



WEBINAR

Transform Engineering Processes: Bridge Gaps Between Teams and Tools Effectively

Our Speakers



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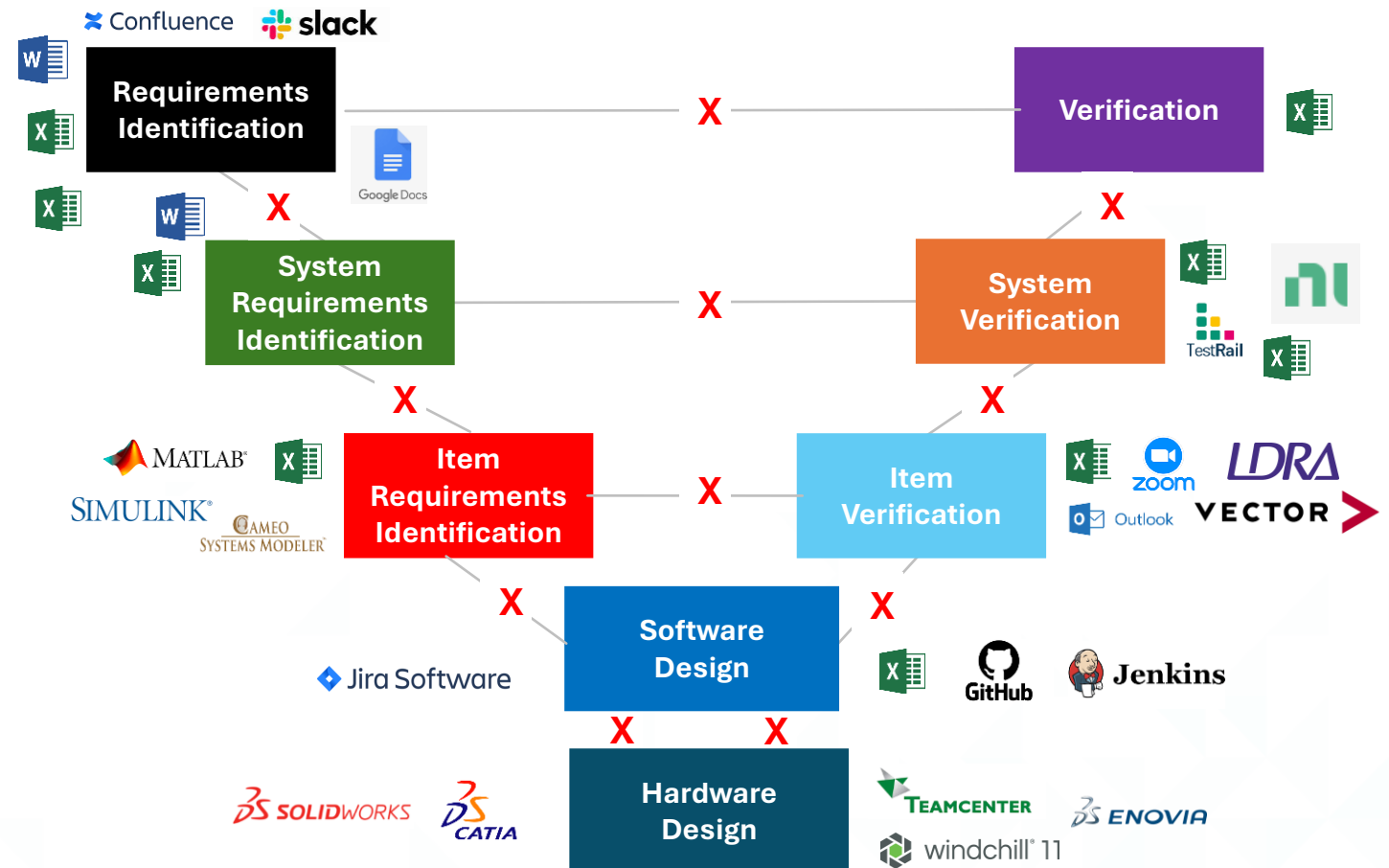
Jama Software

Challenge: Siloed Teams and Tools Across V Model

#1 CAUSE OF NEGATIVE PRODUCT OUTCOMES & COMPLIANCE ISSUES

#1 Cause of Product Delays, Defects, Cost Overruns, Audit Failures, Product Failures

