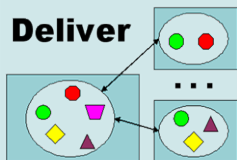


Deliver: Knowledge-based Software Delivery

Tijs van der Storm



Universiteit Utrecht

Jacquard

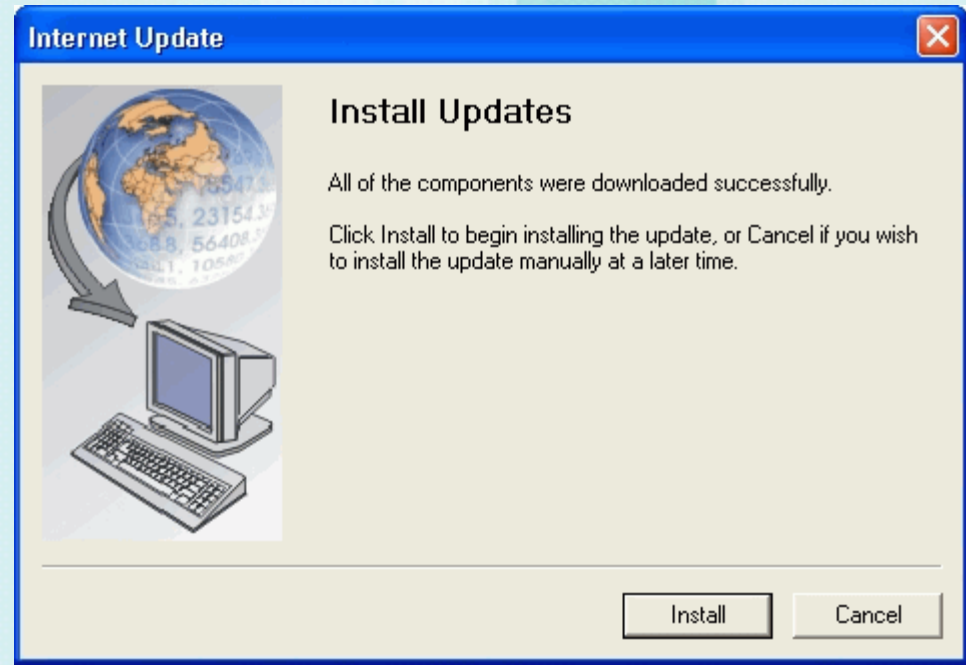
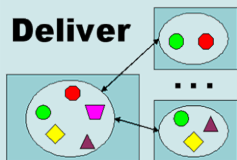
Introduction

■ Motivation: many...

- Components
- Versions
- Variants
- Branches
- Users
- ...and their dependencies

■ How to automate delivery?

■ Software knowledge base



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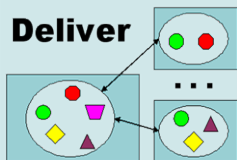
Research approach

■ Case studies:

- Exact Software
- Stabiplan
- GX
- Planon
- e.a.

■ Tool prototyping

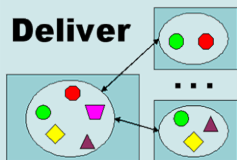
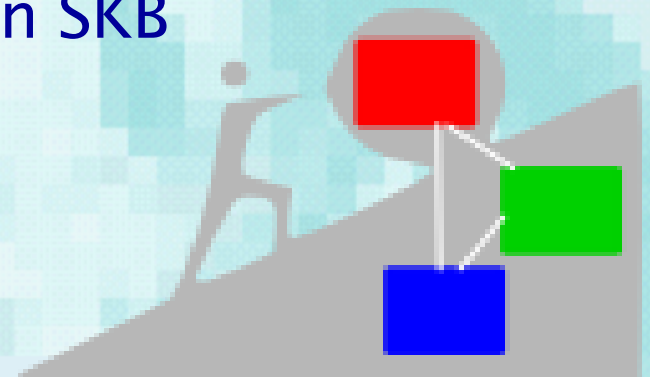
- Sisyphus continuous integration and release tool
- Platform for customer–vendor interaction



