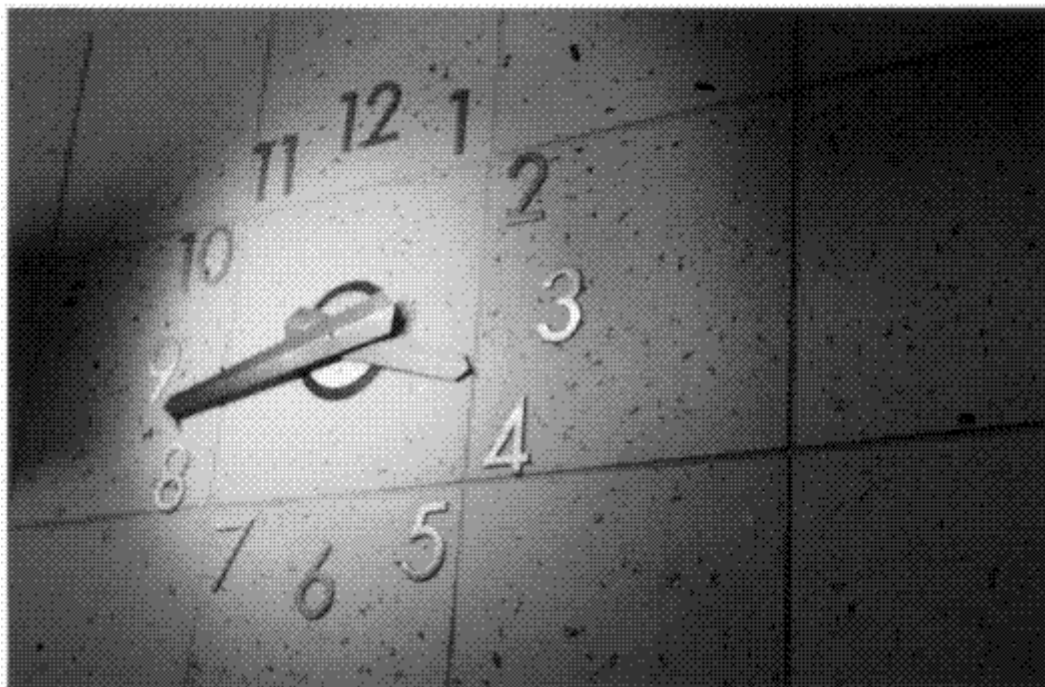




## STORAGE AVAILABILITY AUDIT



Prepared for:  
Customer Name: Citigroup\_EMEA\_CH  
Date: 22-Mar-2010

Prepared by:  
Contact: Myles Hook, Storage Optimisation Consultant  
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## EXECUTIVE SUMMARY

This Storage Availability Audit was conducted by NetApp Authorized Services Engineer, Myles Hook, myles.hook@netapp.com, for Citigroup\_EMEA\_CH. NetApp storage audit and assessment is part of the proactive strategy that provides comprehensive inspections and evaluations of your storage infrastructure, growth requirements, and trends. The results of these reports help your storage management team to leverage and expand existing resources, minimize reactive efforts, and prioritize future storage investments.

Integral to the analysis of environmental and operational statistics for the Storage Availability Audit report is the AutoSupport feature of the NetApp Data ONTAP operating system. AutoSupport is an integrated monitoring feature that constantly provides operational, environmental, and configuration information and status on your storage systems.

## At a Glance

### Systems Inventory

| Component  | Count |
|------------|-------|
| Filer      | 4     |
| NearStore  | 0     |
| NetApp VTL | 0     |
| V-Series   | 0     |
| NetCache   | 0     |
| DataFort   | 0     |

### Capacity Summary

| Systems Summary   | TB    |
|-------------------|-------|
| Total Useable     | 27.27 |
| Total Available   | 11.97 |
| Total Used        | 15.29 |
| Percent Available | 44%   |
| Percent Used      | 56%   |

### Down Rev Components

| Component   | System Count |
|-------------|--------------|
| Motherboard | 4            |
| Shelf       | 0            |
| Disk        | 0            |
| O/S         | 4            |

### RMA Summary

| Status              | Count |
|---------------------|-------|
| Returns Received    | 0     |
| Returns Outstanding | 0     |

### Service Contracts Summary

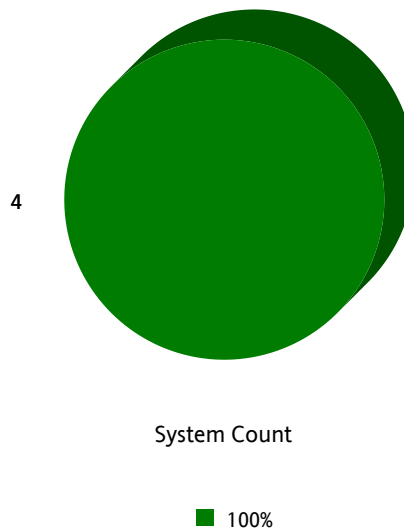
| Status       | Count |
|--------------|-------|
| Grace Period | 4     |

### Unique System Messages

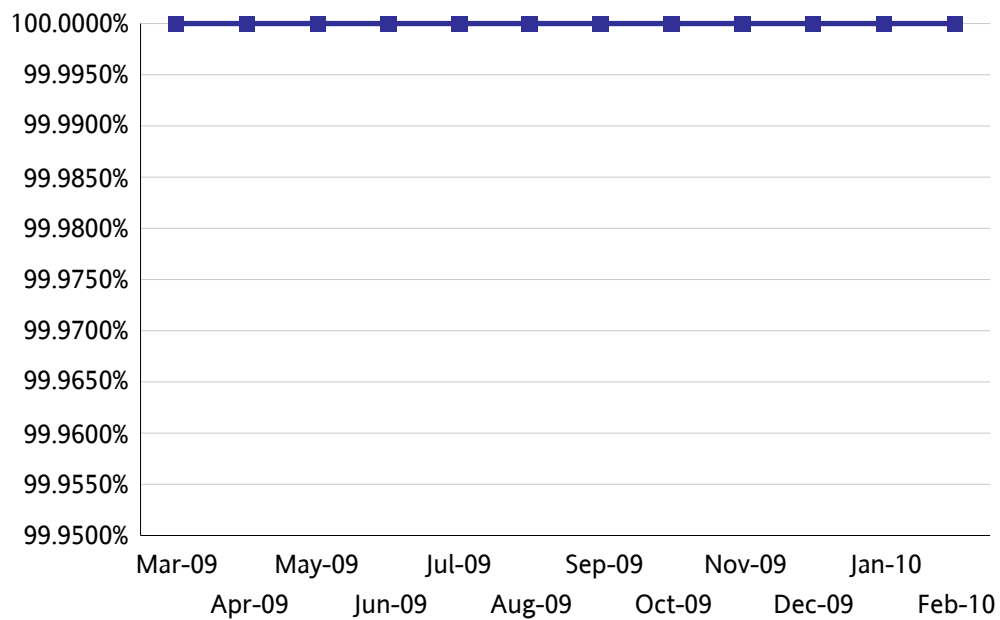
| Type      | Count |
|-----------|-------|
| Recommend | 4     |
| Notice    | 4     |
| Warning   | 4     |

## Data Availability Summary

### Current Data Availability

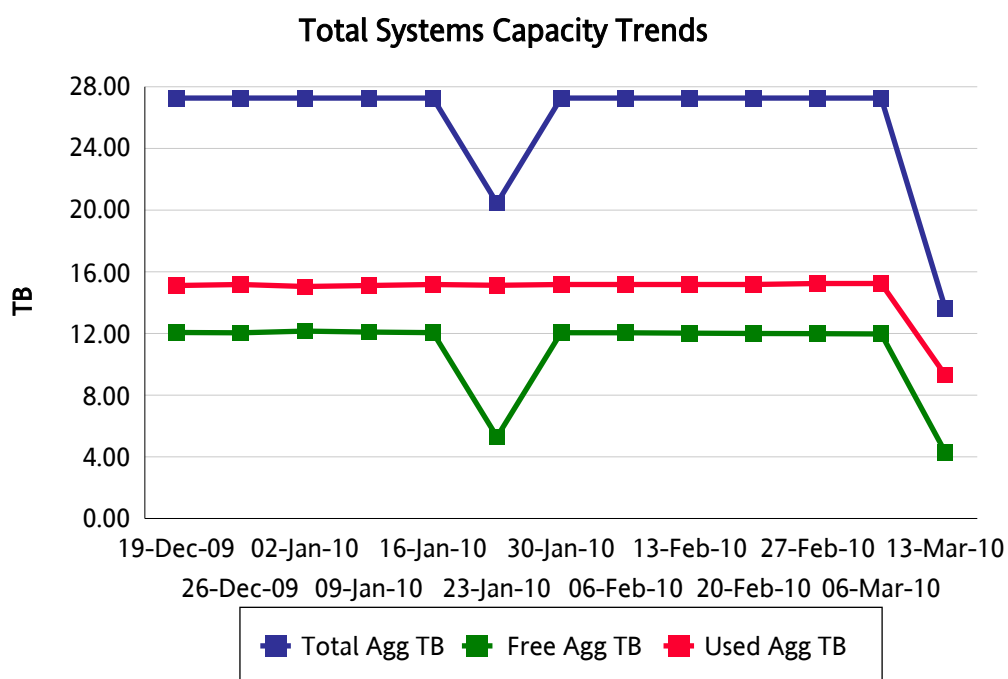


### Data Availability Trends



## Capacity Summary

| Utilization | Systems Count | Host Name     | Serial Number | % Used |
|-------------|---------------|---------------|---------------|--------|
| < 50%       | 1             | zrhctinas202b | 20012891      | 1%     |
| 50-75%      | 1             | zrhctinas202a | 20012890      | 50%    |
| 76-90%      | 2             | zrhctinas201a | 20013442      | 87%    |
|             |               | zrhctinas201b | 20012892      | 87%    |



## Technical Support Cases

### Open Case Count

|        | P3 | Total |
|--------|----|-------|
| Apr-09 | 1  | 1     |
| Jul-09 | 1  | 1     |
| Feb-10 | 1  | 1     |

### Closed Case Count

|        | P3 | Total |
|--------|----|-------|
| Apr-09 | 1  | 1     |
| Aug-09 | 1  | 1     |
| Mar-10 | 1  | 1     |

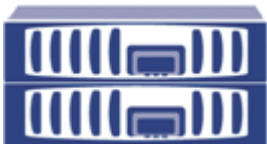
### Total Days to Resolution

|        | P3 | Total |
|--------|----|-------|
| Apr-09 | 4  | 4     |
| Aug-09 | 15 | 15    |
| Mar-10 | 9  | 9     |

## TECHNICAL SUMMARY

Storage Availability Audits are a valuable NetApp service to maintain a robust and secure storage environment. Gain insight and control to reduce unexpected downtime, proactively address potential issues, and ensure you are leveraging NetApp best practices. Storage Availability Audits are comprehensive custom reports that convey the status of your entire NetApp storage environment.

### System Summary for systems sending AutoSupport

| Product                                                                                    | Platform | Host Name     | Serial Number | Useable TB |
|--------------------------------------------------------------------------------------------|----------|---------------|---------------|------------|
| <br>FILER | FAS3040  | zrhctinas202a | 20012890      | 6.82       |
|                                                                                            | FAS3040  | zrhctinas202b | 20012891      | 6.82       |
|                                                                                            | FAS3040  | zrhctinas201b | 20012892      | 6.82       |
|                                                                                            | FAS3040  | zrhctinas201a | 20013442      | 6.82       |
|                                                                                            | FILER    |               |               | 27.27      |

## System Summary for systems not sending AutoSupport

There are no systems in this section

## Action Points

### Summary of Alerts

| Component             | Warning | Recommend | Notice |
|-----------------------|---------|-----------|--------|
| System                | 11      | 4         | 8      |
| Disk                  | 0       | 0         | 0      |
| Volume                | 0       | 0         | 1      |
| Aggregate             | 0       | 0         | 0      |
| Interface             | 0       | 0         | 0      |
| Host Bus Adapter(HBA) | 0       | 0         | 0      |

## System Uptime

### Systems Uptime Summary: Last 12 months

|                       | Mar-09 | Apr-09 | May-09 | Jun-09 | Jul-09 | Aug-09 | Sep-09 | Oct-09 | Nov-09 | Dec-09 | Jan-10 | Feb-10 |
|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total Downtime (min.) | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Total System Outages  | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |

### Systems Uptime Summary: Last 3 months

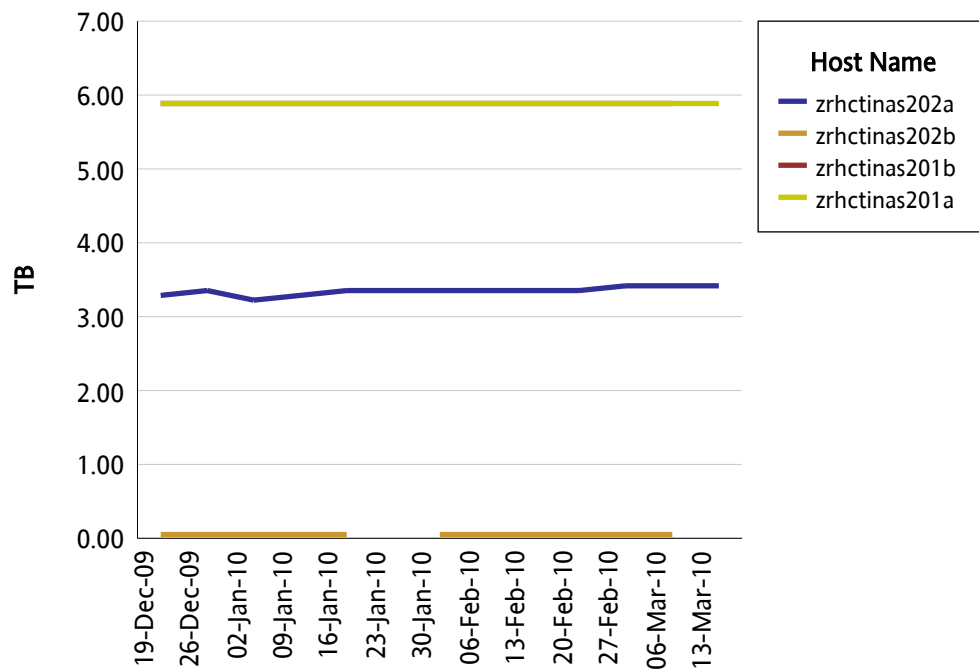
| Host Name     | Serial Number | Fiscal Month | Total Downtime | Total Count |
|---------------|---------------|--------------|----------------|-------------|
| ZRHCTINAS201A | 20013442      | 01-Dec-2009  | 0              | 0           |
|               |               | 01-Jan-2010  | 0              | 0           |
|               |               | 01-Feb-2010  | 0              | 0           |
| ZRHCTINAS201B | 20012892      | 01-Dec-2009  | 0              | 0           |
|               |               | 01-Jan-2010  | 0              | 0           |
|               |               | 01-Feb-2010  | 0              | 0           |
| ZRHCTINAS202A | 20012890      | 01-Dec-2009  | 0              | 0           |
|               |               | 01-Jan-2010  | 0              | 0           |
|               |               | 01-Feb-2010  | 0              | 0           |
| ZRHCTINAS202B | 20012891      | 01-Dec-2009  | 0              | 0           |
|               |               | 01-Jan-2010  | 0              | 0           |
|               |               | 01-Feb-2010  | 0              | 0           |

**Systems Uptime since last reboot**

| Host Name     | Serial Number | System Uptime   | Reported On             |
|---------------|---------------|-----------------|-------------------------|
| zrhctinas201a | 20013442      | 358 days, 6:29  | 14-Mar-2010 12:03:00 AM |
| zrhctinas201b | 20012892      | 351 days, 6:32  | 07-Mar-2010 12:03:00 AM |
| zrhctinas202a | 20012890      | 358 days, 20:17 | 14-Mar-2010 9:03:00 AM  |
| zrhctinas202b | 20012891      | 351 days, 11:17 | 07-Mar-2010 12:03:00 AM |

## System Capacity

Storage Capacity Trends - Top 10 Systems



## O/S and Firmware Summary

### Data ONTAP

| Host Name     | Serial Number | Current O/S Version | Latest O/S Version |
|---------------|---------------|---------------------|--------------------|
| zrhctinas201a | 20013442      | 7.2.5.1P6D15        | 7.3.2              |
| zrhctinas201b | 20012892      | 7.2.5.1P6D15        | 7.3.2              |
| zrhctinas202a | 20012890      | 7.2.5.1P6D15        | 7.3.2              |
| zrhctinas202b | 20012891      | 7.2.5.1P6D15        | 7.3.2              |

### Motherboard Firmware

| Host Name     | Serial Number | Current Firmware | Latest Firmware | Up to Date                                                                         |
|---------------|---------------|------------------|-----------------|------------------------------------------------------------------------------------|
| zrhctinas201a | 20013442      | 2.2.0            | 2.4.0           |  |
| zrhctinas201b | 20012892      | 2.2.0            | 2.4.0           |  |
| zrhctinas202a | 20012890      | 2.2.0            | 2.4.0           |  |
| zrhctinas202b | 20012891      | 2.2.0            | 2.4.0           |  |

### Shelf Firmware

| Host Name     | Serial Number | Shelf Count | Shelf Type  | Shelf Module Type | Current Firmware | Latest Firmware | Up to Date                                                                            |
|---------------|---------------|-------------|-------------|-------------------|------------------|-----------------|---------------------------------------------------------------------------------------|
| zrhctinas201a | 20013442      | 2           | DS14-Mk4-FC | ESH4              | 13               | 13              |  |
| zrhctinas201b | 20012892      | 2           | DS14-Mk4-FC | ESH4              | 13               | 13              |  |
| zrhctinas202a | 20012890      | 2           | DS14-Mk4-FC | ESH4              | 13               | 13              |  |
| zrhctinas202b | 20012891      | 2           | DS14-Mk4-FC | ESH4              | 13               | 13              |  |

### Disk Firmware

| Host Name     | Serial Number | Disk Count | Disk Model       | Current Firmware | Latest Firmware | Up to Date                                                                            |
|---------------|---------------|------------|------------------|------------------|-----------------|---------------------------------------------------------------------------------------|
| zrhctinas201a | 20013442      | 28         | X291_S15K6420F15 | NA00             |                 |  |
| zrhctinas201b | 20012892      | 28         | X291_S15K6420F15 | NA00             |                 |  |
| zrhctinas202a | 20012890      | 28         | X291_S15K6420F15 | NA00             |                 |  |
| zrhctinas202b | 20012891      | 28         | X291_S15K6420F15 | NA00             |                 |  |

## RMA Details

No RMA details found

## REPORTING DETAILS

Storage Availability Audits assist you in obtaining the best possible performance and availability from your storage environment. The detailed data provided in this section of the NetApp Storage Availability Audit report helps you invest in optimally sized technologies and confidently pursue new business strategies.

### Summary of Recommendations

#### System Level Recommendations

| Type: Warning   |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host Name       | Serial Number | Recommendation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| zrhctinas202a   | 20012890      | A user attempted unauthorized access to an administrative command or action. To see what capabilities a user is allowed and denied, run the 'useradmin user list [username]' command. If a user should have the ability to perform this action, create a role with the capability and add that role to the user's group. For more information see the useradmin documentation.<br><a href="http://now.netapp.com/eservice/SamAuditServlet?cid=9a200ecf892c577d95321cee74d7f22a">http://now.netapp.com/eservice/SamAuditServlet?cid=9a200ecf892c577d95321cee74d7f22a</a>                                                            |
| zrhctinas202b   | 20012891      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| zrhctinas201b   | 20012892      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| zrhctinas201a   | 20013442      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| zrhctinas202a   | 20012890      | A user's password has expired and the user is trying to log in or run a command that is not available while the password is expired. When a user's password is expired, the user can only log in via methods that let the user change a password, and the only commands the user can run are password related. The user's password must be changed, either by the user or by another administrator who has the power to change passwords.<br><a href="http://now.netapp.com/eservice/SamAuditServlet?cid=188972e03ed2c703b5013c0c0f4d5ead">http://now.netapp.com/eservice/SamAuditServlet?cid=188972e03ed2c703b5013c0c0f4d5ead</a> |
| zrhctinas202a   | 20012890      | An SSH client sent a packet that could not be dispatched correctly. The server will send an appropriate unimplemented message back to the client with the expectation that the client can deal with the failure. The client should have options to turn off specific features that cause dispatch errors. Otherwise, this message may be safely ignored.<br><a href="http://now.netapp.com/eservice/SamAuditServlet?cid=af229c6b385e2b0090a75a004bb21168">http://now.netapp.com/eservice/SamAuditServlet?cid=af229c6b385e2b0090a75a004bb21168</a>                                                                                  |
| zrhctinas202a   | 20012890      | Newer motherboard firmware is available for this appliance. Currently installed firmware revision is 2.2.0. Latest available firmware revision is 2.4.0 Consult the System Firmware documentation on NOW for download and installation instructions.<br><a href="http://now.netapp.com/NOW/tools/releasetable.shtml">http://now.netapp.com/NOW/tools/releasetable.shtml</a>                                                                                                                                                                                                                                                        |
| zrhctinas202b   | 20012891      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| zrhctinas201b   | 20012892      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| zrhctinas201a   | 20013442      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| zrhctinas202a   | 20012890      | The user tried to log into the appliance using an invalid password and the account has been disabled. The amount of attempts a user has before being disabled is controled by the security.passwd.lockout.numtries option. Another administrator must change the password of the disabled user's account.<br><a href="http://now.netapp.com/eservice/SamAuditServlet?cid=58ae5c124848cb12aa8776f6323e1e00">http://now.netapp.com/eservice/SamAuditServlet?cid=58ae5c124848cb12aa8776f6323e1e00</a>                                                                                                                                 |
| Type: Recommend |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| zrhctinas202a   | 20012890      | Newer General Deployment release is available for this appliance. Consult the System Firmware documentation on NOW for download and installation instructions.<br><a href="http://now.netapp.com/NOW/cgi-bin/software">http://now.netapp.com/NOW/cgi-bin/software</a>                                                                                                                                                                                                                                                                                                                                                              |
| zrhctinas202b   | 20012891      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| zrhctinas201b   | 20012892      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| zrhctinas201a   | 20013442      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Type: Notice    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| zrhctinas202a   | 20012890      | Depending on the number of disks installed and their current firmware revision as compared to the firmware contained in the OS being installed, the disk firmware upgrade process can slow down the boot process to the point that it might briefly disrupt data service. Ensure the disks installed in this system are on the same firmware revision or later than what is contained in the destination OS prior to OS upgrade.<br><a href="http://now.netapp.com/eservice/SamAuditServlet?cid=1d3a33959af5b873c86e4c9d542eed69">http://now.netapp.com/eservice/SamAuditServlet?cid=1d3a33959af5b873c86e4c9d542eed69</a>          |
| zrhctinas202b   | 20012891      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| zrhctinas201b   | 20012892      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| zrhctinas201a   | 20013442      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| zrhctinas202a   | 20012890      | The recommended virus scanner timeout setting is 10 seconds. The option setting on this system is above 12 seconds. The vscan timeout setting determines how long a filer will wait before querying a vscan server for response to the virus scanning request. If this value is set too high it can delay                                                                                                                                                                                                                                                                                                                          |
| zrhctinas202b   | 20012891      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| Host Name     | Serial Number | Recommendation                                                                                                                             |
|---------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| zrhctinas201b | 20012892      | recovery from virus scan server side issues. Please use the "vscan options timeout set" command to adjust the timeout value to 10 seconds. |
| zrhctinas201a | 20013442      |                                                                                                                                            |

## Disk Level Recommendations

There are no Disk level recommendations found.

## Volume Recommendation Level

| Type: Notice  |               |             |                                                                                                                                                                                                                                                                 |
|---------------|---------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host Name     | Serial Number | Volume Name | Recommendation                                                                                                                                                                                                                                                  |
| zrhctinas202a | 20012890      | vol0        | Snapshot usage on this volume exceeds 80% of the allotted capacity. Snapshot capacity should be monitored closely to ensure that enough space is set aside for snapshots. Increase the amount of space reserved for snapshots using the "snap reserve" command. |

There are no Aggregate level recommendations found.

There are no HBA level recommendations found.

There are no Interface level recommendations found.

## Active Open Cases

There are no open cases found.

