Session -2648
Global baseline and product variants management

Jin Li UX Lead | jinli@ca.ibm.com
Mats Göthe Scenario Lead | mats.gothe@se.ibm.com

Rational Design Factory – Systems and Software Engineering

Innovate2013
The IBM Technical Summit

Stay ahead.

Please note the following

IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal without notice at IBM's sole discretion.

Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision.

The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code or functionality. Information about potential future products may not be incorporated into any contract. The development, release, and timing of any future features or functionality described for our products remains at our sole discretion.

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput or performance that any user will experience will vary depending upon many factors, including considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve results similar to those stated here.

Information is confidential and must not be shared or redistributed without permission from IBM. Plans are based on best information available and may change in future.

Abstract

Technologies such as VVC and GC enables components reuse and development of multiple products or applications from a common architecture.

We will collect and validate the customer requirements, and explore the UX design for:

(1) global baseline of lifecycle artifacts across domains (RM/DM/CCM/QM/RELM) as a single logical unit;

(2) variant creation and management for both VVC (RELM/DNG/DM) and non-VVC (DOORS 9.x/RTC/CC/RQM?) based artifacts.

SSE Design Scenario Personas

Pete (Project Manager)

Manages assignment of work items to the team and tracking of project progress.

Tammy (Test Manager)

Tammy leads the test and validation effort. She defines the test plans and tracks the progress of the quality plan and stability of the product.

Pam (Product Line Manager)

Identifies new product opportunity, defines target segment, creates and manages product variants.

Tony (Systems Tester)

Performs automated and manual testing to validate hardware and system requirements.

Charles (Chief Engineer)

Concentrate at high-level system and architecture issues and ensures architecture integrity in the system and makes all architectural design decisions.

Sal (Safety Engineer)

Analyzes potential failures within the system and determines actions that can mitigate the risk of failure to meet the safety certification requirements.

Susan (Systems Engineer)

Performs requirements analysis, modeling and simulation to manage complexity. She collaborates with lead engineers from various hardware and software disciplines to design the system to meet stakeholders' needs.

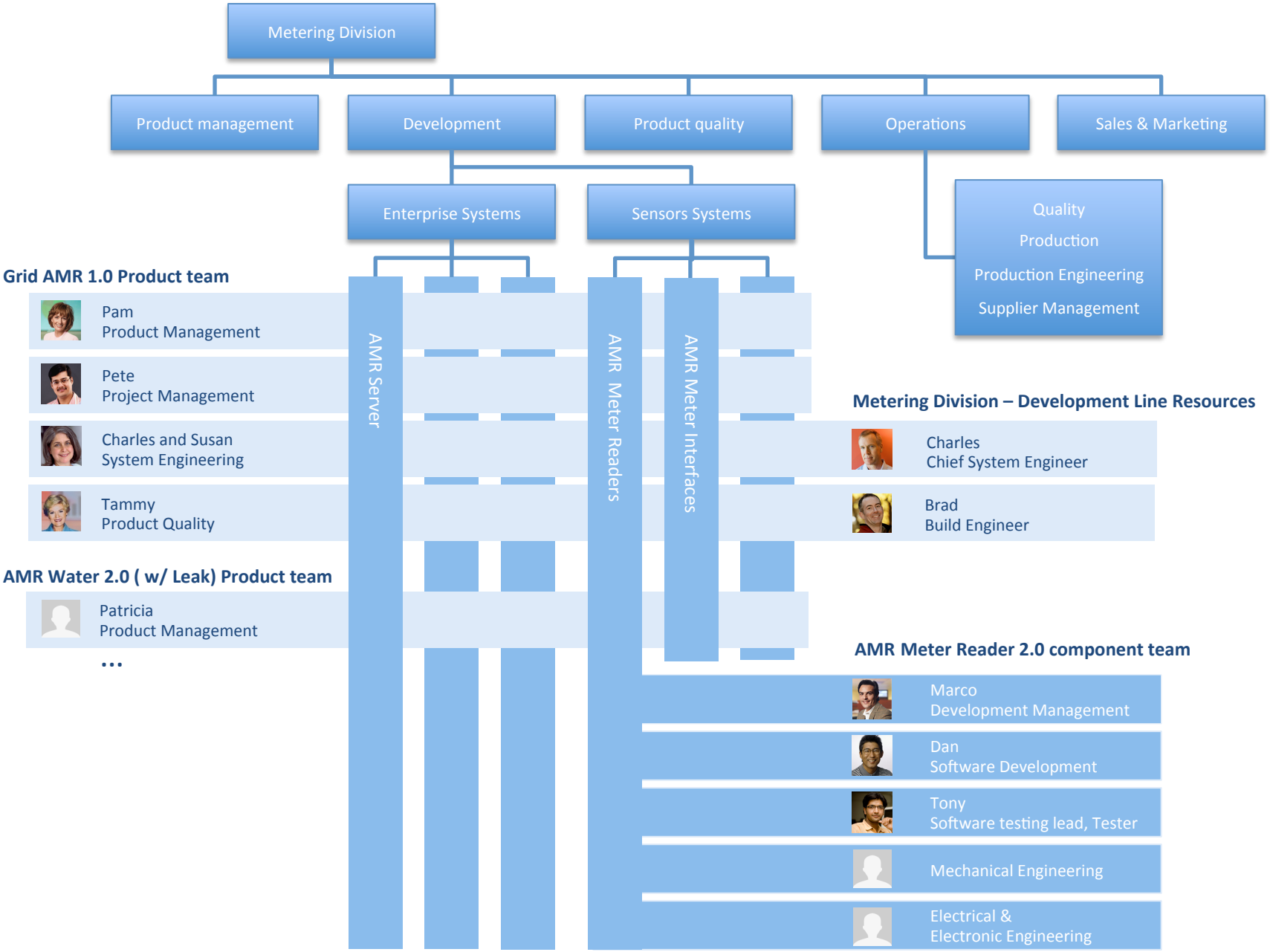
Allison (Tools Administrator)

