Fast introduction for NEST Project Platform v 1.2

+ System Test Case Story

Marko "NarsuMan" Rintamäki 2010



Agenda

- ·What is NEST Project Platform?
- Technology and virtualization
- ·NEST deployment in organization
- NEST process and tool flow
- ·System Testing Case Story



What is NEST Project Platform?

- "MPP" Micro Project Platform
- Collaborative and constructive working environment
- Cost efficient tool selection (Open Source)
- Low administration overhead
- Based on virtualization
- · Fast Ramp up

"Nest for a project"



NEST Project Platform in short!





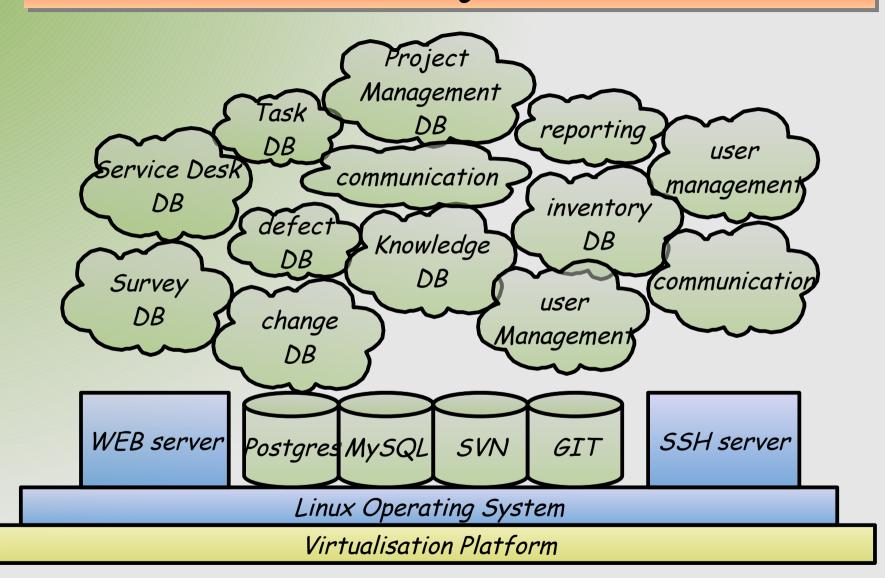
Linux Server

- Error management
- Version control
- Issue tracing
- •Data storage
- · Build service
- •Statistic
- Forums
- Test management
- Intra-Knowledge base
- Collaboration

