

Event Types

Create Item Event Types

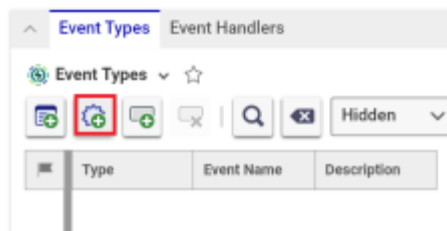
Item Event Type allows to subscribe to specific system events like “OnAfterAdd”, “OnAfterUpdate”, “OnAfterDelete”, “OnAfterCopy”, “OnAfterPromote” and “OnAfterVersion”. Every time an appropriate system event occurs, an EHF Item Event is generated and added to the publishing events queue.

Important

Since the publishing queue is in the server memory, the publishing queue will be lost if the Aras Innovator server is restarted.

The following steps outline the process of creating an **Item Event Type**:

1. On the **Subscription** form, click **Edit**.
2. From the **Subscription** form, scroll down to the **Event Types** tab and click **New Event Type**.



The **Select Item Type** dialog box appears.

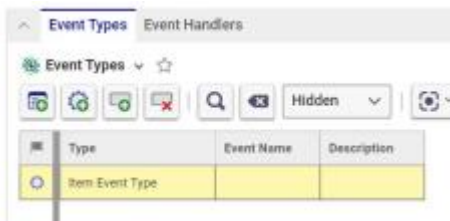


3. Select **Item Event Type** and click **OK**.

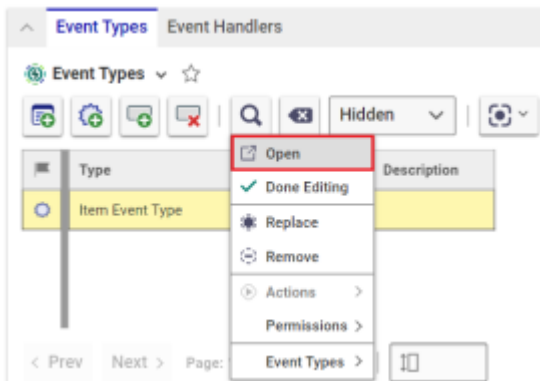




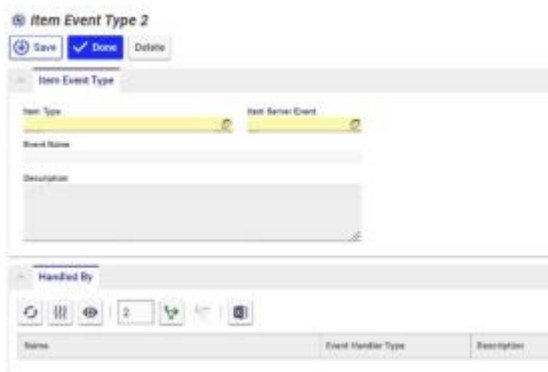
A new row appears on **EventTypes** tab.



4. Right-click on the newly added row and click **Open**.

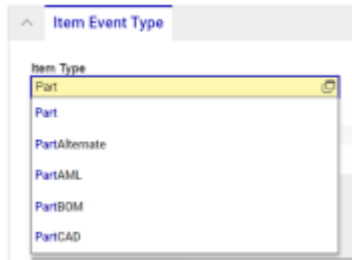


The **Item Event Type** form appears.

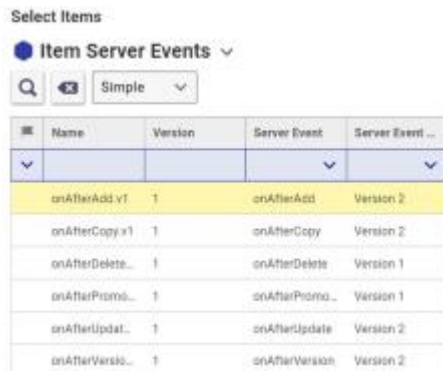


5. In the **ItemType** field, enter the **ItemType**.





6. From the **Item Server Event**, select the appropriate system event that needs to be subscribed.



As a part of **Event Handling Framework**, Aras provides the following **Item Server Events**:

- **onAfterAdd.v1**: The event occurs after an Item is added to the database.
- **onAfterCopy.v1**: The event occurs after an Item is copied.
- **onAfterDelete.v1**: The event occurs after an Item is deleted.
- **onAfterPromote.v1**: The event occurs after an Item is promoted to the next state.
- **onAfterUpdate.v1**: The event occurs after an Item is updated in the database.
- **onAfterVersion.v1**: The event occurs after an Item is versioned.

Event Name is automatically generated by the server.

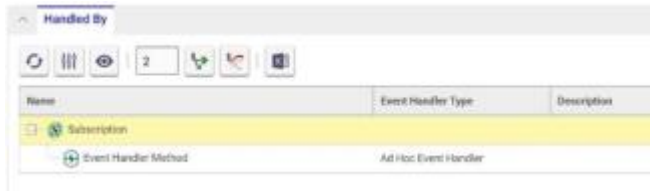
7. Add the event description in the **Description** field.

8. Click **Done** to save.

The **Handled By** tab displays all **Event Handlers** that process this **Item Event Type** grouped by **Subscription**. The **Event Handlers** will be visible only when the **Event Type** is linked to **Event Handler** using **Subscription**. Make sure to save the **Subscription item**, otherwise the **Subscription** will not be visible.



9. Click **Refresh** to view the **Subscription** and linked **Event Handler**.



Creating **Item Event Type** will inform Aras Innovator when a specific event occurs and add the event data to the publishing queue to publish.

The following example displays the **Item Event Type** data that will be added to the publishing queue:

```
<Item>
```

```
<data>
```

```
<Item type="Part" id="04850C519DFD45F0A994961CA0F843CD" />
```

```
</data>
```

```
<subject>04850C519DFD45F0A994961CA0F843CD</subject>
```

```
<type>com.aras.innovator.items.Part.onAfterAdd.v1</type>
```

```
<id>C4187AA25AFC4C5E97607EF082ED297F</id>
```

```
<time>2023-03-02T12:26:31.8746280Z</time>
```

```
<source>14_0_15_37629@http://localhost/InnovatorServer_14_0_15_37629</source>
```

```
<datacontenttype>application/aml+xml</datacontenttype>
```

```
</Item>
```

where:

- **data** – Contains information about the item that triggered the system event.
- **subject** – Event subject that contains id of the item that triggered the system event.



- **type** – The type property contains the name of the Item Event Type.
- **id** – Unique event id.
- **time** – UTC time when event was generated.
- **source** – Contains information about event source in the form of <database name>@<innovator_server_url>.
- **datacontenttype** – Content type of data value.

