



Operations Working Group

Summary

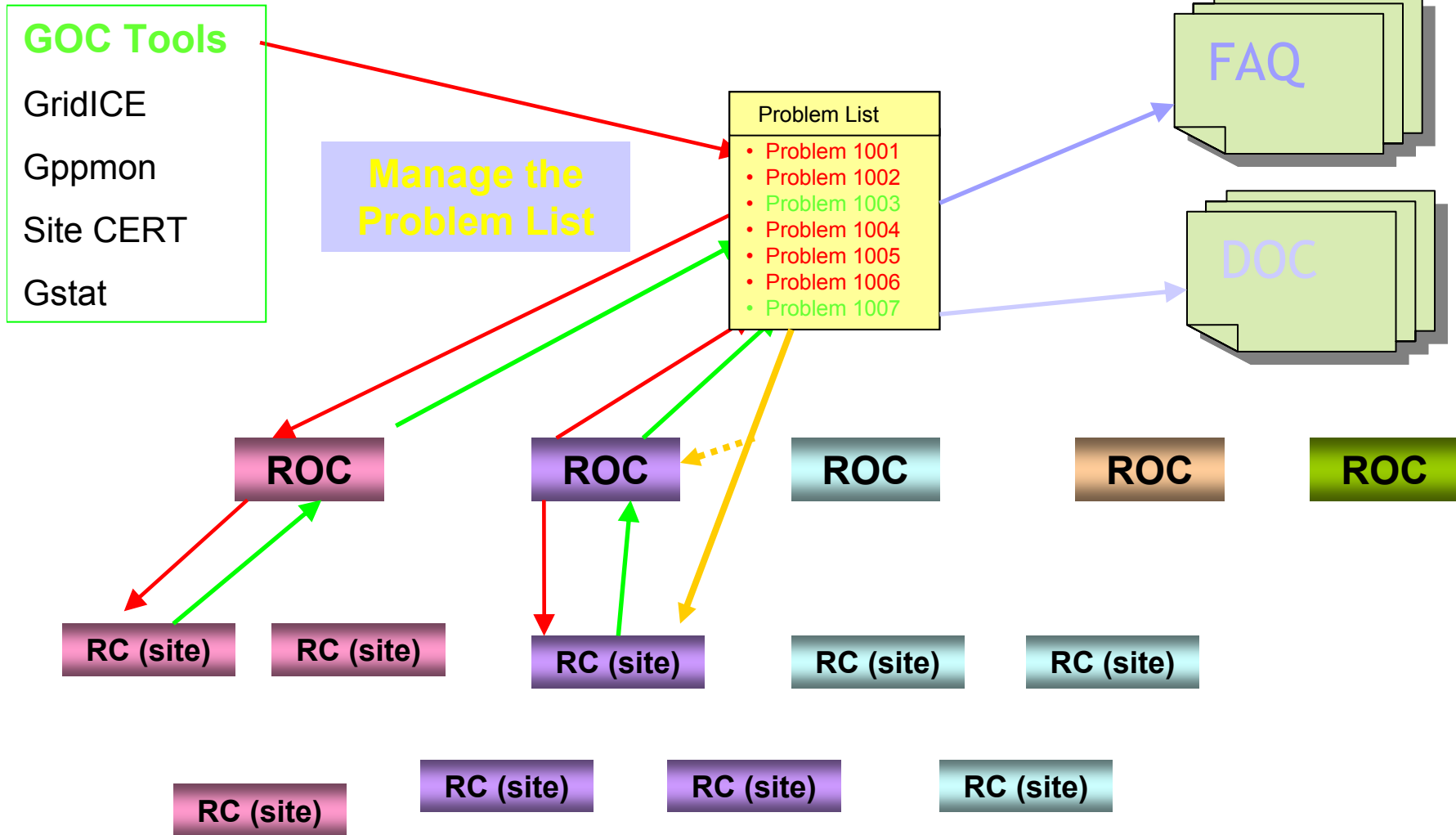


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- What is the workflow for operations support?
 - Who participates – in which roles?
 - Escalation procedures, agreement to responsibilities / penalties?
 - How to manage small/bad sites?
 - What is the daily mode of operations and monitoring?
 - “Opsman” → handover procedures etc.
 - Deployment procedures
- What tools are needed to support this?
 - Who will provide them?
- How to approach “24x7” global operations support?
 - How this affects workflow; external collaborations
- What is the interaction/interface to user support?
- Communication channels?
 - Operations weekly meeting?, RSS, IRC, ...
- Political level agreements on accounting/info gathering granularity
- Milestones (needed for all working groups)
 - Concrete set of reasonable milestones
 - Fit with service challenges; validate the model; monitoring of milestones
- Working groups needed for the longer term?



