

PROMCODE

PROject Management for COnttracted DELivery

An Introduction to PROMCODE (PROject Management of COnttracted DELivery for Software Supply Chain)

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Scenario



- 👉 **Challenges**
- 👉 **Approach**
- 👉 **Key Contributions**
- 👉 **Technology**
- 👉 **Use Cases**
- 👉 **Collaboration with OSLC/OASIS**
- 👉 **Call for Contributions**

Challenges

- ➡ **Management of a contracted delivery across organizational boundaries is increasing attention**
 - 👉 Global software development including outsourcing and offshore development
- ➡ **Conventional project management of contracted delivery is very ad hoc and causes a big risk**
 - 👉 Error prone and tedious human task for data conversion
 - 👉 Lack of visibility and traceability especially in the large-scale software development



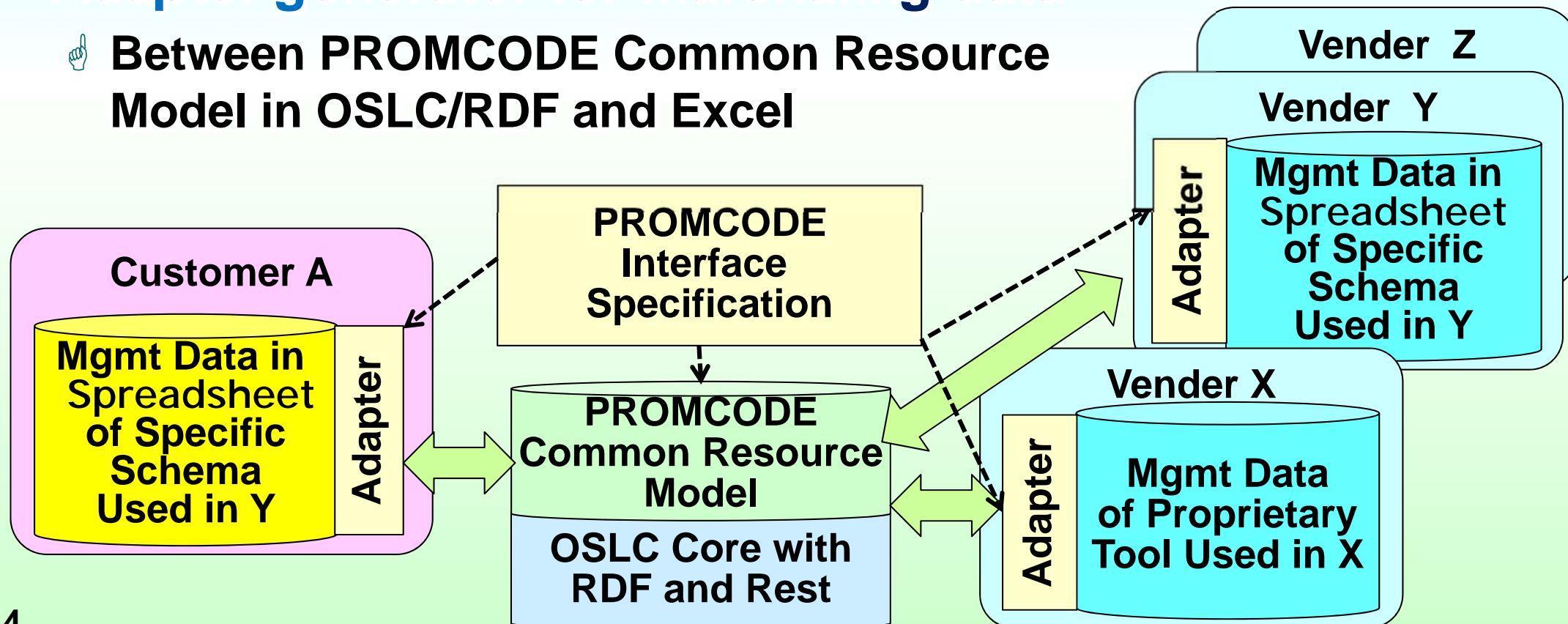
Key Contributions

➡ **Standard interface for exchanging project mgmt data across different organizations/ platforms**

