

Agile @ Scale

What's New in the Continuous
Engineering (CE) 6.0.6 Solution
for Enterprise Scaled Agile
(SAFe)

Watson IoT™

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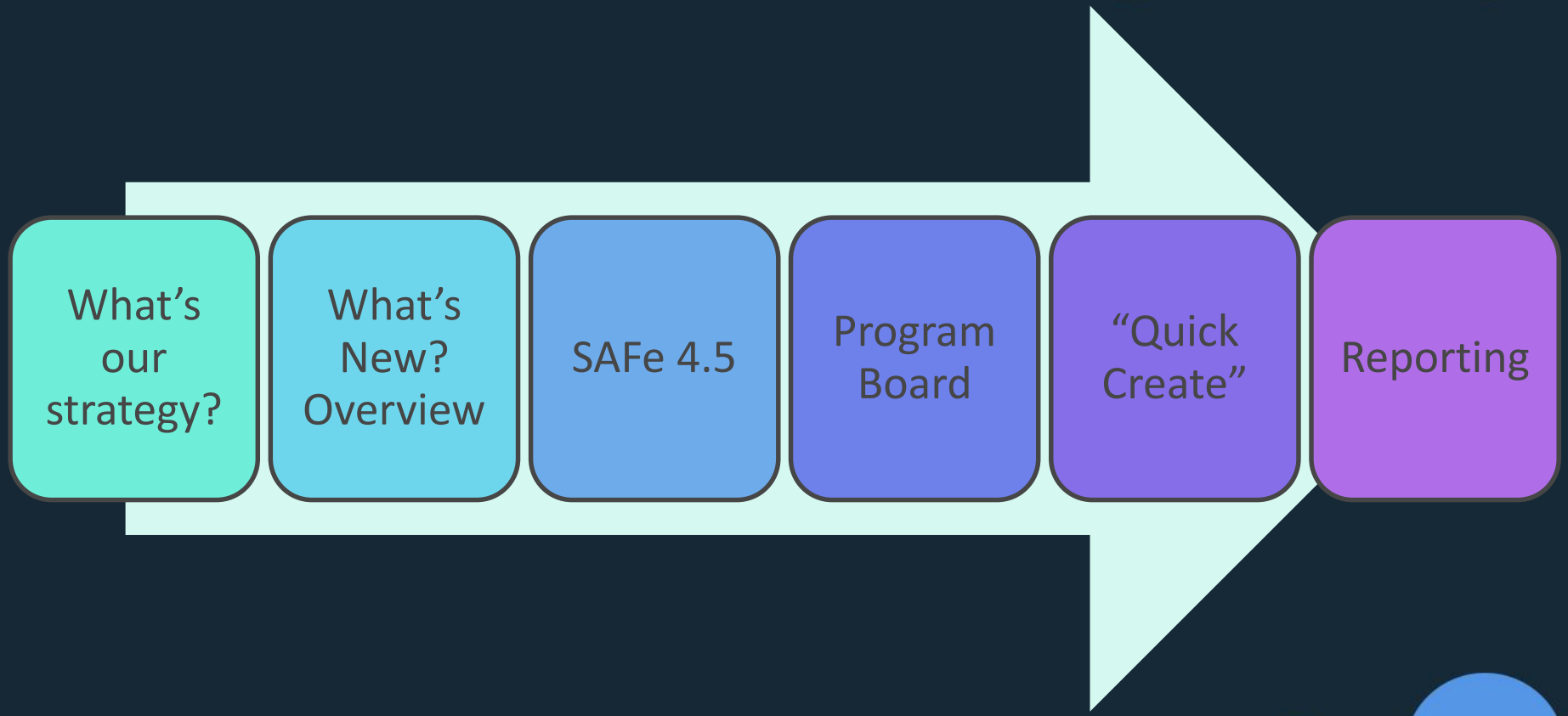
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IBM



Agenda



What's
our
strategy?

What's
New?
Overview

SAFe 4.5

Program
Board

"Quick
Create"

Reporting





What's our strategy?



**Quick & Easy
Agile Planning**

**Enterprise
Support**

**Design &
Modeling**

**SAFe®
Alignment**

Transforming the enterprise involves...

People: Establish an organization-wide culture with the right set of skills to embrace lean and agile values – everywhere, across all teams, every day

Process: Apply lean and agile principles in the planning, development, deployment and delivery of value and then monitoring feedback to improve – continuously

Tools: Provide a framework that enables the implementation of lean and agile practices – easily – while also providing traceability and visibility of work across multi-disciplinary teams



People: Aspects of the cultural transformation ...



... We were more efficient so that I didn't have to spend evenings and weekends to plan the next release

... I didn't have to answer the same questions over and over and over ...

... I didn't have to stop what I'm doing to create spreadsheets with status information

... I could prove to stakeholders – Support, Sales, Services – that we are responsive to their requirements

... I had access to up-to-date information on what we are doing for our key customers – as soon as I ask!

... I could demonstrate how our organization is making smart investment decisions

... I didn't have to bug anyone to get information on the latest capabilities being delivered

... I had visibility into where my priorities were on the delivery roadmap

... I could participate in the planning process and have my voice heard!



