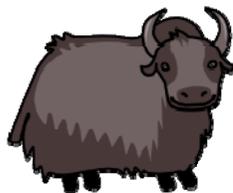**eGee**

Enabling Grids for E-sciencE

YAIM 4 developers

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CERN-IT GD

JRA1 All Hands Meeting 2007, Geneva

www.eu-egee.org

YAIM

Information Society and Media

Enabling Grids for E-sciencE

- **Introduction to YAIM modules**

- **Who is developing YAIM modules**

- **YAIM module architecture**

- **YAIM module development**

- **Resources for YAIM developers**

- **Conclusions**

YAIM

- **Starting from YAIM 3.1.1-9:**
  - We are moving to one yaim module per node type + yaim core
- **In YAIM 4.0.1-6:**

  (which is *Certified* for 3.1 and in *Ready for Certification* for 3.0)
  - All the yaim modules are available
- **YAIM modules:**
  - contain 3.0 and 3.1 configuration in the same module
  - depend on yaim core
  - allow independent yaim releases when necessary

YAIM

- **org.glite.yaim.core**   **Gergely Debreczeni, Maria Alandes**
- **org.glite.yaim.clients**   **Andreas Unterkicher, Gergely Debreczeni, Maria Alandes**
- **org.glite.yaim.wms**   **Di Qing, Nuno Orestes**
- **org.glite.yaim.lb**   **Di Qing, Nuno Orestes**
- **org.glite.yaim.dpm**   **Sophie Lemaitre, Gergely Debreczeni**
- **org.glite.yaim.lfc**   **Sophie Lemaitre, Gergely Debreczeni**
- **org.glite.yaim.fts**   **Gavin Mccance, Steve Traylen**
- **org.glite.yaim.mon**   **Alastair Duncan**
- **org.glite.yaim.myproxy**   **Shu-Ting Liao**
- **org.glite.yaim.sge-server**   **Gonçalo Borges**
- **org.glite.yaim.sge-client**   **Gonçalo Borges**
- **org.glite.yaim.sge-utils**   **Gonçalo Borges**
- **org.glite.yaim.dcache**   **Owen Synge**
- **org.glite.yaim.amga**   **Asterios Katsifodimos**
- **org.glite.yaim.mpi**   **Stephen Childs**
- **org.glite.yaim.torque-server**   **Gergely Debreczeni, Maria Alandes, Nuno Orestes**
- **org.glite.yaim.torque-client**   **Gergely Debreczeni, Maria Alandes, Nuno Orestes**
- **org.glite.yaim.torque-utils**   **Gergely Debreczeni, Maria Alandes, Nuno Orestes**
- **org.glite.yaim.condor-server**   **Christian Neissner**
- **org.glite.yaim.condor-client**   **Christian Neissner**
- **org.glite.yaim.condor-utils**   **Christian Neissner**
- **org.glite.yaim.lsf-utils**   **Maria Alandes**
- **org.glite.yaim.rb**   **Gergely Debreczeni, Maria Alandes**
- **org.glite.yaim.lcg-ce**   **Di Qing, Nuno Orestes**
- **org.glite.yaim.se-classic**   **Gergely Debreczeni, Maria Alandes**
- **org.glite.yaim.bdii**   **Laurence Field**
- **org.glite.yaim.e2emonit**   **Gergely Debreczeni, Maria Alandes**
- **org.glite.yaim.hydra**   **Akos Frohner**
- **org.glite.yaim.cream-ce**   **Sara Bertocco, Simone dalla Fina**

YAIM

- **29 YAIM modules**
  - 15 YAIM modules developed by external contributors
  - 14 YAIM modules developed within SA3 at CERN
- **Who can be a YAIM module developer?**
  - Anybody who wants to contribute!
  - Middleware developers are very good candidates
- **Some candidates**
  - Not in YAIM yet
    - VOMS
    - DGAS
    - LSF
  - Currently developed by the YAIM team at CERN
    - WMS, LB and lcg CE yaim modules currently developed by the same person!
    - APEL
    - VOBOX
    - Myproxy
    - UI
    - WN

YAIM

- **Example can be found in :**

  http://grid-deployment.web.cern.ch/grid-deployment/yaim/examples/org.glite.yaim.lemon.tar.gz

- **Structure of the CVS module:**

  /config

  　　/functions

  　　/node-info.d

  　　/defaults

  　　/services

  Makefile

  glite-yaim-lemon.spec

  → We will provide you with this!

Enabling Grids for E-sciencE

- **A tutorial can be found in :**
  https://twiki.cern.ch/twiki/bin/view/EGEE/YAIMmoduleHOWTO
- **Development process:**
  - Write the functions that will configure your module
  - Add the list of functions to your function list
  - Declare the relevant variables to configure your service
  - Document your variables!!
    - by creating man pages (a template will be also available)
    - https://twiki.cern.ch/twiki/bin/view/LCG/YaimGuide400#Service_configuration_variables
  - Tag your code in CVS
  - Launch a remote build in ETICS
  - Open a patch in Savannah including the relevant list of rpms

  But you are JRA1 and you know how to do this!

- **Although...**
  - We will create the CVS module template for you
    - containing Makefile and spec file ready to use
  - We will create an ETICS configuration template for you

YAIM

- **Example YAIM module**
  http://grid-deployment.web.cern.ch/grid-deployment/yaim/examples/org.glite.yaim.lemon.tar.gz
- **Tutorial on YAIM module development**
  https://twiki.cern.ch/twiki/bin/view/EGEE/YAIMmoduleHOWTO
- **YAIM developers guide**
  https://twiki.cern.ch/twiki/bin/view/EGEE/YaimDevelopersGuide
  – *Where to start?* section with a summary for new developers
- **In general**
  https://twiki.cern.ch/twiki/bin/view/EGEE/YAIM

- **YAIM team support**
  yaim-contact@cern.ch

- **YAIM developers mailing list**
  yaim-devel@cern.ch

YAIM

- **Advantages of YAIM modules**
  - independent development and release process
  - common and simple structure
    - Increase the number of YAIM contributors

- **Distributed working environment implies...**
  - Accurate and up to date documentation
    - Description of existing functions
    - Description of common tools
      - *yaimlog*
      - *comment syntax*
  - Mechanism to propagate changes affecting all modules
    - Mailing list?
  - Control the 'quality' of YAIM modules

YAIM