

Harnessing the Capacity HPC Facilities to support Distributed HTC Workloads

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National investments in very large (exa) scale computers coupled with a growing recognition of the importance of High Throughput Computing (HTC) to scientific discovery lead to a growing interest in harnessing the capacity offered by national High Performance Computing (HPC) facilities for HTC workloads. Researchers who depend on such workloads expect a seamless integration of these facilities with their existing computing environment that is in most cases heterogeneous, dynamic and distributed. Many of the HTC applications are data intensive – Input and/or Output. The Open Science Grid (OSG) and the UW-Madison Center for High Throughput Computing (HTC) have been engaged in a joint effort to address the challenges posed by the unique characteristics of these facilities that range from access control to resource provisioning.