Minutes of the 12th ALADIN LTM meeting May 8, 2012, Marrakesh 14:00 – 16:30

Participants

ALADIN Program Manager: Piet Termonia

LTM or deputy LTM:

Algeria :Bachir Hamadache (dep.)

Austria : Yong Wang (dep.)

Belgium : Alex Deckmyn

Bulgaria : Andrey Bogatchev (dep.)

Croatia : Alica Bajic

Morocco : Hassan Haddouch

Poland : Marek Jerczynski

Portugal : Maria Monteiro

Romania : Doina Banciu

Slovakia : Jozef Vivoda (dep)

Czech Rep.: Alena Trojakova & Petra Smolikava (dep.) Slovenia: Neva Pristov

France : Claude Fischer Tunisia :

Hungary: Roger Randriamampianina Turkey: Ersin Kücükkaraca (dep)

LACE Program Manager: Dijana Klaric

Support Team: Jean Maziejewski, Patricia Pottier

CSSI Members welcome: Daan Degrauwe, Pierre Bénard, Christoph Zimmerle

Excused: Abdelwaheb Nmiri (Tunisia)

1. Opening

In order to have room for more round-table discussions, many explanatory documents were prepared by Roger (as his ACNA functions include some coordination of the LTMs), Claude (as CSSI chairman) and Piet (as PM). They were sent to LTMs but, unfortunately, some deputy-LTMs did not receive them from their local LTM.

2. Adoption of the agenda

The agenda is adopted with a rescheduling of the topics: points 10, 8, 9 are moved up in the agenda; just after point 3.

3. Support Team matters

• Changes in registration of manpower

Patricia reminds that the last General Assembly has approved the revised guidelines for LTMs toward reporting manpower contributions. This document was sent to LTMs and can be downloaded on the aladin website:

http://www.cnrm.meteo.fr/aladin/IMG/pdf/Revised guidelines reporting.pdf.

In order to make the evaluation of the work plan easier, the GA also has agreed on the new functionality of the reporting tool proposed by the PM. Patricia explains that she has modified the registration tool to add a provisional report on some specific activities of the work plan. This won't change the record of cumulative manpower contributions of Members as defined in the MoU.

For this year, the specific activities to be identified during the reporting are: Parallellization optimization; Code development; Code design; Code maintenance.

LTMs are asked if they were faced with any problems regarding the new tool. Patricia proposes to give some demonstrations later on during the workshop for those needing some help to register.

Marek asks if the identified actions are specific to the ALADIN code or if the work done on the verification code should be part of these specific activities.

Piet explains that this added reporting aims to help him to identify people who can actually work on the ALADIN code (on topics such OOPS, SURFEX, ...). Thus, the code activities are restricted to the

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ALADIN/IFS code.

Claude proposes a concrete border of these new reporting topics: they should refer to the code that is in an export version, for the time being.

• *Update on newsletter & various information about stays in Toulouse*

The Newsletter is a tool to communicate. Patricia explains that, for the time being, due to the lack of any other contributions, the newsletter is often a contents table of the last articles published on the website: links to meeting announcements or minutes; links to operational pages (models configurations, domains, ...), which optimally should have been updated by the LTMs.

Piet proposes to keep the newsletter as it is, unless someone can take a more pro-active editorial role (asking people to present some interesting developments, results, ...). Volunteers are welcome!

During the workshop, Jean has previously reported on the future changes in the management of the Toulouse "résidences" and some on-going "building works".. Whatever, the visitors or "stagiaires" in Toulouse will still find an accommodation in Toulouse résidences.

• Inquiry for the ongoing execution of the WP2012

Piet has provided LTMs with a summary table of the WP2012 (as prepared for the last GA). He proposes to use it as a tool to follow the WP2012 execution: each LTM is invited to make a review of his/her local team's activities and to report it in this table before May 19. Piet will give an overview to PAC meeting (4-5 June). Piet asks if anybody has noticed something important in this execution and to report it right away. Nothing special is reported.

4. Verification plans

Piet summarises the proposals of the verification meeting's participants (Brussels, 27-29 March 2012): they aim to improve the verification activities within the consortium through:

- the finalisation of the common quality monitoring tool that exists in Ljubljana (with extension to new ALADIN countries and production of monthly reports),
- the use of R for the new developments (creation of a toolbox for new verification activities, to be used locally),
- an attempt to define our end-users.

• Adopt R as common tool?

Everybody agrees on the use of R for the future verification developments.

• Accept the proposal for the work plan

No comments are made on the proposed workplan. Piet asks LTMs to check who is involved in this workplan and let him know about any problem.

• *Input for the end-user question*

Piet asks if anybody has experimented difficulties to fill in the end-users questionnaire sent by Joao Rio. Nobody reports any problem but the questionnaire was not filled in by everybody.

