2541 - Validation of PLE roles and personas and user experience map

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#### **Abstract**

This session starts by listing the roles presumed involved in the PLE solution.

Hard copies of persona candidates representing those roles will be distributed to participants. Each persona will be described to the group. For each persona, the group will edit the persona's description, adding/removing those who are or are not relevant.

A few selected scenes in the scenario will be played back. The session attendees will select a PLE scenario persona and participate in smaller groups in a ideation session to capture the experience map of the selected persona. Each group will discuss their findings.

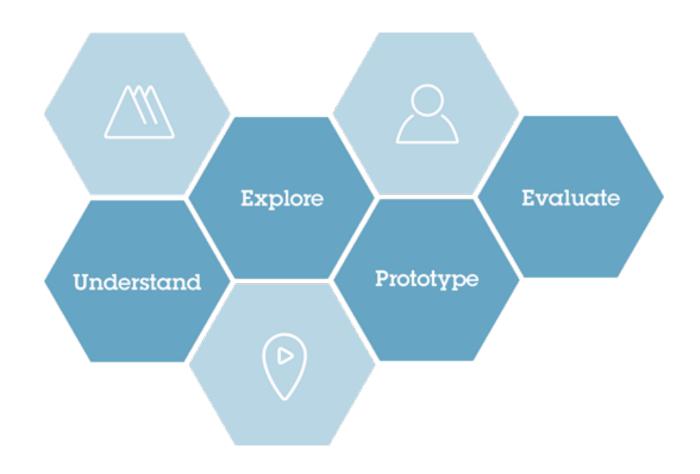


# Agenda

- IBM Design Thinking
- Introduction to the PLE Personas and Scenario
- Introduction to Empathy maps
- Personas Deep-Dive
  - Charles Configuration Lead
  - Susan Systems Engineer
  - Dan Developer
  - Tony Tester
  - (Or select a persona in your organization)

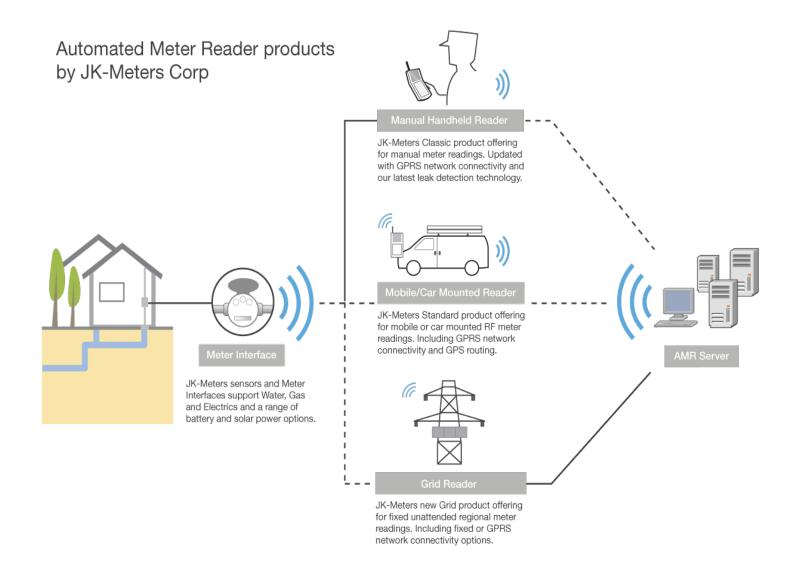


# **IBM Design Thinking**





#### **Automated Meter Reader Scenario**

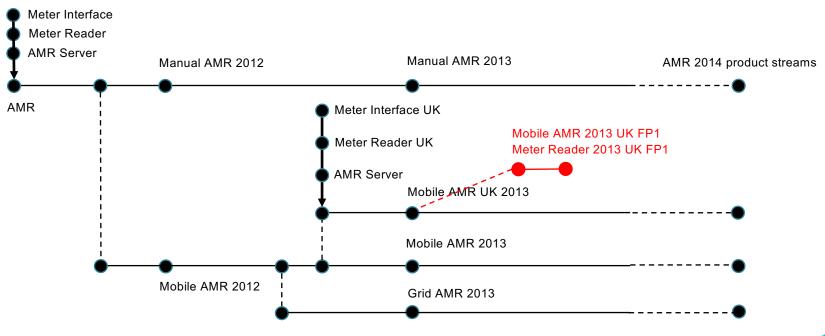






#### **PLE Scenario Context**

- JKE Meters delivering Automated Meter Readers
- Multi-stream PLE practice to manage an evolving product line
- Scenario: Need to fix a product variant defect and deliver a fix pack



