IBM Software Group

Using Question/Answer Wizards and Process Slots to configure an RMC process/WBS

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Innovation for a smarter planet

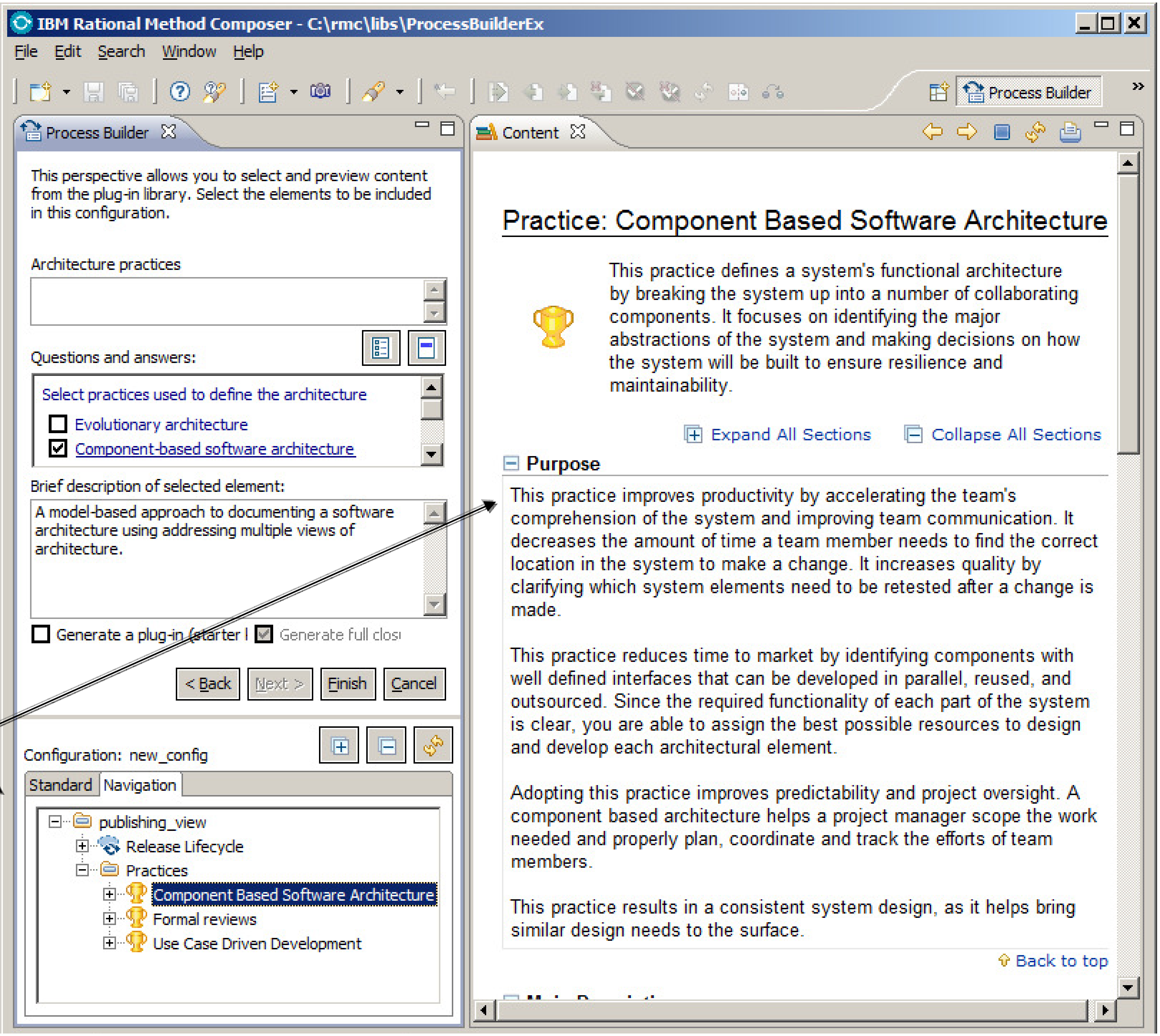
Agenda

- Process builder
- Process slots
- How it all fits
- Demo

Process builder is a “Wizard” for creating configurations

- Uses XML syntax to specify:
  - Pages to display
  - Questions
  - Answers
  - Actions – what to add or subtract
- Selection syntax is richer than the configuration UI
  - Add/subtract tagged elements
  - Add/subtract based on name matching
  - Can document selection rationale in comments
- Self-maintaining
  - the configuration stores the answers/query actions
  - refresh when library changes (execute “Run stored queries“)
- Can be further customized using the Team Process perspective.

Example


IBM Rational Method Composer - C:\rmc\libs\ProcessBuilderEx
File Edit Search Window Help
Process Builder
Process Builder
Content

This perspective allows you to select and preview content from the plug-in library. Select the elements to be included in this configuration.

Architecture practices

Questions and answers:

Select practices used to define the architecture

- □ Evolutionary architecture
- ☑ Component-based software architecture

Brief description of selected element:

A model-based approach to documenting a software architecture using addressing multiple views of architecture.

□ Generate a plug-in (starter l ☑ Generate full closi

Configuration: new_config

- publishing_view
  - Release Lifecycle
  - Practices
    - Component Based Software Architecture
    - Formal reviews
    - Use Case Driven Development

Practice: Component Based Software Architecture

This practice defines a system's functional architecture by breaking the system up into a number of collaborating components. It focuses on identifying the major abstractions of the system and making decisions on how the system will be built to ensure resilience and maintainability.

Purpose

