

September 7, 2011

Learning! That I should have done a long time ago!

### **BeStMan: Berkeley Storage Manager**

- Definition: A full implementation of SRM v2.2, developed by Lawrence Berkeley National Laboratory, for disk based storage systems and mass storage systems such as HPSS. End users may have their own personal BeStMan that manages and provides an SRM interface to their local disks or storage systems. It works on top of existing disk-based unix file system, and has been reported so far to work on file systems such as NFS, PVFS, AFS, GFS, GPFS, PNFS, and Lustre. It also works with any existing file transfer service, such as gsiftp, http, https and ftp. It requires the minimal administrative efforts on the deployment and maintenance.
- Translation: Manages our storage and helps with file transfer systems?

### **SRM: Storage Resource Management**

- Definition: Is the process of optimizing the efficiency and speed with which the available drive space is utilized in a storage area network (SAN). Functions of an SRM program include data storage, data collection, data backup, data recovery, SAN performance analysis, storage virtualization, storage provisioning, forecasting of future needs, maintenance of activity logs, user authentication, protection from hackers and worms, and management of network expansion. An SRM solution may be offered as a stand-alone product, or as part of an integrated program suite.
- Translation: Manages storage in storage area network, so SE?

### **VDT: Virtual Data Toolkit**

- Definition: An ensemble of distributed computing software that can be easily installed and configured. In our experience, installing distributed computing software from scratch is challenging and time consuming. The goal of the VDT is to make it as easy as possible for users to deploy, maintain and use distributed computing software.
- Translation: Installs software that we need easily within a command or two without a bunch of hassle

### **Yum: Yellow dog Update, Modified**

- Definition: An automatic updater and package installer/remover for rpm systems. It automatically computes dependencies and figures out what things should occur to install packages. It makes it easier to maintain groups of machines without having to manually update each one using rpm. Yum has a plugin interface for adding simple features. Yum can also be used from other python programs via its module interface.
- Translation: Updates and installs RPMs easily

## September 16, 2011

Trying to update or fix certs for bestman, possibly a proxy server certificate or bestman certificate?

```
$sudo su
```

```
# cd /opt/osg-1.2/vdt/var/
```

```
# vdt-update-certs
```

and apparently the CA certificates are up to date.

BTW: I was looking at this

[https://twiki.grid.iu.edu/bin/view/ReleaseDocumentation/Bestman#Enable\\_Updates\\_of\\_the\\_CA\\_Certifi](https://twiki.grid.iu.edu/bin/view/ReleaseDocumentation/Bestman#Enable_Updates_of_the_CA_Certifi)

So, that didn't do anything. ☹ Next lets try something else.

Also on the CA certificates note, they expire June 28, 2011. You can find this out using the following command:

```
# openssl x509 -in /etc/grid-security/hostcert.pem -subject -issuer -dates -noout
```

```
Ssh'd to se and went to /sandbox/phedex/gridcert
```

```
# ./proxyrenew.sh.forpatrick
```

Which gave out the following message:

```
voms_proxy_lifetime: 554190
```

```
###INFO: Fri Sep 16 14:33:38 EDT 2011, voms-proxy and proxy in myproxy server are both good....
```

```
###INFO: check passed.....
```

So, may be not those certs???

Look at error message and google search. ☹

## September 29, 2011

Yum used

- Update or install package

- Can be anywhere to install package, but you need to be root

- Essentially when something needs to be updated, try it with yum first and then if that doesn't work, a more complicated method can be used (i.e. installing a tarball)

VDT used

- From the grid

- Grid problem means that something in vdt is not working

- Basically restart it, usually with bestman problems (even gums perhaps)

- Eventually will need to be updated, would get email from hypernews in which it would be phedex'ed to us and a transfer would need to be approved (CERN account)

Restarting Processes

- Bestman restarted through vdt

- On SE as root:

```
# source /sandbox/bestman-1.2.13/setup.sh
```

```
#vdt-control --on
```

Phedex

Come back to

Squid

On SE as root:

```
# /usr/local/bin/
```

```
# DiagnosticsSE
```

Note: DiagnosticsSE tells you where certificates are

VDT

```
#vdt-control -on (need to source)
```

Certificates

Need to update Host, Container, RSV, and HTTP certificate annually, very good documentation online, note at end of TS-Guide about host cert rename as containercert, httpcert/key need to be owned by a daemon (chown and chgrp)

Phedex certificate is a copy of our grid certificate, when expires, need to put MINE in that folder

Folder: /home/phedex/.globus

Cp from /home/jfischer/.globus (usercontent.pem and ls userkey.pem

Chown from jfischer to phedex

Chgrp from jfischer to phedex

Proxy /sandbox/phedex/gridcert/proxyrenew.sh.forpatrick

In proxyrenew.sh.forpatrick, change **Starred23** to my password!

Need CMS VO

Certificate needs to be registered with CMS VO → need CERN account

Website in TS-Guide

NFS

Restart NFS

```
/sbin/service nfs start
```

Condor

Restart Condor

```
/sbin/service condor start
```

HTTPD

```
Restart : /sbin/service httpd start
```

**October 3, 2011**

The cluster runs on Linux 64 bit.

Twiki stuff:

[http://twiki.org/cgi-bin/view/Codev/TWikiVMDebianStable#Using\\_TWiki\\_VM\\_on\\_Linux\\_and\\_Mac](http://twiki.org/cgi-bin/view/Codev/TWikiVMDebianStable#Using_TWiki_VM_on_Linux_and_Mac)

Premade Twiki? So I just need to tweak it...hahaha

Download:

VMPware Player for 64 bit linux

TWiki VM package: TWikiVMDebianStable 4.0.4

**October 28, 2011**

Swinst SAM test failing, gave an error that looked like the voms-proxy was expired (I googled the error)

```
# voms-proxy-info
```

```
Couldn't find valid proxy
```

```
So, to renew the proxy, I need to have a CMSVO account, i.e. be Xenia, I became her:
```

```
# su xfave
```

```
Then restarted the proxy
```

```
# voms-proxy-init
```

```
Now to see if that fixes anything....
```

```
WAITING GAME!
```