### Scenario personas



#### Charles - Configuration Lead | Product Line Engineer

- -I configure and manage configurations for components and product variants
- -I need to define and view products with their variants and dependencies as a set of hierarchical product definitions and reusable component configurations
- -l am responsible for assembling global baselines



#### Dan – (Embedded) Software Developer

- -I develop features in reusable components
- -I need to easily start working on a Change Request in context of a configuration
- -I need to trace links and edit artifacts in context of my selected configuration



Tony – Tester

- -I verify features and changes to artifacts in context of a delivery configuration
- -I need to reuse test artifacts across components and product variants
- -I need to report on test results in context of a configuration



Pete – Project Manager

- -I plan work and track the delivery of my product variant(s)
- -I need to manage project milestones and work and link tasks to artifacts in context of my delivery configurations
- -I need to report on project readiness metrics on my project dashboard



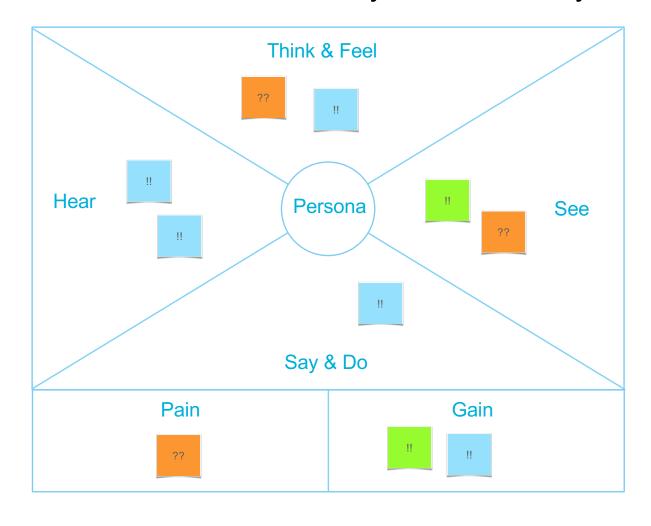
#### PLE Scenario - Scenes and Acts

PLE Scenario Acts	Personas	Hill 1 Work in configurations with artifacts and links	Hill 2 Create and use product definitions
Act 1- Reproduce a defect	Market Pete	Triage and assign a defect	
	Dan	Open and load workspaces	Open and load workspaces using RELM
	Dan	Reproduce defect using engineering artifacts	
	Pete	Plan fix and release	
Act 2 - Create delivery configuration	Charles	Create delivery streams	Create delivery streams using RELM
	Dan		Resolve defect
	Tony		Validate defect resolution
	Charles	Baseline delivery streams	Baseline delivery streams using RELM
Act 3 - Deliver and baseline changes to product line	Charles		Analyze dependencies
	M Pete		Review and approve release
	Charles		Replace baselines
Hill 3	Maria Tammy	Create requirements / quality coverage query	
Visibility into configurations of engineering artifacts	Pete	Track progress to release using Dashboards	
Act 4 - Report on release	Charles	Generate release documentation	

The PLE scenario explores the activities taken by the AMR product line delivery team to progress towards delivery of a Mobile AMR 2013 UK FP1 release resolving a product variant defect

# What is an 'Empathy Map'?

 An empathy map captures and articulates the many facets of a representative user as currently understood by the team.





# **Example: Charles the Configuration Lead**

#### Think & Feel I can overview products, components and variants Hear Need a configuration See New version available Products · Ready to baseline Components · Who uses this component Variants · Need to update a configuration Versions Dimensions / Parameters Say & Do Administer configurations Assign configurations to product definitions • Share configurations for delivery and releases Pain Gain Immutable baselines on all artifacts Manual steps •1000's of configurations • Easy to search & find configurations Formal CM process



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# Design Exercise – Empathy Map

#### What we want you to do...

- 1.Ideate (10 min)
  - Add notes to the Empathy map on what your selected persona Does, Sees, Thinks, Hears, Says and Feels
- 2.Cluster and Discuss (10 min)
  - Move notes into related **clusters** Discuss groupings
  - **Discuss clusters** related to variations of the Charles persona



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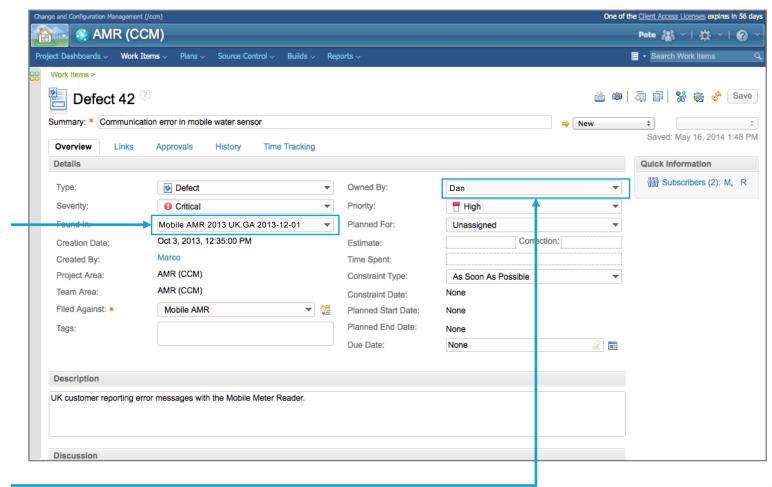
# Triage and Assign the Defect