## Case History: Last 3 Months

| Case ID    | Host Name, Serial Number  | Case Created Date<br>Case Closed Date | Highest Priority,<br>Current Priority | Description                              |
|------------|---------------------------|---------------------------------------|---------------------------------------|------------------------------------------|
| 2001325874 | ZRHCTINAS202A<br>20012890 | 24-Feb-2010<br>05-Mar-2010            | 3<br>3                                | [CORE]rsh_getstr(): unexpected interrupt |

## Service Contracts

| Host Name, Serial Number  | Contract Status | Contract Number | Contract Type            | Service Name           | Service Level      | Service End date | Active                                                                                |
|---------------------------|-----------------|-----------------|--------------------------|------------------------|--------------------|------------------|---------------------------------------------------------------------------------------|
| ZRHCTINAS202A<br>20012890 | Grace Period    | 10430479        | NetApp Standard Contract | Disk Support           | 4hr Premium Onsite | 28-Feb-2013      |  |
|                           |                 |                 |                          | Field Support Services | 4hr Premium Onsite | 28-Feb-2013      |  |
|                           |                 |                 |                          | Hardware Services      | 4hr Premium Onsite | 28-Feb-2013      |  |
|                           |                 |                 |                          | Initial Installation   |                    | 31-Mar-2009      |  |
|                           |                 |                 |                          | Premium                | 4hr Premium Onsite | 28-Feb-2013      |  |
|                           |                 |                 |                          | SAM Audit              | Quarterly          | 28-Feb-2013      |  |
|                           |                 |                 |                          | SSP All SW             |                    | 28-Feb-2013      |  |

## Service Contracts

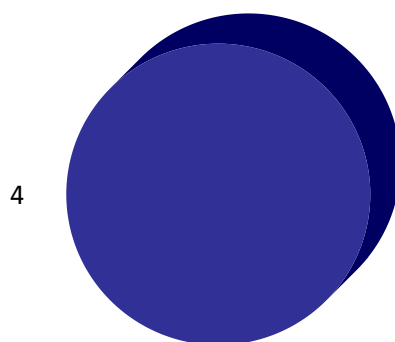
| Host Name,<br>Serial Number | Contract<br>Status | Contract<br>Number | Contract Type               | Service Name                    | Service Level         | Service End<br>date | Active                              |
|-----------------------------|--------------------|--------------------|-----------------------------|---------------------------------|-----------------------|---------------------|-------------------------------------|
| ZRHCTINAS202A<br>20012890   | Grace<br>Period    | 10430479           | NetApp Standard<br>Contract | SW Application<br>SecAdmin      |                       | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | Software<br>Upgrades/Updates    |                       | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | Support Console - SE<br>Premium | 4hr Premium<br>Onsite | 28-Feb-2013         | <input checked="" type="checkbox"/> |
| ZRHCTINAS202B<br>20012891   | Grace<br>Period    | 10430479           | NetApp Standard<br>Contract | Disk Support                    | 4hr Premium<br>Onsite | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | Field Support<br>Services       | 4hr Premium<br>Onsite | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | Hardware Services               | 4hr Premium<br>Onsite | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | Initial Installation            |                       | 31-Mar-2009         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | Premium                         | 4hr Premium<br>Onsite | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | SAM Audit                       | Quarterly             | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | SSP All SW                      |                       | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | SW Application<br>SecAdmin      |                       | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | Software<br>Upgrades/Updates    |                       | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | Support Console - SE<br>Premium | 4hr Premium<br>Onsite | 28-Feb-2013         | <input checked="" type="checkbox"/> |
| ZRHCTINAS201B<br>20012892   | Grace<br>Period    | 10430477           | NetApp Standard<br>Contract | Disk Support                    | 4hr Premium<br>Onsite | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | Field Support<br>Services       | 4hr Premium<br>Onsite | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | Hardware Services               | 4hr Premium<br>Onsite | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | Initial Installation            |                       | 31-Mar-2009         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | Premium                         | 4hr Premium<br>Onsite | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | SAM Audit                       | Quarterly             | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | SSP All SW                      |                       | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | SW Application<br>SecAdmin      |                       | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | Software<br>Upgrades/Updates    |                       | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | Support Console - SE<br>Premium | 4hr Premium<br>Onsite | 28-Feb-2013         | <input checked="" type="checkbox"/> |
| ZRHCTINAS201A<br>20013442   | Grace<br>Period    | 10430477           | NetApp Standard<br>Contract | Disk Support                    | 4hr Premium<br>Onsite | 28-Feb-2013         | <input checked="" type="checkbox"/> |
|                             |                    |                    |                             | Field Support<br>Services       | 4hr Premium<br>Onsite | 28-Feb-2013         | <input checked="" type="checkbox"/> |

## Service Contracts

| Host Name,<br>Serial Number | Contract<br>Status | Contract<br>Number | Contract Type               | Service Name                    | Service Level         | Service End<br>date | Active                                                                              |
|-----------------------------|--------------------|--------------------|-----------------------------|---------------------------------|-----------------------|---------------------|-------------------------------------------------------------------------------------|
| ZRHCTINAS201A<br>20013442   | Grace<br>Period    | 10430477           | NetApp Standard<br>Contract | Hardware Services               | 4hr Premium<br>Onsite | 28-Feb-2013         |  |
|                             |                    |                    |                             | Initial Installation            |                       | 31-Mar-2009         |  |
|                             |                    |                    |                             | Premium                         | 4hr Premium<br>Onsite | 28-Feb-2013         |  |
|                             |                    |                    |                             | SAM Audit                       | Quarterly             | 28-Feb-2013         |  |
|                             |                    |                    |                             | SSP All SW                      |                       | 28-Feb-2013         |  |
|                             |                    |                    |                             | SW Application<br>SecAdmin      |                       | 28-Feb-2013         |  |
|                             |                    |                    |                             | Software<br>Upgrades/Updates    |                       | 28-Feb-2013         |  |
|                             |                    |                    |                             | Support Console - SE<br>Premium | 4hr Premium<br>Onsite | 28-Feb-2013         |  |

## Performance Summary - CPU Utilization

### Current Average CPU Utilization Systems Summary

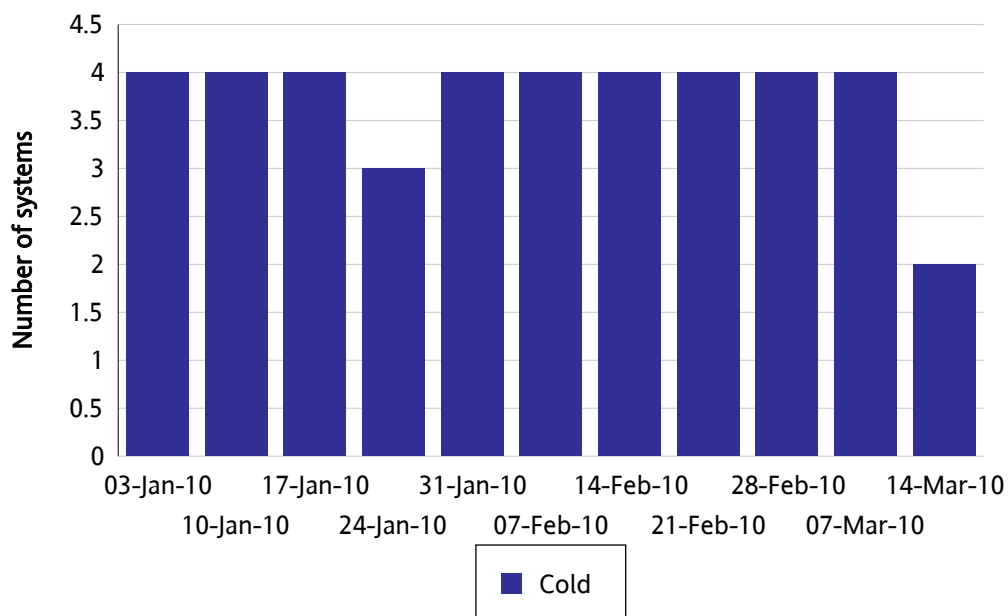


System Count

Cold

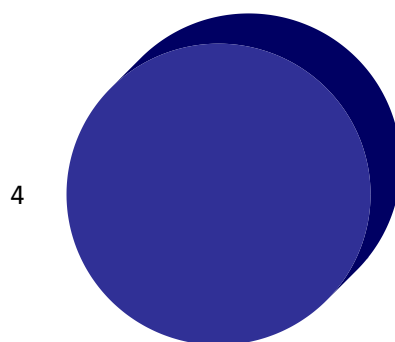
Storage systems are considered Hot when a system spends >40% of its time at >80% utilization. Heated systems spend >10% of their time at >80% utilization. Cool systems spend >50% of their time at >40% utilization. Cold is indicated when none of the previous conditions are true.

### Average CPU Utilization Systems Trend



## Performance Summary - Disk Utilization

### Current Average Disk Utilization Systems Summary

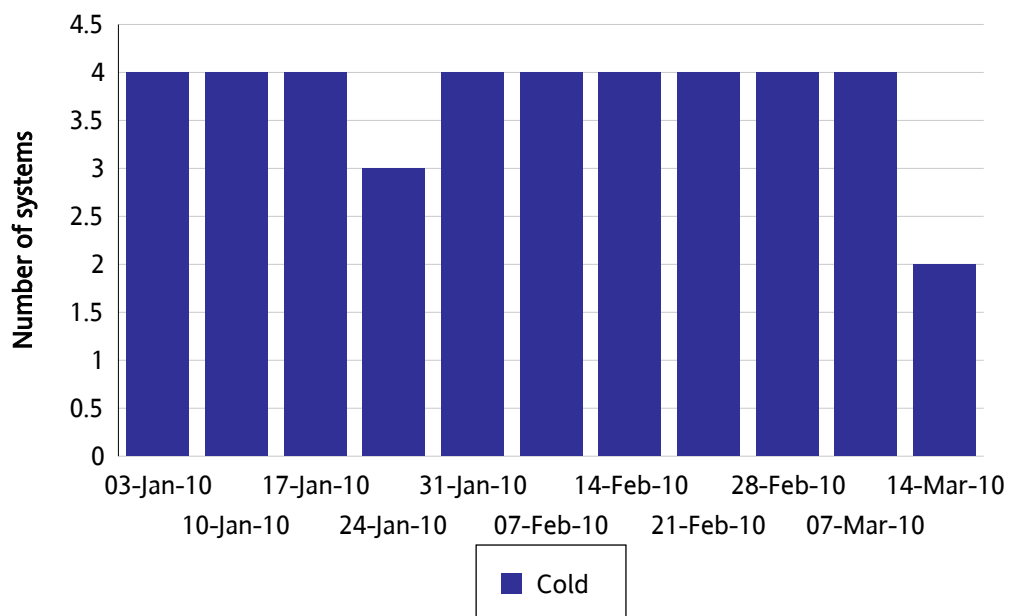


System Count



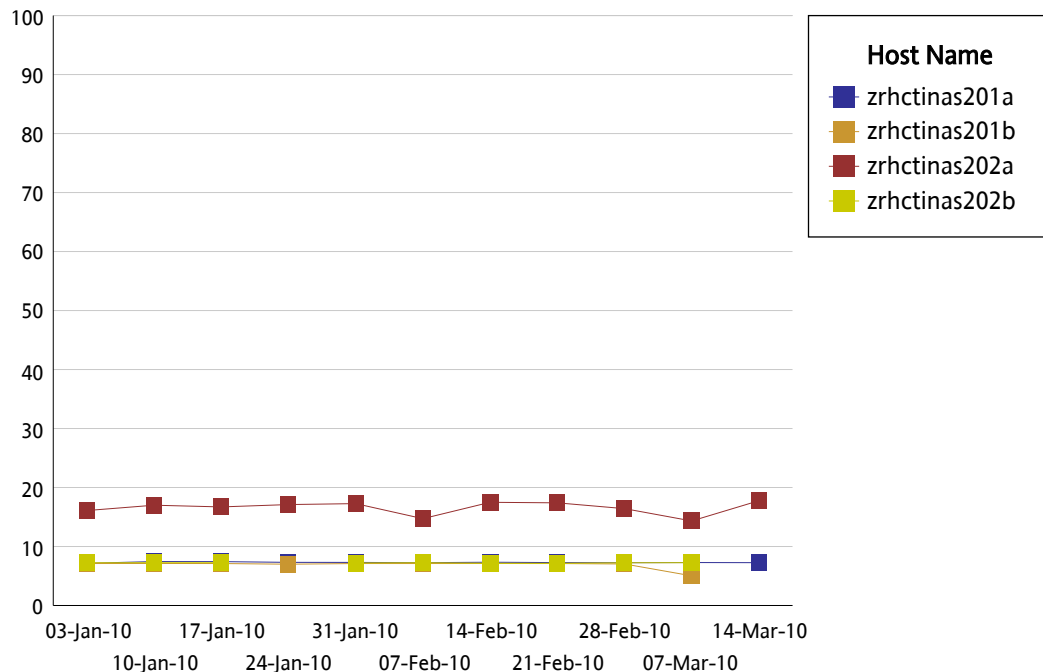
Storage systems are considered Hot when a system spends >40% of its time at >80% utilization. Heated systems spend >10% of their time at >80% utilization. Cool systems spend >50% of their time at >40% utilization. Cold is indicated when none of the previous conditions are true.

### Average Disk Utilization Systems Trend

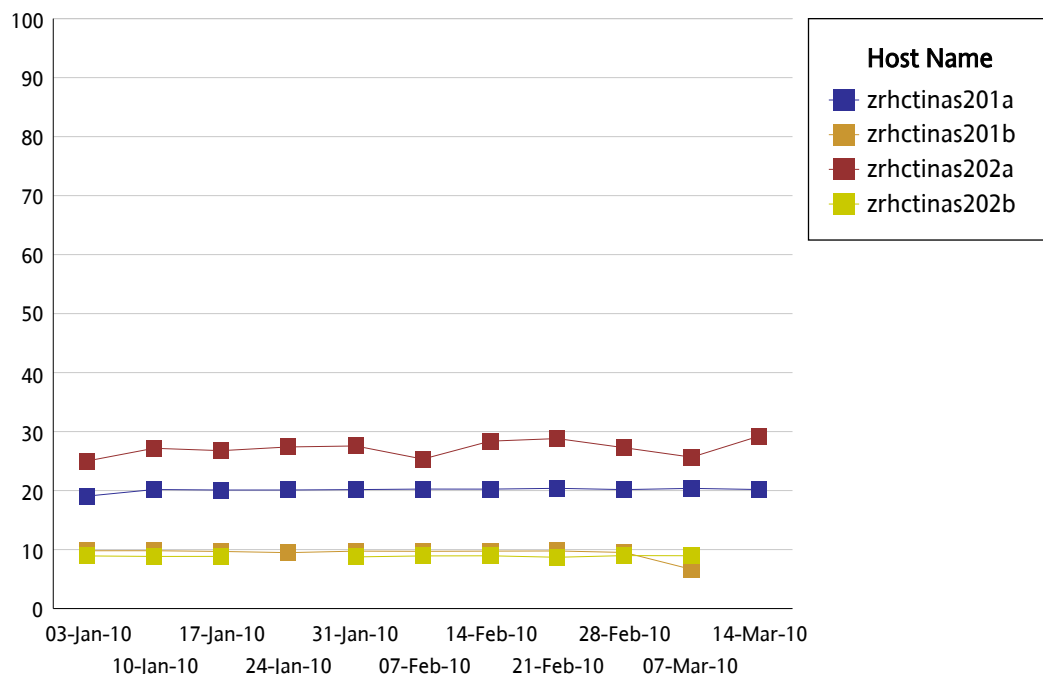


## System Performance

### Average CPU Utilization % Trends - Top 10 Systems



### Average Disk Utilization % Trends - Top 10 Systems



## Physical Inspection Summary

Your NetApp systems are checked for physical and environmental criteria that will adversely affect the availability and performance of your system. The following conditions are checked during a physical inspection.

1. Are all of the disk shelves mounted properly?
2. Do all shelf labels match the shelf IDs?
3. Are all disks and power supply sleds seated properly?
4. Are all head unit fans spinning normally?
5. Are all fans free of dust?
6. Are all power supply LEDs working?
7. Are all power supply fault lights off?
8. Are all exhaust fans spinning normally?
9. Are all power cords fastened securely?
10. Is the system grounded properly?
11. Is the FCAL connector terminator properly attached to the system?
12. Does the system meet NetApp power requirements?
13. Does the system have a spares kit?

There are no inspection results found for this system.

## SYSTEM REVIEW



**Host Name:** zrhctinas202a  
**Serial Number:** 20012890  
**Last Update:** 14-Mar-2010

**Model:** FAS3040  
**O/S:** 7.2.5.1P6D15  
**Partner Name:** zrhctinas202b

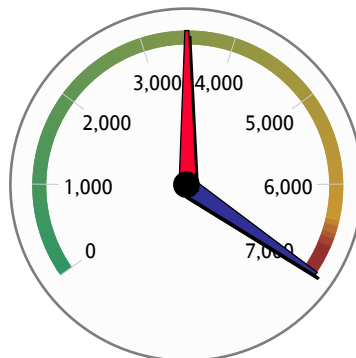
### Installed Products

| Product Name        |
|---------------------|
| A_SIS               |
| CIFS                |
| CLUSTER             |
| DISK_SANITIZATION   |
| FCP                 |
| FLEX_CLONE          |
| ISCSI               |
| MULTISTORE          |
| NEARSTORE_OPTION    |
| NFS                 |
| SNAPLOCK_ENTERPRISE |
| SNAPMIRROR          |
| SNAPRESTORE         |
| SV_ONTAP_PRI        |

### Hardware Summary

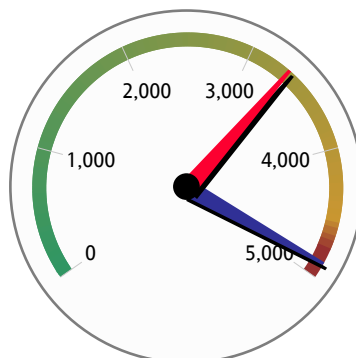
| Component | Count |
|-----------|-------|
| Shelves   | 2     |
| Disk      | 28    |

### Aggregate Utilization



■ Used Aggregate GB ■ Total Aggregate GB

### Volume Utilization



■ Used Volume GB ■ Total Volume GB

**ASUP Contact:** intrnas.alerts@imceu.eu.smb.com  
**SNMP Contact & Location:** No information provided  
**ASUP Minimal Flag:** F

## System Slot Inventory

| Slot Number | Part Number | Description                              |
|-------------|-------------|------------------------------------------|
| 0           | 110-00057   | Remote LAN Module                        |
| 0           |             | BGE 10/100/1000 Ethernet Controller      |
| 0           |             | FC Host Adapter (QLogic 2432 rev. 2)     |
| 0           |             | NetApp ATA/IDE Adapter                   |
| 1           | X2054A      | FC Host Adapter (QLogic 2432 rev. 3)     |
| 2           |             | Quad 10/100/1000 Ethernet Controller G20 |
| 3           |             | NVRAM VI                                 |

## Disk Summary

| Disk Label     | Disk Model, Disk Make   | Current FW, Latest FW | Checksum Type | Disk Size GB | Disk Bytes Per Sector | Shelf Type  | Disk Count |
|----------------|-------------------------|-----------------------|---------------|--------------|-----------------------|-------------|------------|
| DATA           | X291_S15K6420F15 NETAPP | NA00                  |               | 418.00       | 520                   | DS14-Mk4-FC | 20         |
| DPARITY        | X291_S15K6420F15 NETAPP | NA00                  |               | 418.00       | 520                   | DS14-Mk4-FC | 3          |
| PARITY         | X291_S15K6420F15 NETAPP | NA00                  |               | 418.00       | 520                   | DS14-Mk4-FC | 3          |
| SPARE          | X291_S15K6420F15 NETAPP | NA00                  |               | 418.00       | 520                   | DS14-Mk4-FC | 2          |
| <b>Summary</b> |                         |                       |               |              |                       |             | <b>28</b>  |

## Shelf Summary

| Shelf Type  | Shelf Module Type | Latest FW | Current FW | Shelf Count |
|-------------|-------------------|-----------|------------|-------------|
| DS14-Mk4-FC | ESH4              | 13        | 13         | 1           |
| DS14-Mk4-FC | ESH4              | 13        | 13         | 1           |

## RAID Configuration

| RAID Group Name | RAID Type | Aggregate Name | Disk Count |
|-----------------|-----------|----------------|------------|
| rg0             | RAID_DP   | aggr0          | 26         |
|                 |           | aggr1          |            |
| rg1             | RAID_DP   | aggr1          |            |

## Aggregate and Volume Configuration

| Aggregate Name | Volume Name       |
|----------------|-------------------|
| aggr0          | vol0              |
|                | vol0dr_m          |
|                | zrhvnascti001vol0 |
|                | zrhvnascti003vol0 |
| aggr1          | zrhctiv001        |
|                | zrhctiv002        |
|                | zrhctiv003        |
|                | zrhctiv004        |
|                | zrhctiv005        |
|                | zrhctiv006        |
|                | zrhctiv007        |
|                | zrhctiv008        |
|                | zrhctiv009        |

### Snapshot Usage Summary

| Volume Name       | Snapshot Count | Snapshot Schedule | Snapshot Space Reserve % | Snap Reserve Used % |
|-------------------|----------------|-------------------|--------------------------|---------------------|
| vol0              | 30             | 2 13 13@12        | 20.00%                   | 150.00%             |
| vol0dr_m          | 30             | 2 13 13@12        | 20.00%                   | 3.00%               |
| zrhctiv001        | 33             | 2 13 13@12        | 20.00%                   | 56.00%              |
| zrhctiv002        | 33             | 2 13 13@12        | 20.00%                   | 4.00%               |
| zrhctiv003        | 33             | 2 13 13@12        | 20.00%                   | 6.00%               |
| zrhctiv004        | 30             | 2 13 13@12        | 20.00%                   | 10.00%              |
| zrhctiv005        | 30             | 2 13 13@12        | 20.00%                   | 10.00%              |
| zrhctiv006        | 31             | 2 13 13@12        | 20.00%                   | 2.00%               |
| zrhctiv007        | 30             | 2 13 13@12        | 20.00%                   | 4.00%               |
| zrhctiv008        | 31             | 2 13 13@12        | 20.00%                   | 1.00%               |
| zrhctiv009        | 31             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhvnascti001vol0 | 32             | 2 13 13@12        | 20.00%                   | 1.00%               |
| zrhvnascti003vol0 | 30             | 2 13 13@12        | 20.00%                   | 1.00%               |

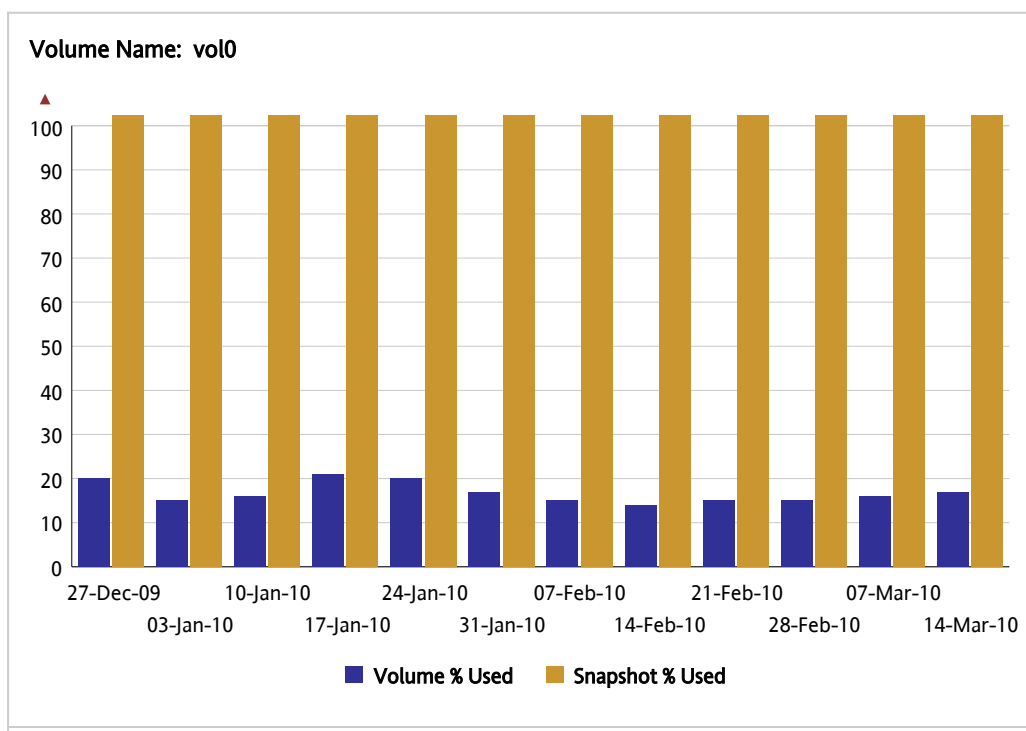
### Aggregate Usage Summary

| Aggregate Name | Total GB | Used GB  | Free GB  | Used %  | Free %  |
|----------------|----------|----------|----------|---------|---------|
| aggr0          | 349.00   | 51.00    | 298.00   | 15.00 % | 85.00 % |
| aggr1          | 6,631.00 | 3,439.00 | 3,192.00 | 52.00 % | 48.00 % |

