

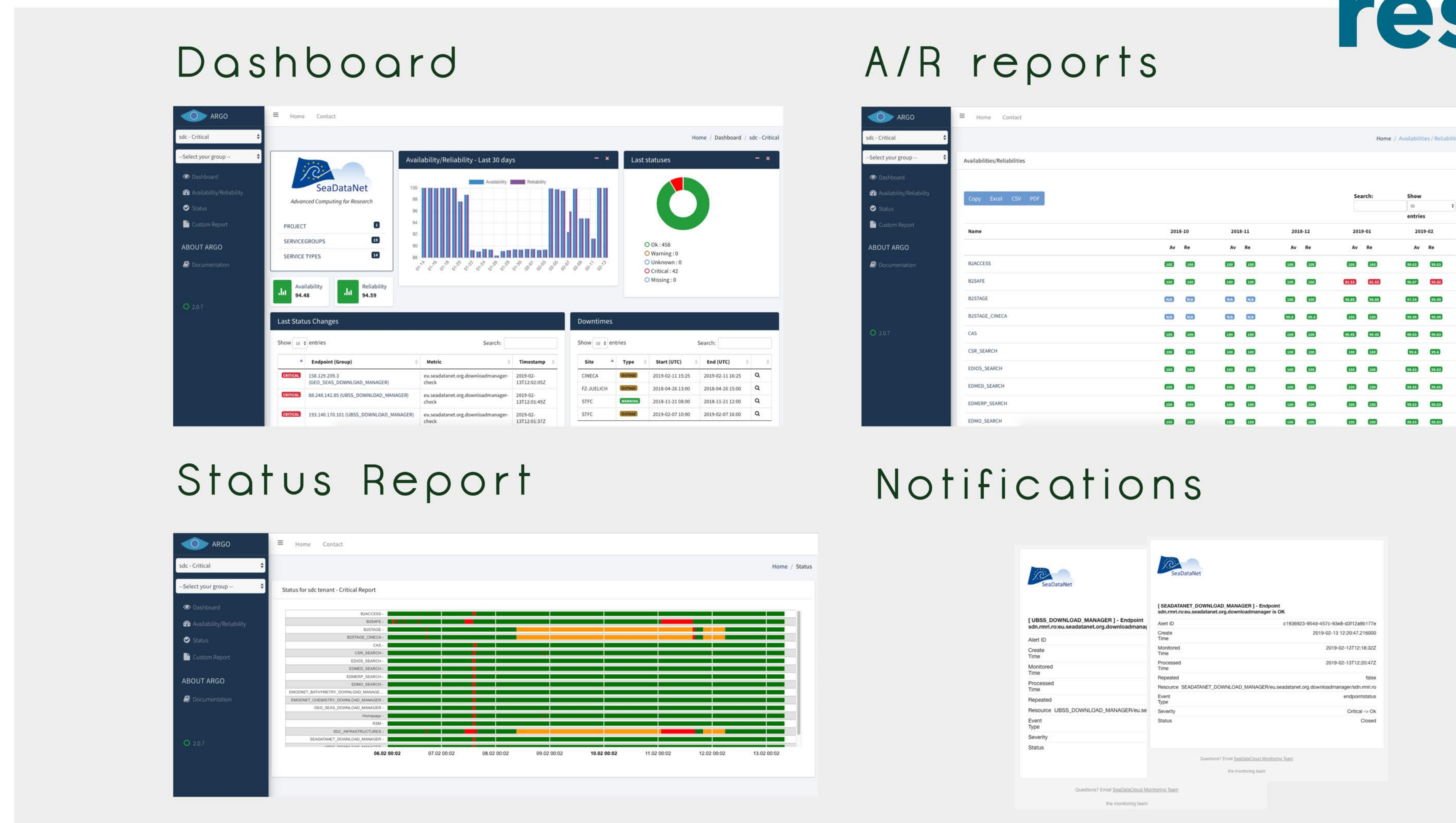
SeaDataNet monitoring infrastructure near real time status updates, rich alerts, trends and insights

Angelos Lykiardopoulos, HCMR, angelo@hcmr.gr, Themis Zamani, GRNET, themis@admin.grnet.gr
 Michalis Iordanis, HCMR, iordanism@hcmr.gr, Kostas Koumantaros, GRNET, kkoum@admin.grnet.gr
 Kostas Kagkelidis, GRNET, kaggis@admin.grnet.gr, Konstantinos Kalkavouras, HCMR, ckalkav@hcmr.gr
 Iona Athanasia, HCMR, sissy@hnodec.hcmr.gr

