

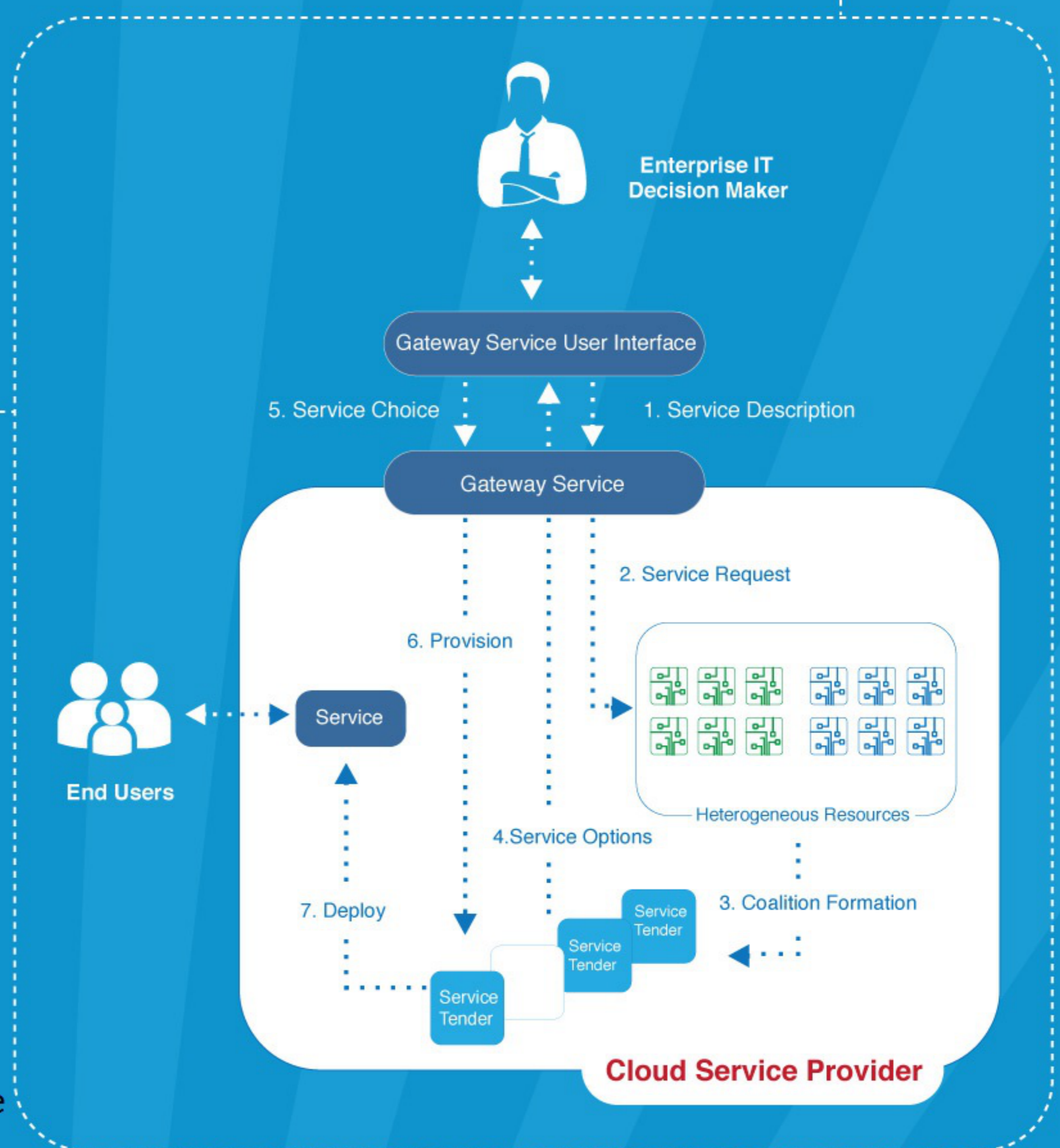
Vision

To develop an intelligent, power-efficient cloud computing infrastructure that will:

- Make cloud computing more accessible to the average customer;
- Provide cloud service providers with power-efficient, scalable management of their cloud infrastructures;
- Exploit resource heterogeneity and self-organisation;
- Demonstrate our approach in three High Performance Computing domains;
 - ◆ Genomics
 - ◆ Oil and Gas Exploration
 - ◆ Ray Tracing



CloudLightning Architecture



Managing Complex Heterogeneous Systems

Self-Organising Model

- Make cloud computing more accessible to the average customer;
- Autonomic configuration and assembly of coalitions
- Automatic release of resources at end of task or when service is retired

NTNU is one of the main partners an site of test-bed for integrating Cloud and HPC services. The NTNU team is also responsible for the oil&gasss use case as well as Risk Mangement of the overall project.