## Volume Usage Summary

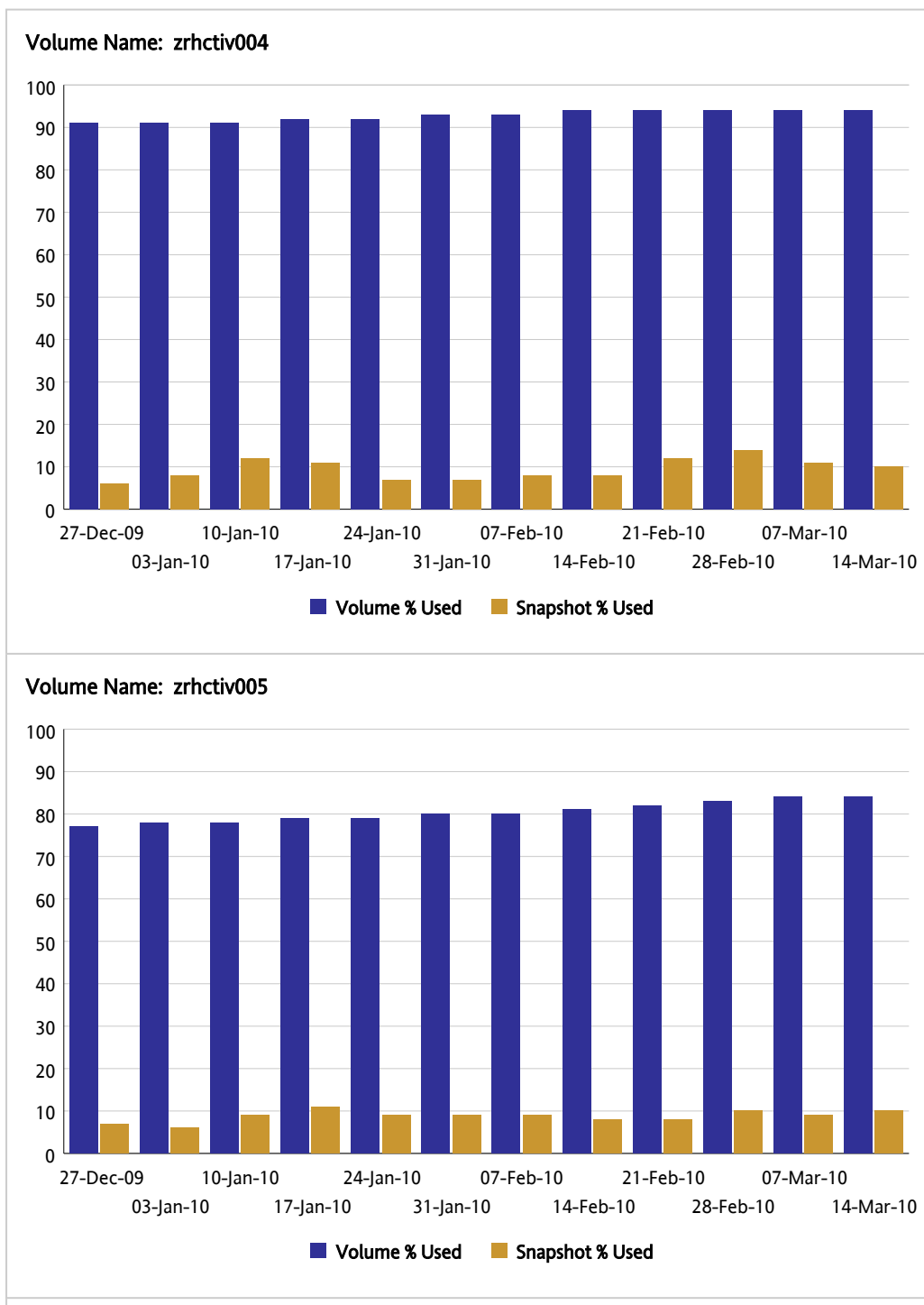
| Aggregate Name | Volume Name       | Volume Type | Volume State | Total GB | Used GB | Free GB | Used %  | Inode Used % |
|----------------|-------------------|-------------|--------------|----------|---------|---------|---------|--------------|
| aggr0          | vol0              | FLEX        | ONLINE       | 40.00    | 7.00    | 33.33   | 17.00 % | 0.00 %       |
|                | vol0dr_m          | FLEX        | ONLINE       | 40.00    | 1.00    | 39.42   | 1.00 %  | 0.00 %       |
|                | zrhvnsacti001vol0 | FLEX        | ONLINE       | 4.00     | 0.00    | 4.00    | 0.00 %  | 0.00 %       |
|                | zrhvnsacti003vol0 | FLEX        | ONLINE       | 4.00     | 0.00    | 4.00    | 0.00 %  | 0.00 %       |
| aggr1          | zrhctiv001        | FLEX        | ONLINE       | 532.80   | 495.00  | 37.40   | 93.00 % | 3.00 %       |
|                | zrhctiv002        | FLEX        | ONLINE       | 532.80   | 500.00  | 32.76   | 94.00 % | 1.00 %       |
|                | zrhctiv003        | FLEX        | ONLINE       | 532.80   | 297.00  | 236.00  | 56.00 % | 1.00 %       |
|                | zrhctiv004        | FLEX        | ONLINE       | 532.80   | 500.00  | 32.46   | 94.00 % | 2.00 %       |
|                | zrhctiv005        | FLEX        | ONLINE       | 532.80   | 449.00  | 83.46   | 84.00 % | 1.00 %       |
|                | zrhctiv006        | FLEX        | ONLINE       | 532.80   | 182.00  | 350.85  | 34.00 % | 2.00 %       |
|                | zrhctiv007        | FLEX        | ONLINE       | 532.80   | 482.00  | 50.75   | 90.00 % | 4.00 %       |
|                | zrhctiv008        | FLEX        | ONLINE       | 532.80   | 407.00  | 125.40  | 76.00 % | 7.00 %       |
|                | zrhctiv009        | FLEX        | ONLINE       | 532.80   | 0.00    | 532.47  | 0.00 %  | 0.00 %       |

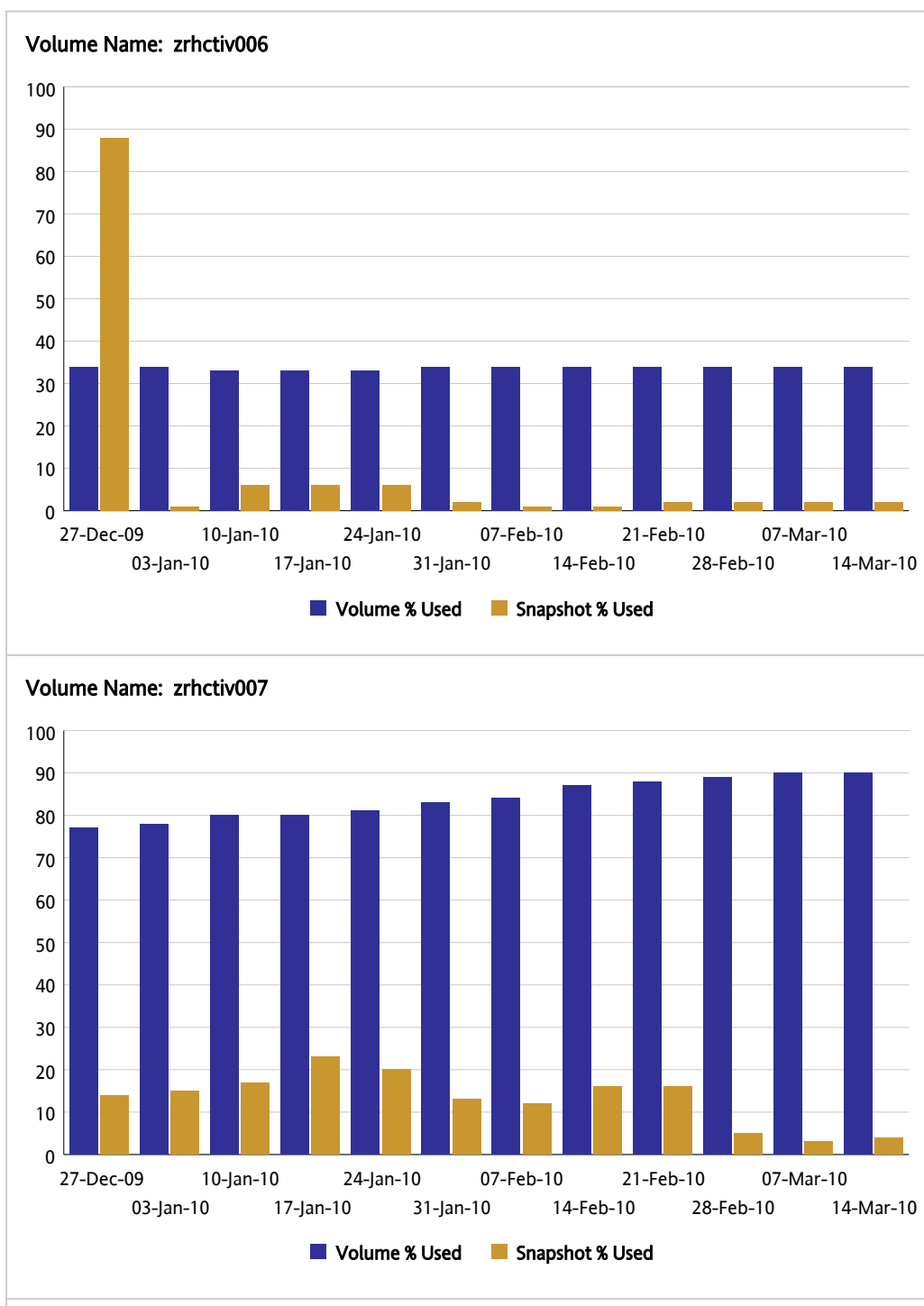
## Disk Space Utilization

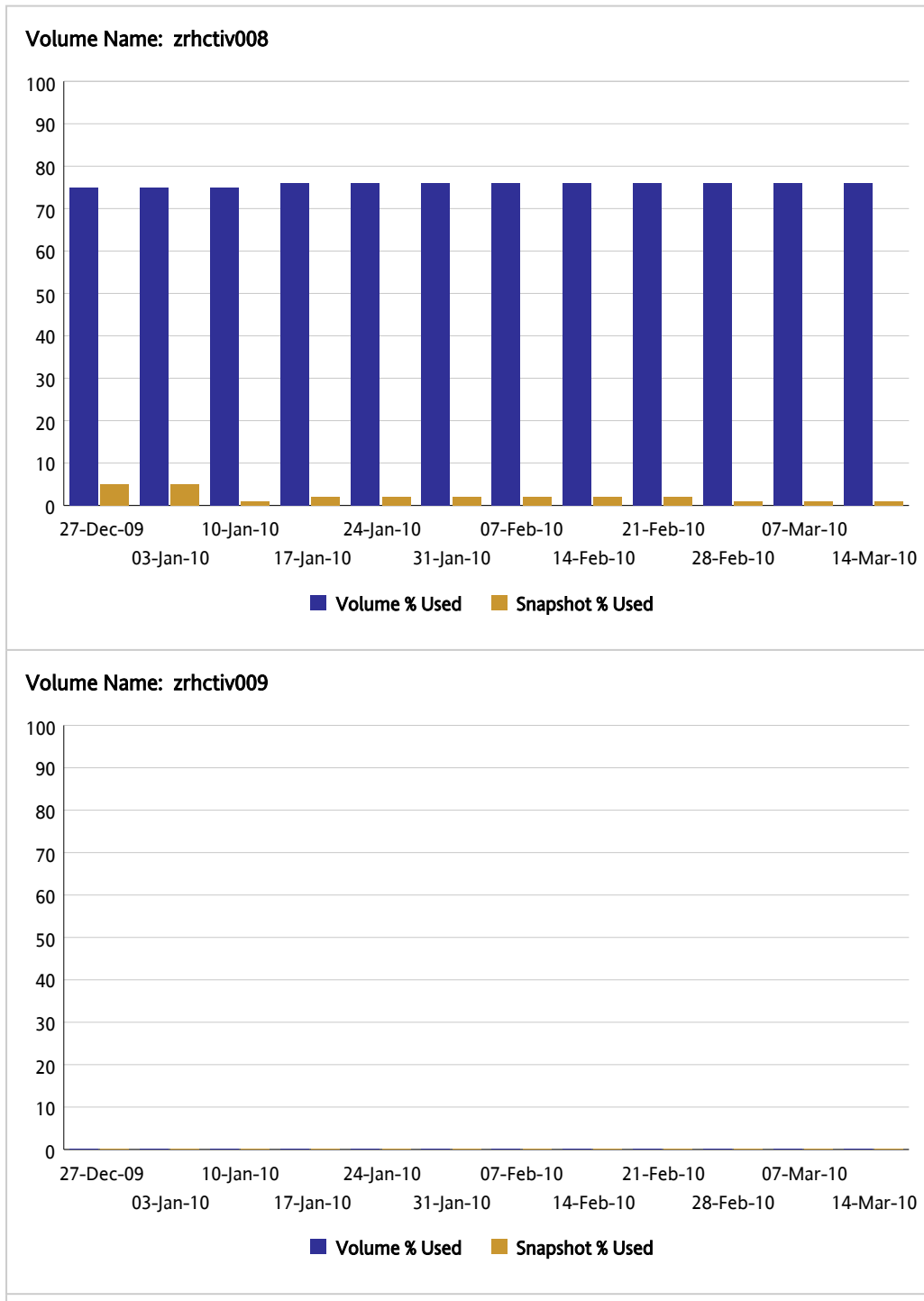




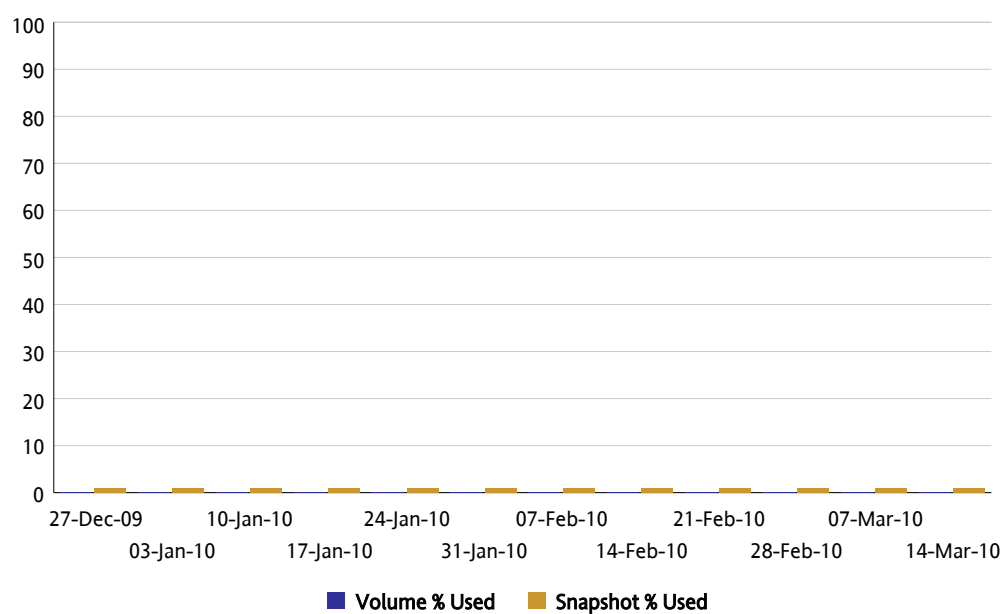




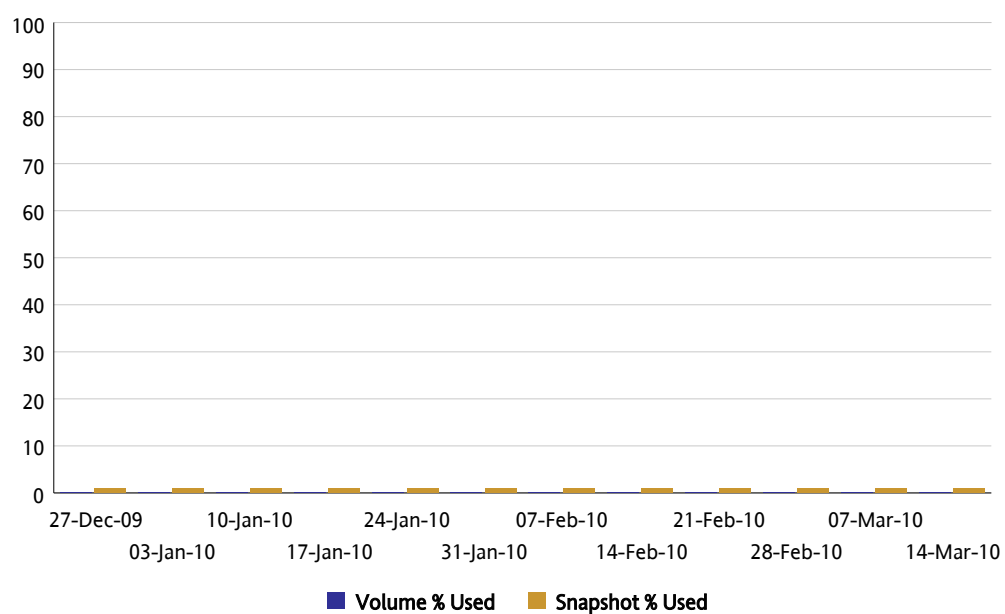




Volume Name: zrhvnsacti001vol0



Volume Name: zrhvnsacti003vol0



## Qtree Status

| Aggregate Name | Volume Name | Qtree Path Name        | Qtree State |
|----------------|-------------|------------------------|-------------|
| aggr0          | vol0        | /vol/vol0/-            | NORMAL      |
|                |             | /vol/vol0/auditlog     | NORMAL      |
|                | vol0dr_m    | /vol/vol0dr_m/-        | NORMAL      |
|                |             | /vol/vol0dr_m/auditlog | NORMAL      |

| Aggregate Name | Volume Name       | Qtree Path Name          | Qtree State |
|----------------|-------------------|--------------------------|-------------|
| aggr0          | zrhvnascti001vol0 | /vol/zrhvnascti001vol0/- | NORMAL      |
|                | zrhvnascti003vol0 | /vol/zrhvnascti003vol0/- | NORMAL      |
| aggr1          | zrhctiv001        | /vol/zrhctiv001/-        | NORMAL      |
|                |                   | /vol/zrhctiv001/zrhqt001 | NORMAL      |
|                | zrhctiv002        | /vol/zrhctiv002/-        | NORMAL      |
|                |                   | /vol/zrhctiv002/zrhqt002 | NORMAL      |
|                | zrhctiv003        | /vol/zrhctiv003/-        | NORMAL      |
|                |                   | /vol/zrhctiv003/zrhqt003 | NORMAL      |
|                | zrhctiv004        | /vol/zrhctiv004/-        | NORMAL      |
|                |                   | /vol/zrhctiv004/zrhqt004 | NORMAL      |
|                | zrhctiv005        | /vol/zrhctiv005/-        | NORMAL      |
|                |                   | /vol/zrhctiv005/zrhqt005 | NORMAL      |
|                | zrhctiv006        | /vol/zrhctiv006/-        | NORMAL      |
|                |                   | /vol/zrhctiv006/zrhqt006 | NORMAL      |
|                | zrhctiv007        | /vol/zrhctiv007/-        | NORMAL      |
|                |                   | /vol/zrhctiv007/zrhqt007 | NORMAL      |
|                | zrhctiv008        | /vol/zrhctiv008/-        | NORMAL      |
|                |                   | /vol/zrhctiv008/zrhqt008 | NORMAL      |
|                | zrhctiv009        | /vol/zrhctiv009/-        | NORMAL      |
|                |                   | /vol/zrhctiv009/zrhqt009 | NORMAL      |

There are no LUNs found for this system.

## SnapMirror / SnapVault Status

| SnapMirror State | Source System | Source Path       | Destination System | Destination Path         |
|------------------|---------------|-------------------|--------------------|--------------------------|
| SNAPMIRRORED     | zrhctinas201a | vol0              | zrhctinas202a      | /vol/vol0dr_m/-          |
| SNAPMIRRORED     | zrhctinas201a | zrhctiv001        | zrhctinas202a      | /vol/zrhctiv001/-        |
| SNAPMIRRORED     | zrhctinas201a | zrhctiv002        | zrhctinas202a      | /vol/zrhctiv002/-        |
| SNAPMIRRORED     | zrhctinas201a | zrhctiv003        | zrhctinas202a      | /vol/zrhctiv003/-        |
| SNAPMIRRORED     | zrhctinas201a | zrhctiv004        | zrhctinas202a      | /vol/zrhctiv004/-        |
| SNAPMIRRORED     | zrhctinas201a | zrhctiv005        | zrhctinas202a      | /vol/zrhctiv005/-        |
| SNAPMIRRORED     | zrhctinas201a | zrhctiv006        | zrhctinas202a      | /vol/zrhctiv006/-        |
| SNAPMIRRORED     | zrhctinas201a | zrhctiv007        | zrhctinas202a      | /vol/zrhctiv007/-        |
| SNAPMIRRORED     | zrhctinas201a | zrhctiv008        | zrhctinas202a      | /vol/zrhctiv008/-        |
| SNAPMIRRORED     | zrhctinas201a | zrhctiv009        | zrhctinas202a      | /vol/zrhctiv009/-        |
| SNAPMIRRORED     | zrhctinas201a | zrhvnascti001vol0 | zrhctinas202a      | /vol/zrhvnascti001vol0/- |
| SNAPMIRRORED     | zrhctinas201a | zrhvnascti003vol0 | zrhctinas202a      | /vol/zrhvnascti003vol0/- |
| SOURCE           | zrhctinas202a | /vol/vol0/-       | zrhctinas201a      | /vol/vol0dr_m/-          |

## Network Information

| Port Name | Description                              | IP Address, Subnet Mask | Media Type       | VIF Name | Current Interface Speed | Full Duplex | FC Setting, Negotiated | Auto-Negotiate Enabled |
|-----------|------------------------------------------|-------------------------|------------------|----------|-------------------------|-------------|------------------------|------------------------|
| e0a       | BGE 10/100/1000 Ethernet Controller      | -                       | auto-1000t-fd-up | gev1     | 1,000                   | Full        | Full Unknown           | On                     |
| e0c       | BGE 10/100/1000 Ethernet Controller      | -                       | auto-1000t-fd-up | gev1     | 1,000                   | Full        | Full Unknown           | On                     |
| e0b       | BGE 10/100/1000 Ethernet Controller      | -                       | auto-1000t-fd-up | gev2     | 1,000                   | Full        | Full Unknown           | On                     |
| e0d       | BGE 10/100/1000 Ethernet Controller      | -                       | auto-1000t-fd-up | gev2     | 1,000                   | Full        | Full Unknown           | On                     |
| e2a       | Quad 10/100/1000 Ethernet Controller G20 | -                       |                  |          |                         |             | Full Unknown           |                        |
| e2b       | Quad 10/100/1000 Ethernet Controller G20 | -                       |                  |          |                         |             | Full Unknown           |                        |
| e2c       | Quad 10/100/1000 Ethernet Controller G20 | -                       |                  |          |                         |             | Full Unknown           |                        |
| e2d       | Quad 10/100/1000 Ethernet Controller G20 | -                       |                  |          |                         |             | Full Unknown           |                        |

## NFS (Network File System) Protocol Usage

### NFS calls by Protocol:

| Protocol | NFS Calls | Bad Calls | Bad Calls % |
|----------|-----------|-----------|-------------|
| TCP      | 0         | 0         | 0.00%       |
| UDP      | 0         | 0         | 0.00%       |

### NFS calls by Version:

| NFS Version | NFS Calls | NFS Calls % |
|-------------|-----------|-------------|
| NFSv2       | 0         | 0.00%       |
| NFSv3       | 0         | 0.00%       |
| NFSv4       | 0         | 0.00%       |

## CIFS (Common Internet File System): Top 5 CIFS Operations

The "CIFS Stat" command shows CIFS related statistics since the last system reboot. These statistics break down the top 5 CIFS operations.

| CIFS operation  | CIFS Calls | CIFS Calls % |
|-----------------|------------|--------------|
| IPC             | 2727351    | 71.00%       |
| NTCreateX       | 284629     | 7.00%        |
| close           | 141061     | 4.00%        |
| query_path_info | 63810      | 2.00%        |
| readX           | 254184     | 7.00%        |

### MultiStore (vFiler)

| vFiler Name | vFiler State | vFiler IP Space  | UUID (Universal Unique ID)           |
|-------------|--------------|------------------|--------------------------------------|
| vfiler0     | RUNNING      | default-ipospace | 00000000-0000-0000-0000-000000000000 |

