

Pulsar Pipeline Checklist

	tasks	Developer
BG/P	TAB Pipeline	John Romain, Jan David Mol, Rob van Nieuwpoort
	Design/preparatory work for BG/P 2nd transpose	John Romain, Jan David Mol, Rob van Nieuwpoort
	Implement preparatory work for BG/P 2nd data transpose	Jan David Mol
	Implement BG/P 2nd data transpose	Rob van Nieuwpoort
	Document "new" BFout stream (post 2nd transpose)	Jan David Mol
	Test and bug fix 2nd transpose	Rob van Nieuwpoort, Jan David Mol, John Romain
SAS / MAC	Integrate of TAB module into SAS/MAC	Jan David Mol, Ruud Overeem
	Offline Pipelineline connection to SAS/MAC	John Swinbank, Ken Anderson, A2, Ruud Overeem
BF2H5 online version	BeamFormed Writer (1st version to OLD ICD spec)	Alwin de Jong
	Test svn externals when building LOFARSOFT with the DAL	Lars Baehren, Marcel Loose, Alwin de Jong
	Integrate DAL "BF" and "Common" classes into BF2H5	Alwin de Jong
	Integrate parset reader into BF writer w/in LOFARSOFT	Alwin de Jong, Jan David Mol
	Integrate new BF H5 data format (ICD) into BF2H5 (raw data)	Alwin de Jong
	Integrate new BF H5 data format (ICD) into BF2H5 (BG/P out data)	Alwin de Jong, Jan David Mol
offline version	Extract UDPcopy and IonProc out of LOFARSOFT	Alwin de Jong, Jan David Mol, Masaya
	Extract parameterDB out of LOFARSOFT	Alwin de Jong, Jan David Mol, Masaya
	Create standalone BF2H5 tool	Alwin de Jong, Masaya
BF ICD	Create mock BF H5 files with 4 types of data storage containers	A2
	Benchmark (DAL C++) 4 storage types to choose optimum BF container	A2, L. Baehren
	Finalize BF ICD	A2, L. Baehren, J. Romain, JD Mol, J. Hessels, K. Anderson
	(Perform benchmarking on H5 chunking)	K. Anderson, A2, L. Baehren
	Identify source of metadata values (& calculations)	Alwin de Jong, R. Overeem, J. Hessels, M. Wise, A2, B. Stappers
	Profile BF Observations (& Pipeline) for typical stats on sizes	J. Hessels, B. Stappers, M. Wise
USG Software Repository Pipeline Tools	Daily build of USG repository on offline cluster	Arno, Mike Wise, Lars
	Integrate FFTW-3.1.2 into cmake	A2
	Integrate PPGPLOT into cmake	A2
	Integrate TEMPO into cmake	A2
	Integrate PRESTO into cmake	A2; Lars
	Integrate SIGPROC into cmake	A2
	Integrate PSRCHIV into cmake	A2
	Test software installation/components on new cluster	A2, J. Hessels, B. Stappers
	Test software installation/components on user machines	Pulsar Group
	Integrate "convert" (bf2presto) into cmake	A2
	Update/maintain/expand "convert" (bf2presto) program for BF observatio	Tom Hassal, A2, Jan David Mol
	DAL	Create DAL classes for BF metadata and structure (abide by ICD)
Create DAL methods to access data from BF structure (abide by ICD)		Lars Baehren, A2
Wrap BF DAL classes and methods with Python for PyDAL		A2, Lars Baehren, K. Anderson
Ongoing PyDAL updates and bugfixes		A2, Lars Baehren, Frank B.
Integrate HDF5 into file I/O for Presto/TEMPO/etc		A2

Pulsar Pipeline

Design Pulsar Pipeline for basic observing modes	J. Hessels, B. Stappers, J. van Leeuwen, A2, M. Wise
Decide how to distribute the Pulsar Pipeline	M. Wise, L. Baehren, J. Hessels, A2, J. Swinbank
Implement Pulsar Pipeline Design within the iPython Framework	A2, K. Anderson, J. Swinbank
Pipeline Testing	A2, K. Anderson, J. Swinbank, J. Hessels, B. Stappers, J. Van Leeuwen
Release Pulsar Pipeline	M. Wise
Design Pulsar Pipeline(s) for other observing modes including survey	J. Hessels, B. Stappers, J. van Leeuwen, A2, M. Wise

Archive

Sync Archive schema with BF ICD	A. Renting, A2, L. Baehren, M. Wise, R. Overeem
Archive Pulsar raw data	A. Renting
Archive Pulsar Pipeline Processed data	A. Renting, A2

Misc.