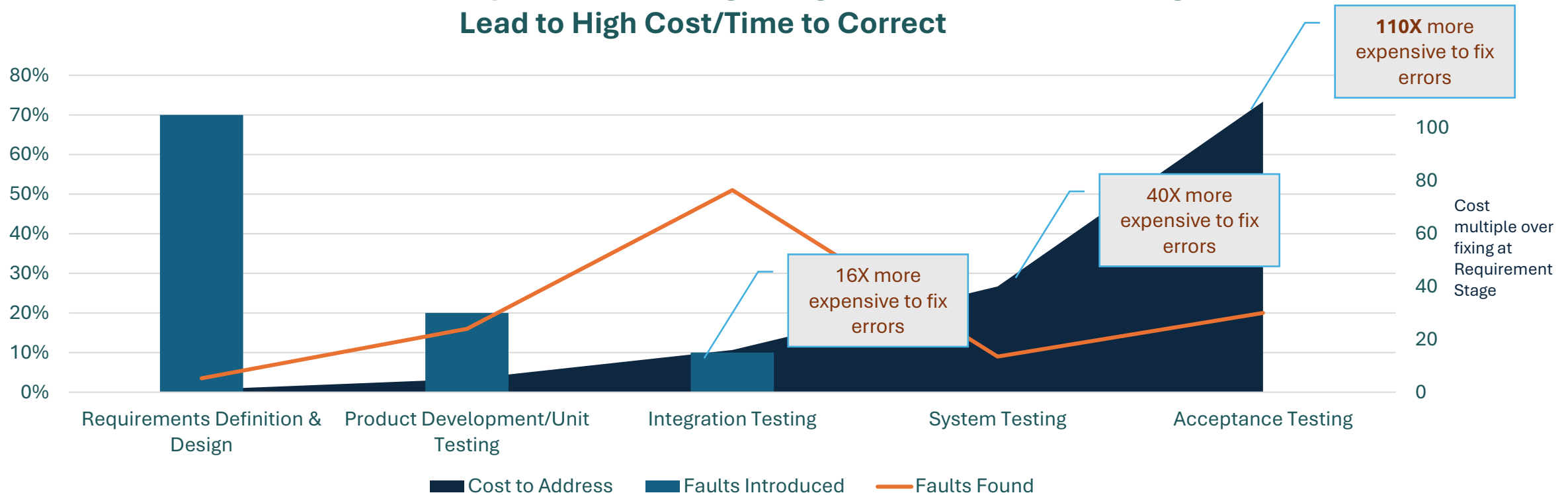
- Late identification of defects/coverage gaps due to lack of visibility through development process
- Lack of requirement coordination and change management between hardware/software
- Lack of ongoing risk assessment and change management
- No way to integrate desktop tools and Excel files
- Highly manual, after the fact traceability effort to satisfy, ISO 26262, ISO 21434, UN R155/156, ASPICE compliance



Result in: Significant Delays, Defects, & Cost Overruns

LATE ISSUE DETECTION LEADS TO MUCH GREATER TIME & COST TO CORRECT

Deficiencies at Requirements/Design Stage Not Found Until Testing Lead to High Cost/Time to Correct



Source: INCOSE, NIST, [Report](#)

Jama Software® | #1 in Requirements Management

INTELLIGENTLY IMPROVE YOUR DEVELOPMENT PROCESS WITH JAMA CONNECT®

Jama Connect helps teams manage requirements with Live Traceability through the systems development process for proven cycle time reduction and quality improvement.

- ✓ Manage Complexity & Scale
- ✓ Intelligently Improve Requirements
- ✓ Bring All Collaboration & Reviews Online
- ✓ Unify Test-Case Management
- ✓ Auto-Detect Risk
- ✓ Maintain Product State Across Tools
- ✓ Measure & Improve Traceability