### ASUP (AutoSupport) Status

| ASUP Category                 | Value                                                                      |
|-------------------------------|----------------------------------------------------------------------------|
| autosupport.enable            | on                                                                         |
| autosupport.mailhost          | mailhub-vip.ny.ssmb.com,mailhub-dc1.eu.ssmb.com,mailhub-dc2.eur.nsroot.net |
| autosupport.noteto            | nas.alerts@citi.com                                                        |
| autosupport.support.enable    | on                                                                         |
| autosupport.support.proxy     | webproxy.wlb.nsroot.net:8080                                               |
| autosupport.support.to        | autosupport@netapp.com                                                     |
| autosupport.support.transport | https                                                                      |
| autosupport.support.url       | support.netapp.com/asupprod/post/1.0/postAsup                              |
| autosupport.to                | intnas.alerts@imceu.eu.ssmb.com                                            |

## SYSTEM REVIEW



**Host Name:** zrhctinas202b  
**Serial Number:** 20012891  
**Last Update:** 07-Mar-2010

**Model:** FAS3040  
**O/S:** 7.2.5.1P6D15  
**Partner Name:** zrhctinas202a

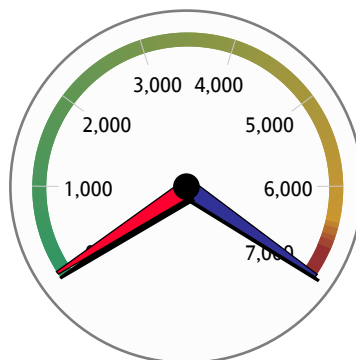
### Installed Products

| Product Name        |
|---------------------|
| A_SIS               |
| CIFS                |
| CLUSTER             |
| DISK_SANITIZATION   |
| FCP                 |
| FLEX_CLONE          |
| ISCSI               |
| MULTISTORE          |
| NEARSTORE_OPTION    |
| NFS                 |
| SNAPLOCK_ENTERPRISE |
| SNAPMIRROR          |
| SNAPRESTORE         |
| SV_ONTAP_PRI        |

### Hardware Summary

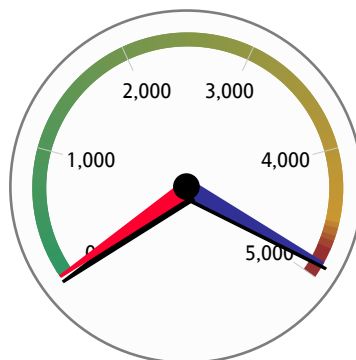
| Component | Count |
|-----------|-------|
| Shelves   | 2     |
| Disk      | 28    |

### Aggregate Utilization



■ Used Aggregate GB ■ Total Aggregate GB

### Volume Utilization



■ Used Volume GB ■ Total Volume GB

**ASUP Contact:** intrnas.alerts@imceu.eu.smb.com  
**SNMP Contact & Location:** No information provided  
**ASUP Minimal Flag:** F

## System Slot Inventory

| Slot Number | Part Number | Description                              |
|-------------|-------------|------------------------------------------|
| 0           | 110-00057   | Remote LAN Module                        |
| 0           |             | BGE 10/100/1000 Ethernet Controller      |
| 0           |             | FC Host Adapter (QLogic 2432 rev. 2)     |
| 0           |             | NetApp ATA/IDE Adapter                   |
| 1           | X2054A      | FC Host Adapter (QLogic 2432 rev. 3)     |
| 2           |             | Quad 10/100/1000 Ethernet Controller G20 |
| 3           |             | NVRAM VI                                 |

## Disk Summary

| Disk Label     | Disk Model, Disk Make   | Current FW, Latest FW | Checksum Type | Disk Size GB | Disk Bytes Per Sector | Shelf Type  | Disk Count |
|----------------|-------------------------|-----------------------|---------------|--------------|-----------------------|-------------|------------|
| DATA           | X291_S15K6420F15 NETAPP | NA00                  |               | 418.00       | 520                   | DS14-Mk4-FC | 20         |
| DPARITY        | X291_S15K6420F15 NETAPP | NA00                  |               | 418.00       | 520                   | DS14-Mk4-FC | 3          |
| PARITY         | X291_S15K6420F15 NETAPP | NA00                  |               | 418.00       | 520                   | DS14-Mk4-FC | 3          |
| SPARE          | X291_S15K6420F15 NETAPP | NA00                  |               | 418.00       | 520                   | DS14-Mk4-FC | 2          |
| <b>Summary</b> |                         |                       |               |              |                       |             | <b>28</b>  |

## Shelf Summary

| Shelf Type  | Shelf Module Type | Latest FW | Current FW | Shelf Count |
|-------------|-------------------|-----------|------------|-------------|
| DS14-Mk4-FC | ESH4              | 13        | 13         | 1           |
| DS14-Mk4-FC | ESH4              | 13        | 13         | 1           |

## RAID Configuration

| RAID Group Name | RAID Type | Aggregate Name | Disk Count |
|-----------------|-----------|----------------|------------|
| rg0             | RAID_DP   | aggr0          | 26         |
|                 |           | aggr1          |            |
| rg1             | RAID_DP   | aggr1          |            |

## Aggregate and Volume Configuration

| Aggregate Name | Volume Name       |
|----------------|-------------------|
| aggr0          | vol0              |
|                | vol0dr_m          |
|                | zrhvnascti002vol0 |
|                | zrhvnascti004vol0 |
| aggr1          | zrhctiv010        |
|                | zrhctiv011        |
|                | zrhctiv012        |
|                | zrhctiv013        |
|                | zrhctiv014        |
|                | zrhctiv015        |
|                | zrhctiv016        |
|                | zrhctiv017        |
|                | zrhctiv018        |

### Snapshot Usage Summary

| Volume Name       | Snapshot Count | Snapshot Schedule | Snapshot Space Reserve % | Snap Reserve Used % |
|-------------------|----------------|-------------------|--------------------------|---------------------|
| vol0              | 30             | 2 13 13@12        | 20.00%                   | 4.00%               |
| vol0dr_m          | 30             | 2 13 13@12        | 20.00%                   | 3.00%               |
| zrhctiv010        | 31             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhctiv011        | 31             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhctiv012        | 31             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhctiv013        | 31             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhctiv014        | 31             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhctiv015        | 31             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhctiv016        | 31             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhctiv017        | 31             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhctiv018        | 31             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhvnascti002vol0 | 30             | 2 13 13@12        | 20.00%                   | 1.00%               |
| zrhvnascti004vol0 | 30             | 2 13 13@12        | 20.00%                   | 1.00%               |

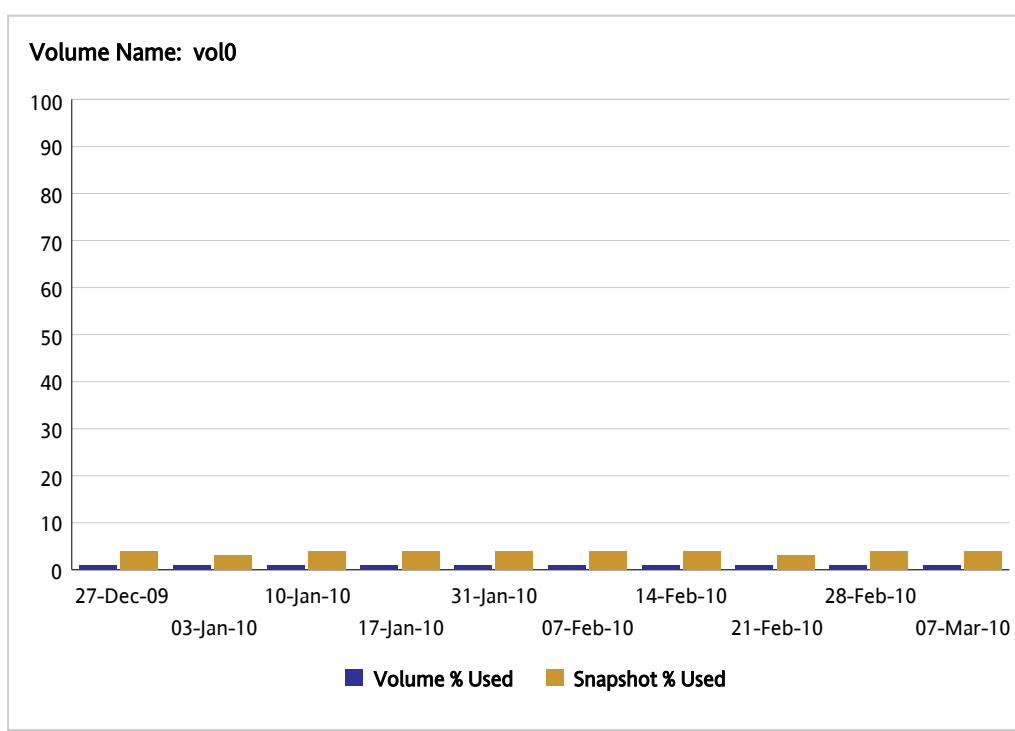
### Aggregate Usage Summary

| Aggregate Name | Total GB | Used GB | Free GB  | Used %  | Free %   |
|----------------|----------|---------|----------|---------|----------|
| aggr0          | 349.00   | 51.00   | 298.00   | 15.00 % | 85.00 %  |
| aggr1          | 6,631.00 | 3.00    | 6,627.00 | 0.00 %  | 100.00 % |

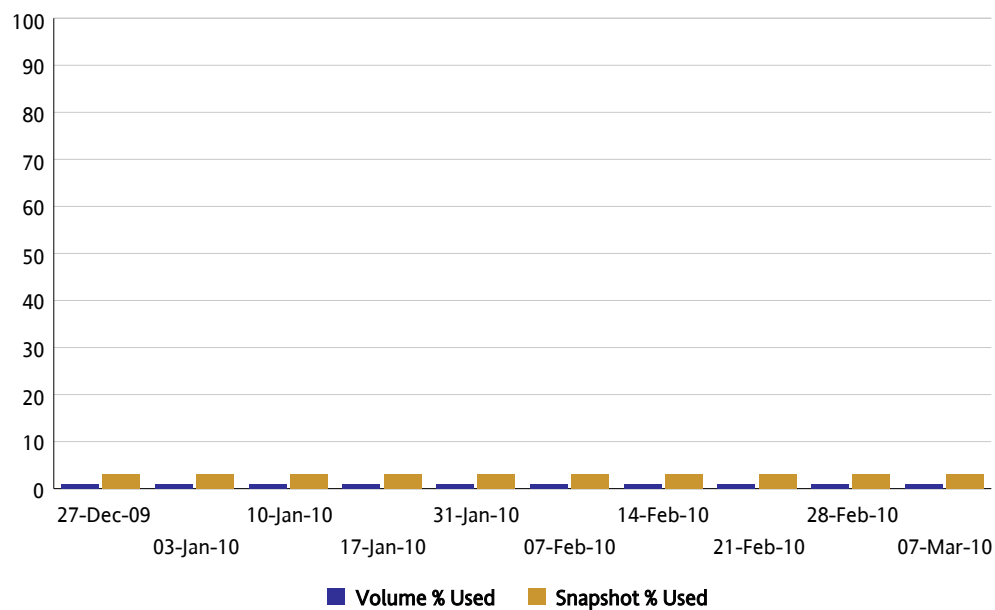
## Volume Usage Summary

| Aggregate Name | Volume Name       | Volume Type | Volume State | Total GB | Used GB | Free GB | Used % | Inode Used % |
|----------------|-------------------|-------------|--------------|----------|---------|---------|--------|--------------|
| aggr0          | vol0              | FLEX        | ONLINE       | 40.00    | 1.00    | 39.46   | 1.00 % | 0.00 %       |
|                | vol0dr_m          | FLEX        | ONLINE       | 40.00    | 1.00    | 39.41   | 1.00 % | 0.00 %       |
|                | zrhvnascti002vol0 | FLEX        | ONLINE       | 4.00     | 0.00    | 4.00    | 0.00 % | 0.00 %       |
|                | zrhvnascti004vol0 | FLEX        | ONLINE       | 4.00     | 0.00    | 4.00    | 0.00 % | 0.00 %       |
| aggr1          | zrhctiv010        | FLEX        | ONLINE       | 532.80   | 1.00    | 531.39  | 0.00 % | 0.00 %       |
|                | zrhctiv011        | FLEX        | ONLINE       | 532.80   | 0.00    | 532.79  | 0.00 % | 0.00 %       |
|                | zrhctiv012        | FLEX        | ONLINE       | 532.80   | 0.00    | 532.79  | 0.00 % | 0.00 %       |
|                | zrhctiv013        | FLEX        | ONLINE       | 532.80   | 0.00    | 532.79  | 0.00 % | 0.00 %       |
|                | zrhctiv014        | FLEX        | ONLINE       | 532.80   | 0.00    | 532.79  | 0.00 % | 0.00 %       |
|                | zrhctiv015        | FLEX        | ONLINE       | 532.80   | 1.00    | 531.39  | 0.00 % | 0.00 %       |
|                | zrhctiv016        | FLEX        | ONLINE       | 532.80   | 0.00    | 532.79  | 0.00 % | 0.00 %       |
|                | zrhctiv017        | FLEX        | ONLINE       | 532.80   | 0.00    | 532.79  | 0.00 % | 0.00 %       |
|                | zrhctiv018        | FLEX        | ONLINE       | 532.80   | 0.00    | 532.79  | 0.00 % | 0.00 %       |