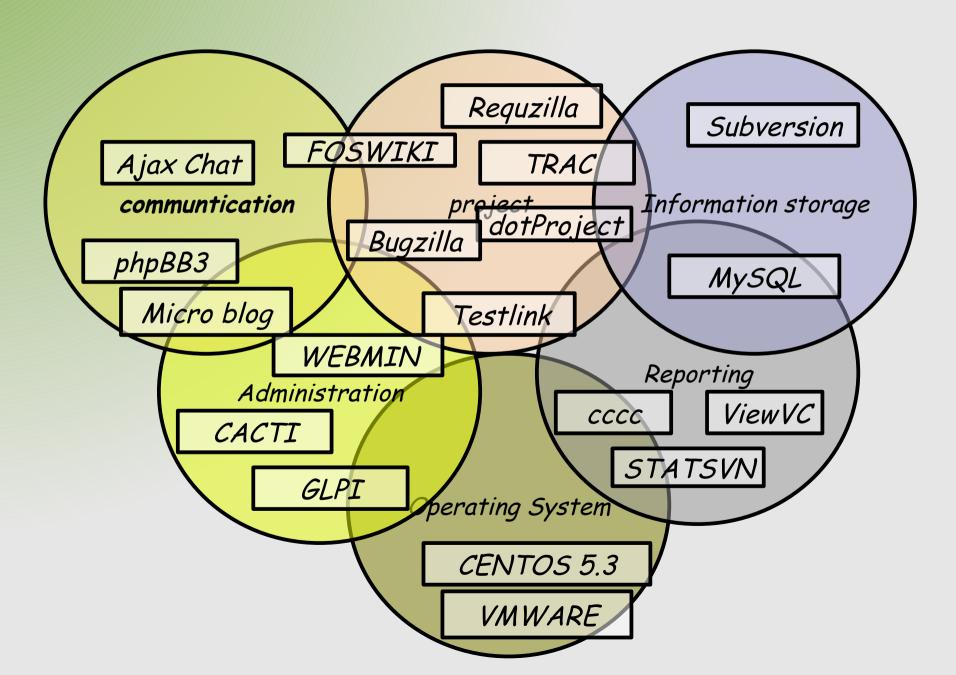


Project Team

What is NEST Project Platform 1.2

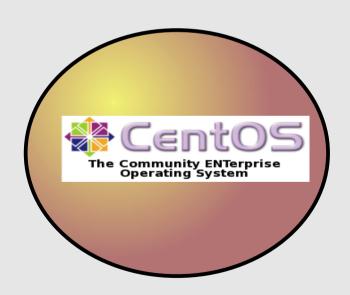


NEST tool domains



NEST Project Platform Technology

- NEST v1.2 is based mainly on Open Source software components which are pre-installed on one virtual machine image.
 - Server platform Linux
 - (Centos 5.4)
 - Database MySQL (5.1)
 - Authentication OpenLDAP
 - Web Server Apache (2.2)
 - PHP 5.0 Python 2.4 Perl 5.8
 - Virtualization using VMWARE



NEST ideology #1

Collaborative working (based heavily on WIKI usage)



- Project teams know how to solve problems platform should not restrict solutions!
- Ready for modifications according project needs



- Tools are able to fix if there is problems
- Platform is agile for further development

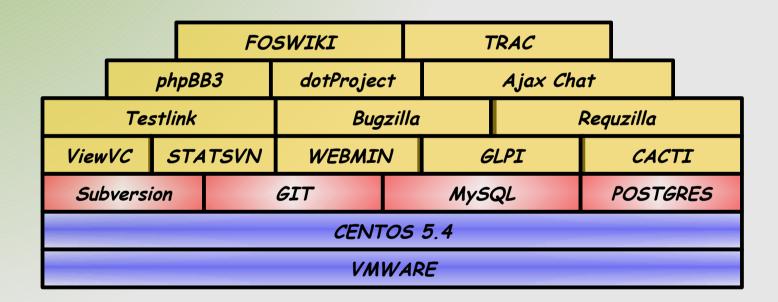


NEST ideology #2

- Low license costs (Possible to reach O€) makes possible to build efficiently multiple independent projects
- · All project are using same tools without limits
- Good integration between process and tools

 (Centralized authentication, common database and local trust for all users)
- Easy to maintain (Documented administration work)

NEST 1.2 Tool "Architecture"



NEST 1.2 Tool Matrix

	Project Management	Task Management	Developmen t Process	Team Collaboratio n	Knowledge Management	Defect Management	Risk Management	Change Management	Data Storage	Adm inist ratio n	Rep ortin g
Foswiki	Х	Х			Х		Х	Х			х
Trac		Х	Х		Х	Х					х
Bugzilla						Х					х
Requzilla								Х			х
Ajax Chat				Х	Х						
phpBB3				Х	Х						
dotProject	Х										
MySQL									Х		
GIT									Х		
Webmin											
Subversion			Х						Х		
StatSVN			Х								Х
GLPI phpLDAPAd		X			Х						х
min											

