2540 – PLE design validation and playback

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Abstract

Design studio group session to validate PLE scenarios, key personas and UX storyboards.

We will deep dive into the 2014 release hills and design exploration. We will provide an overview of the PLE scenarios developed by the PLE delivery team.

Attendees will contribute by examining and validating the design scenarios, the scenario personas and the development practices.

Attendees will also be invited to work with the members of the Rational Design Factory team to explore parts of the scenario and contribute their user experiences and practices into the design work.

Agenda

- IBM Design Thinking
- Release Hills
- Introduction to the PLE Scenario
- Scenario Deep-Dive
  - Explore design scenario's for 2015
  - Act 0: Create product variant
  - Act 1: Reproduce Defect
  - Act 2: Create Delivery Configuration
  - Act 3: Update Product Line
  - Act 4: Report on Release

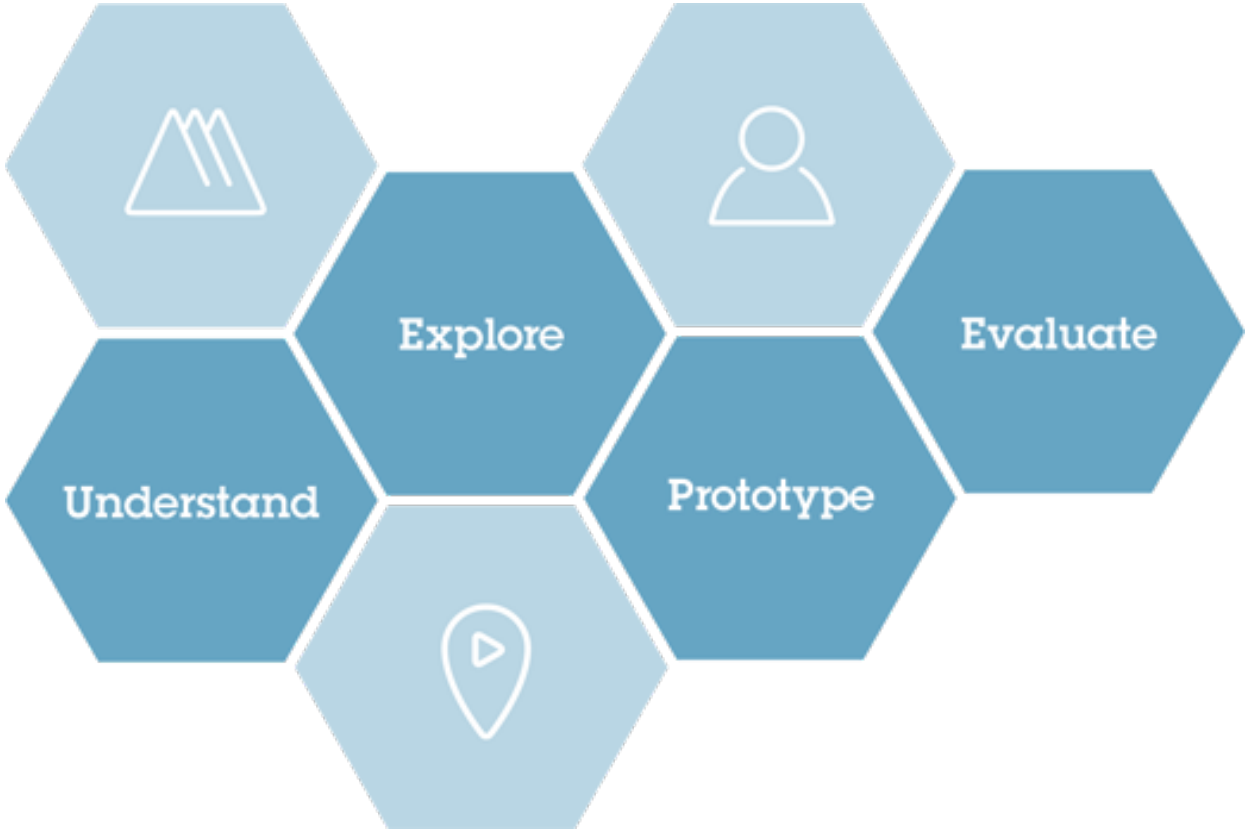
IBM Design Thinking

Hills focus your project on big problems and outcomes for users, not just a list of feature requests.

Sponsor Users help you design experiences for real target users, rather than imagined needs.

Playbacks align your team, stakeholders, and clients around the user value you will deliver, rather than project line items.

