Work Item and Process Customization

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Customizations: Scope

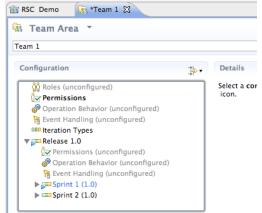
- RTC supports customizations for these capabilities:
 - Process (Jazz Foundation)
 - Work Items
 - Planning
 - Dashboards
 - SCM
 - Build
- Today's focus:
 - Only common customizations
 - Components:
 - Process
 - Work Items



Process Customizations

- 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

🔞 Open Mic 😫	
🕺 Project Area 🔻	
Open Mic	
Configuration	Details
Roles Image: Configuration Project Configuration Project Area Initialization Permissions Operation Behavior (unconfigured) Event Handling Image: State Sta	Select a conf
➢ Event Handling (unconfigured) ▶ Selease 1.0	
Overview Links Process Configuration Process Configurat	ion Source Ac



Overview Links Process Customization Process Customization Source



Process Customization: Operations

Example:

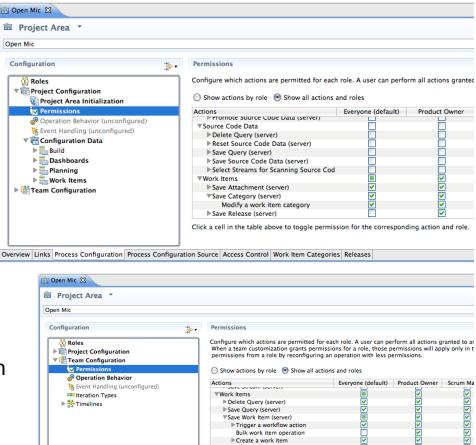
- Save Category": project level
- Save Work Item": team level

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"



Create a work item

Overview Links Process Configuration Process Configuration Source Access Control Work Item Categories Releases

Modify the work item

Remove work item from team area

 \checkmark

Click a cell in the table above to toggle permission for the corresponding action and role

Work Item Types & Custom Attributes

• Work Item Type defines:

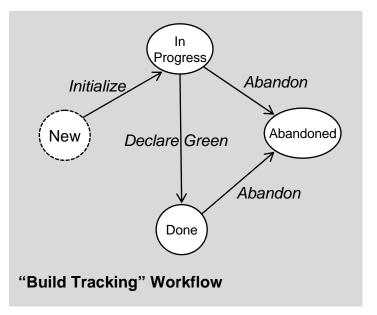
- Display name, Icon
- Built-in attributes: e.g. Summary, Description, Owner, Creator, …
- Optional custom attributes
- A state transition matrix (aka workflow)
- Scrum Examples:
 - Build Tracking Item
 - Story
 - Criteria of Acceptance: Large HTML
 - Adoption Item
 - Impact: Custom enumeration
 - Affected Teams: Team Area list

69: Upgrade to 2.0 AP	¹ 2	
🖄 Adoption Item 6	59 -	
Summary: * Upgrade t	o 2.0 API	
▼ Details		▼ Des
Type:	Adoption Item	\$
Filed Against: *	Category 2	¢ 📜
Impact: ①	Significant	\$
Affected Teams:	🙀 JUnit Team [development] 🎪 Team 1 [Main Development]	
	Add	Remove
Team Area:	Team 1 / Demo9	<u>ŝ</u>
Creation Date:	May 26, 2009 2:30 PM	
Created By:	Andre Weinand	
Owned By : Tags:	Unassigned	\$

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Work Item Workflows

- A Workflow consist of:
 - States
 - Actions
 - Resolutions (optional)
 - State Groups
- Scrum Examples:
 - User Story Workflow
 - Build Tracking Workflow

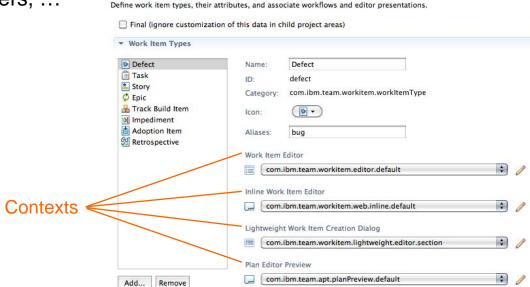




Customizing the UI – Editor & Attribute Presentations

Editor Presentations

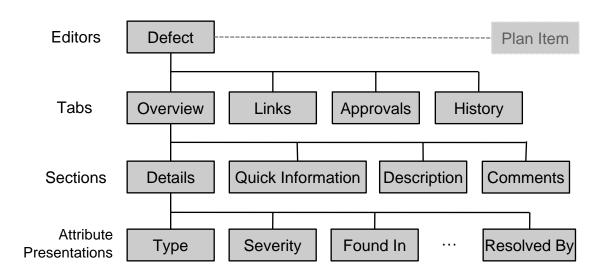
- Define how a work item is presented based on:
 - Tabs, Sections, Attribute presentations
 - Small number of predefined layouts (no free-form layout yet)
- Can be used in various contexts:
 - Editor, Inline Editors, Dialogs, Hovers, …



Types and Attributes

Editor Presentation

Editor's UI element hierarchy:



Editor	Task 27571 - Summary:* Replace the fixed editor layout with a new one based on presentations		
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	E Related (9): 26755, 27431, 28365, 29647, 29	9648	
	Included in Builds (29)		
Taha	Overview Links Approvals History		
Tabs	overview junks Approvais history		

27571: Replace the fixed editor layout with a new one based on presentations 🕴

- RTC 3.0.1 supports WYSIWYG editing
 - but only in Web UI



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

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More Customization Features

Preconditions for Work Item Save Operation:

- "Require Approvals"
 - Require an approval for all transitions into a specific state
- Strict Group Resolution" (generalization of "All Children Resolved" precondition)
 - Requires all children to be resolved before the parent can be resolved, and requires the parent to be open before a child can be added or re-opened.
- "Attribute Validation"
 - Verifies that a work item can only be saved if all attribute values are valid
- "Implied Attributes"
 - Specific attribute changes can trigger sets and clears of dependent attributes
- "Prevent Editing"
 - Prevents a Work Item from being edited in certain states



More Customization Features

Default Values

- Freely configurable default value for attributes
 - Supported Types: Text, Wiki text, Users, User Lists, Iterations, Categories, Numbers

Attribute Validation

Two out-of-the-box configurable validators:

Details		
Name:	Default Description	
Category:	Multi-Line HTML	
Configurat Text:	tion	
	the defect filing guidelines at: z.net/guidelines/bugs.html	

- Number Ranges: Restrict numeric fields to a specific range, e.g. only positive numbers
- Regular Expressions: Enter a regular expression that validates your string attribute
 - Example: U.S. Zip codes:

Severity:	Error	
Message:	Enter e.g. CA 94105	
Regular Expression:	^[A-Z]{2} \d{5}\$	
🗹 Case sensitive		
	then to and the	
Match line breaks	(ror ^ and \$)	



More Customization Features

Dependent Enumerations

- Value set of one enumeration depends on the value of another enumeration
- Example:
 - Browser" value set depends on a "Platform" attribute:

Configuration Source Enumeration:	Dependent Enumeration:
Platform	Browser
OS X	Firefox Safari
Windows Linux	Internet Explorer

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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 (use the "check ... usages" action links in the Eclipse UI)
- After thorough testing create a process template of your customizations that other projects can use