Best of Breed Open Source Tools

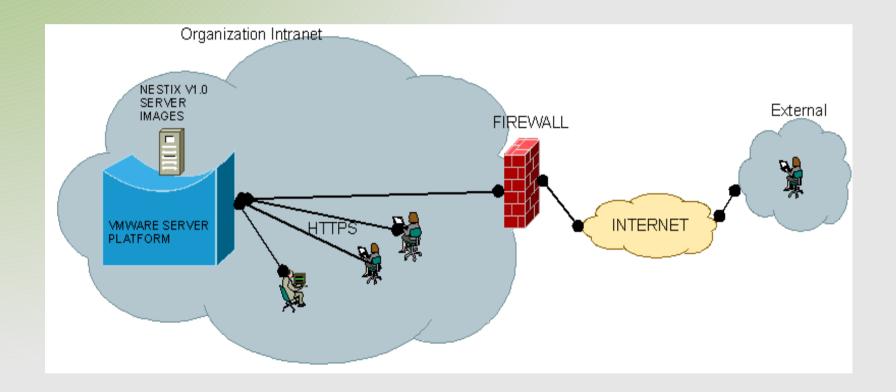




Deployment in organization

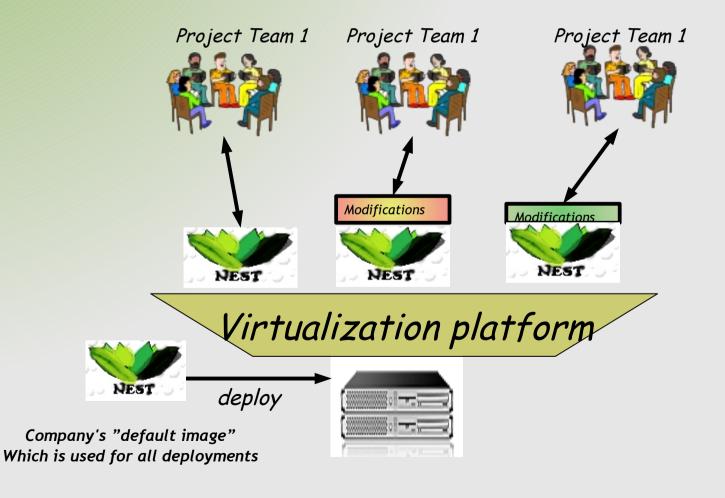
NEST working in network

NEST Server could be located on DMZ (Demilitarized zone)
 where it is available for dedicated organizations or members.

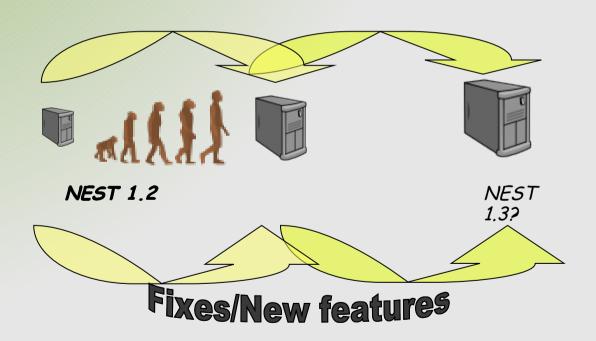


Benefits of virtualisation

- Same default server can be deployed for several groups
- Projects can modify own working environment



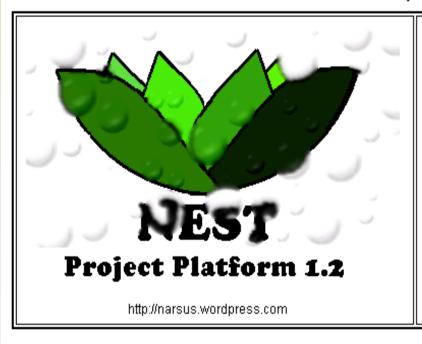
NEST - Foundation for learning project organization?



NEST 1.2 as working environment

NEST as virtual working environment

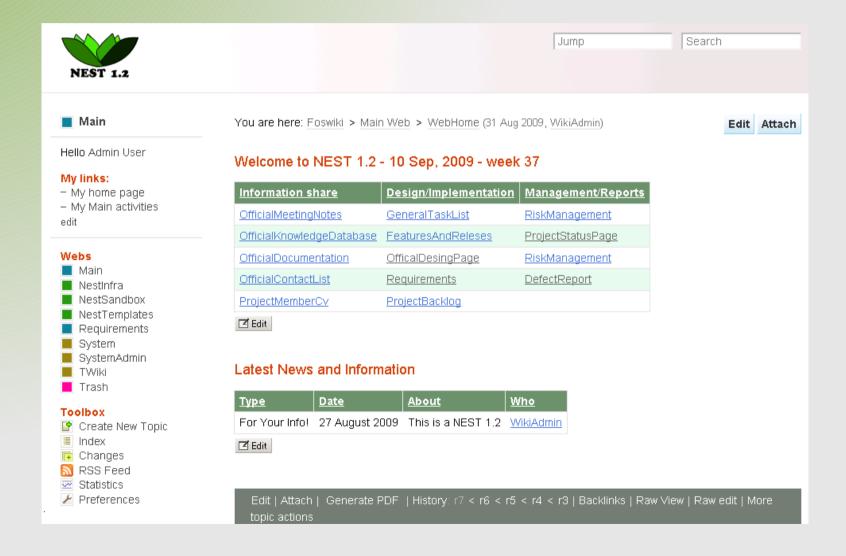
Welcome to NEST v1.2 Project Platform!