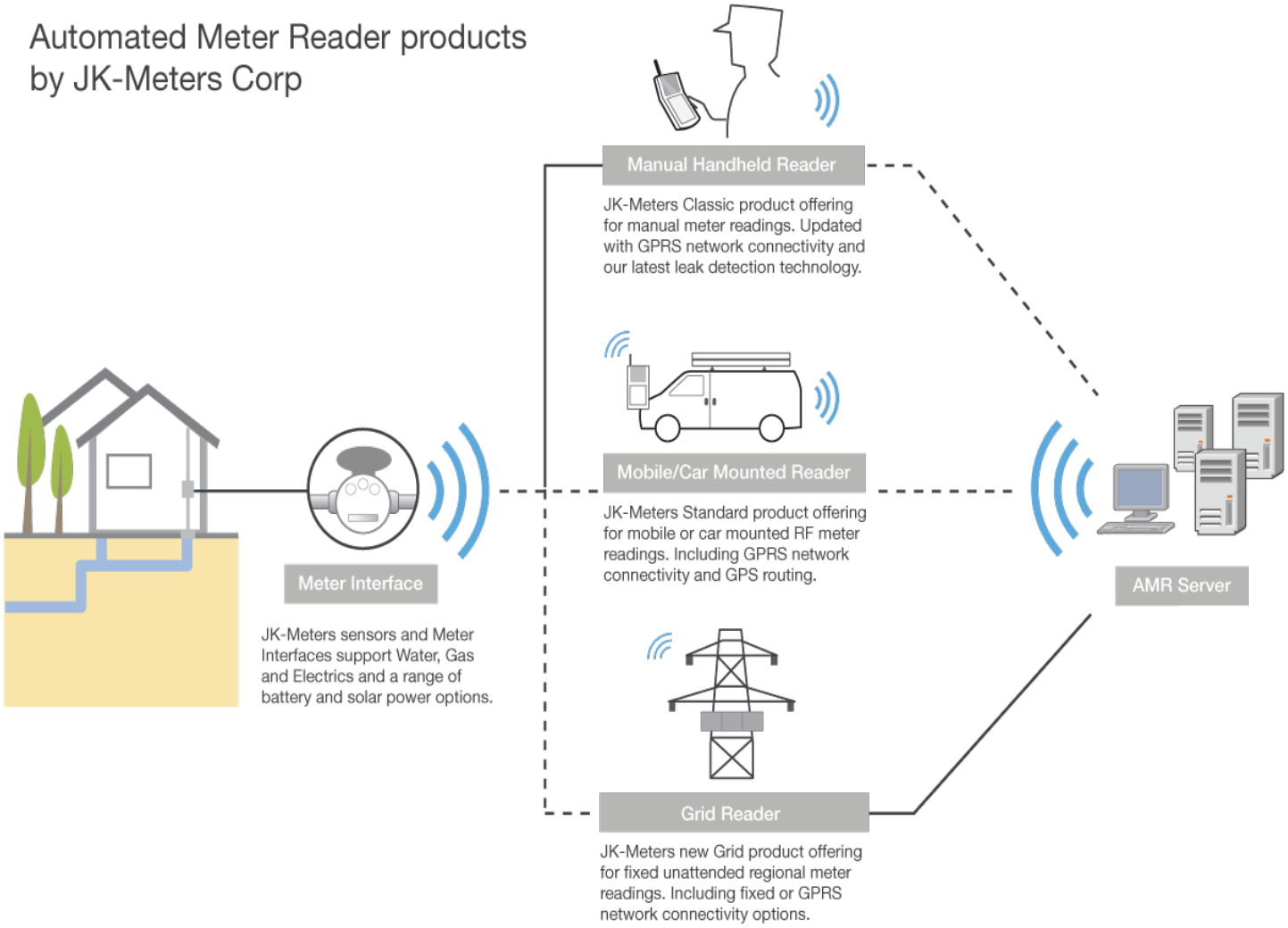
IBM Design Thinking



Release Hills for PLE

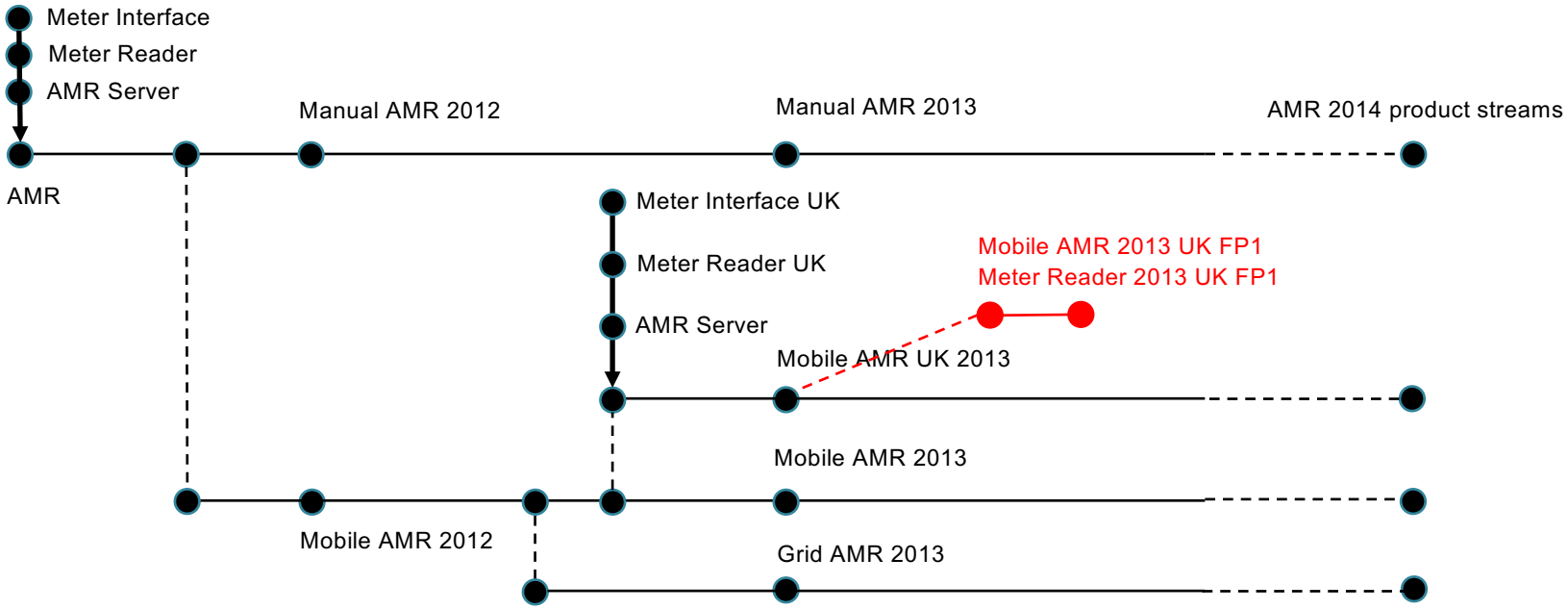
Hill #1	**Work in configurations with artifacts and links** An engineer working in an environment with 1000s of configurations can see and use artefacts and their links that were delivered from any other configuration.
Hill #2	**Create and use product definitions** A configuration lead or product line manager can define a complex product as a set of hierarchical component configurations. This single source of truth enables engineers to work with the right artifacts and links in their tools. •A configuration lead or product line manager can define a new product variant and visualize its structure within 5 minutes. •An engineer can find and select the right configuration within 30 seconds to populate his/her workspace
Hill #3	**Track and report on configurations of engineering artifacts** An engineer working in an environment of 1000s of configurations can create reports in the context of any configuration. •An engineer can generate a document with requirements, tests and design artifacts (and their links) associated with a configuration •An engineer can run queries in the context of any one global configuration •An engineer can generate a real-time or historical report or view dashboards with information associated with a configuration
Hill #4	**Technical Foundation** •Deliver a PLE solution with VVC, LQE and triple store performance and scalability. SSO and LQE Access Controls 2.0 •Improvements on install, upgrade and setup for PLE playbacks and demonstrations

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
-I 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	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
	Pete		Review and approve release
	Charles		Replace baselines
Hill 3 **Visibility into configurations of engineering artifacts**	Tammy	Create requirements / quality coverage query	
	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

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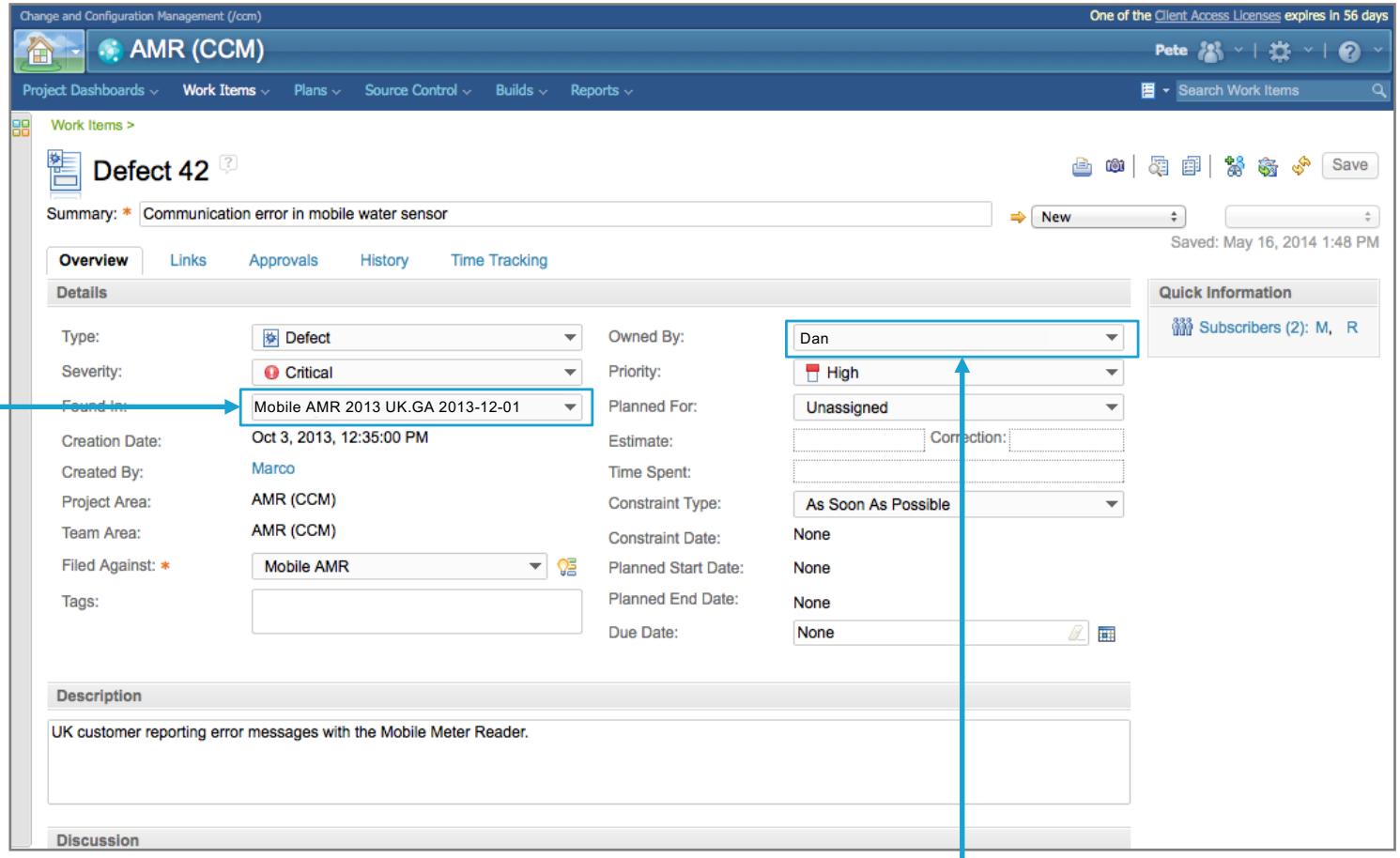
Triage and Assign the Defect

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.

