

Minutes of the IA WG #28
Herschel-HSC-MoM-472

Place: KUL, Leuven, Belgium

Date: 18 November 2004

Time: 14:00 – 17:00

Present:	Jorgo Bakker	JBa (HSC/ESTEC)
	Wim de Meester	WdM (PACS/KUL)
	Steve Guest	SG (SPIRE/RAL)
	Rik Huygen	RH (PACS/KUL)
	Jean-Jacques Mathieu	JJM (HSC/ESTEC)
	Stephan Ott	SO (HSC/ESTEC)
	Peter Roelfsema	PRR (HIFI/SRON)
	Pierre Royer	PR (PACS/KUL, part time)
	Michael Wetzstein	MW (PACS/MPE)

1) Welcome

SO welcomed everybody, and thanked RH for organising the meeting.

2) Agreement on agenda

The topics of the draft agenda (see appendix A) were approved.

3) Review of actions

The status of IA actions (see appendix B) was discussed.

AI WG#22/05 was closed by HSCDT.

AI WG#22/06 was closed by HIFI, PACS, SPIRE and IA-UG

AI WG#22/21 PRR to formulate usecases for a kill statement under JIDE

Overdue. PRR couldn't fulfill this action by the agreed date, but closed the action as input to SPR 646 "JIDE statements control" during the meeting.

AI WG#26/1 was closed by SPIRE.

AI WG#26/2 was actively closed by HSCDT and IA-UG and closed by default by HIFI, PACS and SPIRE

AI WG#26/3 NdC, SG, RH and JCG to estimate the risk when a deadlock would happen in detail, and provide guidelines to GUI developers how to avoid this.

Overdue. A long discussion how to progress on this topic started. SO explained that he had envisaged that NdC would hold a developer's workshop, explaining his work and findings in much more details. SG suggested that the JIDE prototype developed by NdC should be put to use at some developers' machines to see how many deadlocks would occur. However, it was felt that this will result in serious branching for JIDE and that a developer's use of JIDE might not be representative. RH wondered whether all possible solutions were exploited. He suggested looking into the possibility of Jython to stop a particular command/action. Since JIDE forwards commands etc. to Jython any interruption by the user can be caught by JIDE and the appropriate action forwarded to jython. NdC might have investigated this already but we didn't know at the time of the meeting. The benefit of this could be that the jython interpreter is stopped but JIDE still is able to save some state information, scripts etc. Finally, it was agreed that the action is superseded. Instead, the four actors (NdC, RH, SG, TBC HIFI) should form a rapid reaction force (RRF), decide themselves how to continue and report back at the next IA WG meeting.

AI WG#26/4 NdC to look in functionality of Python debugger and professional tools (like eclipse) to support Jython debugging

Overdue. JJM is already looking into Eclipse that supports Jython debugging. Eclipse, however, seems to be geared towards developers, and might not provide a convenient debugging environment for end users. As NdC/JJM couldn't fulfill this action by the agreed date **the due date was shifted to the next IA WG meeting.**

4) What's New?

a) help/documentation system

HELP06

Due to too much work, SG couldn't give the presentation. SO drew the attention to the "HowTo write help documentation" prepared by NdC

<ftp://ftp.rssd.esa.int/pub/HERSCHEL/csdt/releases/doc/help/howto-write-help.html>

During a discussion between NdC and VO concerning SCR 1244 "help files should also be generatable from the elements of a task", NdC assured VO that there would be no need to write documentation information twice.

PRR suggested that we should not implement additional on-line help issues that might be overturned as outcome of the IA documentation review

b) access to calibration data

CAL06

SG gave a verbal presentation. The reason for SPIRE pushing this issue was that their pipeline development has already started, and that they are hampered by the lack of infrastructure for the history and calibration access. PRR suggested having a pipeline developer's WS (mid January?). SG stated that HSCDT and PACS (BV?) commented

his note. However, as he would appreciate additional inputs, HIFI and PACS took the action

AI WG#28/1 HIFI and PACS to comment on SG's note on calibration products

Due date: 03/12/2004

SG stated that after consolidation of the usecases the design phase could start this year.

PRR mentioned that HIFI had a kick-off meeting for pipeline development already.

c) Calibration data sources database DBASE06

JJM gave a verbal presentation on this work, starting from the requirements given by AMH two years ago. The calibration sources database supports the work of the calibration working group to schedule their observations. A demonstration will be given later during the meeting. The latest version of the code for the calibration sources database is in JJM's machine, as this is most convenient from him to access the database (being inside ESTEC's firewall, JJM faces more problems to access the HSCDT database than users outside of ESTEC!). It is planned to move the latest version of the code into the proto tree in two weeks time. This led to the question how users can benefit from code developed for the calibration sources database. JJM explained that it is expected that this can be done easily after the toolbox environment is set up.