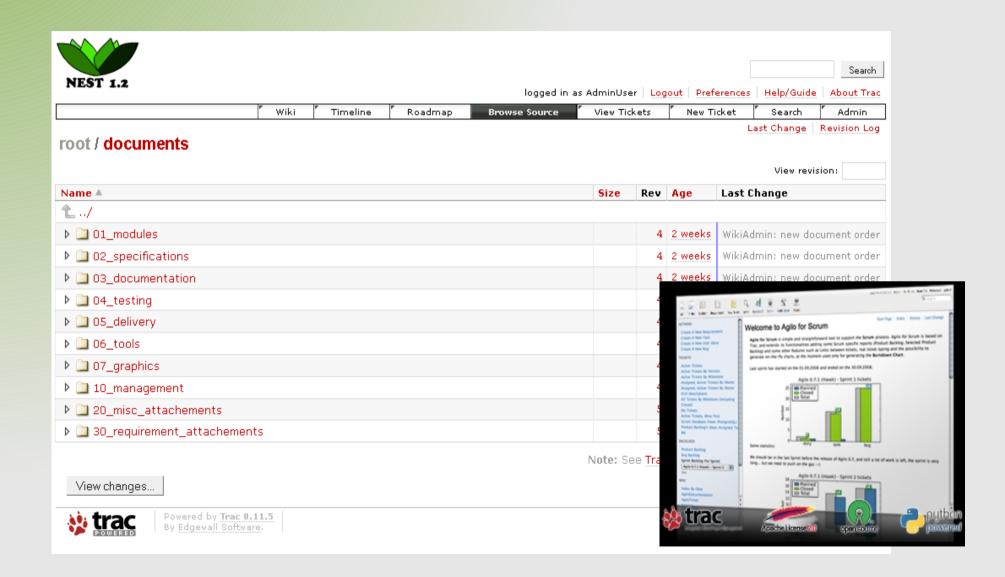
Wiki
Tasking
Project Management
Requirement Management
Version Control Status
Defect Management
Test Management
Forum Chat
Project Service Desk
Change Password
About NEST 1.2

BACK

WIKI as core technology

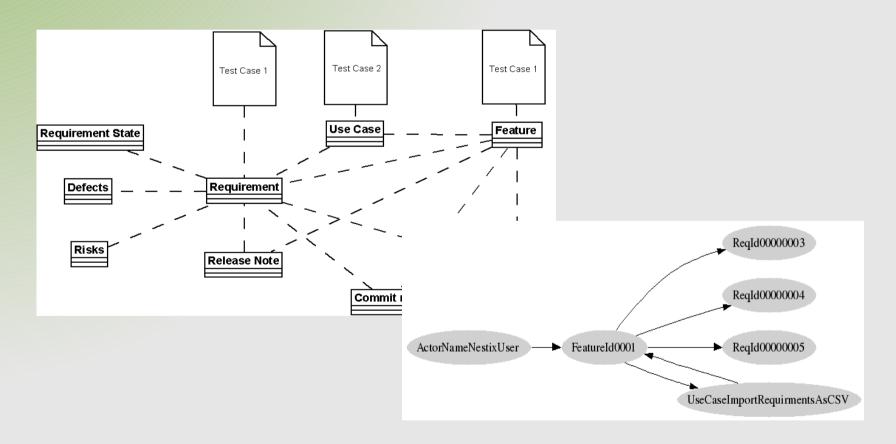


TRAC + Agilo 42



Requirements, traceability and testing

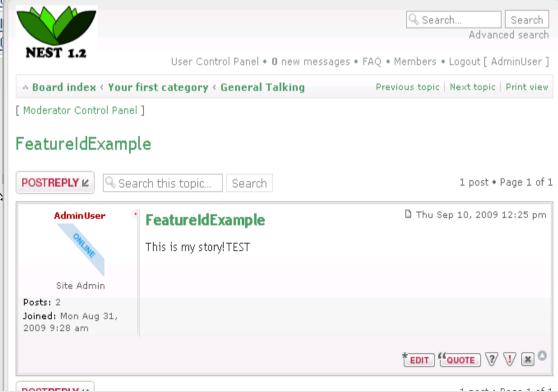
• TWIKI with several integration plug-ins provide high level traceability between different tool domains



