

ARGO Service Monitoring

<http://argoeu.github.io>



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ARGO Service Monitoring

A Flexible & Scalable Framework

- **Status, availability** and **reliability** of services
- Provides **multiple reports** using **customer defined profiles** (e.g. for management, operations etc)
- **Multi-tenant support** in the core framework
- Supports **flexible deployment** models
- Modular design enables **integration with external systems** (such as CMDBs, Service Catalogs etc)
- Can take into account **custom factors** during the report generation (e.g. the importance of a service endpoint, scheduled or unscheduled downtimes)
- Based on **open source** components



Status. Service Monitoring

For status monitoring, ARGO relies on Nagios. All probes developed for ARGO follow the Nagios conventions and can run on any stock Nagios box.

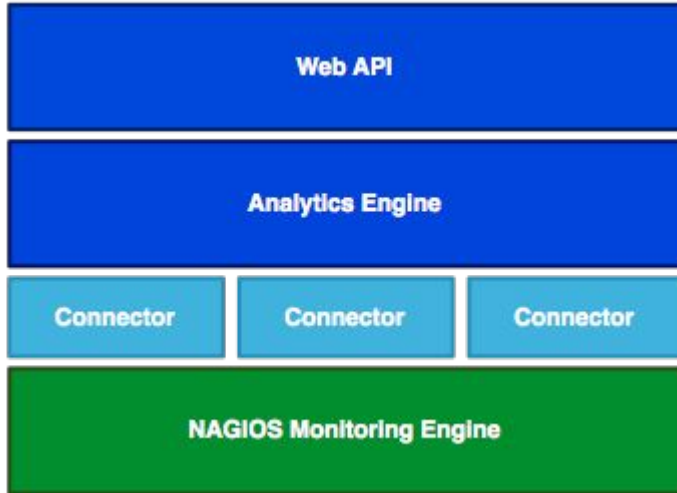
ARGO provides an **optional set of addons** for the stock Nagios that provide features such as auto-configuration from external information sources, publishing results to an external messaging service etc

A solid green rectangular box containing the text "NAGIOS Monitoring Engine" in white, bold, sans-serif font.

NAGIOS Monitoring Engine



Availability & Reliability. Service Monitoring



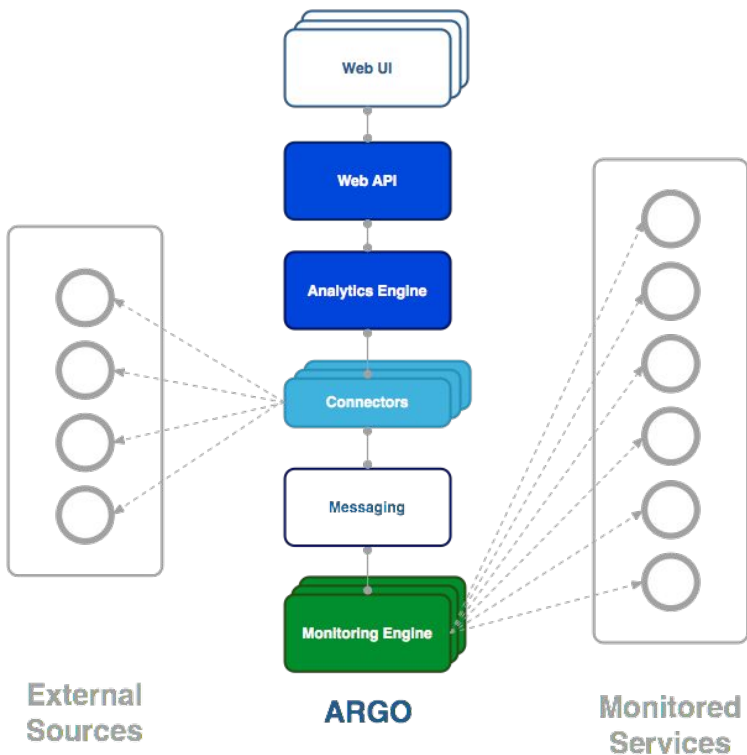
For Availability & Reliability monitoring ARGO, introduces a modular architecture, which relies on Nagios for service endpoint monitoring and which can ingest in the Nagios monitoring results in order to **track** a vast number of **monitoring metrics**, provide real-time **notifications** and **status reports** and **monitor SLAs/OLAs**

ARGO comes in two flavors: **A standalone version** for deployment in low density e-Infrastructures with a limited number of services and **a cluster version** for deployment in high density e-Infrastructures with a large number of services.



Modular Architecture

ARGO Service Monitoring



ARGO Components. Modular Architecture

At its core, ARGO uses a **flexible** monitoring engine (Nagios), a **powerful** analytics engine and a **high performance** web API.

Embracing a **modular, pluggable architecture**, ARGO can easily support a **wide range of e-Infrastructures**.