Business Executive



Product Manager



Stakeholder

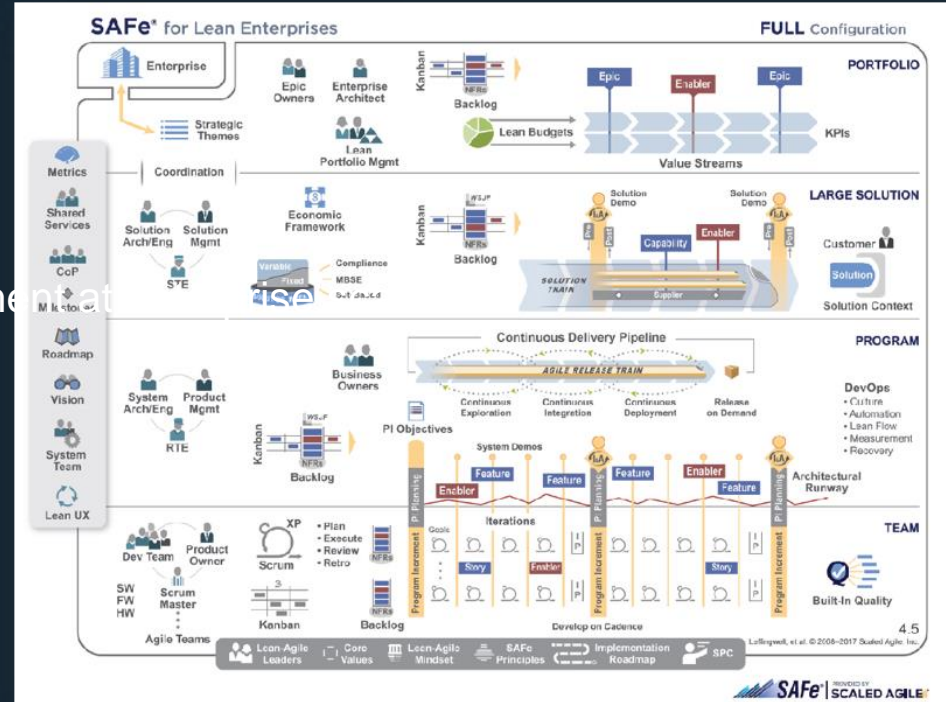
I wish...



Process: Consider an industry-standard methodology like SAFe

- ✓ Publicly available framework
- ✓ A system of integrated proven practices
- ✓ Know-how for implementing Lean-Agile software and system development
- ✓ A few fundamental immutable principles
- ✓ Many practices that can be tailored
- ✓ Initially released in 2011
- ✓ Large market adoption and growing

<http://scaledagileframework.com>



Do as much or as little "SAFe" as you want to boost your value and achieve success and use the templates to get started, even if you aren't truly "SAFe"

Tools: IBM's Collaborative Lifecycle Management (CLM) solution



Continuous
Business Planning

Collaborative
Development

Quality Management

Project Analytics

Synchronizes teams by...

- **Planning** based on a single, cross-domain source of truth
- **Automating** full traceability
- **Managing** with dashboards and reports
- **Demonstrating** compliance
- **Orchestrating** multi-speed IT
- **Supporting** multiple platform / processes / languages
- **Enabling** simple collaboration



*"With IBM's solution, we already realize that **the different roles within the development lifecycle are cooperating much closer**"*

Christof Hammel, Product Manager, Automotive ALM at Bosch Automotive
referencing IBM Rational solution for CLM

Watson IoT

Enterprise agile “your way”



Quality Management at any level

Focus on transformations that matter!



Drive Economic value

- Focus on value-based delivery
- Adopt an economic view to prioritize investments

Align Business & Engineering

- Ensure investments map directly to business strategy
- Reduce wasted time, effort, resources

