



EGEE ITIL Group first works ITIL evaluation for ENOC

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ITIL group

- Set-up in March 2007
- Objective: to follow up industry standards and best practices for IT Service Management, such as ITIL.
- First concrete case study: ITIL evaluation for ENOC
- Further work: evaluate some ITIL process such as Incident & Problem Management.
- This work will continue through the EGEE-III proposal.
- More details: http://egee-jra2.web.cern.ch/EGEE-JRA2/EGEE-II/ITILgroup/JRA2-ITIL-GROUP.htm



What is the ENOC? 1/2

 EGEE Network Operations Centre, part of EGEE II SA2 activity (Networking Support)

Defined as

- the network operational interface between the grid and the network infrastructures,
- the single point of contact between EGEE and the NRENs
- where EGEE and the "network" can exchange operational information

The ENOC is both

- the network support structure inside EGEE, which acts as the network Support Unit for GGUS.
- the entity responsible for having contacts with GÉANT2/NRENs NOCs for operational purposes.



What is the ENOC? 2/2

- ENOC is both people and tools
- ENOC implementation
 - a set of tailor-made tools
 - built on a pragmatic basis
 - iteratively improved and developed since the first trial during EGEE
 - always according to the needs and without formal frameworks of procedures.



Context of work

- The ENOC works in the context of EGEE
- Vocabulary
 - The EGEE and the ITIL one are different. Several terms are used with different definitions.
 - For example "problem"
 - ITIL: a problem is the underlying cause of one or multiple incidents
 - A problem is different from a known error (the root cause of a problem identified by successful diagnosis and the subsequent development of a work-around).
 - EGEE's vocabulary is the one used generally among the IT community. A
 problem is a difficulty; one can also read the term of issue; EGEE doesn't
 deal with different and accurate notions. The user logs its problem as a
 ticket in the user support trouble ticket system or incident ticket system.
- Without common notions and accurate definitions all EGEE entities or working groups and external actors or entity will not be able to communicate efficiently. It makes little sense to change only the ENOC vocabulary.
- Proposal: A first step could be to foster the ITIL definitions in the work done by the project (documents, tools, presentations...)



- The ENOC collects data in order to improve the "knowledge base of know errors" used through and by GGUS
- The ENOC discuss with the NRENS community or an NREN in order to be aware of the NRENs evolutions or to transmit them a requirement from the EGEE community.



The ENOC as network support entity

Enabling Grids for E-science

- The EGEE user support activity could be globally considered as the EGEE Service Desk in the ITIL vocabulary
- The end users of the grid infrastructure are something like the users of EGEE from ITIL point of view
- The ENOC uses the GGUS system
 - to broadcast information about network downtimes and maintenances to the grid community
 - as a network support unit for problems coming from parts of the grid whose operation is the responsibility of the network providers.
- Consequently the ENOC can be considered as a part of the ITIL service desk dedicated to the Network.



The ENOC as network support entity

Enabling Grids for E-sciencE

- The model of User Support used in EGEE is a "regional support with central coordination" but "Users can submit a support request to the central GGUS helpdesk and in most cases to their ROC or to their VO support service.". The GGUS model doesn't offer a unique point of contact to the users. ITIL proposal is that each user have a unique point of contact.
- A global view of all tickets is not currently possible.
- There is no notion of incident, problem, know error ...
 - Problem: the unknown underlying cause of one or more Incidents.
 - Known Error: a Problem that is successfully diagnosed and for which a Work-around is known.
 - RFC: a Request For Change to any component of an IT Infrastructure or to any aspect of IT services.



The ENOC as network support entity

Enabling Grids for E-science

- ITIL recommends the monitoring of the resolution process of all incidents (status of the incident from "new" to "closed" and incident record with lifecycle of the incident).
- GGUS do that monitoring for all incidents recorded in its base.
- Proposal: The step to reach ITIL compliance should be to register all incidents and to map the lifecycle on the ITIL recommended lifecycle.



Conclusion

 This first short study shows that making the ENOC ITIL compliant impacts other EGEE's components such as GGUS or EGEE's vocabulary.

- A proposal could be:
 - First step: to foster the ITIL definitions in the work done by the project (documents, tools, presentations...) and of course to begin with all documents about support.
 - Second step: to make GGUS ITIL compliant
- In parallel the ENOC should continue
 - to improve and enhance the coverage of the network operational database and to extend the number of NRENs sending their tickets. This objective is also a mean to improve the impact of the 'knowledge database' and to speed up the resolving of incidents. This requires also an accurate description of the network details of the sites.
- The local support units should also be encouraged to populate GGUS with the issues solved locally and to use the relevant ones to build the 'knowledge base'. This 'knowledge base' should be built in a second time according to the needs of all units. A specific study should define the relevant structure and content in order to ease the solving of incidents against it.



References

- ENOC-ITIL study: https://edms.cern.ch/document/851610/1
- MSA2.1: https://edms.cern.ch/document/725295/1
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- MSA1.1: Operations metrics defined https://edms.cern.ch/document/723928
- MSA1.5: GGUS operational, <u>https://edms.cern.ch/document/726132</u>
- MSA1.8: Assessment of GGUS support, <u>https://edms.cern.ch/document/798381</u>
- MSA2.3 Assessment of the ENOC, <u>https://edms.cern.ch/document/817091/</u>
- MSA1.6 User requirements for Network Performance Monitoring Diagnostic Tool captured