This practice improves productivity by accelerating the team's comprehension of the system and improving team communication. It decreases the amount of time a team member needs to find the correct location in the system to make a change. It increases quality by clarifying which system elements need to be retested after a change is made.

This practice reduces time to market by identifying components with well defined interfaces that can be developed in parallel, reused, and outsourced. Since the required functionality of each part of the system is clear, you are able to assign the best possible resources to design and develop each architectural element.

Adopting this practice improves predictability and project oversight. A component based architecture helps a project manager scope the work needed and properly plan, coordinate and track the efforts of team members.

This practice results in a consistent system design, as it helps bring similar design needs to the surface.

Questions/ Answers

Preview

Process builder as alternative to configuration UI

- Can use XML syntax to specify a configuration
- No need to ask questions
  - Use the rich syntax to specify the desired selections
  - Can document selection rationale in comments

Syntax

```
<selection id="{unique id}">
<action>{ADD|SUBTRACT}</action>
    <query>
        <where>
            <group type=”{AND|OR}”>
                <group>
                <condition name=”{PLUGIN|TAG|TYPE}” operator="{IS|IS NOT}" value="{text string}"/>
                </group>
                ...
                <group>...</group>
            </group>
        </where>
    </query>
</selection>
```

Question and Answer Process Builder

- Use questions to determine the configuration to build
- Self-maintaining:
  - Answers are remembered in the configuration
  - If the library changes, refresh by executing “Run stored queries"

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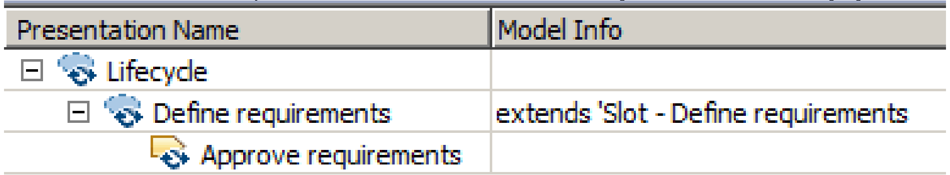
Process slot: definition

- A placeholder for building up WBS structures
- Defined in “core”
- “Filled” when you select practices
- Use to build WBS structures