Effectively Manage Change

- Shift how you act and make decisions
- Abide by “work in progress” limits

Manage Distributed Teams

- Unify process, vocabulary
- Gain cross-team visibility

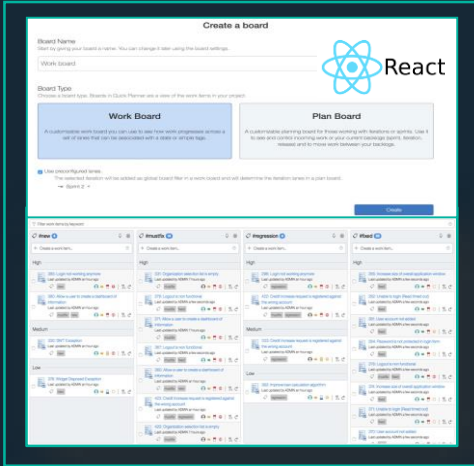
Establish Delivery Intelligence

- Ensure a single source of truth
- Enable automated audit trail

Address Quality

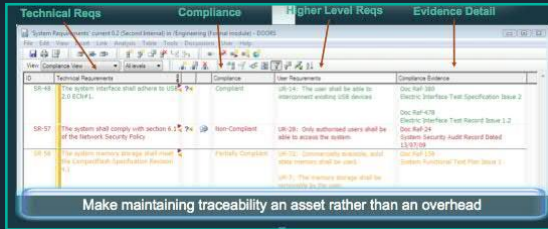
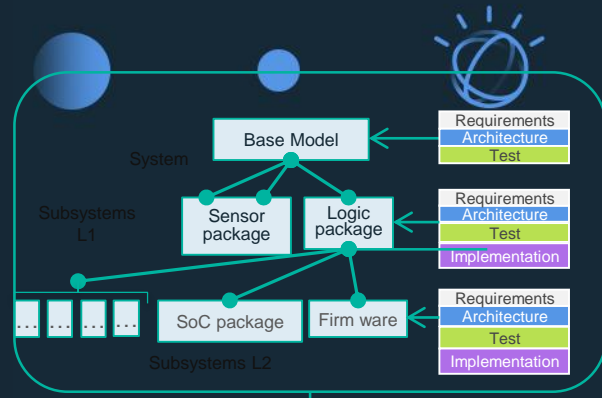
- Focus on the user, employ design thinking
- Implement validation earlier in the process

Pulling it all together in a software-connected world

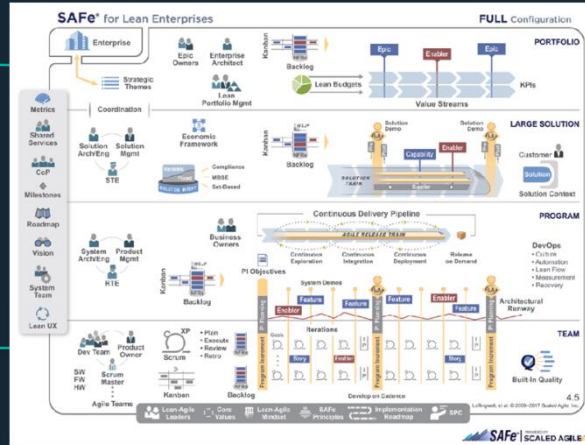


Agile Usability
 Tag and process based
 Planning boards for
 Agile ease of use
 React based for speed

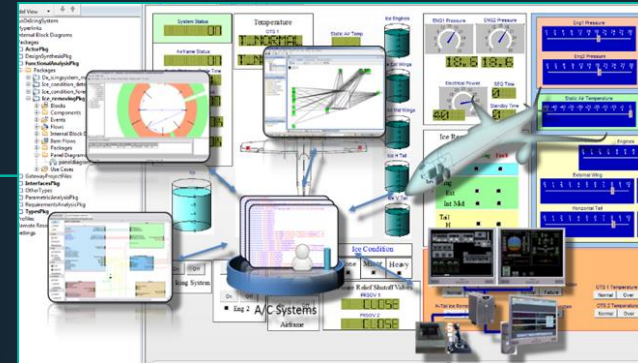
Variant Management
 Manage
 Complexity



End to End Agile Traceability
 Regulatory Compliance / Quality



Enterprise Agile Your Way
 Easily customize SAFe 4.5 and agile
 hybrid methods to meet your needs



Design - Model Based (MBSE)
 Enterprise agile for complex programs

Watson IoT



What's New? Overview



SAFe 4.5

- *SAFe 4.5 Templates “in the box” (6.0.6)*
- *CLM Lifecycle Project Area templates (beta) for all configurations*

