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Enabling Grids for E-sciencE

COD activity in EGEE-III

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- **EGEE-III context**
- **Assessment of COD-activities in EGEE-II**
- **COD mandate in EGEE-III**
- **Concerns**
- **Organisation**
- **Tasks and efforts**
- **Summary**

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- **Goals of EGEE-III**

  Evolution to EGI type /distributed model

  Smooth Transition

- **Goals for EGI (European Grid Initiative)**

  Regionalization of the COD service

  Procedures and tools are to be ready

  Coherent model with a thin central COD layer

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- Stabilization of sites in production,
- Involvement of 10 regional teams in daily global monitoring of production sites,
- Involvement of most federations in the COD coordination through the working groups,
- Regular suggestions to ROC managers attendance on daily procedures via OPM wkg grp or Best Practices wkg grp

Highlights:
- Improvements in tools: COD dashboard
- Improvements in monitoring tools for sites and requirements for Core Service Failure handling.
- Improvements in procedures: Procedures OPM.
- Improvement of Schedule Downtime Process.
- Failover of CIC Portal / GOCDB and setup of cic.gridops.org failover mechanism
- Experimentation of regionalisation of service of CE and TW.

Evolution on the mandate for the COD foreseen:

Enforce regionalization of service, generalization of "1rst line support" model

Experiment/build model and propose models to the ROCs on how could the thin COD layer operate together with the federations - i.e final step of regionalization in terms of tools and procedures.

Improve COD service and its assessment

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Concerns/issues :

- Follow-up on the requirements on each of the monitoring tools for COD daily work and tools integration purposes.

- Process failover of all operational tools needed for COD work.

- Assessment of the operational tools availability.

- Need to define the interface with OAT, ROCs.

- Make the COD structure evolve to gather and coordinate manpower to improve and enhance COD service now and in transition phase to regional model.

- COD mandate need to be officially agreed on, for federations to foresee the manpower at the same time as the OAT.

- Community building for the two following purposes:

o 1rst line support generalization and consequences on tools and procedures including set-up of a knowledge base.

o Experimentation on what the operations model of the next COD generation in EGI could be.

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Official mandate to be agreed on according to :

Goals and past experience coming from sites and ROCs

- Move from central COD (c-COD) model to regional COD (r-COD) model; goal:
  Central COD as we understand it today does not exist at the end of EGEE-III;
  All rocs run a regional COD service by the end of EGEE-III.

- Define what a "thin central COD layer" would do, and if needed introduce it in
  the new COD model

- Coordination between regional CODs and central thin layer COD

- Communication and share of expertise between regional CODs

- Best Practices and Operational Procedures for daily monitoring activity for
  sites and federations.

– Need of interface to OAT in terms of requirements follow-up : Monitoring tools, failover, integration tool

The OAT handles development and availability of monitoring tools.

CODs (r-CODs, c-COD), as users of those tools, are clients of the OAT.

They assess their reliability.

– Need of interface to ROC via internal committees :

ROC-Forum for setting-up failover mechanisms for m/w core services

- Dedication : Working groups recognized within federations to provide expertise and by federations to make the needs come to the central operations.

- Collaboration : Up to now, each federation had found a way to contribute actively to improve their COD work environment, when not proactively leading a working group.

  Also, each person/tool developper/expert recognized as of « global interest » for COD scope has been integrated happily in this « closed community », e.g SAMAP ➜ TIC scope to monitor this aspect with Nagios prototype for example.

- Flexibility : Purpose of the groups to evolve together with their mandate with time and the upcoming of the needs e.g. EGI

- Anticipation : e.g. Strategy of the Operational Failover Working Group.

- Experiment : e.g regionalisation of tools and the future modular « NGI dashboards » to widen the CE 1rst line support experience.

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- – **Currently CE /TW, SWE/NE to come**
- – **Current model : alarms younger than 24h.**
- – **How to improve the model/procedure**
  - – Go further in the regional model
  - – Knowledge base and collaborative tools
  - – Take care of the VO specific tests.
  - – Boundary between the 1rst line support/c-COD
  - – Mutualisation of work of both teams at the region level
  - – What would do the final c-COD team

  (escalation process/grid experts)
- – **How to improve the process of COD service**
  - – Run SAMAP
  - – Set aside network glitches impact
  - – Take into account the Core Services Failure

– **Operation Procedure Manual**

– **Best Practices**

Handover improvement

Alarm masking rules

Operational usecases follow-up

Alarms weighing mechanism

Metrics for COD activity in EGEE-III

Advisory comittee for ensuring uniformisation and as a regulation body, before setting up new critical tests
Ensuring that the present COD work is not disrupted by the technical evolution and drive evolution of COD work and procedures.

➔ **Eventually come-up with a thin layer ops model to test**

– **TIC**

– **Enforce Failover for ops tools**

 Failover mechanisms for GSTAT, SAMAP, CIC and GOC

– **COD dashboard**

 Evolution towards N regional instances + 1 specifically dedicated for C-COD. Incl Alarm weighing mechanism.

 Request for change on monitoring tools through OAT

 Follow-up of requirements on OAT via ???

 Follow-up of requirements on the separate tools via ???

