



# Using Sun StorageTek 53xx NAS with Messaging Server Message Store

Sun Java™ Communications Suite Technical Note



Sun Microsystems, Inc.  
4150 Network Circle  
Santa Clara, CA 95054  
U.S.A.

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# Using Sun StorageTek 53xx NAS with Messaging Server Message Store

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This technical note describes how to configure the Sun StorageTek™ 53xx NAS for use with Sun Java™ System Messaging Server 6.

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## Technical Note Revision History

Version	Date	Description of Changes
10	April 6, 2007	Initial release of this technical note.

## Overview of this Technical Note

The Messaging Server message store contains the user mailboxes for a particular Messaging Server instance. The size of the message store increases as the number of mailboxes, folders, and log files increase.

As you add more users to your system, your disk storage requirements increase. Depending on the number of users your server supports, the message store might require one physical disk or multiple physical disks. Messaging Server enables you an add more stores as needed.

One approach to adding more stores is by using storage appliances such as Sun StorageTek 53xx NAS. Sun StorageTek devices simplify file sharing and management between disparate

platforms. The Sun StorageTek 53xx NAS units are quick to deploy, simple to manage, and integrate seamlessly. In addition, the Sun StorageTek 5320 NAS scales to 224 Tbytes to meet growing data volumes without compromising performance.

The high-level steps to configure a Sun StorageTek 53xx NAS for Messaging Server are:

1. Planning disk capacity
2. Creating volumes
3. Configuring Messaging Server to access the Sun StorageTek 53xx NAS

## Planning Disk Capacity and Creating Volumes

You need to create a volume (or volumes) on the Sun StorageTek 53xx NAS before installing Messaging Server. To avoid disk I/O bottlenecks, configure the system with as many Logical Unit Numbers (LUNs) as possible. Note that more LUNs in a volume means longer RAID reconstruction time in case disk failure happens.

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**Note** – The message store file system on the Sun StorageTek 53xx NAS can only be mounted by one Messaging Server host. Sharing the same message store file system by more than one Messaging Server is not supported.

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### ▼ To Create a Volume on a Sun StorageTek 53xx NAS

- Refer to the Sun StorageTek documentation for instructions on creating volumes:  
<http://docs.sun.com/app/docs/prod/nas>

## Configuring Messaging Server to Work with the Sun StorageTek 53xx NAS

After creating the volume, you need to configure Messaging Server so that it can function with the Sun StorageTek 53xx NAS.

## ▼ To Configure Messaging Server to Work with the Sun StorageTek 53xx NAS

- 1 **Configure the temporary database directory on the Messaging Server host by setting the `store.dbtmpdir` parameter to a directory under `/tmp`.**

For example:

```
configutil -o store.dbtmpdir -v /tmp/mboxlist
```

- 2 **Move the `data/lock` directory to a local file system, for example, `/tmp`.**

- 3 **Create a symlink to the lock directory.**

For example:

```
mv /var/opt/SUNWmsgsr/lock /tmp/lock
ln -s /tmp/lock /var/opt/SUNWmsgsr/lock
```

---

**Note** – If you do this, modify the startup script to recreate the `/tmp/lock` directory (with proper permissions) upon bootup. Otherwise, it won't exist and your sever will fail to start.

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## Improving Sun StorageTek 53xx NAS Performance

In general, you can improve Sun StorageTek 53xx performance by creating more Logical Unit Numbers (LUNs). In addition, build volumes on each LUN so that the metadata and user data are separated. For example, during initial Messaging Server configuration, you could locate metadata on LUN0 and the other user data on LUN1.

## Configuring the Message Store Database Snapshot

After configuring Messaging Server to work with the Sun StorageTek 53xx NAS, you need to specify a message store database snapshot interval and location.

A snapshot is a hot backup of the database and is used by `stord` to restore a broken database transparently in a few minutes. This is much quicker than using `reconstruct`, which relies on the redundant information stored in other areas.

## ▼ To Configure Message Store Database Snapshot Location and Interval

### 1 Plan the snapshot location and interval based on the following:

- Try to allocate five times as much space for the database and snapshots combined.
- Reconfigure snapshots to run on a separate disk that is tuned to the system's needs.
- Having a snapshot interval which is too small will result in a frequent burden to the system and a greater chance that a problem in the database will be copied as a snapshot. Having a snapshot interval too large can create a situation where the database will hold the state it had back when the snapshot was taken.
- A snapshot interval of a day is recommended and a week or more of snapshots can be useful if a problem remains on the system for a number of days and you wish to go back to a period prior to point at which the problem existed.

### 2 Use `configutil` parameters to configure the snapshot location and interval, as described in “To Specify Message Store Database Snapshot Interval and Location” in *Sun Java System Messaging Server 6 2005Q4 Administration Guide*.

## Further Reading

Refer to the following documentation for more information.

- Sun StorageTek 5310 NAS Appliance Version 4.5 Documentation:  
[http://docs.sun.com/app/docs/coll/5310\\_NASv45](http://docs.sun.com/app/docs/coll/5310_NASv45)  
Sun StorageTek 5320 NAS Appliance Version 4.20 Documentation:  
[http://docs.sun.com/app/docs/coll/5320\\_NASv420](http://docs.sun.com/app/docs/coll/5320_NASv420)
- To manage the message store and database snapshots, see Chapter 18, “Managing the Message Store,” in *Sun Java System Messaging Server 6 2005Q4 Administration Guide*.

## Accessing Sun Resources Online

The [docs.sun.com](http://docs.sun.com) web site enables you to access Sun technical documentation online. You can browse the docs.sun.com archive or search for a specific book title or subject. Books are available as online files in PDF and HTML formats. Both formats are readable by assistive technologies for users with disabilities.

To access the following Sun resources, go to <http://www.sun.com>:

- Downloads of Sun products
- Services and solutions

- Support (including patches and updates)
- Training
- Research
- Communities (for example, Sun Developer Network)

## Third-Party Web Site References

Third-party URLs are referenced in this document and provide additional, related information.

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