



Linked Data Platform  
21 April 2015

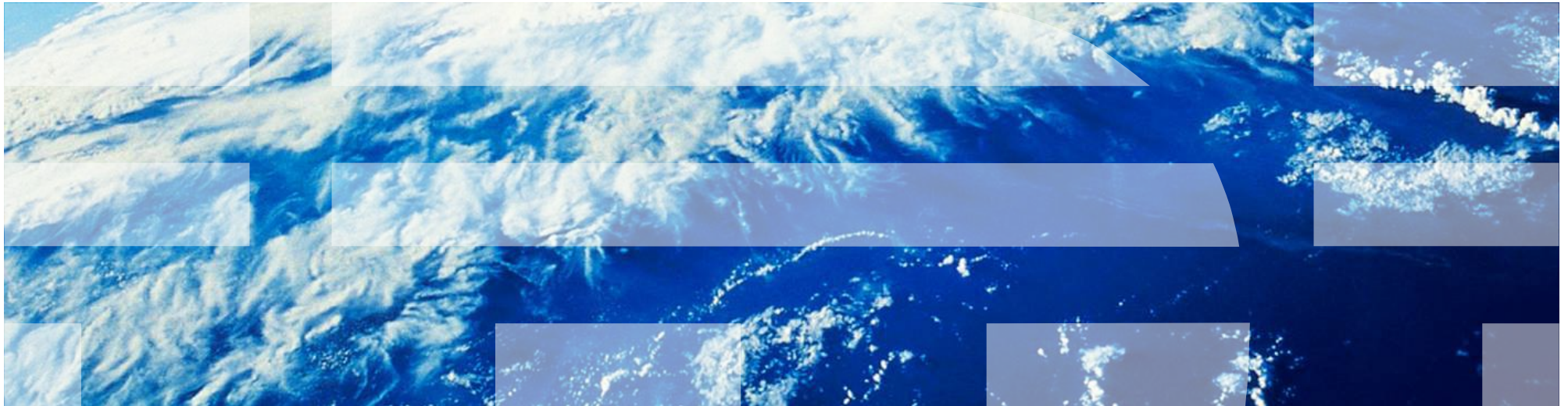


# W3C Linked Data Platform Open Meeting

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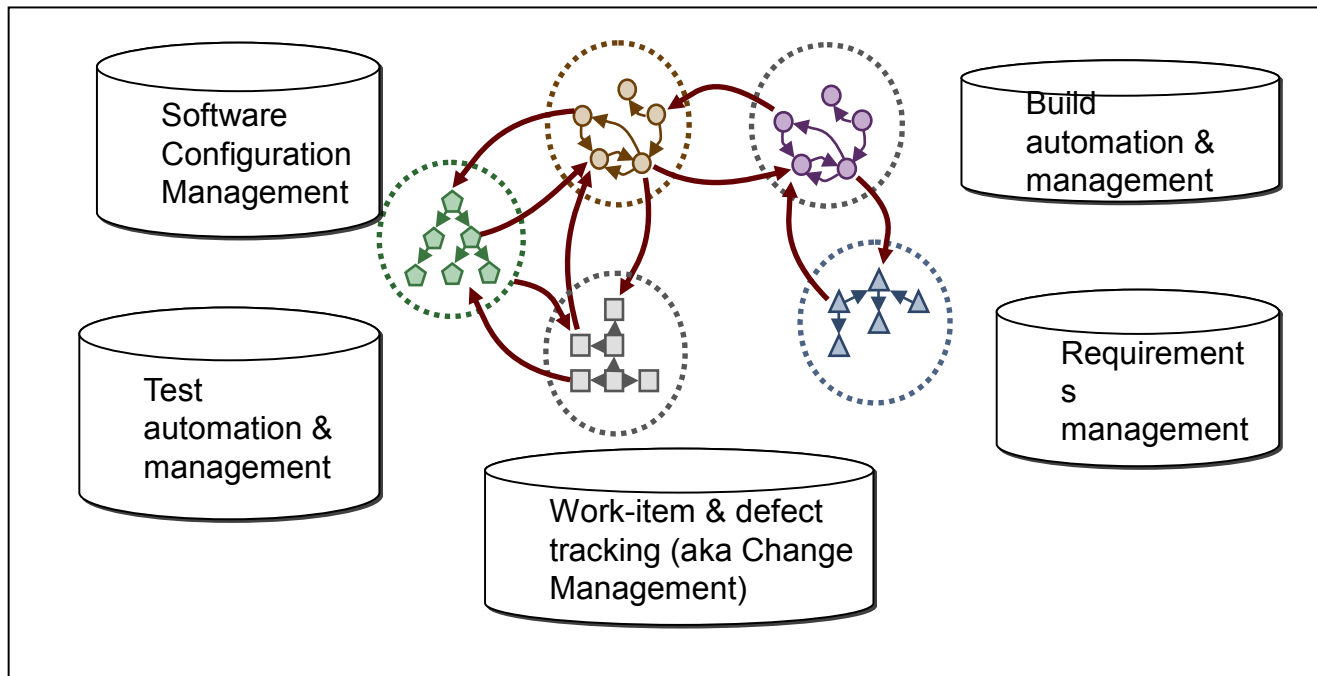




# Year 2010 – IBM Rational's Breakthrough

Integrate with data & open protocols instead of glue code

“If the entire Web can connect like this, why wouldn't the same idea work for ALM?”