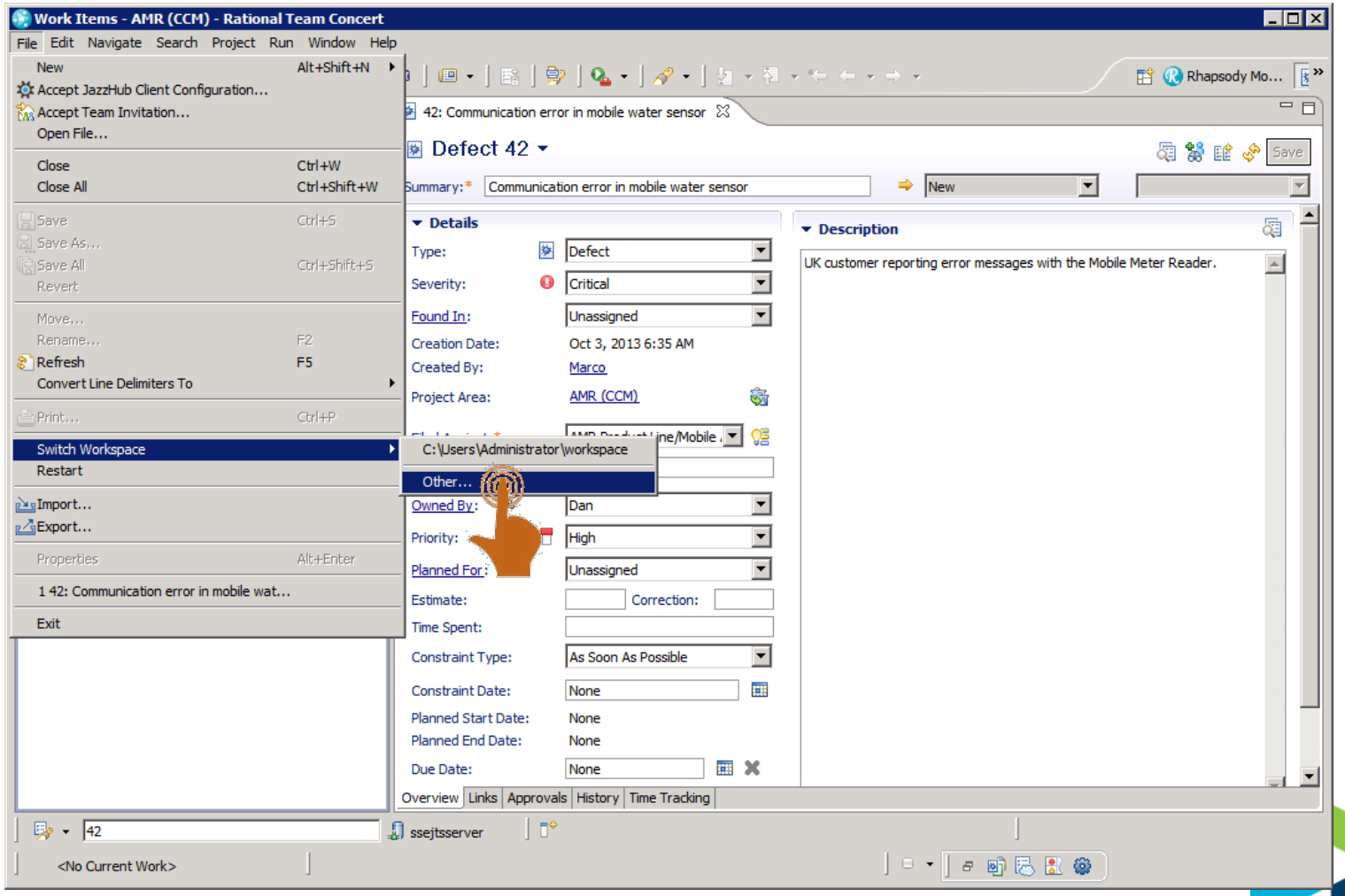


Open and Load Workspaces

Dan is notified of the defect in the Eclipse client

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

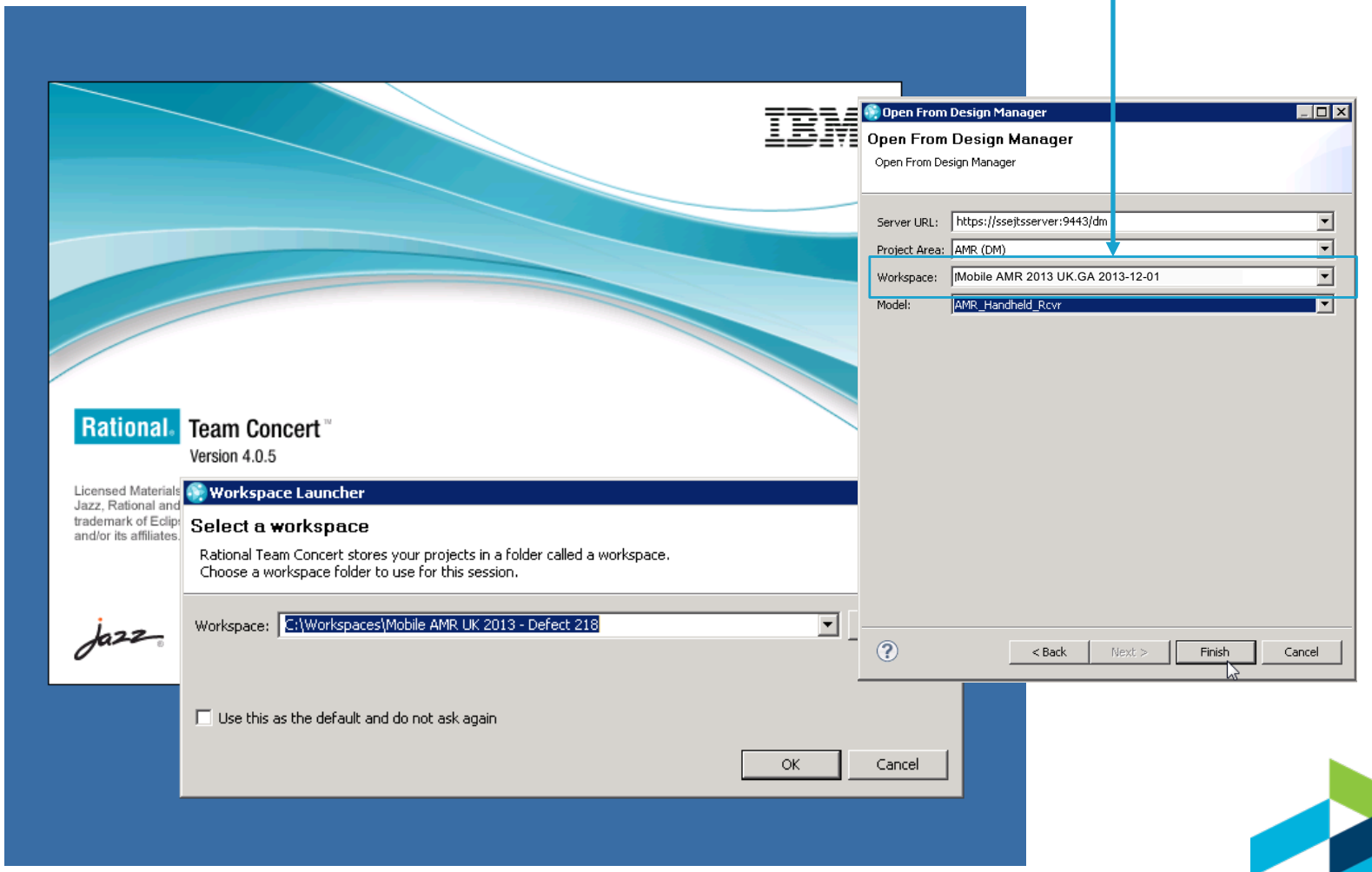
He creates a new workspace to load the 2013 Mobile AMR UK GA baseline



Open and Load Workspaces

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

Meter Reader 2013 UK GA.2013-12-01 context

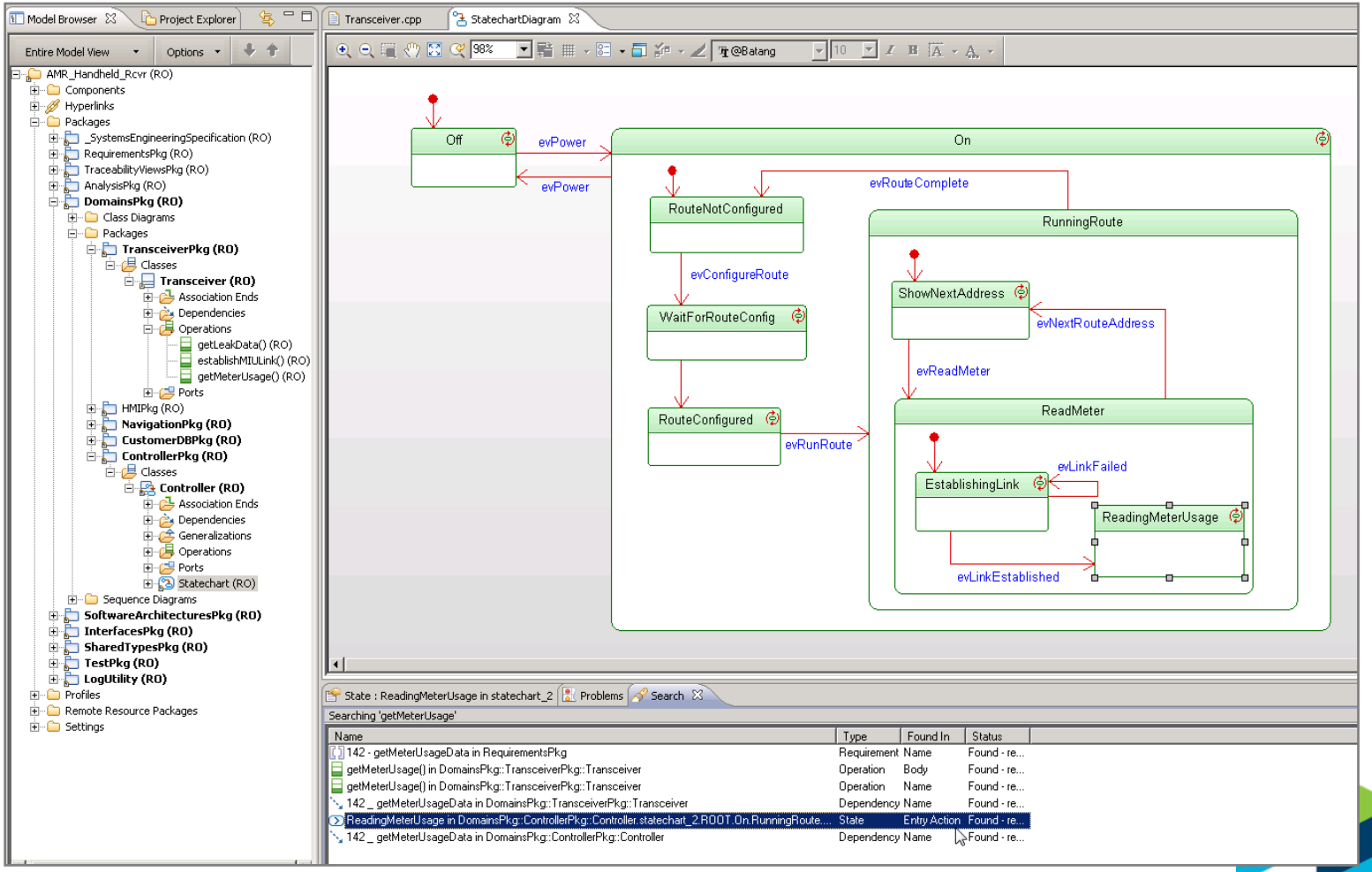


Open and Load Workspaces

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

Task 238 - Change and Configuration Management - Mozilla FireFox

https://jazz.net/jazz/web/projects/AMR%20Foundation%20%28Change%20Management

AMR (CCM) Charles

Project Dashborad | Work Items | Plans | Source Control | Reports | Search Work Items

Work Items >

Task 238 Save

Summary: Create a new delivery configuration for Meter Reader UK 2013 FP1 New

Overview | Links | Approvals | History | Time

Details

Type: Task
Severity: Critical
Creation Date: Jan 25, 2014 3:51:27 PM
Created By: Pete
File Against: Mobile AMR

Owned By: Charles
Priority: High
Planned for: Meter Reader 2013 UK
Time Spent:
Due Date: / /

Quick Information

Subscribers (3): Charles, Pam, Susan

Description

@Charles, please create a new delivery configuration with local stream contributions to deliver the patch for Meter Reader UK 2013 in RELM.
https://ssejtsserver:9443/relm/web/projects/AMR%20%28RELM%29#action=ple.view_pathpath=item_11%23branch_2show=recents

