



# GLUE 2 validation

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# Overview



- GLUE 2 validation process
- Information provider validation
- Site validation
- Integration with Nagios
- glue-validator
- Main validation issues
- Next steps

# GLUE 2 validation process



- It happens at different levels
  - Middleware (information providers)
  - Sites
- It uses one tool: glue-validator
- Current and future approach:
  - Manual validation for WLCG sites only
  - Automatic validation for all EGI sites
    - Integration with Nagios

# Information provider validation



- Results of the validation

<https://twiki.cern.ch/twiki/bin/view/EGEE/ISproviders>

- Current status

- All EMI middleware components are published in GLUE 2
- In general in good shape:
  - Some missing mandatory objects/attributes
  - Some publish incoherent values (i.e. storage capacity)
- This has all been tracked and developers are aware of the errors
  - Steady but slow progress: fixes are being implemented and released

# Sites validation



- Reports for WLCG sites since March
  - Focus on fewer sites

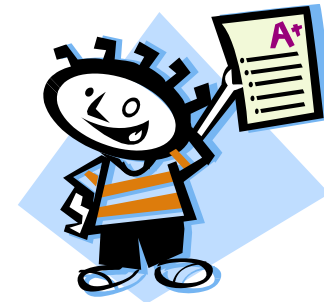
<https://twiki.cern.ch/twiki/bin/view/EGEE/GLUEMonitoring#Reports>
- Tickets manually opened to follow up main issues
  - Helped to improve glue-validator
    - Document known issues
  - Helped to discover BDII bugs
    - e.g. Obsolete GLUE 2 entries not deleted
- This approach is not sustainable though!



## Integration with Nagios

- Validation process should be automated to have a real impact in the whole infrastructure
- glue-validator has been modified to be able to work as a Nagios probe
- It has been running in midmon for several months
  - <https://midmon.egi.eu/nagios>
- It will be validated in the upcoming months and used as a production probe before the end of the year

# glue-validator



- Tool written in python able to validate against the EGI profile for GLUE 2
- Simple, easy to maintain and extend
- Several releases in EMI in the past months
  - Also available in EPEL but version is outdated
- Final version for EGI validation to be prepared after Technical Forum
- Expect to do minor improvements afterwards but no big changes



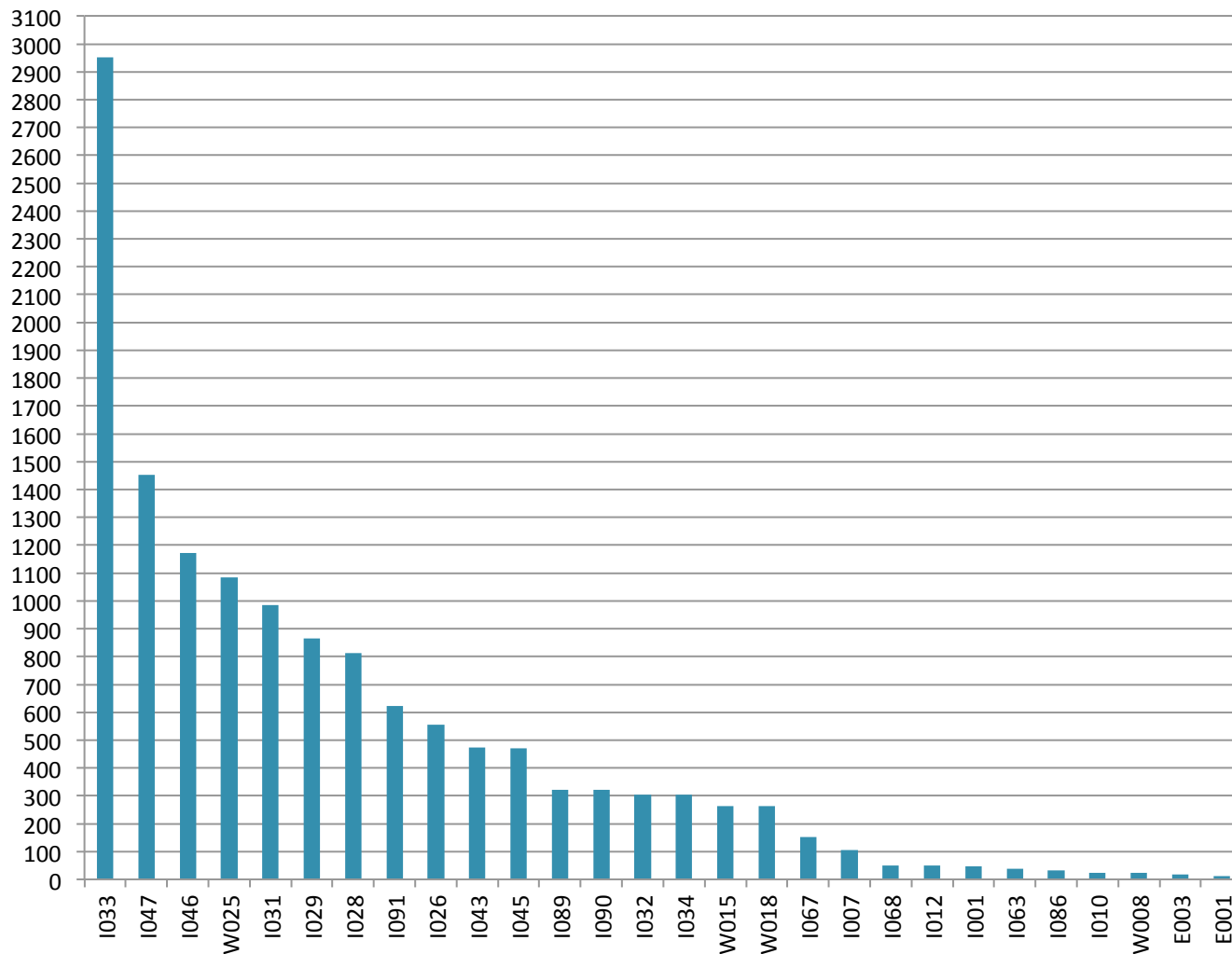
# Main validation issues

<https://twiki.cern.ch/twiki/bin/view/EGEE/GLUEMonitoring>

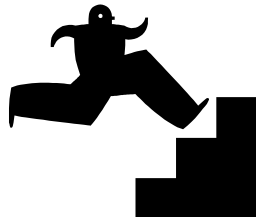
- Using *exclude-known-issues* option
  - It excludes issues in Storage info providers
  - To be extended with issues in CREAM info providers
- Most current issues are INFO or WARNING messages
  - Values may be correct!
    - Default values in Computing Share
    - Estimated Average/Worst Waiting time more than 1 million seconds
    - Incoherent job numbers
      - Some of these results to be followed up with CREAM



## Number of occurrences per type of Error, Warning and Info Messages



<https://twiki.cern.ch/twiki/bin/view/EGEE/GLUEValidatorErrorCodes>



## Next steps

- Prepare a new version of glue-validator for validation in Nagios
  - Focus on Computing issues
- Deploy glue-validator probe in production
- React to feedback and prepare improvements if needed
- Focus on monitoring and less effort on development