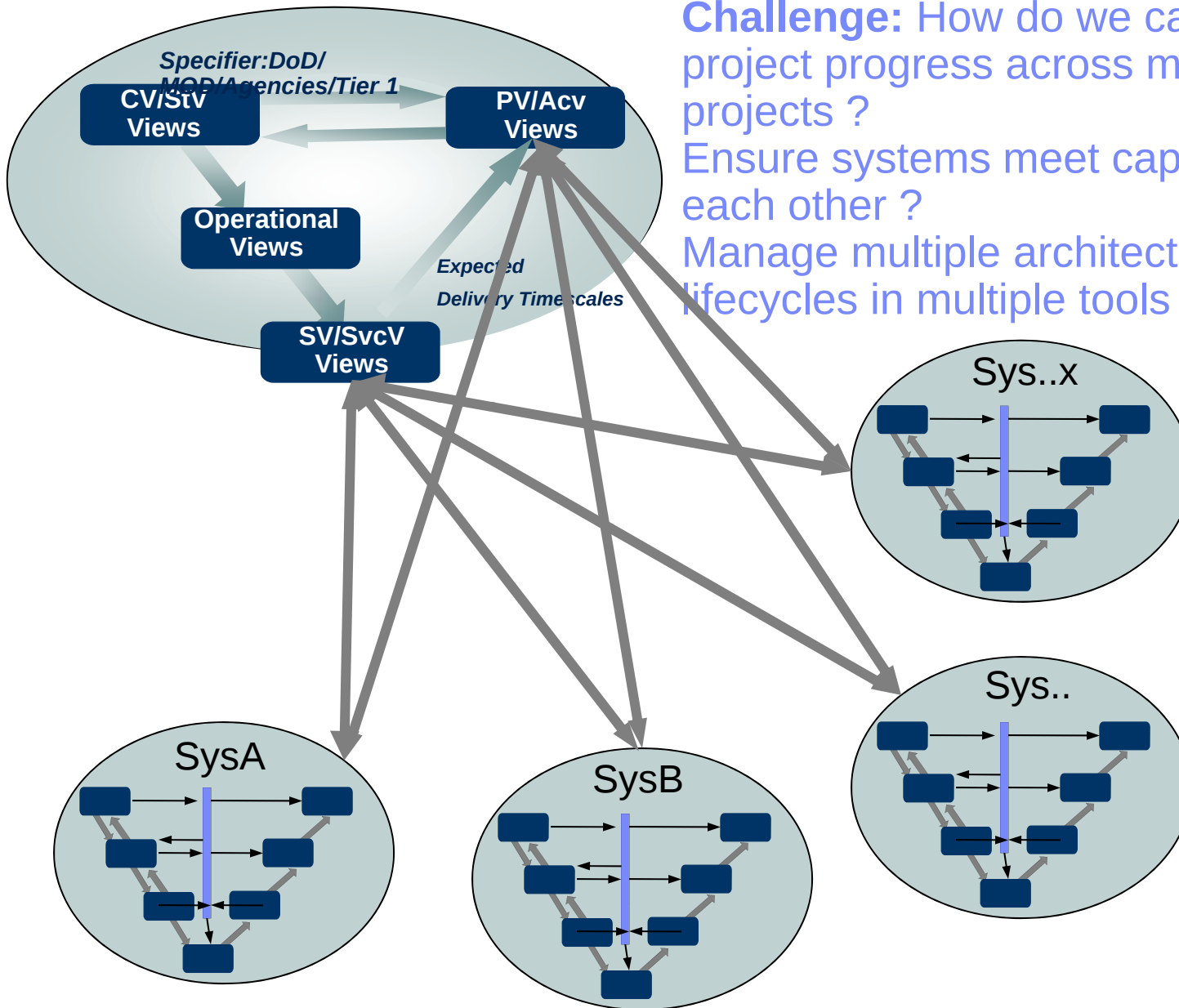


Challenge: How do we capture and report project progress across multiple siloed projects ?