SPACE, AIRBORNE, & DEFENSE SYSTEMS



AUTOMOTIVE & SEMICONDUCTOR



MEDICAL DEVICES



SOFTWARE DEVELOPMENT

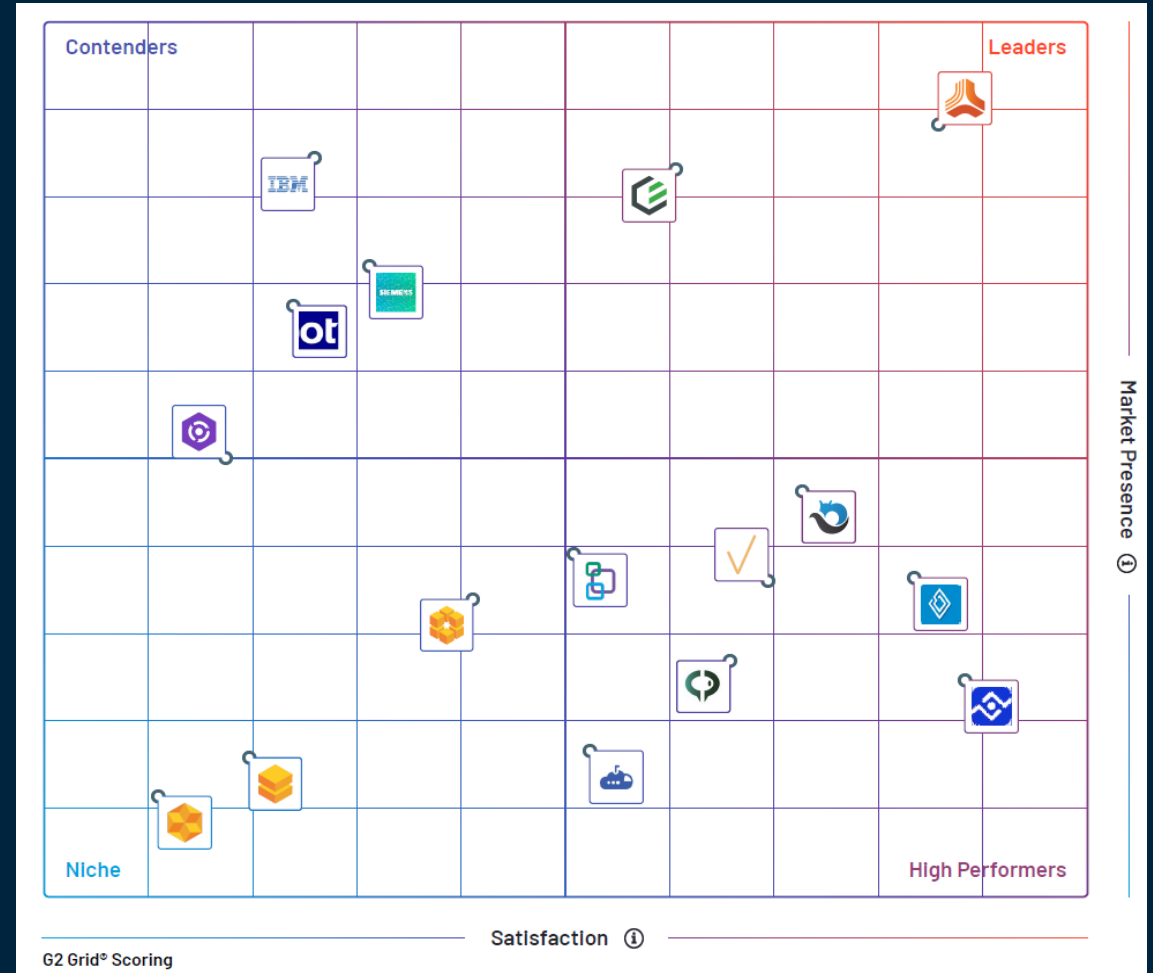


INDUSTRIAL MANUFACTURING



G2 Grid Report for Requirements Management Software – Fall 2024

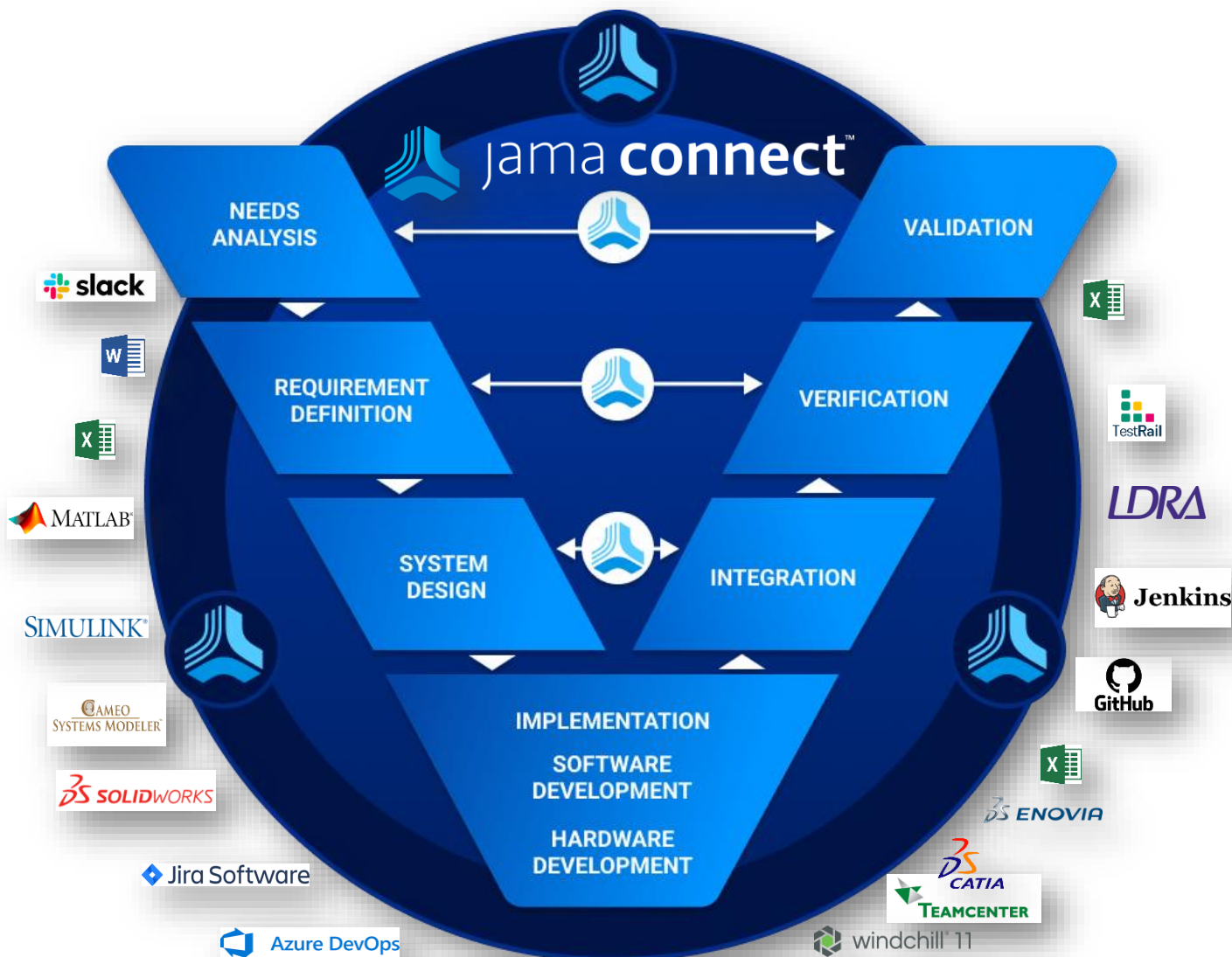
#1 in Requirements Management & Traceability