(Remove PGPLOT from PRESTO)	Lars Baehren, A2
(Work with the VO on format/protocol issues for LOFAR HDF5 data)	J. Swinbank, A2, M. Wise, K. Anderson

Commissioner	Expected date of readiness	remarks
Jan David Mol, Jason Hessels	Done in early 2009	
Rob van Nieuwpoort, John Romain, Jan David Mol	in process, 1-2 months	John, Jan David and Rob have completed the discussions; 4-phased for transpose prep, then transpose
Rob van Nieuwpoort, John Romain, Jan David Mol	1-2 months	Jan David is implementing several computational phases in preparation for transpose
Jan David Mol, Alwin	1-2 months	Rob will add the program code that does the actual communication
Rob van Nieuwpoort, Jan David Mol, Alwin de Jong, Jason Hessels	1-2 weeks	
Jan David Mol, Ruud Overeem		
John Swinbank, Ken Anderson, A2, Ruud Overeem		Can reuse the work done for the Imaging Pipeline integration
Alwin de Jong, J. Hessels	Done	
Alwin de Jong, Marcel	in process, 1-week	Lars has spoken to Marcel and emailed relevant info; Lars to touch base with Marcel to implement in
Alwin de Jong		
Alwin de Jong		
Alwin de Jong, A2, J. Hessels		
Alwin de Jong, A2, J. Hessels, Jan David Mol		
Alwin de Jong		
Alwin de Jong		
Masaya, James Anderson		
A2	Done	
A2, Jason Hessels	1-2 weeks	4 types are: 1D arrays, ND arrays, 1D tables, ND tables (note ND arrays are memory limited) DAL is missing Array/Table real() methods from sub-groups; Lars to add functionality before benchmark John Romain's comments and James Anderson's comments integrated; moved Coord Group; may be not necessary for completion of the pipeline Put this as an agenda item for discussion during the next BF status meeting should be a chart in the ICD to view typical data sizes for types of observations; waiting on Jason
A2, Lars Baehren, J. Romain, JD Mol, J. Hessels, M. Wise		
		Mike to start up the process of asking Arno to include this in a daily build
	Done	
	Done	
A2 fixing seg fault & other issues on new cluster build	Done	note, depends on system install of PGPLOT
	1-2 weeks	workaround for problems with reading files with line length > 70 chars; fix requested to developer accelsearch seg fault (non LOFAR data); cmake external dependencies can be made smarter (Lars)
		not 100% sure this is needed
The Pulsar Group	in process	fixing problems as they unfold
	in process; low priority	Ramesh would like a copy of the software suite within cmake; TEMPO doesn't build on Mac OS 10.6
A2, Tom Hassal		
A2, Tom Hassal, Jan David Mol, J. Hessels		Tom needs to check in his version into the ISG repository
	in process	implemented three highest tiers of H5 structure (not yet lowest tier where the data structures are)
The Pulsar Group		
	in process	need to formalize the to-do and bug list
The Pulsar Group		

The Pulsar Group

A2, K. Anderson, J. Swinbank

A2, J. Hessels, B. Stappers, J. Van Leeuwen

create use-cases and map these to tools/parameter settings; start at PBW #6
do we need to integrate the Transient S/W repository with the USG S/W repository?
meeting scheduled for Dec 18th

not needed for completion of first pipeline release

A. Renting, A2, J. Hessels

A. Renting, A2, J. Hessels, M. Wise

A. Renting, A2, J. Hessels, M. Wise

in process

meetings took place to mesh the LOFAR ICD with the Archive schema

The Pulsar Group

?

investigate S2PLOT or some other package which can be used in general for LOFAR data plotting
not needed for pipeline release