

# **Kelverion Automation**

## **Integration Pack for BMC Enterprise Event Manager**

**System Center Orchestrator**

**User's Guide  
Version 5.1**

# Kelverion Integration Pack for BMC Enterprise Event Manager

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# Kelverion Integration Pack for BMC Enterprise Event Manager

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The Kelverion Integration Pack for BMC Enterprise Event Manager is an add-on for System Center Orchestrator which provides integration and automation capabilities in response to events which are raised within BMC Enterprise Event Manager.

## System Requirements

The Kelverion Integration Pack for BMC Enterprise Event Manager requires the following software to be installed and configured prior to implementing the integration. For more information about installing and configuring Orchestrator and the BMC Enterprise Event Manager application, refer to the respective product documentation.

- Microsoft System Center Orchestrator \*
- Microsoft .NET Framework 4.5.2
- One of the following BMC Event Management Systems:
  - **BMC Enterprise Event Manager 7.4.00**
    - BMC Impact Manager 7.4.00 (Build 1783703 - 30-Sep-2010)
    - BMC Impact Integration Web Services 7.4.00
  - **OR**
  - BMC Impact Manager 7.4.00.30 (Build 181147754 - 8-Jan-2013)
  - BMC Impact Integration Web Services 7.4.01.01
  - **BMC ProactiveNet 8.6.02** (event management only)
    - BMC Impact Manager 8.6.02 (Build 221073454 - 24-Jun-2011)
    - BMC Impact Integration Web Services 8.6.02
  - **BMC ProactiveNet 9.0.20** (event management only)
    - BMC Impact Manager 9.0.00: (Build 231118782 - 12-Apr-2012)
    - BMC Impact Integration Web Services 9.0.00
  - **BMC ProactiveNet 9.5.00** (event management only)
    - BMC Impact Manager 9.5.00: (Build 241196604 - 15-Jan-2014)
    - BMC Impact Integration Web Services 9.0.00
  - **BMC ProactiveNet 9.6.00** (event management only)
    - BMC Impact Manager 9.6.00: (Build 241229441 - 22-Sep-2014)
    - BMC Impact Integration Web Services 9.6.00
  - **BMC TrueSight Infrastructure Management 10.0.500** (event management only)
    - BMC TrueSight Impact Manager 10.0.500 (Build 241295424 - 27-Oct-2015)
    - BMC TrueSight Impact Integration Web Services 10.0.00
  - **BMC TrueSight Infrastructure Management 11.3.01** (event management only)
    - BMC TrueSight Impact Manager 11.3.01 (Build 241438070)
    - BMC TrueSight Impact Integration Web Services 11.3.01

\* Please see [Kelverion.com/orchestrator](http://Kelverion.com/orchestrator) for the latest Orchestrator support information.

The Integration Pack interacts with BMC Impact Manager via the BMC Impact Integration Web Service. Refer to **BMC Impact Integration Web Services Server Installation and Configuration Guide** for details on how to install and configure the web service.

## Registering and Deploying the Integration Pack

After you download the integration pack file, you must register it with the Orchestrator management server and then deploy it to Runbook Servers and Runbook Designers. For more information about how to install integration packs, see the [How to Install an Integration Pack](https://technet.microsoft.com/en-us/library/hh420346.aspx) (<https://technet.microsoft.com/en-us/library/hh420346.aspx>).

### To register the integration pack:

- On the management server, copy the **.OIP** file for the integration pack to a local hard drive or network share.
- Confirm that the file is not set to **Read Only** to prevent unregistering the integration pack at a later date.
- Start the **Deployment Manager**.
- In the navigation pane of the Deployment Manager, expand **Orchestrator Management Server**, right-click **Integration Packs** to select **Register IP with the Orchestrator Management Server**. The **Integration Pack Registration Wizard** opens.
- Click **Next**.
- In the **Select Integration Packs or Hotfixes** dialog box, click **Add**.
- Locate the **.OIP** file that you copied locally from step 1, click **Open** and then click **Next**.
- In the **Completing the Integration Pack Wizard** dialog box, click **Finish**.
- On the **End User Agreement** dialog box, read the Keverion License Terms, and then click **Accept**.
- The **Log Entries** pane displays a confirmation message when the integration pack is successfully registered.