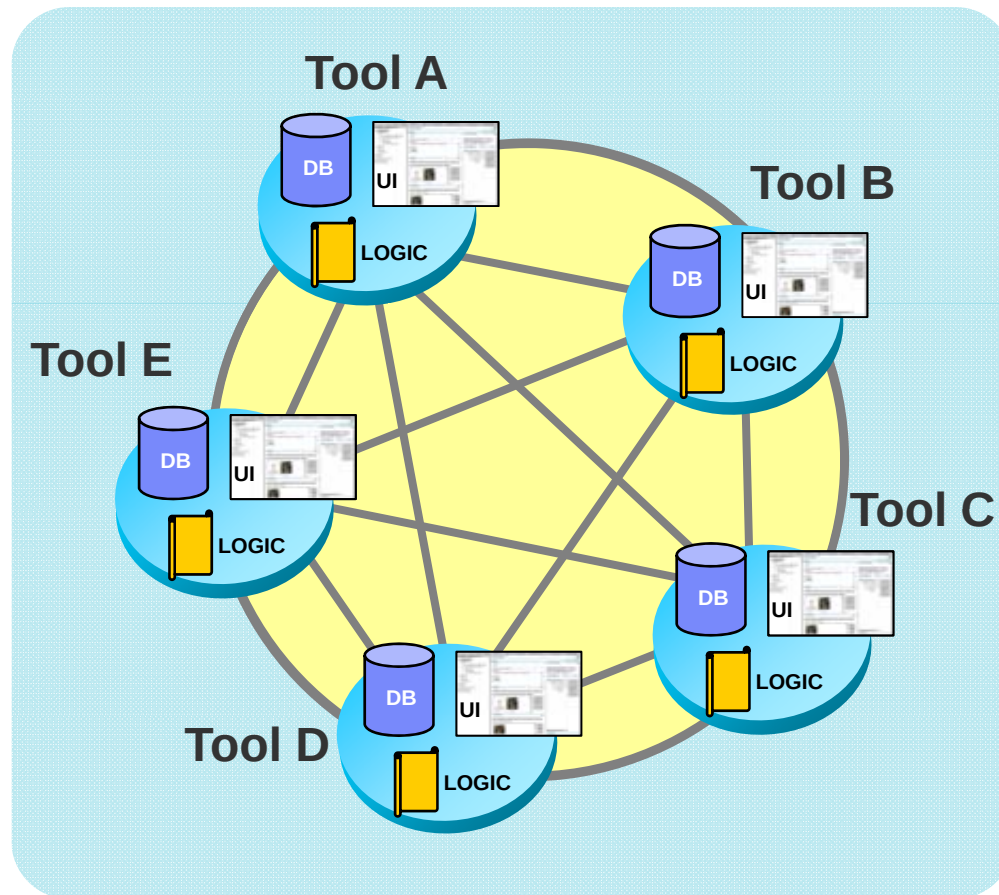
Ensure systems meet capabilities and talk to each other ?

Manage multiple architectures and project lifecycles in multiple tools ?

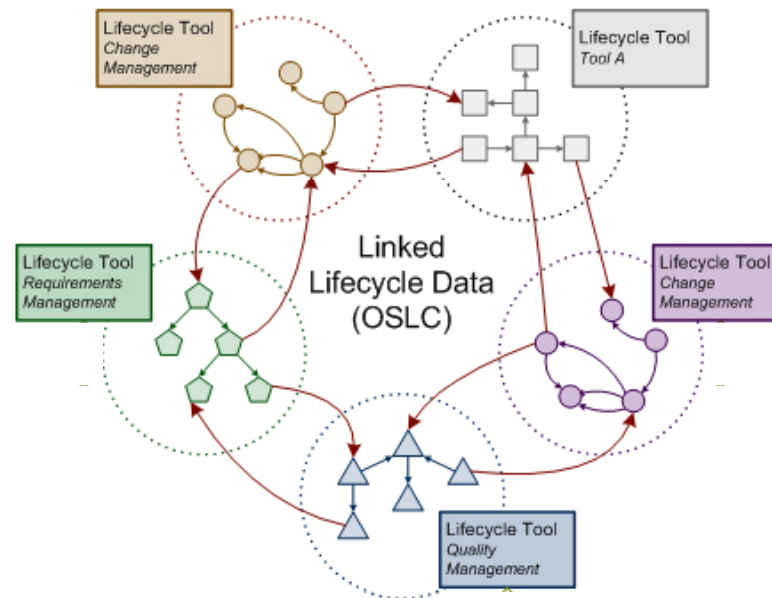


Lifecycle integration begins with “connecting the dots”

Traditional approach point to point tool integrations



Open Services for Lifecycle Collaboration (OSLC)



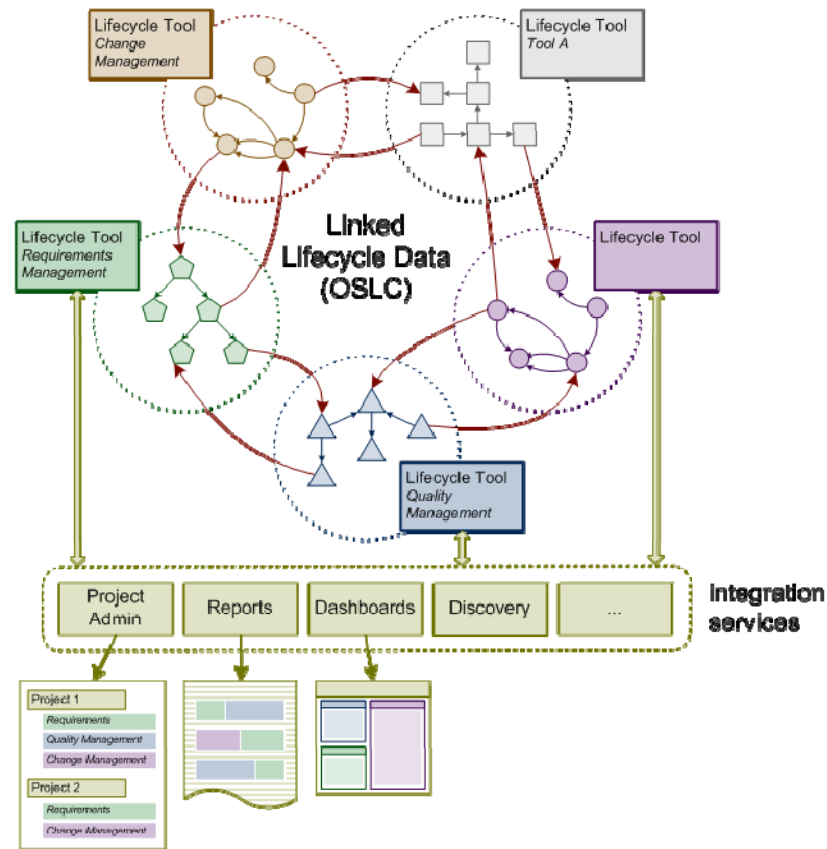
- Specifications for exposing lifecycle data through a uniform (REST) interface and with a common vocabulary
- Shifts emphasis to the lifecycle resources (the data) and the relationships between resources rather than traditional emphasis on tools and their APIs
- One tool can access and link to another tool's resources where the data lives, as opposed to a more classical copy and synchronize approach
- By exposing data through OSLC-defined RESTful interfaces, tools contribute to a web of data that can be traced, indexed, and analyzed from a cross-lifecycle perspective

