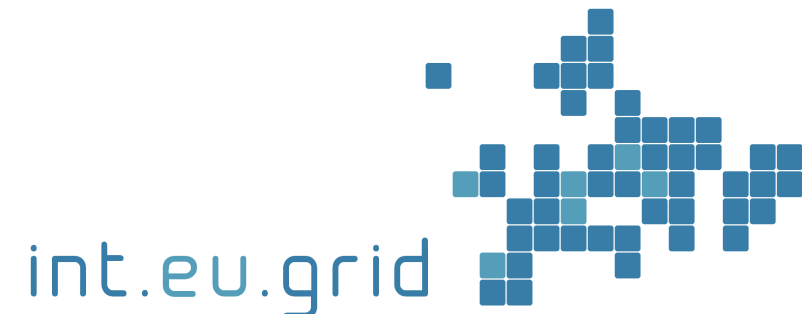


Savannah.. ..and more

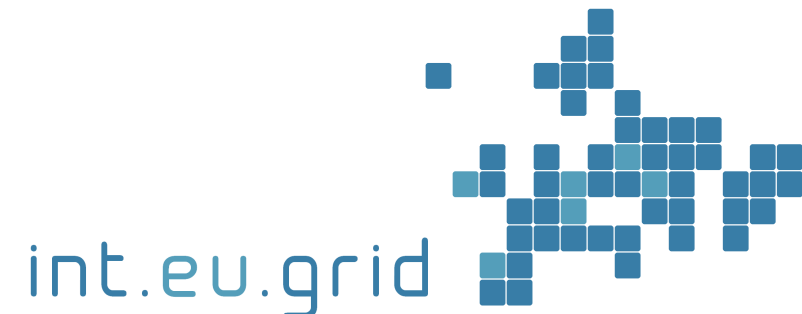
Marcus Hardt, IWR, FZK

- **Problem**
- **Solution**
 - Savannah
 - Wiki
- **Site setup**



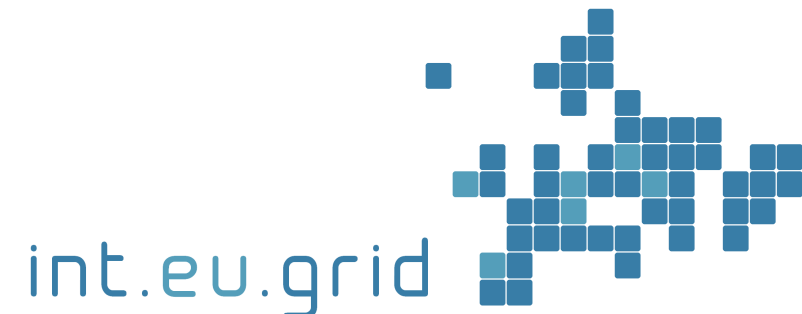
Collaborative development challenge

- Many people work (ie. develop software) together
=> **developers**
 - Communication inside the group
 - Code management
- Users need support
 - Documentation
 - Communication
 - Bug reporting
- Large projects:
 - Responsibilities should be
 - Distributed
 - Defined



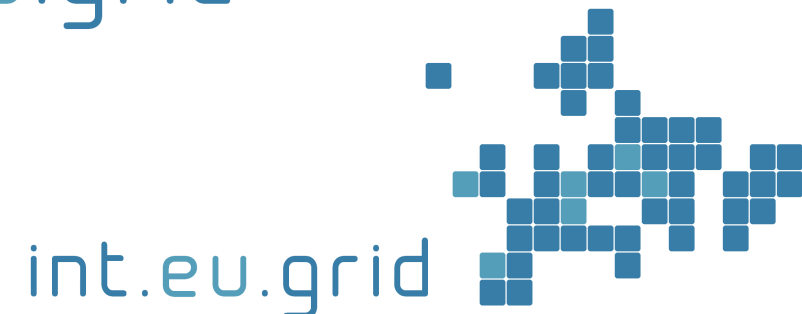
Solution?

- **Savannah (Open Source branch of Sourceforge)**
 - Most of its tools
 - User management
- **Forums**
- **Wiki**
- **Autobuild**



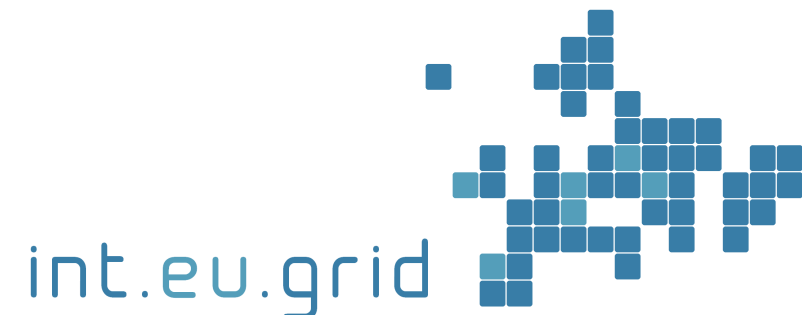
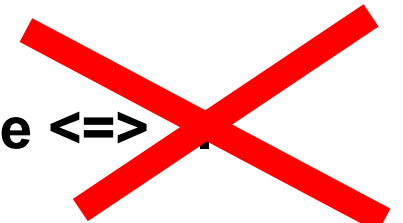
Savannah