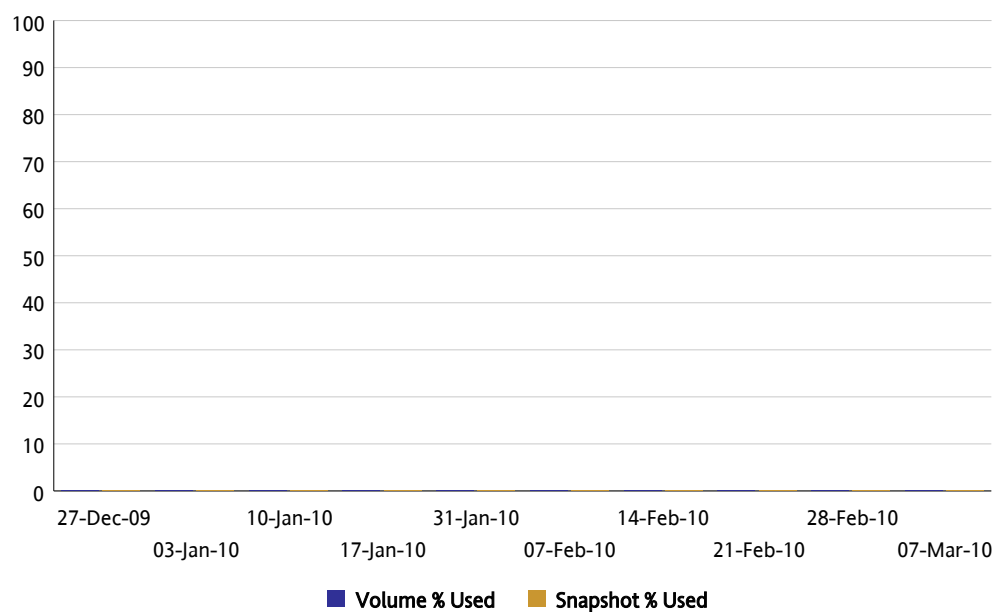
## Disk Space Utilization



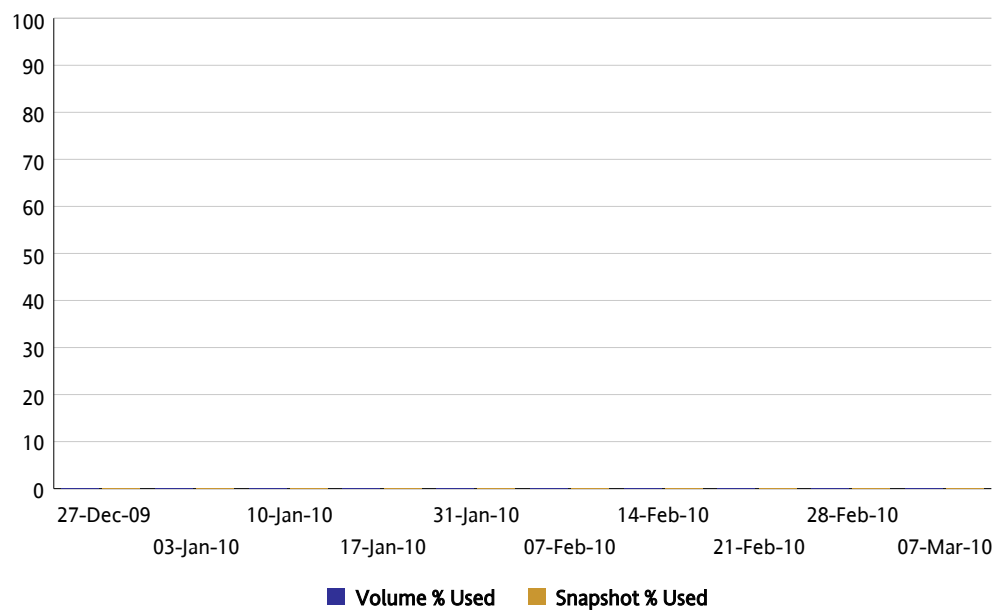
Volume Name: vol0dr\_m



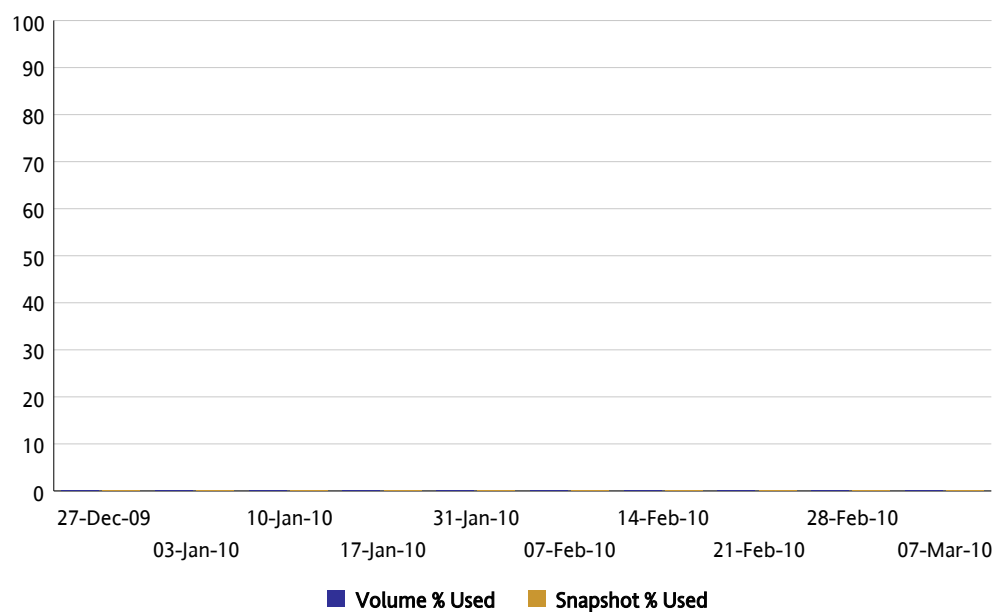
Volume Name: zrhctiv010



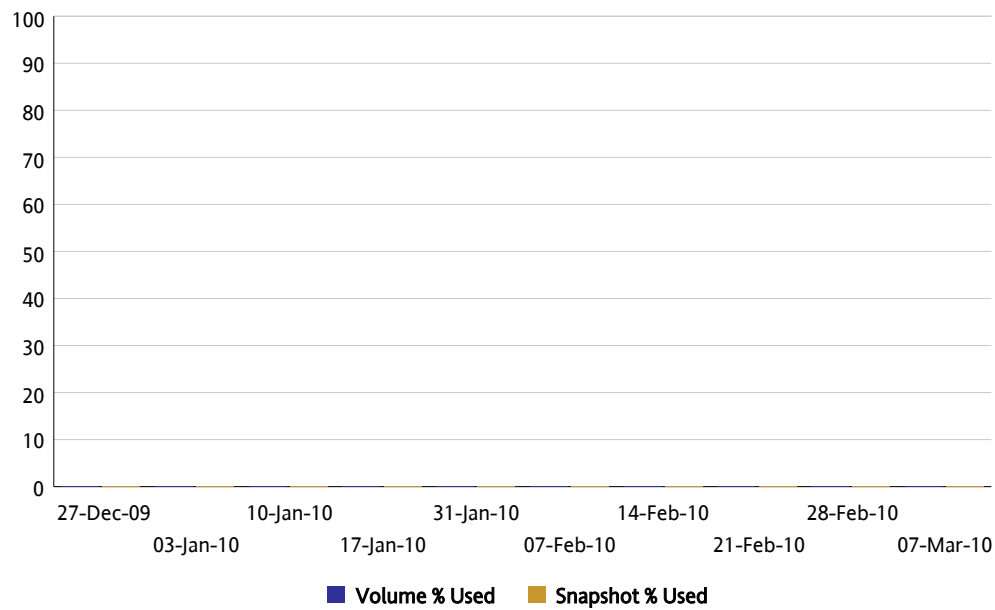
Volume Name: zrhctiv011



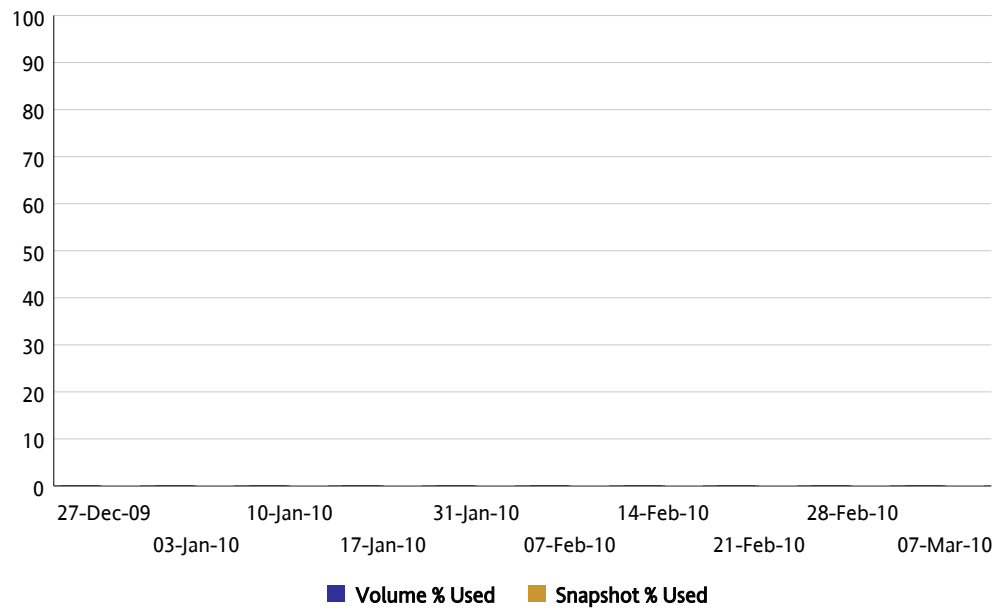
Volume Name: zrhctiv012



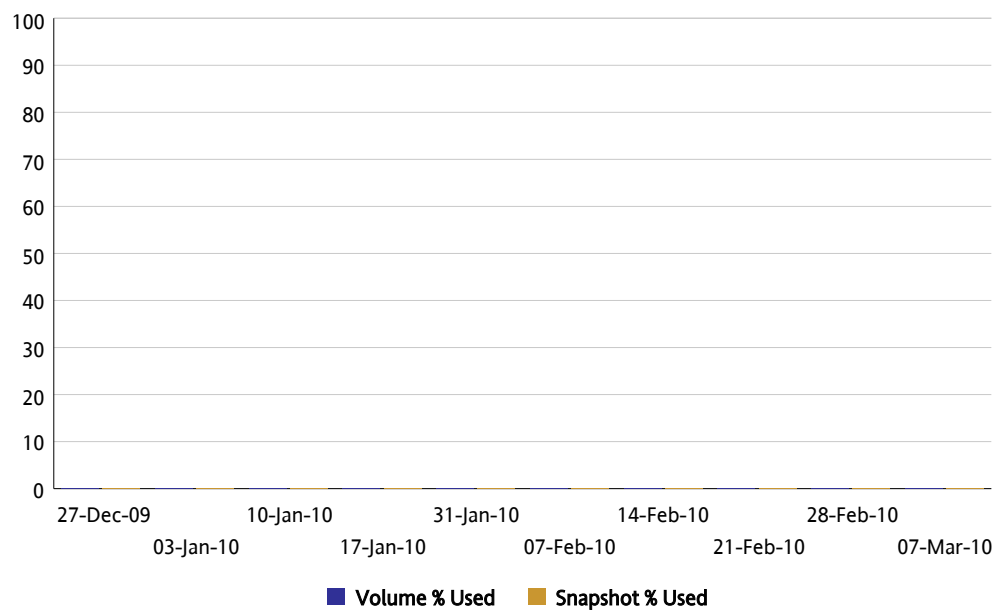
Volume Name: zrhctiv013



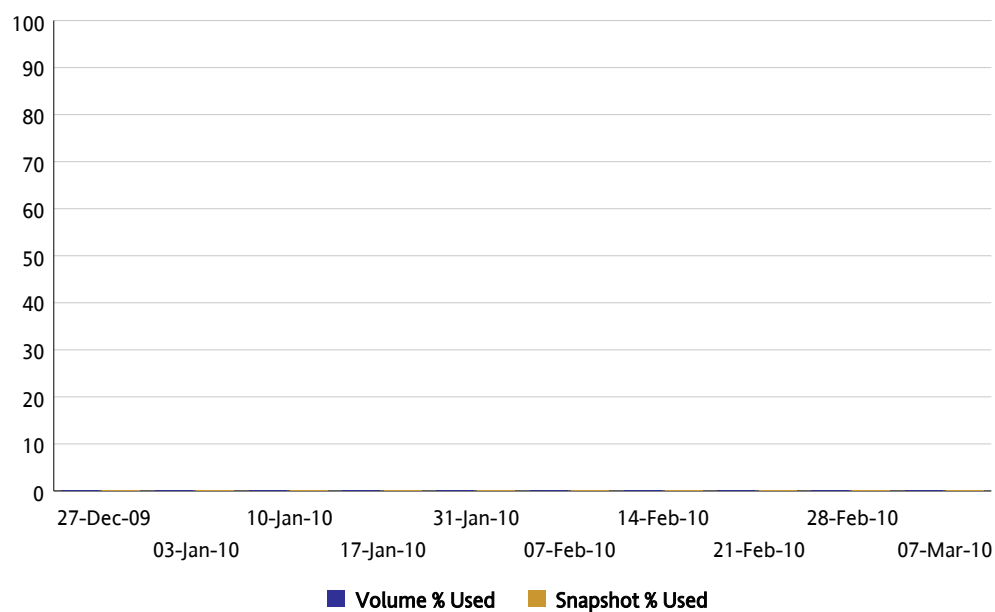
Volume Name: zrhctiv014



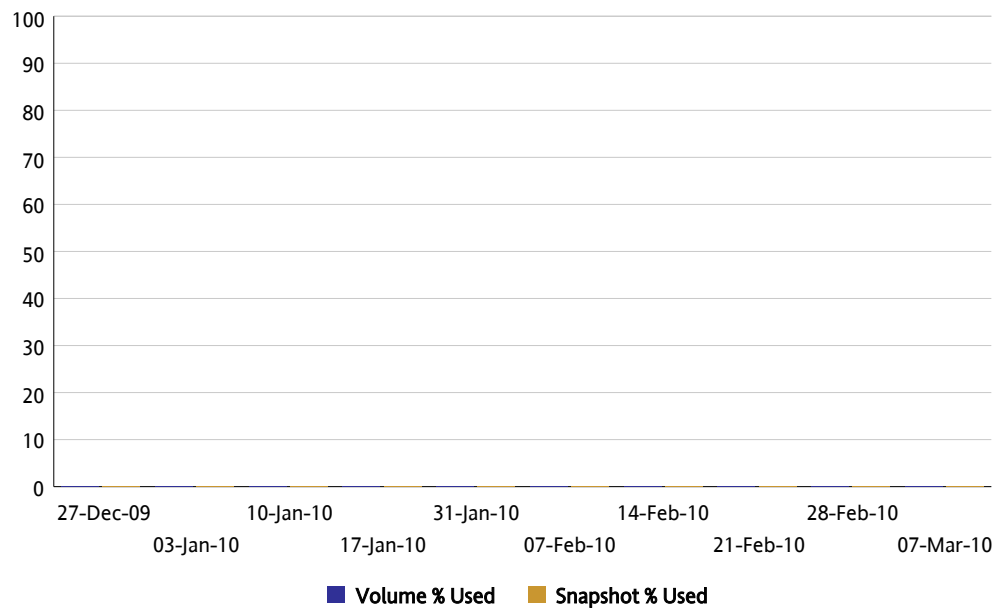
Volume Name: zrhctiv015



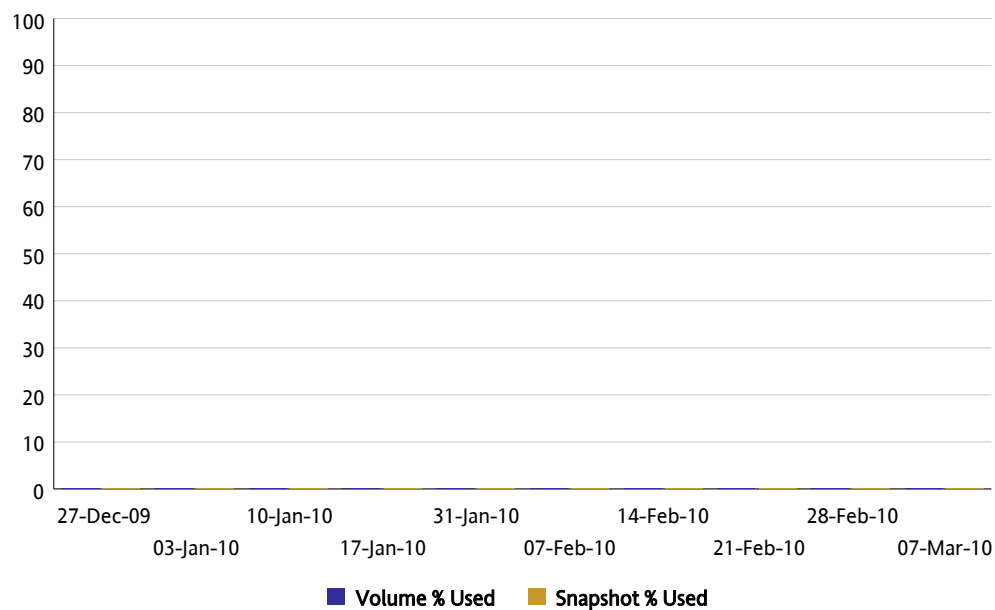
Volume Name: zrhctiv016



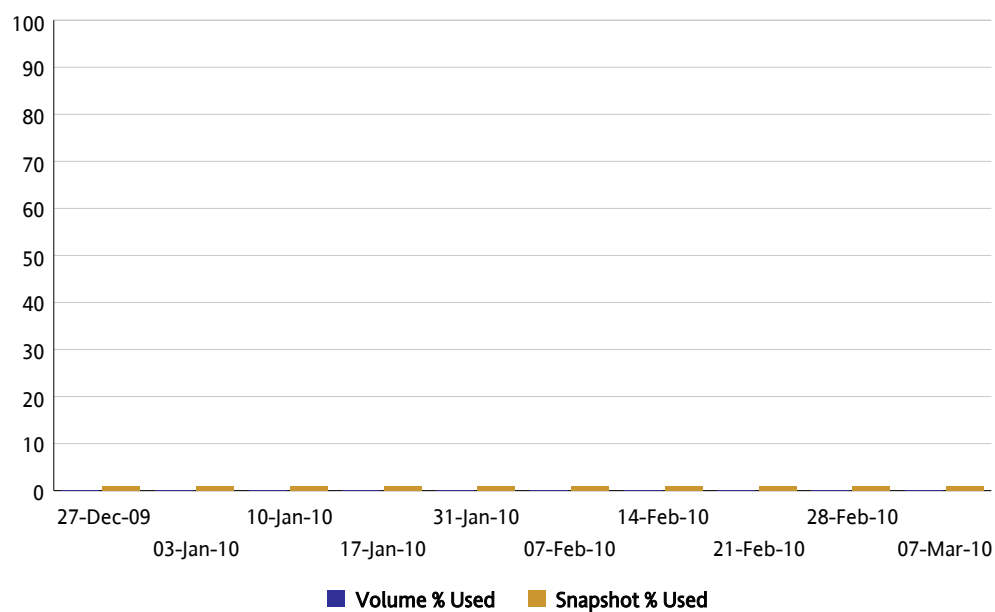
Volume Name: zrhctiv017



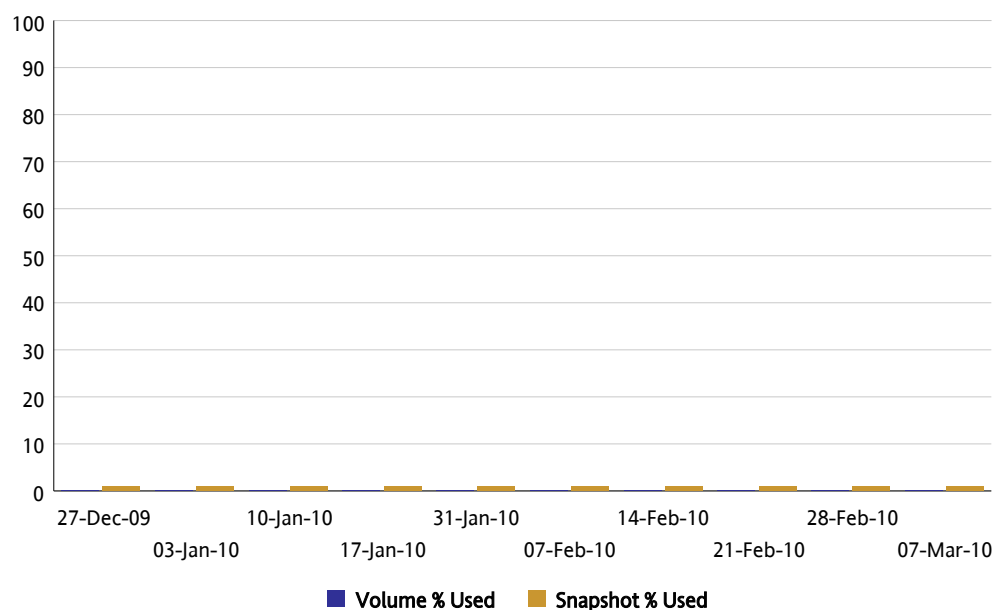
Volume Name: zrhctiv018



Volume Name: zrhvnsacti002vol0



Volume Name: zrhvnsacti004vol0



## Qtree Status

| Aggregate Name | Volume Name | Qtree Path Name        | Qtree State |
|----------------|-------------|------------------------|-------------|
| aggr0          | vol0        | /vol/vol0/-            | NORMAL      |
|                |             | /vol/vol0/auditlog     | NORMAL      |
|                | vol0dr_m    | /vol/vol0dr_m/-        | NORMAL      |
|                |             | /vol/vol0dr_m/auditlog | NORMAL      |

| Aggregate Name | Volume Name       | Qtree Path Name          | Qtree State |
|----------------|-------------------|--------------------------|-------------|
| aggr0          | zrhvnascti002vol0 | /vol/zrhvnascti002vol0/- | NORMAL      |
|                | zrhvnascti004vol0 | /vol/zrhvnascti004vol0/- | NORMAL      |
| aggr1          | zrhctiv010        | /vol/zrhctiv010/-        | NORMAL      |
|                |                   | /vol/zrhctiv010/zrhqt010 | NORMAL      |
|                | zrhctiv011        | /vol/zrhctiv011/-        | NORMAL      |
|                |                   | /vol/zrhctiv011/zrhqt011 | NORMAL      |
|                | zrhctiv012        | /vol/zrhctiv012/-        | NORMAL      |
|                |                   | /vol/zrhctiv012/zrhqt012 | NORMAL      |
|                | zrhctiv013        | /vol/zrhctiv013/-        | NORMAL      |
|                |                   | /vol/zrhctiv013/zrhqt013 | NORMAL      |
|                | zrhctiv014        | /vol/zrhctiv014/-        | NORMAL      |
|                |                   | /vol/zrhctiv014/zrhqt014 | NORMAL      |
|                | zrhctiv015        | /vol/zrhctiv015/-        | NORMAL      |
|                |                   | /vol/zrhctiv015/zrhqt015 | NORMAL      |
|                | zrhctiv016        | /vol/zrhctiv016/-        | NORMAL      |
|                |                   | /vol/zrhctiv016/zrhqt016 | NORMAL      |
|                | zrhctiv017        | /vol/zrhctiv017/-        | NORMAL      |
|                |                   | /vol/zrhctiv017/zrhqt017 | NORMAL      |
|                | zrhctiv018        | /vol/zrhctiv018/-        | NORMAL      |
|                |                   | /vol/zrhctiv018/zrhqt018 | NORMAL      |

There are no LUNs found for this system.

## SnapMirror / SnapVault Status

| SnapMirror State | Source System | Source Path       | Destination System | Destination Path         |
|------------------|---------------|-------------------|--------------------|--------------------------|
| SNAPMIRRORED     | zrhctinas201b | vol0              | zrhctinas202b      | /vol/vol0dr_m/-          |
| SNAPMIRRORED     | zrhctinas201b | zrhctiv010        | zrhctinas202b      | /vol/zrhctiv010/-        |
| SNAPMIRRORED     | zrhctinas201b | zrhctiv011        | zrhctinas202b      | /vol/zrhctiv011/-        |
| SNAPMIRRORED     | zrhctinas201b | zrhctiv012        | zrhctinas202b      | /vol/zrhctiv012/-        |
| SNAPMIRRORED     | zrhctinas201b | zrhctiv013        | zrhctinas202b      | /vol/zrhctiv013/-        |
| SNAPMIRRORED     | zrhctinas201b | zrhctiv014        | zrhctinas202b      | /vol/zrhctiv014/-        |
| SNAPMIRRORED     | zrhctinas201b | zrhctiv015        | zrhctinas202b      | /vol/zrhctiv015/-        |
| SNAPMIRRORED     | zrhctinas201b | zrhctiv016        | zrhctinas202b      | /vol/zrhctiv016/-        |
| SNAPMIRRORED     | zrhctinas201b | zrhctiv017        | zrhctinas202b      | /vol/zrhctiv017/-        |
| SNAPMIRRORED     | zrhctinas201b | zrhctiv018        | zrhctinas202b      | /vol/zrhctiv018/-        |
| SNAPMIRRORED     | zrhctinas201b | zrhvnascti002vol0 | zrhctinas202b      | /vol/zrhvnascti002vol0/- |
| SNAPMIRRORED     | zrhctinas201b | zrhvnascti004vol0 | zrhctinas202b      | /vol/zrhvnascti004vol0/- |
| SOURCE           | zrhctinas202b | /vol/vol0/-       | zrhctinas201b      | /vol/vol0dr_m/-          |

## Network Information

| Port Name | Description                              | IP Address, Subnet Mask | Media Type       | VIF Name | Current Interface Speed | Full Duplex | FC Setting, Negotiated | Auto-Negotiate Enabled |
|-----------|------------------------------------------|-------------------------|------------------|----------|-------------------------|-------------|------------------------|------------------------|
| e0a       | BGE 10/100/1000 Ethernet Controller      | -                       | auto-1000t-fd-up | gev4     | 1,000                   | Full        | Full Unknown           | On                     |
| e0c       | BGE 10/100/1000 Ethernet Controller      | -                       | auto-1000t-fd-up | gev4     | 1,000                   | Full        | Full Unknown           | On                     |
| e0b       | BGE 10/100/1000 Ethernet Controller      | -                       | auto-1000t-fd-up | gev5     | 1,000                   | Full        | Full Unknown           | On                     |
| e0d       | BGE 10/100/1000 Ethernet Controller      | -                       | auto-1000t-fd-up | gev5     | 1,000                   | Full        | Full Unknown           | On                     |
| e2a       | Quad 10/100/1000 Ethernet Controller G20 | -                       |                  |          |                         |             | Full Unknown           |                        |
| e2b       | Quad 10/100/1000 Ethernet Controller G20 | -                       |                  |          |                         |             | Full Unknown           |                        |
| e2c       | Quad 10/100/1000 Ethernet Controller G20 | -                       |                  |          |                         |             | Full Unknown           |                        |
| e2d       | Quad 10/100/1000 Ethernet Controller G20 | -                       |                  |          |                         |             | Full Unknown           |                        |

## NFS (Network File System) Protocol Usage

### NFS calls by Protocol:

| Protocol | NFS Calls | Bad Calls | Bad Calls % |
|----------|-----------|-----------|-------------|
| TCP      | 0         | 0         | 0.00%       |
| UDP      | 0         | 0         | 0.00%       |

### NFS calls by Version:

| NFS Version | NFS Calls | NFS Calls % |
|-------------|-----------|-------------|
| NFSv2       | 0         | 0.00%       |
| NFSv3       | 0         | 0.00%       |
| NFSv4       | 0         | 0.00%       |

## CIFS (Common Internet File System): Top 5 CIFS Operations

The "CIFS Stat" command shows CIFS related statistics since the last system reboot. These statistics break down the top 5 CIFS operations.

| CIFS operation  | CIFS Calls | CIFS Calls % |
|-----------------|------------|--------------|
| IPC             | 2670889    | 71.00%       |
| NTCreateX       | 283893     | 8.00%        |
| close           | 140052     | 4.00%        |
| query_path_info | 63406      | 2.00%        |
| readX           | 234391     | 6.00%        |

## MultiStore (vFiler)

| vFiler Name | vFiler State | vFiler IP Space  | UUID (Universal Unique ID)           |
|-------------|--------------|------------------|--------------------------------------|
| vfiler0     | RUNNING      | default-ipospace | 00000000-0000-0000-0000-000000000000 |

## ASUP (AutoSupport) Status

| ASUP Category                 | Value                                                                      |
|-------------------------------|----------------------------------------------------------------------------|
| autosupport.enable            | on                                                                         |
| autosupport.mailhost          | mailhub-vip.ny.ssmb.com,mailhub-dc1.eu.ssmb.com,mailhub-dc2.eur.nsroot.net |
| autosupport.noteto            | nas.alerts@citi.com                                                        |
| autosupport.support.enable    | on                                                                         |
| autosupport.support.proxy     | webproxy.wlb.nsroot.net:8080                                               |
| autosupport.support.to        | autosupport@netapp.com                                                     |
| autosupport.support.transport | https                                                                      |
| autosupport.support.url       | support.netapp.com/asupprod/post/1.0/postAsup                              |
| autosupport.to                | intnas.alerts@imceu.eu.ssmb.com                                            |

## SYSTEM REVIEW



**Host Name:** zrhctinas201b  
**Serial Number:** 20012892  
**Last Update:** 07-Mar-2010

**Model:** FAS3040  
**O/S:** 7.2.5.1P6D15  
**Partner Name:** zrhctinas201a

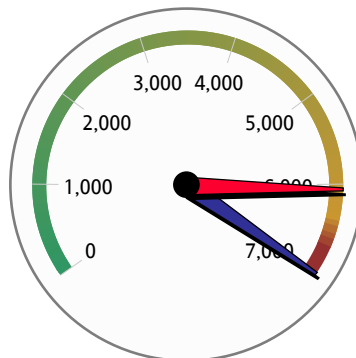
### Installed Products

| Product Name        |
|---------------------|
| A_SIS               |
| CIFS                |
| CLUSTER             |
| DISK_SANITIZATION   |
| FCP                 |
| FLEX_CLONE          |
| ISCSI               |
| MULTISTORE          |
| NEARSTORE_OPTION    |
| NFS                 |
| SNAPLOCK_ENTERPRISE |
| SNAPMIRROR          |
| SNAPRESTORE         |
| SV_ONTAP_PRI        |

### Hardware Summary

| Component | Count |
|-----------|-------|
| Shelves   | 2     |
| Disk      | 28    |

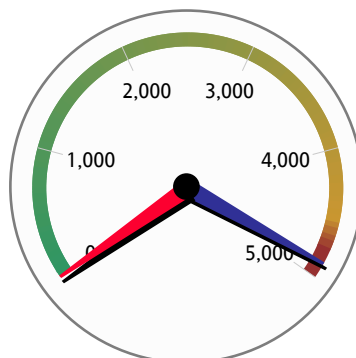
### Aggregate Utilization



6,055 Agg GB used out of 6,980 total Agg GB

■ Used Aggregate GB ■ Total Aggregate GB

### Volume Utilization



3 Vol GB used out of 4,883 total Vol GB

■ Used Volume GB ■ Total Volume GB

**ASUP Contact:** intrnas.alerts@imceu.eu.smb.com

**SNMP Contact & Location:** No information provided

**ASUP Minimal Flag:** F

## System Slot Inventory

| Slot Number | Part Number | Description                              |
|-------------|-------------|------------------------------------------|
| 0           | 110-00057   | Remote LAN Module                        |
| 0           |             | BGE 10/100/1000 Ethernet Controller      |
| 0           |             | FC Host Adapter (QLogic 2432 rev. 2)     |
| 0           |             | NetApp ATA/IDE Adapter                   |
| 1           | X2054A      | FC Host Adapter (QLogic 2432 rev. 3)     |
| 2           |             | Quad 10/100/1000 Ethernet Controller G20 |
| 3           |             | NVRAM VI                                 |

## Disk Summary

| Disk Label     | Disk Model, Disk Make   | Current FW, Latest FW | Checksum Type | Disk Size GB | Disk Bytes Per Sector | Shelf Type  | Disk Count |
|----------------|-------------------------|-----------------------|---------------|--------------|-----------------------|-------------|------------|
| DATA           | X291_S15K6420F15 NETAPP | NA00                  |               | 418.00       | 520                   | DS14-Mk4-FC | 20         |
| DPARITY        | X291_S15K6420F15 NETAPP | NA00                  |               | 418.00       | 520                   | DS14-Mk4-FC | 3          |
| PARITY         | X291_S15K6420F15 NETAPP | NA00                  |               | 418.00       | 520                   | DS14-Mk4-FC | 3          |
| SPARE          | X291_S15K6420F15 NETAPP | NA00                  |               | 418.00       | 520                   | DS14-Mk4-FC | 2          |
| <b>Summary</b> |                         |                       |               |              |                       |             | <b>28</b>  |

## Shelf Summary

| Shelf Type  | Shelf Module Type | Latest FW | Current FW | Shelf Count |
|-------------|-------------------|-----------|------------|-------------|
| DS14-Mk4-FC | ESH4              | 13        | 13         | 1           |
| DS14-Mk4-FC | ESH4              | 13        | 13         | 1           |

## RAID Configuration

| RAID Group Name | RAID Type | Aggregate Name | Disk Count |
|-----------------|-----------|----------------|------------|
| rg0             | RAID_DP   | aggr0          | 26         |
|                 |           | aggr1          |            |
| rg1             | RAID_DP   | aggr1          |            |

## Aggregate and Volume Configuration

| Aggregate Name | Volume Name       |
|----------------|-------------------|
| aggr0          | vol0              |
|                | vol0dr_m          |
|                | zrhvnascti002vol0 |
|                | zrhvnascti004vol0 |
| aggr1          | zrhctiv010        |
|                | zrhctiv011        |
|                | zrhctiv012        |
|                | zrhctiv013        |
|                | zrhctiv014        |
|                | zrhctiv015        |
|                | zrhctiv016        |
|                | zrhctiv017        |
|                | zrhctiv018        |

### Snapshot Usage Summary

| Volume Name       | Snapshot Count | Snapshot Schedule | Snapshot Space Reserve % | Snap Reserve Used % |
|-------------------|----------------|-------------------|--------------------------|---------------------|
| vol0              | 29             | 2 13 13@12        | 20.00%                   | 3.00%               |
| vol0dr_m          | 11             | 2 13 13@12        | 20.00%                   | 2.00%               |
| zrhctiv010        | 30             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhctiv011        | 30             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhctiv012        | 30             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhctiv013        | 30             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhctiv014        | 30             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhctiv015        | 30             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhctiv016        | 30             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhctiv017        | 30             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhctiv018        | 30             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhvnascti002vol0 | 29             | 2 13 13@12        | 20.00%                   | 1.00%               |
| zrhvnascti004vol0 | 29             | 2 13 13@12        | 20.00%                   | 1.00%               |