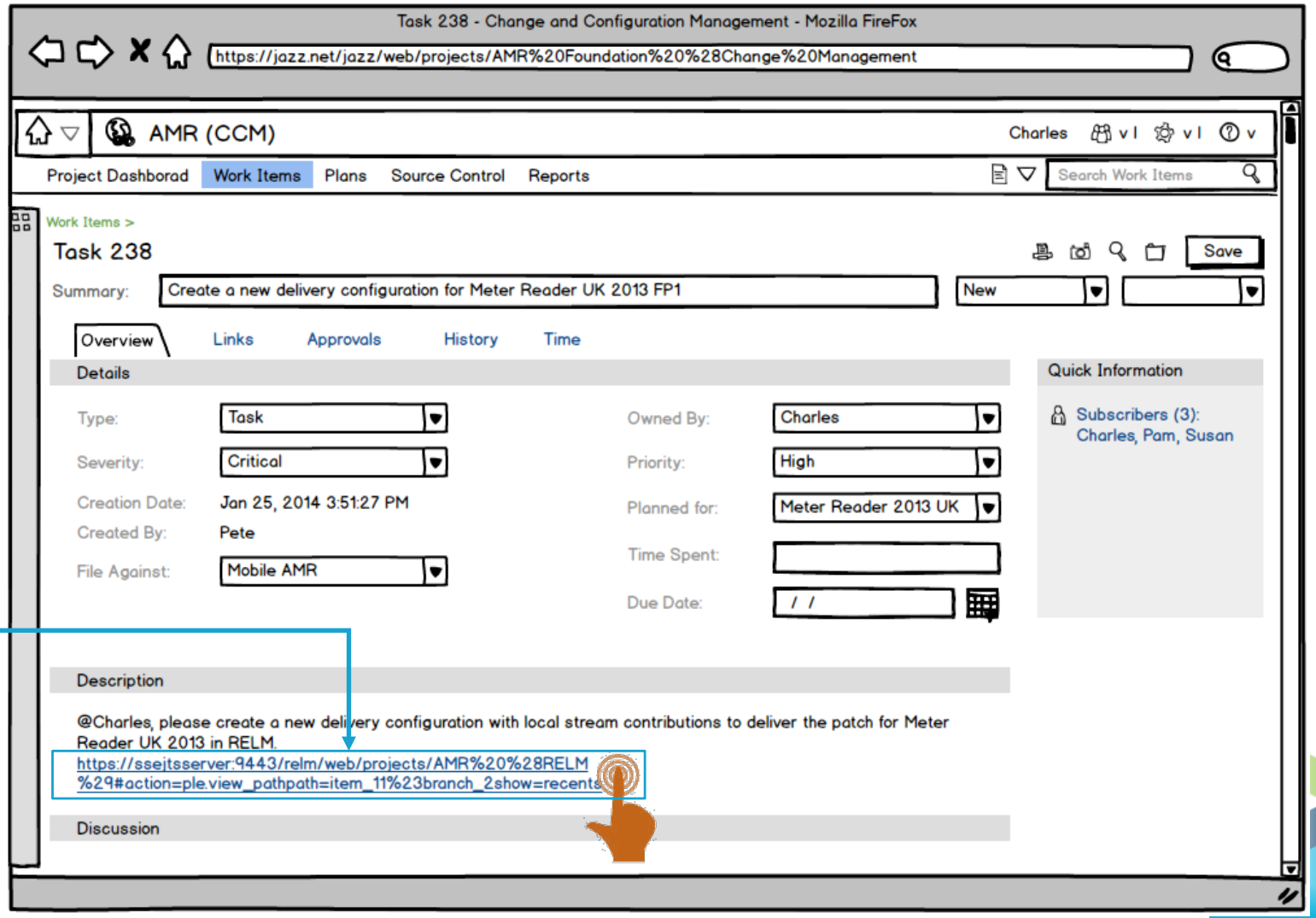
Discussion

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

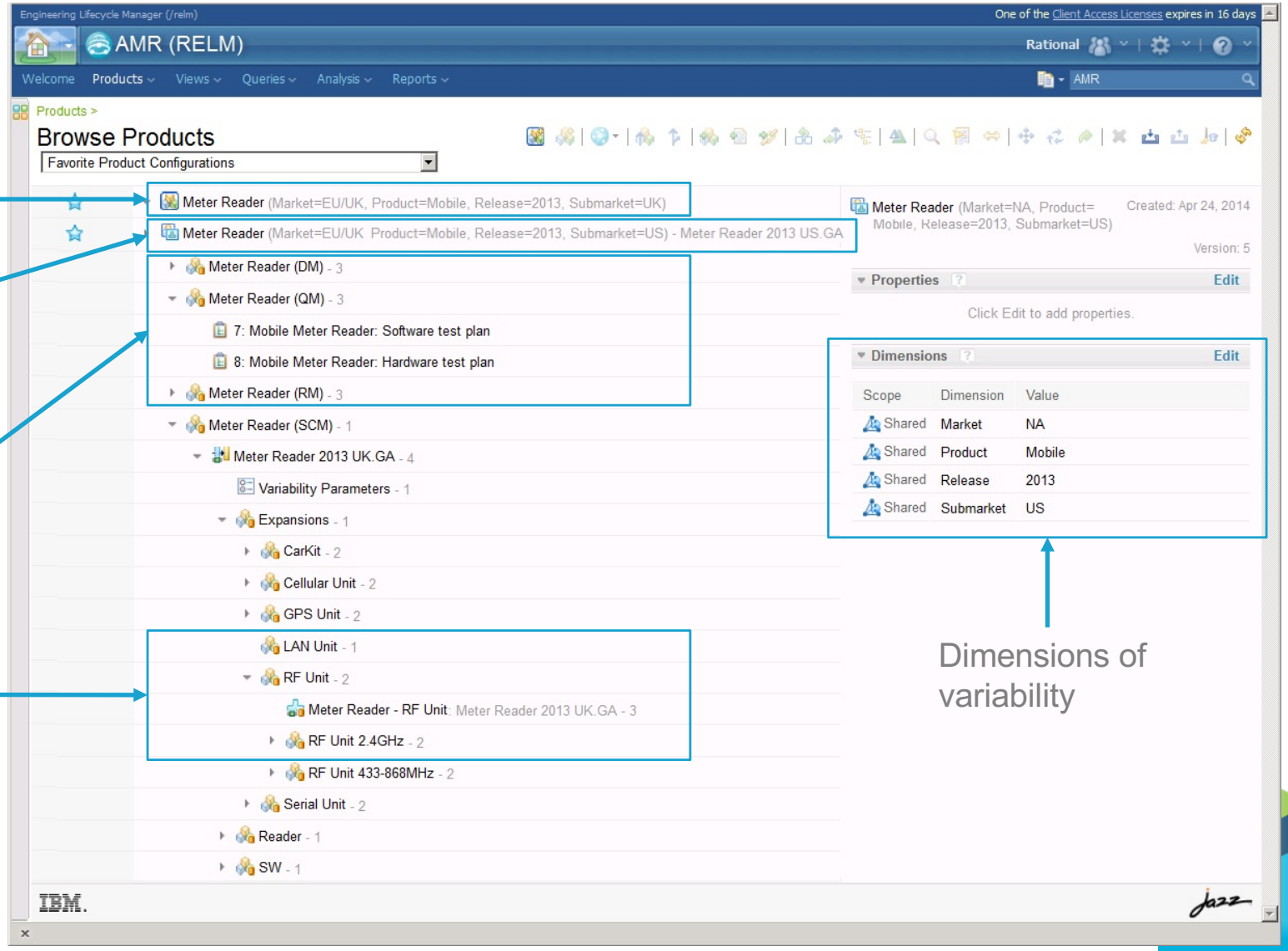
Organization of product configurations w/ lifecycle components