➡ Each organization can keep the conventional management method and tool unchanged

➡ **Adapter generator for marshaling data**

➡ Between PROMCODE Common Resource Model in OSLC/RDF and Excel



Technology

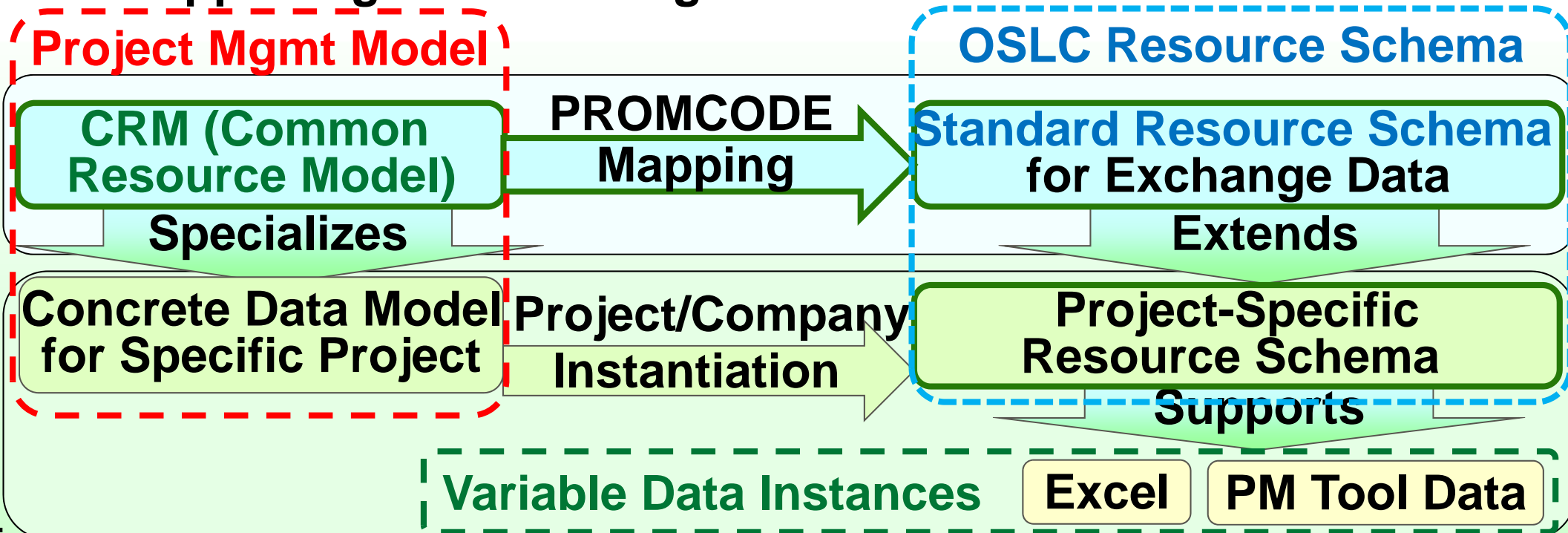
PROMCODE Modeling Framework

➡ Common schema for data exchange through a SSC

- 👉 **CRM(Common Resource Model)**: Domain model of project management
- 👉 **Standard Resource Schema**: Mapping CRM to OSLC resources

