

# Why Customization?

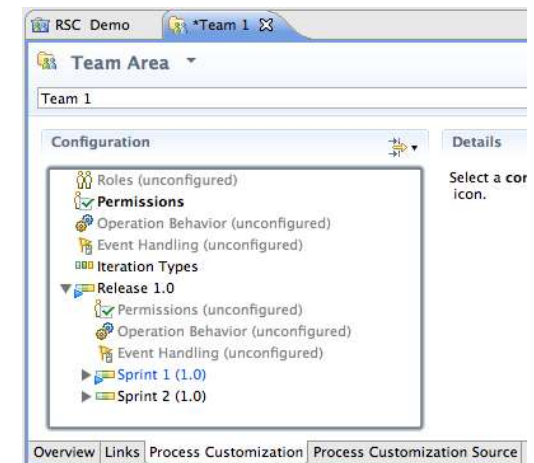
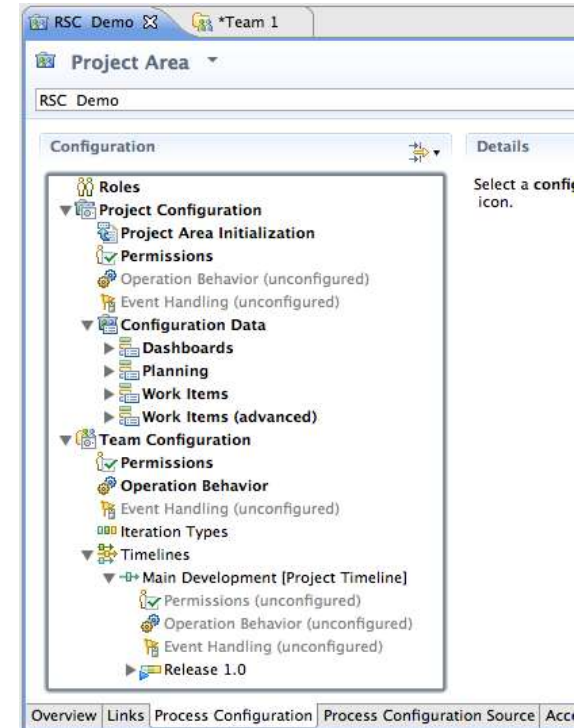
- RTC provides excellent Out-of-the-Box experience:
  - ▶ Minimal setup for most cases
  - ▶ No customization required
  
- However: RTC is highly customizable – Why?
  - ▶ Different organizations have varying requirements for project governance
  - ▶ Different teams want to adapt the tool to the process that works best for them
    - Important for agile teams: continuously adapt and improve

# Customizations: Scope

- RTC supports customizations for these components:
  - ▶ Process (Jazz Foundation)
  - ▶ Work Items
  - ▶ Planning
  - ▶ Dashboards
  - ▶ SCM
  - ▶ Build

## How is it done?

- **Project Area:**
  - ▶ Roles
  - ▶ Project configurations
    - Initialization
    - Role based *Operations*
    - Configurations
  - ▶ Team configurations
    - Role based *Operations*
    - Timeline/Role based *Operations*
  
- **Team Area (optional):**
  - ▶ Roles
  - ▶ Role based *Operations*
  - ▶ Timeline/Role based *Operations*

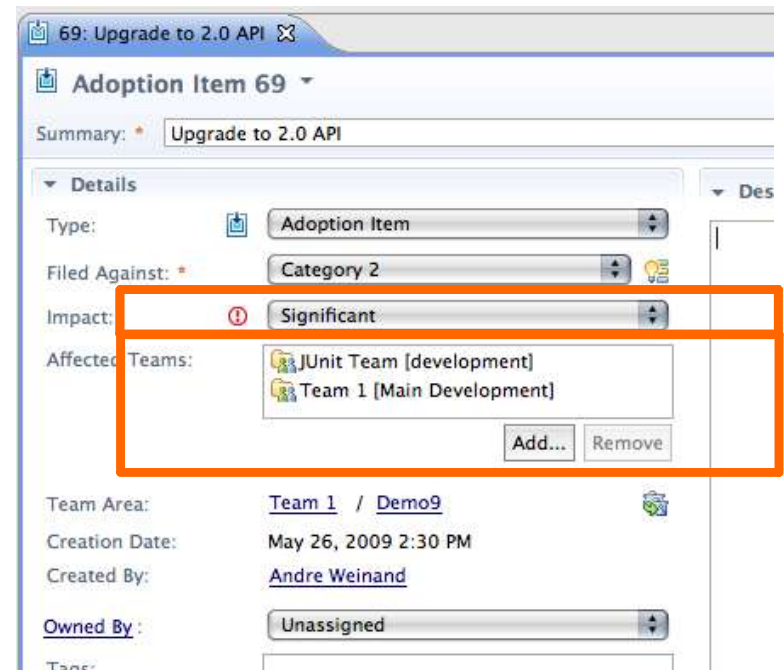


# Process Customization: Operations

- **Example:**
  - ▶ “Save Project Dashboard”: project level
  - ▶ “Save Work Item”: team level
  
