

SaaS

Google Apps

Salesforce

Portal

PaaS

Google AppEngine

Ensemble Simulation

Windows Azure

MapReduce

Hadoop (MapReduce)

Amazon Elastic MapReduce

Dryad

IaaS

Amazon EC2

Ensemble Simulation

MapReduce

Amazon S3

Eucalyptus

Ensemble Simulation

MapReduce

Nimbus

Public

Private Clouds/  
Cloud-like Infrastructure

SAGA-based interoperability

Future Work