AMI and meta-data in ATLAS Computing

ATLAS meta-data and AMI workshop

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BNL

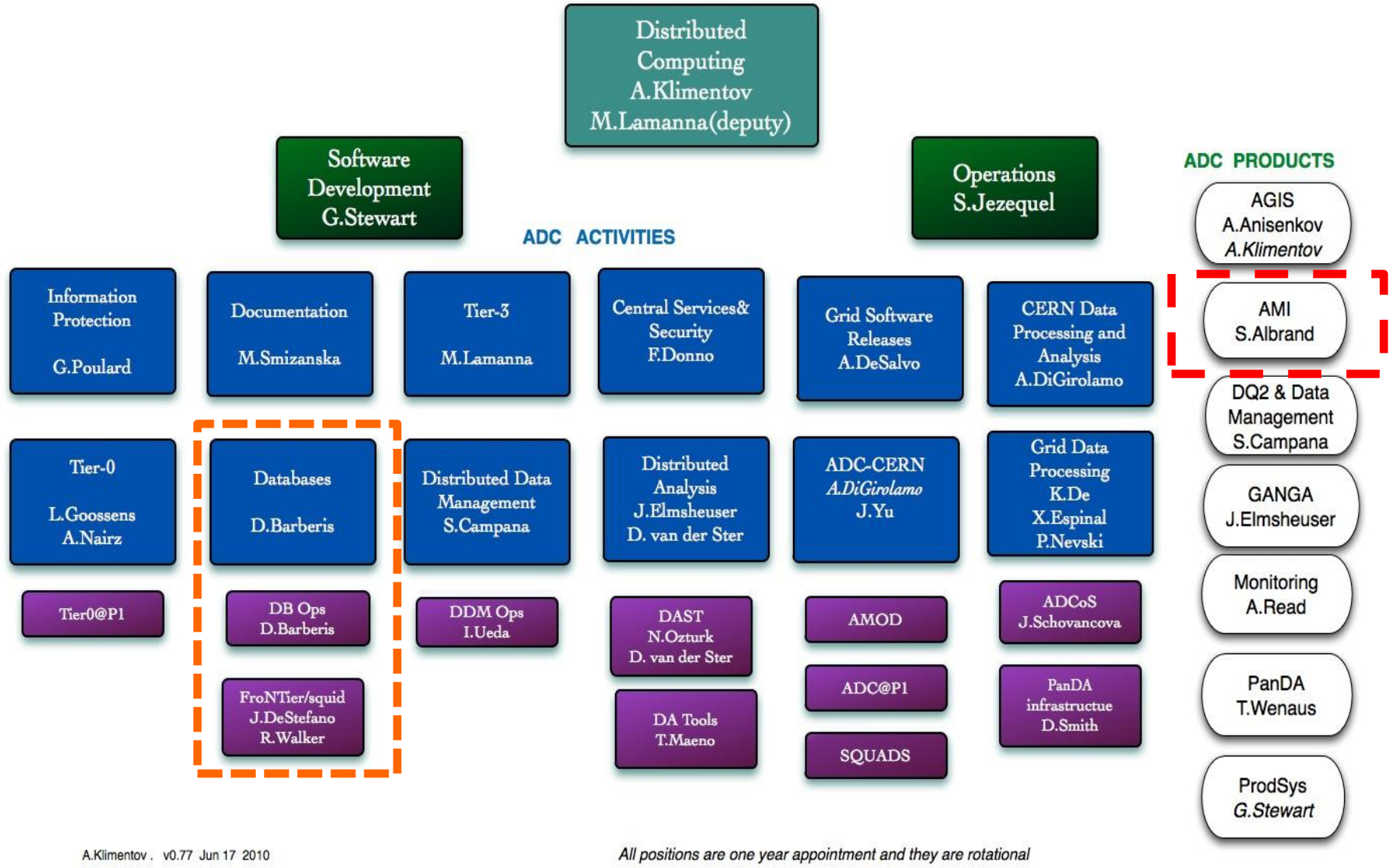
Important Milestones History

- Apr-May 2006. Computing Coordinator called AMI review.
- Jun 2006 - Feb 2007. meta-data TaskForce (TF)
- Oct 2008. Meta-data coordinators nomination within Data Preparation Group
- Mar 2010. Computing Coordinator and Data Preparation Coordinator agreed that AMI is a part of ATLAS Distributed Computing project