For the end-users verification, the new developments aim to provide tools to do the job locally.

Christoph will give a presentation during the verification session of the workshop and this point will be discussed during the CSSI and the HMG/CSSI meetings: Christoph may be proposed by ALADIN as the verification task force leader, in case HMG & CSSI decide the creation of a common task force for verification.

5. SURFEX

• Adopt plan to work on PREPROCESSING

There are two surface schemes in the common system: the "old" ISBA scheme (still used) and the ISBA scheme within SURFEX (with more scientific possibilities). An operational use of SURFEX for all our applications will avoid the maintenance of 2 ISBA schemes. Some logistic problems remain in SURFEX that prevent it to be considered as a fully operational scheme, mostly problems of optimization when creating input for SURFEX with the PREP software. A possible solution could be to have PREP within Full-Pos which supports MPI and Open-MPI, such that Full-Pos can read SURFEX files

Piet proposes that this problem will be the subject of the SURFEX working week to be held in Brussels in the autumn: feasibility study and elaboration of a work plan for this. For the establishment of the working week, the following logical criteria will be followed: (1) a number of people with the correct skills should be present (for ALADIN Daan Degrauwe and Tayfun Dalkilic), (2) based on their availability, the week will be fixed, and (3) the names that have already been mentioned for the FR planning (for the FR countries and for LACE) are welcome in this week to work on testing the SURFEX system issued from cy38.

The LTMs agree.

• <u>Identify experts for the SURFEX WW</u>

Piet asks LTMs to propose collaborators, who have the necessary expertise in coding, porting, ... willing to dig into the PREP code. They will attend the SURFEX WW (on the ALADIN budget, as already planned in the flat-rate and the LACE budgets).

The choice of the date (week 38, 39 or 42) will be adapted to the availability of these core experts (optimally, 2 from ALADIN and 2 from HIRLAM).

6. OOPS

Piet emphases the importance for ALADIN to become active in OOPS and to identify some key persons in the LAM community, with a targeted specific plan. The action is currently limited to a few people, but other people are expected to become active later.

• Inform everyone about the Joint HIRLAM/ALADIN training in Spain next Autumn

Piet informs about the one week joint HIRLAM/ALADIN training in Spain : the attendance will be limited to OOPS experts.

Dijana raises the potential problem of the funding for this action, as it was announced recently and thus, hasn't been planned in the LACE budget.

7. COPE

Ask about observation preprocessing for a coordinated action

Roger would like to know how the ALADIN partners do their preprocessing, how the foreseen evolution by COPE would affect their local implementations and if they have special enquiries to COPE.

Vice-versa, Alena would like to know what partners expect from COPE and what will be the working practices with COPE (management of the changes, ...).

Roger promises to find some documentation and distribute it to LTMs.

Claude reports that, for COPE, specifications are not completely settled but developments have already begun.

Claude thinks that both HIRLAM and ALADIN should think about having a correspondent that would take part in the discussions between MF and ECMWF: somebody should represent the LAM community (as it is the case, for instance, with the OOPS steering committee and the IFS/ARPEGE coordination meetings).

8. Technical progress & plans; cycles

Claude refers to the preparatory document for the technical progress (CY38T1). He underlines the solid phaser teams that worked on the last phasings. He proposes that LTMs start thinking about proposals for phasers for 2013 (for CY39T1, CY40 and possibly a CY40T1) and stresses the timing constraints due to a lesser availability of MF technical teams, busy with the porting to MF's next HPC.

9. Calendar of cycles

• *calendar of MF's move to its next HPC*

Claude summarizes the tight calendar of the next cycles and the move from the NEC computer to a new HPC (see preparatory document for details). Possible difficulties to have robustly validated export cycles for each main cycle with IFS should be expected. The degree of freedom for arranging cycles at MF will be lesser because of these calendars and due to manpower constraints linked with porting applications.

• move to new SCR GIT

MF source code repository tool will be changed from Clearcase to GIT by the end of 2012 (February 2013, at the latest). GCO will develop an upper layer on GIT to mimic Clearcase.

Alena asks if GIT+GCO layer will be available for partners for free.

Alex reminds that GIT is a free software used for example by ECMWF for OOPS or by HIRLAM.

Alena explains that Cz has some knowledge on GIT.

• Setup of cycle testing for the partners: identify manpower

Claude explains that in principle the export version of CY37T1 is ready for dissemination. It is however so far without a deep validation of ALARO (apart from a technical test in mitraillette). So the question of whether to announce the export version or arrange a longer validation of ALARO first is open.

Piet mentions that Luc Gérard is testing it, without assimilation.

Alena asks for an olive configuration to test ALARO in Toulouse. Claude leaves this issue open but remarks that, in that case, the observation usage will be MF's one. Neva proposes to open the question of a test configuration and its maintenance by the ALARO team during the next ALARO Working Days (June 13-15).