Integrations between tools

Features and requirements as references

Feature Id	Description	Requireme
FeatureId0001	Local control panel	Regid000006, Regid000009, Regid000010, Regid000012, Regid000053, Regid000044, Regid000110, Regid000111,
FeatureId0002	General MIDI support	Regid000001 Regid000002 Regid000003 Regid000011 Re StakeHolderRegid2
FeatureId0003	Adjustable Hit Level	Regid000043, Regid000045,
FeatureId0004	USB Flash drive	Reqld000054
FeatureId0005	Metronome mode	Regid000027, Regid000
Featureld0006	Kit Cover replace	Regid000030, StakeHol Regid000150, Regid000



Test management

Passed

Failed

Blocked

Not Run

ID 112 :: Test Case Battery level shown on the Kit

Version 1

Summary

Battery level must be shown on the KITs screen

Steps

- 1. Turn the KIT on
- 2. Look for the battery level indicator
- 3. Play drums for 5 minutes
- 4. Take another look at the battery level

Expected Results

- After turning the level indicator
- After turning the level is shown
- After playing with indicator has disa
- 4. After playing with indicator is still sl

48%

Test Plan : System Testing

Test Suite	Test Case	Test Build 6	Test Build 7	Test Build 8
System testing / Non Functional System Testing / Performance Testing	136: Frequencies	Not Run	Passed	Blocked
System testing / Non Functional System Testing / Stress Testing	89:User doesn't get hurt	Not Run	Failed	Passed
System testing / Non Functional System Testing / Stress Testing	91:Test waterproof	Not Run	Passed	Passed
System testing / Non Functional System Testing / Stress Testing	93:Device doesn't overheat	Not Run	Failed	Passed
]	124:Fire Resist	Not Run	Passed	Passed
al g	130:Bulletproof	Not Run	Failed	Failed
33% al	134:Waterproof	Not Run	Passed	Not Run
al	144:Does the speaker get	Not Run	Passed	Not Run

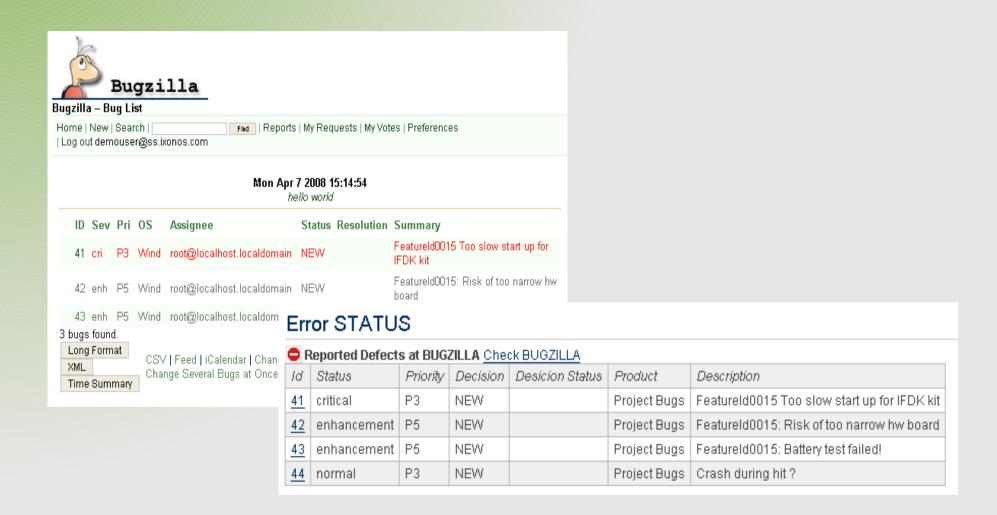
affected by mobile phones

Keywords:

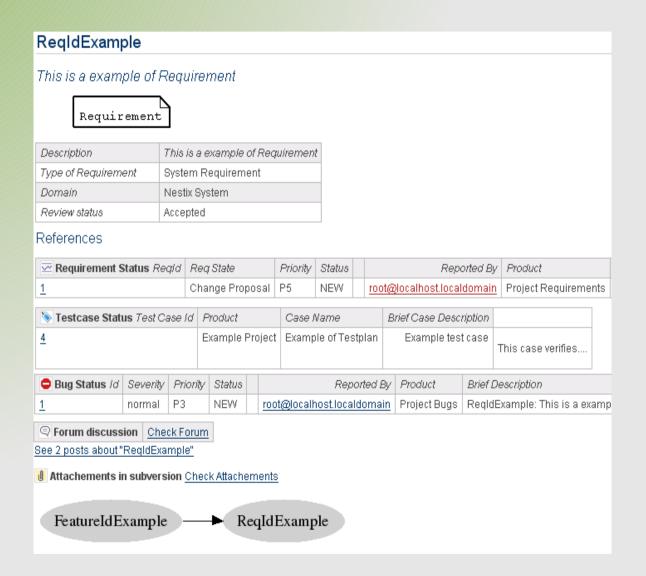
Requirements: None

Created on 02/04/2008 09:29:52 by W

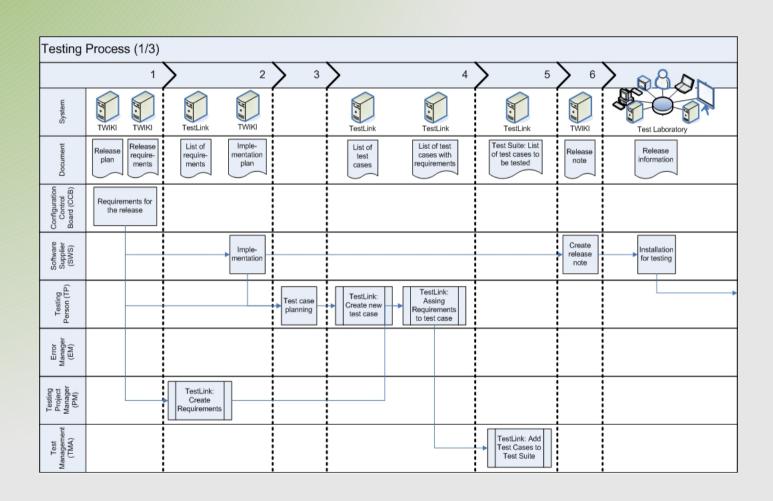
Defect Management



Information view as Wiki page



Workflow and process for working



Test Management Case Story:

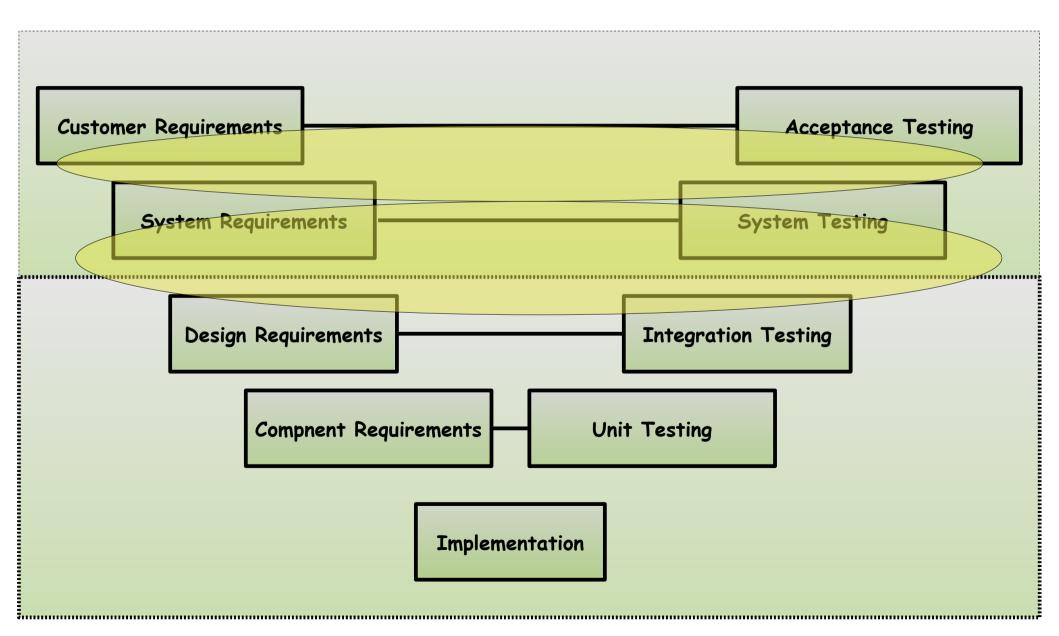
-Industrial Company
-Large Automation System Integration
-Multiple Subcontractors
~50 person
Requirements: ~2000
Test Cases: ~1000

