# *NEST 1.1 Project platform*
# *Fast Introduction*



**NEST 1.1**

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Senior Test Engineer

# Agenda



- *What is NEST Project Platform ?*
- *Technology and virtualization*
- *Deployment in organization*
- *Network Infrastructure*
- *Tool Domains*

# What is NEST Project Platform ?

# 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 ideology #1

- *Collaborative working (based heavily on WI 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 0€) makes possible to build efficiently multiple independent projects*

- *All project are using same tools without limits*

- *High integration between tools, because of centralized authentication*

- *Easy to maintain (Documented administration work)*



Linux platform

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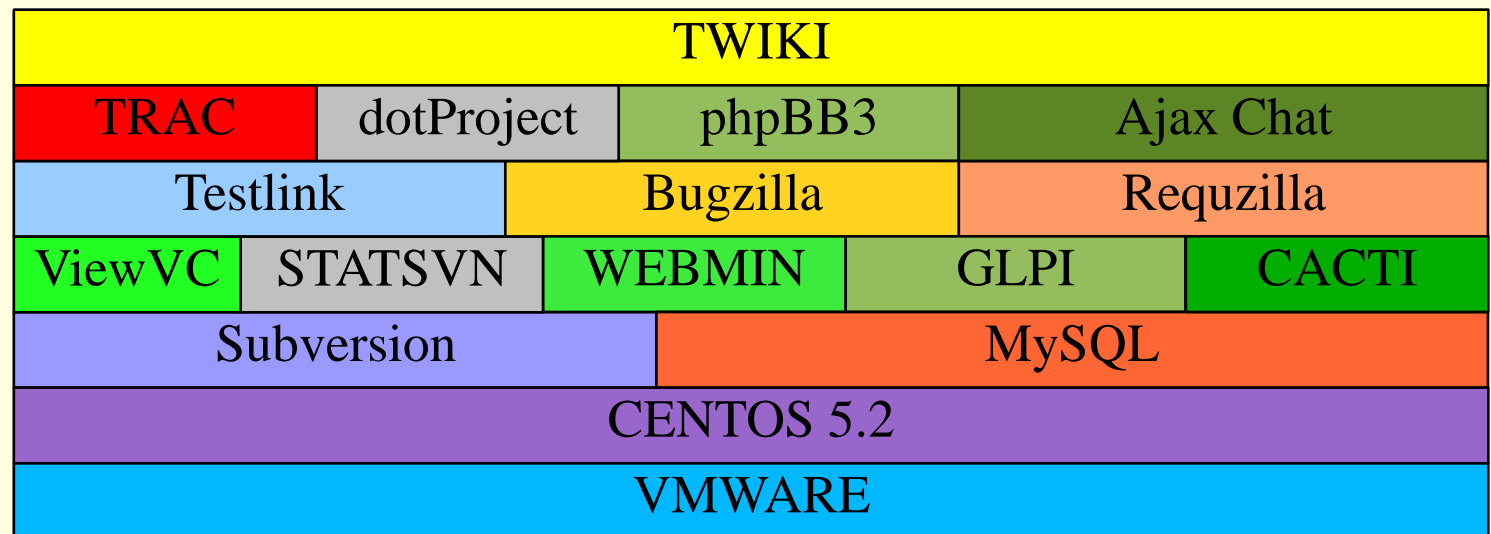- *Collaboration*

Project team size 1-n ?

# NEST Architecture

**NEST 1.1**

| | |
|---|---|
| **Project Management Knowledge management / Reporting / Collaboration** | **TWIKI** |
| | **TRAC** · **dotProject** · **phpBB3** · **Ajax Chat** |
| **Project Work Flow** | **Testlink** · **Bugzilla** · **Requzilla** |
| **Statistics Administration** | **ViewVC** · **STATSVN** · **WEBMIN** · **GLPI** · **CACTI** |
| **Version Control + Database System** | **Subversion** · **MySQL** |
| | **CENTOS 5.2** |
| **Operating System Virtualization** | **VMWARE** |

# Best of Breed Open Source Tools

NEST 1.1
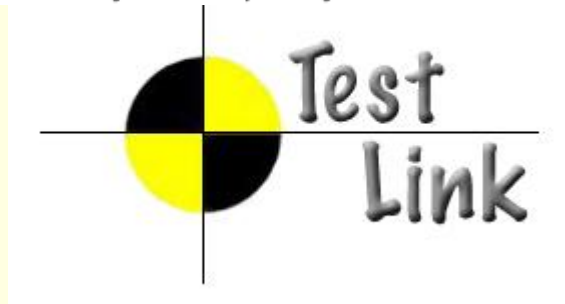
# **Technology and Virtualization**

# NEST Project Platform Technology #1

*NEST v1.1 is based on pure Open Source software components which are pre-installed on one virtual machine image.*

- *Server platform Linux*
- *(Centos 5.2/RedHat 5.2)*
- *Database MySQL (5.0)*
- *Authentication OpenLDAP*
- *Web Server Apache (2.2)*
- *PHP 5.0 - Python 2.4 – Perl 5.8*
- *Virtualization using VMWARE / XEN*

# NEST Project Platform Technology #2

- *Virtualization platform provides service power in efficient way.*
- *NEST servers will be possible to deploy as cluster*

