

# vSMP Technology

## Offered by

# JRT and ScaleMP



## Powering High-End x86 Systems

Better Performance, Lower TCO

### ScaleMP vSMP Solutions Are Now Being Offered In Partnership With James River Technical

vSMP Foundation-based aggregation provides a cost effective alternative to buying expensive and large proprietary shared-memory systems. It enables an application requiring large amounts memory to leverage the aggregated memory of multiple systems, and reduce the need to use external high-performance storage systems for swap or scratch space. Application runtime can be dramatically reduced by running simulations with in-core-solvers or by using memory instead of swap for large-memory footprint models.

### The Award-Winning vSMP Foundation 2.0™

James River Technical and ScaleMP have partnered together to offer your organization ScaleMP's vSMP Foundation 2.0 software. vSMP Foundation 2.0 enables the creation of a single virtual system by aggregating multiple industry-standard x86 systems. With a single operating system running up to 128 cores and 4 terabytes of memory, it simplifies cluster management and provides the benefits of a traditional SMP - without the inherent costs. The [New Intel® Nehalem processors](#) can be leveraged to [deliver up to 3X](#) the performance over the previous generation of processors.

#### Cray CX1 - Nehalem Configurations - Xeon 5500 Series

4 Blades, 8 Sockets/32 Core w/ 48GB RAM	32-core - \$59,995
8 Blades, 16 Sockets/64 Core w/ 192GB RAM	64-core - \$129,995
8 Blades, 16 Sockets/64 Core w/ 384GB RAM	64-core - \$164,995

#### Cray CX1 - Xeon 5400 Series

4 Blades, 8 Sockets/32 Core w/ 64GB RAM	32-core - \$55,995
8 Blades, 16 Sockets/64 Core w/ 256GB RAM	64-core - \$109,995
8 Blades, 16 Sockets/64 Core w/ 512GB RAM	64-core - \$195,995

#### Dell M1000 Chassis & M600 Blades

8 Blades, 16 Sockets/64 Core w/ 256GB RAM	64-core - \$119,995
16 Blades, 32 Sockets/128 Core w/ 128GB RAM	128-core - \$209,995
16 Blades, 32 Sockets/128 Core w/ 128GB RAM	128-core - \$269,995

#### JRT-HPC SMP N8 Supercomputer

4 Nodes, 8 x Xeon 5500 2.66GHz, 192GB RAM	32-core - \$39,995
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JRT-HPC SMP N8



Cray CX1



Dell M1000 Blade Series

### Why Choose vSMP?

#### •Higher Performance, Lower Cost

- \* Lower TCO (CapEx/OpEx)
- \* Reduces management complexity
- \* Eliminates the need for complex clustered file-systems
- \* Optimized for HPC Environments
- \* Single Operating System

#### •Versatile Platform

- \* Run different types of applications at equal to or better performance compared to clusters and traditional SMPs
- \* Program in multi-threaded, multi-process throughput, multi-process cooperative, and single threaded, large memory applications. **The choice is yours.**
- \* Eliminate the need for different architectures to support dedicated MPI or shared-memory applications (Clusters, SMP)

#### •x86 Technology

- \* Lower cost of acquisition than traditional, proprietary SMP Systems
- \* vSMP Foundation is able to leverage the latest generation of chips and interconnects at any point in time
- \* Create "fat nodes" on existing cluster with software only solution

JRT - Continuing to address customers' growing demands for innovative and cost-efficient High Performance Computing solutions.

Please contact JRT Sales at [insidesales@jrti.com](mailto:insidesales@jrti.com) for additional information and pricing. You can also visit us on the web at [www.jrti.com](http://www.jrti.com) for all HPC solutions.