### To deploy the integration pack:

1. In the navigation pane of the **Deployment Manager**, right-click **Integration Packs**, click **Deploy IP to Runbook Server or Runbook Designer**.
2. Select the integration pack that you want to deploy, and then click **Next**.
3. Enter the name of the runbook server or computers with the Runbook Designer installed, on which you want to deploy the integration pack, click **Add**, and then click **Next**.
4. Continue to add additional runbook servers and computers running the Runbook Designer, on which you want to deploy the integration pack. Click **Next**.
5. In the **Installation Options** dialog box, configure the following settings.
6. To choose a time to deploy the integration pack, select the **Schedule installation** check box, and then select the time and date from the **Perform installation** list.
7. Click one of the following:
  - a. **Stop all running runbooks before installing the integration pack** to stop all running runbooks before deploying the integration pack.
  - b. **Install the Integration Packs without stopping the running Runbooks** to install the integration pack without stopping any running runbooks.
8. Click **Next**.
9. In the **Completing Integration Pack Deployment Wizard** dialog box, Click **Finish**.

10. When the integration pack is deployed, the **Log Entries** pane displays a confirmation message.

## Licensing the Integration Pack

After you register and deploy the integration pack you must provide a valid Kolverion license before running any runbooks that contain activities from the integration pack

### To deploy the integration pack license file

1. Copy the .KAL license file to %PROGRAMFILES(X86)%\Kolverion Automation\Licenses
2. Repeat for each Orchestrator Runbook Server and Runbook Designer host system.

## Configuring Connections for the Kolverion Integration Pack for BMC Enterprise Event Manager

A connection establishes a reusable link between Orchestrator and a BMC Impact Integration Web Service server. It also specifies the target Impact Management Instance (Cell) and the Event Class which integration pack activities will be referring to. You can create as many connections as you require, to specify links to multiple servers, multiple target cells or multiple event classes.

### To set up a BMC Enterprise Event Manager connection

1. In the Runbook Designer, click the **Options** menu, and select KA BMC Enterprise Event Manager. The KA BMC Enterprise Event Manager dialog box appears.
2. On the **Configurations** tab, click **Add** to begin the connection setup. The **Add Configuration** dialog box appears.
3. In the **Name** box, enter a name for the connection. This could be the name of the BMC Enterprise Event Manager server or a descriptive name to distinguish the type of connection.
4. In the **Type** box select "Connection Configuration".
5. In the **Protocol** box specify the underlying protocol used to communicate with the Impact Integration Web Server.
6. In the **Primary Cell Name** box, type the name of the primary Impact Manager Instance (Cell) which integration pack activities will be targeting.
7. In the **Backup Cell Name** box, type the name of the backup Impact Manager Instance (Cell) which integration pack activities should be targeting when the primary cell is not available. If a backup cell is not available leave this field empty or use the primary cell.
8. In the **Retry Delay (seconds)** specify the number of seconds to wait before retrying execution against the backup cell, after a failure against the primary.
9. In the **Cell Response Timeout (seconds)** box, specify the number of seconds the Impact Integration Web Service should wait when sending new or update events to the Cell, before it times out.
10. In the **Query Timeout (seconds)** box, specify the number of seconds the Impact Integration Web Service should wait when querying event information from the Cell, before it times out.

11. In the **Enterprise Manager Host** box, specify the Name or IP address of the machine where the Impact Integration Web Server is running. If you are using the computer name, you can type the NetBIOS name or the fully qualified domain name (FQDN).
12. In the **Enterprise Manager Port** box, specify the port configured for receiving web service requests, on the Impact Integration Web Server machine. The default HTTPS port is 9443 and the default HTTP port is 9080.
13. In the **Web Service Timeout (minutes)** box, specify the number of minutes a web service request should be running for, before it times out.
14. In the **Skip Certificate Validation** box, specify if you want the IP to perform server certificate validation or not. This applies only when connecting to the server over HTTPS. When set to True, the IP will not perform certificate validation. This is typically used in secure environments, when working with trusted servers and self-signed certificates. When set to False, the IP will validate the server certificate. The server must be configured with a valid certificate signed by a valid certificate authority and the server name in the **Enterprise Manager Host** must be listed on the certificate. Default value is False.
15. Add additional connections if applicable.
16. Click **OK** to close the configuration dialog box, and then click **Finish**.

