

Cinegrid NL Portal

The Cinegrid NL Portal acts as a front-end for all the orchestrated services, hiding technological complexities from the user.



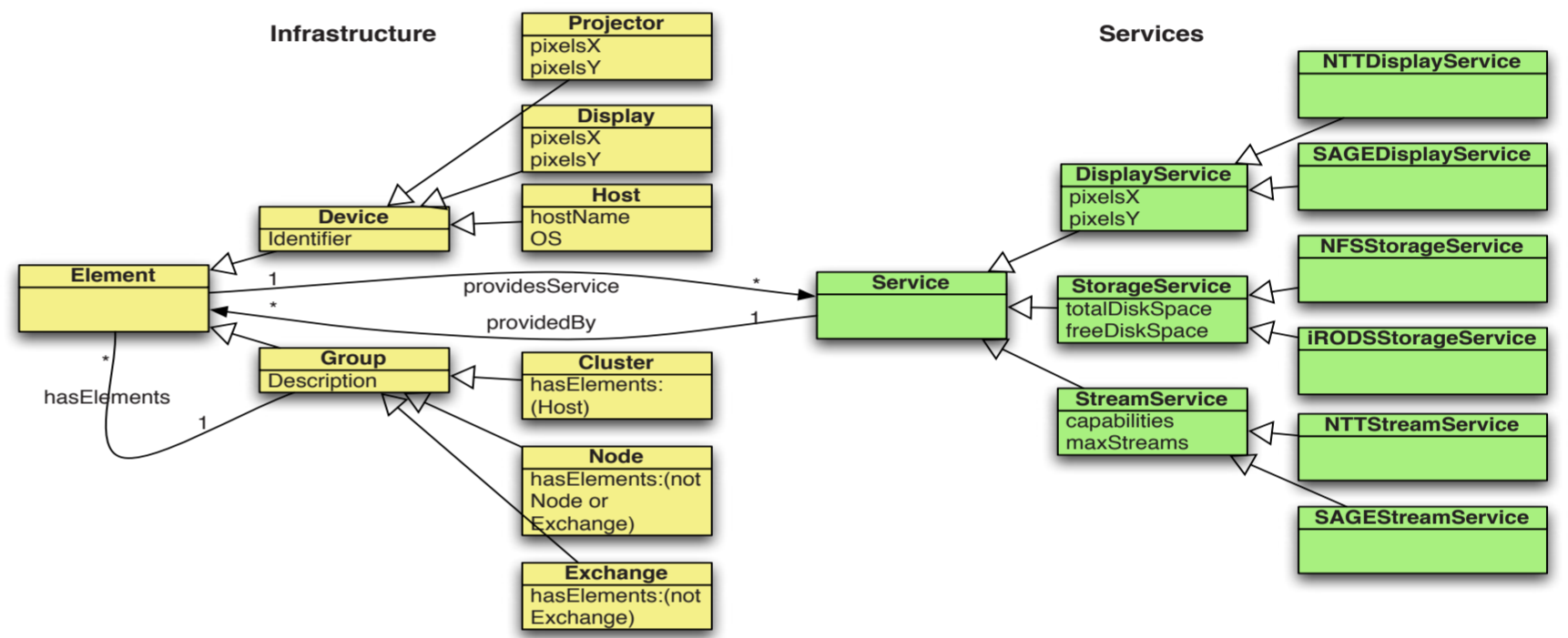
Global Lambda Integrated Facility Infrastructure

GLIF provides lambdas internationally as an integrated facility to support data-intensive scientific research. Network provisioning systems allow the creation of dynamic dedicated highspeed links (lightpaths) between endpoints.



DAS 4 Cluster

Clusters provide the on-demand processing power needed to perform operations like video transcoding, rendering and video effects.



Cinegrid Description Language

The CineGrid Description Language (CDL) is created to describe the various components and services running in the CineGrid network.

CDL is build upon Semantic Web. Semantic Web provides a formal and reusable way to describe resources and allows one to and use and link to other semantic descriptions like, for example, the Network Description Language (NDL).

With CDL we can reason on the Cinegrid infrastructure and its services.

Network Quality-of-Service Aware Workflow Planner (NEWQoSPlanner)

Problem: optimize large data movement related to workflow processes.

Example: resize and transcode a clip and copy to destination storage.

The user is presented with an interface (portal) that allows the initiation of the process.

Based on the initial constrains (content, operations, required completion time) and current information about the infrastructure, the planner provides candidate network provision (network paths), resource provision (computing elements) and storage plans (source and destination storage). The candidate plans are sorted by quality (i.e. path bandwidth, latency, link loss).