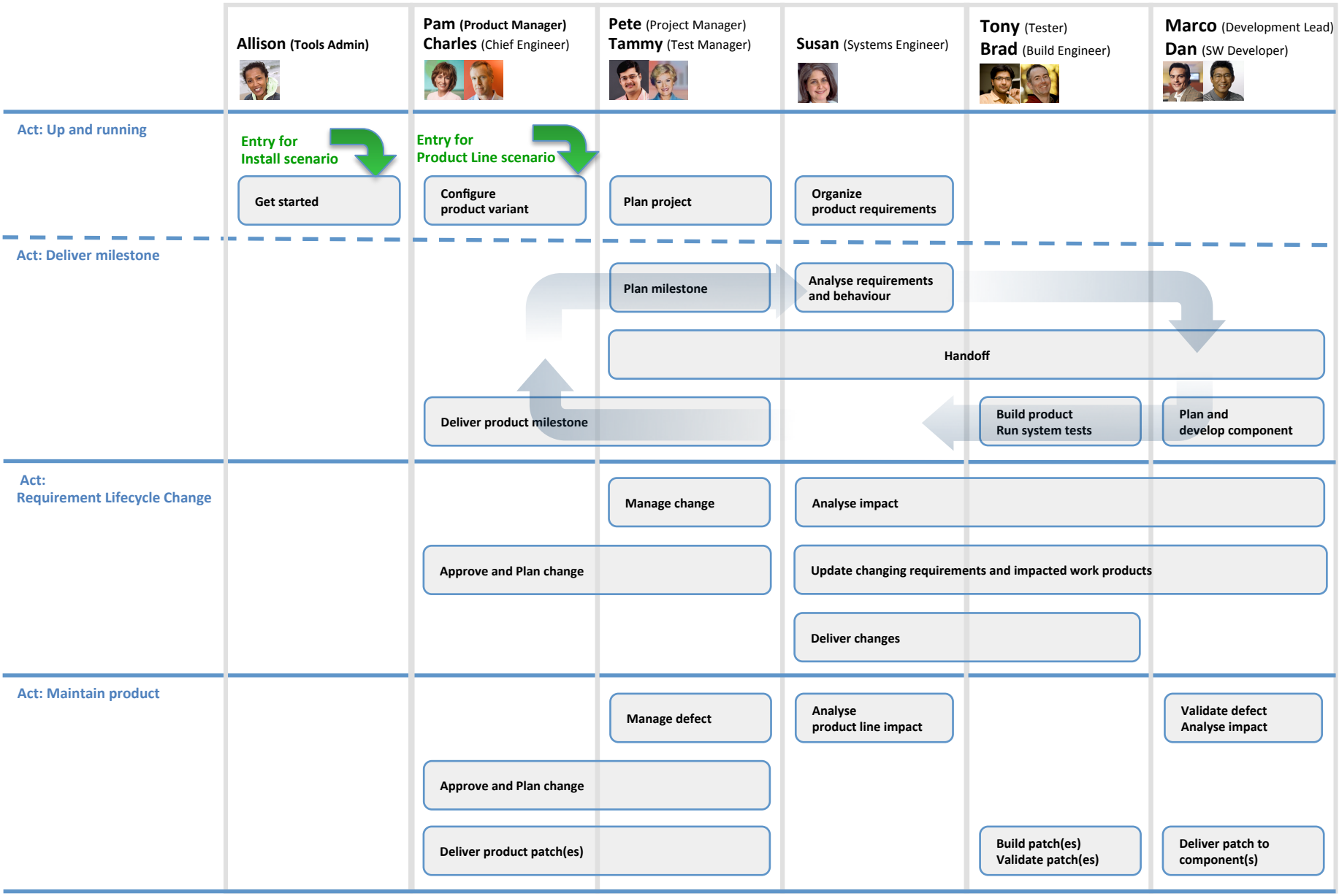
Installs, Configures and Maintains tools in production. Maintains project templates and create tool repositories using templates.