## Connecting Impact Cells to the Impact Integration Web Service

The IP communicates with BMC Impact Cells through the BMC Impact Integration Web Service (IIWS). After installing IIWS, or after configuring a new cell, there are a number of configuration steps which need to be performed in order to ensure that impact cells communicate with IIWS. For details, please refer to [Connecting BMC Impact Integration Web Services server with BMC Impact Manager for event subscription](#).

### Configure the mcell.dir File for the Impact Cell

This file is located under

**<Server Install Folder>/pw/server/etc/<Cell Name>**

Ensure that the mcell.dir file contains an entry for the IIWS gateway:

```
gateway.imcomm IIWSGatewayServer <Key> <IIWS Computer>:<Port>
```

### Configure the mcell.dir File for IIWS

This file is located under

**<IIWS Install Folder>/Tomcat/webapps/imws/WEB-INF/etc**

Ensure that the mcell.dir file contains an entry for the IIWS gateway:

```
gateway.imcomm IIWSGatewayServer <Key> <IIWS Computer>:<Port>
```

Ensure that the mcell.dir file contains an entry for each cell that IIWS needs to communicate with:

```
cell <Cell Name> <Key> <Cell Computer>:<Port>
```

## Runtime Failover Configuration

Specifying the Backup Cell Name cell allows the Integration Pack to execute a failover process (runtime only) in cases when the primary cell is not available. An activity will always target the primary cell during the first execution attempt. If the Impact Integration Web Service signals an error condition, the activity will re-attempt execution against the backup cell. Monitor Event follows the same behavior every time it checks for events: it first queries the primary cell, if this fails it then tries the backup cell. Note that the Integration Pack exhibits the same behavior for any error reported by the Impact Integration Web Service, not just when failing to reach the primary cell.

In the case when a second cell is not available to be designated as the backup cell, the Backup Cell Name can either be left empty or it can be configured the same as the Primary Cell Name. In this case the failover mechanism becomes a retry mechanism with second attempt executing against the primary cell.

Failover takes place only at runtime, there is no failover for design time.

## See Also

[Kelverion Integration Pack for BMC Enterprise Event Manager Activities](#)



# Kelverion Integration Pack for BMC Enterprise Event Manager Activities

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This integration pack adds the KA BMC Enterprise Event Manager category to the **Activities** pane in the Runbook Designer. This category contains the following activities:

[Create Event Activity](#)

[Update Event Activity](#)

[Set Event Status Activity](#)

[Get Event Activity](#)

[Monitor Event Activity](#)

## Common Configuration Instructions for All Activities

The following configuration instructions apply to all activities in this integration pack. Links to this section are included in the configuration instructions for each activity.

### Activity Properties

Each activity has a set of required or optional properties that define the configuration of that activity. This includes how it connects to other activity or how the activity performs its actions. You can view or modify activity properties in the Runbook Designer.

#### To configure the properties for an activity

1. Double-click the activity. Alternatively, you can right-click the activity, and then click **Properties**.
2. To save your configuration entries, click **Finish**.

In the activity properties dialog box, several tabs along the left side provide access to general and specific settings for the activity. Although the number of available tabs for activity properties differs from activity to activity, all activities will have a **General** tab, a **Properties** tab, and a **Run Behavior** tab. Some activities may have additional tabs.

### General Tab

This tab contains the **Name** and **Description** properties for the activity. By default, the **Name** of the activity is the same as its activity type, and the **Description** is blank. You can modify these properties to create more descriptive names or provide detailed descriptions of the actions of the activity.

## Properties/Filters Tabs

These tabs contain details that are specific to the activity. All activities in this integration pack have the **Connection Name** property at the top of the **Properties** or **Filters** tab. This property is used to specify the connection to the BMC Enterprise Event Manager server.

### To configure the Connection Name property

- Click the ellipsis (...) button next to the **Name** field, and then select the applicable connection name. Connections displayed in the list have been previously configured as described in [Configuring Connections for the Keverion Integration Pack for BMC Enterprise Event Manager](#).

