

## Exercise: Creating a Type

### Objectives

After completing this exercise, you will be able to:

- Use sequencing logic to design a custom type.

### Scenario

A customer implementation requires the design of a type named Action Item. Similar to a task, the example Action Item includes an Action item type pick field which categorizes the action required. You will create the workflow and required fields to implement the type. Following a typical process in Type design, you will add and define all of the necessary elements of the type.

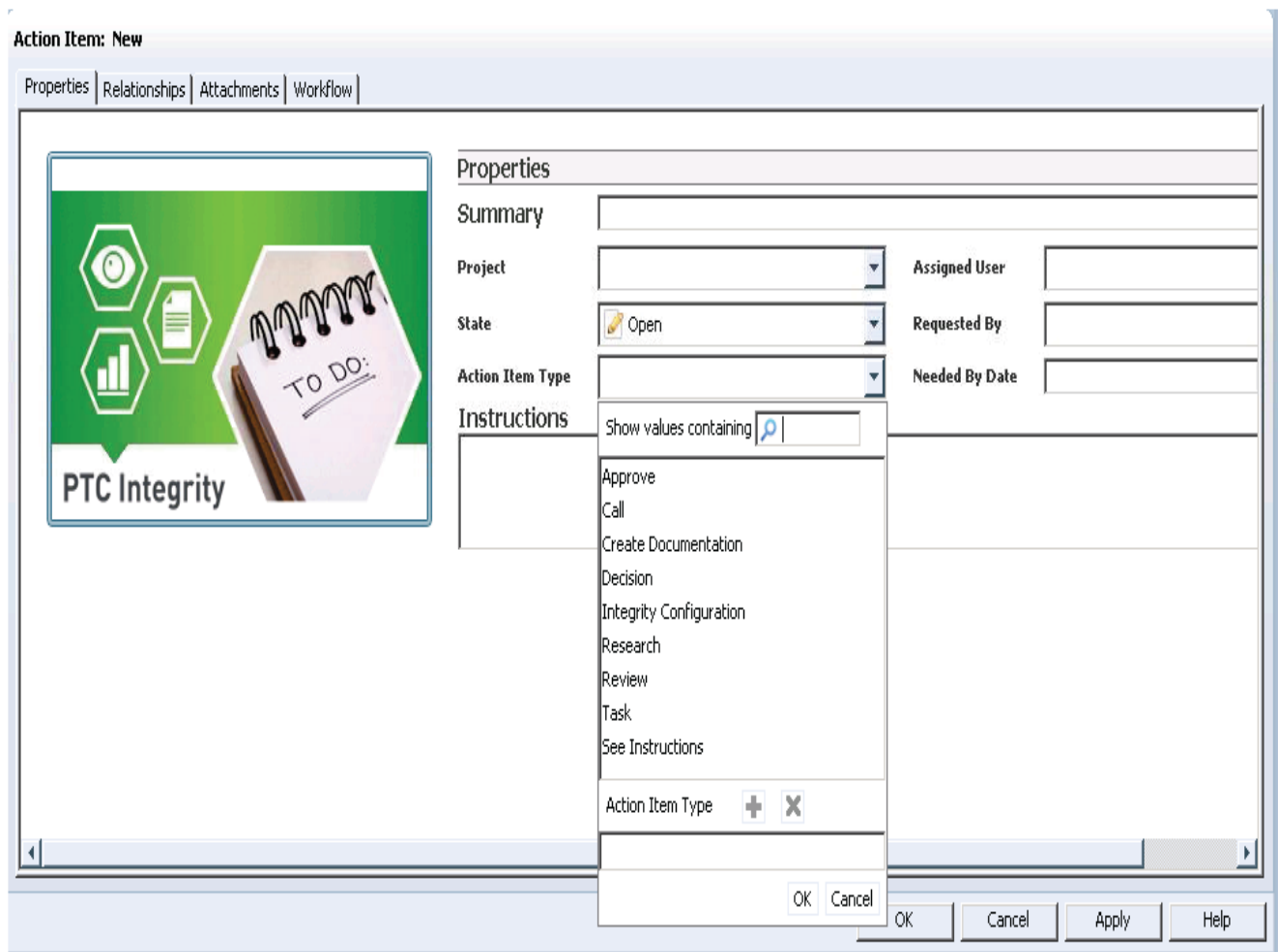


Figure 1 – A Custom Type Named Action Item

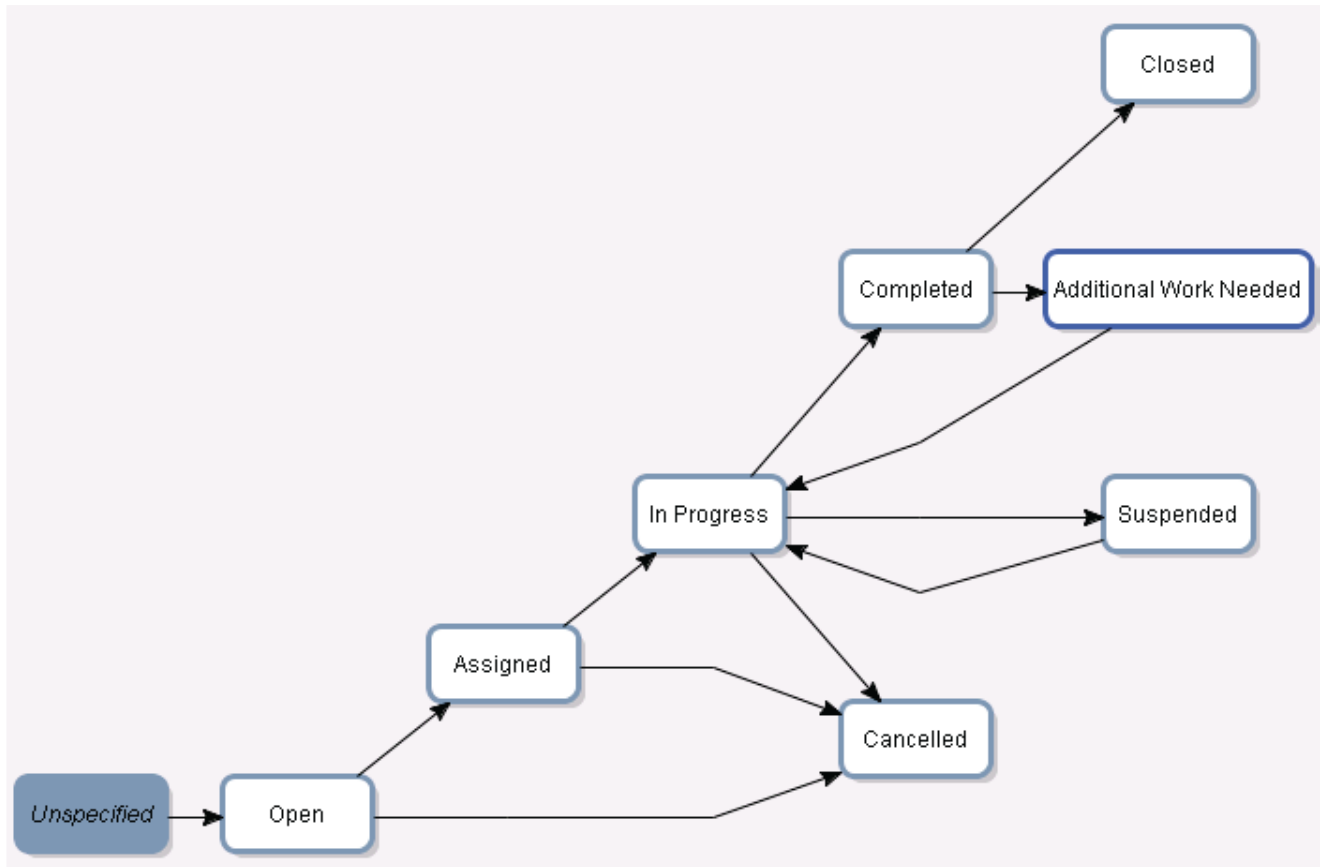
### Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log in to the Integrity Administration Client using the Administrator user credentials.