- **Savannah was set-up for CrossGrid**
 - Well accepted by developers (after initial learning curve)
- **Savannah:**
 - **Basic System: LAMP**
 - = Linux + Apache + MySQL + PHP
 - + Perl and Bash scripts
 - **Portal System**
 - => User Interfaces via Browser
 - **Extensions:**
 - Various services, accessible via ssh, service specific tools
- **Continuing support within int.eu.grid**



Structure of Savannah

- **Savannah is project oriented**
 - => Provides access to tools
 - => Project content is completely independent for each project
 - => Visitor must find the project he is looking for
 - => Developers must be members in order to contribute
- **Access to tools**
 - Based on Role inside a project
 - Anybody \Leftrightarrow User \Leftrightarrow Member \Leftrightarrow Admin \Leftrightarrow me \Leftrightarrow ...



Savannah Roles

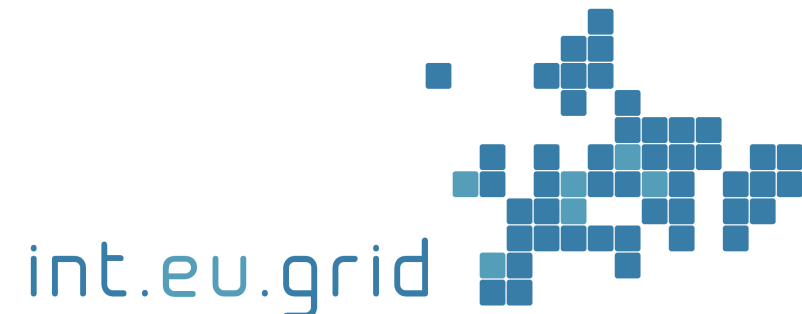
- **What can I do if I am ...**

- **Anybody:**
 - Look at **some** projects (read news, cvs, forum, ...), Submit bugs
- **User:**
 - Read access in **some** parts (e.g. above) of **some** projects
 - Subscribe to forums, write to some forums; look at some CVS
 - **can become member in a project**
- **Member:**
 - Read/Write access to all features in **his** projects including CVS, **web**space, **ftp**space, forums
 - (Limited) shell account
- **Admin:**
 - Can modify **his** project: Modify bug-tracker, change roles of members, approve users, delete mail/disapprove news, change License



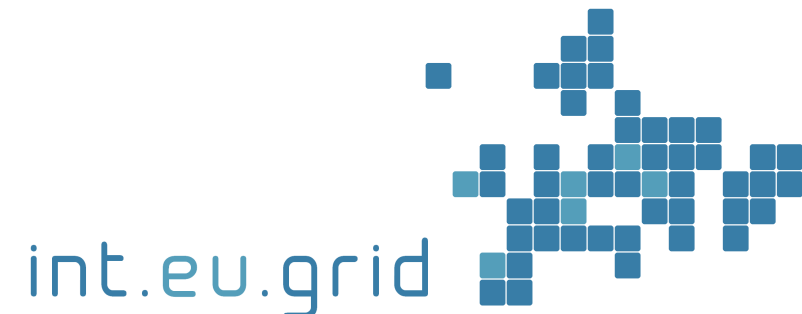
Savannah Tools [1/3]

- **Homepage**
 - Plain webospace
 - Webospace, administered via svn
 - External link
- **Cookbook**
 - System to support on-line documentation
 - Usefulness to be evaluated
- **Files**
 - Plain webospace
 - Useful, if homepage is an external link



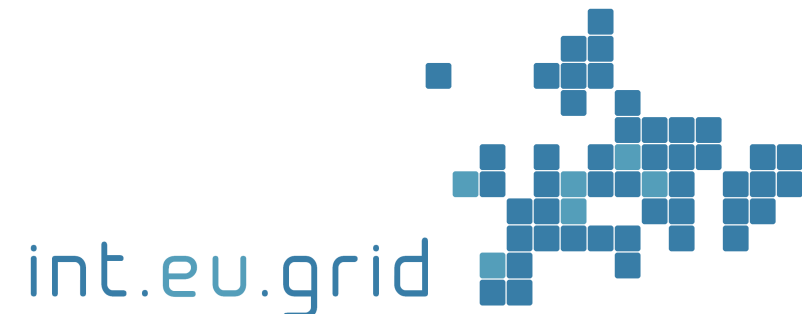
Savannah Tools [2/3]