Applying Linked Data to the ALM Integration Challenge:

- Artifacts such as defects, change requests, and tests become resources exposed as RDF that can be linked to each other
- Tools simply access the resources via HTTP following the Linked Data principles



# Challenges of using Linked Data

- No formal definition
- State of the art was primarily about publishing **read-only** data on the web, downloaded and updated as large dumps or via a SPARQL entry point
- Tim Berners-Lee's four principles are a terrific foundation but didn't go far enough.
- Developers were left with many unanswered questions:
  - How do I create a resource?
    - It seems obvious that you use POST to create, but what do you POST to?
  - Where can I get the list of resources that already exist?
  - Which vocabulary do I use?
  - Which media types do I use?
  - When resources get big, how do I split the information into pages?
  - How do I specify ordering?



# Open Services for Lifecycle Collaboration (OSLC)

*Working to improve the way software lifecycle tools share data*



## Open Services for Lifecycle Collaboration

Lifecycle integration inspired by the web

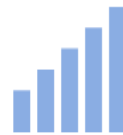
- Community driven and governed
  - 400+ registered community members
  - Workgroup members from 34+ organizations
- Wide range of interests, expertise, & participation
- Open specifications for numerous disciplines
- Defined by scenarios – solution oriented
- Implementations from IBM, BPs, and Others
  - Based on W3C<sup>®</sup> Linked Data



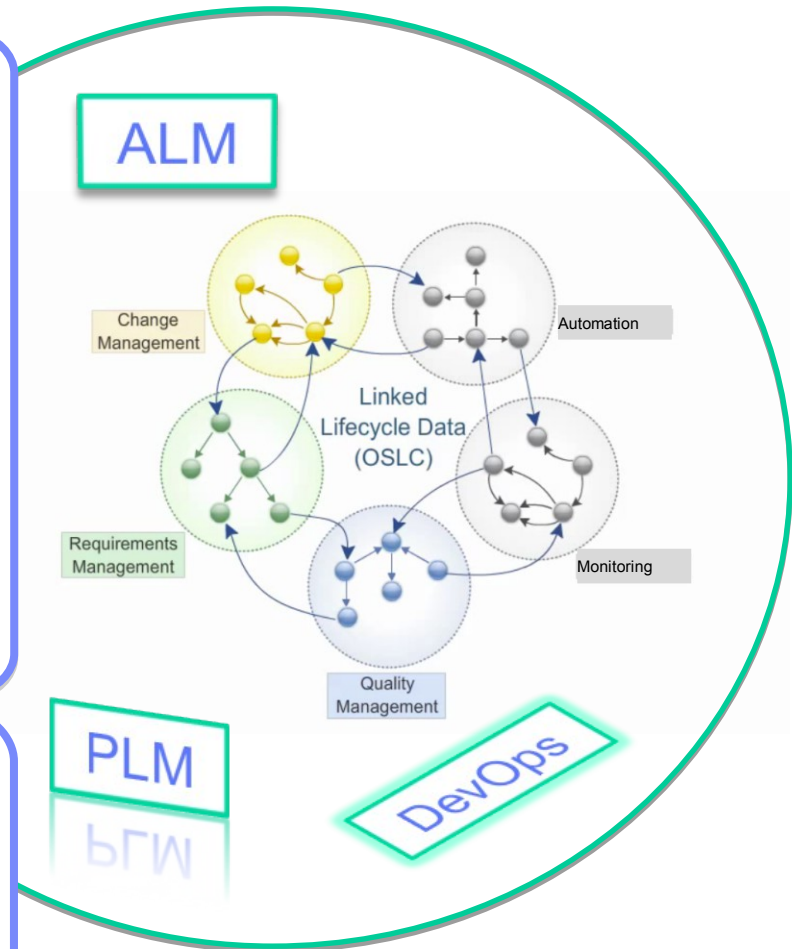
Inspired by the web  
**Proven**



Free to use and share  
**Open**



Changing the industry  
**Innovative**



**open-services.net**

For more info see: <http://open-services.net>



## Possible future work of interest

Several necessary and desirable features are not in scope for LDP 1.0:

- “Inlining”
- Validation/Constraints
  - RDF Data Shapes Working Group developing SHACL
  - How can LDP leverage SHACL?
- Security – Authentication & Access Control
  - WG identified requirements and use cases
  - Several technologies can already be used: OAuth, WebId, etc.
- OSLC Track Resource Set
  - Protocol allowing clients to track state changes to resources
- OSLC Query
  - Simple query mechanism
  - `http://example.com/bugs?oslc.select=dcterms:created,dcterms:creator{foaf:familyName}&oslc.where=cm:severity="high"`