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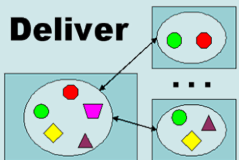
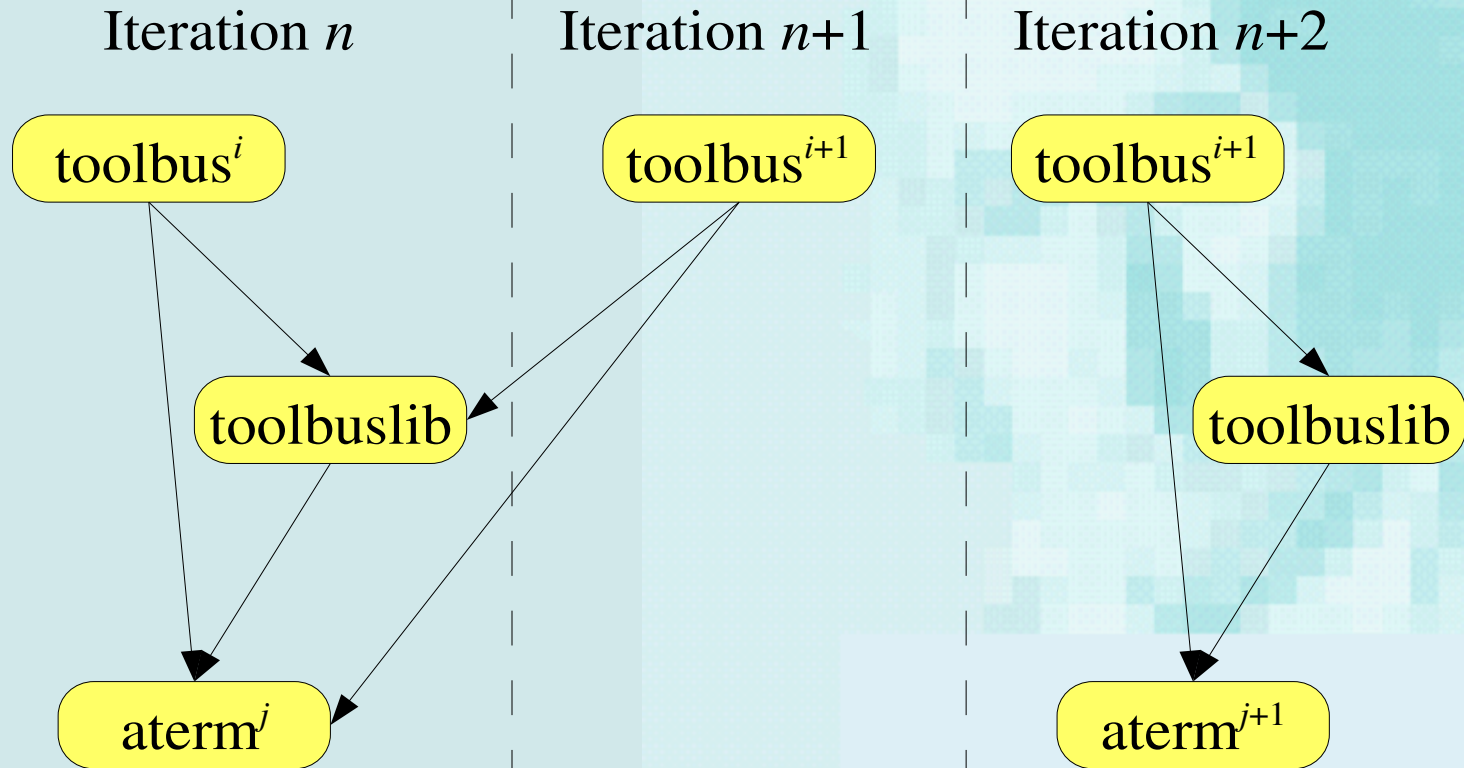
Sisyphus: integration is key