Product and product variant definitions

Baseline of product definition

Design, Quality and Requirement contributions

SCM stream and component contributions



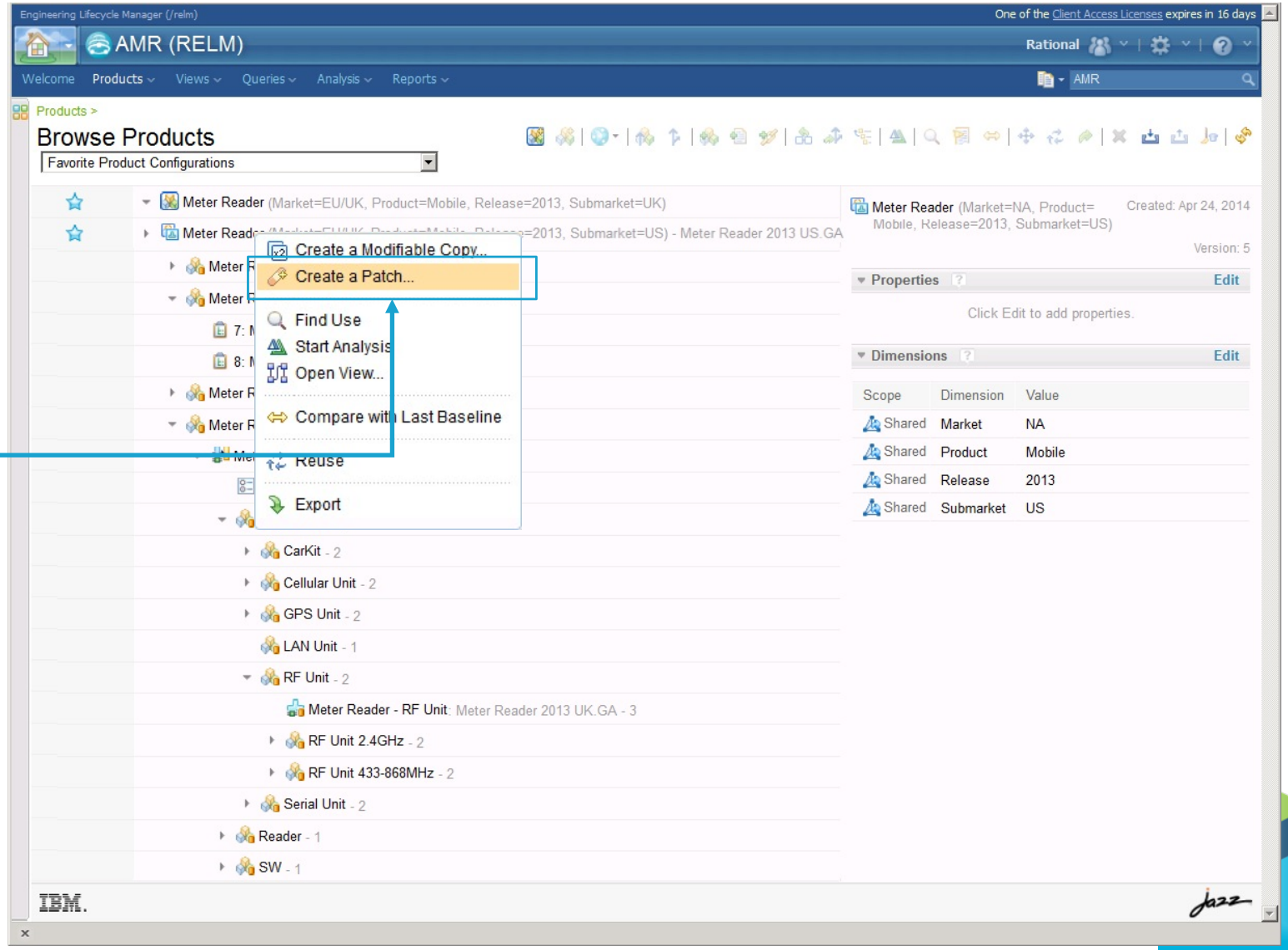
Dimensions of variability

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

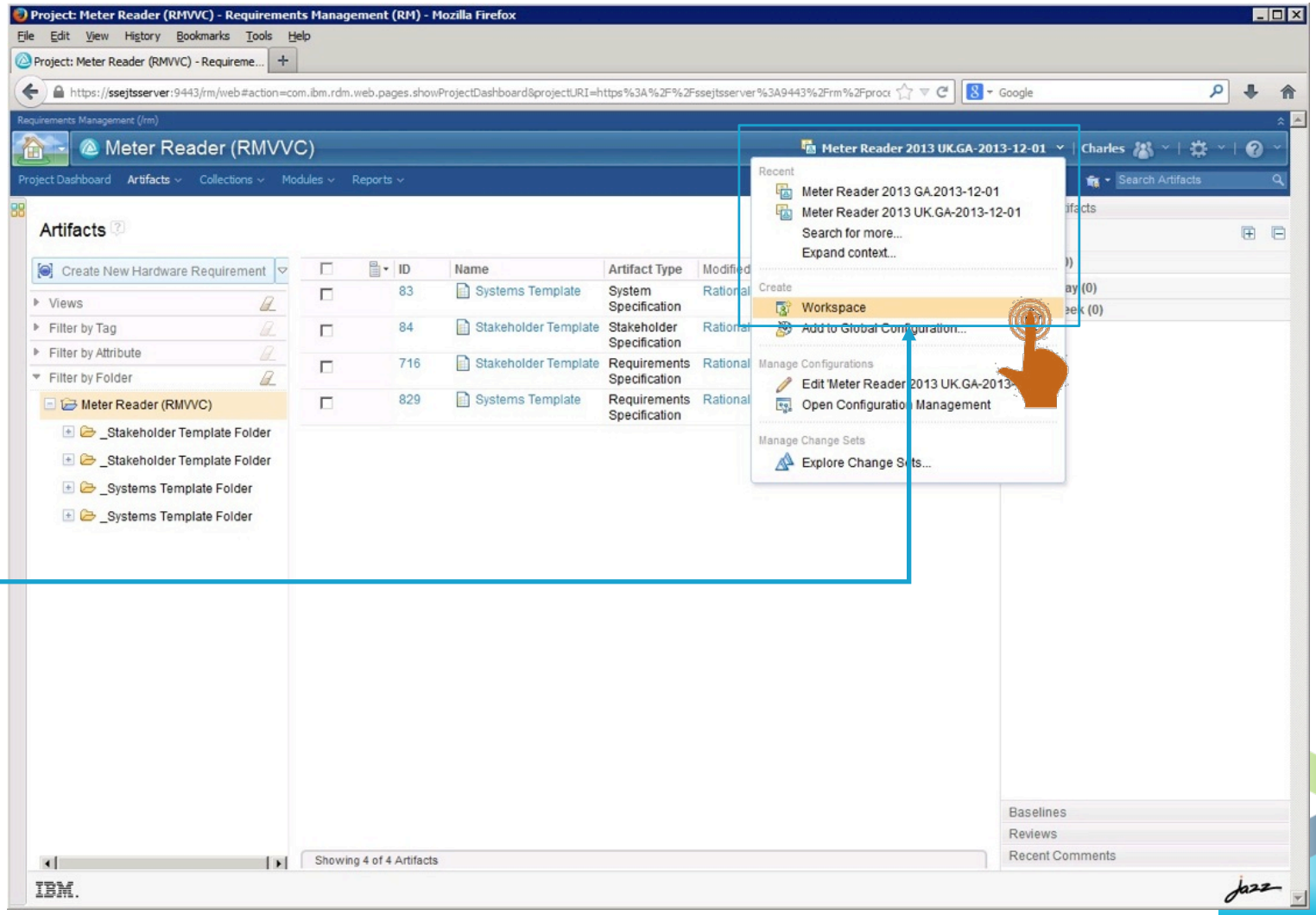
This command creates a product configuration stream without changing the versions of contributions