➡ Project-Specific Schema for data exchange in a project

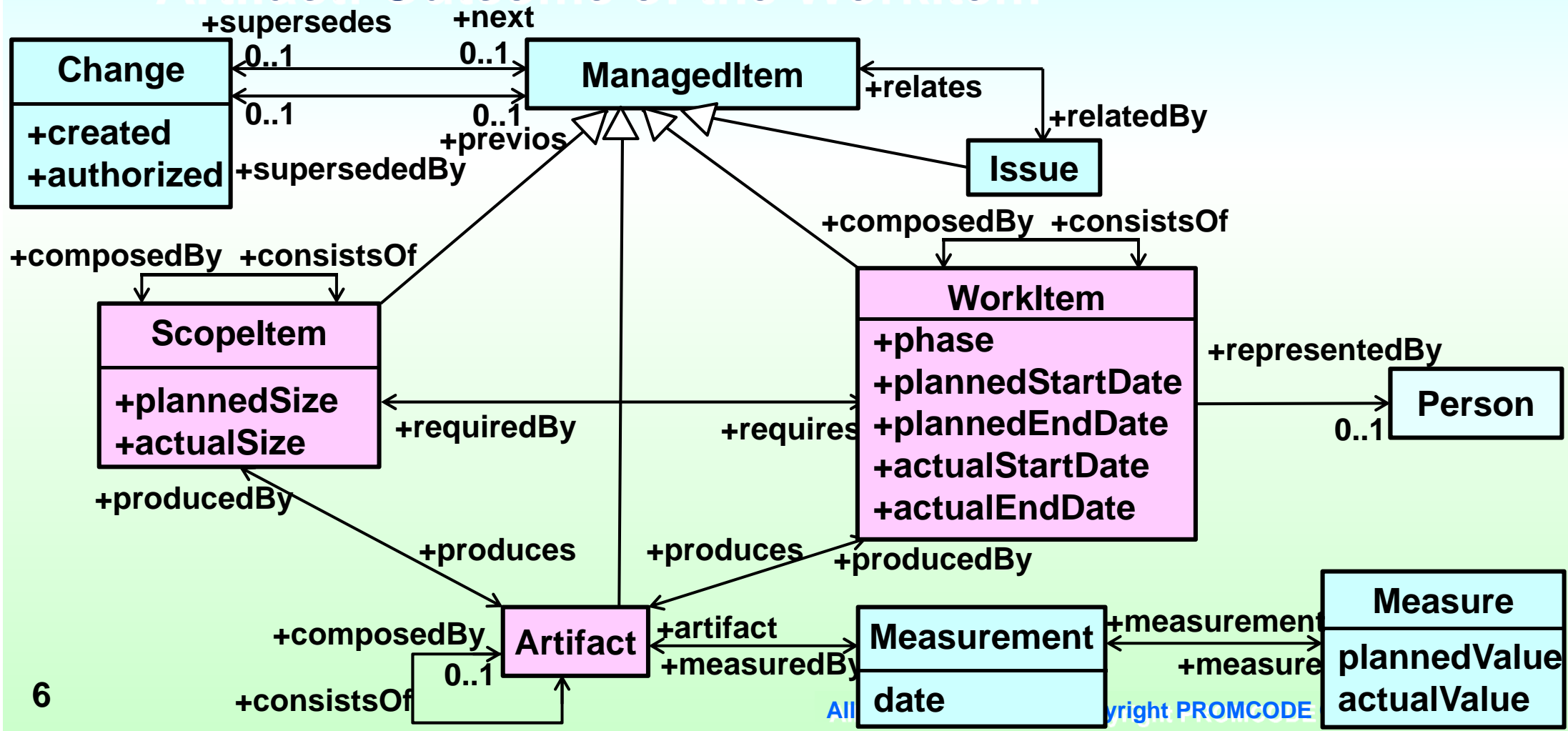
- 👉 Supporting data exchange across tools



Technology

CRM (Common Resource Model)

- ➡ Managing contracted delivery by sharing TRIPLE
- ➡ Scopeltem: Unit of contract and its scope
- ➡ WorkItem: Unit of Wok and its structure
- ➡ Artifact: Outcome of the WorkItem