The CCB reviews this defect on the Mobile AMR 2013 UK product.

Pam, the product line manager, request that the defect should be fixed with high priority.

The defect is assigned to Dan, a developer in the Meter Reader team.



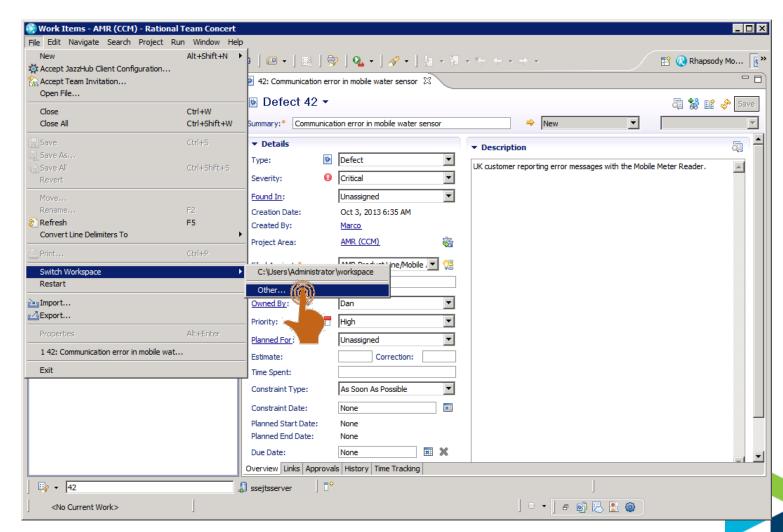
## Open and Load Workspaces



Dan is notified of the defect in the Eclipse client

He suspends the task he is working on and starts reproducing the defect

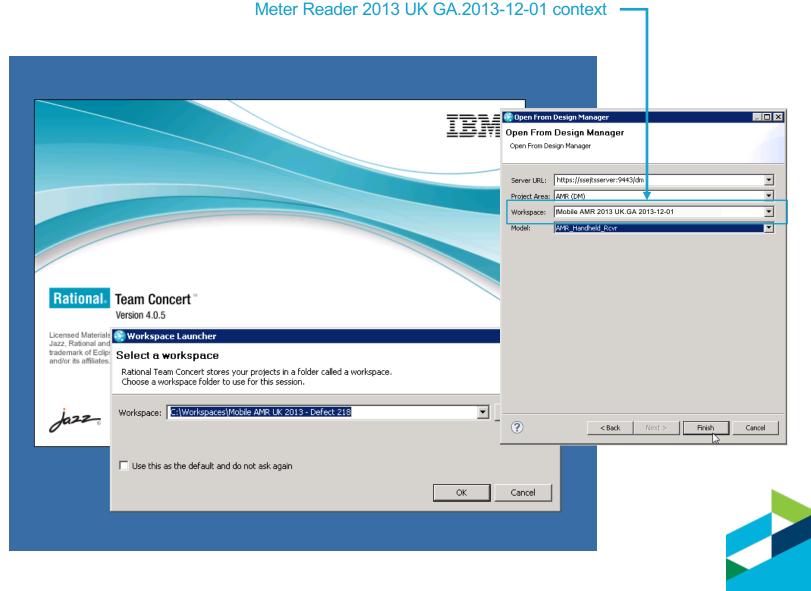
He creates a new workspace to load the 2013 Mobile AMR UK GA baseline



# Open and Load Workspaces



Dan launch
Eclipse w/ the
Rhapsody client,
loads his
workspace and
select the GA
baseline



