

NetApp SNMP MIBs

[Daniel Prakash](#) 461 posts since

Mar 5, 2008

Where do I find information on the NetApp SNMP MIBs and supported Data ONTAP versions?

[Daniel Prakash](#) 461 posts since

Mar 5, 2008 1. **Re: NetApp SNMP MIBs** Apr 7, 2008 1:58 AM

The NetApp SNMP MIBs are at doc/mib directory. For more information, see the SDK help Getting started with the SDK > Version Matrix.

[hunterzzz](#) 1 posts since

May 2, 2008 2. **Re: NetApp SNMP MIBs** May 2, 2008 11:41 AM

I have a somewhat related question, but specifically regarding querying the device for total disk space in a volume. I am running the following command in order to poll the device for total space used by a volume:

```
#> snmpwalk -c public -v 1 10.66.200.56 .1.3.6.1.4.1.789.1.5.4.1.3.5
```

```
SNMPv2-SMI::enterprises.789.1.5.4.1.3.5 = INTEGER: -2147483648
```

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But it comes back negative whenever the volume in question is over 2TB. Is this a known issue? Is there a work around? When or how can i fix this? It is causing some monitoring problems that i am trying to work around using perl, but so far i am not having any luck.

TIA

[adamfox](#) 220 posts since

Mar 10, 2008 3. **Re: NetApp SNMP MIBs** May 2, 2008 11:54 AM

Until DOT 7.3, ONTAP only supports SNMP v1, and thus can only handle 32-bit values. So you'll find if you look at the MIB file that many values that need more bits are split between high order and low order bits. So to get the true value, you have to combine the 2 values to get the real value.

Starting in ONTAP 7.3, ONTAP supports SNMP v3 which supports larger values.

[jwagner@ea.com](#) 2 posts since

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Dec 24, 2008 4. Re: **NetApp SNMP MIBs** Dec 30, 2008 2:28 PM

I am having the same issue where a volume >= 2TB is reporting as negative. I have switched to v3 and I still have the same issue.

What gives?

I have Data ONTAP Release 7.3 on a netapp 3140 with the latest mib for this OnTap version.

```
zenoss@ears-monitoring ~$ snmpwalk -v 3 -n "" -u USER -l authNoPriv -A PASSWORD  
FILER_HOST -a Md5 1.3.6.1.4.1.789.1.5.4.1.17.75
```

```
SNMPv2-SMI::enterprises.789.1.5.4.1.17.75 = INTEGER: -1349956220
```

Jesse

PS I don't see how "combining the values" is a viable solution. What happens when we get to 4TB? or 8? How do we know many time we have rolled over.

PPS the base OID is SNMPv2-SMI, Could this hv e anything todo with it? Is there a separate tree for v3?

[flank](#) 12 posts since

Mar 19, 2008 5. Re: **NetApp SNMP MIBs** Jan 5, 2009 11:30 AM

You are looking at:

```
dfLowUsedKBytes .1.3.6.1.4.1.789.1.5.4.1.17.76
```

If you support v3, you should be able to query the 64-bit value instead:

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df64UsedKBytes .1.3.6.1.4.1.789.1.5.4.1.30.76

...

If you want to continue using the low/high values for v1, here is the public report for a similar issue:

Some entries in the Quota Table of the SNMP MIB, including but not necessarily limited to qrVKBytesLimit (snmp.1.3.6.1.4.1.789.1.5.4.1.30.76) are signed integers. Workaround:

Post process the value to produce an unsigned 32 bit integer. if $(x < 0) x = 4294967296 + x$

Notes:

For file systems larger than 4TB the qrV2Table(.1.3.6.1.4.1.789.1.4.6) may be used. Starting with ONTAP 6.5 the qrV2Table splits into qrV2TableLow and qrV2TableHigh.

jwagner@ea.com 2 posts since

Dec 24, 2008 6. Re: **NetApp SNMP MIBs** Jan 7, 2009 11:02 AM

Changing the OID worked.

Thanks.

[kvishal](#) 4 posts since

Jul 28, 2009 7. Re: **NetApp SNMP MIBs** Nov 20, 2009 11:05 AM

The MIBs are now moved out of SDK are not bundled as part of SDK.

Please refer to this post <http://communities.netapp.com/docs/DOC-1075#comment-1898>