Past Important Recommendations

- AMI Review :
  - AMI Group should include at least 2 ATLAS physicists, one of whom should be close to CERN. In short term one of AMI engineers should visit CERN every week.
  - ATLAS computing management should immediately identify these physicists with goal being 1 June 2006
  - AMI group should take part in Metadata Taskforce
  - Dual reporting lines should be established between AMI team and Data Management and Data Preparation
- Meta-data TF :
  - Final document provides an overview of the metadata, which are needed to characterize ATLAS event data at different levels (a complete run, data streams within a run, luminosity blocks within a run, individual events).

Present Distributed Computing Org Chart



Offline Database View

Offline Database Coordination: Dario Barberis

Database Software: Elizabeth Gallas

- COOL related tools:
R. Hawkings ➔ M. Borodin
- Liaison to LCG-AA:
E. Gallas, D. Barberis
- Conditions data tagging:
P. Laycock ➔ M. Plamondon
- Geometry DB: V. Tsulaia
- Trigger DB: J. Stelzer

Liaison to Online Databases:

Rainer Bartoldus

Database Operations: Dario Barberis

- DB administration, monitoring and optimisation:
G. Dimitrov, F. Viegas
- Liaison to WLCG Service Coordination:
  - Coordination: D. Barberis
  - Technical (including 3D):
G. Dimitrov, F. Viegas
- DB releases: V. Tsulaia
- ADC servers liaisons:
F. Donno, S. Baranov
- Frontier/Squid support:
J. DeStefano, R. Walker
- Conditions data files:
A. De Salvo

Metadata and TAGs: David Malon

- TAG infrastructure and contents:
D. Malon, J. Cranshaw, T. Donszelmann
- TAG uploading tools and operations:
E. Vinek, F. Viegas
- Conditions metadata:
E. Gallas
- AMI: S.Albrand

June 2010 – February 2011

Data Preparation View

Data Preparation Activity Coordinators

General:	Andreas Hoecker, Beate Heinemann
Data Quality:	Michael Hauschild, Peter Onyisi
PROC:	Walter Lampl, Maaike Limper
Tier-0:	Operations: coordinators: Luc Goossens, Armin Na…
Reprocessing:	Adam Gibson
Luminosity:	run coordinator: Witold Kozaneck; group convenors: Benedetto Giacobbe (…
Beam spot:	Juerg Beringer, Rainer Bartoldus (7…
Simulation:	Charlie Young, Adele Rimold
Conditions:	Paul Laycock (…, Mathieu Plamondon (…
Magnetic field:	Laurent Chevalier, Marie Legendre
Metadata:	Eric Torrence (…, David Malon (…

ATLAS Metadata Coordination (mandate)