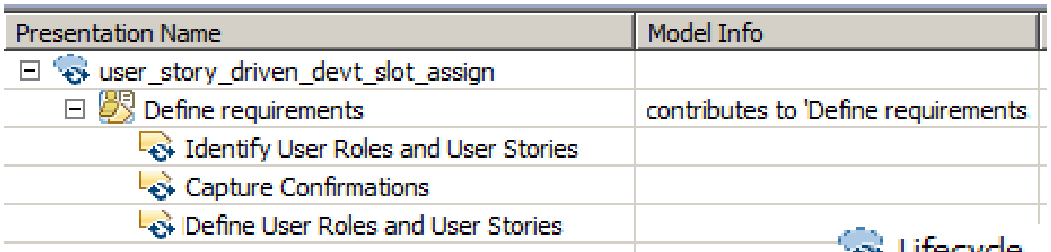
Example use

- Organization doesn't care HOW requirements are specified
  - does mandate that requirements BE specified and be reviewed/approved
- Add a **Define requirements** slot
  - Core.Tech.Slots\ Slot - Define requirements
- Use in a WBS, add a mandatory review/approval



Presentation Name	Model Info
⊟ Lifecycle	
⊟ Define requirements	extends 'Slot - Define requirements
Approve requirements	

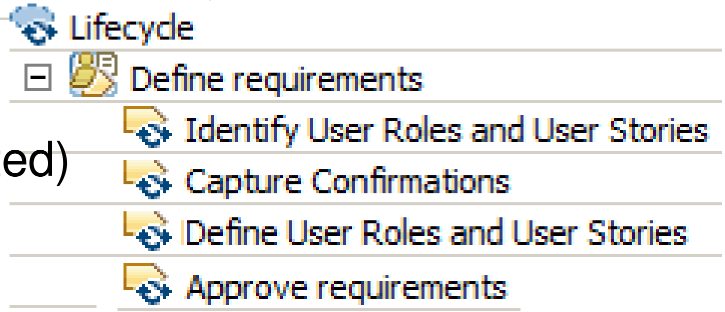
- Populate from one or more requirements definition practices



Presentation Name	Model Info
⊟ user_story_driven_devt_slot_assign	
⊟ Define requirements	contributes to 'Define requirements
Identify User Roles and User Stories	
Capture Confirmations	
Define User Roles and User Stories	

Result

(if practice selected)



Lifecycle
⊟ Define requirements
Identify User Roles and User Stories
Capture Confirmations
Define User Roles and User Stories
Approve requirements