## Filter Behavior

The Monitor and Get activities use filters to determine the values that will invoke a runbook or retrieve activities. Property values of potential candidates are compared to the values of the filters to determine if they meet the criteria. When matching against values, you select one of the available methods of comparison. An option is provided to either match or not match the filter using each method. For example, the "Does not" version of a method causes alerts that do not match the filter to trigger the runbook.

- **Equals:** the field of the record exactly matches the text or number specified in the filter.
- **Does not equal:** the field of the record does not exactly match the text or number specified in the filter.
- **Is less than:** the field of the record is less than the number specified in the filter.
- **Is less than or equal to:** the field of the record is less than or equal to the number specified in the filter.
- **Is greater than:** the field of the record is greater than the number specified in the filter.
- **Is greater than or equal to:** the field of the record is greater than or equal to the number specified in the filter.
- **Contains:** the field of the record contains the exact text specified in the filter. Unlike the Equals behavior, there can be other text surrounding the matching text.
- **Does not contain:** the field of the record does not contain the exact text specified in the filter. Unlike the Equals behavior, there can be other text surrounding the matching text.
- **Matches pattern:** the field of the record matches the pattern specified in the filter. Refer to BMC Knowledge Base Development Reference Guide for details on pattern syntax.
- **Does not match pattern:** the field of the record does not match the pattern specified in the filter. Refer to BMC Knowledge Base Development Reference Guide for details on pattern syntax.

## Run Behavior Tab

This tab contains the properties that determine how the activity handles multi-value published data and what notifications will be sent if the activity fails or runs for an excessive period of time.

## Multi-Value Published Data Behavior

The Get activities retrieve information from another activity or outside source, and can return one or more values in the published data. For example, when you use the Get Collection Member activity, the data output from that activity might be a list of computers that belong to the specified collection.

By default, the data from the Get activity will be passed on as multiple individual outputs. This invokes the next activity as many times as there are items in the output. Alternatively, you can provide a single output for the activity by enabling the **Flatten** option. When you enable this option, you also choose a formatting option:

- **Separate with line breaks.** Each item is on a new line. This format is useful for creating human-readable text files for the output.
- **Separate with \_ .** Each item is separated by one or more characters of your choice.
- **Use CSV format.** All items are in CSV (comma-separated value) format. This format is useful for importing data into spreadsheets or other applications.

The activity will produce a new set of data every time it runs. The **Flatten** feature does not flatten data across multiple instances of the same activity.

## Event Notifications

Some activities are expected to take a limited amount of time to complete. If they do not complete within that time they may be stalled or there may be another issue preventing them from completing. You can define the number of seconds to wait for completion of the action. After this period a platform event will be sent and the issue will be reported. You can also choose whether to generate a platform event if the activity returns a failure.

### To be notified when the activity takes longer than a specified time to run or fails to run

1. In the **Event Notifications** box, enter the **number of seconds** of run time before a notification is generated.
2. Select **Report if activity fails to run** to generate run failure notifications.

For more information about Orchestrator events, see the "Event Notifications " topics in the [Runbook Properties](https://technet.microsoft.com/en-us/library/hh489610.aspx#EventNotifications) (https://technet.microsoft.com/en-us/library/hh489610.aspx#EventNotifications).

## Published Data

Returned data is the foundation of a working runbook. It is the data produced as a result of the actions of an activity. This data is published to an internal data bus that is unique for each runbook. Subsequent activities in the runbook can subscribe to this data and use it in their configuration. Link conditions also use this information to add decision-making capabilities to runbooks.

An activity can only subscribe to data from the activities that are linked before it in the runbook. You can use published data to automatically populate the property values needed by activities.

### To use published data

1. Right-click the property value box, click **Subscribe**, and then click **Published Data**.
2. Click the **Activity** drop-down box and select the activity from which you want to obtain the data.
3. To view additional data elements common to all activities, select **Show Common Published Data**.
4. Click the published data element that you want to use, and then click **OK**.

For a list of the data elements published by each activity, see the Published Data tables in the activity topic. For information about the common published data items, see the [Published Data](http://technet.microsoft.com/en-us/library/hh403821.aspx) (<http://technet.microsoft.com/en-us/library/hh403821.aspx>).