Through the use of **custom connectors**, ARGO can connect to multiple external **Configuration Management Databases** and **Service Catalogs**.





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STATUS

- Site Status Report
- Cloud Status Report
- Opsmon Status Report
- Customized Report



AVAILABILITIES/RELIABILITIES

- NGI Report
- Site Report
- Cloud Report
- OpsMon Report
- Customized Report
- Availability Treemap



ADMINISTRATION

- Profile Management
- Recomputation request
- Admin List
- Admin Interface



ABOUT ARGO

- Start Page
- ARGO Web Site
- Documentation
- GitHub
- Contact Us

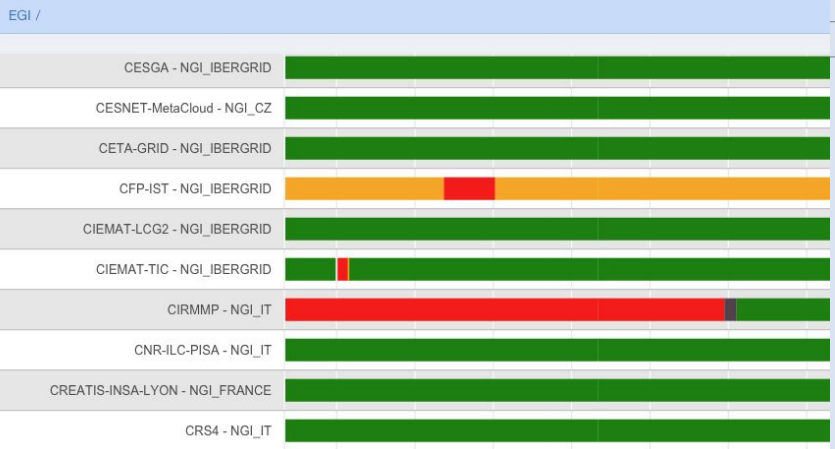


ARGO is an EGI service provided by CNRS , GRNET and SRCE
co-funded by EGI.eu <http://egi.eu> and EGI-Engage <http://go.egi.eu/eng>





ARGO REPORTS STATUS REPORT



- STATUS
- AVAILABILITIES/RELIABILITIES
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AVAILABILITIES RELIABILITIES REPORTS EGI LEAGUE REPORT

SITE LEAGUE REPORT - REPORT TYPE : CRITICAL

CSV XML

EGI > NGI_GRNET

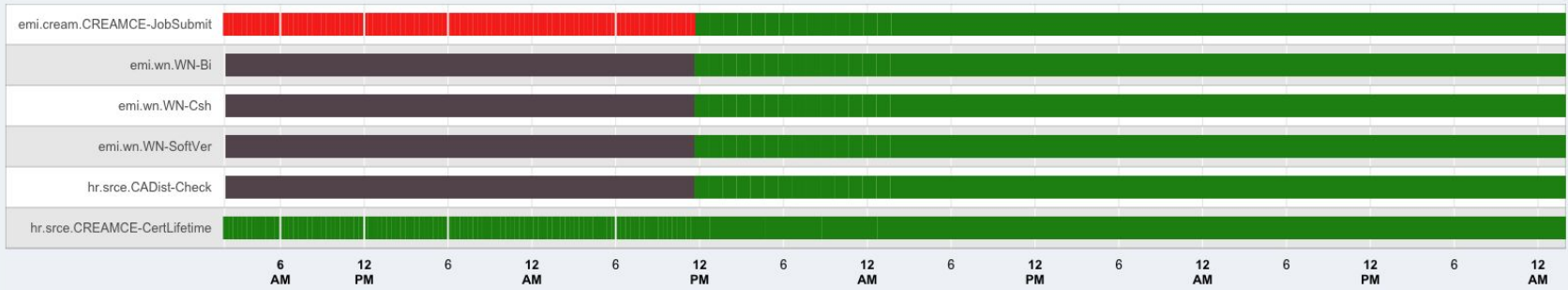
AVAILABILITY RELIABILITY

Site	2015-08		2015-09		2015-10	
GR-01-AUTH	99.89	99.89	97.30	97.30	68.18	68.18
GR-04-FORTH-ICS	85.87	85.87	99.26	99.26	93.97	93.97
GR-07-UOI-HEPLAB	99.94	99.94	98.47	98.47	92.47	96.38
GR-11-UPATRAS	99.64	99.64	100.00	100.00	100.00	100.00
GR-12-TEIKAV	98.42	98.42	90.44	90.44	87.03	87.03
HG-01-GRNET	98.07	98.07	100.00	100.00	97.27	97.27
HG-02-IASA	93.16	93.16	96.72	96.72	96.72	96.72
HG-03-AUTH	89.26	89.26	81.76	81.76	69.94	69.94
HG-04-CTI-CEID	.00	.00	.72	.72	.00	.00