Model I Strict Hierarchy (modified)



- CICs locates a problem with a RC or CIC in a region
 - triggered by monitoring/ user alert
- CIC enters the problem into the problem tracking tool and assigns it to a ROC
- ROC receives a notification and works on solving the problem
 - region decides **locally** what the ROC can to do on the RCs.
 - This can include restarting services etc.
 - The main emphasis is that the region decides on the depth of the interaction.
 - ==> different regions, different procedures
 - CICs NEVER contact a site
 - .====> ROCs need to be staffed all the time
 - ROC does it is fully responsible for **ALL** the sites in the region
- CIC can contact site directly and notify ROC
 - ROC is responsible for follow-up

Model I Strict Hierarchy



- Pro:
 - Best model to transfer knowledge to the ROCs
 - all information flows through them
 - Different regions can have their own policies
 - this can reflect different administrative relation of sites in a region.
 - Clear responsibility
 - until it is discovered it is the CICs fault then it is always the ROCs fault
- Cons:
 - High latency
 - even for trivial operations we have to pass through the ROCs
 - **ROCs have to be staffed (reachable) all the time. \$\$\$\$**
 - Regions will develop their own tools
 - parallel strands, less quality
 - Excluded for handling security



- CIC-on-duty (described by Lyon)
 - Responsibility rotates through CIC's – one week at a time
 - Manage daily operations – oversee and ensure
 - Problems from all sources are tracked (entered into PTS)
 - Problems are followed up
 - CIC-on-duty retains responsibility for problems
 - Hand-over in weekly operations meeting
- Daily ops:
 - Checklist
 - Various problem sources: monitors, maps, direct problem reports
 - Need to develop tools to trigger alarms etc



- Cannot avoid local PTS's
- But must have central aggregator
 - Where COD manages problems, new problems entered
 - Use GGUS
 - Needs interfaces – automatic ticket updates in linked systems (both directions)
 - Needed to build knowledge db etc.



- Need service level definitions (Grid 3 site charter)
 - What a site supports (apps, software, MPI, compilers, etc)
 - Levels of support (# admins, hrs/day, on-call, operators...)
 - Response time to problems
 - Agreement (or not) that remote control is possible (conditions)
- Sites sign-off on responsibilities/charter/SLD
- Publish sites as bad in info system
 - Based on unbiased checklist (written by CICs)
 - Consistently bad sites → escalate to political level GDB/PMB
- Small/bad sites
 - Remote management of services
 - Remote fabric monitoring (GridICE etc)



- How to formally capture site feedback
 - Priorities for next release, ...
- Web page where info is presented
 - What's in releases, etc.
- How to "force" sites to deploy new releases
 - ROC responsibility
 - Mark site as "bad"
 - Escalation to GDB, EGEE PMB



- GDA → Operations weekly meeting
- (Grid3 daily mtg service desk+engineers)
 - Could be a model within regions → ROCs + sites
- General news info page
- RSS customised feeds
 - Various communities
 - General users
- “Run control” – messaging/alarm aggregation – sends messages/notifications to ops consoles
- Use (eg) Jabber as comm tool between CICs (and other operators – ROCs)
- Mailing lists
 - Rollout
 - Announcements (GOC web page – make people look daily)



- GGUS + interfaces to Savannah + local PRMS's
 - (start with Savannah as central aggregator)
- Monitoring console
 - Monitors (mostly have now)
 - Frameworks – to allow stats and triggers of alarms, notifications, etc.
- GSI-enabled SUDO (etc) for remote service management
- Fabric management “cook-book”
- Remote fabric monitors



- Interfaces to user support
- Milestones, etc
- 24x7 support (covered?)
- External collaborations
- Accounting/info gathering – high level agreements
- Longer term groups needed...
 - Tools, cookbooks,