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

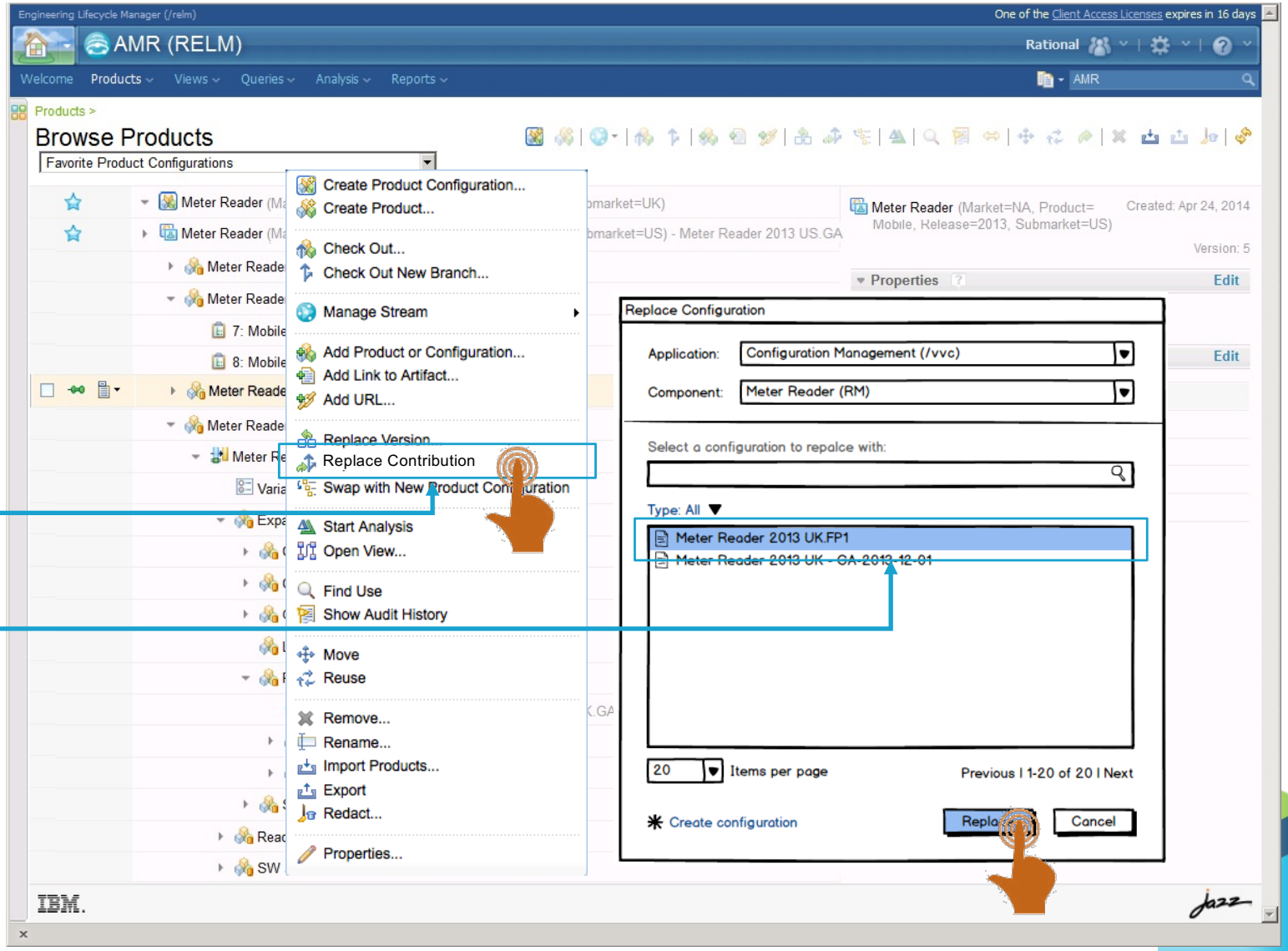


Replace baseline with stream contribution

Update action on product configuration to replace component variant

Charles returns to the product configuration and chooses the ‘Replace’ command

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



Navigate artifacts and links in configuration

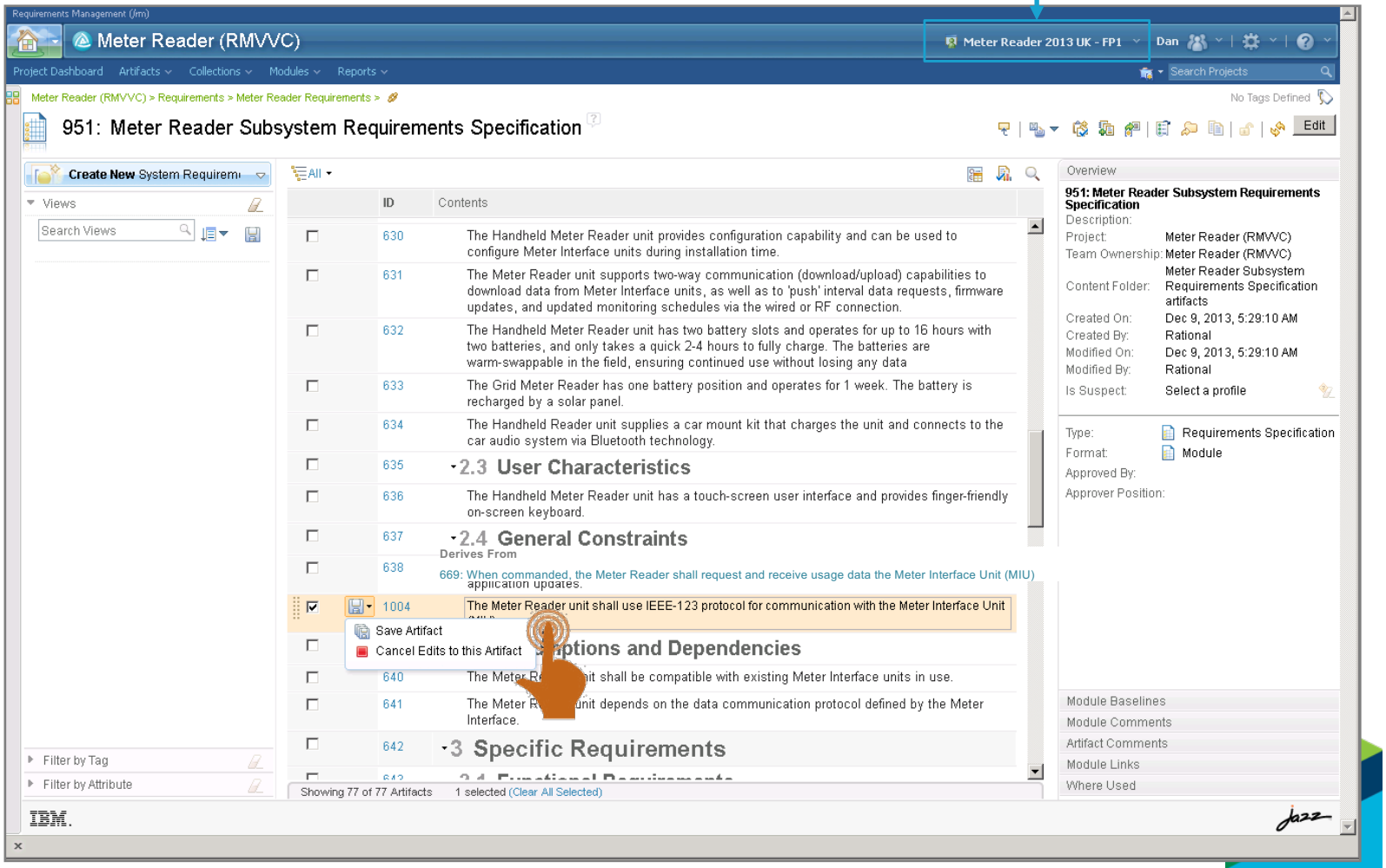
Artifacts and links shown in selected configuration context

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

Meter Reader 2013 UK FP1 context

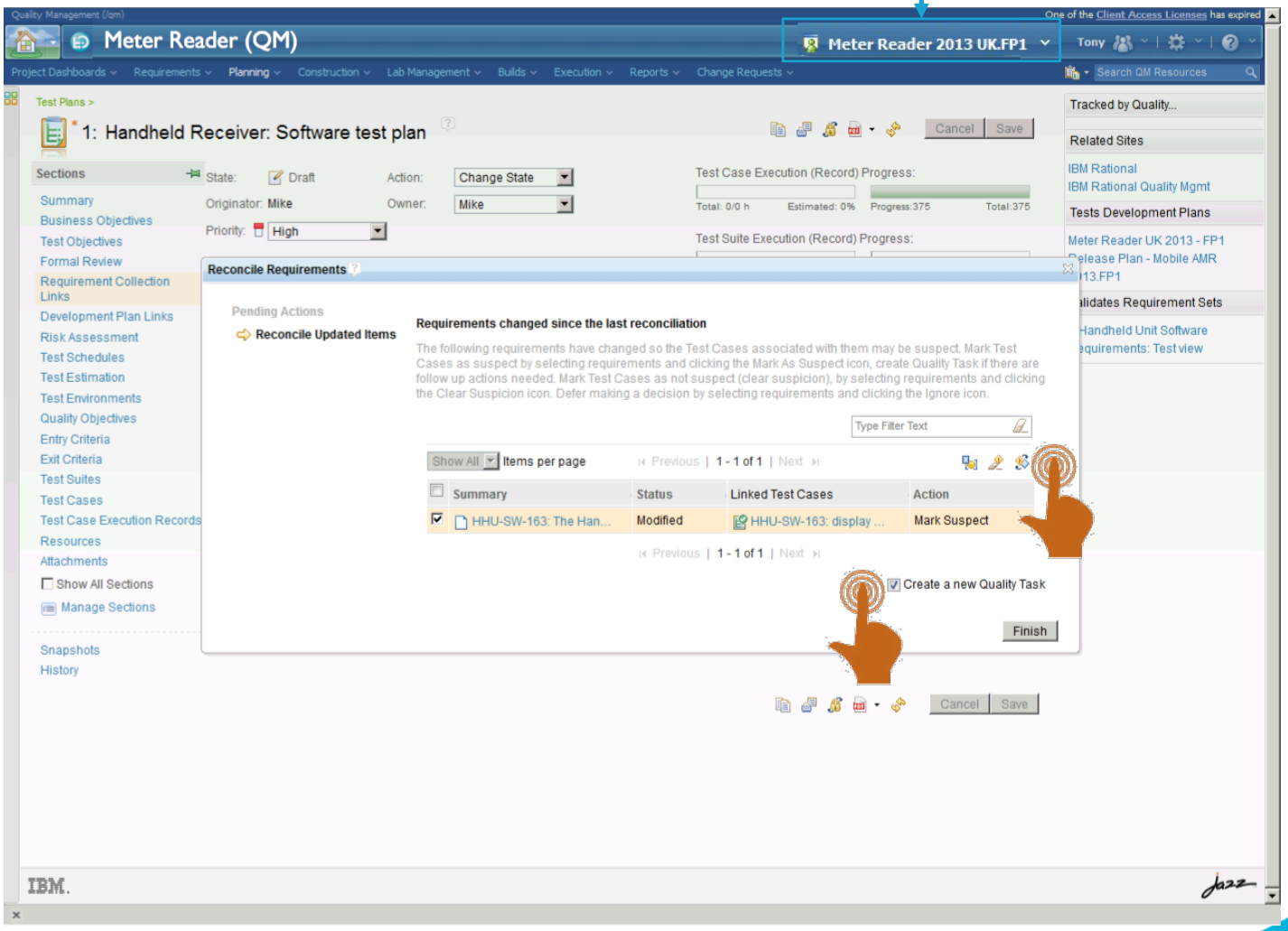


Validate Defect Resolution

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

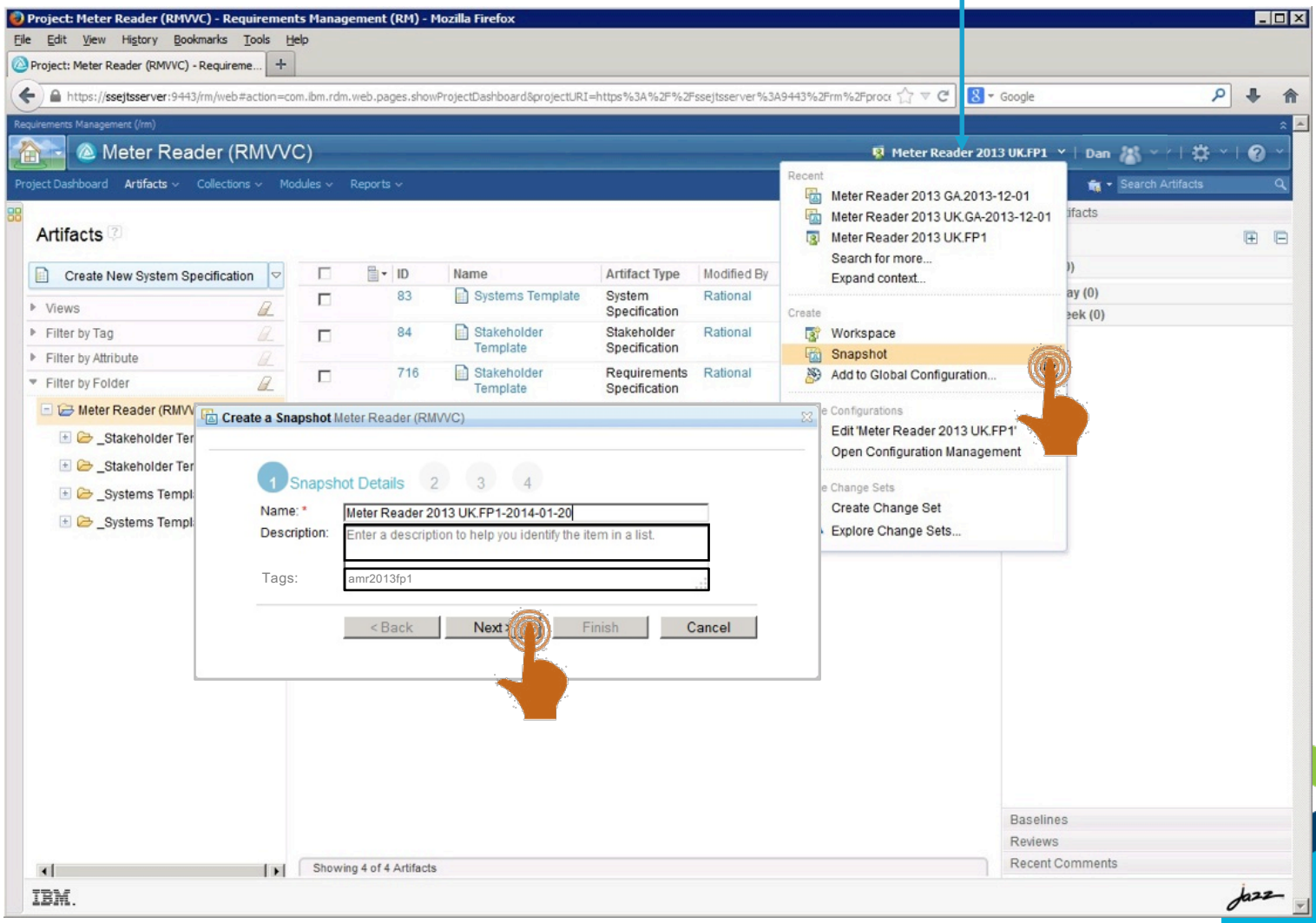
Baseline actions on component stream (local configurations)