# Create Event Activity

The Create Event activity is used in a runbook to send new events to the configured target Impact Management Instance (Cell). For the procedure to configure this activity, see: [Configuring the Create Event Activity](#).

The following tables list the required properties and published data for this activity. The activity publishes all configuration and required properties. Based on your Event Class selection, different optional properties will become available, corresponding to the event slots defined for the selected class.



## Tip

When configuring list properties (slot type LIST\_OF <type>) the property value must be enclosed in square brackets [ ].

### Create Event Required Properties

Element	Description	Valid Values	Look up
Event Class	<i>Event class for the new event.</i>	<i>Event classes available for the primary cell specified in the Connection Configuration.</i>	Yes
severity	<i>Event severity for the new event.</i>	UNKNOWN OK INFO WARNING MINOR MAJOR CRITICAL	Yes
mc_priority	<i>Event priority for the new event.</i>	PRIORITY_5 (lowest) PRIORITY_4 PRIORITY_3 PRIORITY_2 PRIORITY_1(highest)	Yes
msg	<i>Message text for the new event</i>		No

### Create Event Published Data

Name	Description	Value Type
mc_ueid	<i>ID of the new event.</i>	String
Execution Cell Name	<i>Name of the Impact Manager cell where the event has</i>	String

Name	Description	Value Type
	<i>been created.</i>	

## Configuring the Create Event Activity

### To configure the Create Event Activity

1. From the **Activities** pane, drag a Create Event activity to the active runbook.
2. Double-click the Create Event activity. The **Properties** dialog box opens.
3. Configuring the **Properties** tab:
  - a. In the **Configuration** section, click the ellipsis button (...), and then select the configuration that you want to use for this activity. Click **OK**. For more details about creating configurations see [Configuring Connections for the Kolverion Integration Pack for BMC Enterprise Event Manager](#).
  - b. In the **Properties** section, enter a value for each of the required properties and the applicable optional properties. If the property is Lookup-enabled, you can click the ellipsis (...) button next to the text box to browse for a value.  
 You can also use published data to automatically populate the value of the property from the data output by a previous activity in the workflow.  
**To use published data**
    - i. Right-click the property value box, click **Subscribe**, and then click **Published Data**.
    - ii. Click the **Activity** drop-down box and select the activity from which you want to obtain the data.
    - iii. To view additional data elements common across the runbook, select **Show Common Published Data**.
    - iv. Click the published data element you want to use, and then click **OK**.  
 For a list of the data elements returned by each activity, see the Published Data tables in the activity topic.
4. For information about the settings on the **General** and **Run Behavior** tabs, see [Common Configuration Instructions for All Activities](#).
5. Click **Finish**.

## Other Activities

The Kolverion Integration Pack for BMC Enterprise Event Manager contains the following additional activities:

[Update Event Activity](#)

[Set Event Status Activity](#)

[Get Event Activity](#)

# Update Event Activity

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The Update Event activity is used in a runbook to modify slot values in an existing event.

For the procedure to configure this activity, see: [Configuring the Update Event Activity](#).

The following tables list the required properties and published data for this activity. The activity publishes all configuration and required properties. Based on your Event Class selection, different optional properties will become available, corresponding to the event slots defined for the selected class.



## Tip

When configuring list properties (slot type LIST\_OF <type>) the property value must be enclosed in square brackets [ ].

### Update Event Required Properties

Element	Description	Valid Values	Look up
Event Class	<i>Event class for the event that is to be modified.</i>	<i>Event classes available for the primary cell specified in the Connection Configuration.</i>	Yes
mc_ueid	<i>ID for the for the existing event to be modified</i>		No

### Update Event Published Data

Name	Description	Value Type
<i>Execution Cell Name</i>	<i>Name of the Impact Manager cell where the event has been updated.</i>	<i>String</i>

# Configuring the Update Event Activity

## To configure the Update Event Activity

1. From the **Activities** pane, drag an Update Event activity to the active runbook.
2. Double-click the Update Event activity. The **Properties** dialog box opens.
3. Configuring the **Properties** tab:
  - a. In the **Configuration** section, click the ellipsis button (...), and then select a configuration specific for the deploy job type which you want to create. Click **OK**. For more details about creating configurations see [Configuring Connections for the Kolverion Integration Pack for BMC Enterprise Event Manager](#).
  - b. In the **Properties** section, enter a value for each of the required properties and the applicable optional properties. If the property is Lookup-enabled, you can click the ellipsis (...) button next to the text box to browse for a value.