David Malon, Eric Torrence

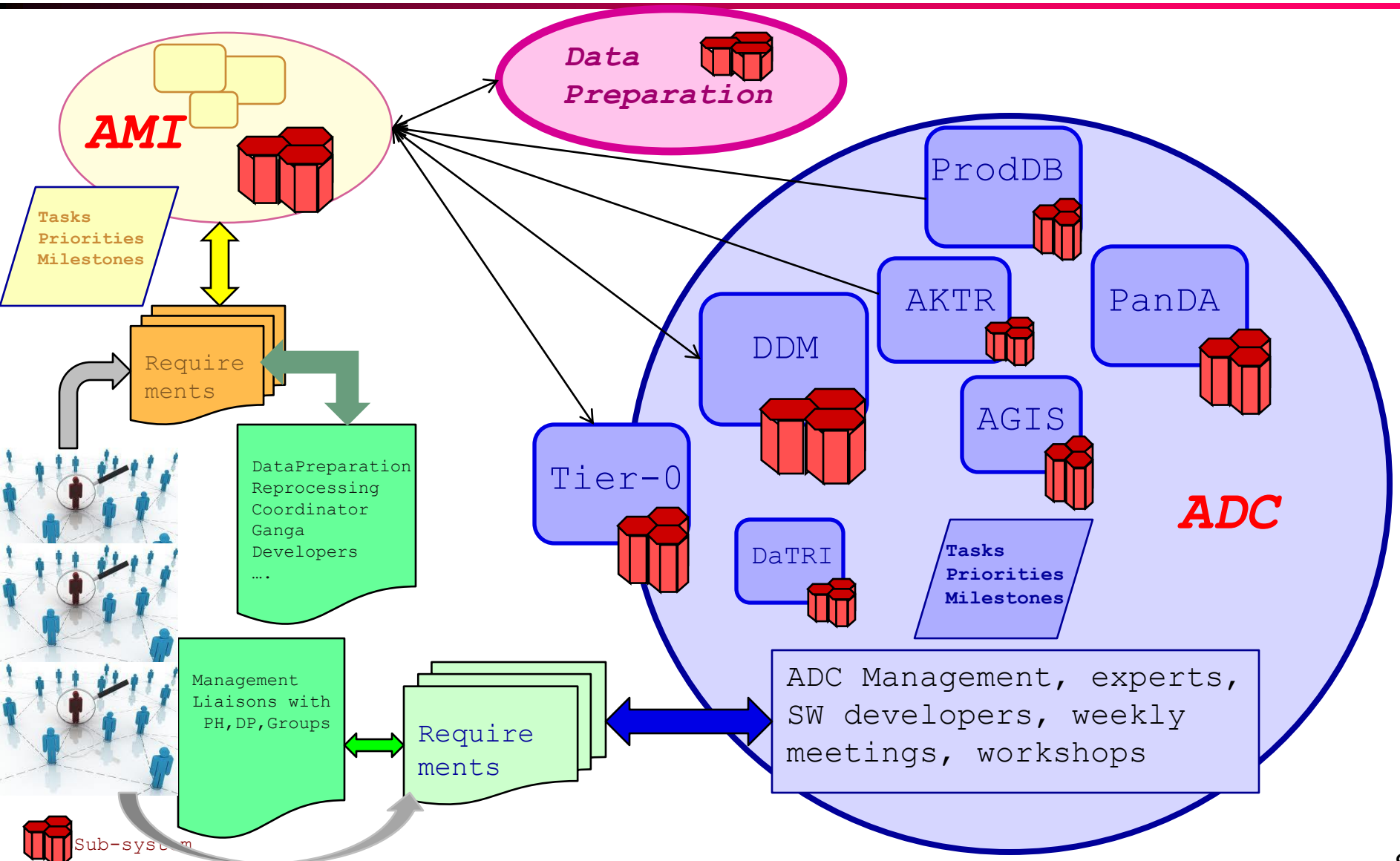
Related links:

- Metadata task force report
- ATLAS metadata interface (AMI)
- ELSSI (Event Level Selection Service Interface)
- ATLAS Data Summary page
- AtlasDataSummary TWiki page
- Document on requesting changes to TAG content

Disclaimer

- It is my biased and sometimes incoherent view on AMI and meta-data handling place in ATLAS Computing
- *AMI Priorities and Tasks are not well synchronized with the other ADC activities.*
  - *It caused :*
    - Duplication in SW Development
    - Information synchronization issues
- At the same time several inconsistencies and bugs were found in various ADC products (databases), due to cross-check within AMI information

My view


AMI
Data Preparation
Tasks
Priorities
Milestones
Require ments
DataPreparation
Reprocessing
Coordinator
Ganga
Developers
….
ProdDB
AKTR
PanDA
DDM
AGIS
Tier-0
DaTRI
Tasks
Priorities
Milestones
ADC
Management
Liaisons with
PH,DP,Groups
Require ments
ADC Management, experts,
SW developers, weekly
meetings, workshops
Sub-system databases

Where is the place of AMI and meta-data handling ?

- AMI is a frontend for ATLAS Physics Community and it is used widely. A lot of information is aggregated in AMI. AMI is the first place where physicists look for meta-information
- At the same time :
  - It is still uncertain <to me> where AMI project is placed (it is on the boundary between computing and data preparation and physicists)?
  - What is the best way to optimize reporting lines ?
  - How are software development priorities and requirements defined ?

- *Do we have a sufficiently coherent view of metadata and its handling?*
  - *For users*
  - *For SW developers*