L0: Application and User Tools

Application Specific Data Structures

L1: Runtime Environments

Resource Management Abstractions: Pilot Abstractions (Pilot Job/Pilot Data)

L2: Data-Cyberinfrastructure
e.g. File-Systems, SQL/no-SQL

L2: Infrastructure Abstractions
Templated Appliances and Virtual Clusters

L4: Execution Environment
e.g. XSEDE, OSG, Clouds