

ISIP time line 2012

F. Imbeaux, G. Manduchi, H. Klingshirn

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2012 Milestone: Deploy workflows on HPC and GRID

We propose the following timeline :

January :

- Correct UAL bugs reported last year (Gabriele) ongoing
- Update ISIP mailing list (Frédéric) **Done** (message sent to ISIP members)
- Organize Support (Frédéric / CPT)
 - Issue 311: new one, new CPT please proceed with it
 - Issue 299 : about to be solved – Jacqueline will complete its resolution
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 - Issue 308 : New Feature request for XMLParamsForm (how to add parameters which are not in the « Frequently used » list. Has to be worked out by Philippe.
 - Issue 307 : Pending, the user did not answer to the CPT request. New CPT team to ask E.W. for an update on this Tracker
 - Issue 296 : Pending, new CPT to proceed
- Status of GRID workflows and HPC submission and decide this year's Timeline (Frédéric / CPT)

February :

- 17 February: Deadline for submitting abstract to Fusion Distributed Application workshop (conference in June, Spain). IPPLM
- 1st February: all Data Structure updates sent by IMPs to Frédéric **Done**
- Frédéric implements the Data Structure changes and iterates with IMPs on them
- ISIP Kickoff meeting (Frédéric to organize)
- Release new version of ISE 4.09a with arrays of structure (Jacqueline / Philippe)
- Replace 4.09a with new UAL memory cache and related Kepler actors → procedure to define and distribute (Philippe, Frédéric, Gabriele)
- Install software in switm as requested by Rui Coelho CPT
- Develop easy copy tool from one data version to the other CPT
- Modify UALslicecollector actor so that it updates also the simulation catalogue (Philippe)
- New release of HPC2K for 4.09a, to be tested by IMP4 (Tomek)

March :

- Complete full timeline and distribute it (Imbeaux)
- Release platform 4.10a for testing at first Code Camp (Philippe, all)
 - Data structure update IMP3, IMP5, MHD CPO
 - Integrate UAL with memory cache and restructured Fortran UAL and parallel Fortran UAL as public release
 - Merge FC2K version of Jacqueline including the init/fire methods (for C only)
 - Kepler updates ? Version 2.3 ?
 - Update Serpens suite to v2.3

- Tool for displaying the memory usage of CPOs
- ITMshared tools ? (See Nicosie report from Olivier) → need to update the cpo_copy tools and integrate them to the UAL (CPT)
- Integrate 2 python scripts to compare and list CPOs in data entries : work from Olivier copied in my public/tools_to_advertise directory
- Training 12-16 March (Garching, IPPLM)
- Code camp 19-30 March (Garching)
 - Bartell meets Gabriele to work on the UAL
- Prepare improvement of UAL Memcache (see UALMemcache_201111 document)
- Do an inventory of the various visualisation tools available on the ITM-TF platform (Hajo)
- GRID workflow with time slice submission (Michal)

April:

- Organize GOTIT course 16-20 April. Potential lecturers: Irina, Denis, Michal, one of our IMP5 expert (R. Dumont ?)
- Deliver packaged version of ITM platform for testing (ACT3-T4, Yves)
- Create a unified documentation for the various visualisation tools available on the ITM-TF platform (Hajo)

May:

- Test packaged version of ITM platform (ACT3-T4)
- GRID workflow with simple physical parameter scan (Michal)

June:

- Extend UAL with complex numbers and time-dependent strings (Gabriele, CPT). Dedicate a new CPT expert to UAL ?
- Provide standard and easy access to the various visualization tools (Hajo)
- Mid-term report of the CPT

July:

August:

September:

October :

November :

- ITM General Meeting (JET)

December :

From 2011 CPT report:

On going: make the Python actor compliant with usage of UAL's memory cache in Kepler

On going: Modification of FC2K in order to enable debug mode for an actor in memory cached workflow.

On going: copy routines should be implemented at small structures level and not at CPO level

Ideas to be placed this year:

- Launch a full ITM workflow on GRID (B. Guillerminet)
- Merge HPC2K, WS2K and FC2K into a unified tool (P. Huynh)
- UAL performance
 - All other initial ideas that we had are pending, waiting for more analysis (not sure they are relevant)
 - Propose design for CPO mask and related UAL updates (mask indicates the presence of individual signals in the CPO). (Hoenen)
 - Propose design for individual signal GET selection in FC2K (UAL optimisation, Hoenen)
 - Compare performances between MDS+ and HDF5 backend (including the possibility of storing the whole CPO as a structure array instead of the present method in MDS+ backend).
- Allow for new data types in the UAL : Complex numbers, up to 3D time dependent (Manduchi, Hoenen)
- Propose solution for operations on experimental signals (including index extraction) in Exp2ITM (Signoret)
- Propose solution for updates of the XML machine description file when going from one data version to another (Signoret)
- HPC2K upgraded to use the parallel IO UAL and retrieve the HDF5 file from HPC (Guillerminet)
- ITMProf available on Portal – Pending on Rui, install package in /cgi/bin and put a link on the Portal
- ITMProf writes to coreprof : Priority
- ITMProf uses more diagnostics (now, only interferometry, Thomson, ECE) → **NEEDS EQUAL 4.09a !!! AND EXPERIMENTAL DATA → Less priority than item above**
- Deliver suggestion of Requirements for Upgrade of Catalog Querying tool (Imbeaux)
- Make the documentation about actor SVN version to appear in the Kepler Actor documentation (Huynh ?)
 - I think what was wanted was a way of right clicking on an actor in a Kepler workflow and seeing some of this information, perhaps in the documentation section.
 - It might be worth advertising the information you sent me about \$KEPLER/.importedactors and actor_info.xml --- or is it already in the documentation somewhere?
 - There are a number of traceability elements on actor versions already provided by the import_actor script. If people have used this script to import an actor, the SVN revision number of the actor (related to Project kepler_actors) is

stored together with the SVN path in \$KEPLER/.importedactors. We remind also that the SVN revision number of the SOURCE code which has been used to create the actor (related to the Gforge Project of the physics code) can be found in the actor_info.xml file (stored in the kepler_actor directory).

- Init phase for actors: adapt FC2K to use the native Kepler mechanism ?
- ITMProf writes coreprof output, with errorbars on profiles, and released publically (installation on the system side)
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