NEST CLUSTER

NEST

NEST 1.1

NEST 1.1

NEST 1.1

Virtualization platform

NEST 1.1
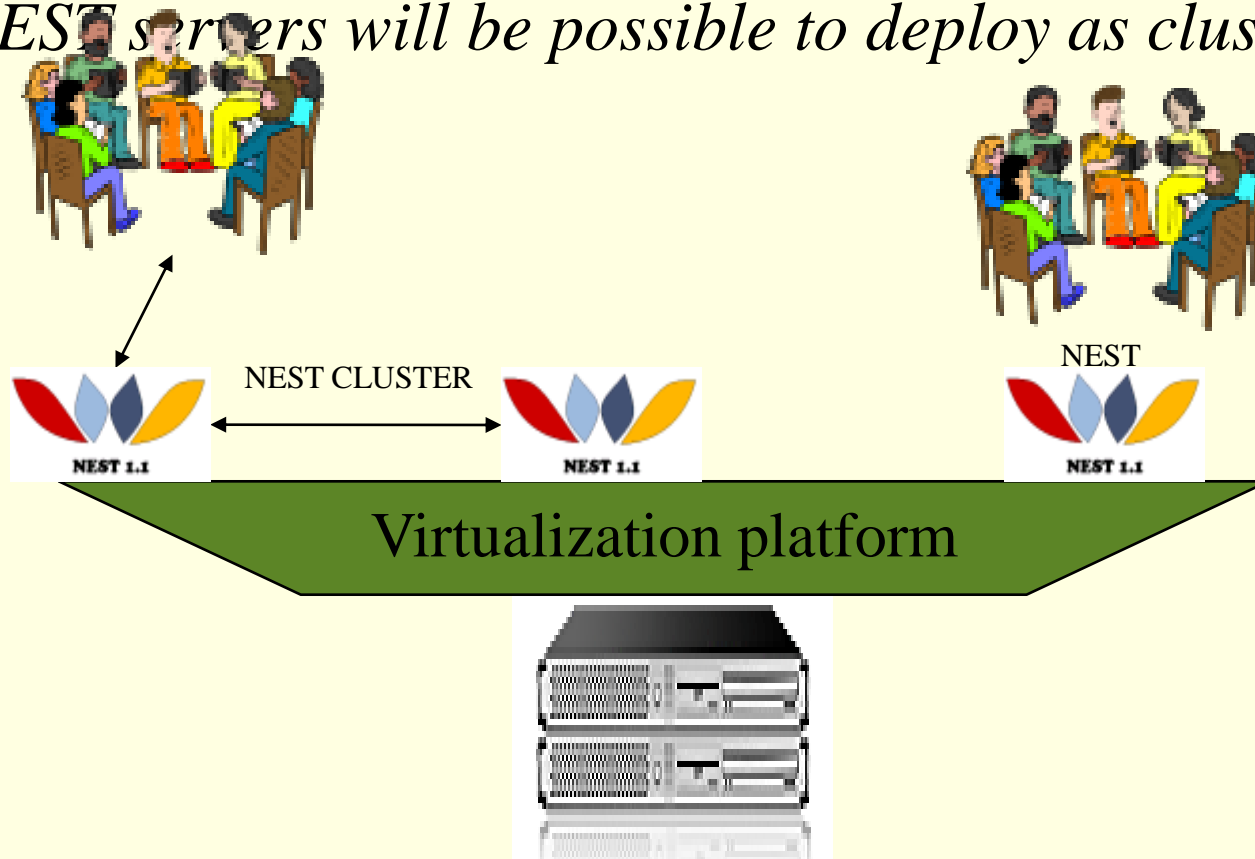
# **Deployment in organization**