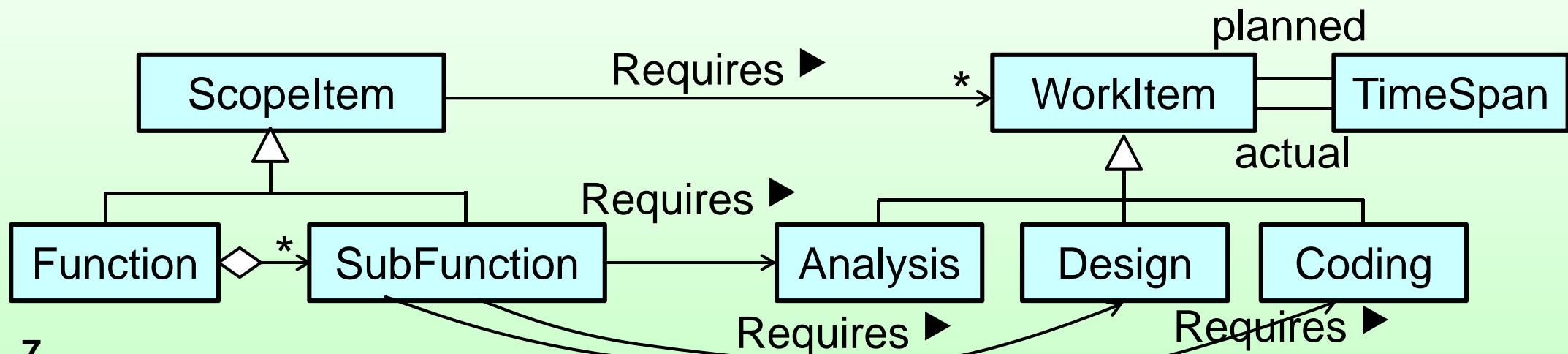


Technology

CRM (Common Resource Model): An Example

👉 A contracted is decomposed into two functions

Function	Sub-Function		Analysis		Design		Coding	
			Start	End	Start	Start	End	Start
A	A1	Planned	6/4	6/11	6/12	6/19	6/20	6/27
		Actual	6/4	6/10	6/11	6/19	6/20	6/26
	A2	Planned	6/4	6/11	6/12	6/19	6/20	6/25
		Actual	6/4	6/12	6/13	6/20	6/21	6/26
B	B1	Planned	6/4	6/11	6/12	6/19	6/20	6/27
		Actual	6/4	6/12	6/13	6/20	6/21	6/28
	B2	Planned	6/4	6/11	6/12	6/19	6/20	6/26
		Actual	6/5	6/11	6/12	6/19	6/20	6/25