Uses

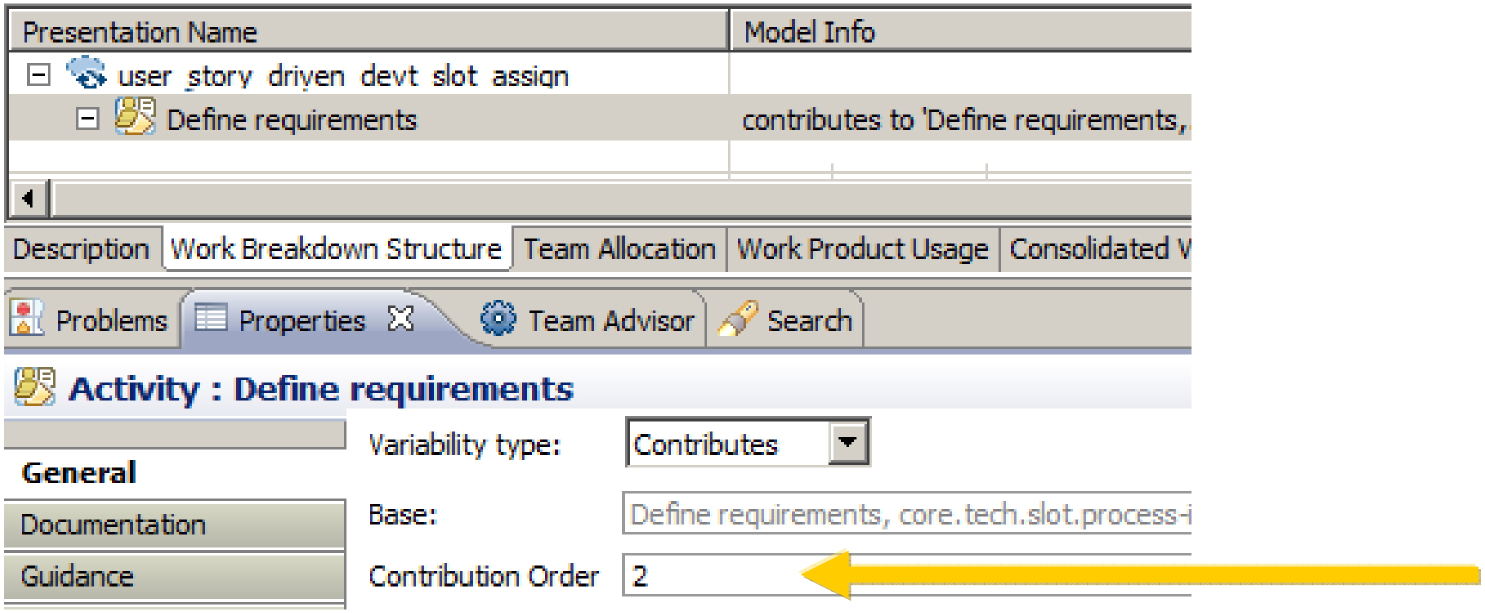
1. Define a standard organization WBS with mandated tasks
   - Slots where alternatives permitted
2. Define alternative WBSs for different styles of development
   - Waterfall vs. Scrum
   - Maintenance vs. New development

   – can use slots for common portions / alternatives
3. Standards
   - Define slots for mandated standards
   - Fill from practices
   - Can see which standards sections are addressed by the practices

Contribution order

Example:

- business process sketching AND user stories
  - both add to “define requirements” slot
  - business process sketching tasks go first.
- Solution: Specify contribution order:



Presentation Name	Model Info
⊟ user_story_driven_devt_slot_assign	
⊟ Define requirements	contributes to 'Define requirements,

Activity : Define requirements

Variability type: Contributes

Base: Define requirements, core.tech.slot.process-i

Contribution Order: 2

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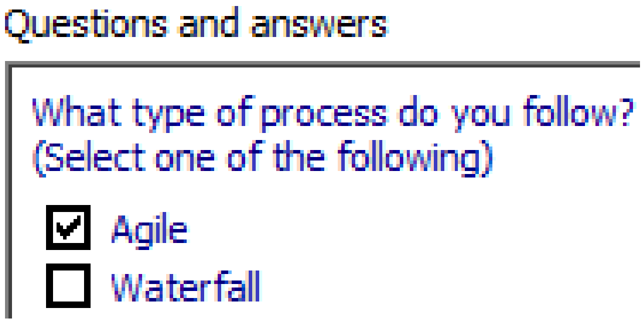
Preparation (Method architect)

1. Define slots in “core”
2. Contribute to slots in practices
3. Define WBS structures using slots
   - In practices for practice-specific WBS
   - “Process” plugin for WBS that directly uses mandated practices
4. Define process builder or builders:
   - Initial selection is “core” plus mandated practices
   - May include mandated overall WBS or provide choices.

