

## FreeNAS - Bug #25982

### Allow catia VFS object to be enabled independently from fruit and streams\_xattr

09/26/2017 12:47 PM - Andrew Walker

<b>Status:</b>	Resolved	
<b>Priority:</b>	No priority	
<b>Assignee:</b>	Timur Bakeyev	
<b>Category:</b>	OS	
<b>Target version:</b>	11.1-BETA1	
<b>Seen in:</b>	11.0-U2.2	<b>Needs Merging:</b> Yes
<b>Severity:</b>	New	<b>Needs Automation:</b> No
<b>Reason for Closing:</b>		<b>Support Suite Ticket:</b> n/a
<b>Reason for Blocked:</b>		<b>Hardware Configuration:</b>
<b>Needs QA:</b>	No	<b>ChangeLog Required:</b> No
<b>Needs Doc:</b>	Yes	

#### Description

##### Problem:

We can't enable catia by itself. The gui shows that it's added, but the vfs object doesn't appear in the smb4.conf file.

##### Background:

We need to be able to use vfs\_catia to fix how Mac clients write dos stream names to samba. Once this is fixed, we can enable catia on Fredo's box and set the parameter:

```
catia:mappings = 0xE3:0xF022
```

##### More Background:

Macs store the following xattr on their local filesystem for files downloaded from the internet:

"com.apple.metadata:kMDItemWhereFroms". The OSX SMB client writes this as an ADS on SMB shares, but since ":" is an invalid character in NTFS, OSX substitutes it with the unicode private-range character "␣" or 0xF022. We'll use vfs\_catia to convert it back to ":" on the fly to store it on our servers, which will make userland tools happier.

#### Associated revisions

##### Revision 7fbc3a1b - 10/17/2017 12:15 PM - Dru Lavigne

Fine-tune catia description.

Ticket: #25982

#### History

##### #1 - 09/26/2017 02:05 PM - Andrew Walker

Typo regarding catia mappings in original post. Correct values are as follows:

```
catia mappings = 0x3a:0xf022
```

##### #2 - 09/26/2017 04:43 PM - Timur Bakeyev

- Status changed from Unscreened to Needs Developer Review

- Assignee changed from Timur Bakeyev to John Hixson

- Target version set to 11.0-U3

The fix is in the <https://github.com/freenas/freenas/pull/323>

**#3 - 09/26/2017 05:08 PM - Timur Bakeyev**

- Target version changed from 11.0-U3 to 11.0-U4

**#4 - 09/27/2017 10:45 AM - John Hixson**

- Project changed from TrueNAS to FreeNAS

- Category changed from OS to OS

- Target version changed from 11.0-U4 to 11.1

**#5 - 09/27/2017 10:58 AM - John Hixson**

- Status changed from Needs Developer Review to Reviewed by Developer

- Assignee changed from John Hixson to Release Council

Looks good to me.

**#6 - 09/27/2017 12:50 PM - John Hixson**

- Project changed from FreeNAS to TrueNAS

- Category changed from OS to OS

- Target version changed from 11.1 to 11.0-U4

- Migration Needed set to No

I see, this needs to go into TrueNAS. These tickets should be created for FreeNAS first ;-) Timur, is this code in master? is it in FreeNAS 11.0-stable?

**#7 - 09/27/2017 12:55 PM - Dru Lavigne**

- Assignee changed from Release Council to Timur Bakeyev

John: we worked out the process with support at yesterday's releng meeting so this appearing in TrueNAS first for fixes that affect both projects shouldn't happen again (after U4).

**#8 - 09/27/2017 12:56 PM - Dru Lavigne**

- Subject changed from Samba - allow catia to be enabled independently from fruit and streams\_xattr to Allow catia VFS object to be enabled independently from fruit and streams\_xattr

**#9 - 09/27/2017 01:00 PM - Dru Lavigne**

Andrew/John/Timur: for this change, will this Note still be applicable in the Guide:

When using fruit, also add the streams\_xattr and catia VFS objects and be sure to configure all SMB shares this way. Reboot the Mac client after making this change.

**#10 - 09/27/2017 01:02 PM - John Hixson**

Dru Lavigne wrote:

Andrew/John/Timur: for this change, will this Note still be applicable in the Guide:

When using fruit, also add the streams\_xattr and catia VFS objects and be sure to configure all SMB shares this way. Reboot the Mac client after making this change.

The streams\_xattr is required (and added implicitly if fruit is added). Catia is not necessarily needed. Mac clients don't need to reboot, but they do need to disconnect and reconnect.

**#11 - 09/27/2017 01:11 PM - Dru Lavigne**

- Project changed from TrueNAS to FreeNAS
- Category changed from OS to OS
- Target version changed from 11.0-U4 to 11.1-BETA1

Timur: please set to Ready for Release after you merge in the PR.

**#12 - 09/27/2017 02:24 PM - Timur Bakeyev**

- Status changed from Reviewed by Developer to Ready For Release

**#13 - 10/04/2017 02:17 PM - Andrew Walker**

For reference, Catia mappings in vfs\_fruit, which will probably be required to avoid weird unicode characters in xattr names, are as follows:

```
if (config->encoding == FRUIT_ENC_NATIVE) {
    lp_do_parameter(
        SNUM(handle->conn),
        "catia:mappings",
        "0x01:0xf001,0x02:0xf002,0x03:0xf003,0x04:0xf004, "
        "0x05:0xf005,0x06:0xf006,0x07:0xf007,0x08:0xf008, "
        "0x09:0xf009,0x0a:0xf00a,0x0b:0xf00b,0x0c:0xf00c, "
        "0x0d:0xf00d,0x0e:0xf00e,0x0f:0xf00f,0x10:0xf010, "
        "0x11:0xf011,0x12:0xf012,0x13:0xf013,0x14:0xf014, "
        "0x15:0xf015,0x16:0xf016,0x17:0xf017,0x18:0xf018, "
        "0x19:0xf019,0x1a:0xf01a,0x1b:0xf01b,0x1c:0xf01c, "
        "0x1d:0xf01d,0x1e:0xf01e,0x1f:0xf01f, "
        "0x22:0xf020,0x2a:0xf021,0x3a:0xf022,0x3c:0xf023, "
        "0x3e:0xf024,0x3f:0xf025,0x5c:0xf026,0x7c:0xf027, "
        "0x0d:0xf00d");
}
```

**#14 - 10/24/2017 04:48 AM - Dru Lavigne**

- Status changed from Ready For Release to Resolved

**#16 - 11/08/2017 12:39 PM - Bonnie Follweiler**

- File Screen Shot 2017-11-08 at 3.37.59 PM.png added
- Needs QA changed from Yes to No

- QA Status Test Passes FreeNAS added
- QA Status deleted (Not Tested)

## Files

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Screen Shot 2017-11-08 at 3.37.59 PM.png	58 KB	11/08/2017	Bonnie Follweiler
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