Program Board

- *Program Level Technical Preview*

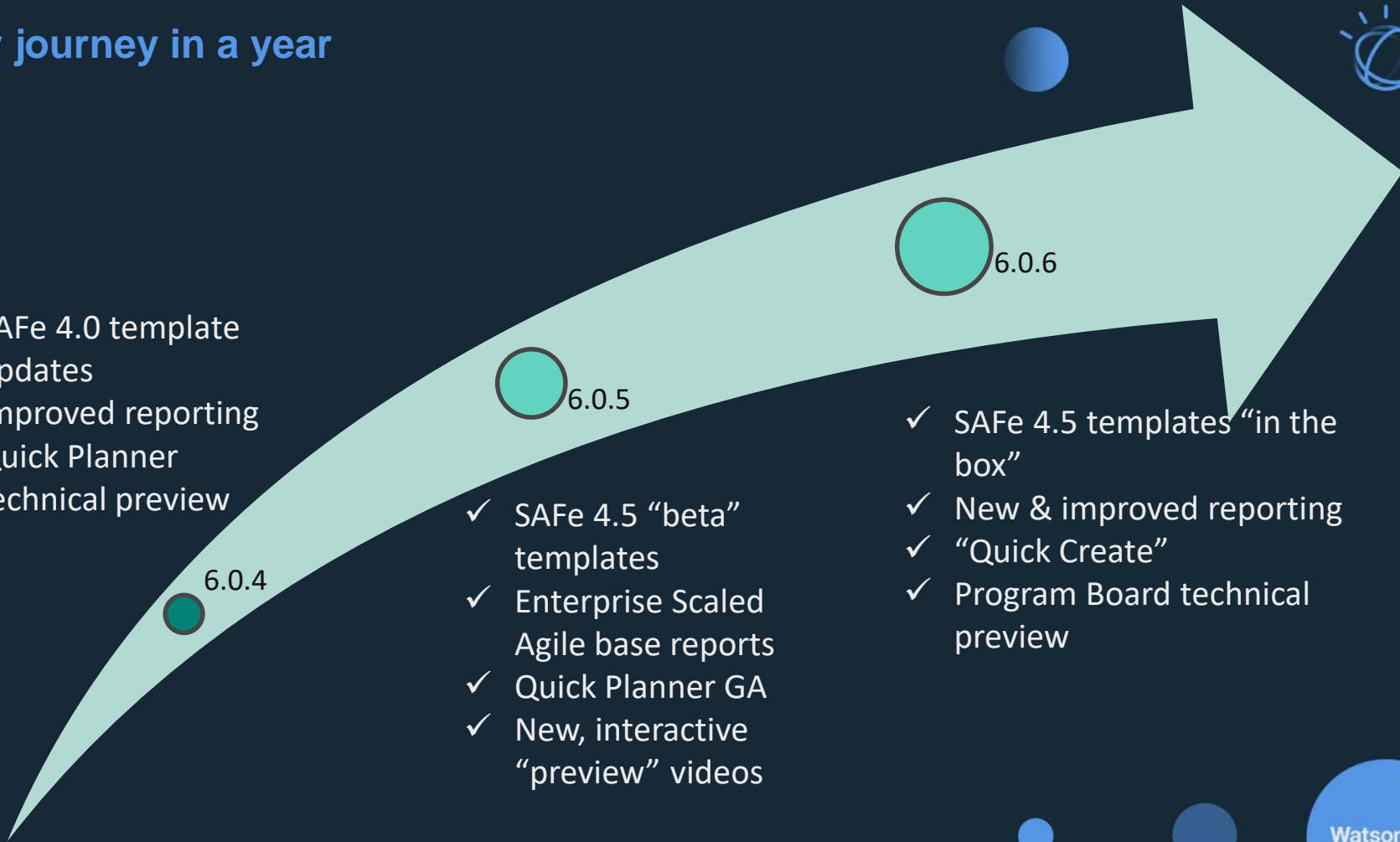
Usability

- *Quick and easy work breakdown*

Reporting

- *New & Enhanced Reports*

Our journey in a year



- ✓ SAFe 4.0 template updates
- ✓ Improved reporting
- ✓ Quick Planner technical preview

6.0.4

- ✓ SAFe 4.5 “beta” templates
- ✓ Enterprise Scaled Agile base reports
- ✓ Quick Planner GA
- ✓ New, interactive “preview” videos

6.0.5

- ✓ SAFe 4.5 templates “in the box”
- ✓ New & improved reporting
- ✓ “Quick Create”
- ✓ Program Board technical preview