Jama Connect® Delivers Live Traceability™ Across Best-of-Breed Tools

Live Traceability Delivers:

- 1.8X faster time to defect detection
- 2.1X faster time to execute test cases
- 2.4X lower test case failure rates
- 3.6X higher verification coverage



Jama Connect Interchange

THE POWERFUL ADD-ON TO JAMA CONNECT

Jama Connect Interchange allows your teams to connect their data and processes.

Today we're going to cover 3 use cases:

- **Traceable Agile:** Integrate Systems and Software teams with Jama Connect + Atlassian Jira
- **Scalable FMEA Process:** Enable Reliability & Risk management teams with Jama Connect + Excel
- **Universal ReqIF Exchange:** Enable co-development with partners and suppliers

Traceable Agile

Engineering Leaders...

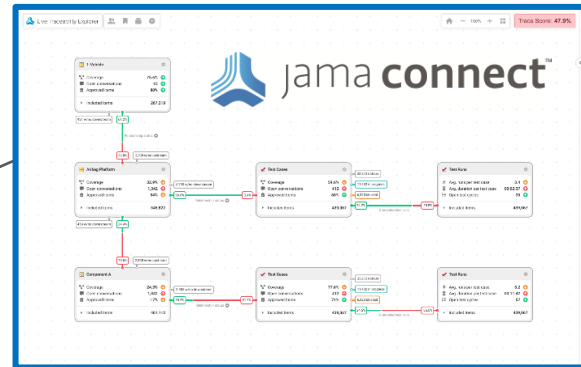
TOP 5 QUESTIONS THAT KEEP ENGINEERING LEADERS UP AT NIGHT:

- How do I know which requirements have been missed?
- How do I know which requirements are not fully covered by test cases?
- How do I know which requirements have failed to pass tests?
- How do I identify rogue development activity?
- How do I know if changes have been made that impacts the software team?

Solution | Traceable Agile

NO CHANGE TO SOFTWARE TEAM, MANAGEMENT CAN NOW ANSWER ALL QUESTIONS

1 Auto Detect Gaps
Meta data from sprints in Jira are continually synched to associated requirements and test cases in Jama Connect



2 Inspect & Determine Action
Jama continually calculates Traceability & Coverage scores to identify high risk areas to drill into and determine corrective action

3 Assign Tasks to Backlog
Corrective action assigned in Jira to be addressed

 **Jira Software**

(no change to current developer behavior)

How | Live Trace Explorer



- 1 AUTO DETECT GAPS**
Software requirements decomposition to **Dev Tasks** has made no progress since project kickoff



How | Auto-detect risk, drilldown to determine action

2 Inspect & Determine Action

The screenshot shows the Jama Connect interface. At the top, there's a navigation bar with the 'jama connect' logo, a dropdown menu for 'Software Requirements Progress', and buttons for 'Save', 'Save as', 'Export', and a bookmark icon. Below the navigation bar, there's a status bar indicating '0 items selected' and '1 level and 1 item type filtered'. The main content area is divided into two panels: 'SOURCE ITEMS' (Software Requirement (5)) and '1 LEVEL DOWN' (Dev Task (5)). The 'SOURCE ITEMS' panel shows a table with columns for Project ID, Name, Status, and Story Completion. The '1 LEVEL DOWN' panel shows a table with columns for Project ID, Name, Jira Status, and Sprint. A red box highlights the '1 LEVEL DOWN' panel, showing a mapping between requirements and tasks. A red icon and a '+ Add Coverage' button are visible between the two panels.