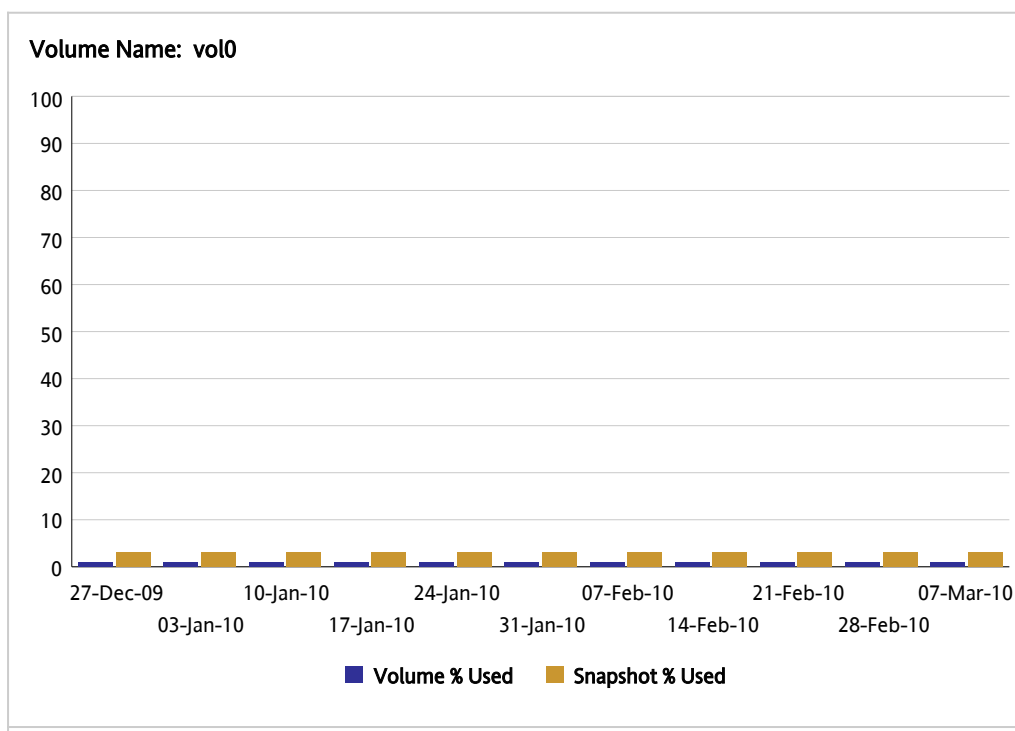
### Aggregate Usage Summary

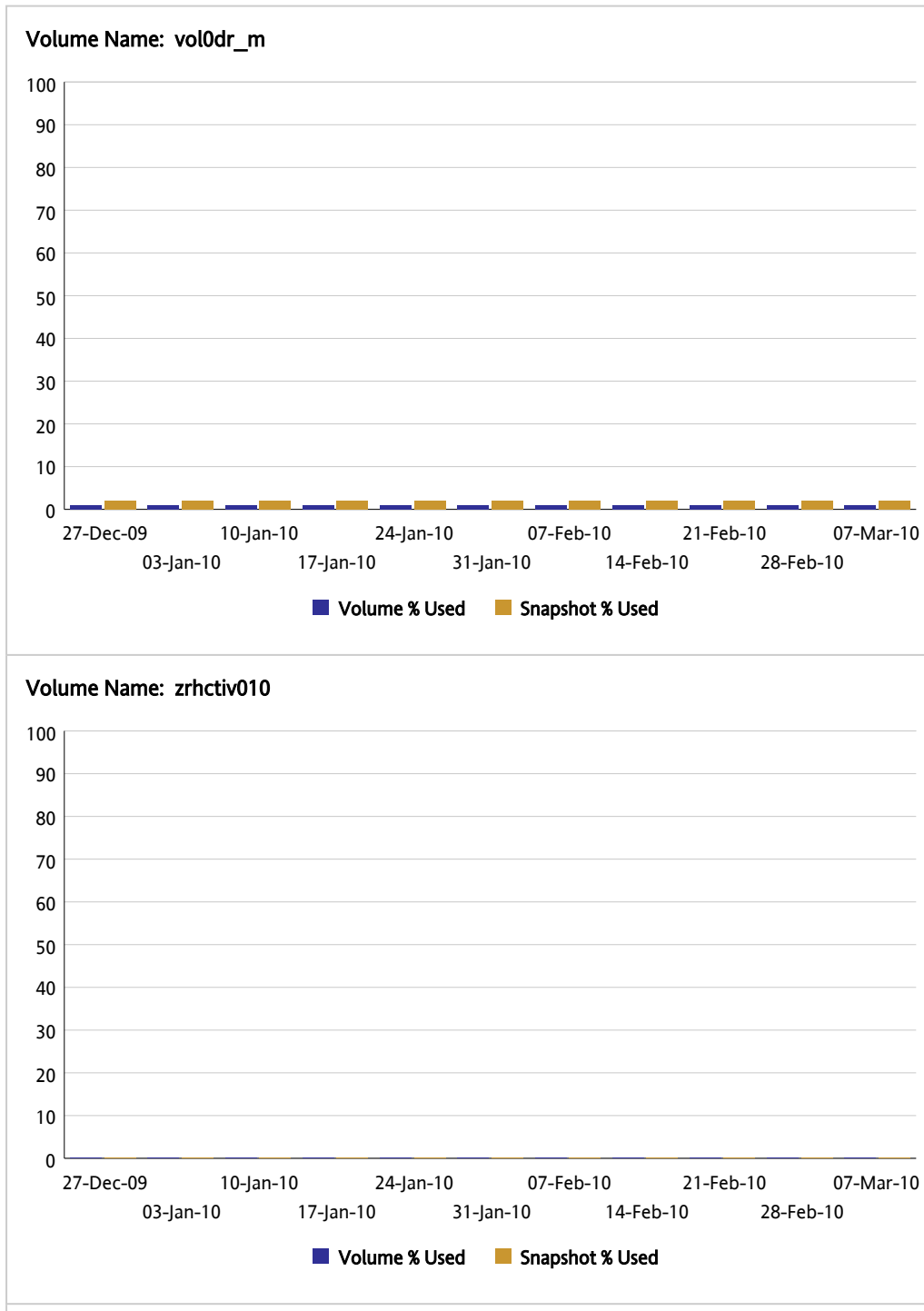
| Aggregate Name | Total GB | Used GB  | Free GB | Used %  | Free %  |
|----------------|----------|----------|---------|---------|---------|
| aggr0          | 349.00   | 61.00    | 288.00  | 17.00 % | 83.00 % |
| aggr1          | 6,631.00 | 5,994.00 | 637.00  | 90.00 % | 10.00 % |

## Volume Usage Summary

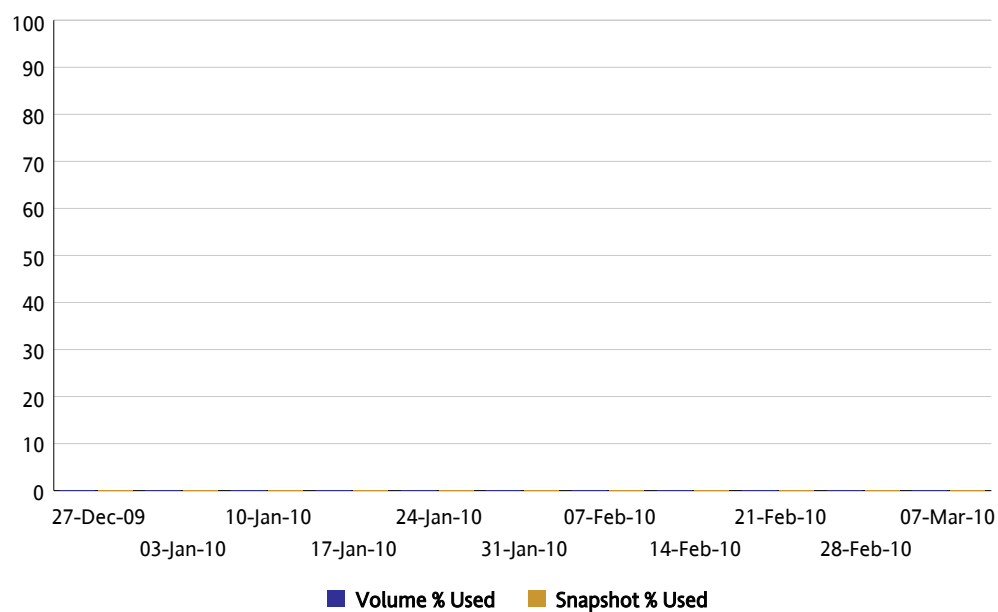
| Aggregate Name | Volume Name       | Volume Type | Volume State | Total GB | Used GB | Free GB | Used % | Inode Used % |
|----------------|-------------------|-------------|--------------|----------|---------|---------|--------|--------------|
| aggr0          | vol0              | FLEX        | ONLINE       | 40.00    | 1.00    | 39.43   | 1.00 % | 0.00 %       |
|                | vol0dr_m          | FLEX        | ONLINE       | 40.00    | 0.00    | 39.53   | 1.00 % | 0.00 %       |
|                | zrhvnascti002vol0 | FLEX        | ONLINE       | 4.00     | 0.00    | 4.00    | 0.00 % | 0.00 %       |
|                | zrhvnascti004vol0 | FLEX        | ONLINE       | 4.00     | 0.00    | 4.00    | 0.00 % | 0.00 %       |
| aggr1          | zrhctiv010        | FLEX        | ONLINE       | 532.80   | 1.00    | 531.39  | 0.00 % | 0.00 %       |
|                | zrhctiv011        | FLEX        | ONLINE       | 532.80   | 0.00    | 532.79  | 0.00 % | 0.00 %       |
|                | zrhctiv012        | FLEX        | ONLINE       | 532.80   | 0.00    | 532.79  | 0.00 % | 0.00 %       |
|                | zrhctiv013        | FLEX        | ONLINE       | 532.80   | 0.00    | 532.79  | 0.00 % | 0.00 %       |
|                | zrhctiv014        | FLEX        | ONLINE       | 532.80   | 0.00    | 532.79  | 0.00 % | 0.00 %       |
|                | zrhctiv015        | FLEX        | ONLINE       | 532.80   | 1.00    | 531.39  | 0.00 % | 0.00 %       |
|                | zrhctiv016        | FLEX        | ONLINE       | 532.80   | 0.00    | 532.79  | 0.00 % | 0.00 %       |
|                | zrhctiv017        | FLEX        | ONLINE       | 532.80   | 0.00    | 532.79  | 0.00 % | 0.00 %       |
|                | zrhctiv018        | FLEX        | ONLINE       | 532.80   | 0.00    | 532.79  | 0.00 % | 0.00 %       |

## Disk Space Utilization

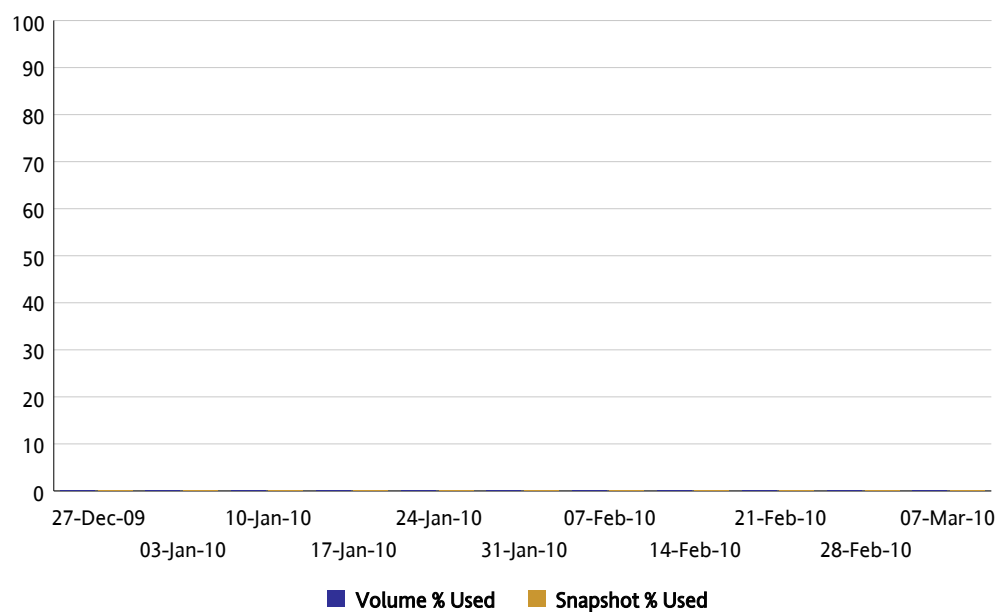




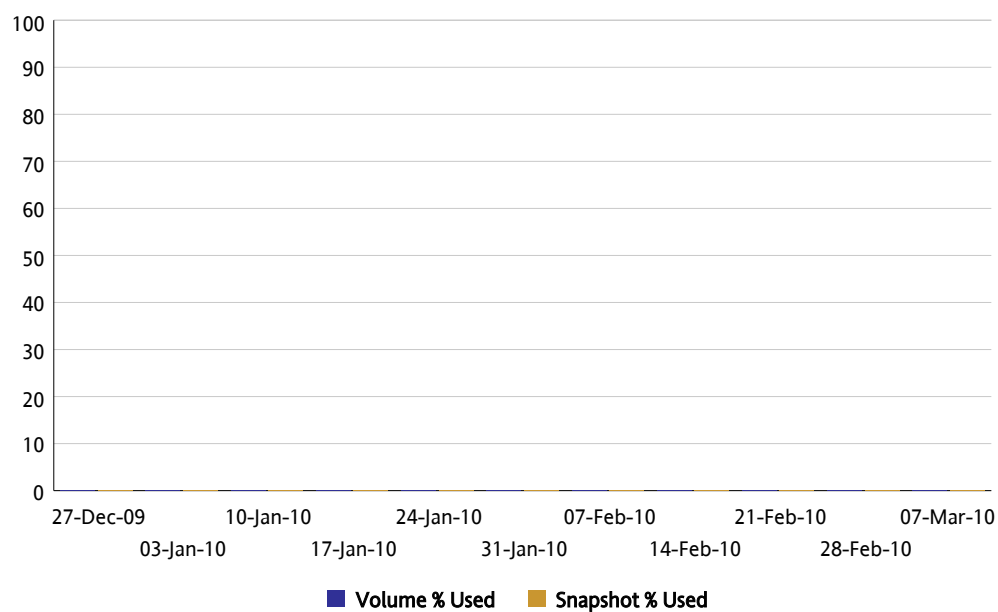
Volume Name: zrhctiv011



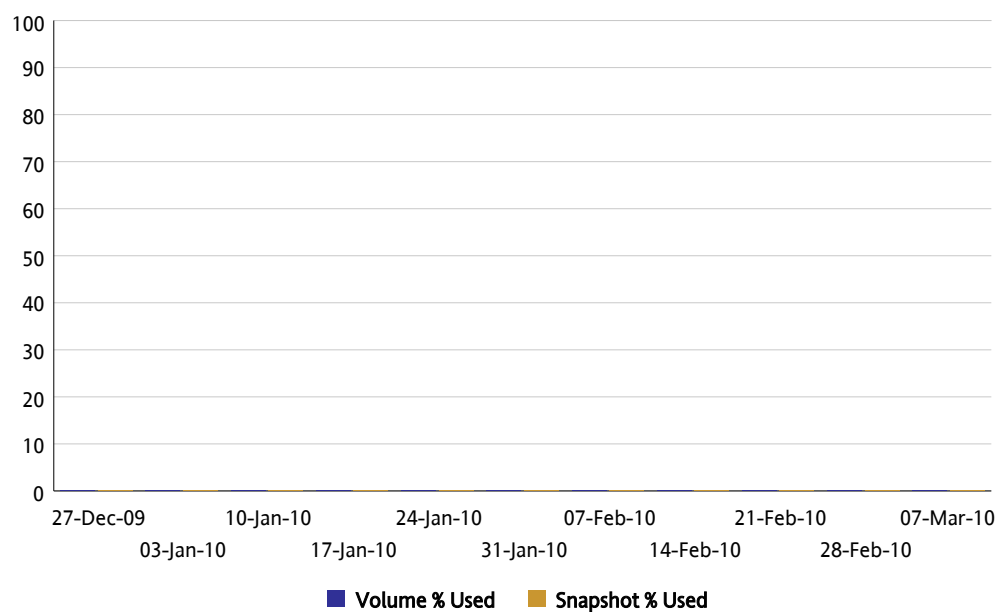
Volume Name: zrhctiv012



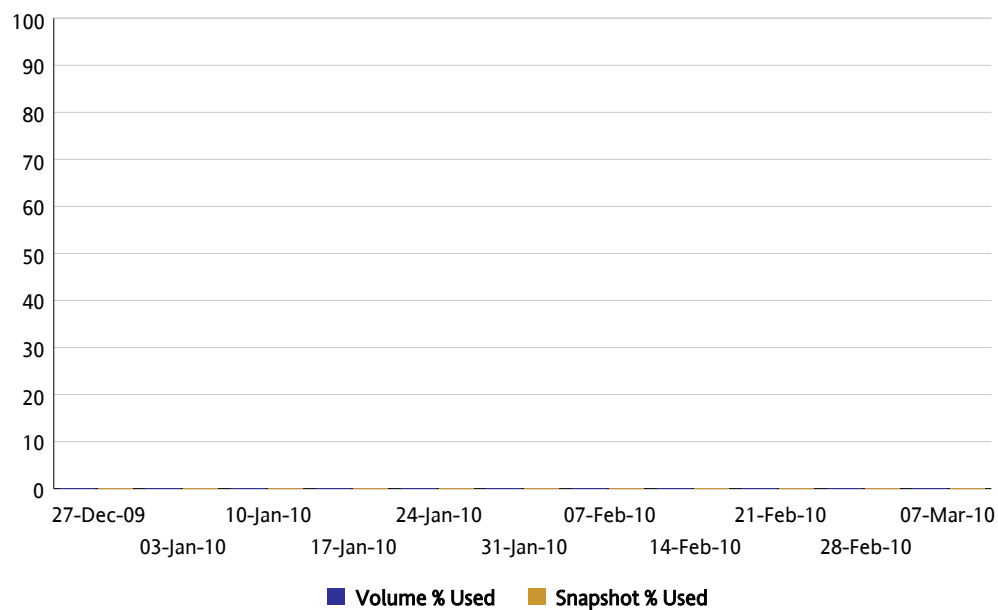
Volume Name: zrhctiv013



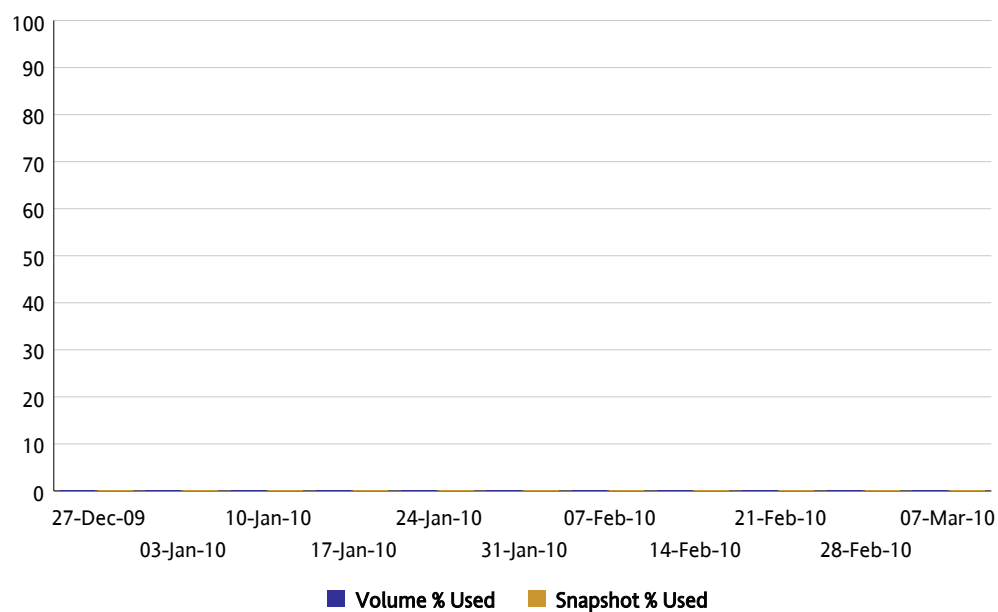
Volume Name: zrhctiv014



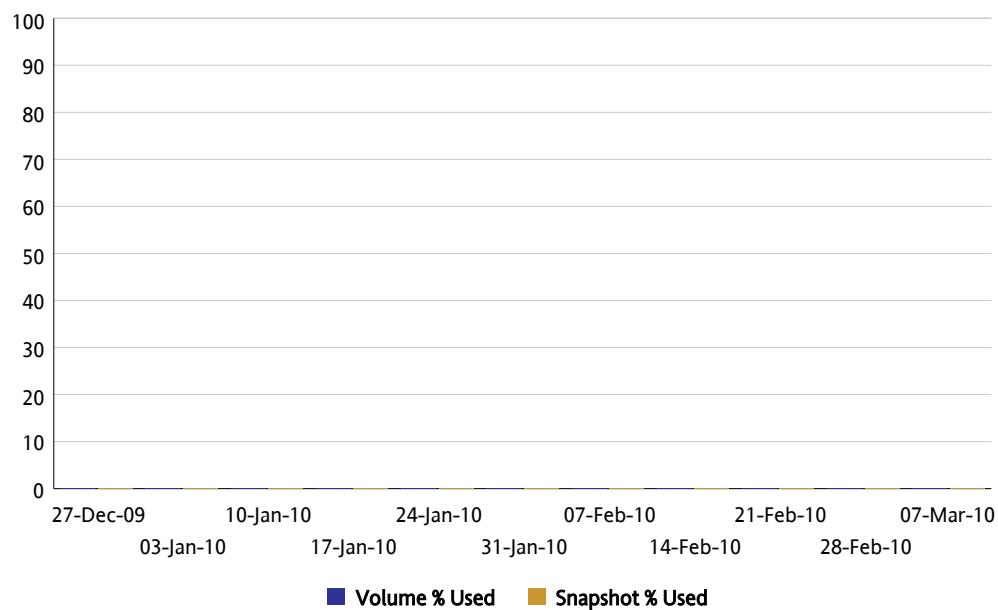
Volume Name: zrhctiv015



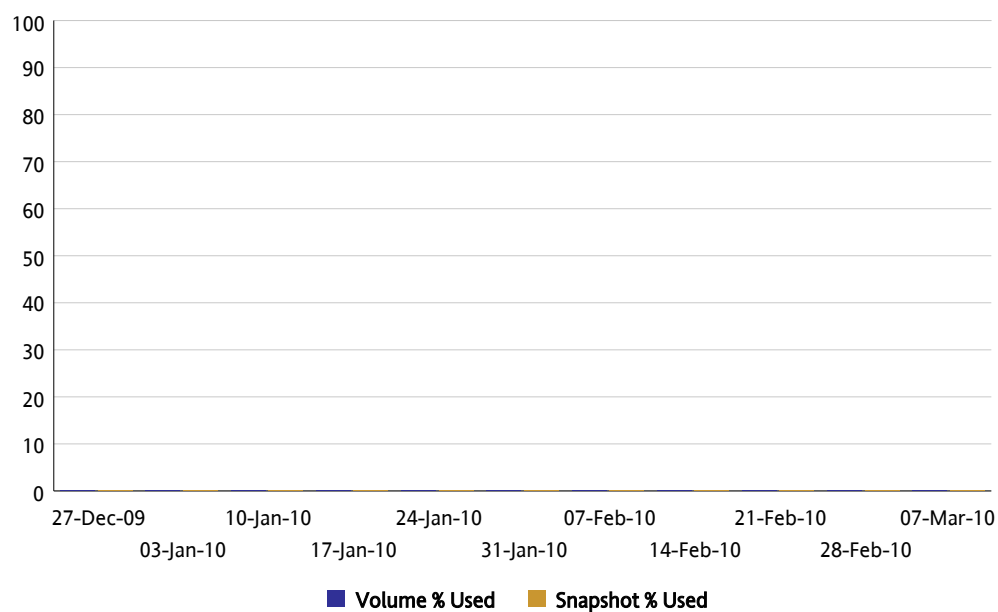
Volume Name: zrhctiv016



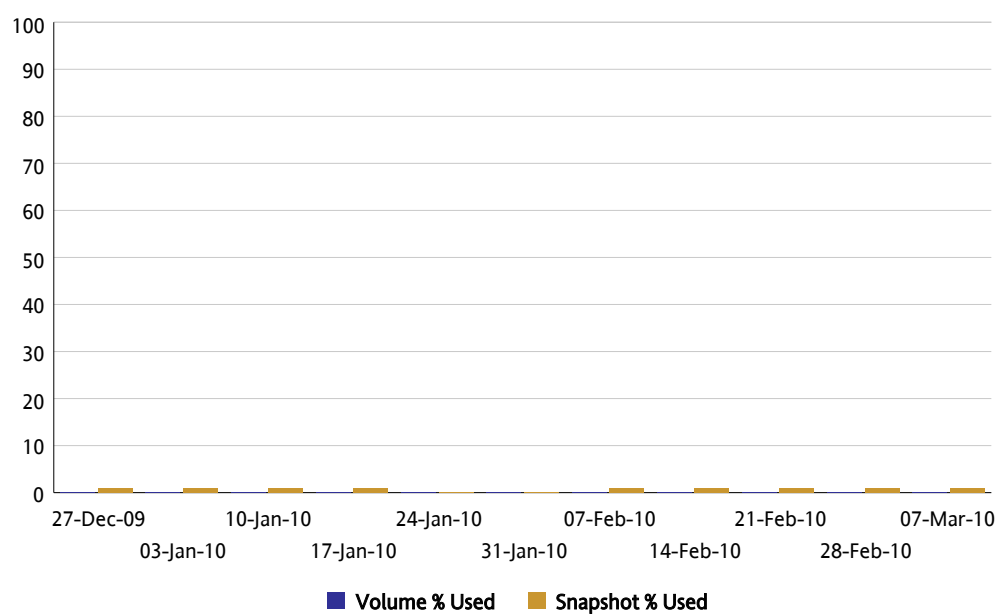
Volume Name: zrhctiv017



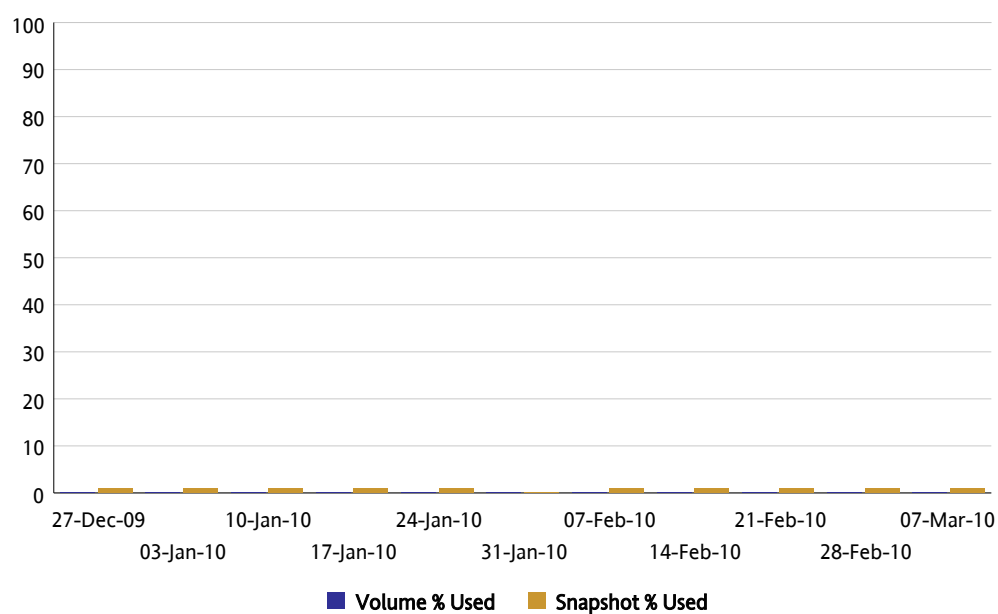
Volume Name: zrhctiv018



Volume Name: zrhvnsacti002vol0



Volume Name: zrhvnsacti004vol0



## Qtree Status

| Aggregate Name | Volume Name | Qtree Path Name        | Qtree State |
|----------------|-------------|------------------------|-------------|
| aggr0          | vol0        | /vol/vol0/-            | NORMAL      |
|                |             | /vol/vol0/auditlog     | NORMAL      |
|                | vol0dr_m    | /vol/vol0dr_m/-        | NORMAL      |
|                |             | /vol/vol0dr_m/auditlog | NORMAL      |