Defining what “Jazz” means

- Jazz is IBM’s initiative for improving collaboration across the software & systems lifecycle
- This initiative consists of three elements:
 - An open **platform** for lifecycle tool integration
 - A transparent **community** working together to integrate and develop lifecycle tools
 - A set of **products** that support the Jazz platform



The Jazz architecture integrates both tools & services

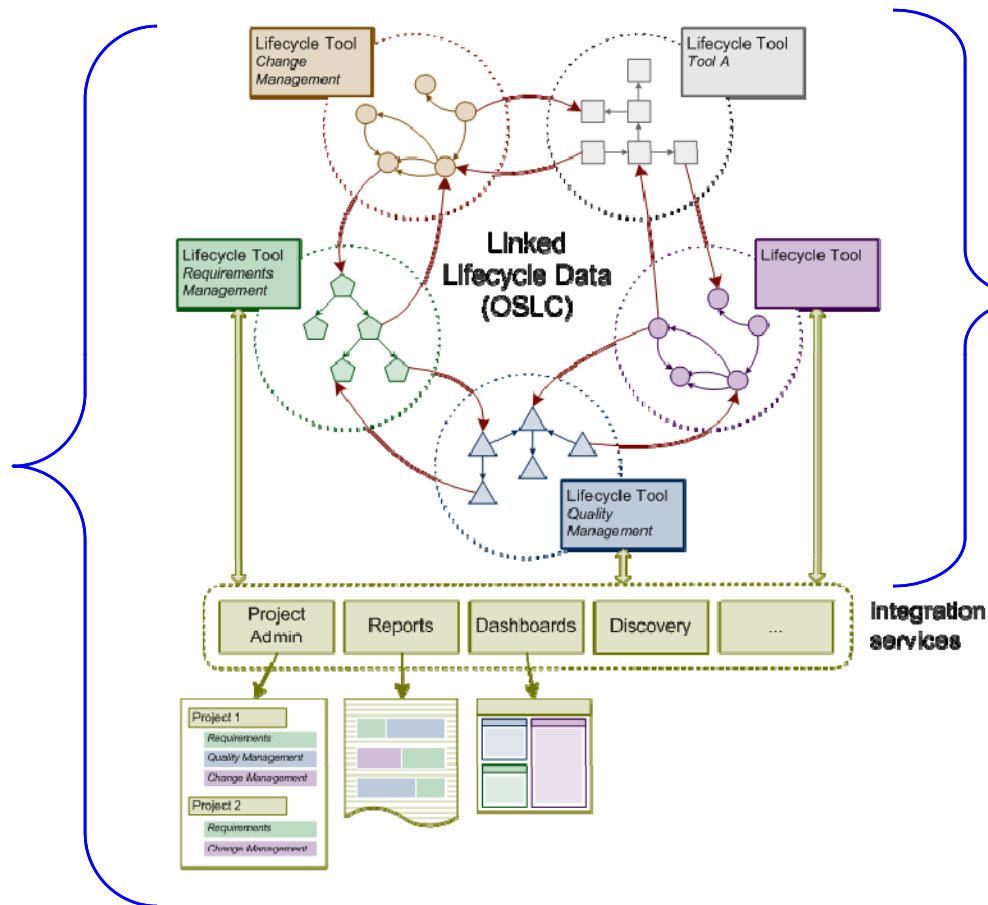


*Integration between tools is necessary,
but not sufficient*

Jazz is open, supports both internal and external tool integrations

Internal tool integrations

- RTC
- RQM
- RRC



External tool integrations

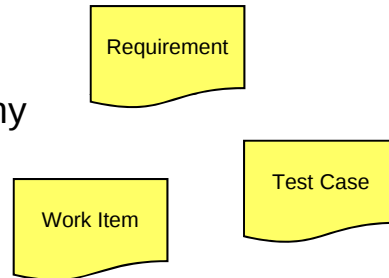
- Rhapsody
- DOORS
- CAD tools
- System Architect
- Electrical
- Mechanical

Jazz products overcome limitations of the past

✓ Open choice and rich integration

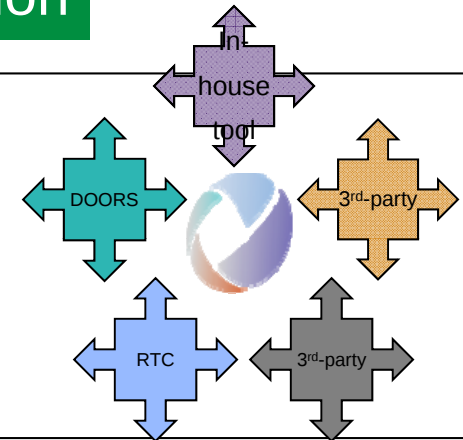
Uniform Resource Identifiers

“I can link any resource to any other resource, regardless of where the resource lives!”