SOURCE ITEMS					1 LEVEL DOWN				
Software Requirement (5)					Dev Task (5)				
	Project ID	Name	Status	Story Completion		Project ID	Name	Jira Status	Sprint
<input type="checkbox"/>	FuSa-SWRQ-1	Sensor Analysis	Approved	0%	<input type="checkbox"/>	FuSa-US-11	Sensor Signal Interpretati...	In Progress	SWR 1.1
<input type="checkbox"/>	FuSa-SWRQ-2	Passenger Profile Analysis	Approved	100%	<input type="checkbox"/>	FuSa-US-1	Weight and Height calcul...	Done	SWR 1.0
<input type="checkbox"/>	FuSa-SWRQ-13	Receive impact data	Approved	0%	+ Add Coverage for FuSa-SWRQ-13				
<input type="checkbox"/>	FuSa-SWRQ-3	Passenger position sensing	Approved	0%	<input type="checkbox"/>	FuSa-US-6	Interpret positioning signal	In Progress	SWR 1.1
<input type="checkbox"/>	FuSa-SWRQ-4	Passenger attention moni...	In Review	0%	<input type="checkbox"/>	FuSa-US-2	Eye Tracking signal Inter...	To do	Backlog
					<input type="checkbox"/>	FuSa-US-8	Camera Obstruction alert	To do	Backlog

- Quickly create associated Backlog Items with live traceability to requirements
- Backlog Item is automatically created in Jira backlog for estimation and sprint planning
- Easily understand if requirements are unaccounted for with Development.
- Importing existing Backlog Items to relate to requirements if work is already started.

How | Auto-detect risk, drilldown to determine action

3 Assign Tasks to Backlog

Jira Software

Projects / Connect / CON-36188

Charge Point Safety Threshold



General Required Updates?

Description

Set the max change threshold to 95% of remaining batter management life.

Acceptance Criteria

None

Release Notes

None

Activity

Show: All Comments History Work log Zendesk Support

Oldest first ↕

JT Add a comment...

Pro tip: press M to comment

In Progress Actions

Details

Fix versions	None
Epic Link	None
Assignee	Marc Osofsky Assign to me
Story Points	8
Components	None
Priority	<input type="radio"/> Low
Reporter	Josh Turpen
Development	Create branch Create commit
Jama URL	https://jama-lte.jamasoftware.net/perspective.req#/items/170250?projectId=65
PagerDuty	PagerDuty Incident
Zendesk Support	Linked Tickets

Copy Jama **Live Traceable** link on creation of User Story and Jama now automatically syncs changes, related tasks/bugs so Jama Project & Sprint State is always 100% live and can auto-detect risk

Benefits

- No manual linking or references with IDs – reduce human error!
- Digital thread shows quick impact analysis of change
- Automated integration enables metrics – **measure traceability!**

Jama Connect Interchange (JCI) for Risk Management



Vincent Balgos
Director of Medical Device
Solutions

Video Highlights

Problem Statement

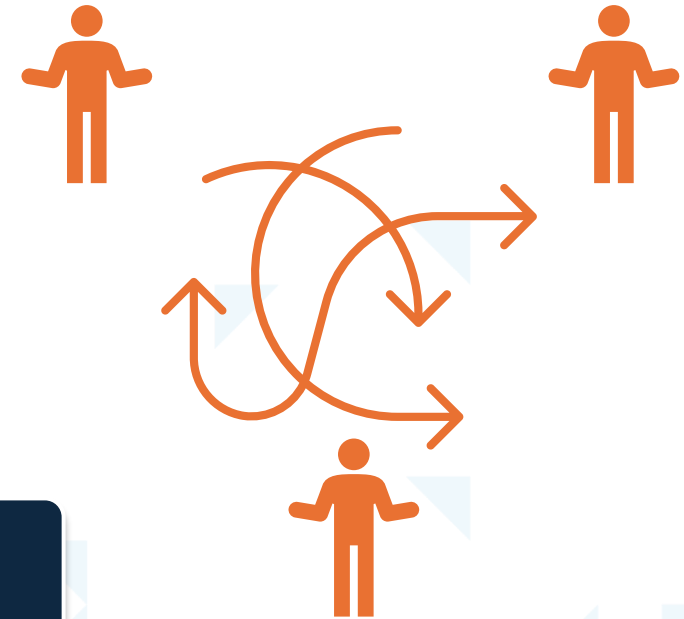
COMPLEX RISK MANAGEMENT

Complex Risk Management Process that is applied across many business units, functional groups, and project teams.

High chances of fragmented practice, inconsistent methods, and manual approaches lead to errors in risk management activities.

Unfavorable outcomes include unsafe / ineffective products, quality issues, and unmitigated levels of risks.