9. Concept for a common system: start with common namelist

Roger proposes a common namelist management to ease both the local implementation and the contribution to a new cycle. He proposes to have a common namelist database and a makefile to provide namelists required for available options of the applications of the common codes. Such system is implemented in HARMONIE. Roger proposes to LTMs to test it and to come back on this topic during the next LTMs meeting.

Claude raises the question of the coordination of this common namelist database.

Alena asks if it will be available on the ALADIN webpages.

Neva underlines the fact that, in ALARO, each country has its own configuration; each one who provides a namelist should be responsible for its content, together with the coordinator of the database.

10. Météo-France raised issues for partners

• plans at MF to re-organize the 00 UTC production, and its impact on LBC file production

Piet asks the participants not to shoot the messenger ... Claude adds not too shoot MF either ...

Claudes details MF's plans to re-organize the 00UTC production (see also the preparatory document for point 10).

- The current situation is: a long cut-off for assimilation around 8:00UTC, a short cut-off at 2:15UTC and a very short cut-off at 1:10UTC (so-called PACOURT).

- MF wants to provide an earlier AROME 00UTC and to implement an AROME 03UTC production (coupling with ARPEGE short cut-off). This implies to modify the timing of the ARPEGE 00UTC production with a very short cut-off at 0:30UTC (and not 0:10UTC as written in the preparatory document) and a short cut-off at 3:00UTC. These shifts in time will mechanically affect all downstream production, including coupling files (on advance of 40' or in delay of 45', respectively)
- This scenario is regularly discussed at the level of MF Headquarters. An experimentation will start on this basis and the discussions will continue on the basis of the results in ARPEGE.
- The coupling files from the short cut-off will be available 45' later. The coupling files from the very short-cut off (currently produced for LACE domain) will be available 40' earlier but the statistical quality of these coupling files will be somewhat lower than at present.
- MF also has a downstream production and MF departments have been asked to assess the impact of these changes.
- These changes would be effective between September 2012 and the end of the year.

The LTMs confirm their full understanding of these plans and are asked to react to them.

The CZ dep-LTMs report on the dissatisfaction of CZ with these plans and the way they have been communicated.

Piet explains that he had known for a month about these plans but decided to delay the announcement until the LTM meeting discussions.

Claude answers several questions raised by LTMs: only 00UTC will be re-organized; apart from the time, there will be no change in the coupling files; the quality will be assessed by GMAP and the decision making will be made on the assessment of the impact.

Alena asks who is using the LACE very short coupling files (PACOURT). No positive answer can be given by the LACE LTMs. Maybe Hungary? Each LTM should verify if their national applications are coupled with PACOURT or with the short cut-off.

LTMs explain that delayed coupling files will mean potential problems of availability to their local computers and, above all, delayed national production with expected loss of customers. The situation is more crucial for countries in the Eastern European Time zone (GMT+2 : Bg, Ro, Tk), the current coupling files being available already rather late.

Dijana explains that some (surface) ARPEGE coupling fields are needed even when coupling with ECMWF.

Claude proposes the very short cut-off as an alternative for all voluntary partners (and not only LACE as for the current PACOURT): the use of PACOURT coupling files should be assessed domain by domain, with the help of partners in a coordinated change. A fair approach could be that a limited number of partners will do the testing (MF can provide the ARPEGE data and the partners would create coupling files from the new ARPEGE data).

Some partners asks about the possibility of having both very short and short cut-off coupling files .

Piet proposes a two-stage action:

- he will report at the PAC meeting (4-5 June) about the impact of the delay of availability of coupling files on the partners, specifically LTMs are expected to inform him and Roger about: (a) to which of both cut-offs the national runs are coupled and (b) which critical applications are impacted. It is too early to address the problem of the quality of the initial files.
- then, during the summer, based on the outcome of the discussions in PAC, some coordinated performance tests will be run with PACOURT coupling.

Roger agrees to coordinate these tests at the consortium level (each LTM should coordinate at the local

level and try to find some manpower) but not to do the whole job (as was sometimes done in the past by ACNA, for example for the change of resolution). Dijana asks if the ALADIN budget could be used to pay somebody to do the testing in Toulouse. Claude explains that it is possible to use some MF maintenance fundings for this.

• Password renewal for MF's computers / servers & web site portal

Claude informs that MF DSI Department is preparing a centralized password control and management. An external web-portal will be dedicated to remote users of MF computers. The usual Unix-type of password changes will then be replaced by a central change valid for archive, HPC and servers at the same time. LTMs will receive further information: contacts at MF are Claude and Eric Escalière.

11. AOB

12. Date and place of next LTM meeting

• EWGLAM meeting, Finland, 8-11 October

It is decided to move the LTM meeting from the usual Friday morning to Tuesday evening (thus Tuesday 9 October 2012 in Helsinki).