Standard Interfaces

“Each tool can evolve independently without breaking integrations!”



Open Standards for the Lifecycle

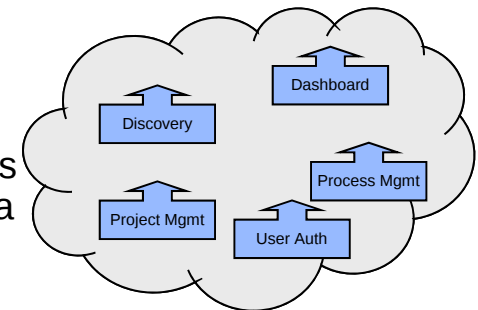
“Each domain can create standards without having to wait on the others or get the whole industry to agree!”



Open Services for Lifecycle Collaboration
open community. open interfaces. open possibilities

Integration Services

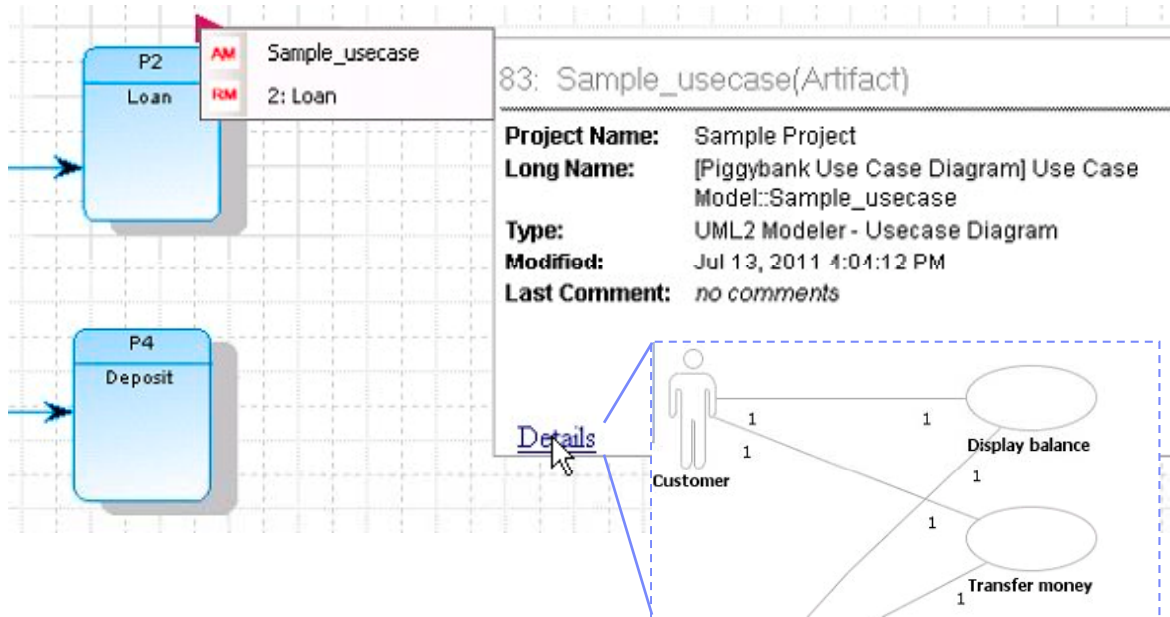
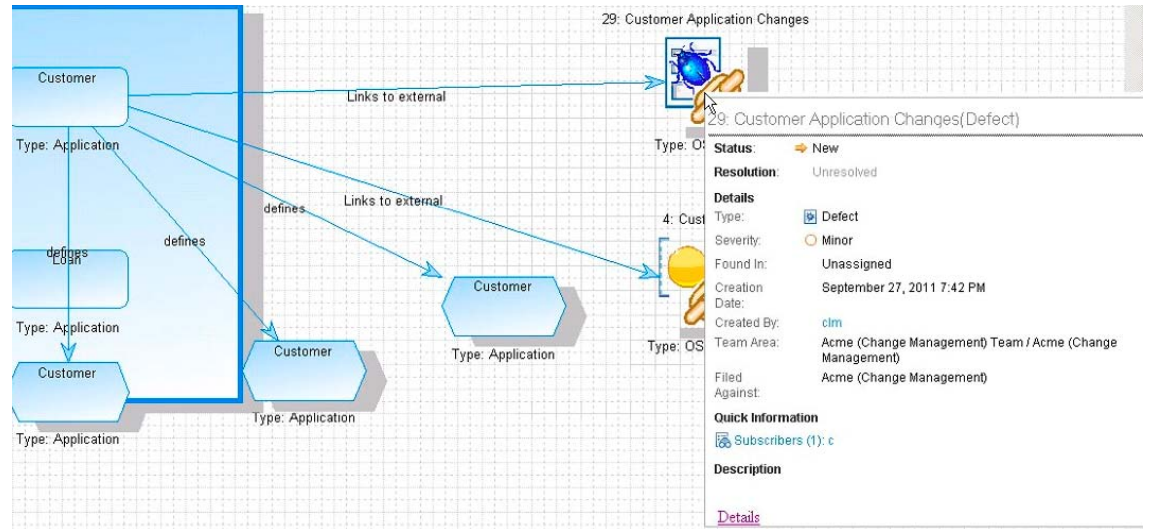
“Services needed across all tools are provided in a uniform and consistent manner ”