- Extend continuous integration to release and delivery
 - After every change, integrate, “release” AND deliver
- Maintain accurate Bills-of-Materials in SKB
 - Identify exactly what went into a release
- To shorten release & delivery cycles
 - Incremental builds
 - Backtracking
- Live version: <http://sisyphus.sen.cwi.nl:8080>



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Incremental builds



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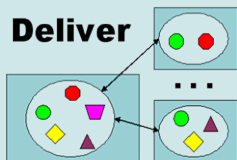
Pheme: knowledge distribution network

■ Customer communication is a bottleneck

- Software updates
- License renewal
- Bug reports & feature requests
- Usage statistics
- Commercial information

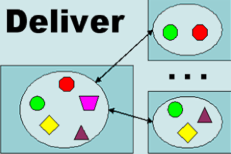
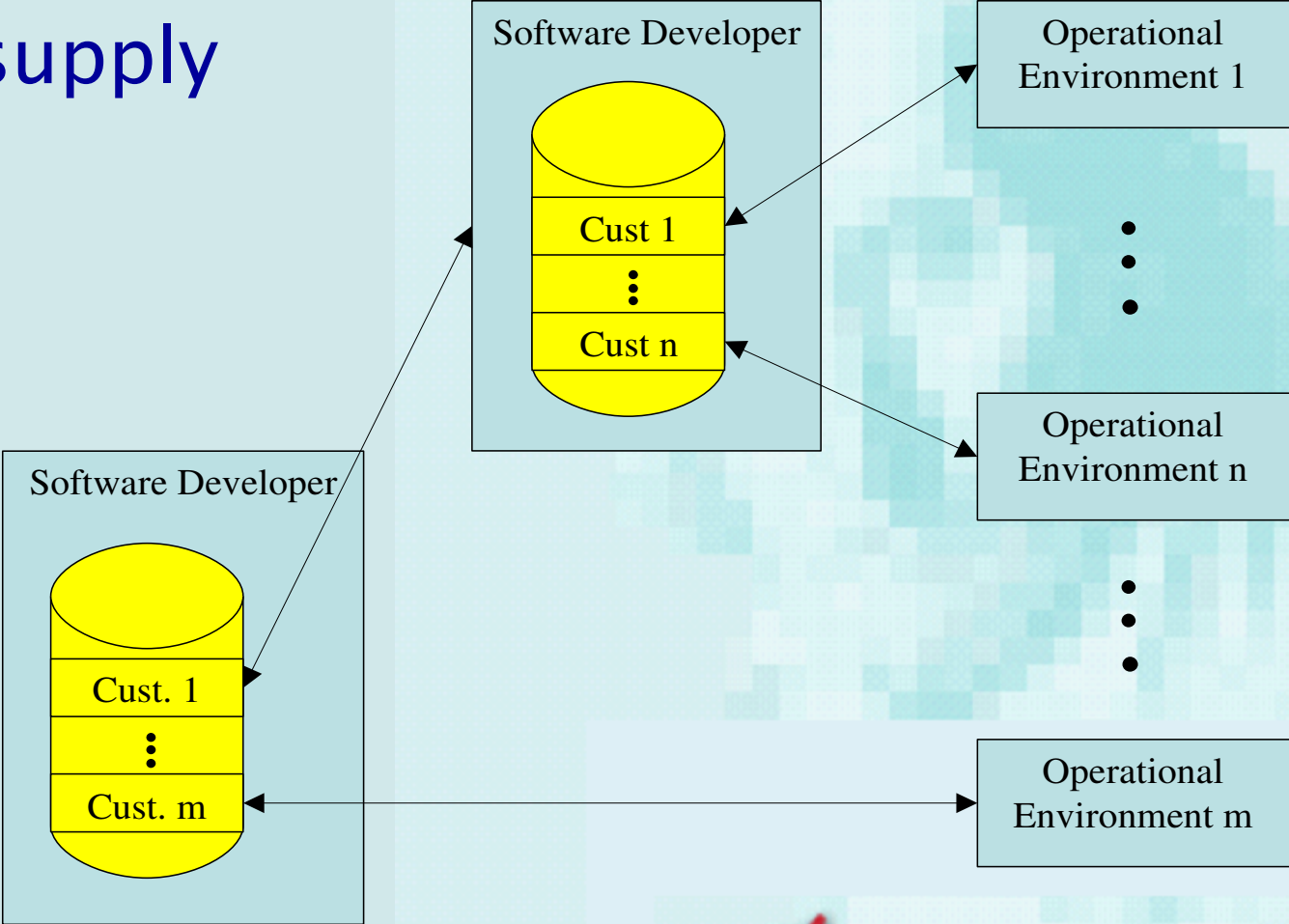
■ Prototype implementation of Pheme:

- Federated architecture
- Communication over SOAP



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Software supply networks



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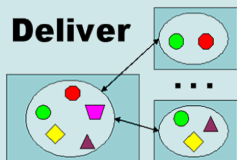
Conclusion

■ Software delivery needs knowledge-management

- Integration as a crucial release step
- Identification of bills of materials
- Communication infrastructure

■ Current & future work

- Better integration of Sisyphus with software configuration management activities
- Integration across Software Supply Networks

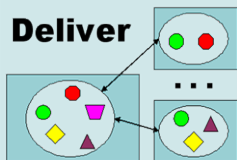


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Thank you

■ More information:

- Slinger Jansen
 - slinger@cs.uu.nl
 - <http://www.slingerjansen.nl>
- Tijs van der Storm (me)
 - storm@cwi.nl
 - <http://www.cwi.nl/~storm>



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Web of Sisyphus

Web of Sisyphus

[Builds](#) [Sessions](#) [Packages](#) [Hosts](#) [Logs](#) [Sisyphus](#) [Statistics](#)

Status	breezer.sen.cwi.nl	
Builds	JJTraveler	success 14:47 14/08
Sessions	JReIcal	success 14:47 14/08
Packages	apigen	success 14:47 14/08
Hosts	asc-support	success 14:47 14/08
Logs	asf	success 14:47 14/08
Sisyphus	asf-library	success 14:47 14/08
Configuration	asf-support	success 14:47 14/08
	asfsdf-meta	success 16:52 14/08
	aterm	success 14:47 14/08
	aterm-java	success 14:47 14/08
	balanced-binary-aterms	success 14:47 14/08
Profiles	config-manager	success 14:47 14/08
Sources		
Script		

Recent builds

meta-doc: success
apps.cwi.nl at [16:04 14/08](#)

sdf-apigen: success
apps.cwi.nl at [16:04 14/08](#)

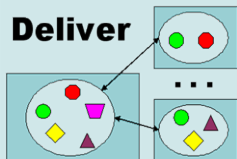
apigen: success
apps.cwi.nl at [16:04 14/08](#)

asfsdf-meta: success
apps.cwi.nl at [16:04 14/08](#)

sdf-meta: success
apps.cwi.nl at [16:04 14/08](#)

sdf: success
apps.cwi.nl at [16:04 14/08](#)

pgen: success



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Web frontend Pheme

Pheme Management

Welkom, **slinger**. Documentatie / Change

Pheme Menu

- Communication
 - Provided Services +
 - Required Services +
- Inbox
 - Downloaded Files
 - Downloaded Reports
- Outbox
 - Provided Files +
 - Provided Reports +
- System Management
 - Policies +
 - Notifications +
 - System logs
- User Management
 - Users +
 - User groups +

Policy Joomla10InstallPackage

Service	Joomla
Channel	JoomlaInstall
Type	filePackagePolicy
Is active	True
Owner	slinger
Package Name	Joomla10InstallPackage

[Edit](#) [Create new](#)

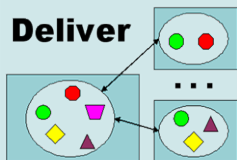
Create a new refresh event

Create a new package trigger event

This policy has the following action sequence:

Action name	package_selection	Package name	Which Box	params
customAction			I	C:\Progra~1\xampp\htdocs\joomla\joomla1.0.10\fillDB.bat
unzip	Joomla10InstallPackage	Joomla10InstallPackage	I	C:\Program Files\xampp\htdocs\joomla\

[Create a new action](#)



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