

Moab HPC Suite 10.2.0 Release Notes

March 2026



Adaptive
C O M P U T I N G

Contents

1. New Features	3
Torque Resource Manager	3
Moab Workload Manager	3
2. Differences	5
Torque Resource Manager	5
Moab Workload Manager	6
3. Known Issues	7
Torque Resource Manager	7
Moab Workload Manager	7
3. Resolved Issues	8
Torque Resource Manager	8
Moab Workload Manager	8
4. Installation and Upgrade Information	9
Compatibility Requirements	9

1. New Features

This topic contains a summary of key new features in Moab HPC Suite.

In this topic:

- [Torque Resource Manager](#)
- [Moab Workload Manager](#)

Torque Resource Manager

7.2.0

Support Added for Red Hat 9 and 10, SUSE 16, and Ubuntu 24 and 26

Support has been added for Red Hat 9 and 10 (e.g., RHEL, CentOS, Scientific Linux, Rocky Linux, Alma Linux), SUSE 16 (e.g., SLES, OpenSUSE Leap), and Ubuntu 24.04 and 26.04 (tested against 25.10).

Support Added for cgroups v2

Support has been added for cgroups version 2. If cgroups is enabled, Torque auto-detects which cgroups version is available (v1 or v2) at runtime and uses the appropriate implementation. cgroups v2 integrates with systemd via D-Bus to create properly delegated resource containers, enabling robust enforcement of CPU, memory, and GPU allocations. As with cgroups v1, this ensures jobs cannot exceed their resource limits or interfere with other jobs.

`$cgroup_version` MOM parameter

Running with cgroups in hybrid mode (both v1 and v2 mounted) is not supported. However, if you want to assume the risks of running in a non-supported configuration, it is possible to force v1 or v2 mode while in hybrid mode by setting '`$cgroup_version v1`' or '`$cgroup_version v2`' in `mom_priv/config`.

Moab Workload Manager

10.2.0

Support Added for Red Hat 9 and 10, SUSE 16, and Ubuntu 24 and 26

1. New Features

Support has been added for Red Hat 9 and 10 (e.g., RHEL, CentOS, Scientific Linux, Rocky Linux, Alma Linux), SUSE 16 (e.g. SLES, OpenSUSE Leap), and Ubuntu 24.04 and 26.04 (tested against 25.10).

2. Differences

This section contains differences in previously existing features that require a change in configuration or routine in Moab HPC Suite.

In this topic:

- [Torque Resource Manager](#)
- [Moab Workload Manager](#)

Torque Resource Manager

7.2.0

Support for Red Hat 9 and 10, SUSE 16, and Ubuntu 24 and 26

Support has been added for Red Hat 9 and 10, SUSE 16, and Ubuntu 24.04 and 26.04. Red Hat 7, SUSE 12, and Ubuntu 18.04 and 20.04 are not supported in version 7.2.

New support for cgroups v2

Support has been added for cgroups version 2. If cgroups is enabled, Torque auto-detects which cgroups version is available (v1 or v2) at runtime and uses the appropriate implementation. Running with cgroups in hybrid mode (both v1 and v2 mounted) is not supported. However, if you want to assume the risks of running in a non-supported configuration, it is possible to force v1 or v2 mode while in hybrid mode by setting '\$cgroup_version v1' or '\$cgroup_version v2' in mom_priv/config.

Removed obsolete Cray features

Support has been removed for obsolete Cray features such as Cray heterogeneous job support, ALPS reservation handling, ALPS-specific node attributes, and Cray energy tracking. The `cray_enabled` and `interactive_jobs_can_roam` server parameter has been removed.

Removed obsolete Linux 2.6 cpuset support and geometry requests

Removed legacy cpuset support which has been supplanted by the use of cgroups and NUMA aware resource task definitions. The '--enable-cpusets' and '--enable-geometry-requests' configure options have been removed. The Linux cpuset functionality has been integrated into cgroups so that when Torque is configured with the '--enable-cgroups' option, cpuset functionality is also included. When jobs are submitted using the -L resource request syntax, Torque allocates a cpu set and memory set for each task in the job request.

Removed obsolete 'NUMA-Support' for SGI Altix and UV hardware

Support has been removed for the obsolete 'Numa-Support' systems. Introduced in Torque 3.0 for large-scale SLES systems using SGI Altix and UV hardware, this configuration allowed a single pbs_mom to be treated as if there were multiple nodes running in the cluster. The affiliated '--enable-numa-support' configure option has been removed. The 'NUMA-Aware' system configuration introduced in Torque 6.0 that supports multi-req jobs and jobs that span hosts is still actively supported.

Moab Workload Manager

10.2.0

Support for Red Hat 9 and 10, SUSE 16, and Ubuntu 24 and 26

Support has been added for Red Hat 9 and 10, SUSE 16, and Ubuntu 24.04 and 26.04. Red Hat 7, SUSE 12, and Ubuntu 18.04 and 20.04 are not supported in version 10.2.

Removed obsolete Cray features

Support has been removed for obsolete Cray features such as topology-aware scheduling support for the Cray 3D torus, size and mpp* job attributes.

3. Known Issues

This topic lists known issues in Moab HPC Suite.

In this topic:

- [Torque Resource Manager](#)
- [Moab Workload Manager](#)

Torque Resource Manager

7.2.0

- `qsub -n` (`node_exclusive`) is implemented for `cgroups v1` but not yet for `cgroups v2`. In either case, Torque will avoid placing a job using `qsub -n` on nodes that have other jobs running. With `cgroups v1`, Torque will additionally allocate all CPUs and memory on the node to the job. However, with `cgroups v2`, the job will receive only the resources explicitly requested (or queue defaults), not the entire node's resources. Use `-L tasks=1:lprocs=all:place=node` to get all node resources with `cgroups v2`.

Moab Workload Manager

10.2.0

- No known issues.

3. Resolved Issues

When applicable, each resolved issue in Moab HPC Suite has the associated issue number in parentheses.

In this topic:

- [Torque Resource Manager](#)
- [Moab Workload Manager](#)

Torque Resource Manager

7.2.0

- MPI jobs did not receive CPU affinity information, potentially impacting process placement and performance.
- momctl -l would report 'Socket 0 (0KB)' instead of the correct aggregated memory from child NUMA nodes on systems using hwloc 1.x.
- Moms could be marked down due to incorrect spool filesystem check saying "note = ERROR: torque spool filesystem full".

Moab Workload Manager

10.2.0

- mrsvctl could show an incorrect failure message when the sum of reservation end time and job duration exceeded MAXINT.
- .moab.key could fail to load showing "invalid key for client" errors due to an authentication failure when the file cache was full.

4. Installation and Upgrade Information

This section identifies information useful when installing and upgrading Moab HPC Suite.

In this topic:

- [Compatibility Requirements](#)

Compatibility Requirements

Torque Resource Manager

Torque 7.2 is not backward compatible with Torque 6.1 or earlier. When upgrading to Torque 7.2 from Torque 6.1 or earlier, the server, moms, and clients must be upgraded at the same time. The job format is compatible between Torque 7.2 and previous versions of Torque. After upgrading, any queued jobs should continue to work with the new version.

Moab Workload Manager

Moab Workload Manager 10.2 requires Torque Resource Manager 7.0 or later. Elastic Computing is not supported on Ubuntu.