

# Integration Configuration Workflows With Project Management System

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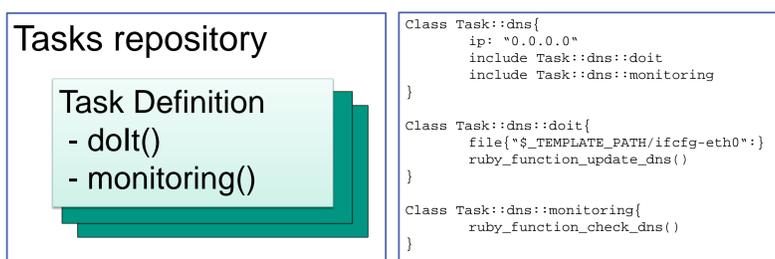
## Introduction:

- Heterogeneous resources at GridKa WLCG Tier-1 center require structured approach to configuration management.
- The configuration management at GridKa is based on the set of tools, which allow to configure system using predefined lists of tasks and workflows.
- Each unique action in configuration management is defined as a task.
- A set of tasks defines configuration scenario or workflow to be applied to GridKa host.



## Define and Describe Tasks

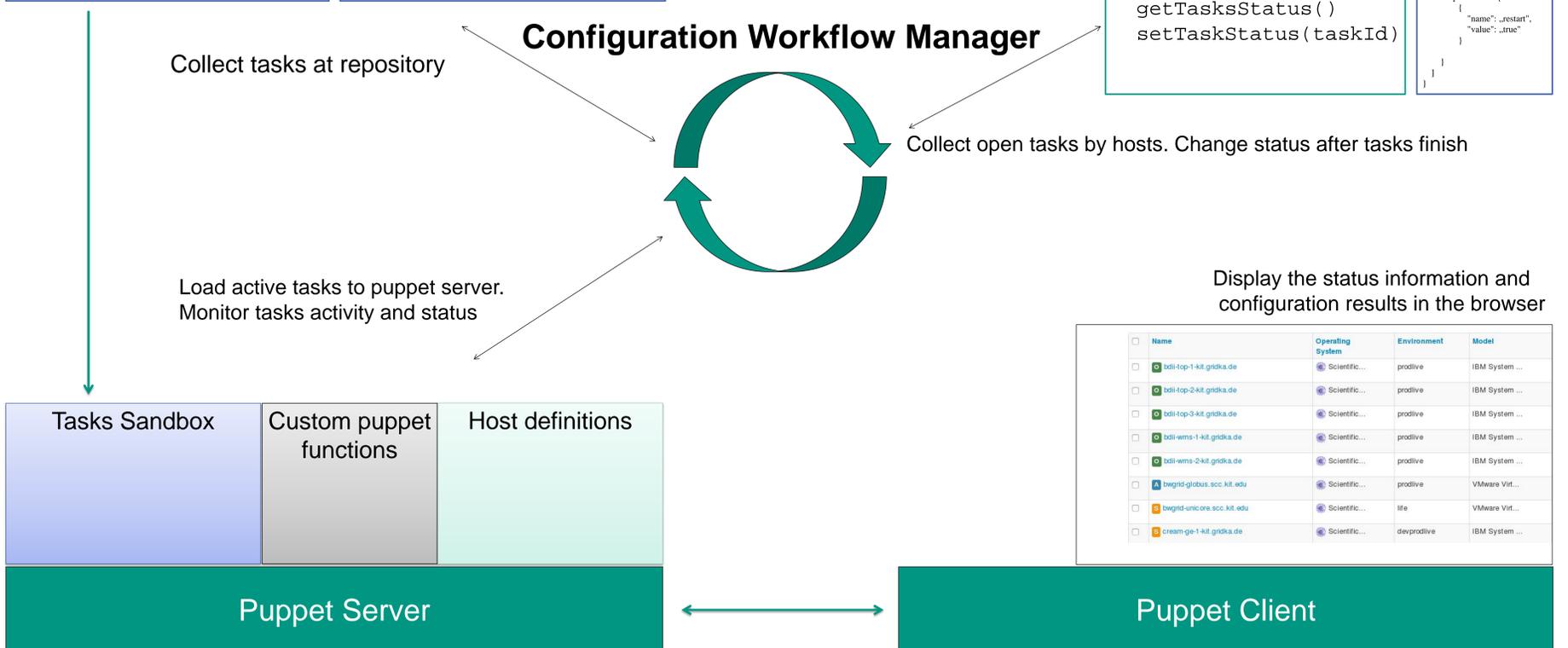
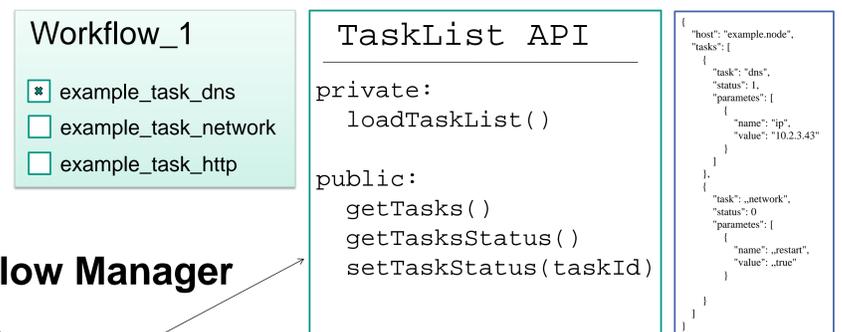
Each task is defined and stored in repository accessible by Redmine, Puppet and Configuration Workflow Manager.



## Redmine + TaskList Plugin

Redmine loads tasks definitions and introduce them in a list view.

Provides a way to create new and customize existing workflows.



## Puppet Server

At puppet server hosts specific manifests are managed and applied to nodes. Custom functions implement remote calls and monitoring. Results are reported to the Configuration Workflow Manager.



## Hosts

Puppet client triggers tasks execution on puppet master and perform changes.

## Conclusions:

- Configuration and project management systems Puppet and Redmine are successfully deployed at GridKa.
- The interaction between Puppet and Redmine are controlled by configuration workflow manager.
- The configuration workflow manager is being developed.
- Integration of the configuration tools like Puppet deployed at GridKa with Redmine management system leads to automation of configuration workflows, effective problem tracking and reduction of administrative effort.