Lead to business risks, and technical product safety risks for the user, operators, stakeholders



Fragmented Risk Management Approach

ACROSS VARIOUS DOCUMENTS AND FUNCTIONAL GROUPS



FMEA							Set Rankings			Mitigations			Adjusted Rankings	
FMEA ID	Element	Function or Performance Standard	Potential Failure Mode	Potential Failure Effect	Potential Causes of Failure	Existing Design / Process Controls	Severity	Occurrence	Risk Level	Recommended Mitigations	Mitigating Actions Taken	Downstream Mitigations	Mitigated Occurrence	Mitigated Risk Level
MDZ-FMEA-2	Volume control button	Volume threshold exceeds 68 dBA	Maximum output volume should be 68 dBA	Ear drum damage	Plastic threshold button breaks	dBA output detection on CPU	7 - High	2 - Low: relatively few failures 1 in 150,000	Medium	CPU shut down output when dBA detected above 67. Design safe shutdown	CPU power shut down when output > 67 is detected		1 - Remote: failure is unlikely < 1 in 1,500,000	Medium
MDZ-FMEA-3	Hearing Aid Water Intake	Hearing Aid Water Intake	Hearing aid should be waterproof	Electric shock	Showering/Precipitation/ Swimming and Exercise	NA	8 - Moderate	9 - Very high: failure is almost inevitable 1 in 3	High	Ensure hearing aid material is waterproof, allowing no water intake	Ensured case material is waterproof		1 - Remote: failure is unlikely < 1 in 1,500,000	High
MDZ-FMEA-4	Volume control button	Volume threshold exceeds 68 dBA	Maximum output volume should be 68 dBA	Ear drum damage	Plastic threshold button breaks	dBA output detection on CPU	7 - High	2 - Low: relatively few failures 1 in 150,000	Medium	CPU shut down output when dBA detected above 67. Design safe shutdown	CPU power shut down when output > 67 is detected		1 - Remote: failure is unlikely < 1 in 1,500,000	Medium
MDZ-FMEA-5	Hearing Aid Water Intake	Hearing Aid Water Intake	Hearing aid should be waterproof	Electric shock	Showering/Precipitation/ Swimming and Exercise	NA	7 - High	9 - Very high: failure is almost inevitable 1 in 3	High	CPU shut down output when dBA detected above 67. Design safe shutdown	CPU power shut down when output > 67 is detected		1 - Remote: failure is unlikely < 1 in 1,500,000	Medium



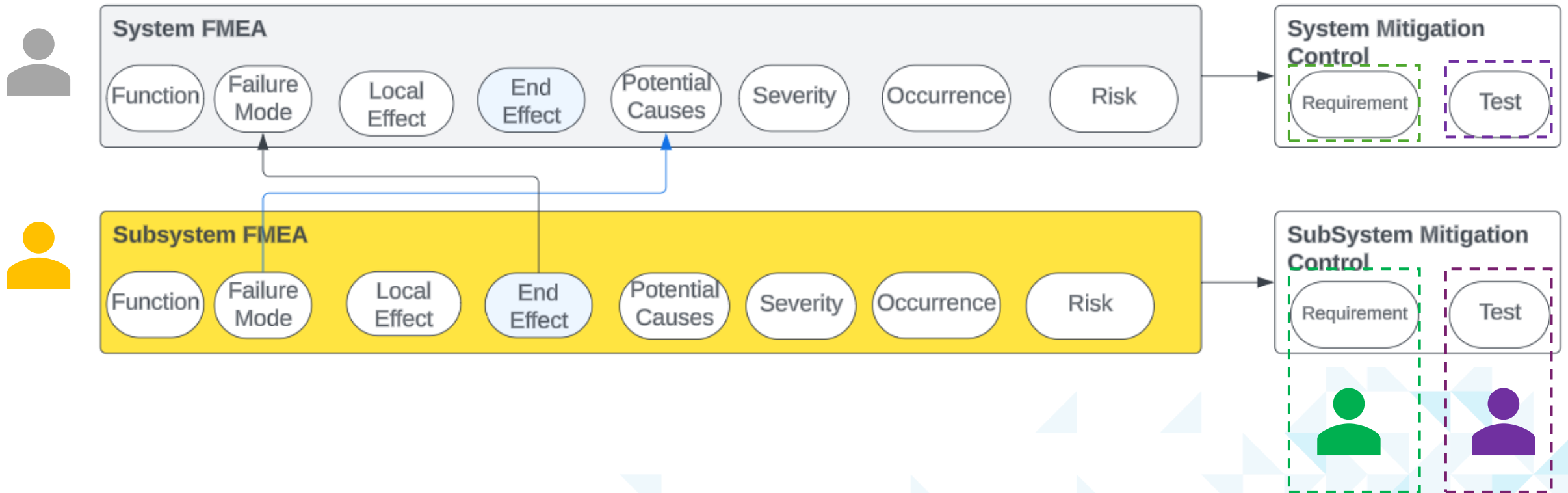
- Design
- Architecture
- Workflow

- Failure Mode & Effects Analysis
- Risk Analysis
- Hazard Analysis

- Mitigation Controls
- Requirements
- Test

Multi-Layer FMEA Approach

INFORMATION FLOW MAP



Jama Connect Demo

JAMA CONNECT INTERCHANGE WITH EXCEL

Summary

COMPLEX RISK MANAGEMENT

- Streamline complex Risk Management practices using Jama Connect Interchange (JCI) with Excel
- Enables integrated automation to streamline risk practices across projects, and thereby reducing risks to the business
- For more information, please contact your CSM or Jama Consultant