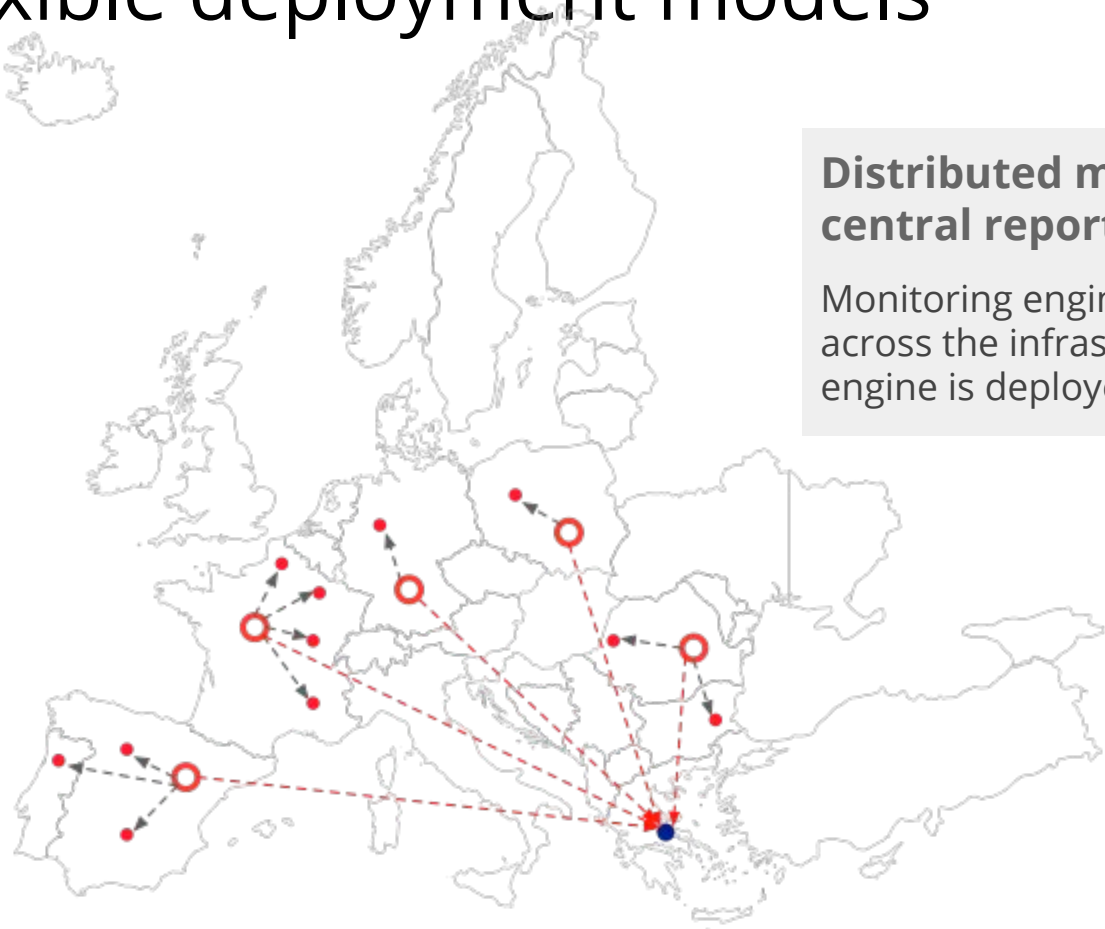
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ARGO REPORTS STATUS REPORT

EGI / NGI_IT / CIRMMP / CREAM-CE / pbs-enmr.cerm.unifi.it



- Analytics engine
- Monitoring engine
- Monitored service



Distributed model with central reporting

Monitoring engines are distributed across the infrastructure. Analytics engine is deployed centrally



- Analytics engine
- Monitoring engine
- Monitored service



Centralized Model

Monitoring and reporting engine deployed at a central location



ARGO in EGI

ARGO Service Monitoring

- Web site: <http://argo.egi.eu>
- Currently uses the **distributed model with centralized reporting**
- In the process of migrating to the **centralized model** providing Monitoring as a Service
- **Distributed monitoring engines (Nagios) per NGI or VO.**
- **Monitoring results are published to the ARGO Reporting Engine.**
The Message Broker Network is used as the transport mechanism
- Support for **multiple reports** for Status, Availability & Reliability Reports.



ARGO Service Monitoring

- ARGO is developed by GRNET (Greece) in collaboration with SRCE (Croatia) and CNRS (France)
- ARGO provides (or will provide soon) Service Reporting for Status, Availability and Reliability Reports in EGI, EUDAT, GRNET Prace Tier-1 and CLARIN-EL.
- ARGO follows an open source development process
 - All development takes place on github - <http://github.com/argoEU/>
 - New requirements are gathered after consultation with the user communities



Thank you
Questions?