# NEST working in network

- *NEST Server could be located on DMZ (Demilitarized zone) where it is available for dedicated organizations or members.*
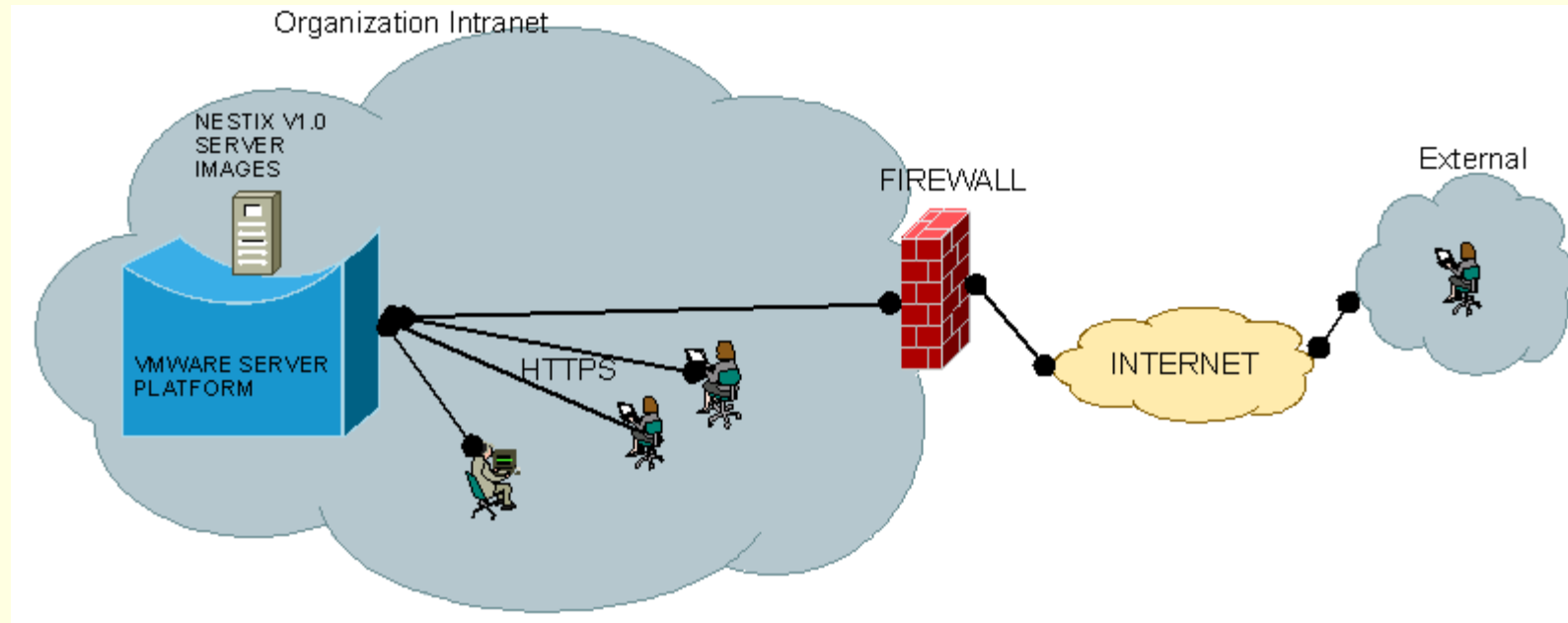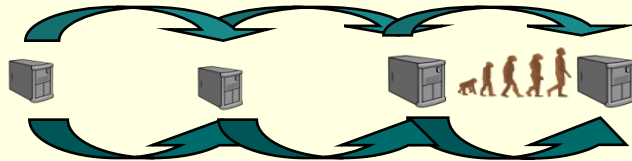
# Breaking up project organization model? #1
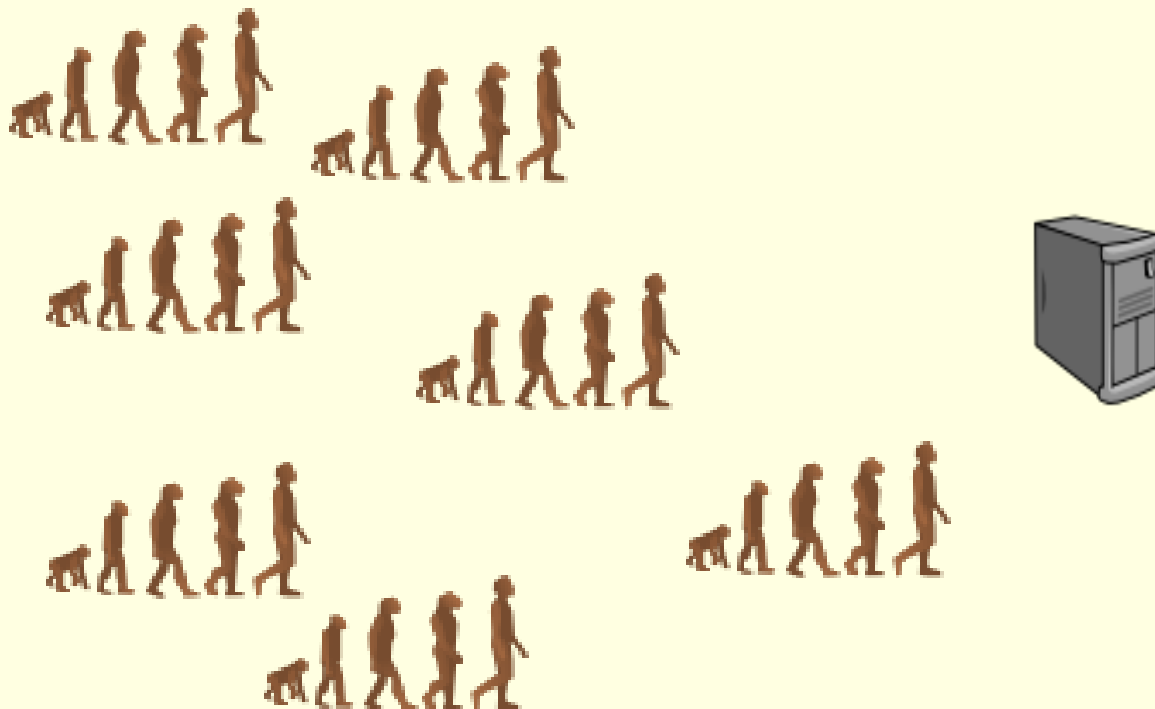
# NEST - Foundation for learning project organization?

Lessons learned

NEST 1.1          NEST 1.2?          NEST 1.3?