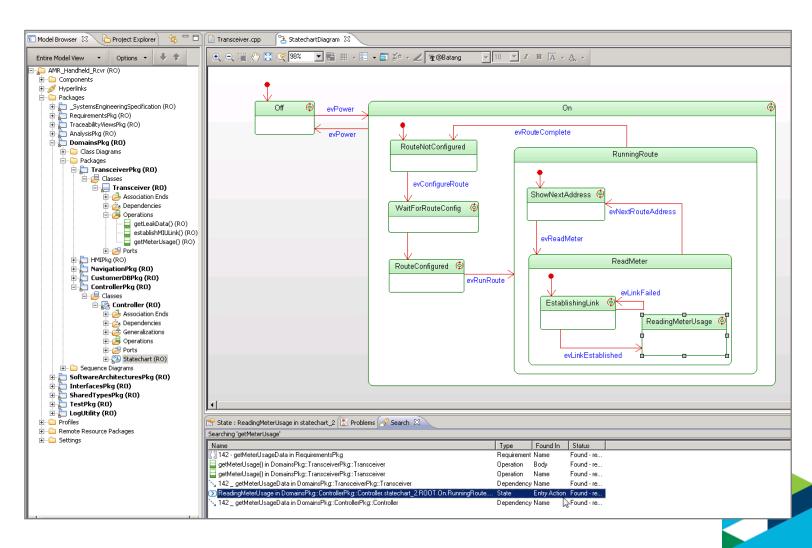
# Open and Load Workspaces



Dan suspects the getMeterUsage() is causing the reported error.

He finds the defect in getMeterUsage()

He updates the work item with a link to the model element.



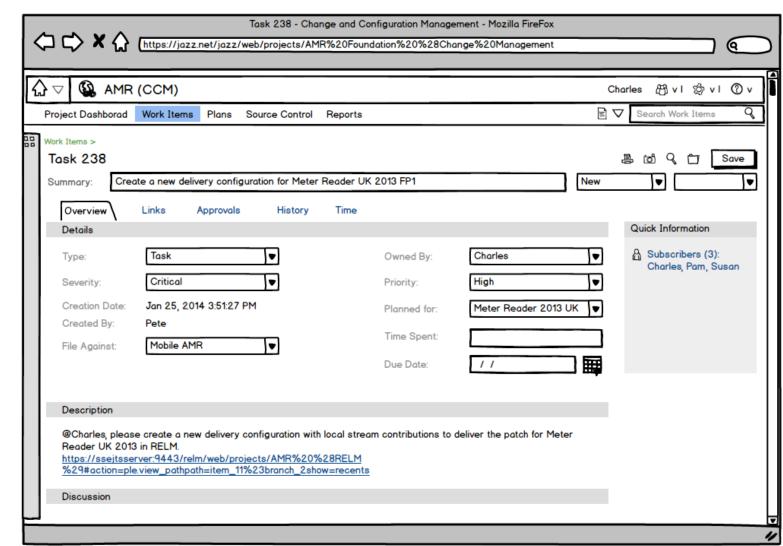
#### Plan Fix and Release



Pete plans the delivery of the fixpack.

He creates a release plan.

He creates a task
for Charles
(Configuration
Lead) to create a
delivery
configuration for
FP1