✓ Evolutionary and incremental adoption

OSLC Linking-Example in Systems Architect

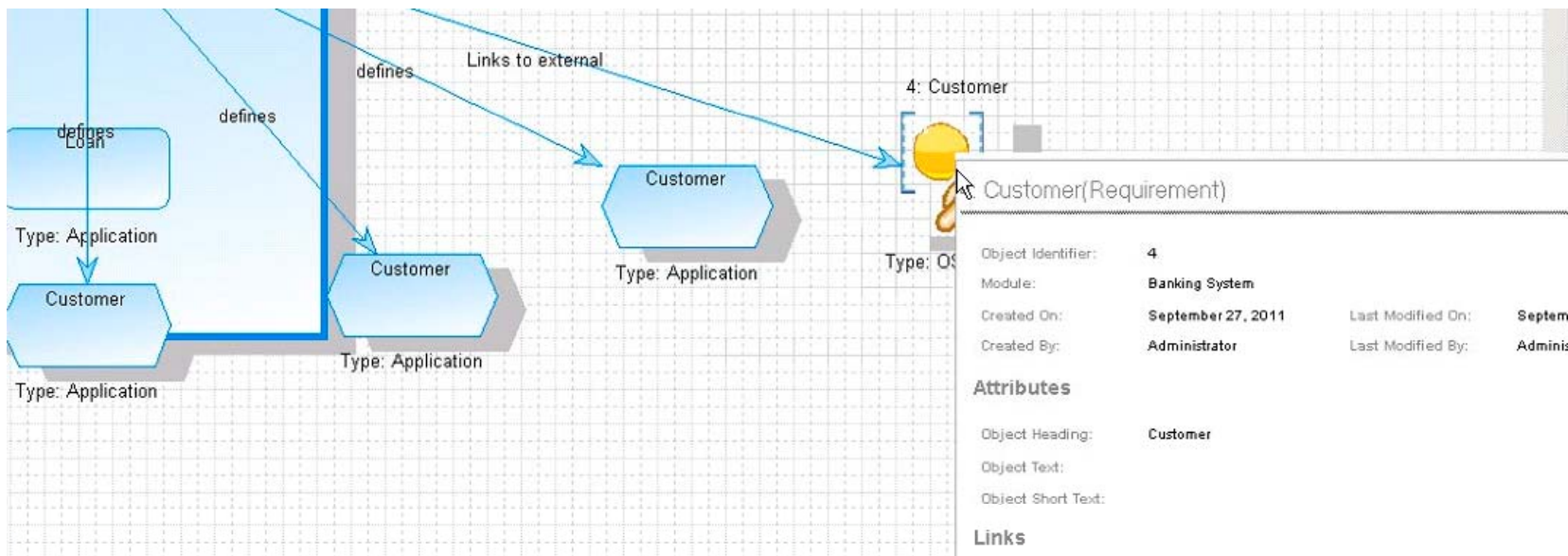
- Support for OSLC linking available now in
 - SA 11.4.1,
- Allows linking to tools supporting OSLC for Requirements, Change, Architecture Management and Systems Modelling
- OSLC link indicators in diagrams, the explorer, and explorer diagrams
- Hover over the link indicator to see a summary of the link target
- Click on “Details” in the rich hover to bring up the target of the link in its native tool