Usage scenario: Creating a custom process Step 1: Execute process builder

1. Process builder perspective
2. Select builder wizard
3. Select starter kit option
   - Answer questions
   - Result is a "starter kit" plug-in that contains:
     - Elements selected
     - WBS generated
     - Tree structure for browsing

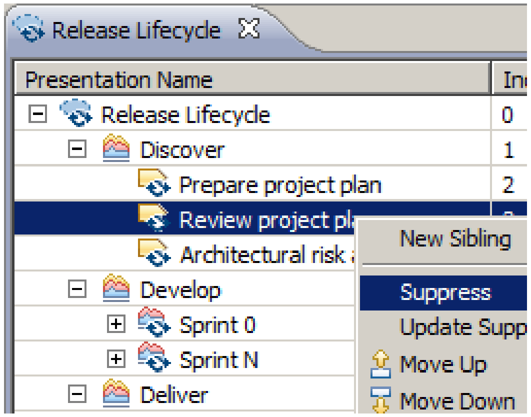


Questions and answers

What type of process do you follow?
(Select one of the following)

☑ Agile

□ Waterfall

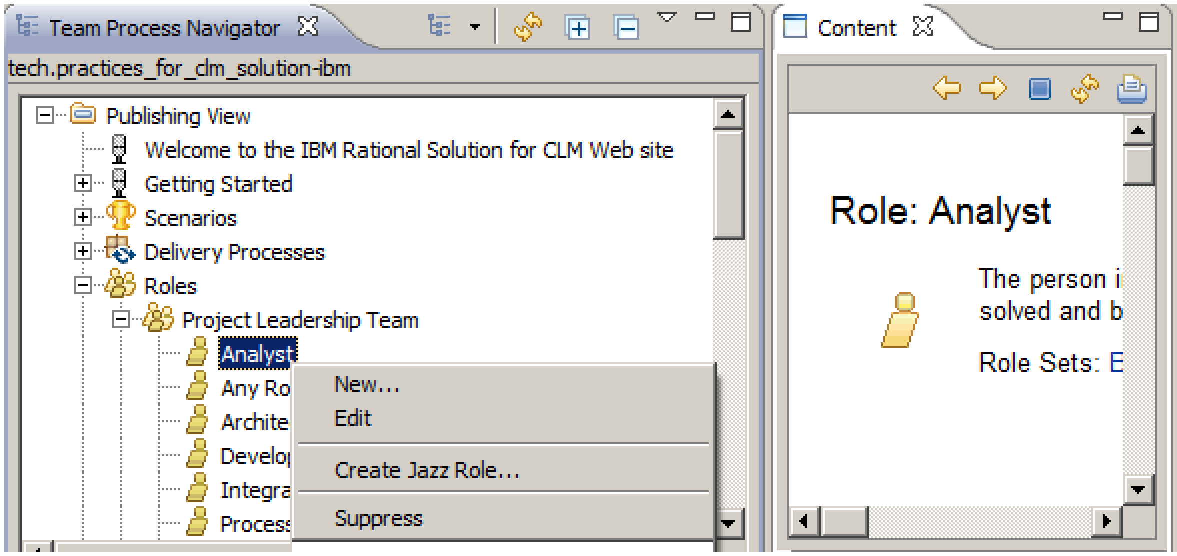


Release Lifecycle

Presentation Name	In
⊟ Release Lifecycle	0
⊟ Discover	1
Prepare project plan	2
Review project pl	
Architectural risk a	
⊟ Develop	
⊞ Sprint 0	
⊞ Sprint N	
⊟ Deliver	