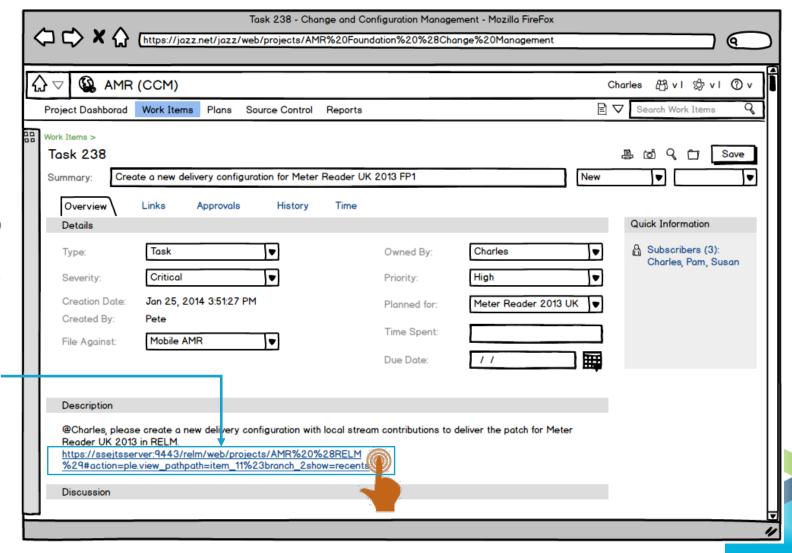
# Request new delivery configuration

#### Collaboration in context of Plans, Tasks and Configurations



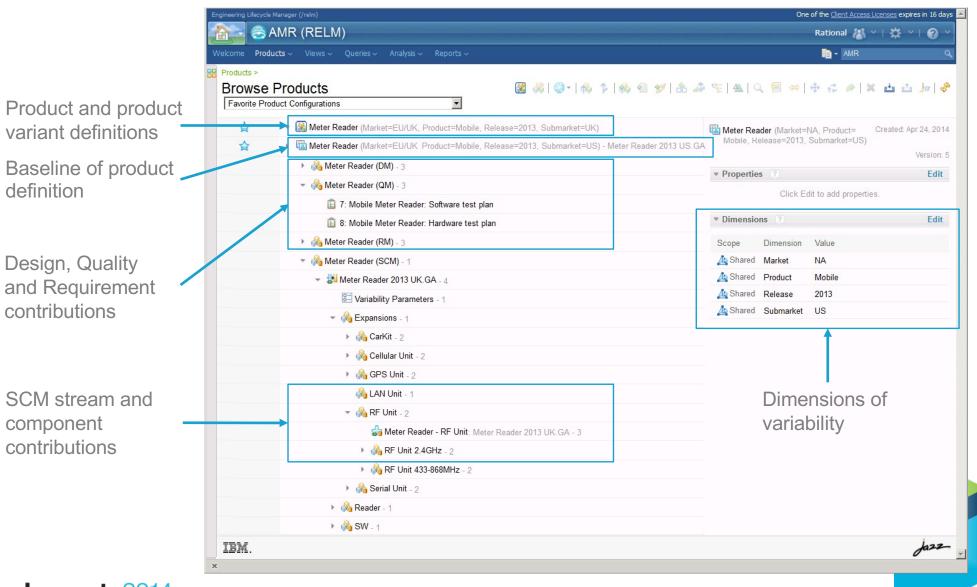
Charles is assigned a task to create a delivery configuration for a Meter Reader FP1

He may follows links to product configurations



## Product configurations

Organization of product configurations w/ lifecycle components



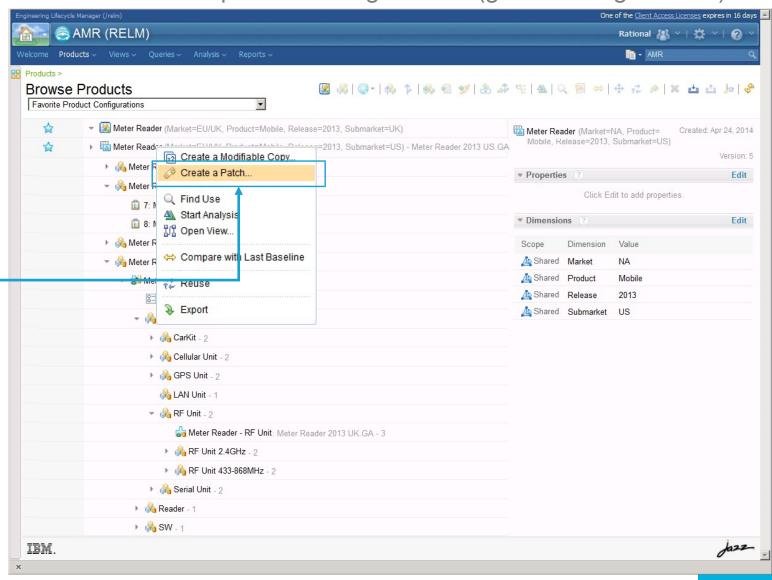
## Create product configuration stream from baseline

Branch action on product configurations (global configurations)



Charles creates a patch from the Meter Reader \_ 2013 UK GA baseline

This command creates a product configuration stream without changing the versions of contributions

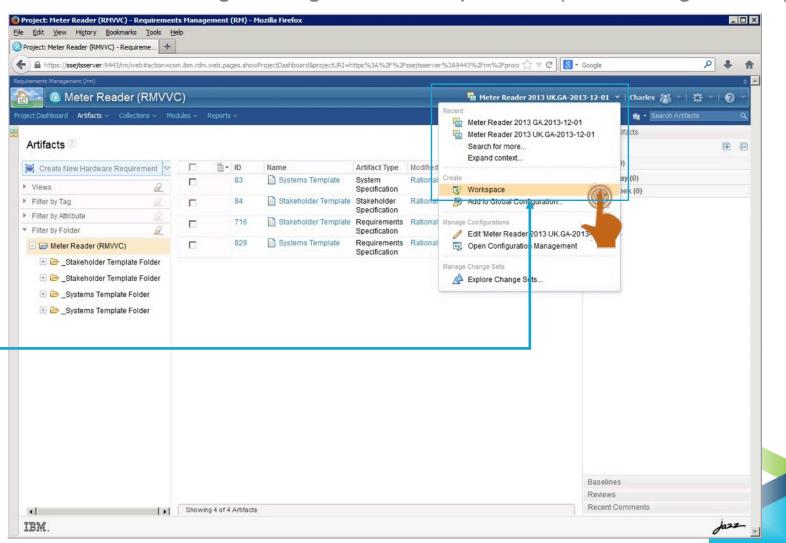


## Create engineering artifact stream from baseline

Branch action on engineering artifact components (local configurations)