Fixes/New features
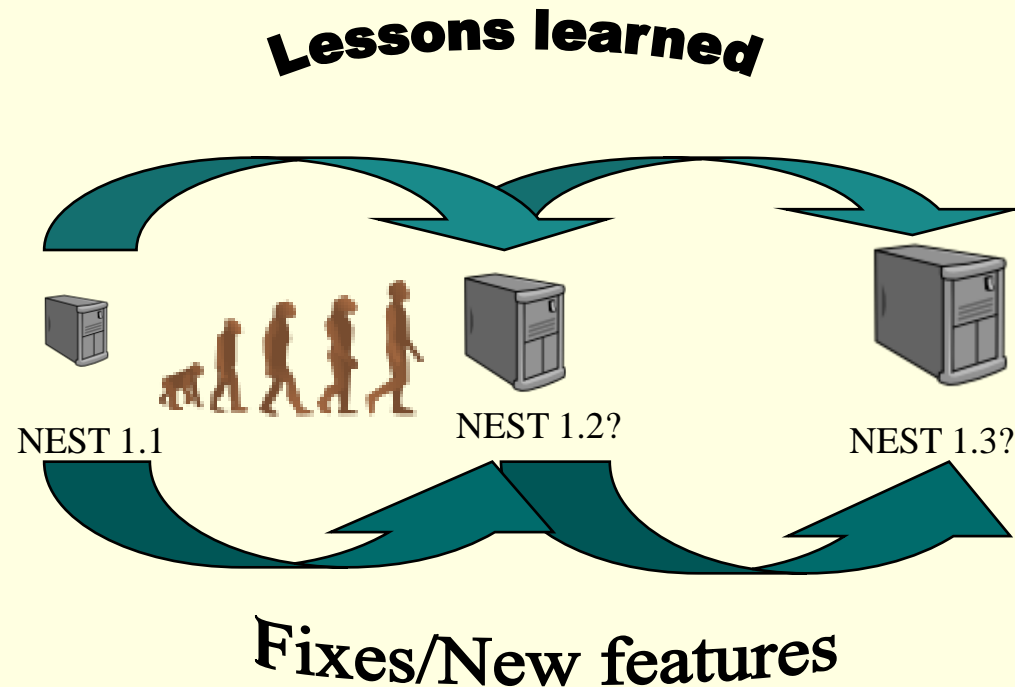
# Breaking up project organization model? #2
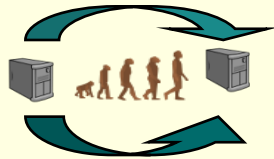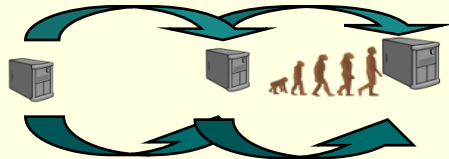


VS.

*One server to rule them all?*
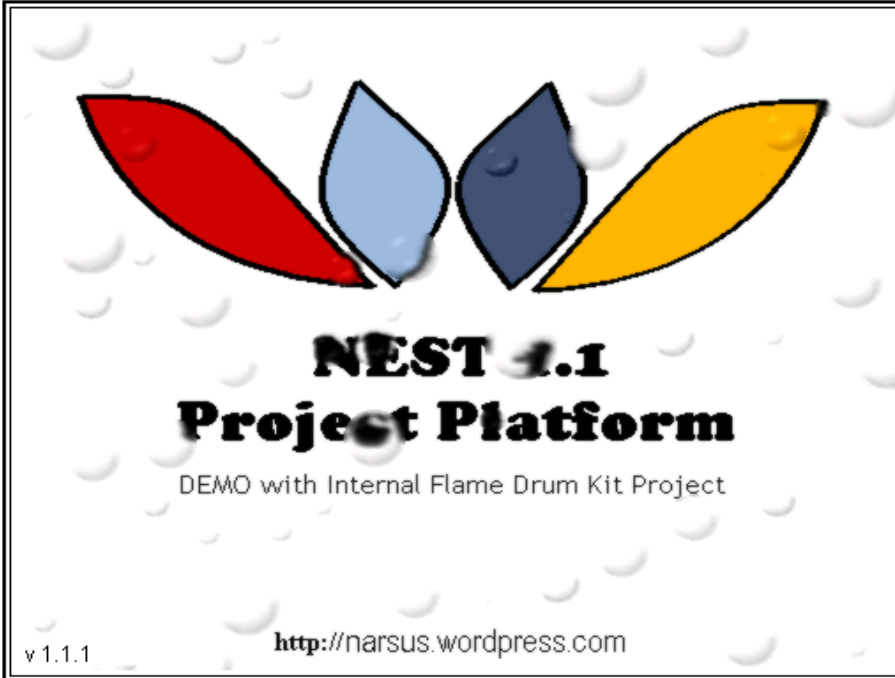
**NEST 1.1**