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

He enters a tag for the baseline

Tony baselines the test configuration

Meter Reader 2013 UK FP1 context

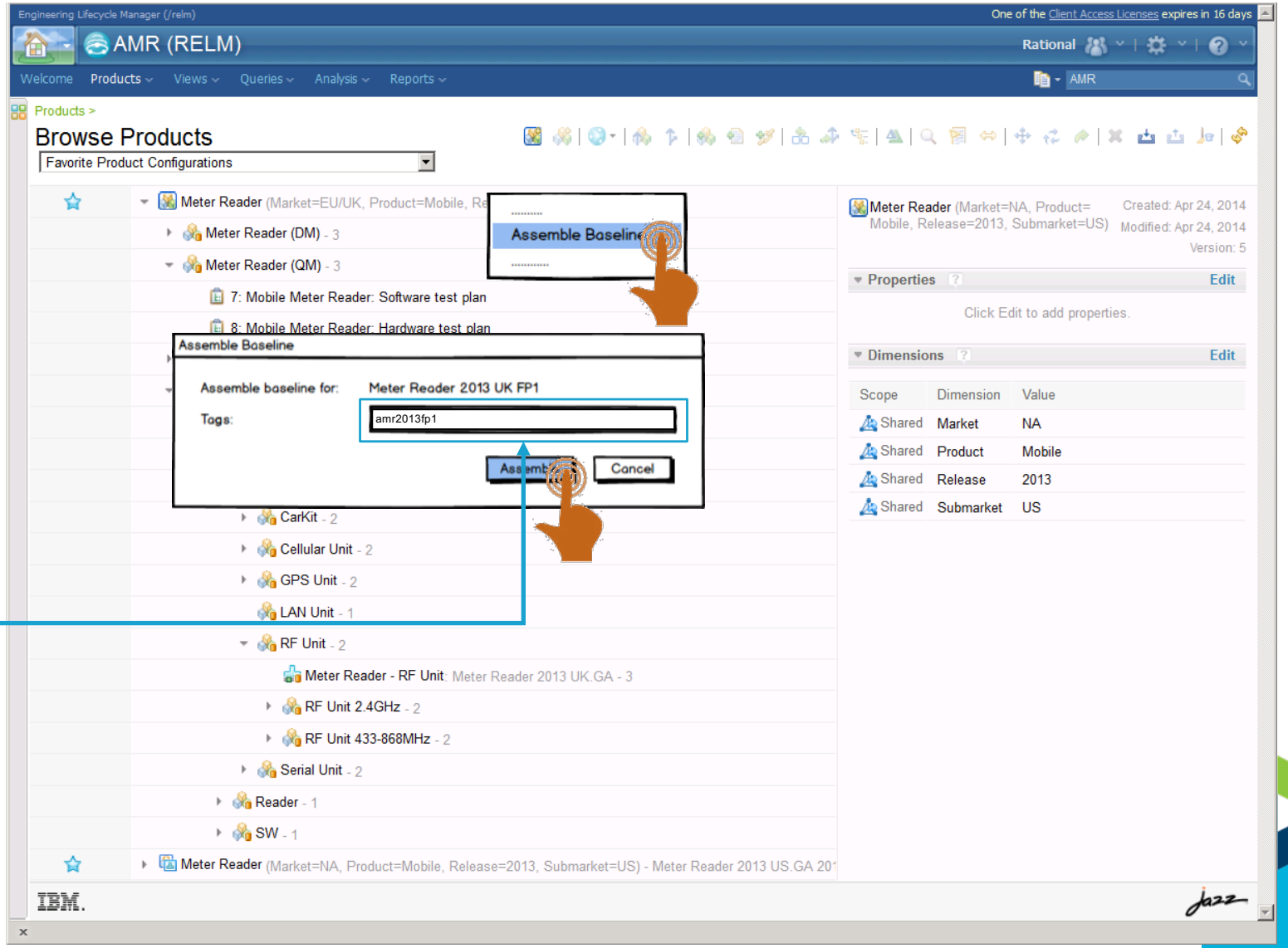


Assemble baselines using tags

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



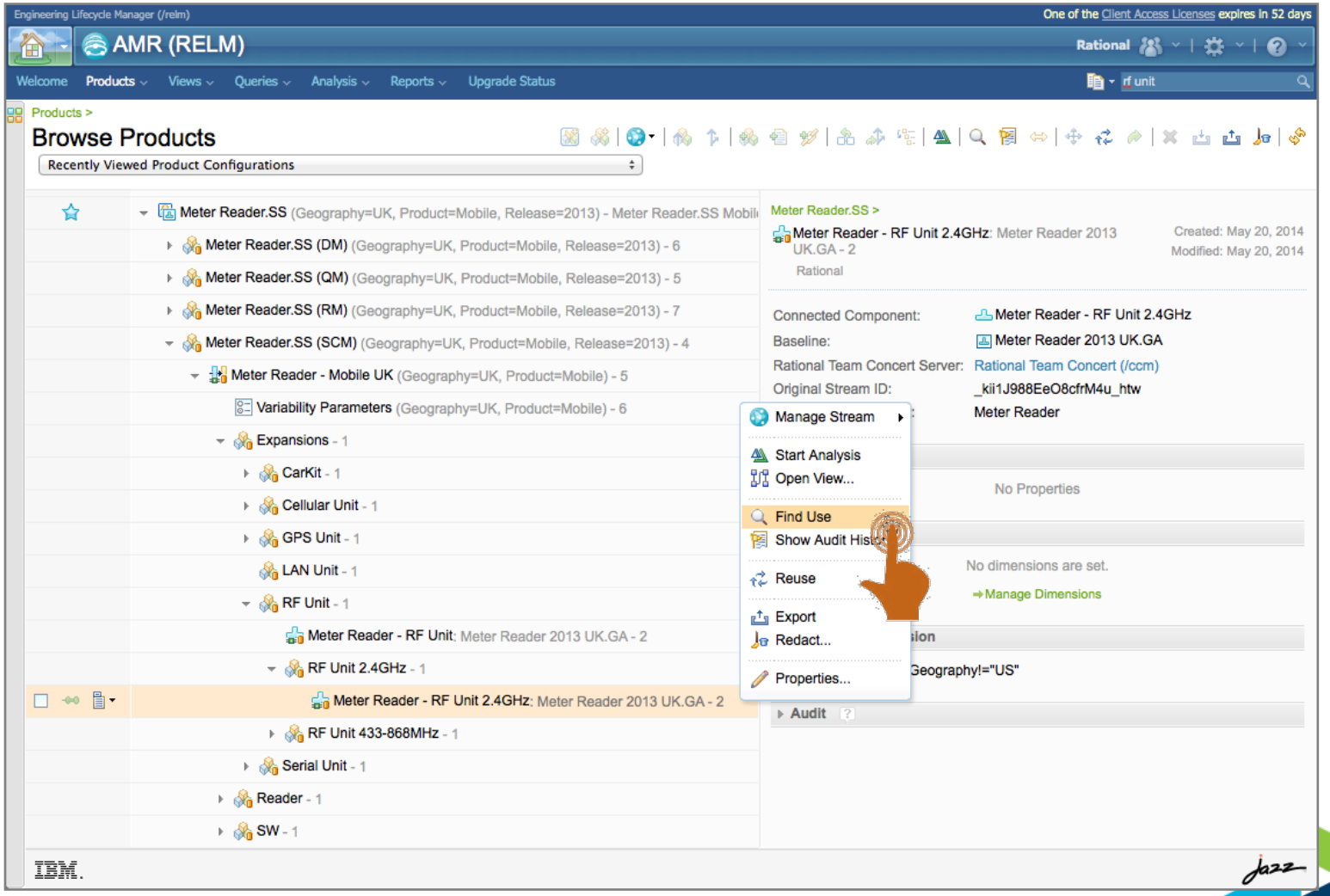
Find Use of Component

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.

