

iSCSI Performance Tuning

Best Practice Guide

Version 1.0

January 02, 2020

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Announcement

Edition 1.0 (JAN. 2020)

Trademarks

Notices

Preface

About This Guide



CAUTION:

Technical Support

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Information, Tip and Caution



INFORMATION:



TIP:



CAUTION:

1. Overview

1.1 Audience

2. Storage Best Configuration

2.1. Network Configuration

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Create Volume

- General
- Advanced**
- Summary

Volume Advanced Settings

Please configure the volume advanced settings.

Block Size : 512 Byte ▾

Priority : High ▾

The priority is the comparison with the other volumes.

Background I/O Priority : High ▾

Background I/O priority will influence volume initialization, rebuild, and migration.

Erase Volume Data : Fast Erase ▾

Enable Cache Mode (Write-back Cache)
Write back optimizes the system speed but comes with the risk which the data may be inconsistent be short time interval.

Enable Video Editing Mode
Please enable it when the application is in the video editing environment. It sacrifices a bit of performance.

Enable Read-ahead
The system will identify what is needed next, based on the content just retrieved from the disk, and the buffer. When the data to be transmitted is continuous, this feature will improve performance.

3. Server Configuration

3.1. Network Configuration

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TIP:

3.2. Local Drive

3.3. Windows Server OS

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INFORMATION:



CAUTION:

3.4. Unix-Like OS

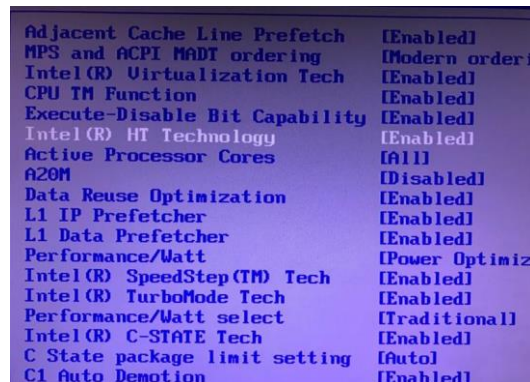
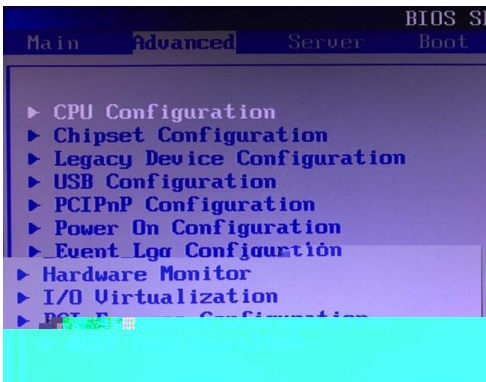
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```
root@antony-virtual-machine:/home/antony# blockdev --report
RO   RA   SSZ   BSZ   StartSec      Size  Device
rw   256  2048  2048      0      1051721728 /dev/sr0
rw   256   512  4096      0      17179869184 /dev/sda
rw   256   512  4096     2048     16105078784 /dev/sda1
rw   256   512  1024    31459326      1024 /dev/sda2
rw   256   512  4096    31459328     1071644672 /dev/sda5
root@antony-virtual-machine:/home/antony# blockdev --setra 4096 /dev/sda
```

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```
root@antony-virtual-machine:/home/antony# sysctl -w net.core.rmem_max=524284
net.core.rmem_max = 524284
root@antony-virtual-machine:/home/antony#
```

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INFORMATION:



CAUTION:

4. Support and Other Resources

4.1. Getting Technical Support

Information to collect

Information for Technical Support

SANOS UI → System Settings → Maintenance → System Information
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OSAN SANOS 4.0

System Information | Update | Firmware Synchronization | System Identification | Reset

Firmware Version	1.2.0 (build 201707171500)
SAS IOC Firmware Version	07.00.01.00
SAS Expander Firmware Version	1000

Controller 2

Item	Information
Controller Serial Number	
CPU	Intel(R) Processor D1500 2 Cores
Memory	8 GB
Host Card Slot 1	Empty
Host Card Slot 2	Empty
Firmware Version	1.2.0 (build 201707171500)
SAS IOC Firmware Version	07.00.01.00
SAS Expander Firmware Version	1000

Backplane

Item	Information
Backplane Serial Number	
Backplane ID	QW424
MCU Version	1.2.0

Licenses

Item	Information
SSD Cache	Enabled
Auto Tiering	Enabled

[Download Service Package](#)

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4.2. Documentation Feedback

Appendix

End-User License Agreement (EULA)

General

License Grant

Intellectual Property Right

License Limitations

Disclaimer

Limitation of Liability

Termination

Miscellaneous

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