Scenario Personas on Jazz.net

https://jazz.net/rm/resources/_wfF_QBd4EeKAk8OVgd5Q4Q

JK Meters – Organization and scenario personas

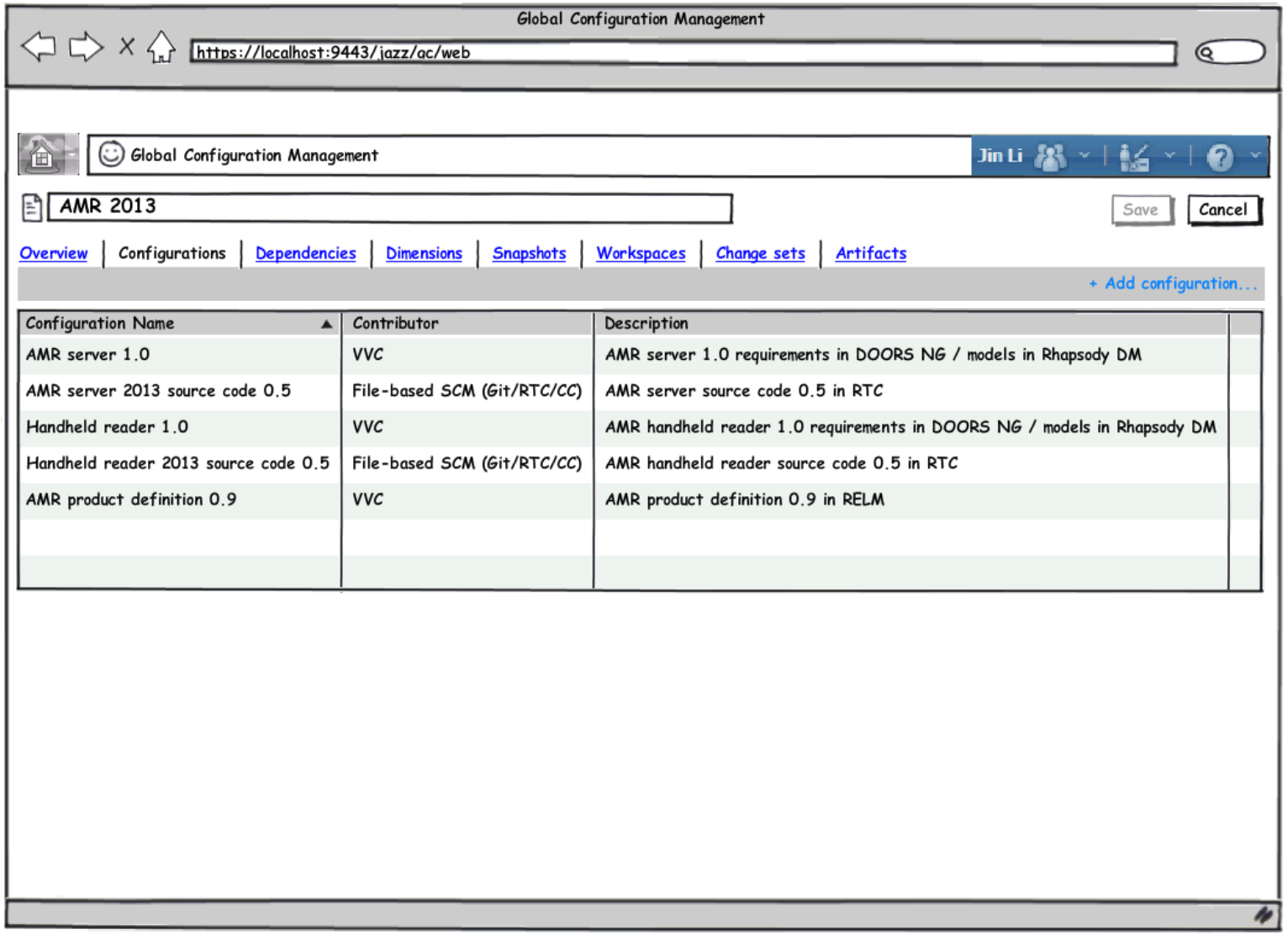



Allison (Tools Admin)
Pam (Product Manager)
Charles (Chief Engineer)
Pete (Project Manager)
Tammy (Test Manager)
Susan (Systems Engineer)
Tony (Tester)
Brad (Build Engineer)
Marco (Development Lead)
Dan (SW Developer)
Act: Up and running
Entry for Install scenario
Entry for Product Line scenario
Get started
Configure product variant
Plan project
Organize product requirements
Act: Deliver milestone
Plan milestone
Analyse requirements and behaviour
Handoff
Deliver product milestone
Build product Run system tests
Plan and develop component
Act: Requirement Lifecycle Change
Manage change
Analyse impact
Approve and Plan change
Update changing requirements and impacted work products
Deliver changes
Act: Maintain product
Manage defect
Analyse product line impact
Validate defect Analyse impact
Approve and Plan change
Deliver product patch(es)
Build patch(es) Validate patch(es)
Deliver patch to component(s)