### Task 1: Create the Type Workflow

1. Create a new type named **Action Item**.
2. Create the following Workflow transitions: Unspecified>Open; Open>Cancelled or Assigned; Assigned>Cancelled or In Progress; In Progress>Cancelled, Completed, or Suspended; Suspended>In Progress; Completed>Additional Work Needed or Closed; Additional Work Needed>In Progress.



3. Allow the “**everyone**” **Group** to make all state transitions.

### Task 2: Create new fields

1. Create a **Long Text** field named **Instructions** with the following description: **Description of the work requested.**
2. Set the Default Attachment Field to **Attachments**.
3. Create a **Long Text** field named **Work Executed**.
4. Set the Default Attachment Field to **Attachments**.
5. Create a **Pick** field named **Action Item Type**.
6. Add the following Picks: Approve, Call, Create Documentation, Decision, Integrity Configuration, Research, Review, and Task.
7. Create a **User** field named **Requested By**.
8. Create a **Date** field named **Needed By Date**.

### Task 3: Create Relationship fields

1. Create a **Relationship** field named **Action Items**.

2. On the Forward Relationship, add **Action Item** as an Allowable Type on each of the following types: Project, Requirement Document, Specification Document, Test Suite Document, and Defect.
3. Select **Multi Valued**.
4. Name the **Backward Relationship: Action Item For**.
5. Click **OK**.
6. In the fields list, search for fields containing **Action**. Notice that both the Action Items: Forward Relationship field and the Action Item For Backward Relationship field are created.
7. Create a single valued, Forward Relationship field named **Associated To** on the **Action Item Type** that will enable you to relate Action Items to Action Items.
8. Name the Backward Relationship: **Associated From**.

#### Task 4: Add Visible fields

1. For the Action Item type, add the following Visible fields: Assigned User, Project, Action Item Type, Instructions, Requested By, Needed By Date, Summary, Work Executed, Attachments, Action Items, Action Item For, Associated To, and Associated From.

*Note: By default all fields are Visible for the "everyone" group.*

#### Task 5: Select Mandatory fields.

1. For the Action Item type, select the following Mandatory fields on the Open State: **Action Item Type**, **Instructions**, **Requested By**, and **Summary**.
2. Select the following Mandatory Fields on the Assigned State: **Assigned User**.
3. Select the following Mandatory Fields on the Completed State: **Work Executed**.

#### Task 6: Define relevance.

1. For the Action Item type, edit the **Overrides for Fields** for the Work Executed field.
2. On the Relevance tab, select **Override the global rule**.
3. Create a Relevance rule that applies when the State is **Additional Work Needed**, **Closed**, or **Completed**.
4. Create an additional Relevance rule that applies when the State is **In Progress** and the Assigned User is the **Current User**.

The screenshot shows a workflow configuration interface. On the left, a tree view displays the following structure:

- or
  - State = Additional Work Needed
  - State = Closed
  - State = Completed
  - or
    - State = In Progress
    - and
      - Assigned User = - Current User -

Below the tree view, there is a 'Condition' section with a dropdown menu set to 'Compare the value of a field with a constant'. Below this, there are three input fields: 'Assigned User', '=', and '- Current User -', each with a dropdown arrow.

#### Task 7: Select Type attributes.

1. Edit the **Action Item** type.
2. Select **Attributes**.
3. Select **Display Workflow in Item**.
4. Select **Allow Time Tracking**.
5. Add the following image as a Custom Image: **C:\Integrity\_Training\Files\Icons\gear.png**.

