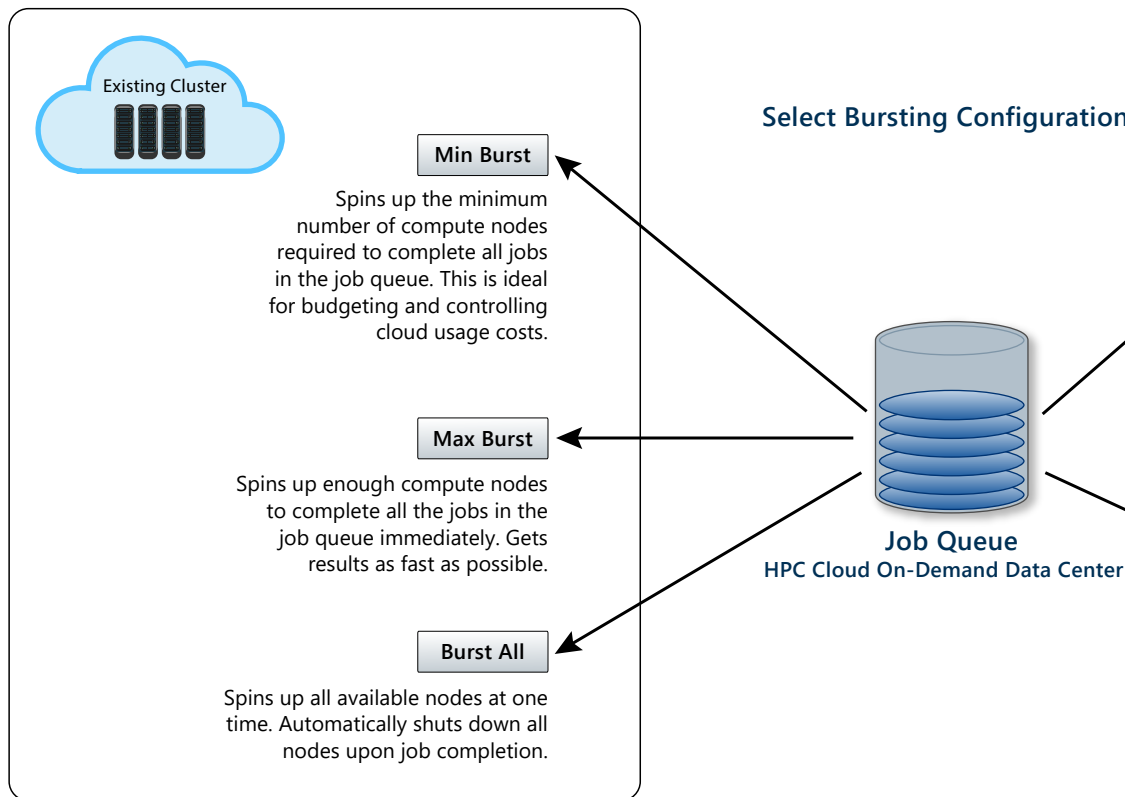# Adaptive COMPUTING

HPC Cloud On-Demand Data Center™

Bursting Configurations that Bring the Fastest Time to Results at the Lowest Possible Cost

"Only pay when in use"

Bursting Service Enabled

Existing Cluster

Min Burst

Spins up the minimum number of compute nodes required to complete all jobs in the job queue. This is ideal for budgeting and controlling cloud usage costs.

Max Burst

Spins up enough compute nodes to complete all the jobs in the job queue immediately. Gets results as fast as possible.

Burst All

Spins up all available nodes at one time. Automatically shuts down all nodes upon job completion.

Select Bursting Configurations

Job Queue
HPC Cloud On-Demand Data Center

Bursting Service Off

Persistent

Spins up all or a portion of the licensed instances in a cluster that remains persistent.

Existing Cluster

On-Demand

New Cluster

A	B	C
Head node stays active, compute nodes are destroyed.	Head node stays active, compute nodes go off-line.	Full cluster is destroyed including the head node.

The HPC Cloud On-Demand Data Center bursting function detects which jobs are in the job queue and automatically spins up, takes off-line, or shuts down nodes depending on the total requirements for the job queue. If there are not enough on-line nodes to run all jobs, bursting will bring on as many nodes as needed. If there are more nodes than needed, the excess nodes will be taken off-line.