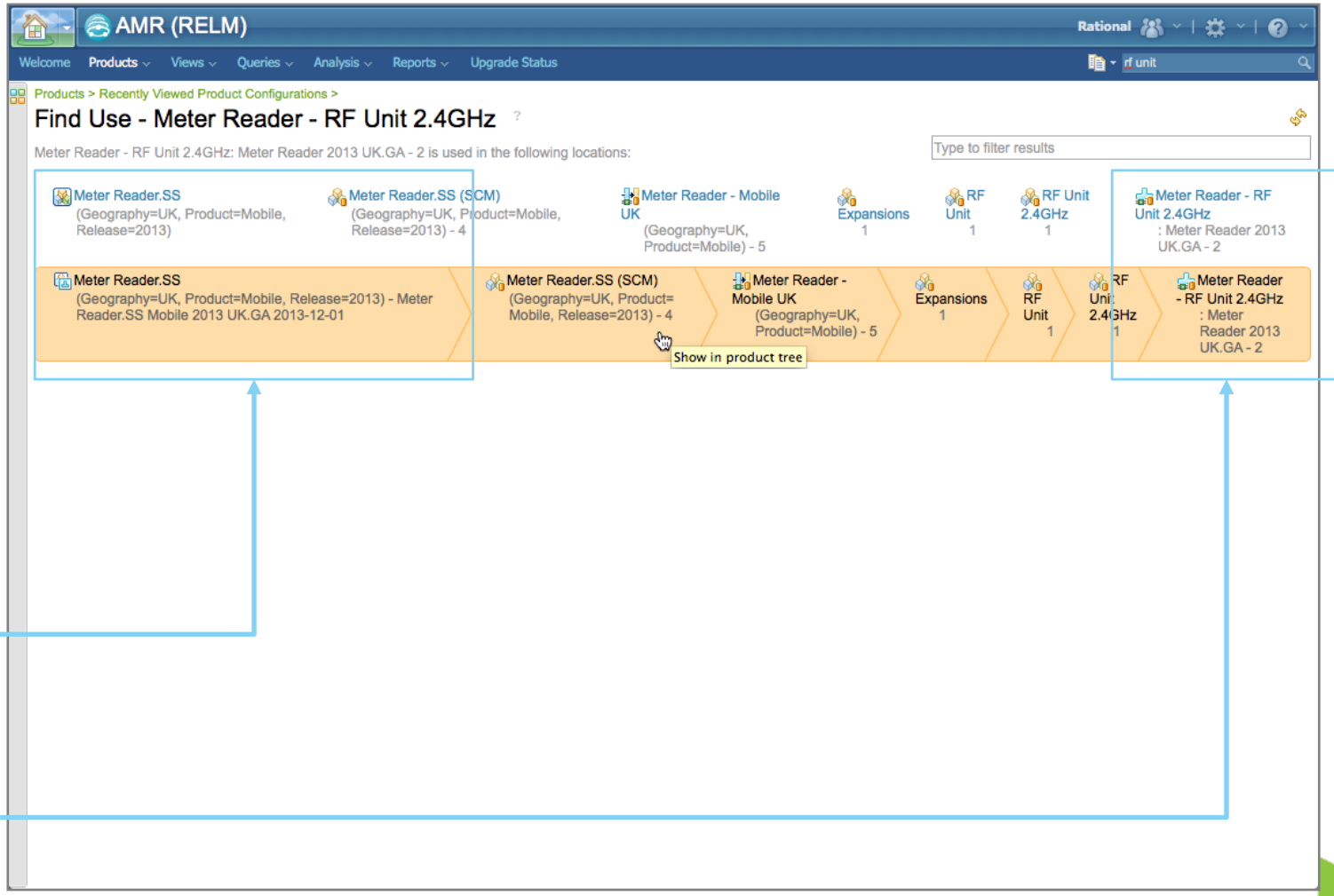
He runs the Find Use command



Find Use of Component

Charles identifies product variants including the defect in Meter Reader

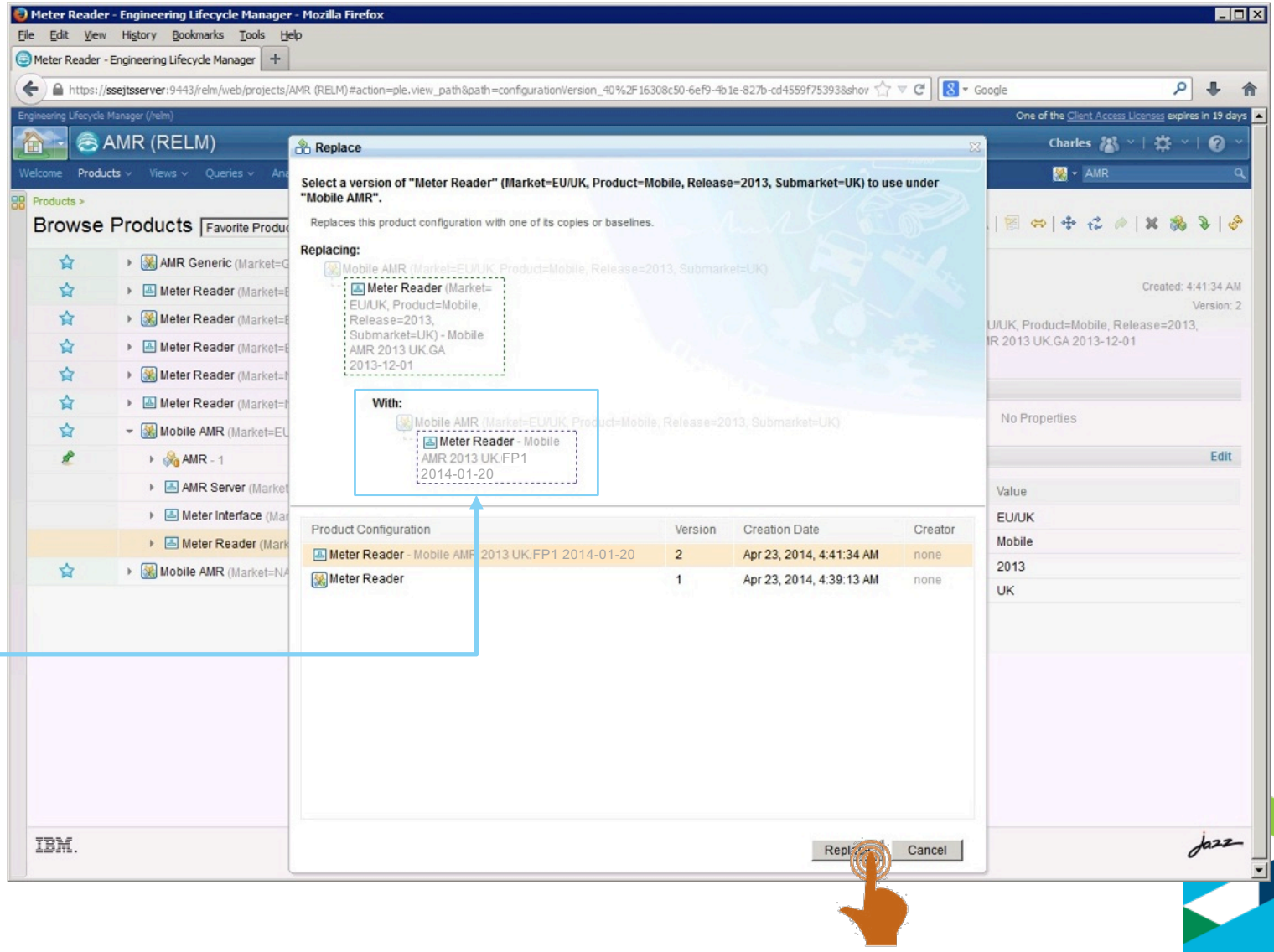
He confirms that only the UK variant is impacted by the defect in the UK variant of the RF-Unit



Update Mobile AMR Product Baseline

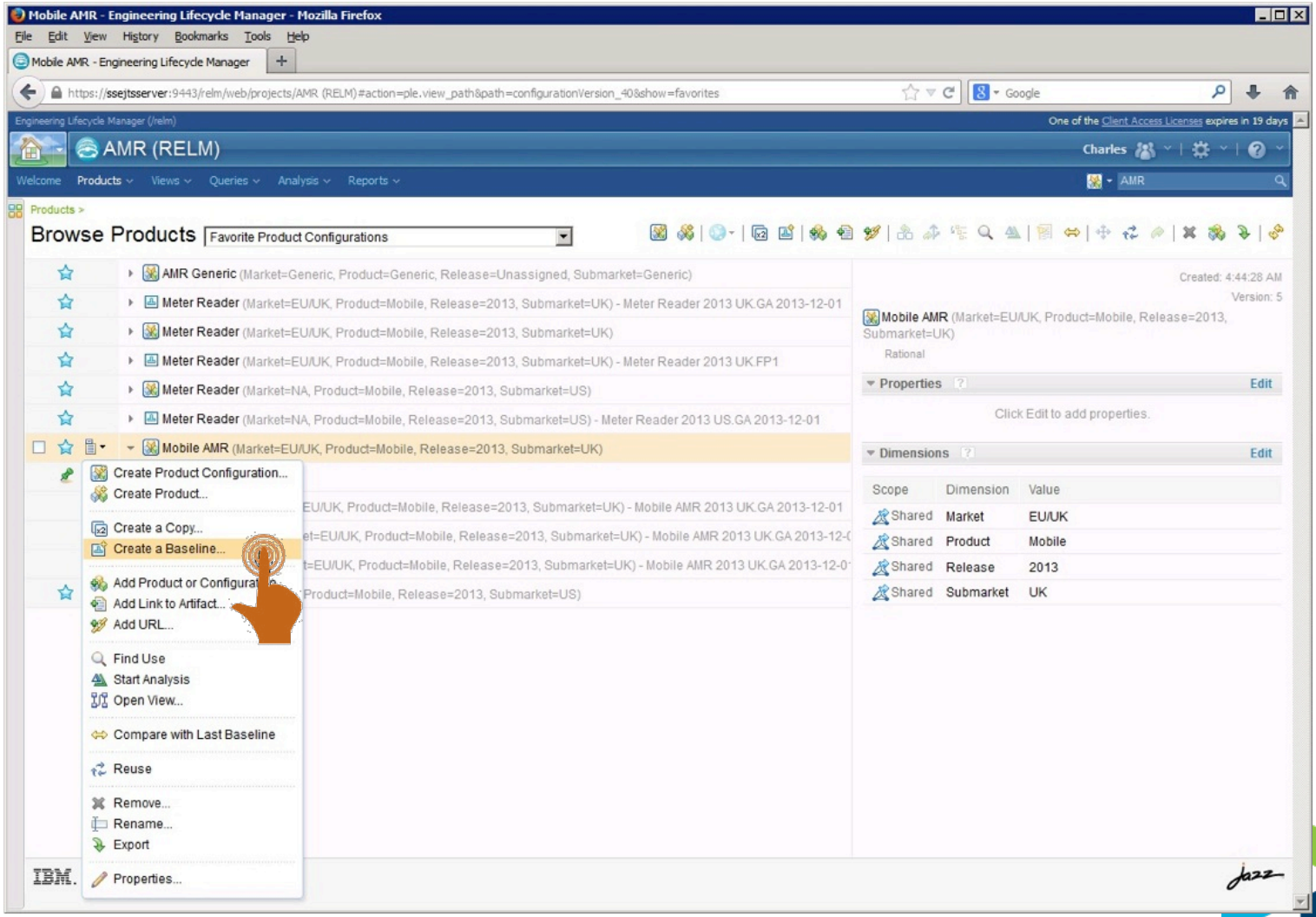
Charles selects the Meter Reader 2013 UK GA baseline contribution

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



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