TASK: Provide System Testing Infrastructure

Component Defects: ~1000

Case Story's V-MODEL FOCUS AREAS

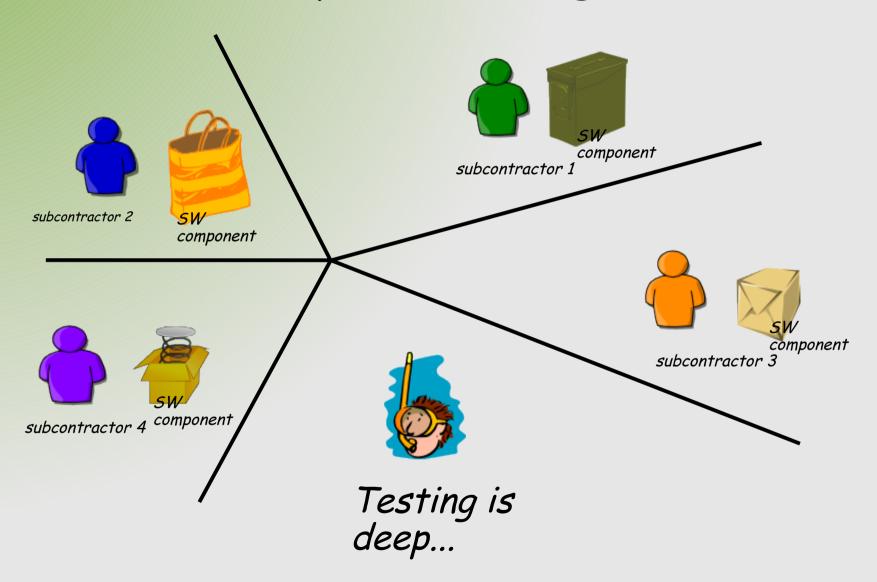




NEST Tool Matrix (Case Story specific tools)

	Project Management	Task Management	Developmen t Process	Team Collaboratio n	Knowledge Management	Defect Management	Risk Management	Change Management	Data Storage	Administration	Reporting
Foswiki	X	x			X		X	X			х
Trac		x	х		Х	Х					х
Bugzilla						Ť					x
Requzilla											х
Ajax Chat				Х	Х						
phpBB3				х	х						
dotProject	X										
MySQL									^		
GIT									x		
Webmin											
Subversion			Х						x		
StatSVN			х								x
GLPI		Х			X						x
phpLDAPAd min											

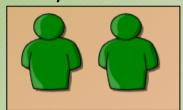
NEST in System Testing Scenario



NEST's major benefit in case story



Different processes/intranets

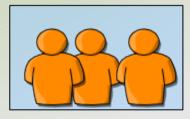


organization1



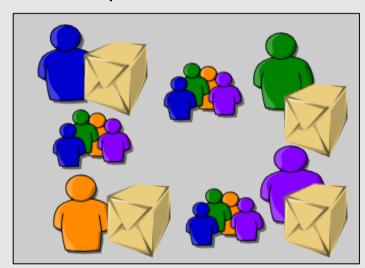
organization2

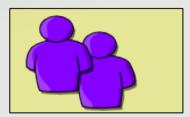
VS



organization3

Same processes and intranet





organization4

4 X COSTS? > 1 X COSTS?

Other benefits in case story



- ·Common working area
- Document sharing
- ·Release Planning
- Test Planning/Execution
- ·Defect Management/Reporting

New Strategy: "Man In The Middle"



Lightweight project environment between two large ones?

Links

Pro Gradu 1: http://go2.wordpress.com/?id=725X1342&site=narsus.wordpress.com&url=http%3A%2F%2Fnarsus.files.wordpress.com%2F2008%2F06%2Fprogradunest11-kaiperala.pdf

Pro Gradu 2: http://go2.wordpress.com/?id=725X1342&site=narsus.wordpress.com&url=http%3A%2F%2Fnarsus.files.wordpress.com%2F2008%2F06%2Fnarsusprogradu12062008.pdf

Blog / Wiki: http://narsus.wordpress.com

http://twiki.org/cgi-bin/view/Blog/BlogEntry200810x1

http://www.youtube.com/watch?v=U-JjitFbPDU

http://epofo.labranet.jamk.fi/wiki/index.php/NEST_Project_Platform

Forum: Google Groups - NEST Project Platform

Linked In: Nest Projet Platform Group

Demo Site: Coming soon spring 2010

Download Site: Coming soon during 2010?

NEST Project Platform 1.3?



NEST 1.3 under construction.....

OPEN DOOR FOR OPEN SOURCE!

narsuman@gmail.com