| Aggregate Name | Volume Name       | Qtree Path Name          | Qtree State |
|----------------|-------------------|--------------------------|-------------|
| aggr0          | zrhvnascti002vol0 | /vol/zrhvnascti002vol0/- | NORMAL      |
|                | zrhvnascti004vol0 | /vol/zrhvnascti004vol0/- | NORMAL      |
| aggr1          | zrhctiv010        | /vol/zrhctiv010/-        | NORMAL      |
|                |                   | /vol/zrhctiv010/zrhqt010 | NORMAL      |
|                | zrhctiv011        | /vol/zrhctiv011/-        | NORMAL      |
|                |                   | /vol/zrhctiv011/zrhqt011 | NORMAL      |
|                | zrhctiv012        | /vol/zrhctiv012/-        | NORMAL      |
|                |                   | /vol/zrhctiv012/zrhqt012 | NORMAL      |
|                | zrhctiv013        | /vol/zrhctiv013/-        | NORMAL      |
|                |                   | /vol/zrhctiv013/zrhqt013 | NORMAL      |
|                | zrhctiv014        | /vol/zrhctiv014/-        | NORMAL      |
|                |                   | /vol/zrhctiv014/zrhqt014 | NORMAL      |
|                | zrhctiv015        | /vol/zrhctiv015/-        | NORMAL      |
|                |                   | /vol/zrhctiv015/zrhqt015 | NORMAL      |
|                | zrhctiv016        | /vol/zrhctiv016/-        | NORMAL      |
|                |                   | /vol/zrhctiv016/zrhqt016 | NORMAL      |
|                | zrhctiv017        | /vol/zrhctiv017/-        | NORMAL      |
|                |                   | /vol/zrhctiv017/zrhqt017 | NORMAL      |
|                | zrhctiv018        | /vol/zrhctiv018/-        | NORMAL      |
|                |                   | /vol/zrhctiv018/zrhqt018 | NORMAL      |

There are no LUNs found for this system.

## SnapMirror / SnapVault Status

| SnapMirror State | Source System | Source Path              | Destination System | Destination Path         |
|------------------|---------------|--------------------------|--------------------|--------------------------|
| SNAPMIRRORED     | zrhctinas202b | vol0                     | zrhctinas201b      | /vol/vol0dr_m/-          |
| SOURCE           | zrhctinas201b | /vol/vol0/-              | zrhctinas202b      | /vol/vol0dr_m/-          |
| SOURCE           | zrhctinas201b | /vol/zrhctiv010/-        | zrhctinas202b      | /vol/zrhctiv010/-        |
| SOURCE           | zrhctinas201b | /vol/zrhctiv011/-        | zrhctinas202b      | /vol/zrhctiv011/-        |
| SOURCE           | zrhctinas201b | /vol/zrhctiv012/-        | zrhctinas202b      | /vol/zrhctiv012/-        |
| SOURCE           | zrhctinas201b | /vol/zrhctiv013/-        | zrhctinas202b      | /vol/zrhctiv013/-        |
| SOURCE           | zrhctinas201b | /vol/zrhctiv014/-        | zrhctinas202b      | /vol/zrhctiv014/-        |
| SOURCE           | zrhctinas201b | /vol/zrhctiv015/-        | zrhctinas202b      | /vol/zrhctiv015/-        |
| SOURCE           | zrhctinas201b | /vol/zrhctiv016/-        | zrhctinas202b      | /vol/zrhctiv016/-        |
| SOURCE           | zrhctinas201b | /vol/zrhctiv017/-        | zrhctinas202b      | /vol/zrhctiv017/-        |
| SOURCE           | zrhctinas201b | /vol/zrhctiv018/-        | zrhctinas202b      | /vol/zrhctiv018/-        |
| SOURCE           | zrhctinas201b | /vol/zrhvnascti002vol0/- | zrhctinas202b      | /vol/zrhvnascti002vol0/- |
| SOURCE           | zrhctinas201b | /vol/zrhvnascti004vol0/- | zrhctinas202b      | /vol/zrhvnascti004vol0/- |

## Network Information

| Port Name | Description                              | IP Address, Subnet Mask | Media Type       | VIF Name | Current Interface Speed | Full Duplex | FC Setting, Negotiated | Auto-Negotiate Enabled |
|-----------|------------------------------------------|-------------------------|------------------|----------|-------------------------|-------------|------------------------|------------------------|
| e0a       | BGE 10/100/1000 Ethernet Controller      | -                       | auto-1000t-fd-up | gev4     | 1,000                   | Full        | Full Unknown           | On                     |
| e0c       | BGE 10/100/1000 Ethernet Controller      | -                       | auto-1000t-fd-up | gev4     | 1,000                   | Full        | Full Unknown           | On                     |
| e0b       | BGE 10/100/1000 Ethernet Controller      | -                       | auto-1000t-fd-up | gev5     | 1,000                   | Full        | Full Unknown           | On                     |
| e0d       | BGE 10/100/1000 Ethernet Controller      | -                       | auto-1000t-fd-up | gev5     | 1,000                   | Full        | Full Unknown           | On                     |
| e2a       | Quad 10/100/1000 Ethernet Controller G20 | -                       |                  |          |                         |             | Full Unknown           |                        |
| e2b       | Quad 10/100/1000 Ethernet Controller G20 | -                       |                  |          |                         |             | Full Unknown           |                        |
| e2c       | Quad 10/100/1000 Ethernet Controller G20 | -                       |                  |          |                         |             | Full Unknown           |                        |
| e2d       | Quad 10/100/1000 Ethernet Controller G20 | -                       |                  |          |                         |             | Full Unknown           |                        |

## NFS (Network File System) Protocol Usage

### NFS calls by Protocol:

| Protocol | NFS Calls | Bad Calls | Bad Calls % |
|----------|-----------|-----------|-------------|
| TCP      | 0         | 0         | 0.00%       |
| UDP      | 0         | 0         | 0.00%       |

### NFS calls by Version:

| NFS Version | NFS Calls | NFS Calls % |
|-------------|-----------|-------------|
| NFSv2       | 0         | 0.00%       |
| NFSv3       | 0         | 0.00%       |
| NFSv4       | 0         | 0.00%       |

## CIFS (Common Internet File System): Top 5 CIFS Operations

The "CIFS Stat" command shows CIFS related statistics since the last system reboot. These statistics break down the top 5 CIFS operations.

| CIFS operation  | CIFS Calls | CIFS Calls % |
|-----------------|------------|--------------|
| NTCreateX       | 1707       | 14.00%       |
| login           | 684        | 6.00%        |
| query_file_info | 1474       | 12.00%       |
| query_path_info | 3240       | 27.00%       |
| writeX          | 810        | 7.00%        |

### MultiStore (vFiler)

| vFiler Name   | vFiler State | vFiler IP Space  | UUID (Universal Unique ID)           |
|---------------|--------------|------------------|--------------------------------------|
| vfiler0       | RUNNING      | default-ipospace | 00000000-0000-0000-0000-000000000000 |
| zrhvnascti002 | RUNNING      | default-ipospace | 42b46a70-ff35-11dd-b869-00a0980dcd93 |
| zrhvnascti004 | RUNNING      | default-ipospace | 5e0f7a70-ff35-11dd-b869-00a0980dcd93 |

### ASUP (AutoSupport) Status

| ASUP Category                 | Value                                                                      |
|-------------------------------|----------------------------------------------------------------------------|
| autosupport.enable            | on                                                                         |
| autosupport.mailhost          | mailhub-vip.ny.ssmb.com,mailhub-dc1.eu.ssmb.com,mailhub-dc2.eur.nsroot.net |
| autosupport.noteto            | nas.alerts@citi.com                                                        |
| autosupport.support.enable    | on                                                                         |
| autosupport.support.proxy     | webproxy.wlb.nsroot.net:8080                                               |
| autosupport.support.to        | autosupport@netapp.com                                                     |
| autosupport.support.transport | https                                                                      |
| autosupport.support.url       | support.netapp.com/asupprod/post/1.0/postAsup                              |
| autosupport.to                | intnas.alerts@imceu.eu.ssmb.com                                            |

## SYSTEM REVIEW



Host Name: zrhctinas201a  
 Serial Number: 20013442  
 Last Update: 14-Mar-2010

Model: FAS3040  
 O/S: 7.2.5.1P6D15  
 Partner Name: zrhctinas201b

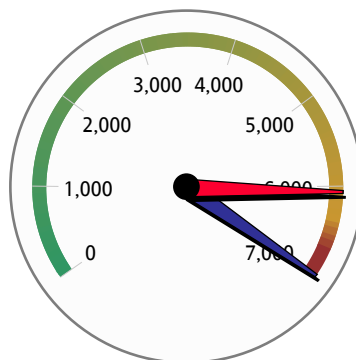
## Installed Products

| Product Name        |
|---------------------|
| A_SIS               |
| CIFS                |
| CLUSTER             |
| DISK_SANITIZATION   |
| FCP                 |
| FLEX_CLONE          |
| ISCSI               |
| MULTISTORE          |
| NEARSTORE_OPTION    |
| NFS                 |
| SNAPLOCK_ENTERPRISE |
| SNAPMIRROR          |
| SNAPRESTORE         |
| SV_ONTAP_PRI        |

## Hardware Summary

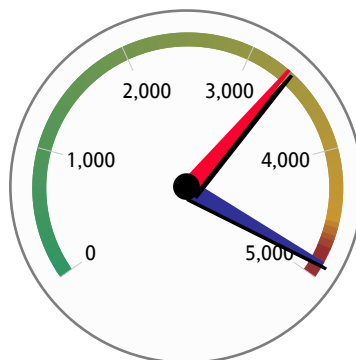
| Component | Count |
|-----------|-------|
| Shelves   | 2     |
| Disk      | 28    |

## Aggregate Utilization



■ Used Aggregate GB ■ Total Aggregate GB

## Volume Utilization



■ Used Volume GB ■ Total Volume GB

ASUP Contact: intnas.alerts@imceu.eu.smb.com

SNMP Contact & Location: No information provided

ASUP Minimal Flag: F

## System Slot Inventory

| Slot Number | Part Number | Description                              |
|-------------|-------------|------------------------------------------|
| 0           | 110-00057   | Remote LAN Module                        |
| 0           |             | BGE 10/100/1000 Ethernet Controller      |
| 0           |             | FC Host Adapter (QLogic 2432 rev. 2)     |
| 0           |             | NetApp ATA/IDE Adapter                   |
| 1           | X2054A      | FC Host Adapter (QLogic 2432 rev. 3)     |
| 2           |             | Quad 10/100/1000 Ethernet Controller G20 |
| 3           |             | NVRAM VI                                 |

## Disk Summary

| Disk Label     | Disk Model, Disk Make   | Current FW, Latest FW | Checksum Type | Disk Size GB | Disk Bytes Per Sector | Shelf Type  | Disk Count |
|----------------|-------------------------|-----------------------|---------------|--------------|-----------------------|-------------|------------|
| DATA           | X291_S15K6420F15 NETAPP | NA00                  |               | 418.00       | 520                   | DS14-Mk4-FC | 20         |
| DPARITY        | X291_S15K6420F15 NETAPP | NA00                  |               | 418.00       | 520                   | DS14-Mk4-FC | 3          |
| PARITY         | X291_S15K6420F15 NETAPP | NA00                  |               | 418.00       | 520                   | DS14-Mk4-FC | 3          |
| SPARE          | X291_S15K6420F15 NETAPP | NA00                  |               | 418.00       | 520                   | DS14-Mk4-FC | 2          |
| <b>Summary</b> |                         |                       |               |              |                       |             | <b>28</b>  |

## Shelf Summary

| Shelf Type  | Shelf Module Type | Latest FW | Current FW | Shelf Count |
|-------------|-------------------|-----------|------------|-------------|
| DS14-Mk4-FC | ESH4              | 13        | 13         | 1           |
| DS14-Mk4-FC | ESH4              | 13        | 13         | 1           |

## RAID Configuration

| RAID Group Name | RAID Type | Aggregate Name | Disk Count |
|-----------------|-----------|----------------|------------|
| rg0             | RAID_DP   | aggr0          | 26         |
|                 |           | aggr1          |            |
| rg1             | RAID_DP   | aggr1          |            |

## Aggregate and Volume Configuration

| Aggregate Name | Volume Name       |
|----------------|-------------------|
| aggr0          | vol0              |
|                | vol0dr_m          |
|                | zrhvnascti001vol0 |
|                | zrhvnascti003vol0 |
| aggr1          | zrhctiv001        |
|                | zrhctiv002        |
|                | zrhctiv003        |
|                | zrhctiv004        |
|                | zrhctiv005        |
|                | zrhctiv006        |
|                | zrhctiv007        |
|                | zrhctiv008        |
|                | zrhctiv009        |

### Snapshot Usage Summary

| Volume Name       | Snapshot Count | Snapshot Schedule | Snapshot Space Reserve % | Snap Reserve Used % |
|-------------------|----------------|-------------------|--------------------------|---------------------|
| vol0              | 29             | 2 13 13@12        | 20.00%                   | 3.00%               |
| vol0dr_m          | 11             | 2 13 13@12        | 20.00%                   | 2.00%               |
| zrhctiv001        | 32             | 2 13 13@12        | 20.00%                   | 56.00%              |
| zrhctiv002        | 32             | 2 13 13@12        | 20.00%                   | 4.00%               |
| zrhctiv003        | 32             | 2 13 13@12        | 20.00%                   | 6.00%               |
| zrhctiv004        | 29             | 2 13 13@12        | 20.00%                   | 10.00%              |
| zrhctiv005        | 29             | 2 13 13@12        | 20.00%                   | 10.00%              |
| zrhctiv006        | 30             | 2 13 13@12        | 20.00%                   | 2.00%               |
| zrhctiv007        | 29             | 2 13 13@12        | 20.00%                   | 4.00%               |
| zrhctiv008        | 30             | 2 13 13@12        | 20.00%                   | 1.00%               |
| zrhctiv009        | 30             | 2 13 13@12        | 20.00%                   | 0.00%               |
| zrhvnascti001vol0 | 31             | 2 13 13@12        | 20.00%                   | 1.00%               |
| zrhvnascti003vol0 | 29             | 2 13 13@12        | 20.00%                   | 1.00%               |

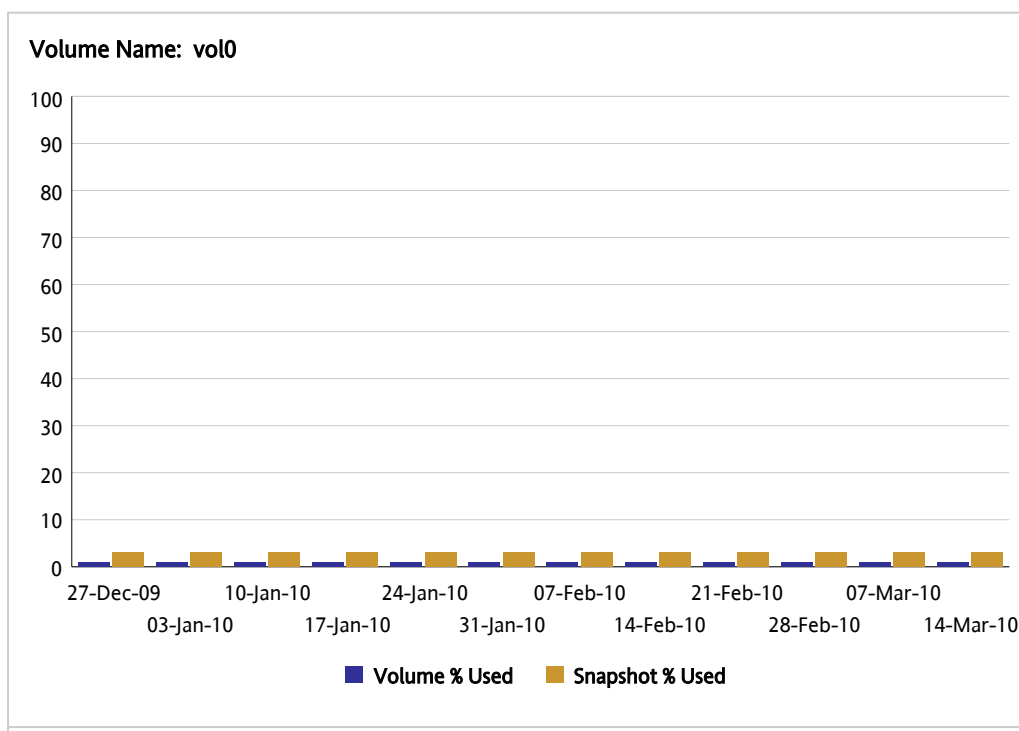
### Aggregate Usage Summary

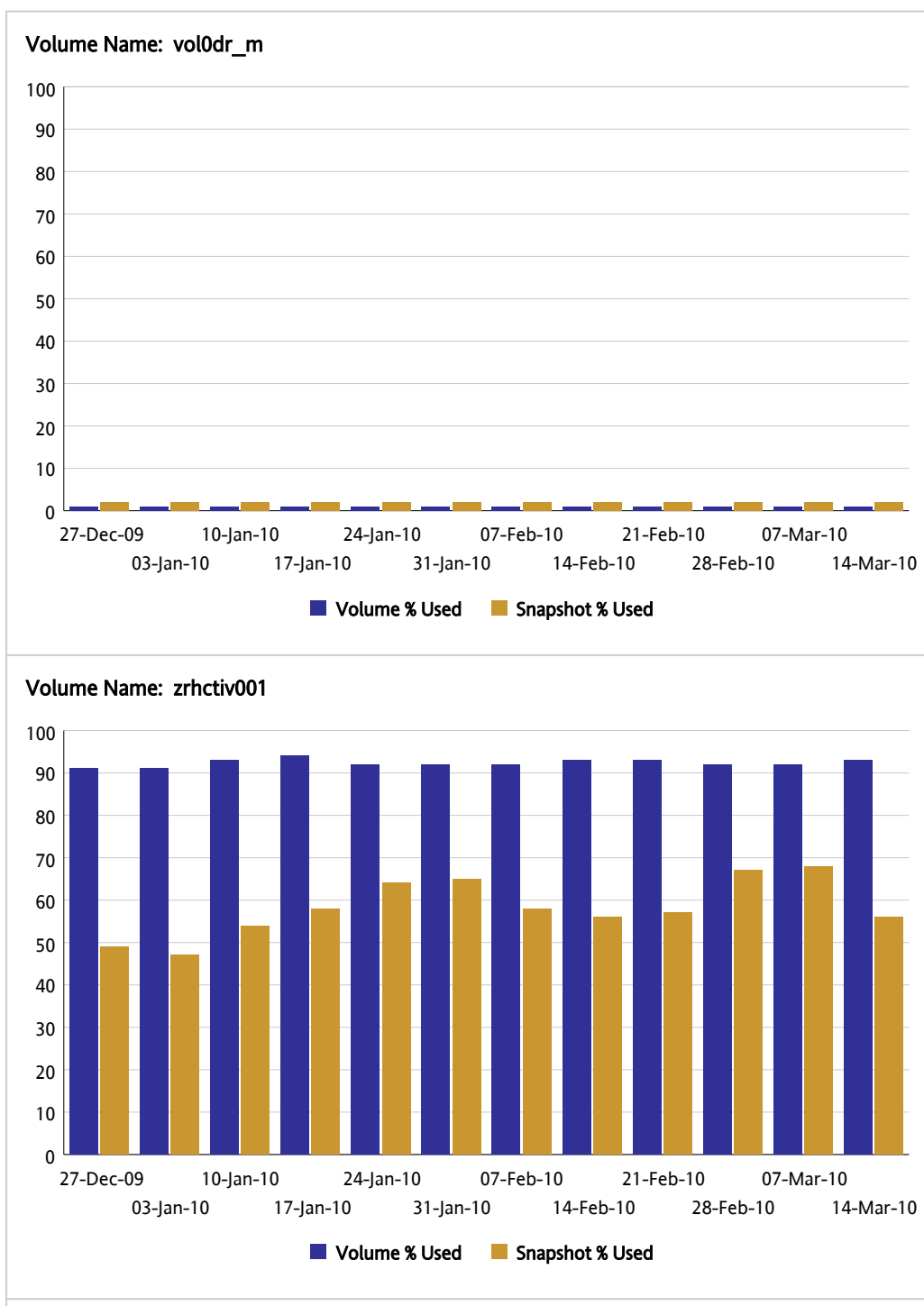
| Aggregate Name | Total GB | Used GB  | Free GB | Used %  | Free %  |
|----------------|----------|----------|---------|---------|---------|
| aggr0          | 349.00   | 61.00    | 288.00  | 17.00 % | 83.00 % |
| aggr1          | 6,631.00 | 6,000.00 | 631.00  | 90.00 % | 10.00 % |