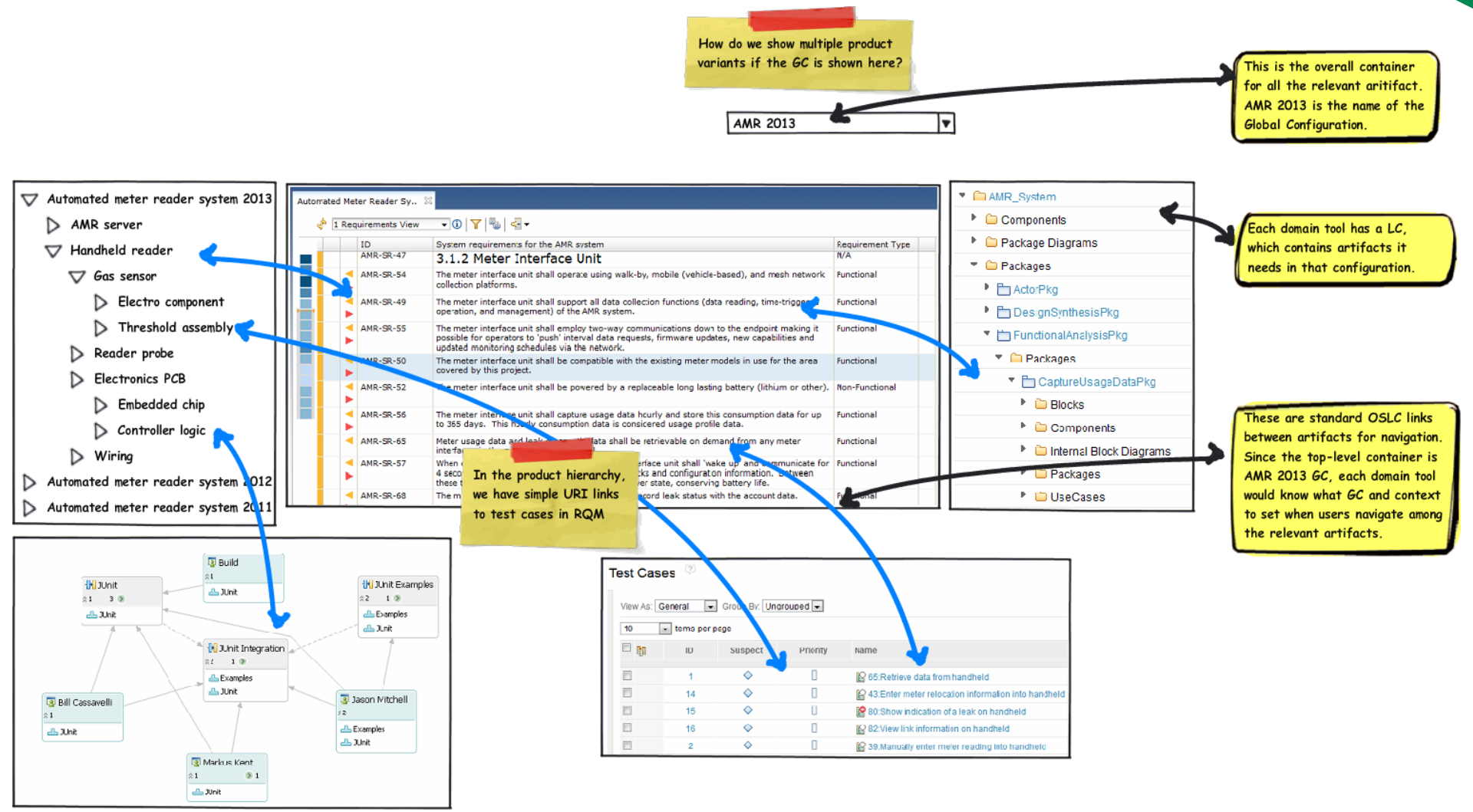
PLE User Stories

- As a **Product (Line) Manager** I need to
  - Create a product / application variant
  - Visualize and manage multiple variants
  - Manage component baselines as part of a product variant
  - Create and set up a configuration based on existing artifacts
- As a **Chief Engineer** I need to
  - Create a baseline for my variant (across all domains)
  - Find all baselines of a component for replacement in my variant
  - Set access rights to assets and operations on my variants and baselines
  - Compare two product baselines or variants
  - Create a report for my product
- As a **Software Engineer** I need to
  - Navigate among the artifacts in the variant under development
  - Perform impact analysis for my variants
- As a **Build Engineer** I need to
  - Build the software for a product variant

Deep Dive – UX Design for PLE



Deep Dive – UX Design for PLE



PLE and Variant Management

- How many product lines (or product families) do you have?
  - How many product variants are there in a product line?
  - Are they developed in parallel or in sequence?
- How are product variant plans established?
- How are product / component variants configured?
- How are variant requirements managed?
- How are variant models managed?
- How are variant tests managed?
- How are system models updated from new variant requirements?

Global configurations

- What lifecycle artifacts are included in a configuration?
- How is a configuration managed?
- How are baselines taken?
- What are the frequently performed tasks with a global configuration?

Questions

Innovate2013
The IBM Technical Summit

Acknowledgements and disclaimers

Availability: References in this presentation to IBM products, programs, or services do not imply that they will be available in all countries in which IBM operates.

The workshops, sessions and materials have been prepared by IBM or the session speakers and reflect their own views. They are provided for informational purposes only, and are neither intended to, nor shall have the effect of being, legal or other guidance or advice to any participant. While efforts were made to verify the completeness and accuracy of the information contained in this presentation, it is provided AS-IS without warranty of any kind, express or implied. IBM shall not be responsible for any damages arising out of the use of, or otherwise related to, this presentation or any other materials. Nothing contained in this presentation is intended to, nor shall have the effect of, creating any warranties or representations from IBM or its suppliers or licensors, or altering the terms and conditions of the applicable license agreement governing the use of IBM software.

All customer examples described are presented as illustrations of how those customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics may vary by customer. Nothing contained in these materials is intended to, nor shall have the effect of, stating or implying that any activities undertaken by you will result in any specific sales, revenue growth or other results.

Thank You