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## DDS –The Dynamic Deployment System

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The Dynamic Deployment System (DDS) is a tool-set that automates and significantly simplifies a deployment of user-defined processes and their dependencies on any resource management system (RMS) using a given topology.

A number of basic concepts are taken into account in DDS. Namely, DDS implements a single responsibility principle command line tool-set and APIs. The system treats users' tasks as black boxes –they can be executables and scripts. DDS doesn't depend on RMS and provides deployment via SSH, when no RMS is present. It doesn't require pre-installation and pre-configuration on the worker nodes. DDS deploys private facilities on demand with isolated sandboxes. The system provides a key-value property propagation service for tasks. DDS provides a rule-based execution of tasks.

In this report detailed description, current status and future developments of the DDS will be presented.

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