# TOOLS

# NEST tools and services
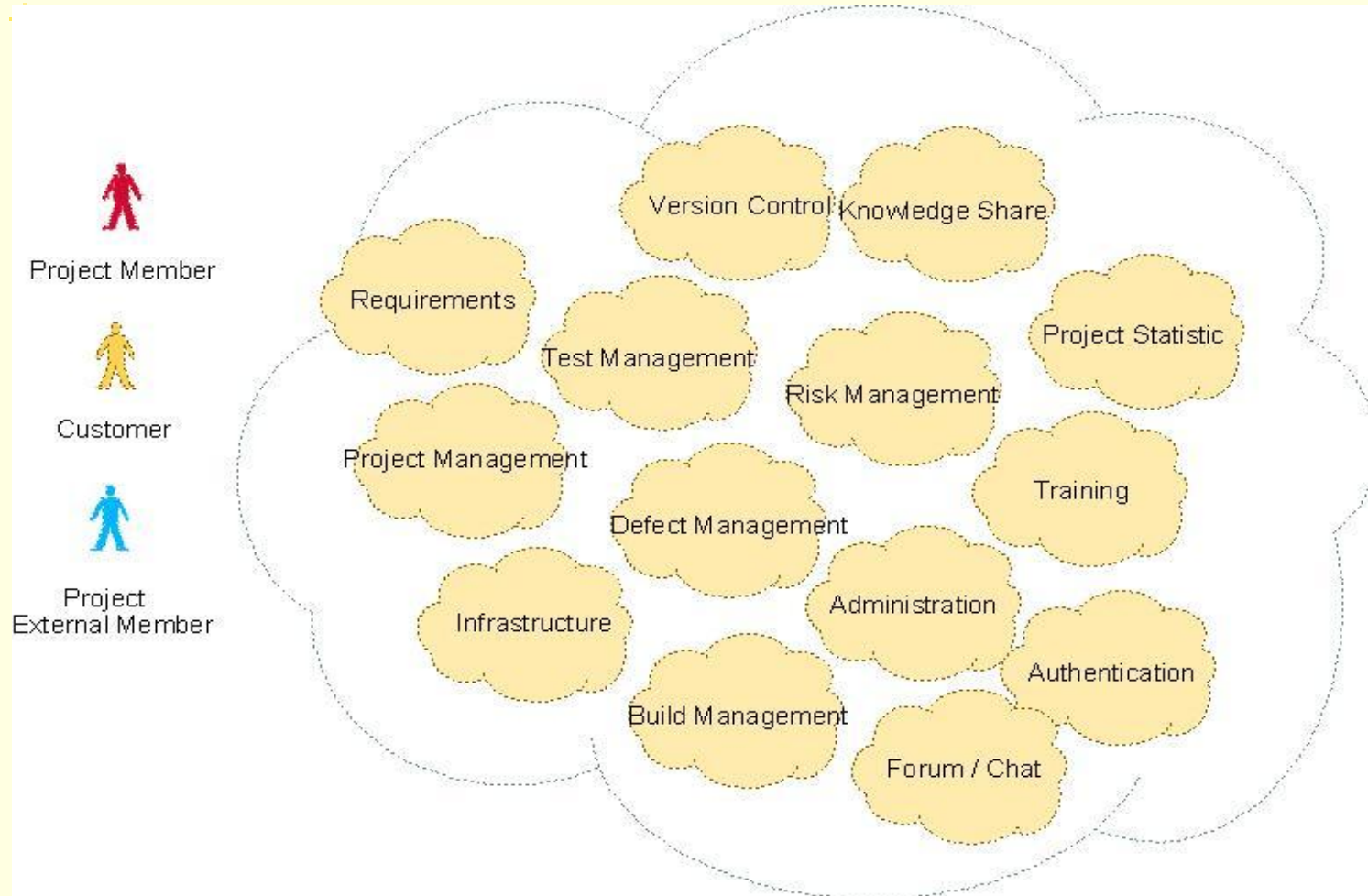
# NEST as virtual working environment

# WIKI as core technology



NEST 1.1 Project Platform Wiki

Search
Wiki Admin Print
Edit Attach Move Raw Diffs More

**NAVIGATION**

Main ˄
Webs ˄
MySideBar ˄

Main » WebHome

## Welcome to Official Project WIKI! - 20 Sep, 2008 - week 38

Welcome to NEST Project Platform DEMO (v. 1.1.1)!!

### Links

| Information share | Design/Implementation | Work | Management | Reports |
|---|---|---|---|---|
| Process pages | | Simple Tasks List | Back Log | WebChanges |
| Project Knowledge Base | Features and Releases | OfficialTopicCreatePage | Error Management | Project Status |
| Project Documentation | Project Design | Project Training | Requirement Management | Meetings and Notes |
| Contact List | Big Picture of Project | Project tools | Risk Management | Project CV's |

Edit

### Latest News and Information

| type | time | Description | by who |
|---|---|---|---|
| FYI | 21.09.2008 | OfficialCollectionOfOldFYI old pages should be moved here | Narsu |
| Info | 22.09.2008 | Read AboutNEST? | Narsu |

Edit

Printable

# SCRUM with TRAC + Agile 42 modification

# Requirements, traceability and testing

- *TWIKI with several integration plug-ins provide high level traceability between different tool domains*
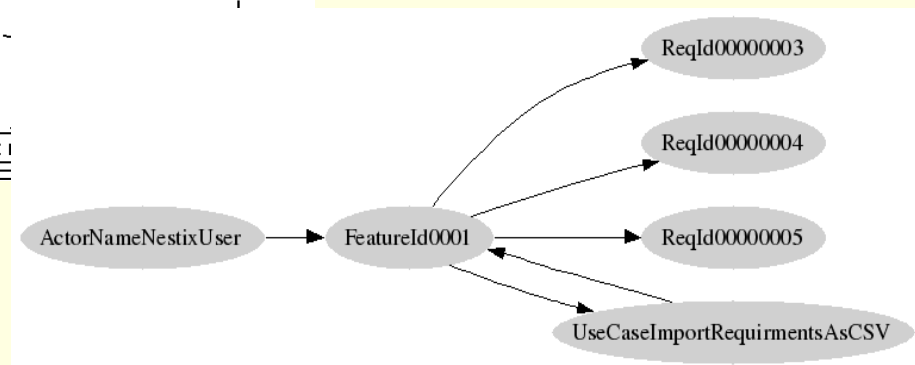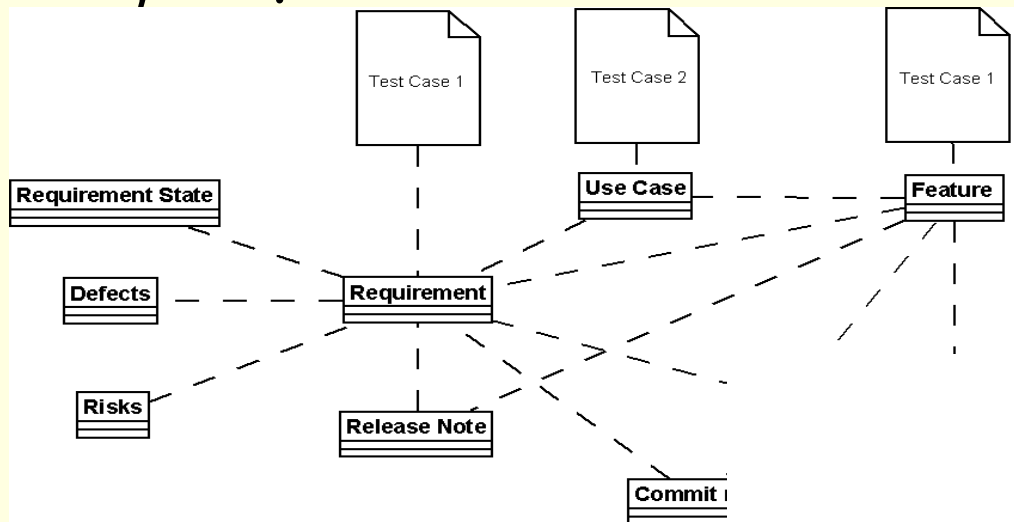
# Integrations between tools



