

# Monitoring based on OAT's work

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# The idea (as presented at 8th Workshop)

- Given that Quattor “knows” the whole infrastructure, we could have:
  - the monitoring system rely on it
  - dynamic configuration based on each change
- we are not the first who thought this...

# So what's the difference? (8th Workshop)

- Till now all proposals had the Nagios configuration created BY Quattor
  - this requires that every single probe is “documented” in Quattor templates
- EGEE (and OAT in specific) had done a great tool for dynamic Nagios configuration
  - Can we use it?

# The Nagios Configuration Generator

- NCG is a modular tool that gets information regarding:
  - Node information and topology
  - Probe definitions
  - Attributes per configured probe
- Creates the whole Nagios configuration on configuration folders
  - Easy integration with pre-configured installations

# NCG internals...

- NCG uses the following “basic modules” to create the Nagios configuration:
  - **NCG::SiteSet:**
    - Defines a list of sites which we want to monitor. Nothing more than a list to loop for the next module
    - Usually used with GOCDDB or BDII as input
    - Should be extended in order to include our “sites”
  - **NCG::SiteInfo:**
    - Defines the list of nodes that exist in the site. This also includes the Node type of each node as well as possible metadata per node
    - Should be extended to get information from Quattor

# NCG internals...

- **NCG::LocalMetricSets**
  - Defines which probe groups should be configured for each node-type
  - Extension for Quattor node-types
- **NCG::LocalMetricsAttrs**
  - Defines probe attributes per node
  - This should be extended to receive our configuration
- **NCG::LocalMetrics**
  - Contains the definition of metrics and the MetricSet they belong
  - If we want to monitor additional services we need to extend this as well

# What NCG needs

- Topology of the monitored systems
- Which nodes, what services
  - In grid terms
    - GOCDB
    - BDII
  - In our terms
    - Quattor profiles via QAD

# What NCG needs

- MetricSets and Metric definition
- How to check X?
  - In grid terms (OAT)
    - MDDDB
  - In our terms
    - QAD



# Definition of features in templates

- Use of an extended schema for Quattor
  - /monitor
- Somewhere in "lcg/ce/service"
  - "/monitor/features/" = push("CE");
- Somewhere in "glite/mon/service"
  - "/monitor/features/" = push("MON");

# Definition of MetricSet and Metrics

- QAD web interface
  - Web form for MetricSets
  - Web form for Metrics
- Nagios configuration
  - based on name match of MetricSets and Node features
  - Relevant groups are created at the Nagios

# Current status - DONE

- Configuration of all nodes as hosts in Nagios
- Configuration of all features as Service Groups in Nagios
- Ability to define Metrics per Feature (metricSet)
- Configure specific per node attributes
- Create the Nagios host relations

# Current status - Work in progress

- Interface
  - Add I18n translation
  - Automate operations (i.e. NRPE check)
- Add exceptions
  - i.e. not all nodes have sshd running
- Ability to temporarily disable MetricSets and Metrics

# Can i download/install it?

- Unfortunately this tool
  - heavily depends on QAD and NCG
    - QAD is still under development
    - NCG is also under development
- Was planned as a QUEST “product”
  - Development is done on best effort
  - Covering only our needs at the moment

# Proof of concept (a new one)

- Small demo

# Thank you

## Questions?