, or **Object**. Select **All** to generate a report for all of these types.
6. Click **Apply** to generate the report.

The report displays in the **Action Report** dialog box. The total number of action objects in existence is displayed at the top of the report, regardless of the number of occurrences you selected to display in the report.

7. Click the **Print** button  to print the report.


To create another action report, modify the report selections as required, and then click **Apply**.

A new action report is generated.

6. Configuring subscribable properties

How to use the subscription properties pane

1. In Subscription Administration, click the **Subscription Properties** tab .



2. Click  to create a new configuration.

3. Select a **Type** from the list.



A screenshot of a dropdown menu labeled 'Type: *' with a small red asterisk. The dropdown is currently empty, showing only the label and a downward arrow on the right side.

4. Select one or more properties from the list of **Available Properties**. Use the **CTRL** to select several properties at once.

5. Add the selected properties to the **Selected Properties** tab by clicking on the . To remove a selected property from the list, select the property to be removed and click .

6. Click .

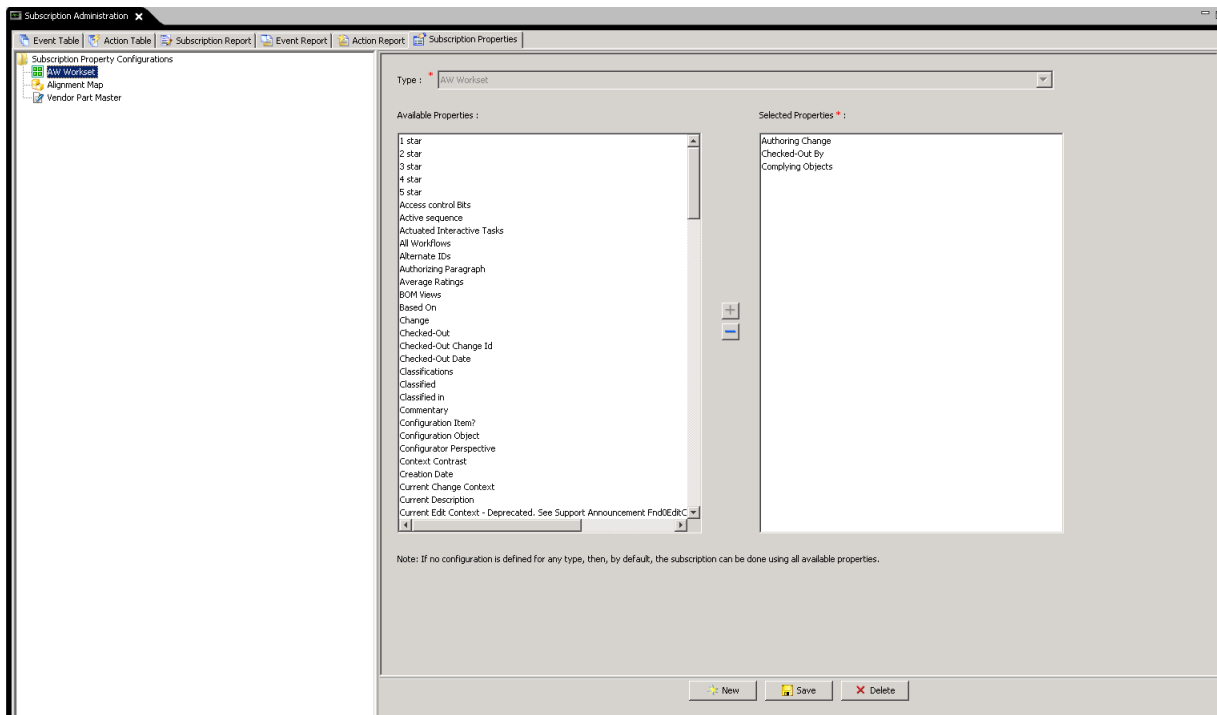
Note:



If no configuration is defined for any type, then, by default, the subscription can be done using all available properties.

Edit subscription property configurations

1. In Subscription Administration, click the **Subscription Properties** tab .

2. Select the configuration item to be edited.



3. Add the selected properties to the **Selected Properties** tab by clicking on the . To remove a selected property from the list, select the property to be removed and click .

4. Click .