## Features and requirements as references

| Feature Id | Description | Requirem... |
|---|---|---|
| FeatureId0001 | Local control panel | ReqId000006, ReqId000009, ReqId000010, ReqId000012, ReqId000053, ReqId000044, ReqId000110, ReqId000111 |
| FeatureId0002 | General MIDI support | ReqId0( StakeH( |
| FeatureId0003 | Adjustable Hit Level | ReqId0( |
| FeatureId0004 | USB Flash drive | ReqId0( |
| FeatureId0005 | Metronome mode | ReqId0( |
| FeatureId0006 | Kit Cover replace | ReqId0( ReqId0( |

### phpBB NEST-IX Project Platform Forum
Main forum for project

⌂ Board index ‹ NEST-IX Demo ‹ Requirement Management

User Control Panel (**0** new messages) • View your posts

## FeatureId0015 Power management

POSTREPLY ↙    Search this topic...    Search

**FeatureId0015 Power management**

by **WikiAdmin** on Thu Feb 21, 2008 9:25 am

There is something odd with current power management desing??

If you agree you should do something?

I have started change proposal state for FeatureId0015 at Requzilla!

POSTREPLY ↙

# Test management

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

**Version 1**

**Summary**

Battery level must be shown on the KIT's 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**

1. After turning the level indicator
2. After turning the level is shown
3. After playing with indicator has disa...
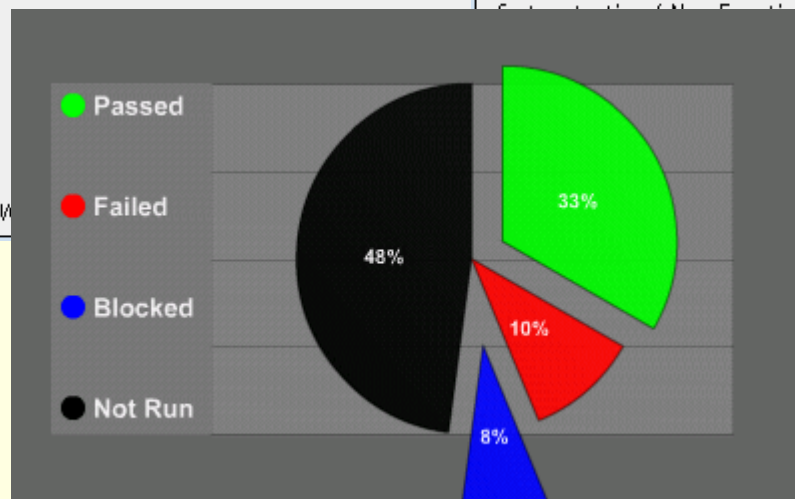4. After playing with indicator is still sl...

**Keywords**:

**Requirements** :  None

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

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 |
| | 130:Bulletproof | Not Run | Failed | Failed |
| | 134:Waterproof | Not Run | Passed | Not Run |
| | 144:Does the speaker get affected by mobile phones | Not Run | Passed | Not Run |