6.0.6



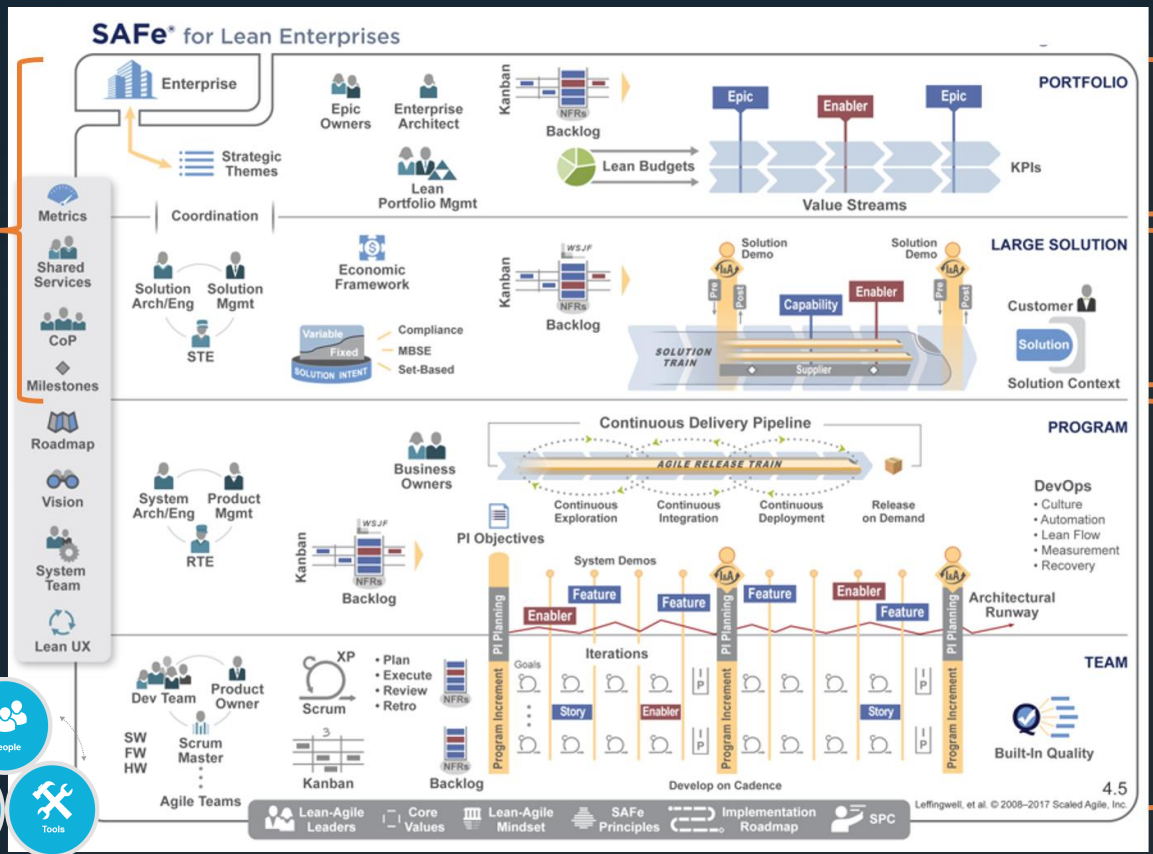


SAFe 4.5

SAFe® for Lean Enterprises (SAFe 4.5)



Full Templates



Portfolio Templates

Solution Templates

Essential Templates

Large

Four Configurations

Full SAFe
Like 4-Level SAFe 4.0

Portfolio SAFe
Like 3-Level SAFe 4.0

Large Solution SAFe
No Portfolio

Essential SAFe
Program & Teams Only



What are the changes for SAFe 4.5?



Rational Team Concert

- Value Stream → Large Solution name change, affecting Plan Types, Plan Views, Roles, Timeline, Work Item Types
- New *Compliance* Enabler Type
- Epic *Value Statement* → *Epic Hypothesis Statement*
- Capability/Feature *Description* → *Benefit Hypothesis*
- Workflow changes for Kanban

Rational DOORS Next Generation

- Lightweight Business Case → Lean Business Case
- *Compliance* content in Solution Intent

Rational Quality Manager

- Value Stream → Solution changes to dashboard, categories

Typical Adoption Path



1. Start with Agile Teams, add Program level = “Essential SAFe”

- RTC supports this
- Add RDNG and/or RQM for added requirements and quality management governance

RTC (Essential SAFe) – Single Program/ART

2. Scale up to the Portfolio level as needed = “Portfolio SAFe”

- RTC supports this with limited Portfolio support
- Adding RDNG creates additional Portfolio artifacts for budgeting and decision-making

RTC (Essential SAFe) – Multiple Programs/ARTs
+ RTC (Portfolio SAFe) – Single Portfolio

3. Add cross-domain capabilities for Portfolio, Full or Large Solution SAFe

- Scale up to cross-domain capabilities when and if you are ready

CLM LPAs
(Essential + Portfolio/Full/Large Solution SAFe)