## Volume Usage Summary

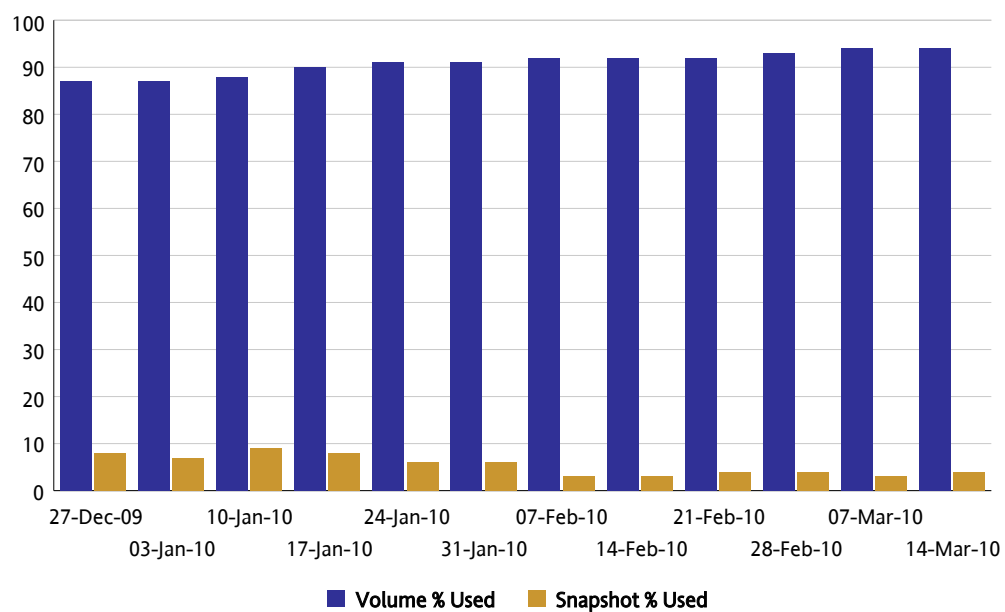
| Aggregate Name | Volume Name       | Volume Type | Volume State | Total GB | Used GB | Free GB | Used %  | Inode Used % |
|----------------|-------------------|-------------|--------------|----------|---------|---------|---------|--------------|
| aggr0          | vol0              | FLEX        | ONLINE       | 40.00    | 1.00    | 39.43   | 1.00 %  | 0.00 %       |
|                | vol0dr_m          | FLEX        | ONLINE       | 40.00    | 1.00    | 39.49   | 1.00 %  | 0.00 %       |
|                | zrhvnascti001vol0 | FLEX        | ONLINE       | 4.00     | 0.00    | 4.00    | 0.00 %  | 0.00 %       |
|                | zrhvnascti003vol0 | FLEX        | ONLINE       | 4.00     | 0.00    | 4.00    | 0.00 %  | 0.00 %       |
| aggr1          | zrhctiv001        | FLEX        | ONLINE       | 532.80   | 495.00  | 37.40   | 93.00 % | 3.00 %       |
|                | zrhctiv002        | FLEX        | ONLINE       | 532.80   | 500.00  | 32.76   | 94.00 % | 1.00 %       |
|                | zrhctiv003        | FLEX        | ONLINE       | 532.80   | 297.00  | 236.00  | 56.00 % | 1.00 %       |
|                | zrhctiv004        | FLEX        | ONLINE       | 532.80   | 500.00  | 32.46   | 94.00 % | 2.00 %       |
|                | zrhctiv005        | FLEX        | ONLINE       | 532.80   | 449.00  | 83.46   | 84.00 % | 1.00 %       |
|                | zrhctiv006        | FLEX        | ONLINE       | 532.80   | 182.00  | 350.85  | 34.00 % | 2.00 %       |
|                | zrhctiv007        | FLEX        | ONLINE       | 532.80   | 482.00  | 50.75   | 90.00 % | 4.00 %       |
|                | zrhctiv008        | FLEX        | ONLINE       | 532.80   | 407.00  | 125.40  | 76.00 % | 7.00 %       |
|                | zrhctiv009        | FLEX        | ONLINE       | 532.80   | 0.00    | 532.47  | 0.00 %  | 0.00 %       |

## Disk Space Utilization

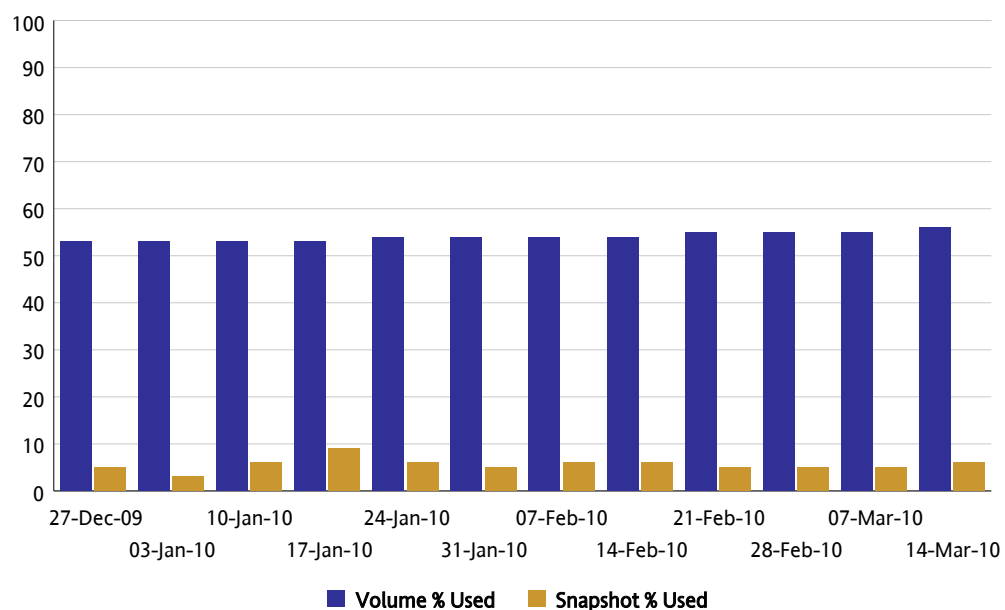




Volume Name: zrhctiv002

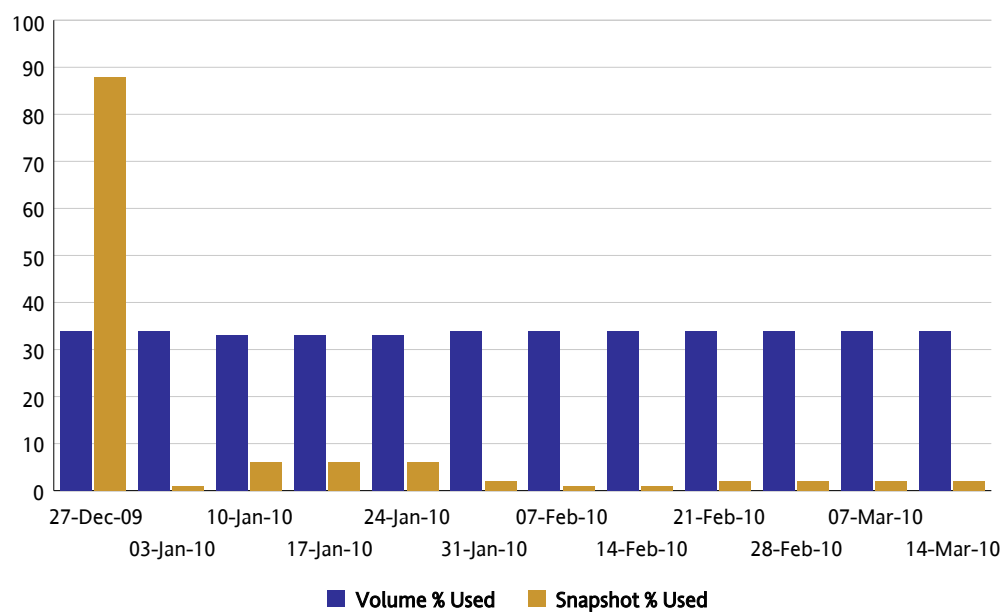


Volume Name: zrhctiv003

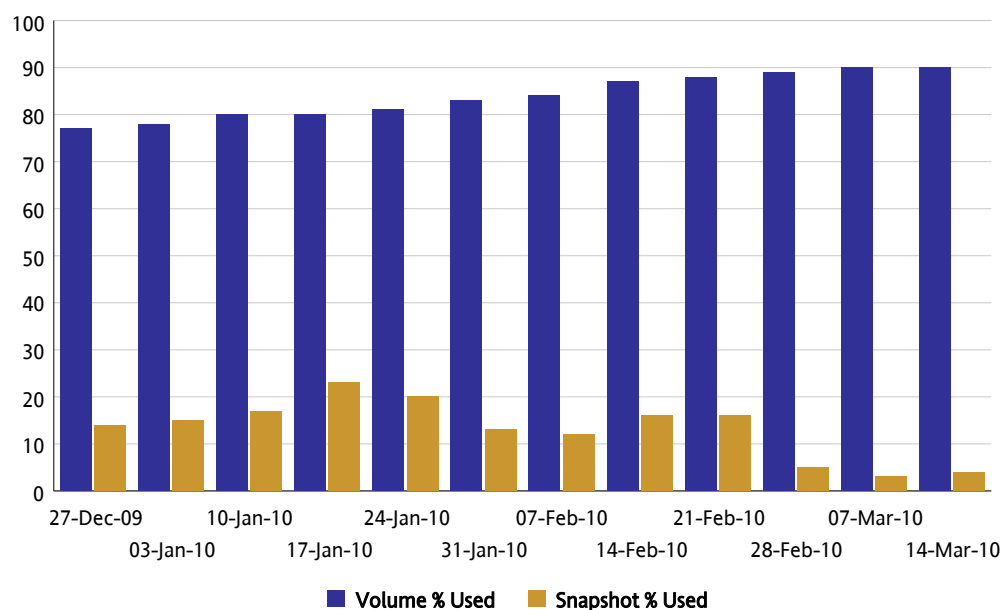


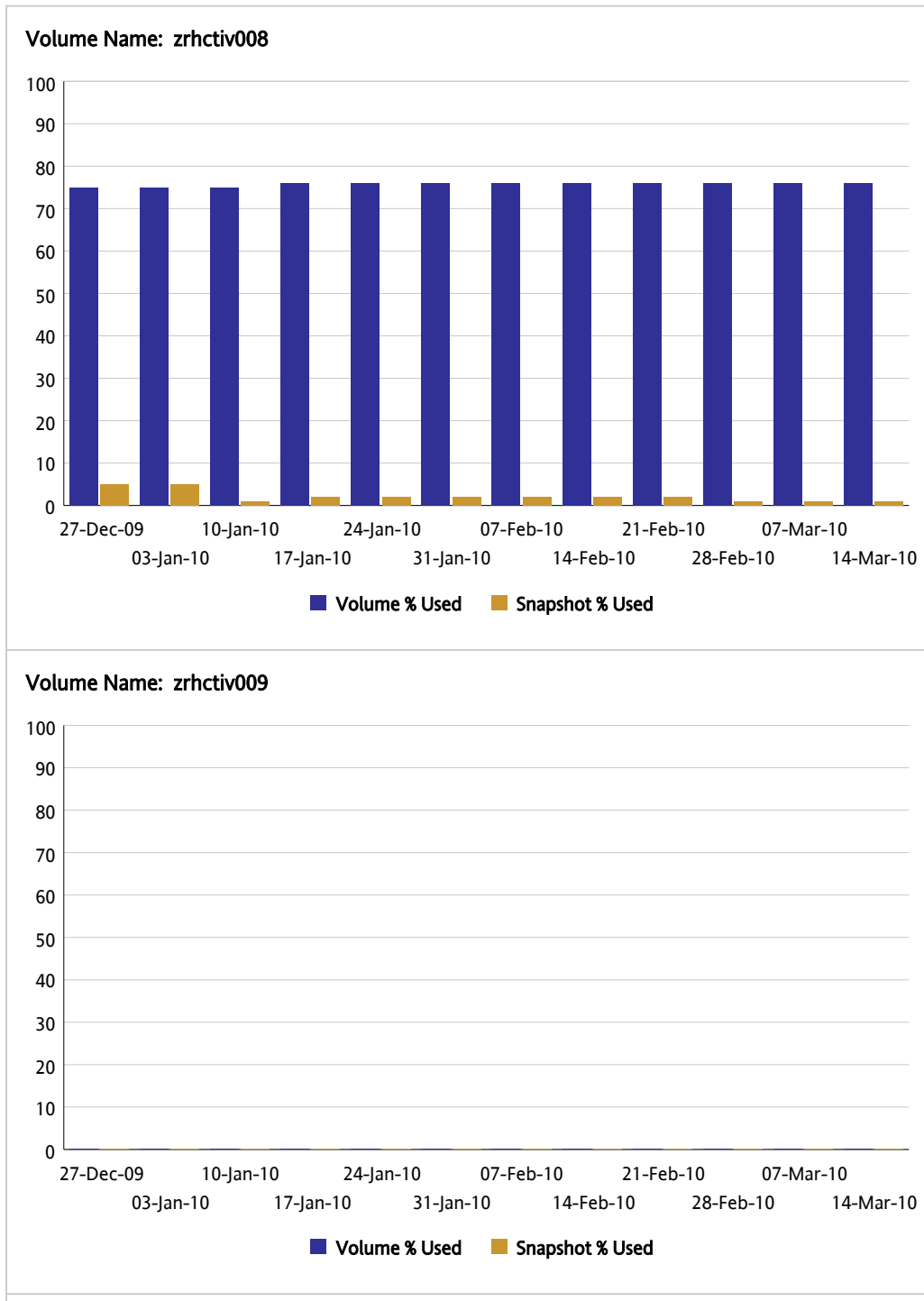


Volume Name: zrhctiv006

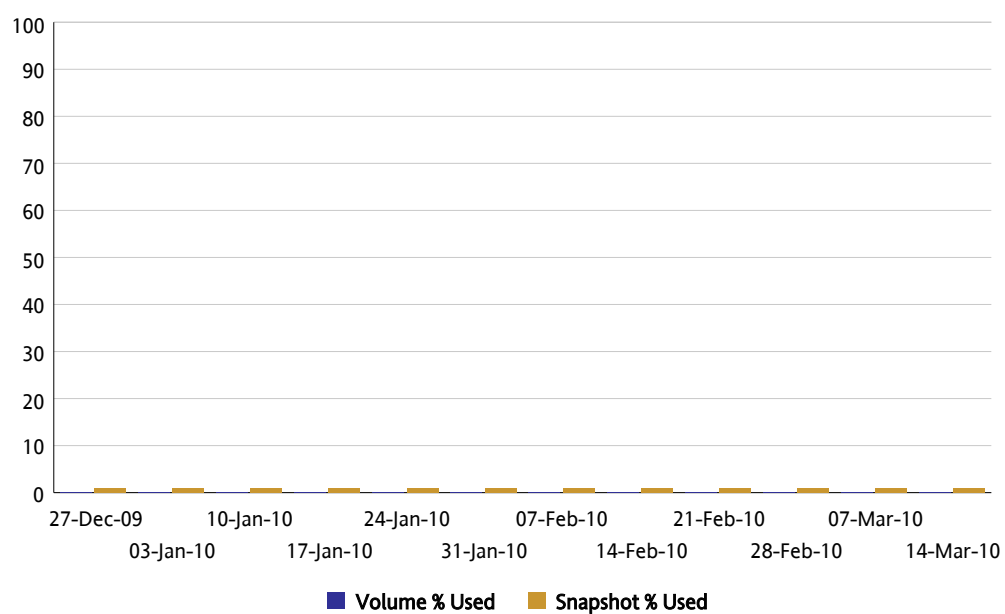


Volume Name: zrhctiv007

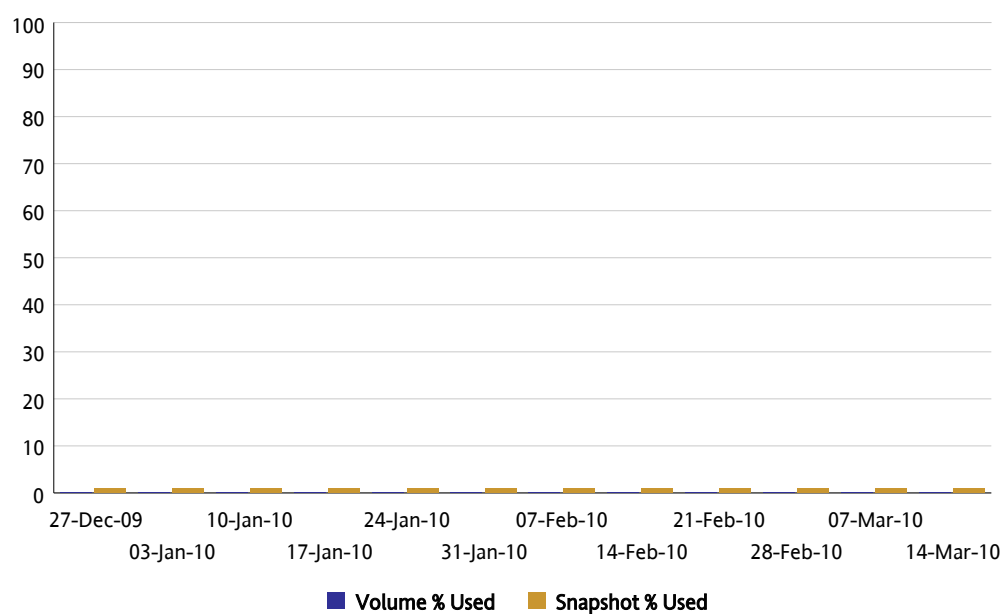




Volume Name: zrhvnsacti001vol0



Volume Name: zrhvnsacti003vol0



## Qtree Status

| Aggregate Name | Volume Name | Qtree Path Name        | Qtree State |
|----------------|-------------|------------------------|-------------|
| aggr0          | vol0        | /vol/vol0/-            | NORMAL      |
|                |             | /vol/vol0/auditlog     | NORMAL      |
|                | vol0dr_m    | /vol/vol0dr_m/-        | NORMAL      |
|                |             | /vol/vol0dr_m/auditlog | NORMAL      |

| Aggregate Name | Volume Name       | Qtree Path Name          | Qtree State |
|----------------|-------------------|--------------------------|-------------|
| aggr0          | zrhvnascti001vol0 | /vol/zrhvnascti001vol0/- | NORMAL      |
|                | zrhvnascti003vol0 | /vol/zrhvnascti003vol0/- | NORMAL      |
| aggr1          | zrhctiv001        | /vol/zrhctiv001/-        | NORMAL      |
|                |                   | /vol/zrhctiv001/zrhqt001 | NORMAL      |
|                | zrhctiv002        | /vol/zrhctiv002/-        | NORMAL      |
|                |                   | /vol/zrhctiv002/zrhqt002 | NORMAL      |
|                | zrhctiv003        | /vol/zrhctiv003/-        | NORMAL      |
|                |                   | /vol/zrhctiv003/zrhqt003 | NORMAL      |
|                | zrhctiv004        | /vol/zrhctiv004/-        | NORMAL      |
|                |                   | /vol/zrhctiv004/zrhqt004 | NORMAL      |
|                | zrhctiv005        | /vol/zrhctiv005/-        | NORMAL      |
|                |                   | /vol/zrhctiv005/zrhqt005 | NORMAL      |
|                | zrhctiv006        | /vol/zrhctiv006/-        | NORMAL      |
|                |                   | /vol/zrhctiv006/zrhqt006 | NORMAL      |
|                | zrhctiv007        | /vol/zrhctiv007/-        | NORMAL      |
|                |                   | /vol/zrhctiv007/zrhqt007 | NORMAL      |
|                | zrhctiv008        | /vol/zrhctiv008/-        | NORMAL      |
|                |                   | /vol/zrhctiv008/zrhqt008 | NORMAL      |
|                | zrhctiv009        | /vol/zrhctiv009/-        | NORMAL      |
|                |                   | /vol/zrhctiv009/zrhqt009 | NORMAL      |

There are no LUNs found for this system.

## SnapMirror / SnapVault Status

| SnapMirror State | Source System | Source Path              | Destination System | Destination Path         |
|------------------|---------------|--------------------------|--------------------|--------------------------|
| SNAPMIRRORED     | zrhctinas202a | vol0                     | zrhctinas201a      | /vol/vol0dr_m/-          |
| SOURCE           | zrhctinas201a | /vol/vol0/-              | zrhctinas202a      | /vol/vol0dr_m/-          |
| SOURCE           | zrhctinas201a | /vol/zrhctiv001/-        | zrhctinas202a      | /vol/zrhctiv001/-        |
| SOURCE           | zrhctinas201a | /vol/zrhctiv002/-        | zrhctinas202a      | /vol/zrhctiv002/-        |
| SOURCE           | zrhctinas201a | /vol/zrhctiv003/-        | zrhctinas202a      | /vol/zrhctiv003/-        |
| SOURCE           | zrhctinas201a | /vol/zrhctiv004/-        | zrhctinas202a      | /vol/zrhctiv004/-        |
| SOURCE           | zrhctinas201a | /vol/zrhctiv005/-        | zrhctinas202a      | /vol/zrhctiv005/-        |
| SOURCE           | zrhctinas201a | /vol/zrhctiv006/-        | zrhctinas202a      | /vol/zrhctiv006/-        |
| SOURCE           | zrhctinas201a | /vol/zrhctiv007/-        | zrhctinas202a      | /vol/zrhctiv007/-        |
| SOURCE           | zrhctinas201a | /vol/zrhctiv008/-        | zrhctinas202a      | /vol/zrhctiv008/-        |
| SOURCE           | zrhctinas201a | /vol/zrhctiv009/-        | zrhctinas202a      | /vol/zrhctiv009/-        |
| SOURCE           | zrhctinas201a | /vol/zrhvnascti001vol0/- | zrhctinas202a      | /vol/zrhvnascti001vol0/- |
| SOURCE           | zrhctinas201a | /vol/zrhvnascti003vol0/- | zrhctinas202a      | /vol/zrhvnascti003vol0/- |

## Network Information

| Port Name | Description                              | IP Address, Subnet Mask | Media Type       | VIF Name | Current Interface Speed | Full Duplex | FC Setting, Negotiated | Auto-Negotiate Enabled |
|-----------|------------------------------------------|-------------------------|------------------|----------|-------------------------|-------------|------------------------|------------------------|
| e0a       | BGE 10/100/1000 Ethernet Controller      | -                       | auto-1000t-fd-up | gev1     | 1,000                   | Full        | Full Unknown           | On                     |
| e0c       | BGE 10/100/1000 Ethernet Controller      | -                       | auto-1000t-fd-up | gev1     | 1,000                   | Full        | Full Unknown           | On                     |
| e0b       | BGE 10/100/1000 Ethernet Controller      | -                       | auto-1000t-fd-up | gev2     | 1,000                   | Full        | Full Unknown           | On                     |
| e0d       | BGE 10/100/1000 Ethernet Controller      | -                       | auto-1000t-fd-up | gev2     | 1,000                   | Full        | Full Unknown           | On                     |
| e2a       | Quad 10/100/1000 Ethernet Controller G20 | -                       |                  |          |                         |             | Full Unknown           |                        |
| e2b       | Quad 10/100/1000 Ethernet Controller G20 | -                       |                  |          |                         |             | Full Unknown           |                        |
| e2c       | Quad 10/100/1000 Ethernet Controller G20 | -                       |                  |          |                         |             | Full Unknown           |                        |
| e2d       | Quad 10/100/1000 Ethernet Controller G20 | -                       |                  |          |                         |             | Full Unknown           |                        |

## NFS (Network File System) Protocol Usage

### NFS calls by Protocol:

| Protocol | NFS Calls | Bad Calls | Bad Calls % |
|----------|-----------|-----------|-------------|
| TCP      | 0         | 0         | 0.00%       |
| UDP      | 0         | 0         | 0.00%       |

### NFS calls by Version:

| NFS Version | NFS Calls | NFS Calls % |
|-------------|-----------|-------------|
| NFSv2       | 0         | 0.00%       |
| NFSv3       | 0         | 0.00%       |
| NFSv4       | 0         | 0.00%       |

## CIFS (Common Internet File System): Top 5 CIFS Operations

The "CIFS Stat" command shows CIFS related statistics since the last system reboot. These statistics break down the top 5 CIFS operations.

| CIFS operation  | CIFS Calls | CIFS Calls % |
|-----------------|------------|--------------|
| find_first2     | 151355058  | 4.00%        |
| query_file_info | 1203299454 | 31.00%       |
| query_path_info | 449236900  | 12.00%       |
| readX           | 606702815  | 16.00%       |
| writeX          | 1016990036 | 26.00%       |

## MultiStore (vFiler)

| vFiler Name   | vFiler State | vFiler IP Space  | UUID (Universal Unique ID)           |
|---------------|--------------|------------------|--------------------------------------|
| vfiler0       | RUNNING      | default-ipospace | 00000000-0000-0000-0000-000000000000 |
| zrhvnascti001 | RUNNING      | default-ipospace | e74b8640-ff34-11dd-93f9-00a0980dcd4f |
| zrhvnascti003 | RUNNING      | default-ipospace | 571e14b0-ff35-11dd-93f9-00a0980dcd4f |

## ASUP (AutoSupport) Status

| ASUP Category                 | Value                                                                      |
|-------------------------------|----------------------------------------------------------------------------|
| autosupport.enable            | on                                                                         |
| autosupport.mailhost          | mailhub-vip.ny.ssmb.com,mailhub-dc1.eu.ssmb.com,mailhub-dc2.eur.nsroot.net |
| autosupport.noteto            | nas.alerts@citi.com                                                        |
| autosupport.support.enable    | on                                                                         |
| autosupport.support.proxy     | webproxy.wlb.nsroot.net:8080                                               |
| autosupport.support.to        | autosupport@netapp.com                                                     |
| autosupport.support.transport | https                                                                      |
| autosupport.support.url       | support.netapp.com/asupprod/post/1.0/postAsup                              |
| autosupport.to                | intnas.alerts@imceu.eu.ssmb.com                                            |



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