- Passed 33%
- Failed 10%
- Blocked 8%
- Not Run 48%

# Defect Management

# Information availabe as Wiki pages

# Workflow and process for working
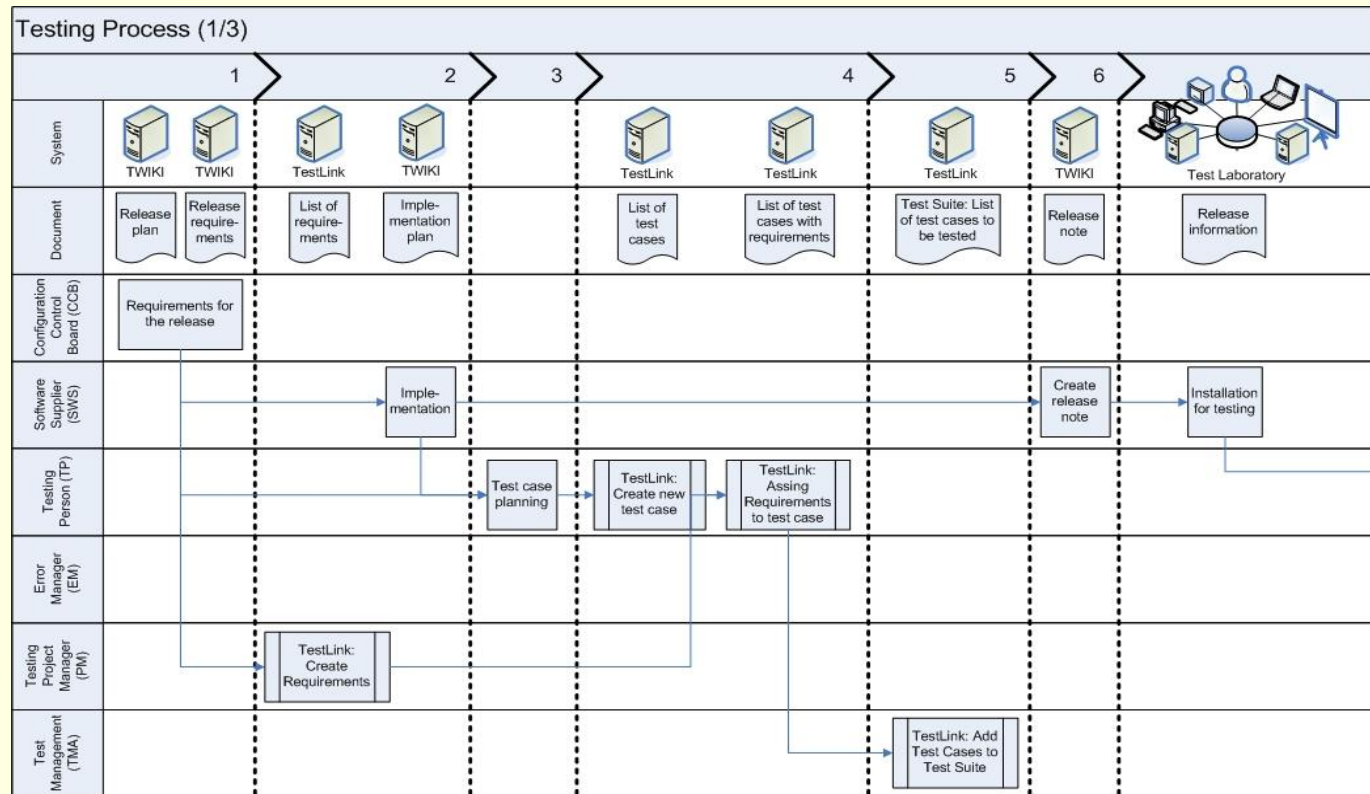
# Case Story

# NEST in System Testing Scenario



SW component

subcontractor 1

SW component

subcontractor 2

SW component

subcontractor 3

SW component

subcontractor 4

Testing is deep...
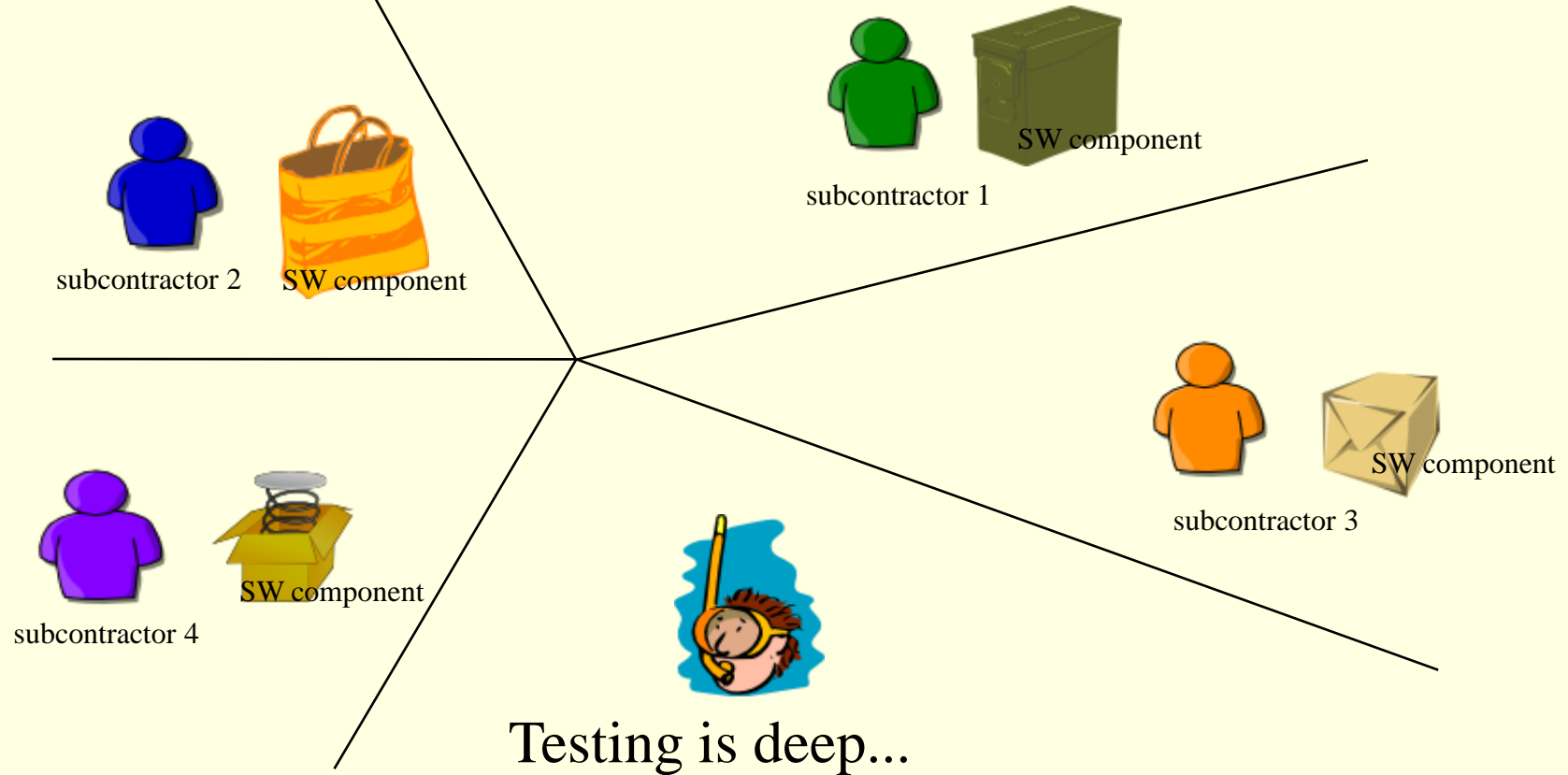
# NEST in System Testing Scenario