Program Board

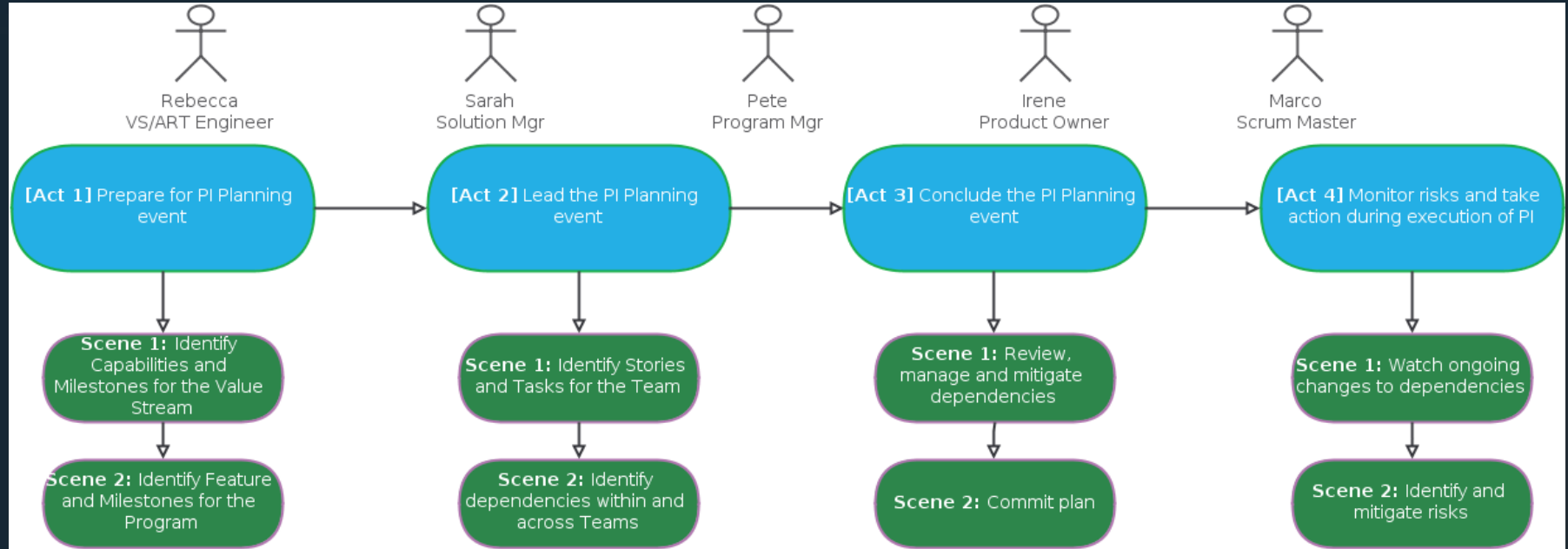
Program Board Technical Preview



- **Mixed Methodology Support:** Consistent dependency management regardless of methodology
- **Visualization:** See “red” and “green” dependencies across nodes
- **Actionability:** Mitigate risks: set/change target iteration, create/remove dependencies
- **Visibility:** View details via rich hover without leaving the board, click to open work item editor



Program Board – Who needs it?



Program Board Basics



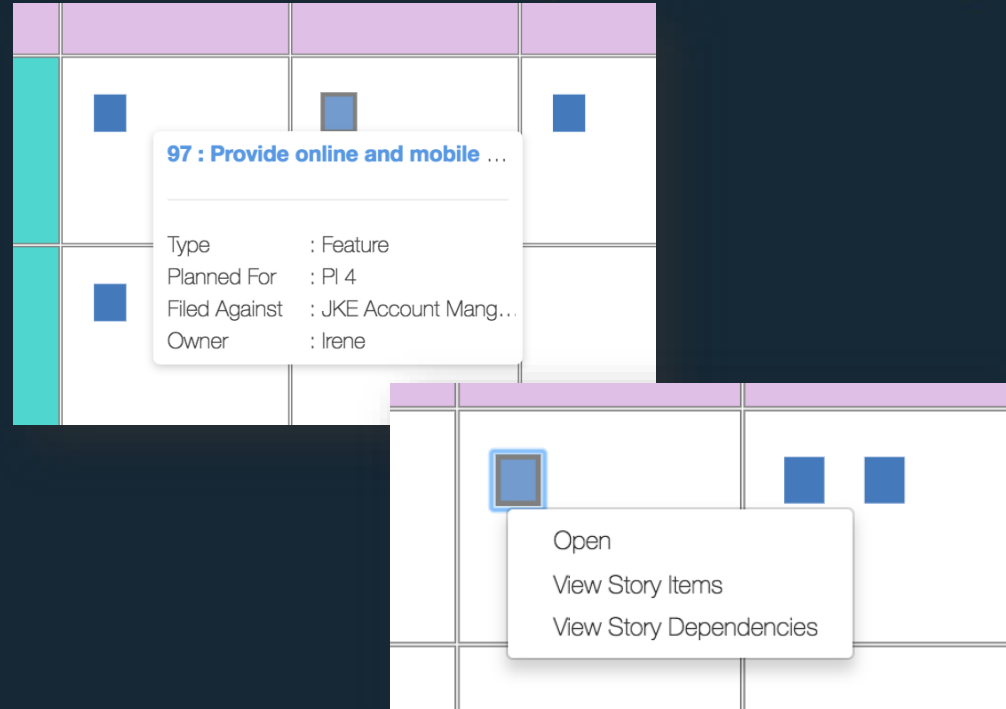
- ❑ **Launch from Plans menu: Plans > Dependency Board**
- ❑ **Set Filters:**
 - ❖ Program (Parent) Iteration + Team (Child) Iterations in scope
 - ❖ Program (Parent) and Team (Child) work item types
 - ❖ Teams in scope
- ❑ **Display:**
 - ❖ **Parent Row:** Parent work items *planned for* Program Iteration [Limit 30]
 - ❖ **Team Row(s):** One row for each Team in scope [Limit 7]
 - ❖ **Team Iteration Column(s):** One column for each Team in scope.
 - ❖ Parent appears in each cell when it has a Child *planned for* a Team Iteration and *filed against* a Team*
 - ❖ **Learning Milestone Row:** Shown only when SAFe template is in use, Learning Milestones appear in the lane corresponding to the *Planned For* iteration
- ❑ **Dependency Visualizations:**
 - ❖ **Out-of-Scope Dependency:** Shows up as different color on board
 - ❖ **Cross-Feature Dependencies:** **Red** or **Green** based on *Planned For*

* In GA, Parent will only appear in multiple cells if there is a dependency at the Child level. Otherwise it will only appear once, in the latest-most cell based on the children *planned for* settings

Program Board *Actionability*



- ❑ Quick hover details*
- ❑ Open Parent in work item editor
- ❑ View Children
- ❑ View Children Dependencies
- ❑ Edit Children
- ❑ Mitigate **red** dependencies
- ❑ Add/Remove dependencies



View child work items, add dependencies

The image shows a Jira interface with a work item hierarchy. A context menu is open over a work item, with a red arrow pointing to a detailed view of its children. A search box is also visible on the right side of the detailed view.