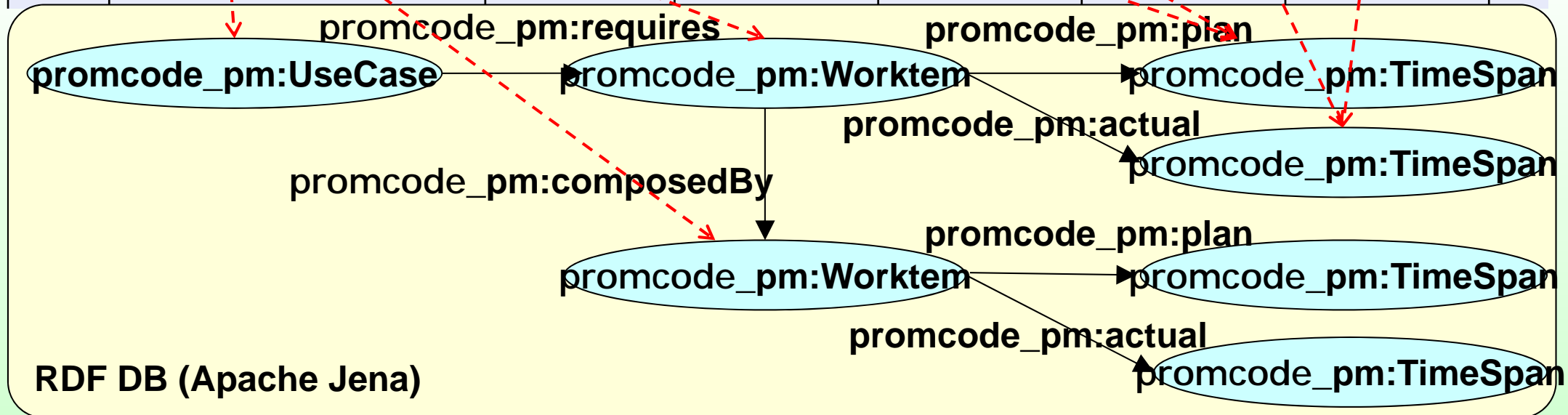


Technology

Mapping PROMCODE CRM to OSLC Resource Schema

☞ Mapping PROMCODE CRM to Standard Resource Schema in OSLC RDF

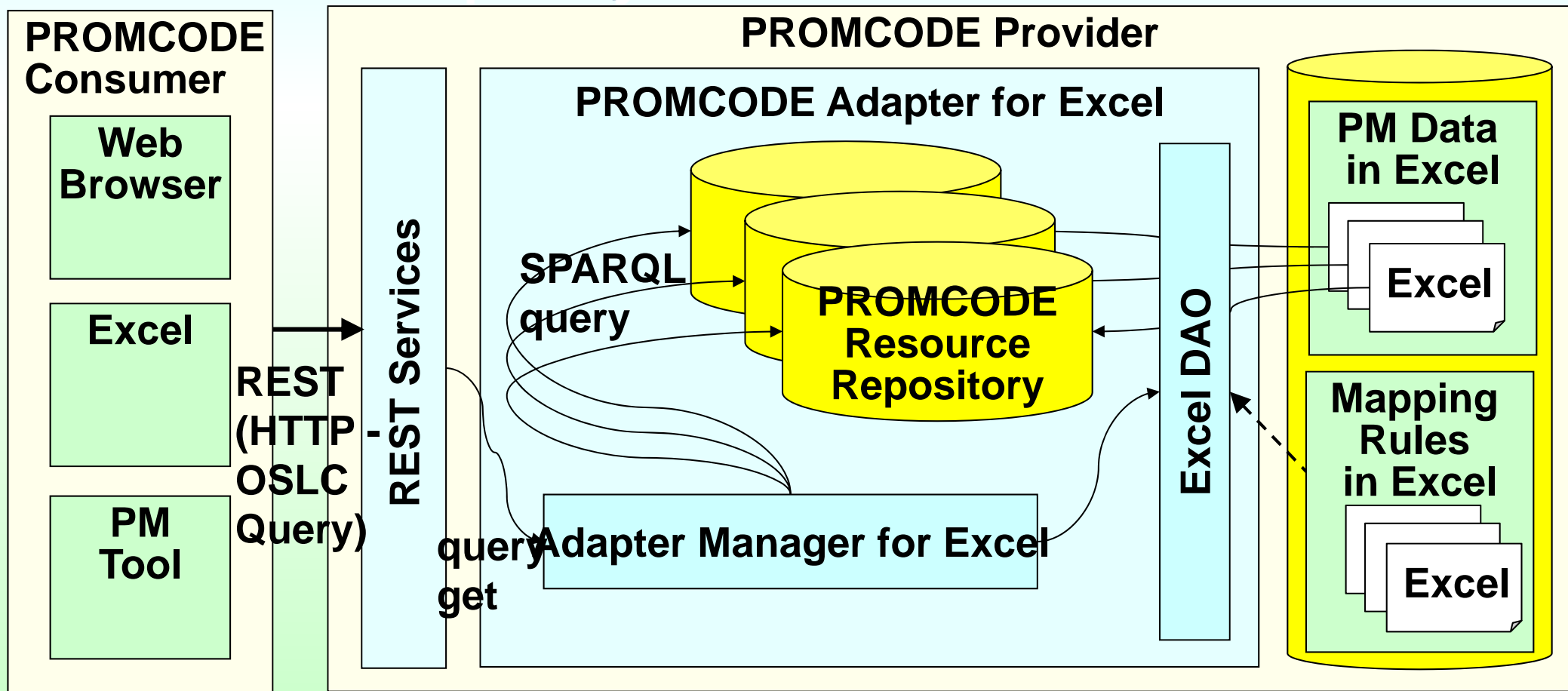
ID	Process/Activity	Person In Charge	Plan		Actual		
			Start	End	Start	End	
1	Requirements Eng.	Suzuki	2012/05/21	2012/06/21	2012/05/21	2012/06/15	
1.1	Req. Elicitation		2012/05/21	2012/05/30	2012/05/21	2012/05/29	
1.1.1	Stakeholder Analysis						
1.1.2							