Step 2: Customize the resulting plugin

1. Team process perspective:
   - Create a team
   - Add/remove/edit
   - Changes recorded in team plug-in



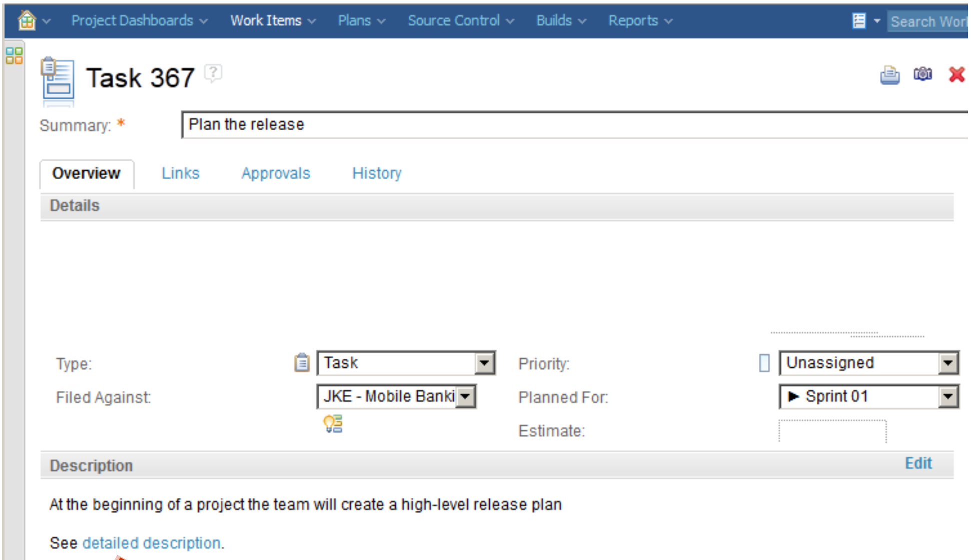
2. Authoring perspective
   - Edit WBS (add or suppress)
   - Publish and deploy the result

3. Team process perspective
   - Generate RTC process template and/or work item templates

Step 3: Follow the process

With Rational team concert:

- Links from work items
  - Direct access to process guidance



Task 367

Summary: * Plan the release

Overview | Links | Approvals | History

Details

Type: Task

Priority: Unassigned

Filed Against: JKE - Mobile Banki

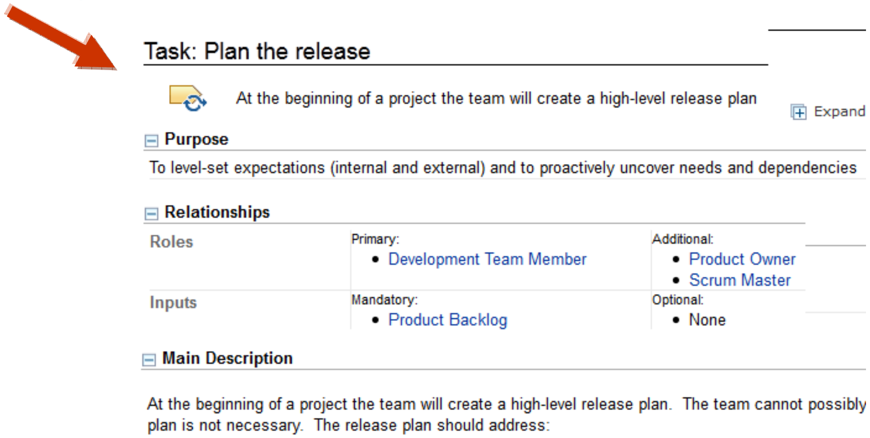
Planned For: ▶ Sprint 01

Estimate:

Description | Edit

At the beginning of a project the team will create a high-level release plan

See detailed description.



Task: Plan the release

At the beginning of a project the team will create a high-level release plan

Purpose

To level-set expectations (internal and external) and to proactively uncover needs and dependencies

Relationships

Roles	Primary: • Development Team Member	Additional: • Product Owner • Scrum Master
Inputs	Mandatory: • Product Backlog	Optional: • None

Main Description

At the beginning of a project the team will create a high-level release plan. The team cannot possibly plan is not necessary. The release plan should address:

- Update process as project proceeds
  - Create new work items roles, work item types, and templates (RMC/RTC integration)
  - Can re-run builder if base library changes

    (answers are remembered – "run stored queries")

Questions

Thank You

Tip for adding slots to WBS structures

- After defining slots, create a configuration that includes the slots plug-in
- Select that configuration in the dropdown
- Now you can drag and drop slots from the configuration view into WBS structures
- Choose “extend”
- Change variability to “contributes”