You can also use published data to automatically populate the value of the property from the data output by a previous activity in the workflow.

### To use published data

- i. Right-click the property value box, click **Subscribe**, and then click **Published Data**.
  - ii. Click the **Activity** drop-down box and select the activity from which you want to obtain the data.
  - iii. To view additional data elements common across the runbook, select **Show Common Published Data**.
  - iv. Click the published data element you want to use, and then click **OK**.
- For a list of the data elements returned by each activity, see the Published Data tables in the activity topic.
4. For information about the settings on the **General** and **Run Behavior** tabs, [see Common Configuration Instructions for All Activities](#).
  5. Click **Finish**.

## Other Activities

The Kolverion Integration Pack for BMC Enterprise Event Manager contains the following additional activities:

[Create Event Activity](#)

[Set Event Status Activity](#)

[Get Event Activity](#)

[Monitor Event Activity](#)



# Set Event Status Activity

The Set Event Status activity is used in a runbook to modify the status of an existing event.

For the procedure to configure this activity, see: [Configuring the Set Event Status Activity](#).

The following table lists the required properties and published data for this activity. The activity publishes all configuration and required properties.

## Set Event Status Required Properties

Element	Description	Valid Values	Look up
Event Class	<i>Event class for the event to be modified.</i>	<i>Event classes available for the primary cell specified in the Connection Configuration.</i>	Yes
mc_ueid	<i>ID for the for the existing event whose status is to be modified</i>		No
status	<i>New status</i>	OPEN ACK ASSIGNED CLOSED BLACKOUT	Yes

## Set Event Status Optional Properties

Element	Description	Valid Values	Look up
mc_owner	<i>Owner of the event, to be used in conjunction with ASSIGNED status.</i>		No

## Set Event Status Published Data

Name	Description	Value Type
<i>Execution Cell Name</i>	<i>Name of the Impact Manager cell where the event has been updated.</i>	String

# Configuring the Set Event Status Activity

## To configure the Set Event Status Activity

1. From the **Activities** pane, drag a Set Event Status activity to the active runbook.
2. Double-click the Set Event Status activity. The **Properties** dialog box opens.
3. Configuring the **Properties** tab:
  - a. In the **Configuration** section, click the ellipsis button (...), and then select a configuration specific for the job type which you want to run. Click **OK**. For more details about creating configurations see [Configuring Connections for the Kolverion Integration Pack for BMC Enterprise Event Manager](#).
  - b. In the **Properties** section, enter a value for each of the required properties and the applicable optional properties. If the property is Lookup-enabled, you can click the ellipsis (...) button next to the text box to browse for a value.

You can also use published data to automatically populate the value of the property from the data output by a previous activity in the workflow.

### To use published data

- i. Right-click the property value box, click **Subscribe**, and then click **Published Data**.
  - ii. Click the **Activity** drop-down box and select the activity from which you want to obtain the data.
  - iii. To view additional data elements common across the runbook, select **Show Common Published Data**.
  - iv. Click the published data element you want to use, and then click **OK**.
- For a list of the data elements returned by each activity, see the Published Data tables in the activity topic.
4. For information about the settings on the **General** and **Run Behavior** tabs, see [Common Configuration Instructions for All Activities](#).
  5. Click **Finish**.

## Other Activities

The Kolverion Integration Pack for BMC Enterprise Event Manager contains the following additional activities:

[Create Event Activity](#)

[Update Event Activity](#)

[Get Event Activity](#)

[Monitor Event Activity](#)

# Get Event Activity

The Get Event activity is used in a runbook to query the configured Impact Management Instance (Cell) for existing events according to filter criteria that you specify. The activity returns events of the same class as (or classes derived from) the configured Event Class property. For the procedure to configure this activity, see: [Configuring the Get Event Activity](#).