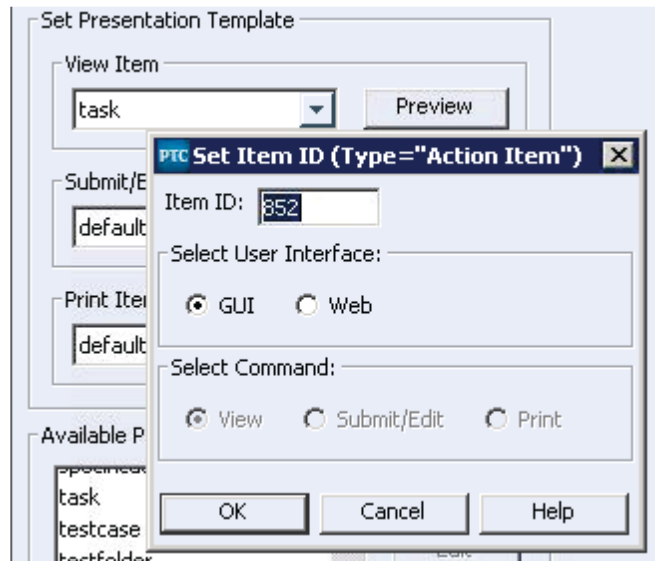
#### Task 8: Allow change packages.

1. Edit the **Action Item** type.
2. Select **Change Packages**.
3. Select **Allow Change Packages**.
4. Select **Members of these groups**.
5. Add the **GSD Users**.

#### Task 9: Design the presentation template.

1. Log in to the Integrity client using the credentials for the Administrator user.
2. From the **Item** menu, create an **Action Item**. Notice the long text fields (currently only one in the Open state). The Work Executed field would also be included in the In Progress, Additional Work Needed, Completed, and Closed states. The long text fields currently require significant space in the presentation using the default field values. You can edit the Display Rows value to save space on the presentation template.
3. In the Integrity Administration client, edit the long text fields which display on the **Action Item Type**.
4. Set the Display Rows value for each long text field to: **4**
5. In the Integrity client, create an **Action Item** from the Item menu again. Notice the long text fields now display four rows.

- To design the presentation template for the Action Item type, you can copy a similar template as your starting base. In the Integrity Administration client, **Preview** the **Presentation Template** for the View Item view of a **task**.



*To do this, you need to type in the item ID number of an existing Action Item.*

- Copy the Presentation Template for **task**.
- Name the Presentation Template: **Action Item**.
- Design the **Properties** tab to match the figure below.

*There is a defect ("bug") in 10.6 which you may encounter. Image links will break if you edit the presentation template after you save the changes from the first edit. If the spacer images used in this template break, close the presentation template and attempt to edit it again.*

Properties							
Summary							
Project		(Project)		Assigned User		(Assigned User)	
State		(State)		Requested By		(Requested By)	
Action Item Type		(Action Item Type)		Needed By Date		(Needed By Date)	
Instructions							
(Instructions)							
Work Executed							
(Work Executed)							

- Design the **Relationships** tab to match the figure below:

that are

Action Item For [Relationships]  
Action Item Type [Properties]  
Action Items [Relationships]  
Active Projects  
Activity  
Actual Budget  
Actual Effort  
Actual Start Time  
All Content Count  
Allow Edits  
Allow Traces  
Assigned Group  
Assigned User [Properties]  
**Associated From [Relationships]**  
Associated To [Relationships]  
Attachments [Attachments]

(Item Modified Information)  
(Item Locked Information)

(1) Properties (2) Relationships (3) Integration (4) Attachments

**Relationships**  
**Action Items**  
(Action Items)  
☐ Action Item For ☐  
☐ (Action Item For)  
**Associated To:**  
(Associated To)  
**Associated From:**  
(Associated From)

11. Delete the **Integration** tab.
12. Set the presentation templates for each of the **View Item**, **Submit/Edit Item**, and **Print Item** views to the **Action Item** template.
13. Preview an Action Item in the **View Item** view.
14. Preview an Action Item in the **Submit/Edit Item** view.
15. Preview an Action Item in the **Print Item** view.
16. In the Integrity client, create an **Action Item**.