Technology

Automatic Data Conversion by Support Tool for Excel

- ➡ Generation of adapters between PROMCODE Standard Resource Schema and Excel
- ➡ Define mapping rules in Excel
- ➡ Available at Eclipse/Lyo



Technology

Automatic Data Conversion by Support Tool for Excel

👉 Customization of adapter for Excel by specifying mapping file in Excel

Instance Type Name

Resource Type Name

Resource URL

Properties for the Resource

Condition to generate resource

	B	D	F	G	H	I	J	K
1	resource				property			
2	name	type	line	uri	name	type	column	reference
3	UCL1	promis_pm:UseCase	[2,*,exist(L)]	"UCL1"+[1,B]+[C]				
4					title	String	L	
5	WIL1	promis_pm:WorkItem	[2,*,exist(L)]	"WIL1"+[C]				
6					requiredBy	Resource		UCL1[sameLine]
7					responsibleFor	Resource	S	searchPerson(S)
8					plannedStart	Date	T	
9					...			
10					...			
11	UCL2	promis_pm:UseCase	[2,*,exist(M)]	"UCL2"+[C]				
12					composedBy	Resource		UCL1[mostRecent]
13								
14								
15			例:				例:	
16			[3,*]	3rd row and below			UCL1[1]	UCL1 instance in the 1st row
17			[2]	2nd row				
18			[2,*,exist(L)]	2nd row and below, and L column has a value in the row				

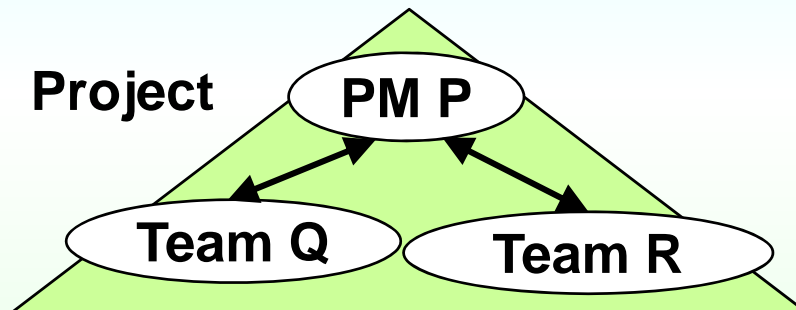
Use Cases



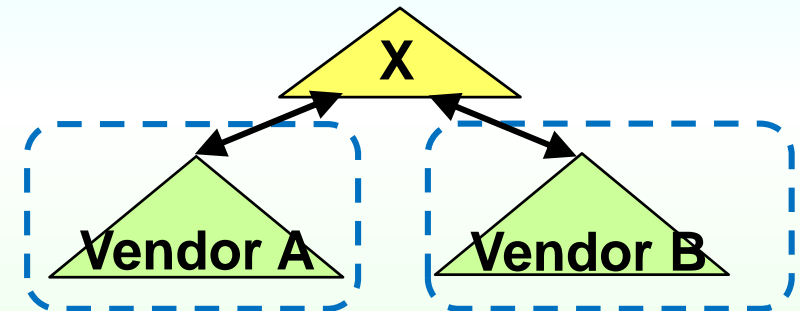
👉 Four scenarios of contracted delivery on a SSC

👉 We conducted a set of experiments

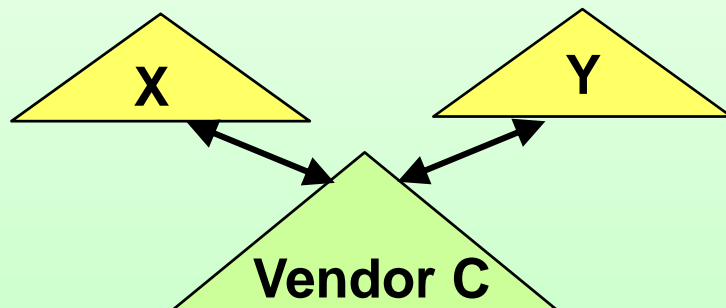
Scenario 1: Collaboration between PM and multiple teams Using different management schema within a project