Examples of OSLC usage- Relating requirements to model elements

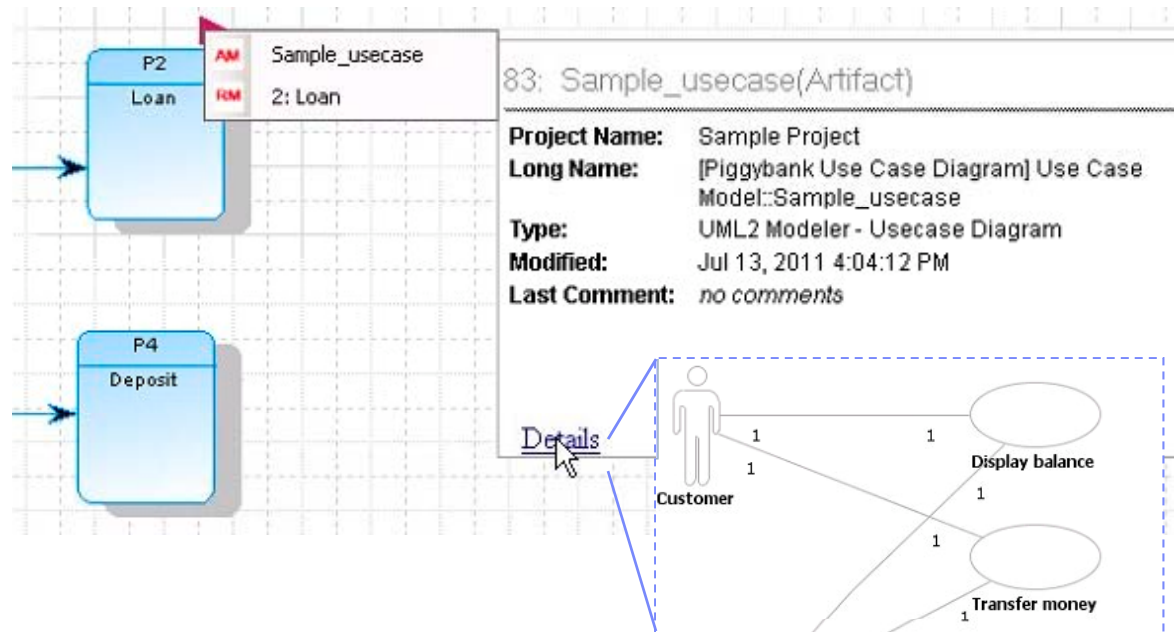
System Architect & DOORS

- Show requirements the EA satisfies via OSLC links
 - Link to Capabilities in DoD reference architectures
- Create requirements via OSLC to be satisfied by systems specification and solution teams
- Show traceability via System Architect Explorer diagrams
 - Visualize across federated architectures
- Visualize on diagrams with navigation to the source



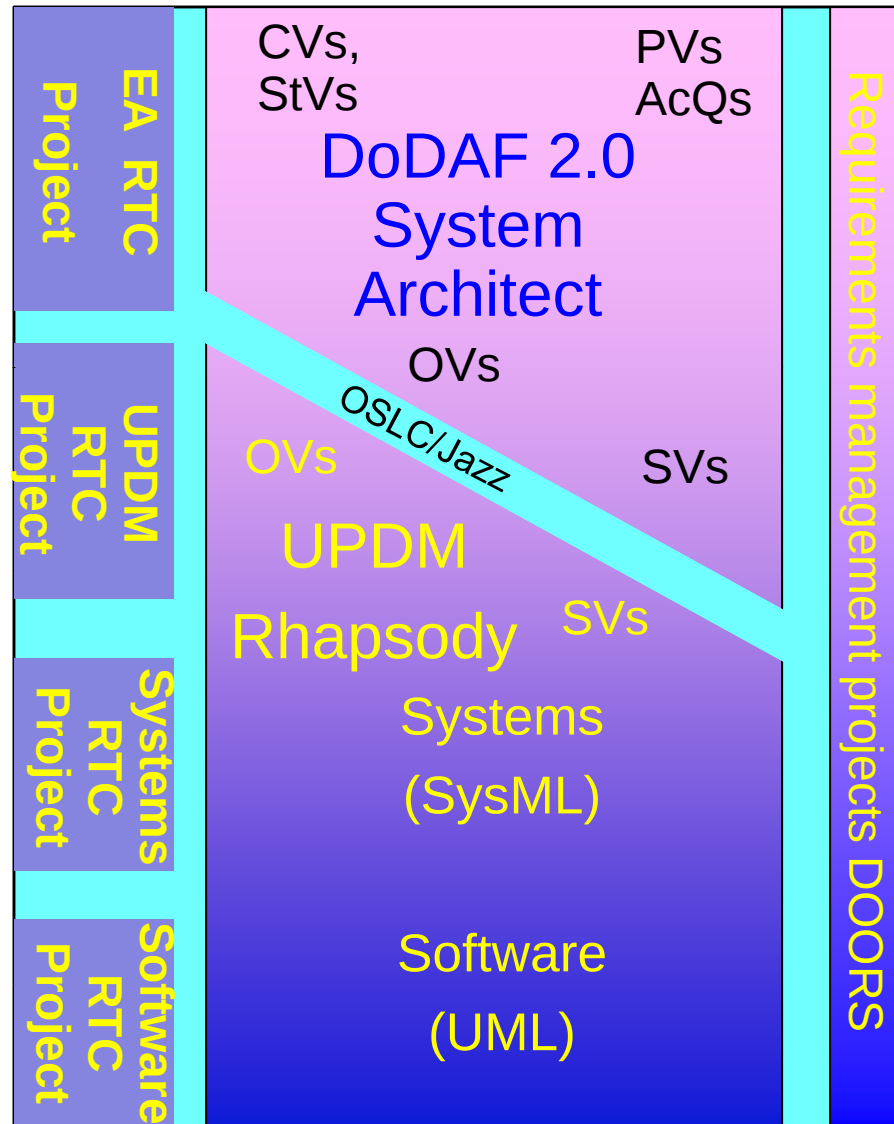
Examples of OSLC usage-Linking across levels of abstraction and tools System Architect and Rhapsody

- Trace from an application object in System Architect to its implementation via Design Manager, to tools like Rhapsody
- Potential to trace from a UPDM Systems view element to its specification in Operational View in DoDAF 2.0 (SV-5a/b)
- Link DoDAF 2.0 artifacts to UPDM or SysML elements in Systems domain
- Visualize on diagrams with navigation to the source