Children for work item 109

- 137: As an iPhone user, I want to be able to find branches near me using my GPS locator
- 138: As a Windows mobile device user, I want to be able to find branches near me using my GPS locator

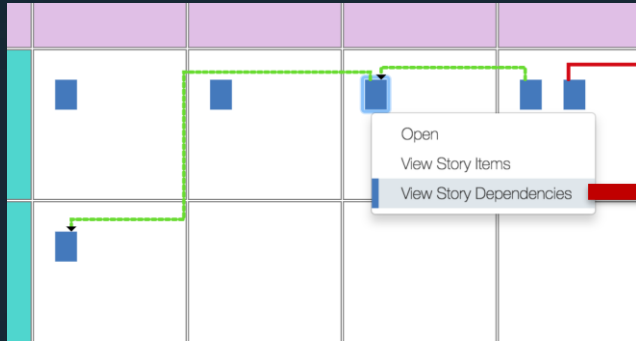
Children for work item 109

- 137: As an iPhone user, I want to be able to find branches near me using my GPS locator
- 138: As a Windows mobile device user, I want to be able to find branches near me using my GPS locator

GPS

- device
- Story 137: As an iPhone user, I want to be able to find branches near me using my GPS locator
- Story 187: Implement a common API to find branches near me using my GPS locator

View Dependencies, take action



Dependencies for work item 99

Depends On

126: As a mobile banking customer, I must be able to tra... → 188: Implement common API to transfer between accounts

Blocks

126: As a mobile banking customer, I must be able to tra... ← 139: As a mobile banking customer, I must have the ability to vie...

A red circle highlights an edit icon (pencil) next to the dependency entry for work item 188. A red arrow points from this icon to the "Edit dependent work items" dialog.

Edit dependent work items

126 : As a mobile banking customer, I must b...	→	188 : Implement common API to transfer bet...
Owner : Deb		Owner : Bob
Category : Mobile		Category : Web
Planned For : Sprint 4.3		Planned For : Sprint 4.1

Sprint 4.6

- Unassigned
- JKE Account Management
- Mobile
- Web

A background Kanban board is visible, showing a task card in a lane under the heading "Sprint 4.6".



“Quick Create”

Quick & Easy Work Breakdown



Quick Create Button

New button in work item editor to create children with a single click

Default Child Work Item Type Configuration

Specify the default child work item type to make work breakdown quick and easy

Inherited Attributes

Filed Against and *Planned For* are now automatically inherited when you create a child work item type

“Quick Create” in action



The screenshot illustrates the "Quick Create" workflow in the IBM Watson IoT interface. It shows two overlapping windows. The top window is for "Feature 5" and the bottom window is for "Story <07:03:24>".

Feature 5 Details:

- Summary: * Feature 2
- Buttons: Overview, Acceptance Criteria, Done Criteria, Links, Approvals, History
- Type: Feature
- Type description: Air Program
- Filed Against: * Air Program
- Proposed: Unassigned
- Planned For: PI 1
- WSJF: 4.75
- Quick Information: Subscribers (1): A, Children (5): 7, 8, 15, 19, 20, Mentions (1): 2
- Buttons: Cancel, Save

Story <07:03:24> Details:

- Summary: * |
- Buttons: Overview, Acceptance Criteria, Done Criteria, Links, Approvals, History
- Type: Story
- Type description: Air Program
- Filed Against: * Air Program
- Owned By: Unassigned
- Priority: Unassigned
- Planned For: PI 1
- Quick Information: Parent (1): 5
- Buttons: Cancel, Save

Workflow Indicators:

- A purple box highlights the "Create Child Work Item" button in the Feature 5 toolbar, with an arrow pointing to the "Parent (1): 5" entry in the Story's Quick Information.
- Blue boxes highlight the "Air Program" dropdown in the "Filed Against" field of both the Feature and Story windows, with an arrow pointing from the Feature's dropdown to the Story's dropdown.
- Green boxes highlight the "PI 1" dropdown in the "Planned For" field of both the Feature and Story windows, with an arrow pointing from the Feature's dropdown to the Story's dropdown.