Charles creates streams for the engineering artifact contributions to the FP1 configuration



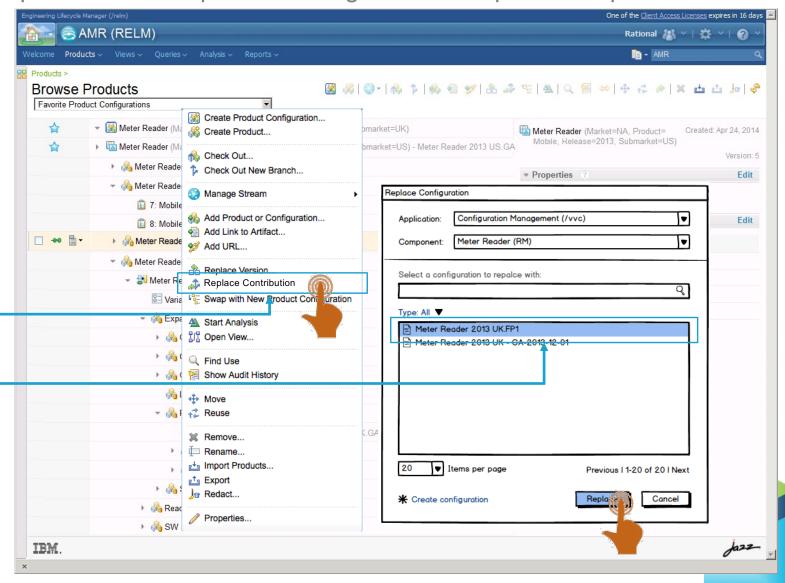
## Replace baseline with stream contribution

Update action on product configuration to replace component variant



Charles returns to the product configuration and chooses the 'Replace'

He then picks the new streams created in QM, RM, etc.



# Navigate artifacts and links in configuration

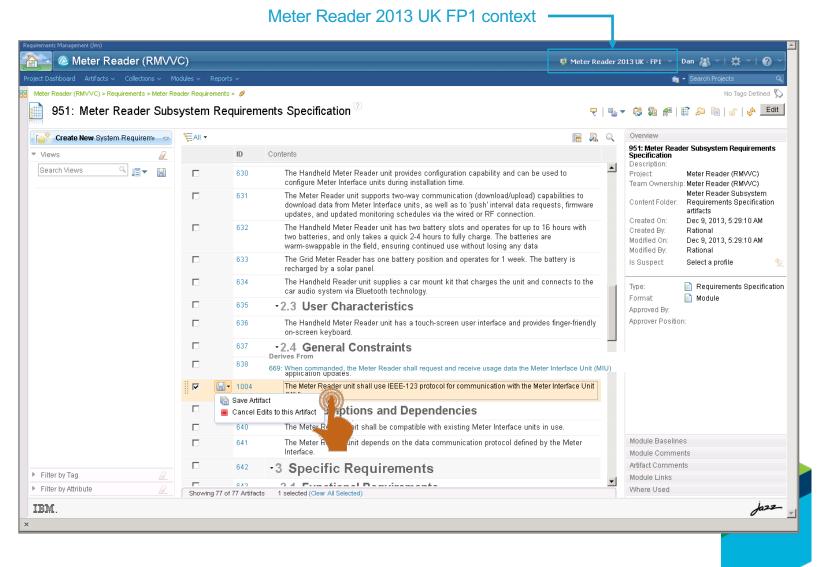
#### Artifacts and links shown in selected configuration context



Dan edits artifacts and links in the context of the delivery configuration

He fixes the getMeterUsage() operation in RDM

He follows the link to the impacted requirement in the context of the delivery configuration



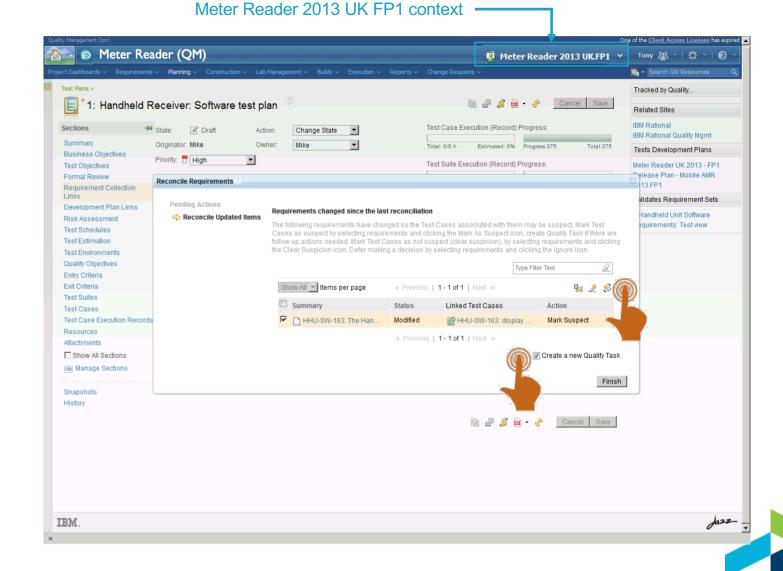
#### Validate Defect Resolution



Tony validates the defect fix.