d) Additions to numeric package NUMERIC06

JBa gave a presentation describing the new Java and Jython features, and improvements in design documentation (see appendix C)

5) Technical discussions

Instead of the planned technical discussions, PRR insisted to use this forum to discuss a split of the IA WG into several bodies according to the lines of the bonne idée meeting (an IA management group and an IA "system engineering" technical group). This change in agenda was supported by PACS (RH). SO felt that this was not the correct forum for such a discussion, as this IA WG meeting was requested to be a purely technical session, and in view of JRR's e-mail dated 12/11/2004 that such a discussion should be held in the Herschel steering group closer to the SPC decision whether or not additional funding would be provided for a common IA development, and in an appropriate forum. As both HIFI (PRR) and PACS (RH) insisted that, regardless of the outcome of SPC discussions, we need to have a body that will look into the system-wide aspects of common IA (implying that the common IA development would go ahead even without additional funding) SO reluctantly agreed to continue this discussion.

During the following closed session the original mandate and working style of the IA WG was discussed intensively. As an outcome SO was requested to provide a list of

areas he expects to be covered by the IA “something” group(s), and that all involved parties would propose terms of reference and an organizational scheme. After consolidation, such a scheme might serve as input for discussions within the steering group.

6) Next meeting and IA telecons

no dates for future meetings or IA telecons were agreed

7) AOB

no AOBs were discussed

Appendix A

proposed agenda

Agenda of toolbox WS / IA WG #28
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Place: KUL, Leuven, Belgium

Date: 18 November 2004; 09:00

Room: Seminar Room 33

toolbox WS
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1) Welcome JBa 09:00

Lunch (12:30 - 13:00)

IA WG #28
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1) Welcome SO 13:00

2) Agreement on agenda all 13:05

3) Review of actions SO 13:10

4) What's new? 13:30

* help/documentation system SG for JK
* what tags needed to be filled for
other packages

* access to calibration data SG

* calibration sources database JJM

5) Technical discussions 14:30

* handling of non-existing keywords SO
(SPR 1095)

* database --- ways to coax its use all
(triggered by discussion "extracting
dataframes from database)

* efficient coding document RH
--- how to progress

* where to store tasks RH/JJM

N	eclipse as debugging tool for Jython	JJM	
*	fall-out from IA review	SO	15:30
6)	next meetings and IA telecons	all	16:30
*	next IA WG meeting		
*	technical splinters ?		
	* outcome of investigation how to stop tasks, and discuss supportable scenarii		
	* organise and maintain Jython scripts and Java code infrastructure		
	* pipeline developers' workshop		
*	conclave ?		
*	IA review ?		
7)	AOB	all	16:45

Appendix B

State of IA Actions *before* IA WG

AI WG#22/5 JBa to make proposal what multi-dimensional select and where functionality is expected to be available (command line examples)

Due date: 24/09/2004

CLOSED HSCDT

AI WG#22/6 ICC user representatives to select their preferred behaviour for a multidimensional select and where function

Due date: 08/10/2004

CLOSED HFII
SPIRE
PACS
UG

AI WG#22/21 PRR to formulate usecases for a kill statement under JIDE

Due date: 30/09/2004

OVERDUE HIFI

AI WG#26/1 SG to raise SPR to avoid that help system has to be configured individually before it works

Due date: 17/09/2004

CLOSED SPIRE

AI WG#26/2 ICCs to comment on current help system.

Due date: 17/09/2004

CLOSED HIFI (default)
HSCDT
PACS (default)
UG
SPIRE (default)

AI WG#26/3 NdC, SG, RH/WdM and JCG/AL to estimate the risk when a deadlock would happen in detail, and provide guidelines to GUI developers how to avoid this.

Due date: 29/10/2004

OVERDUE HIFI
 HSCDT
 PACS
 SPIRE

AI WG#26/4 NdC to look in functionality of Python debugger and professional tools (like eclipse) to support Jython debugging

OVERDUE HSDCT

Due date: 29/10/2004

Appendix C

What's new in the numerics package? (JBa)

IA Numeric What's New

Jorgo Bakker

18 November 2004

Documentation

- + Current: Design & Contrib drafts

Jython User

- + New toolboxes:
 - fit
- + New Functions in toolbox basic:
 - LOGN(x,base)
 - SHIFT(x,shift,dimension=0)
 - RESHAPE(x,shape=None)
- + New features:
 - Slicing an array can now be done with a step-size as well.
 - Old `x[0:4 ,5:10]`
 - `x[0:4 ,5:10] # as before, step size=1`
 - `x[0:4:1,5:10:1] # same, but with explicit step-size`

Java User

- ✦ As for Jython
- ✦ ArrayData implement two new methods...
 - that both return a view object. This view object may help avoiding casting (say after applying a function), such that it improves the readability of your code.
 - `ArrayData {`
 - `ArrayView as();`
 - `ArrayView to();`
 - `}`