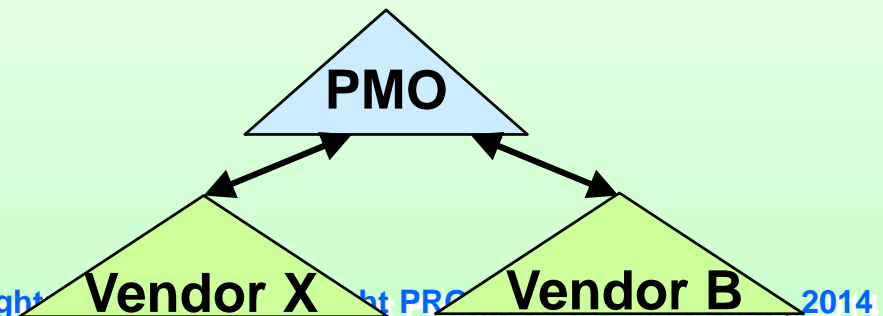
Scenario 2: Collaboration between a customer and multiple vendors using different management schema



Scenario 3: Collaboration between a vendor and multiple customers (X, Y) using different management schema



Scenario 4: Collaboration between a PMO and multiple projects using different management schema within a corporation

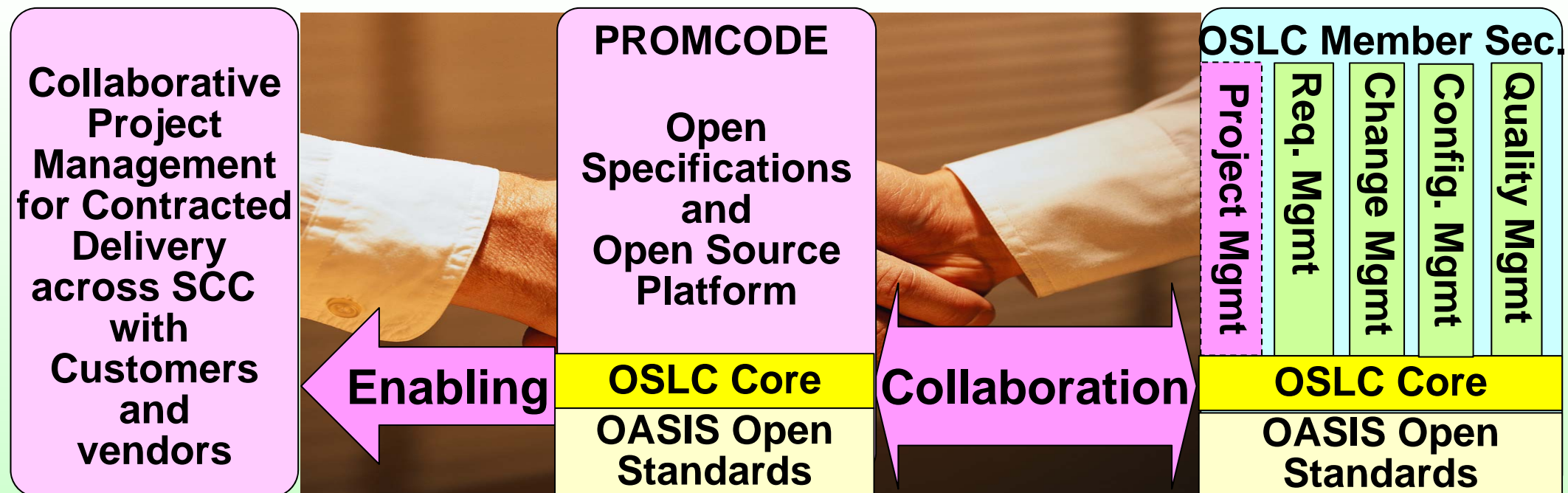


Collaboration with OSLC/OASIS

Call for Contribution

➡ **PROMCODE specification is intended to standardize at OASIS OSLC Lifecycle Integration for Project Management of Contracted Delivery for Software Supply Chain (OSLC-PROMCODE) TC**

👉 **Registration will due on 18 March, 2014**



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Thank You!

**For Further Information
Please Visit to
<http://www.promcode.org/en/>**