Deployed Middleware Support Unit

Aleš Křenek, CESNET

EGI TF, September 22, 2011

e-infrastructure

DMSU Task

- SA2 processes ensure that only well-working, documented software gets deployed.

- SA2 processes ensure that only well-working, documented software gets deployed.

- 3rd law of Murphy holds

  If anything just cannot go wrong, it will anyway.

  `http://www.murphys-laws.com/murphy/murphy-laws.html`

- SA2 processes ensure that only well-working, documented software gets deployed.

- 3rd law of Murphy holds

  If anything just cannot go wrong, it will anyway.

  `http://www.murphys-laws.com/murphy/murphy-laws.html`

- We have to react fast and to mitigate the impact.
- DMSU is the EGI's own team of middleware experts
  - deep understanding of software internals

Problem resolution workflow

- Middleware related issues are reported through GGUS and assigned to DMSU
  - directly from TPM or after investigation by operations
  - 10–30 tickets per week

Problem resolution workflow

- Middleware related issues are reported through GGUS and assigned to DMSU
  - directly from TPM or after investigation by operations
  - 10–30 tickets per week
- Understand what is the problem
  - may include further interaction with the user
  - reproduce the behaviour if possible

- Middleware related issues are reported through GGUS and assigned to DMSU
  - directly from TPM or after investigation by operations
  - 10–30 tickets per week
- Understand what is the problem
  - may include further interaction with the user
  - reproduce the behaviour if possible
- Provide solution or workaround
- Reassign the ticket to 3rd line support (TPs)
  - only proven defects which require a fix ($\sim 80\%$)
  - software itself, configuration, packaging, documentation, . . .

- The only way to control TPs reaction time
  - covered by SLA between EGI and TP
- GGUS ticket priorities
  - *top priority* – 4h response, fix ASAP
  - *very urgent* – 2d response, fix in next cycle (3–4 weeks)
  - *urgent* – 5d response, fix in next minor/major release
  - *less urgent* – 15d response, fix in some future release
- DMSU evaluates ticket severity and impact
  - find the right balance (not all 30 tickets/w can be top priority)
  - the only GGUS SU who can reassign to TPs

DMSU team

- 4 *assigners*
  - handle arriving tickets
  - involve resolvers
  - meet weekly (jabber), check open tickets
  - agree on priority assignment
- 15 *resolvers*
  - provide wide coverage of deep expertise

- What happens to tickets assigned to 3rd line?

- What happens to tickets assigned to 3rd line?
- MS502 defined ETA handling process
  - per-ticket "time to provide fix" assignment
  - never agreed with TPs fully

- What happens to tickets assigned to 3rd line?
- MS502 defined ETA handling process
  - per-ticket "time to provide fix" assignment
  - never agreed with TPs fully
- no need to assign ETA, check ticket status and escalate
  - *top priority* – after 1 week
  - *very urgent* – after 1 month
  - others – don't check, unpredictable

Producing FAQs

- DMSU has appropriate expertise to produce middleware FAQs
- avoid to duplicate effort with TPs
- two main categories
    - permanent – non-obvious way of work with middleware

        How shall I upload results of my job to SE in fault-tolerant way?

    - temporary – workaround of software defect with wide impact

        Purge `/var/run/bdii` *manually when upgrading to BDII version X.*

- clarification of the process still required