- **Forum**
 - Web-based discussion for a
 - Interlinked with email
 - Can be public or private
- **Subversion (SVN)**
 - Improvement of CVS
 - Versioning system
 - Software development
 - Access control via project membership
 - Web browsable



Savannah Tools [3/3]

- **Bugtracker**
 - **Trouble ticket system**
 - **Very flexible**
 - **Categories**
 - **one responsible person per category**
 - **Email notifications**
 - **Aging reports**
 - **Reminder Spam (wishlist)**
- **News**
 - **Simple news items**
 - **Appear on project homepage**
- **Demo-Tour**



Wiki

- **User management taken from savannah**
 - Access rights
 - Ignore the new users page!
- **Can be integrated at “Homepage” link**
- **Mediawiki installation plus modifications:**
 - All pages can be changed by everybody
 - Members can protect pages
 - Members can edit protected pages
 - hidden: pages are hidden for non-members
- **Demo-Tour**



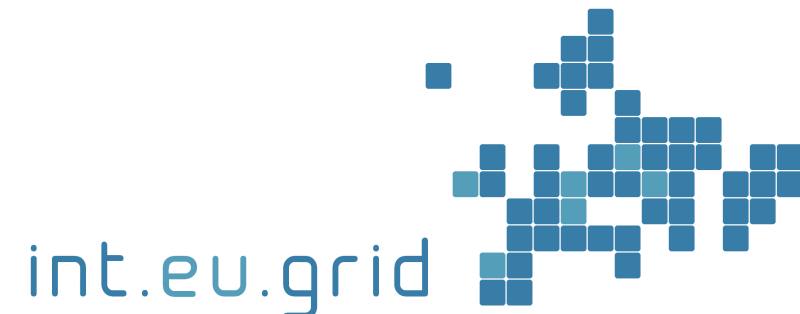
Autobuild

- **Developed by EDG (Yannick Patois)**
- **Build whole int.eu.grid repository every night:**
 - `svn checkout <module>`
 - `configure; make; make doc;`
`make install; make dist; make rpm`
 - **For details see the developers guide**
- **Publishes build results on webpages**
- **Makes newest RPMs available for download**
 - **These RPMs can be used for deployment**
=> one day delay between deploy and install (of MW)
- **Autobuild is**
 - **mandatory** for middleware (= root installable software)
 - **optional** for applicationware (= anything else)



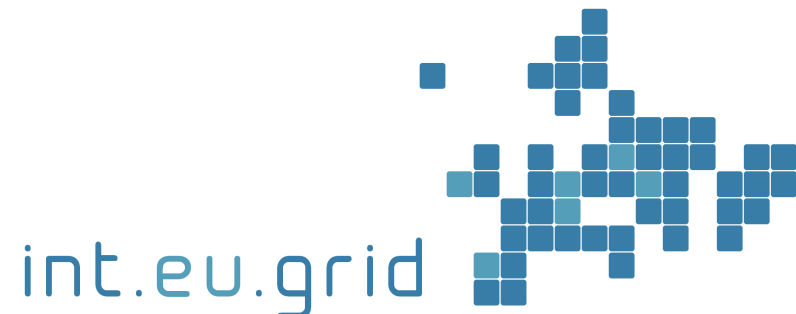
Proposed Structure of Savannah

- **One overall project (int.eu.grid)**
 - To make sure everybody is in the system
 - To administer access to wiki
- **One project per Development task**
 - Testbed management
 - Migrating Desktop
 - ¿CrossBroker?
 - Applications
 - Are welcome to start a project as well



Summary

- **Savannah integrates many tools**
- **They are available to you!**
- **We should agree on the structure**
- **Invitation**
 - **Everybody: Get an account at savannah**
 - **If you want your own SVN, Bugtracker, Forum, News, Wiki:**
 - **Register a project at savannah (or send me an email ;-)**
- **Questions - Suggestions - Complaints?**



Infrastructure considerations

- **RPM packages**
 - Install via apt
 - sources:
 - Scientific Linux
 - gLite
 - our own (as filled by autobuild)
- **Site configurations**
 - YAIM
 - site-info.def consists of
 - Site specific settings
 - General settings
 - => General settings in SVN
 - => Script combines SVN+local
 - => create site.conf



Infrastructure Considerations

- **Xen usage:**
 - domain-0 basis
 - CE, SE, ... as virtual machines
 - Copy virtual machine images to new sites

⇒ only one machine as a grid frontend
- **Ideal Xen setup:**
 - Automatic (FAI) installation of xen dom-0
 - Use only minimal (est 2 GB) for dom-0
 - Export rest of harddrive via GNBD
 - Import GNBD via GFS-toolsuite
- **Good** because
 - Fault tolerant GFS can tolerate missing nodes
 - Xen images can be kept on GFS
- **Bad** because
 - Nobody tried it
 - Nobody has time for it

[volunteers? int.eu.grid](http://volunteers.int.eu.grid)