Integration Vision, EA - Systems of Systems - Systems - SW

- Governance of process controlled by Rational Team Concert
- Management of Distributed Projects, Teams and team members
- Guidance of process and work items derived from Practices
- All linked by OSLC and Jazz



**High Level
Enterprise
Architecture in
Agencies, i.e. DoD,
MOD and services**

**OSLC/Jazz
related elements**

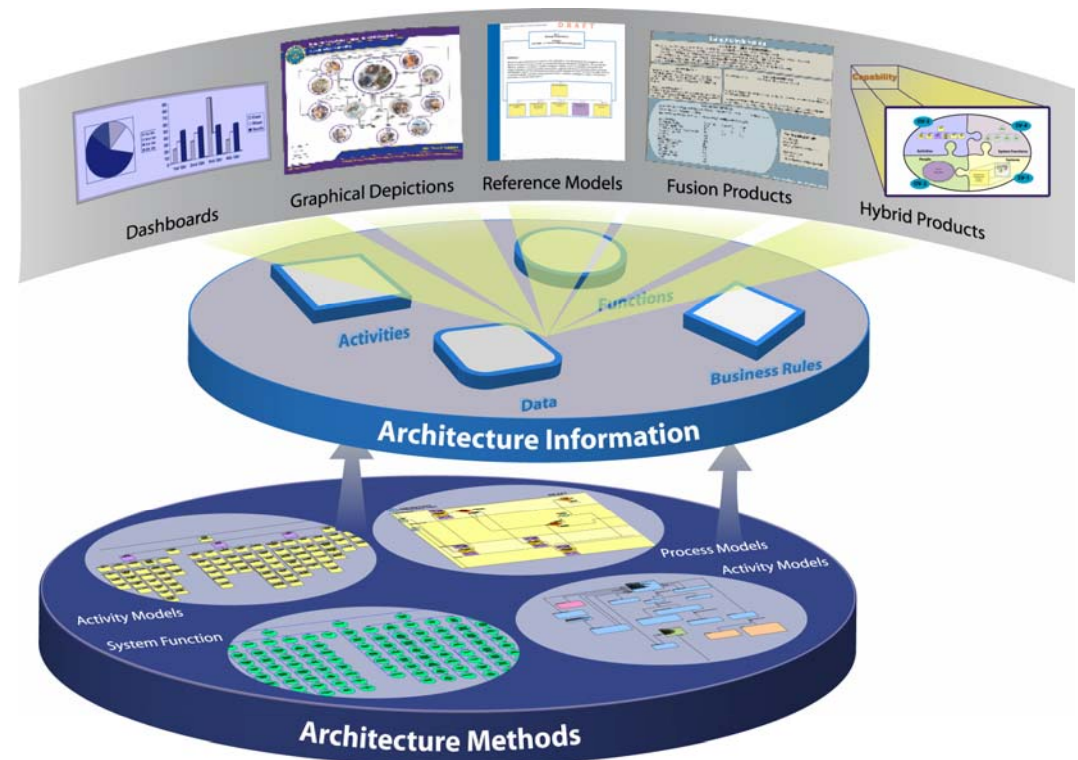
**Allows searching
across federated
architectures**

**More detailed
technical
expression of Ovs
and SVs**

**Primes and Tier 1s
down to
Subcontractors**

Summary

- Current approaches to integrations can be brittle
- Traceability across multiple tools is a challenge
- The Jazz platform includes an open framework for robust, flexible integrations across tools with full traceability via OSLC
- A solid solution to our integration challenges
- Allows you to view and control information across federated architectures
- See Jazz.net for details



IBM investing heavily in the commitment of tying flagship products like SA, Rhapsody and DOORS into the integration architecture called Jazz to help DoD