- **Operation Permissions:**
  - ▶ Based on finer grained “actions”:
    - **Create** Work Item
    - **Modify** Work Item
    - **Modify Attribute “Priority”** of Work Item
  
- **Operation Behavior:**
  - ▶ *Preconditions*, e.g. “Required Properties”
  - ▶ *Follow-up actions*, e.g. “Create Initial Work Items”

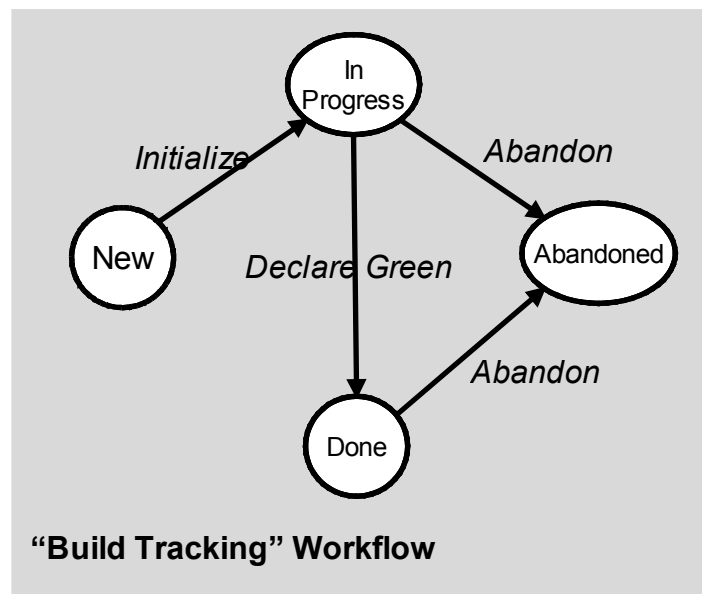
# Work Item Types & Custom Attributes

- **Work Item Type** defines:
  - ▶ Display name, Icon
  - ▶ Built-in attributes: e.g. *Summary*, *Description*, *Owner*, *Creator*, ...
  - ▶ Optional custom attributes
  - ▶ A state transition matrix (aka *workflow*)



## Work Item Workflows & Workflow Bindings

- A **Workflow** consist of:
  - ▶ States
  - ▶ *Actions*
  - ▶ Resolutions (optional)
- **Workflow Bindings**
  - ▶ bind workflow to work item type
  - ▶ workflows can be shared



# Customizing the UI – Editor & Attribute Presentations

## ■ Editor Presentations

- ▶ Define how a work item is presented based on:
  - Tabs, Sections, Attribute presentations
  - Small number of predefined layouts (no free-form layout yet)
- ▶ Can be used in various contexts:
  - Editor, inline editors, dialogs, hovers, ...

## ■ Editor Presentation Bindings

- ▶ Bind presentation to work item type
- ▶ Presentations can be shared

**Editor Presentation Bindings**

Associate work item types with editor presentations.

Choose the Work Item Type to edit:

Defect

Work Item Editor

com.ibm.team.workitem.editor.default

Inline Work Item Editor

com.ibm.team.workitem.web.inline.default

Lightweight Work Item Creation Dialog

com.ibm.team.workitem.lightweight.editor.section

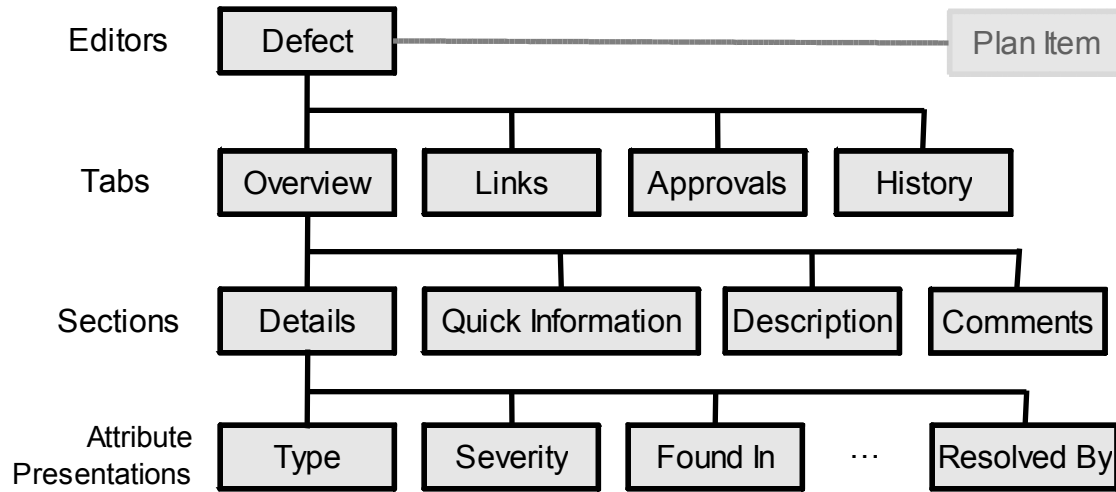
Plan Editor Preview

com.ibm.team.apt.planPreview.default

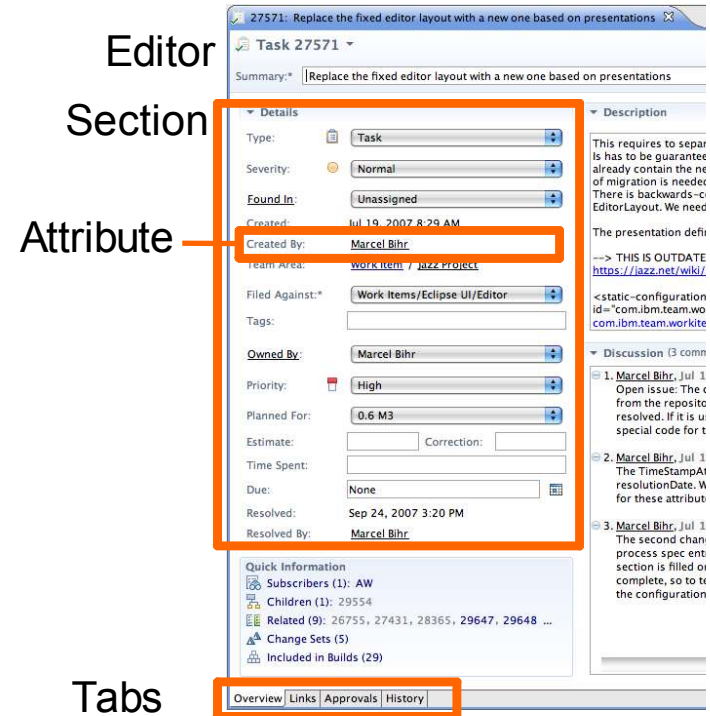
Contexts

# Editor Presentation

- Editor's UI element hierarchy:



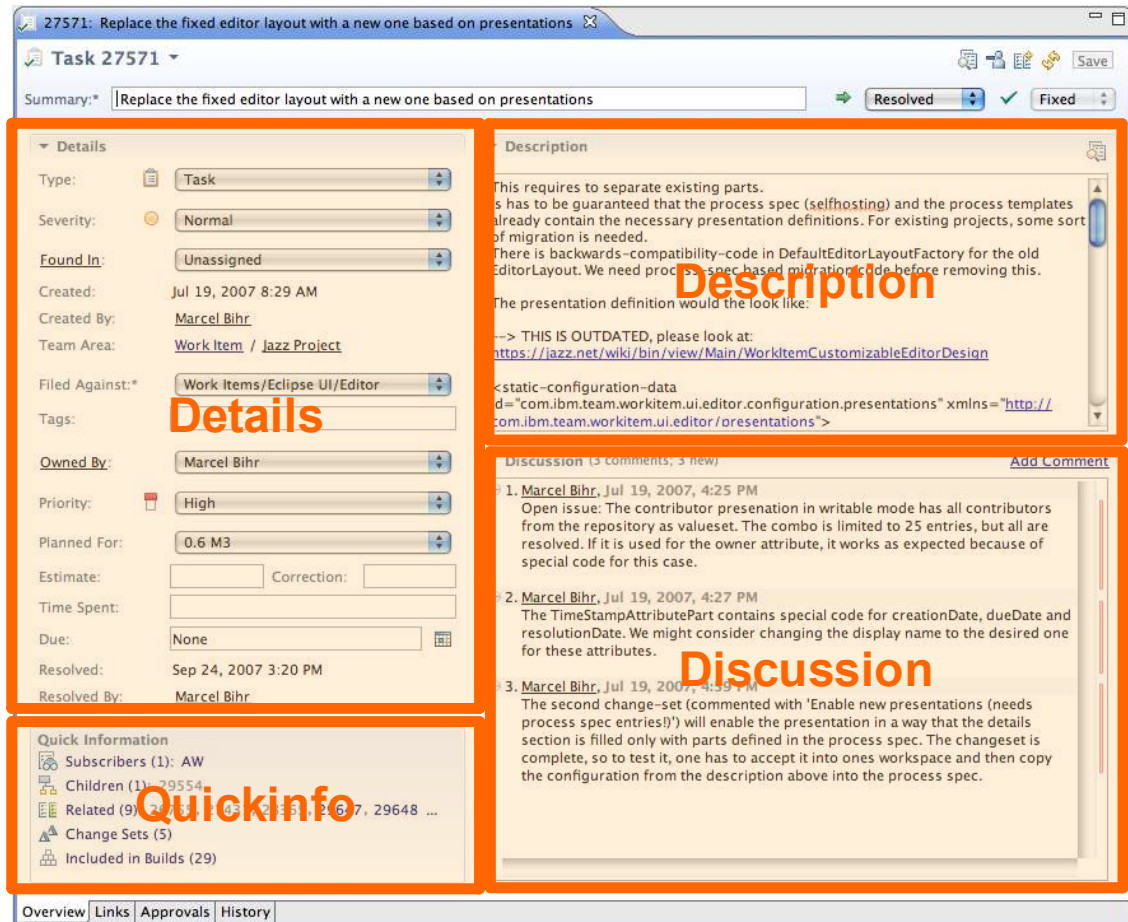
- RTC 2.0 supports structural editing
  - children can be added/removed to/from container





# Editor Presentation Layout

- Layout limitations:
  - ▶ Tabs have predefined 'section slots'
  - ▶ Sections can be added to slot but not arbitrarily positioned
  
- Web UI uses same slots
  - ▶ but different layout
  
- Similar limitation for Sections
  - ▶ Attributes can be added but not arbitrarily positioned



# Process Customization: Best Practices

- Process can be easily changed at any time
  - ▶ But there are some constraints (see below)
- At end of iteration reflect on how to improve process
  - ▶ e.g. collect improvements in “Process Improvement” work items
- After enough reflection/discussions customize existing process instance
  - ▶ Start with simple customizations
    - e.g. add a new work item type, add query to find all items of this type
  - ▶ Plan how to avoid corruption of existing data
    - e.g. add only, do not change IDs,  
do not remove process definitions that are still used
- After thorough testing create a process template of your customizations that other projects can use

## What's new in RTC 2.0

- More Custom Attribute Types:
  - ▶ Tags
  - ▶ Item References:
    - User, Category, Iteration, Deliverable, Work Item, Team Area, Project Area
  - ▶ Multi Valued Item References:
    - User, Category, Iteration, Deliverable, Work Item, Team Area, Project Area
  
- Required Attributes scoped to Workflow States
  - ▶ Example: require owner on close/fixed

## What's new in RTC 2.0 (contd.)

- Improved Editor Presentations:
  - ▶ Configurable Header in Work Item Editor
  - ▶ Editor Presentations now used in different contexts (Web & Eclipse UI):
    - Work Item Editor
    - Inline Editor
    - Work Item Creation Dialog
    - Rich Hovers
    - Preview
  
- Conditional Visibility for Attribute Presentations
  - ▶ Attribute value based, e.g. *hideIfEmpty*
  - ▶ Work Item state based, e.g. *hideIfInState* “resolved”

## What's new in RTC 2.0.0.1

- Initial support for e-Signatures:
  - ▶ Add an attribute of type 'E-Signature' to the desired Work Item type.
  - ▶ Configure the editor presentation to show the E-Signature attribute in the Approvals section.
  - ▶ Enable the 'E-Signature' precondition for the 'Save Work Item' operation and configure it for the desired Approval and Work Item type.

## What's planned for RTC 2.0.0.2

- e-Signatures:
  - ▶ Support for Workflow state transitions (“*Actions*”)
  
- “Require Approvals” Precondition:
  - ▶ enforces a matching Approval for a specific state
  
- Dependent Attributes:
  - ▶ Values, value sets, and default values of an attribute are dependent on other attributes