Jama Connect Interchange (JCI) Universal RegIF Exchange

**Enable Co-Development With
Partners and Stakeholders**



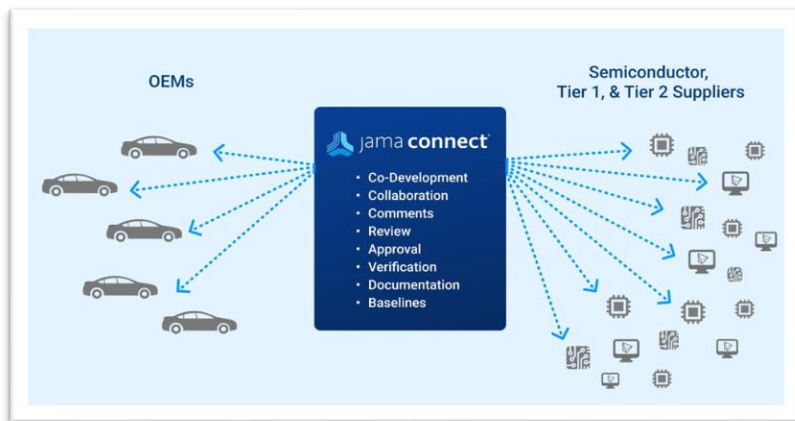
Mario Maldari
Director of Product and
Solution Marketing

There are Two Ways to Collaborate

ONLY JAMA CONNECT FULLY SUPPORTS BOTH

1. Co-Development Partners

- Share co-development project in your Jama Connect instance
- Control partner access and information



2. Arm's Length Partners

- Invite to online reviews in your instance
- **Share files (ReqIF)**

The screenshot shows the 'Initiate review' dialog box and the 'Conversations' table in the Jama Connect interface.

Initiate review dialog:

- Definition
- Settings
- Participants
- Initiation
- Learn more

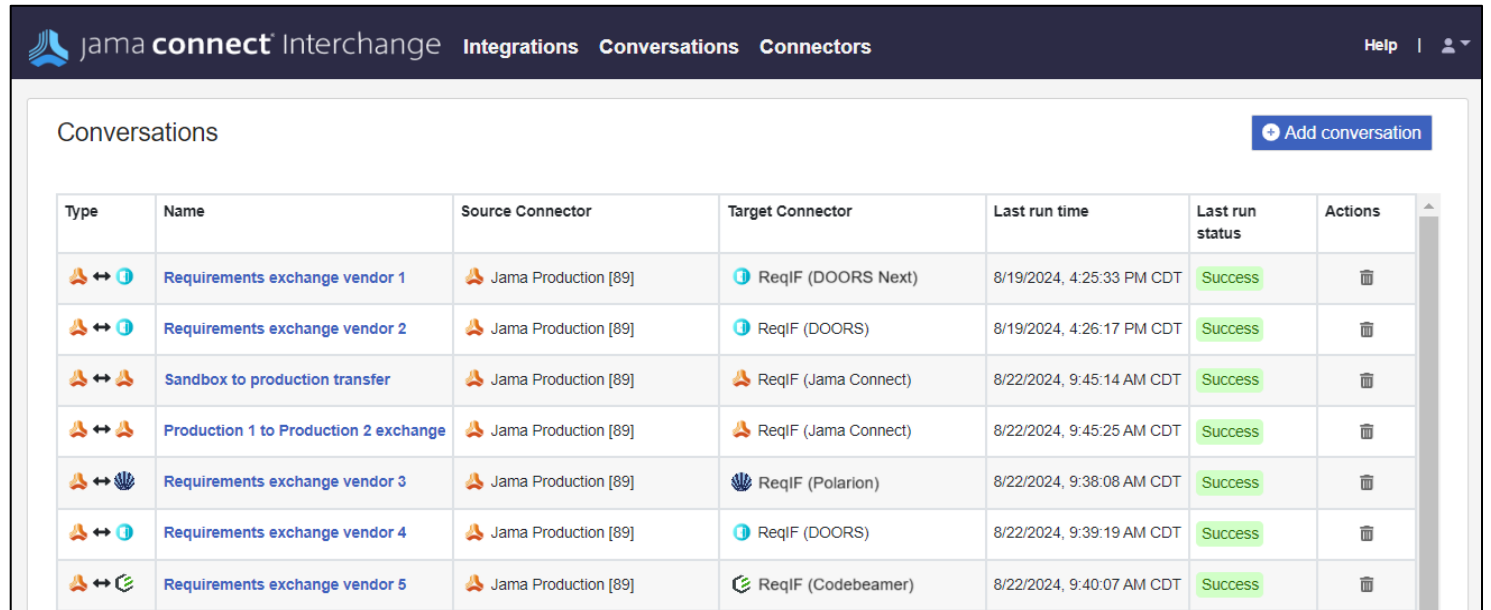
Conversations table:

Type	Name	Source Connector	Target Connector	Last run time	Last run status	Actions
↔	Requirements exchange vendor 1	Jama Production [05]	ReqIF (DOORS Next)	6/19/2024, 4:25:33 PM CDT	Success	ⓘ
↔	Requirements exchange vendor 2	Jama Production [05]	ReqIF (DOORS)	6/19/2024, 4:26:17 PM CDT	Success	ⓘ
↔	Sandbox to production transfer	Jama Production [05]	ReqIF (Jama Connect)	6/22/2024, 9:45:14 AM CDT	Success	ⓘ
↔	Production 1 to Production 2 exchange	Jama Production [05]	ReqIF (Jama Connect)	6/22/2024, 9:45:25 AM CDT	Success	ⓘ
↔	Requirements exchange vendor 3	Jama Production [05]	ReqIF (Polarion)	6/22/2024, 9:38:08 AM CDT	Success	ⓘ
↔	Requirements exchange vendor 4	Jama Production [05]	ReqIF (DOORS)	6/22/2024, 9:39:19 AM CDT	Success	ⓘ
↔	Requirements exchange vendor 5	Jama Production [05]	ReqIF (Codebeamer)	6/22/2024, 9:40:07 AM CDT	Success	ⓘ

Jama Connect is #1 in Offering Universal ReqIF

IF YOU HAVE JAMA CONNECT, YOU CAN INTEROPERATE WITH ANY OF THE OTHER TOOLS

- Only Jama Software invested to natively support all major vendor ReqIF flavors:
- DOORS, DNG, Codebeamer, Polarion, PTC Integrity (Windchill RV&S)
- Never have to worry about losing data
- Never have to manually manipulate files
- Maintain a structured data format and preserve tool-specific hierarchies
- Smart field mappings and continuous roundtrip exchanges



The screenshot shows the 'Conversations' page in the Jama Connect Interchange interface. The page has a dark header with the 'jama connect' logo and navigation tabs for 'Interchange', 'Integrations', 'Conversations', and 'Connectors'. A 'Help' link and a user profile icon are also visible. Below the header, there is a table of conversations with a '+ Add conversation' button in the top right corner. The table has seven columns: Type, Name, Source Connector, Target Connector, Last run time, Last run status, and Actions. Each row represents a conversation between a source connector (Jama Production [89]) and a target connector (various ReqIF flavors). All conversations show a 'Success' status.

Type	Name	Source Connector	Target Connector	Last run time	Last run status	Actions
↔	Requirements exchange vendor 1	Jama Production [89]	ReqIF (DOORS Next)	8/19/2024, 4:25:33 PM CDT	Success	🗑️
↔	Requirements exchange vendor 2	Jama Production [89]	ReqIF (DOORS)	8/19/2024, 4:26:17 PM CDT	Success	🗑️
↔	Sandbox to production transfer	Jama Production [89]	ReqIF (Jama Connect)	8/22/2024, 9:45:14 AM CDT	Success	🗑️
↔	Production 1 to Production 2 exchange	Jama Production [89]	ReqIF (Jama Connect)	8/22/2024, 9:45:25 AM CDT	Success	🗑️
↔	Requirements exchange vendor 3	Jama Production [89]	ReqIF (Polarion)	8/22/2024, 9:38:08 AM CDT	Success	🗑️
↔	Requirements exchange vendor 4	Jama Production [89]	ReqIF (DOORS)	8/22/2024, 9:39:19 AM CDT	Success	🗑️
↔	Requirements exchange vendor 5	Jama Production [89]	ReqIF (Codebeamer)	8/22/2024, 9:40:07 AM CDT	Success	🗑️

Jama Connect Demo

JAMA CONNECT INTERCHANGE WITH EXCEL

Summary

CO-DEVELOPMENT WITH UNIVERSAL REQIF

- Jama Connect Interchange enables Universal Reqif exchanges between you and your suppliers, regardless of source.
- Intelligent mapping and other usability features make the exchange simple and error free.
- Imports and export allows for an interactive exchange between you and your suppliers with the option to update existing requirements with changes and modifications.
- For more information, please contact your Customer Success Manager or Jama Consultant

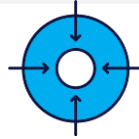
Roadmap & Q&A

2025

Product Roadmap for Jama Connect Interchange™

JANUARY 2025

NOW



Application Features

- Enhanced multi-project configuration for Jira

Integration Endpoints

 ReqIF Exchange –
Universal support

NEXT



Application Features

- Performance improvements and enterprise features

LATER



Key Research Areas

 TestRail



Azure DevOps



GitHub and GitLab

Q&A

THANK YOU!

THANK YOU!