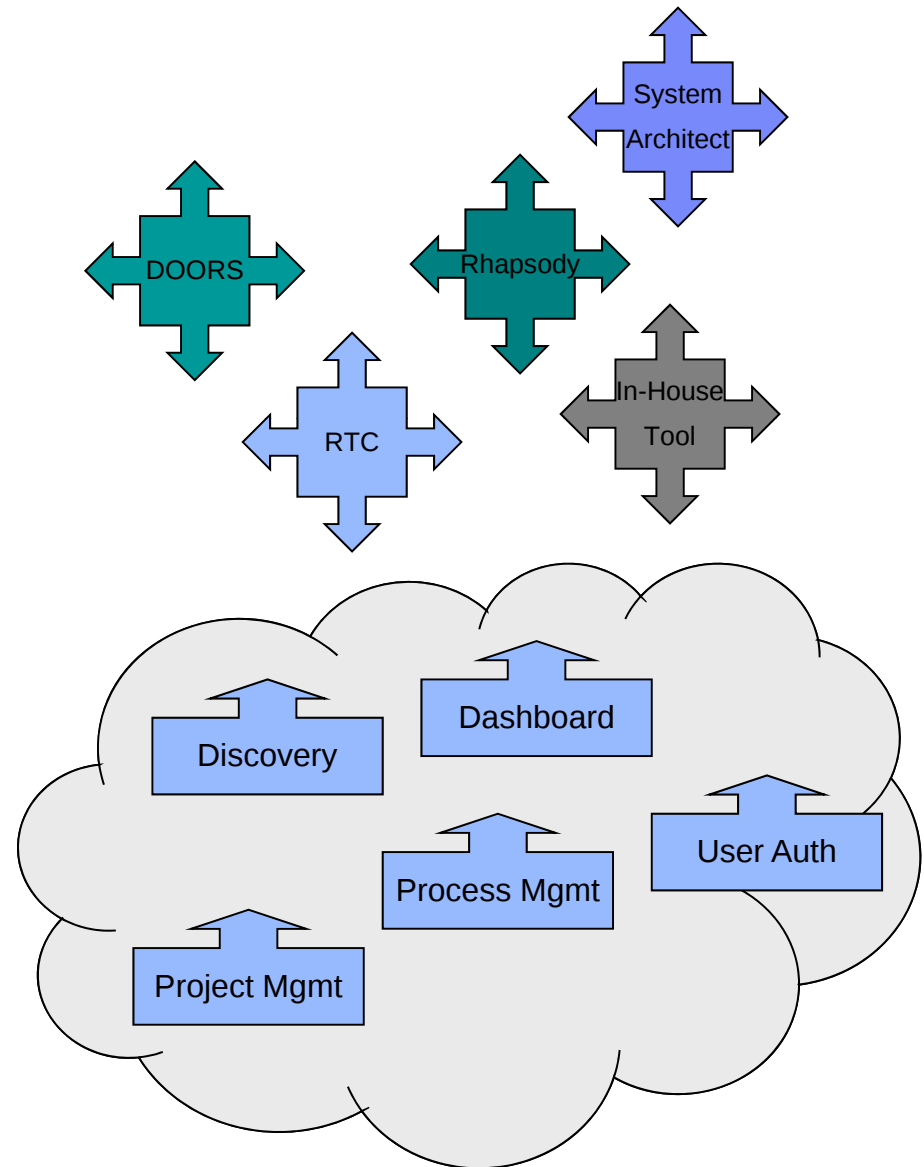
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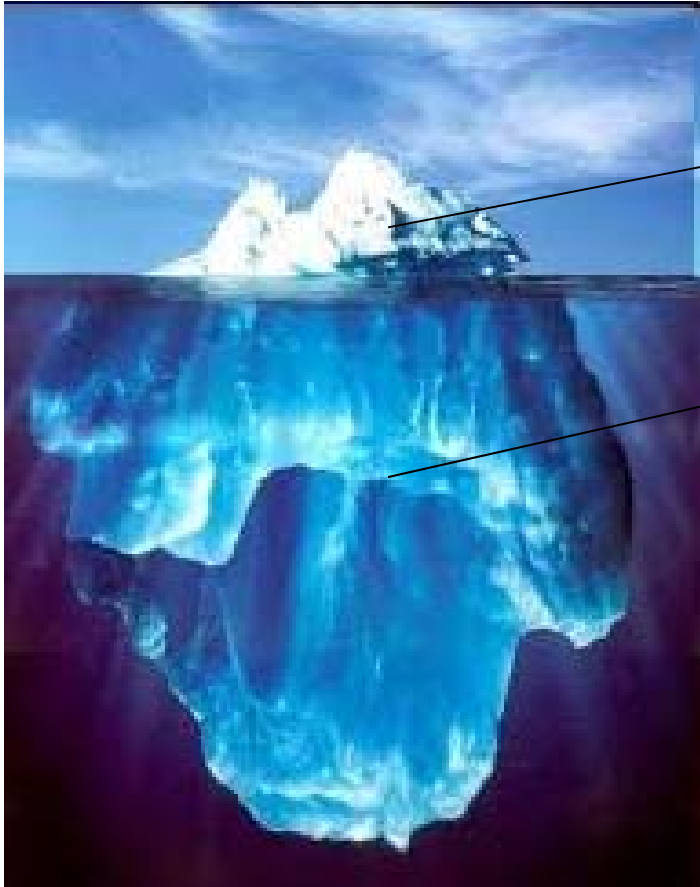
Business Value of Jazz/OSLC Architecture

With Jazz/OSLC, customers can...

- Integrate all of their lifecycle tools: In-house, open source, third-party
- Upgrade (and replace) tools on their schedule
- Expect a more consistent user experience for ease of adoption
- Realize lower TCO resulting from unified tool administration
- Help development teams enact more integrated and collaborative workflows and processes
- Establish better traceability across the lifecycle
- Create integrated reports that draw from data spanning across many tools, including baselines and coordinated views
- Leverage aggregated data to allow measurement, analysis, and overall business process improvement
- Ensure that software and system deployments are more scalable
- Support globally distributed teams



But integration is more than merely “connecting the dots”



- **Tool-to-tool integration:** Integrating user interfaces and enabling navigation between tools is important. It is the most visible part of the problem.
- **Data & Process integration:** Maximizing business value requires full lifecycle linkage and traceability as well as consistent governance, shared processes, and collaborative workflow.

Minimizing cost of ownership also requires shared infrastructure such as searchable indexes across all assets, common reporting, and unified administration of users, projects, and access control.

*Integration between tools is necessary,
but not sufficient*

Jazz provides open collaboration across the software and systems lifecycle

