

# Vmeter SQM™ 2.0

## SAN QOS Manager for Apple Video SANs

### Key Features

#### SAN QOS Management

Ensures adequate bandwidth is available to high-priority video processes by pacing XSAN client I/O access rates.

Eliminates unexpected I/O bursts

Increases Xsan bandwidth efficiency and number of clients that can be attached to a single SAN

#### Easy Installation

Compact application installs on SAN-attached clients.

#### Simple Configuration and Management

Client I/O limits and I/O statistics are set once and applied automatically across SAN.

#### Compatibility

Works with all SAN-connected Apple OS X and Windows clients and Apple-compatible FC RAID. Xsan or Xsan 2 are not required.

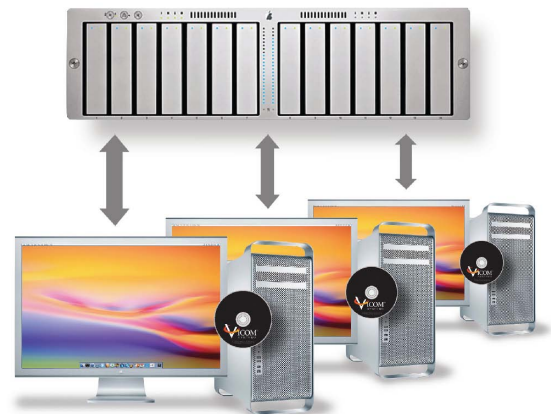
Looking to get more from your Apple SAN while spending less? How about ensuring business-critical video operations like playout get the bandwidth they need?

If so, look no more. Installed on SAN-attached clients, Vmeter SQM 2.0 raises the overall performance of Apple SANs by controlling the I/O access rates of attached workstations. When high-priority processes such as playout are running, Vmeter SQM ensures sufficient streaming bandwidth is available by pacing lower-priority SAN client with administrator-specified, maximum access rates.

The result: dramatic SAN performance improvement. With Vmeter, the same SAN infrastructure will support as many as three times as many video clients as a non-Vmeter SAN.

### Need for SAN QOS Management

In a typical Xsan video environment, multiple video workstation clients are connected to the same SAN. In this configuration, each workstation accesses SAN storage devices directly rather than connecting to a central file server via Ethernet network. Direct SAN connection can increase individual system performance by eliminating I/O bottlenecks at the file server, but this can also introduce potential problems when workstation access priorities conflict and degrade SAN efficiency.



This is the case when I/O-intensive tasks such as backup compete with video operations like playout. Playout requires isochronous data delivery to achieve required performance levels and to function properly. Without adequate I/O bandwidth, frames may be dropped and playout will be interrupted. Increasing the number of FC RAID systems on a SAN will increase aggregate bandwidth but it is an expensive solution. Through simple addition of software, Vmeter SQM reduces the need for storage bandwidth by controlling the quality of service (QOS) on the SAN.

## Benefits

When installed on SAN-attached workstations, Vmeter SQM:

- Ensures bandwidth is continuously available for all high-priority processes
- Increases SAN bandwidth efficiency and number of clients that can be attached to single SAN
- Eliminates frame drops due to unexpected I/O bursts
- Reduces performance-based storage requirements by as much as 3:1
- Dynamically limits workstation I/O demands according to preset levels
- Provides easy bandwidth monitoring
- Simplifies SAN capacity planning

## Licensing

Vmeter SQM 2.0 installs on SAN-attached Mac OS X and Windows clients, and works with or without Xsan or Xsan 2. Vmeter SQM software is available under single-unit and multi-client software site licenses as shown below.

### Vmeter SQM 2.0 at-a-Glance

Model Number	Vmeter-1	Vmeter-96
<i>Licensed clients</i>	1	96 (single site)
<i>Host OS support</i>	Mac OS X 2.5.4 or later Windows 2008	Mac OS X, Windows
<i>Storage Support</i>	<i>All Apple-compatible FC storage</i>	<i>All Apple-compatible FC storage</i>
<i>Xsan</i>	Not required	Not required

### Support (included with Vmeter)

3-year maintenance and telephone support, normal business hours, single unit  
3-year maintenance and telephone support, normal business hours, 96 clients/site

#### VICOM SYSTEMS

Vicom Systems is a privately held company in Redwood City, California. Vicom specializes in the delivery of transparent, wire speed data services for systems and storage. Vicom delivers on the long-standing promise of SANs: seamless mobility and consolidation, any-to-any connection, simplified management, and high availability. Vicom products and services have been selected by OEMs including IBM, Sun Microsystems, and Hewlett-Packard. Enterprise and video customers include Deutsche Bank, Bloomberg, Caterpillar Tractor, NFL Films, and Korea Broadcasting.