Reporting

New reports for scaled agile environments



Enterprise Scaled Agile Reports

Use these reports regardless of the templates in place in your CE environment

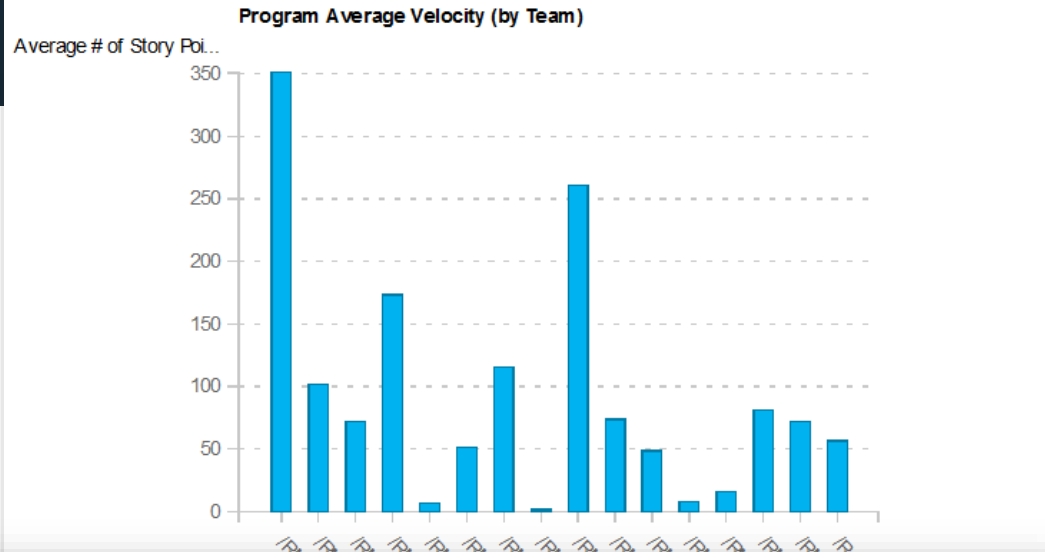
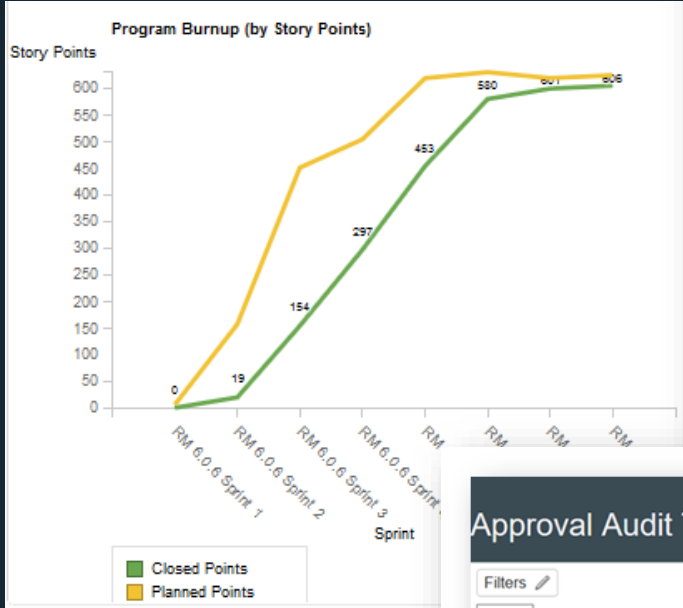
- Approval Audit Trail
- Days in State (by Month)
- Defect Days in Current State
- Estimated vs Actual Hours
- Program Average Velocity
- Program Burn-Down Chart (by Story Points)
- Program Burn-Up Chart (by Story Points)
- Solution Epic Average Velocity
- Story Cumulative Flow Diagram
- Team Average Velocity
- Team Burn-Down Chart (by Story Points)
- Work Item Cycle Time (by PI)

SAFe 4.5 Reports

Use these reports if you are using the SAFe 4.5 templates

- Capability Cumulative Flow Diagram
- Feature Cumulative Flow Diagram
- Feature Progress by Team – Specific PI [Advanced SQL]
- Portfolio Epic Burn-Up Chart (FULL SAFe)
- Portfolio Epic Burn-Up Chart (PORTFOLIO SAFe)
- Solution Epic Burn-Up Chart

Some examples



Approval Audit Trail

Filters

20 Items Per Page

Previous 1 - 3 of 3 items Next

Project	Work Item	Work Item Type	Approval Type	Approval	Build	Cumulative State
JKE Account Mgmt Program	Task Review	Task	Review	Review code changes		Pending
JKE Banking (Change Management)	Implement - Allocate Dividends to Multiple Causes	Task	Review	Code Review	C20170418-1409	Pending

Previous 1 - 3 of 3 items Next

- ✓ Industry-standard reports for scaled agile environments
- ✓ Compliance, audit, trending reports

New reporting documentation eases consumability



Enterprise Scaled Agile Reporting Guidelines – Summary, import and filtering guidance
Enterprise Scaled Agile Reports Details – Brief listing that includes functional, organizational and complexity categorization

Functional Group

- **Progress/Status**
- **Quality**
- **Productivity**
- **End to End Traceability**
- **Process Improvement**
- **Governance**

Organizational Level

- **All**
- **Portfolio**
- **Program**
- **Team**

Complexity

- **Basic**
- **Intermediate**
- **Advanced**



References/Case Studies:

- [Blog] [Words of wisdom from a few of the scaled agile "experts" at Interconnect 2017](#)
- **NICE Actimize DevOps.com interview:** [IBM InterConnect 2017 w/Igal Levi, NICE Actimize](#)
- **Pôle emploi:** [Scheduling and prioritizing development backlog with the Scaled Agile Framework](#)
- **Softplan:** [Gaining robust visibility with IBM Rational software and the Scaled Agile Framework methodology](#)
- **US Department of State:** [Customer Reference](#)
 - [Video](#)
 - [IBM.com](#)

[SAFe Landing Page](#)

[Getting Started with SAFe](#)

[SAFe 4.5 Assets](#)

Interactive Previews: <http://jazz.net/previews>

Program Board Video: <https://www.youtube.com/watch?v=QMP0g8TzKfo&feature=youtu.be>

Contact Us: asilber@us.ibm.com , christophe.telep@fr.ibm.com

Thank You