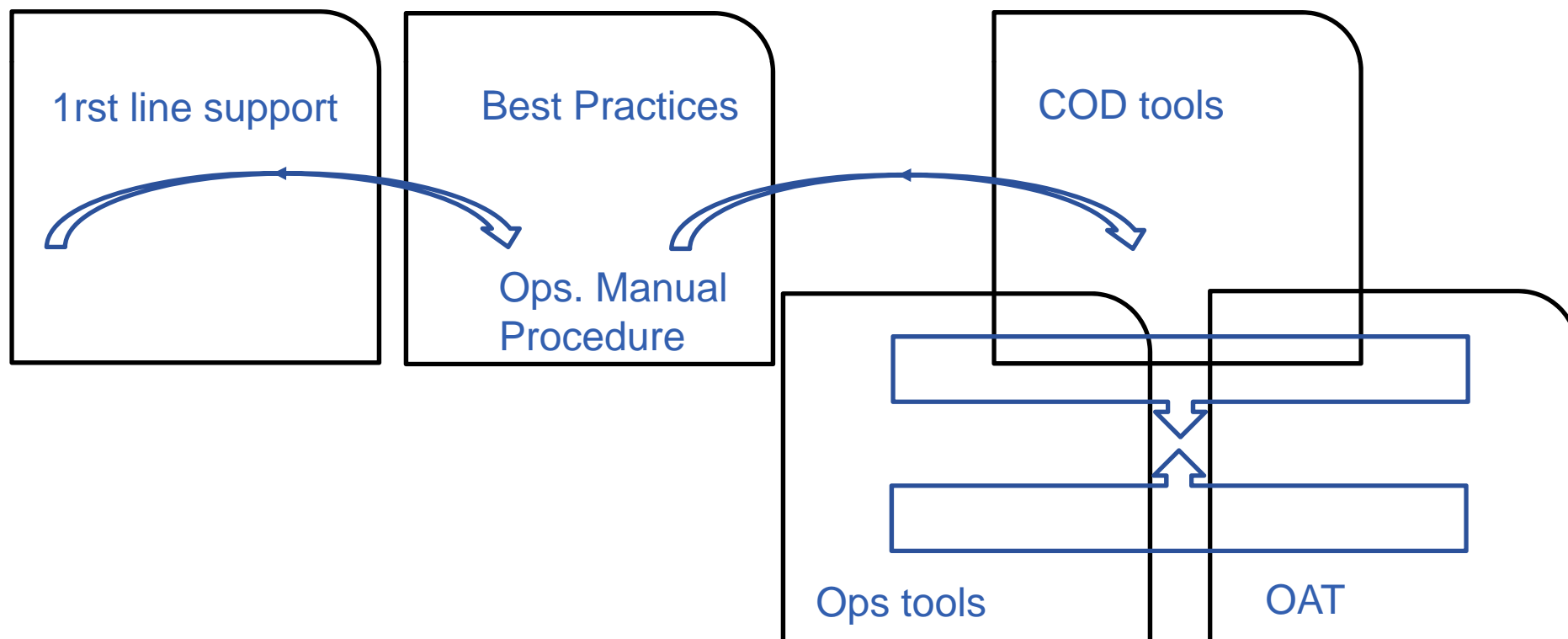 How to assess the prioritization of stability vs. automatization process ???

 How to assess the failover mechanisms of the ops tools ???

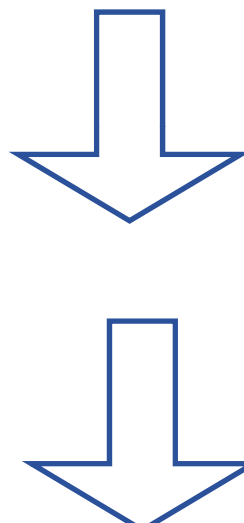 ➔ **Requests on the integration of tools**

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Strong commitment from all federations

COD shifts ~ 0.5 FTE

➔ **Topics from 2 to 4 PM**

1rst line support

Best Practices

COD tools

Ops. Manual Procedure

Ops tools

OAT

Tentative Roadmap

time

Time	Structure of COD	Manpower/federation
EGEE-II end	COD teams + coord	0.5 + 0.2
PY1	COD teams + coord R-COD	0.5 + 0.2 + 0.5 to 1 FTE
PY2	R-COD + COD teams + Coord	0.5 to 1 FTE + (??) +0.2
EGEE-III end	R-COD + c-COD + Coord	1FTE + c-COD (??) + 0.2

– **PRO-ACTIVITY and COMMUNITY BUILDING**

We more than ever need to strengthen this to figure out:

– **Extension of coverage hours**
➔ **regional issue and not for c-COD to deal with**

– **VO specific tests, VO specific requests on operations**
➔ **HEP VOs specific needs**

– **Other specific regional issues that will arise on the way to EGI**
➔ **Several operational model needs**

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Validation of the mandate and the participation model principle in order to enable:

– **Federation to make an early contribution on:**

how to set-up all this within WBS

as the WHERE/WHAT question

regional communities +c-COD ➔procedures

is as important as the HOW question

optimization of tools

– **COD transition meeting according to mandate to**

Set-up proper interfaces and internal organisation,

Start the 1rst line support forum asap,

Strengthen the community building on common goal.