ON-DEMAND INSTANTIATION IN A HIGH-PERFORMANCE COMPUTING (HPC) SYSTEM

ABSTRACT

In one embodiment, a method for on-demand instantiation in a high-performance computing (HPC) system includes receiving a connection request from a client specifying a first port number and a first host name advertised externally with respect to an HPC server including a cluster of nodes, identifying a service at the HPC server corresponding to the first port number and the first host name, determining whether the identified service is available, and, if the identified service is available, instantiating a host providing the identified service at one or more nodes in the cluster.