The following tables list the required properties for this activity. The activity publishes all configuration and required properties. Based on your Event Class selection, different filters and published data fields will become available, corresponding to the event slots defined for the selected class.

## Tip

When configuring list filters (slot type LIST\_OF <type>) with operators *Equals*, *Does not equal* the filter value must be enclosed in square brackets [ ]. When configuring list filters (slot type LIST\_OF <type>) with operators *Contains*, *Does not contain*, *Matches*, *Does not match* square brackets are not required.

## Get Event Required Properties

Element	Description	Valid Values	Look up
Event Class	<i>Event class for the events that are to be retrieved.</i>	<i>Event classes available for the primary cell specified in the Connection Configuration.</i>	Yes

## Get Event Published Data

Name	Description	Value Type
<i>Class Name</i>	<i>Event class for the retrieved event. Note that this will differ from Event Class property when the event is of a derived class.</i>	<i>String</i>
<i>Event Count</i>	<i>The number of events that were retrieved by the activity</i>	<i>Integer</i>
<i>Execution Cell Name</i>	<i>Name of the Impact Manager cell where the event has been updated.</i>	<i>String</i>

# Configuring the Get Event Activity

## To configure the Get Event Activity

1. From the **Activities** pane, drag a Get Event activity to the active runbook.
2. Double-click the Get Event activity. The **Properties** dialog box opens.
3. Configure the settings in the **Filters** tab:
  - a. In the **Filters** section, at least one filter is required to define the activity. Click **Add**. In the **Name** box, click the down arrow and select a property from the list.
  - b. In the **Relation** box, click the down arrow and select a filter type.
  - c. In the **Value** box, enter the value you want to use. For more information about using filters see [Filter Behavior](#).

You can also use published data to automatically populate the value of the property from the data output by a previous activity in the workflow.

### To use published data

- i. Right-click the property value box, click **Subscribe**, and then click **Published Data**.
  - ii. Click the **Activity** drop-down box and select the activity from which you want to obtain the data.
  - iii. To view additional data elements common across the runbook, select **Show Common Published Data**.
  - iv. Click the published data element you want to use, and then click **OK**.

For a list of the data elements published by each activity, see the Published Data tables in the activity topic.
  - d. Click **OK** to save the filter settings.
  - e. **Add** additional filters as needed, and then click **Finish**.
4. To make changes to a filter, click the filter and then click **Edit**. Make the changes, and then click **OK**.

To remove a filter, click the filter and then click **Remove**.
  5. For information about the settings on the **General** and **Run Behavior** tabs, see [Common Configuration Instructions for All Activities](#).
  6. Click **Finish**.

## Other Activities

The Kolverion Integration Pack for BMC Enterprise Event Manager contains the following additional activities:

[Create Event Activity](#)

[Update Event Activity](#)

[Set Event Status Activity](#)

[Monitor Event Activity](#)

# Monitor Event Activity

The Monitor Event activity is used in a runbook to detect when new events are created and/or existing events are updated in the configured Impact Management Instance (Cell), according to filter criteria that you specify. The monitor returns events of the same class as (or classes derived from) the configured Event Class property. For the procedure to configure this activity, see: [Configuring the Monitor Event Activity](#).

The following tables list the required properties for this activity. The activity publishes all configuration and required properties. Based on your Event Class selection, different filters and published data fields will become available, corresponding to the event slots defined for the selected class.

## Tip

When configuring list filters (slot type LIST\_OF <type>) with operators *Equals*, *Does not equal* the filter value must be enclosed in square brackets [ ]. When configuring list filters with operators *Contains*, *Does not contain*, *Matches*, *Does not match* square brackets are not required.