He searches for updated requirements and marks impacted test cases as suspect

He updates the test cases and runs the test plan



## Baseline engineering artifact stream

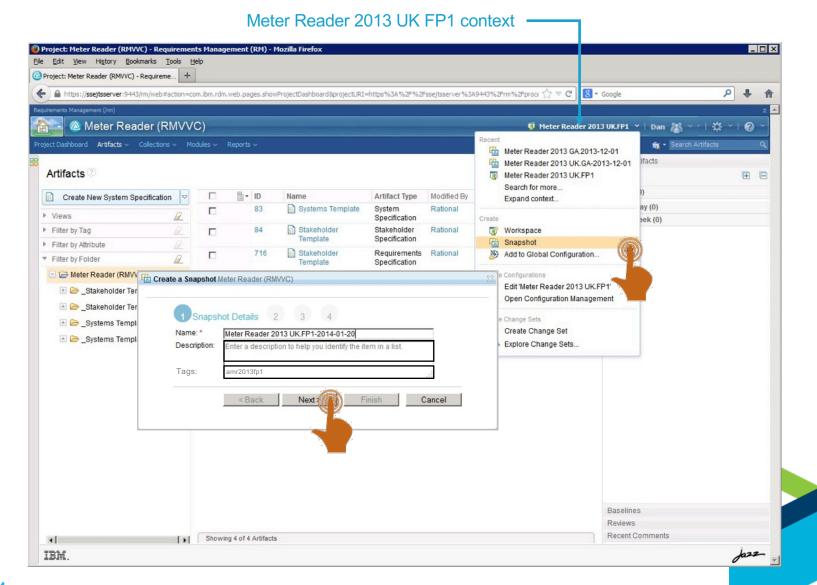
Baseline actions on component stream (local configurations)



Dan creates a baseline of the Meter Reader 2013 UK FP1 requirements

He enters a tag for the baseline

Tony baselines the test configruation



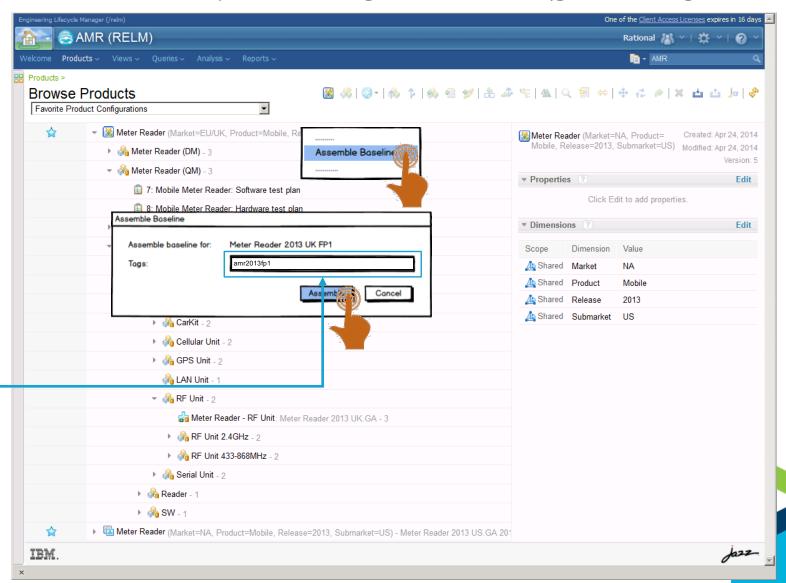
# Assemble baselines using tags

Assisted action on product configuration stream (global configurations)



Charles expands the Meter Reader FP1 product configuration

He selects the product configuration and assembles — baselines for all streams in the configuration