Different processes/intranets
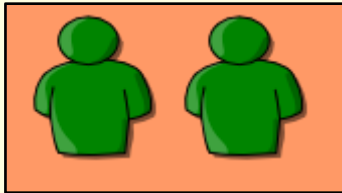


organization1

organization2
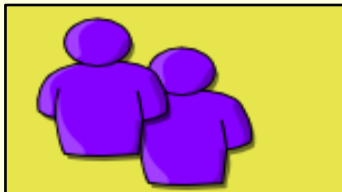
Same processes and intranet

VS.
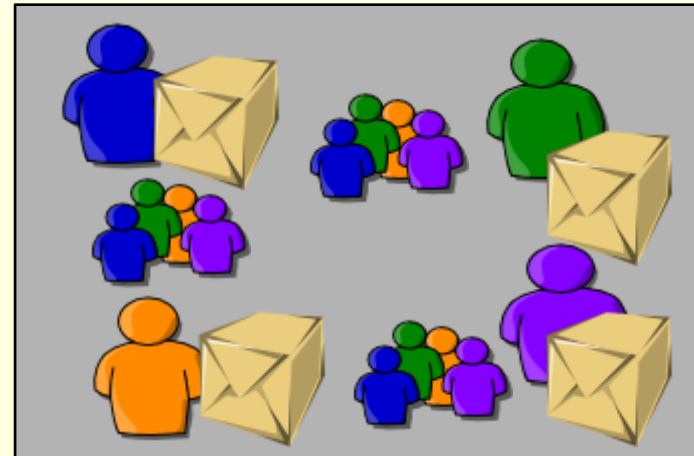
organization3

organization4
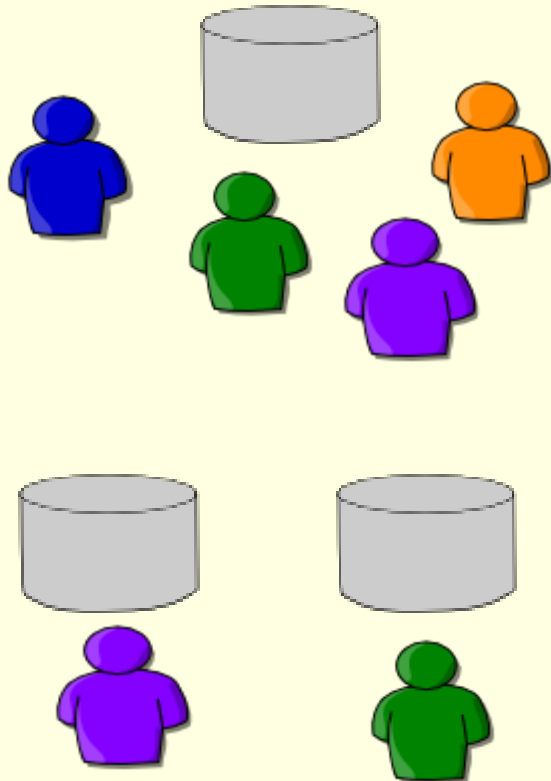
4 X COSTS? > 1 X COSTS?

# What we can reach using open source?

- Same tools for everyone ?

- No extra costs for licenses

- Scalability during project

- Focus on efficient usage

- All participants can work together – more agile ?

# Links

Blog / Wiki:

http://narsus.wordpress.com

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

List of available tools:

http://narsus.files.wordpress.com/2008/06/officialprojecttoolsnest11.pdf

Forum:

Google Groups – NEST Project Platform

Demo Site:

Still missing....

Download Site:

Still missing

# OPEN DOORS FOR OPEN SOURCE !

narsuman@gmail.com

*Project Team:*

*Vision and idea*
*Project Manager: Marko Rintamäki (Ixonos Plc)*

*Implementation*
*and ideas:*        *Jan Lapinkataja (Ixonos Plc)*
                *Kimmo Varis (Ixonos Plc)*
                *Heikki Paajanen (Ixonos Pcl)*
                *Kai Perälä (Landis & Gyr)*

*NEST 1.1  Project platform*