### Monitor Event Required Properties

Element	Description	Valid Values	Look up
Event Class	<i>Event class for the events that are to be retrieved.</i>	<i>Event classes available for the primary cell specified in the Connection Configuration.</i>	Yes
Monitor New Events	<i>Specifies whether new events are to be detected by the monitor.</i>	<i>True False</i>	Yes
Monitor Updated Events	<i>Specifies whether existing event updates are to be detected by the monitor.</i>	<i>True False</i>	Yes
Monitor Interval (seconds)	<i>Specifies how often the monitor will be polling for events.</i>	<i>Integer</i>	No

### Monitor Event Published Data

Name	Description	Value Type
<i>Class Name</i>	<i>Event class for the retrieved event. Note that this will differ from Event Class property when the event is of a derived class.</i>	<i>String</i>
<i>Event Count</i>	<i>The number of events that were detected by the monitor.</i>	<i>Integer</i>
<i>Execution Cell Name</i>	<i>Name of the Impact Manager cell where the event has been updated.</i>	<i>String</i>

## Configuring Event Slot Updates for Detection by Monitor Event

Monitor Event detects event updates by inspecting the *mc\_date\_modification* slot, which contains the timestamp for the last event modification. The Impact Manager (Cell) can be configured so that only modification of specific slots result in *mc\_date\_modification* being set. Therefore, if a slot is not configured to set *mc\_date\_modification* when it has been modified, updates to this slot will not be detected by Monitor Event.

By default, event status, severity and priority slots are configured to set *mc\_date\_modification*, therefore, updates to these slots will be detected by Monitor Event.

Please refer to **Configuring Slots for time stamping** in the BMC Enterprise Event Manager (or BMC ProactiveNet) Administrator Guide for further details on how to configure event slots so that *mc\_date\_modification* is set when slots are updated.

## Server Time Synchronization

When monitoring for event changes, please ensure that machine times are in sync between the Orchestrator server where the Integration Pack is running and the server where the Impact Manager (Cell) is running. Note that this requirement does not apply to time zone differences; the monitor will detect events when the two servers are in different time zones, as long as the minutes and seconds are in sync.

# Configuring the Monitor Event Activity

## To configure the Monitor Event Activity

1. From the **Activities** pane, drag a Monitor Event activity to the active runbook.
2. Double-click the Monitor Event activity. The **Properties** dialog box opens.
3. Configuring the **Properties** tab:
  - a. In the **Configuration** section, click the ellipsis button (...), and then select the configuration that you want to use for this activity. Click **OK**. For more details about creating configurations see [Configuring Connections for the Keverion Integration Pack for BMC Enterprise Event Manager](#).
  - b. In the **Properties** section, enter a value for each of the required properties and the applicable optional properties. If the property is Lookup-enabled, you can click the ellipsis (...) button next to the text box to browse for a value.

You can also use published data to automatically populate the value of the property from the data output by a previous activity in the workflow.

### To use published data

- i. Right-click the property value box, click **Subscribe**, and then click **Published Data**.
- ii. Click the **Activity** drop-down box and select the activity from which you want to obtain the data.
- iii. To view additional data elements common across the runbook, select **Show Common Published Data**.
- iv. Click the published data element you want to use, and then click **OK**.

For a list of the data elements returned by each activity, see the Published Data tables in the activity topic.

4. Configure the settings in the **Filters** tab:
  - a. In the **Filters** section, at least one filter is required to define the activity. Click **Add**. In the **Name** box, click the down arrow and select a property from the list.
  - b. In the **Relation** box, click the down arrow and select a filter type.
  - c. In the **Value** box, enter the value you want to use. For more information about using filters see [Filter Behavior](#).

You can also use published data to automatically populate the value of the property from the data output by a previous activity in the workflow.

### To use published data

- i. Right-click the property value box, click **Subscribe**, and then click **Published Data**.
- ii. Click the **Activity** drop-down box and select the activity from which you want to obtain the data.
- iii. To view additional data elements common across the runbook, select **Show Common Published Data**.
- iv. Click the published data element you want to use, and then click **OK**.

For a list of the data elements published by each activity, see the Published Data

tables in the activity topic.

- d. Click **OK** to save the filter settings.
- e. **Add** additional filters as needed, and then click **Finish**.
5. To make changes to a filter, click the filter and then click **Edit**. Make the changes, and then click **OK**.

To remove a filter, click the filter and then click **Remove**.

6. For information about the settings on the **General** and **Run Behavior** tabs, see [Common Configuration Instructions for All Activities](#).
7. Click **Finish**.

## Other Activities

The Kelverion Integration Pack for BMC Enterprise Event Manager contains the following additional activities:

[Create Event Activity](#)

[Update Event Activity](#)

[Set Event Status Activity](#)

[Get Event Activity](#)