# Find Use of Component

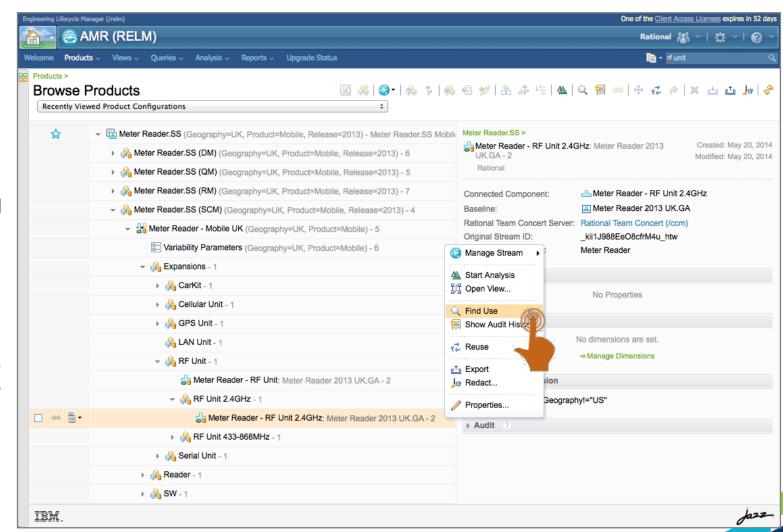


Dan has identified that the defect is in the 2013 UK variant of the RF-Unit (SCM)

Charles opens the Meter Reader.

He selects the RF Unit in the UK variant.

He runs the Find Use command

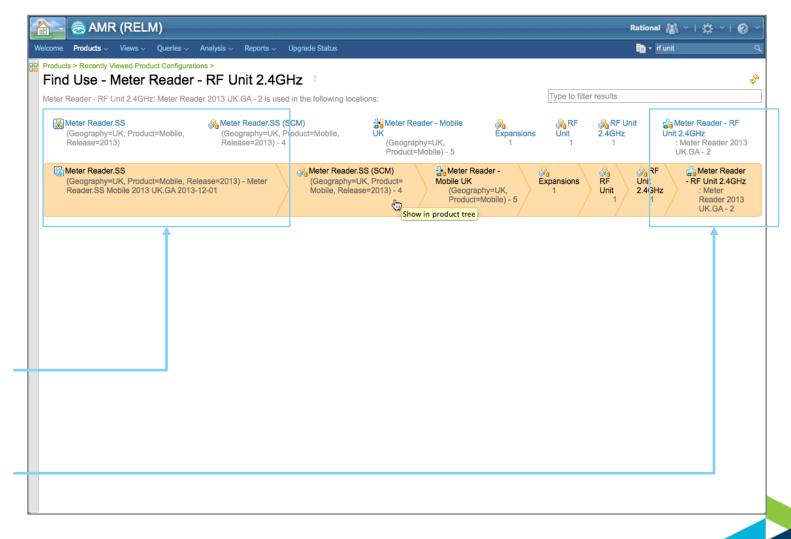


# Find Use of Component



Charles identifies product variants including the defect in Meter Reader

He confirms that only the UK variant is impacted by the defect in the UK variant of the RF-Unit

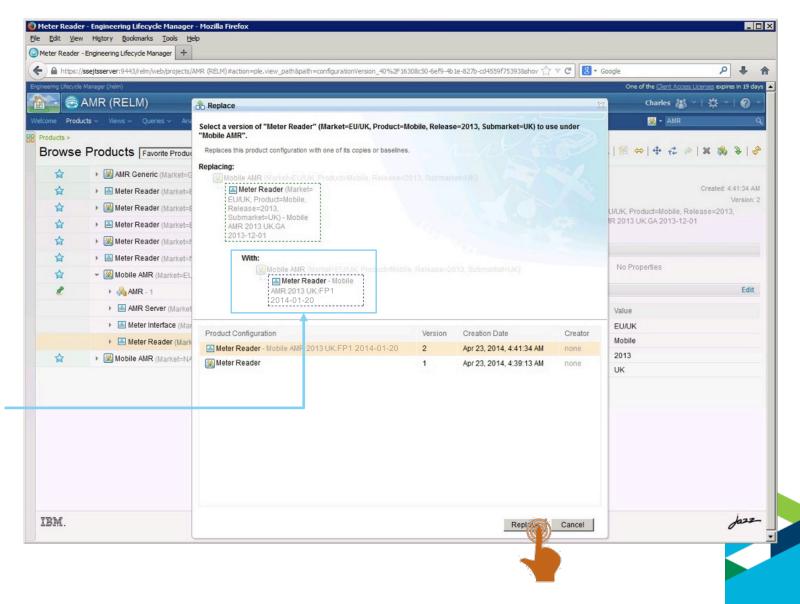


## **Update Mobile AMR Product Baseline**



Charles selects the Meter Reader 2013 UK GA baseline contribution

He chooses replace and picks the FP1 baseline



#### **Update Mobile AMR Product Baseline**



Charles creates a baseline of the Mobile AMR 2013 UK FP1 product