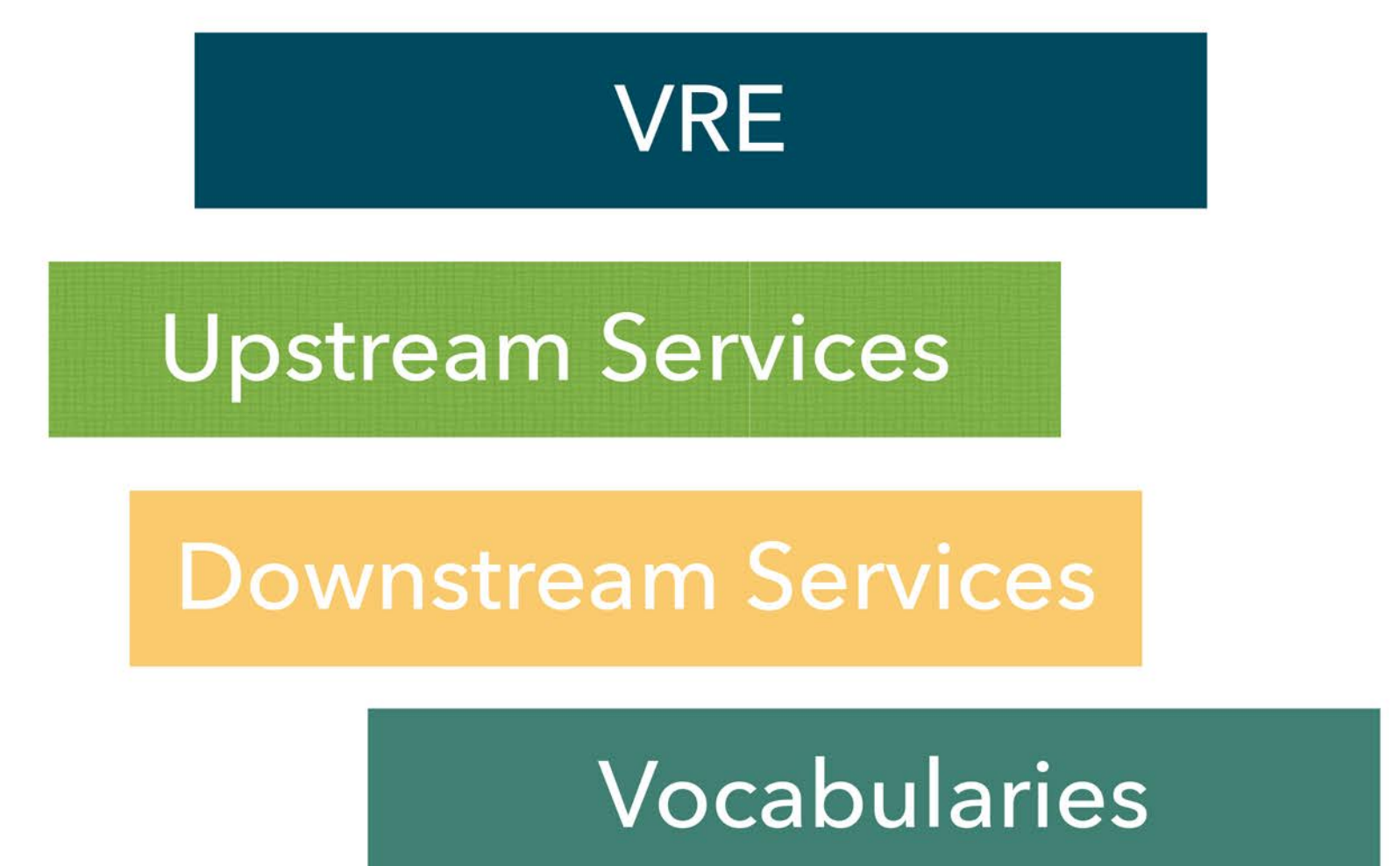
facts



results

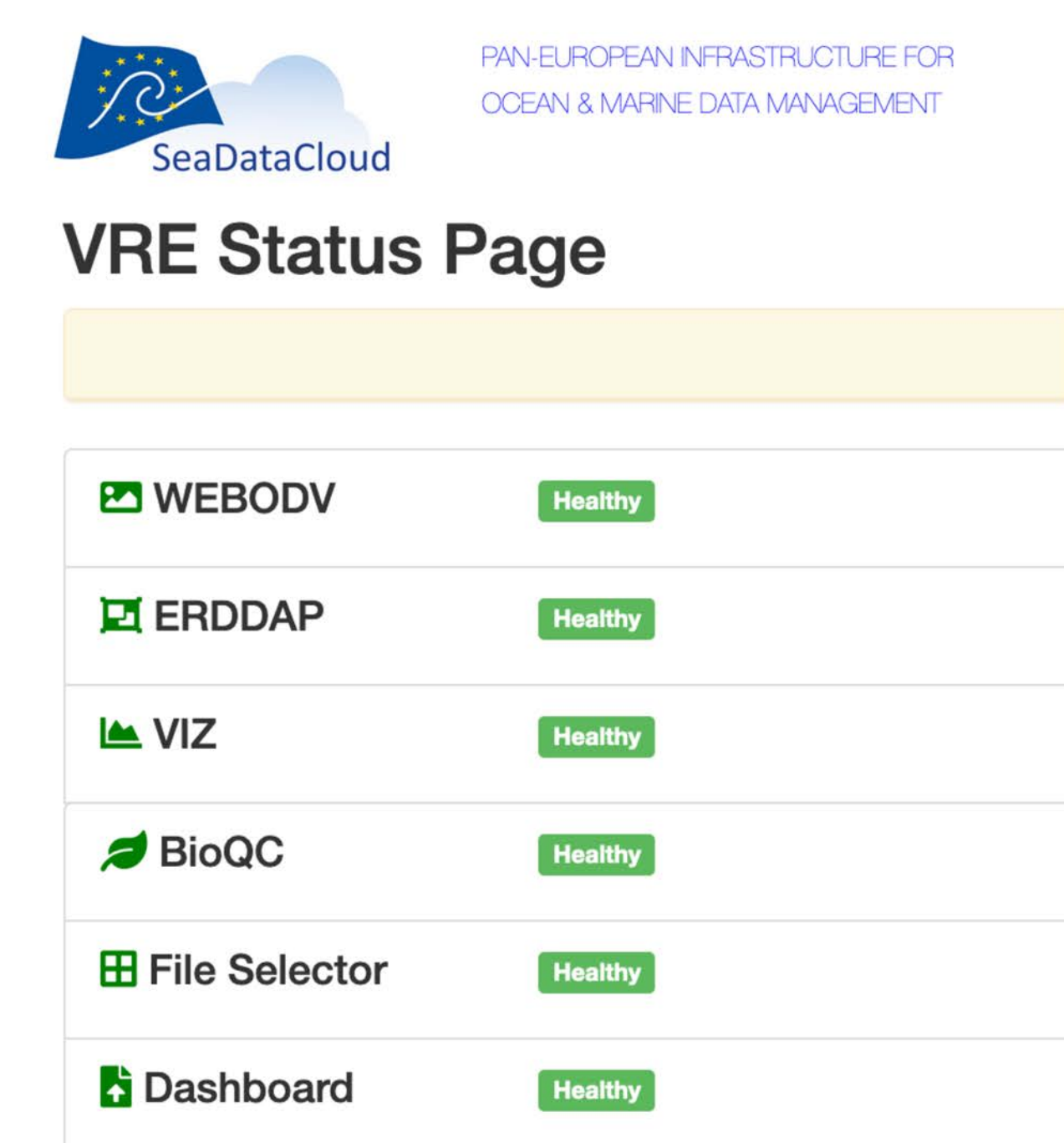


ARGO Monitoring goal in the SeaDataCloud is to enable end users to monitor the availability and reliability of the services they are using. They want to know how the **overall services they are relying upon are performing** and whether the delivery of those meets the service level they have agreed. ARGO monitoring routines are configured to **emulate what a user will do** with a service, and to provide **status and A/R reports**.


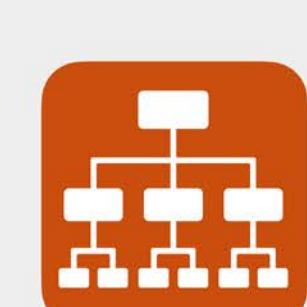



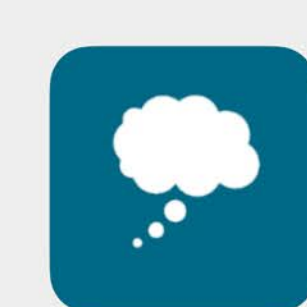


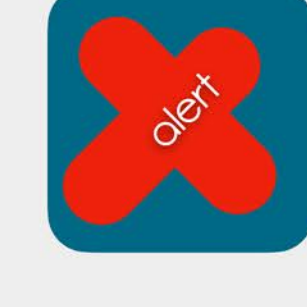
Custom Status Page: VRE use case

In Virtual Research Environments (VRE), multiple types of services in several nodes cooperate as components to provide a unified dashboard with a plethora of functionalities to the end-users. ARGO not only monitors individually the proper function of these services but also combines them in logical groups and hierarchies to reflect and accurately monitor the reliability of their interoperability so as to ensure that the top-level service offer (VREs) works as expected.



ARGO components

-  **Central Registry**
A central registry to record information about the topology of SDC Infrastructure.
-  **Metrics Management**
Collect and organise metrics. It instructs monitoring instances what kind of tests to execute for a given service.
-  **Monitoring Engine**
Executes the service checks against the infrastructure and delivers the metric data to a ARGO Messaging Service

-  **ARGO Messaging Service**
A Publish/Subscribe Service used by internal components and other systems to exchange messages via Topics/Subscriptions.
-  **Connectors**
A bundle of connectors/sync components for various data sources established
-  **Compute Engine**
Computes availability and reliability of services and near - real time status events
-  **Notifications**
Real-time status events are the basis of alerts. It sends alerts (ex. email, sms), by connecting to external sources to get info about the owner(s) of services, endpoints.

ARGO is framework for Service Level Monitoring designed for medium and large sized e-Infrastructures, Research Infrastructures and Thematic Services. It Supports:

- Status, availability and reliability of services
- multiple reports using customer defined profiles



<https://argoeu.github.io>