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- □□□ OS dell Dset □□□□ .
- Cacti □□ □□□
- Centos□□ HP PSP□□
- Centos□□ zabbix□□□□
- dell □□ Open Manage Server Administrator□□
- PCP□□□ □□□ □□□□

□□□ OS dell Dset □□□□ .

Dell□□ cli□□□ □□ Tool□ Dset□ Dell□□ □□□□□□ □□ OS□□□□□ □□□ □□□ □□□□ □□ □□□□□ .

(□□□ OS□□ □ □□□ .. □□□□ □□□ .. □□)

1. DellDset □□□□ □□□□ \\ (http://linux.dell.com)
2. Dset □□□□ □□

```
[root@localhost ~]# vi delldset_v2.1.0.112_A00.bin
...
...
# rm -rf $_TEMP_ARCHIVE $_TEMP_PACKAGE_GENERATOR $_TEMPDIR 2> /dev/null
# 178□ □ rm -rf □ □□□□ □□□□ □□□□ □ □□
...
...
□□
```

□□ □ □□

3.
```
[root@localhost ~]# chmod +x delldset_v2.1.0.112_A00.bin
[root@localhost ~]# ./delldset_v2.1.0.112_A00.bin
Choose an option:
1) Read DSET Release Notes First
Show latest information concerning features and known issues

2) Create DSET Report Only
Creates a DSET report and saves it to user's home directory

3) Clear ESM Hardware Log Only
Only clears the ESM Hardware Log contents

4) Install/Upgrade DSET Application
Permanently installs or upgrades the DSET application for repeat use
```

```
Enter option (1-4) or 'q' to quit: q
```

□□□□ □□□ □□ quit □□□□ /tmp□□□ delldset□□ □□□□ □□□ □□□□ □□□□□ .

4. □□ □□ □□

```
# ls -l /tmp
total 8
drwx------. 2 root root 4096 Jul 20 13:28 delldset_v2.1.0.112_A00.bin-1288-4067
```

5. dset□□□ □□

```
[root@localhost ~]# cd /tmp/delldset_v2.1.0.112_A00.bin-1288-4067
[root@localhost ~]# yum localinstall delldset-2.1.0-112.i386.rpm
```

6. dellsysteminfo□□□ □□

```
[root@localhost ~]# which dellsysteminfo
/usr/bin/dellsysteminfo
```

```
[root@localhost ~]# vi /usr/bin/dellsysteminfo
□□□□ –
$RpmPath/dset/bin □□ $RpmPath□ /opt/dell/□□ □□ □□
```

7. dset □□

```
[root@localhost ~]# dellsysteminfo --time --nologs
error: incorrect format: unknown tag
Dell System E-Support Tool
@Copyright Dell Inc. 2004-2010 Version 2.1 build 112
NOTE: Customer information has not been specified yet.
This information is optional but it can assist Dell Technical Support.
Enter your company name:
* Getting Linux system summary information ...
Gathering Network Information ...
Gathering OS Summary Information ...
```

```
* Xsltproc is not installed. Installing now...
* Uninstalling the installed xsltproc..
* Getting Linux operating system configuration information ...
Gathering Boot Information ...
Gathering Module Information ...
Gathering Memory Information ...
Gathering Storage Information ...
Gathering Network Information
Gathering Summary Information ...
* Gathering chassis information...
* Gathering DRAC Information...
* Converting DRAC txt information to XML format...
* Gathering storage information...
Note: Scanning for supported SCSI or RAID controllers... [please wait]
* Collecting storage information...
* Transforming XML files ...
* Xsltproc is not installed. Installing now...
* Uninstalling the installed xsltproc..
* Xsltproc is not installed. Installing now...
* Uninstalling the installed xsltproc..
* Xsltproc is not installed. Installing now...
* Uninstalling the installed xsltproc..
* Creating table of contents ...
* Unloading framework core
* DSET Instrumentation uninstalled successfully
* Compressing report...
A compressed, encrypted ZIP report archive was saved at: /root/DSET_Report_for_123..zip
```

8. dset □□ □□
   - /root□□ DSET_Report□ □□□□ □□□□□ □□□□□□ . □ □□ □□□□ □ dsetreport.hta □□ □□□□□ □□□□ □□□ □ □ □□□□ .
   - □□□ □□□□□ □□□□ □□□ zip□□□□ □□□ □□□□□ □□□□ □□ □□□□ zip□ □□□□□ □□□ . (□□□□ □□□□□ dell □□□ .)

Cacti □□ □□□

□□

1. snmp□ □□□ □□□ □□ □ rrdtool□ □□□ □□□□□ □□□□ (license : GPLv2)
2. simple architecture (
   https://docs.cacti.net/manual:088:2_basics.0_principles_of_operation#basics)
3. Cacti□□ : 0.8.8h□ □□□ □□□ (□□□□ □□), 2017□ 1□□□ 1.x □□□ □□□ □□
   □□□ ,
   1.x□□ □□□ □□□□ □ UI □□□□ □□□□ □□□ □□ □□ □□ (ex.
   php max_execution_time = 60□□ max_execution_time = 3600)
   □□ □□□ □□□ □□□□ □□□□□ □□□□ □□ 1.x□ □□□ □□□□ □□

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1. cacti spine□ □□□□ poller□ □□□□□ □□□ □□ , □□□ □□□ □□□ □□□□ □□
   □□□ □□□□ □□ □□□□ □□□
2. Mysql : □□□□□□□ □□□□□□ □□□□ □□□□ , □□□□ DB□□ □□□□ □□ □□□
   □□□□ □□ □□□ □□□□ □□
3. Apache / Mysql : □□□□□□□ □□□□□ □□□□ □□□□□ □□□□□ □□□ ,
   □□□□□ □□□□□ □□□□ □□□□ □□□□ □□
4. Apache / php : □□□□□ □□□□ □□□ □□ □□□ □ □□□□ □□□ □□ , □□□ □□□
   □□□□ □□□□□
5. OS□ Centos 7□□□ □□□□ □□□□□ , Centos6□□□□ □□□ □□ "Cen6 =" □□ □□
   □□□ □□□□□
6. Cacti □□□ □□□□ □□□□ □□□

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1. Apache : /usr/bin
2. Apache Config : /etc/httpd/conf/
3. Cacti webapp : /svc/cacti/public_html/

□□□□

1. □□□□□□ □□

```
$> yum install rrdtool httpd net-snmp net-snmp-utils net-snmp-devel php-gd php php-snmp gd-devel
php-mysql php-pdo php-mysqli  mariadb-server mariadb-libs -y
```

- Cen6 = mariadb□ □□ mysql□ □□□□ □□□□ □ }}}

1. DB□□ (database □□ / □□□□)

```
# mysql_install_db --force --user=mysql
Installing MariaDB/MySQL system tables in '/var/lib/mysql' ...

# systemctl start mariadb
* Cen6 = /etc/init.d/mysql start □□ □□
```

```
# mysql -u root
MariaDB [(none)]> create database cacti;
Query OK, 1 row affected (0.001 sec)
MariaDB [(none)]> grant all privileges on cacti.* to 'cacti'@'localhost' identified by '{cacti□□□□ }';
Query OK, 0 rows affected (0.000 sec)
MariaDB [(none)]> flush privileges;
Query OK, 0 rows affected (0.000 sec)
```

2. DB□□ □□□

```
mysql -u cacti -p
Enter password: {cacti□□□□ □□ }
```

```
MariaDB [(none)]> use cacti;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A
```

```
Database changed
MariaDB [cacti]>
```

3. Cacti□ □□□ □□ (□□ □□□□ □)

```
# cat /etc/httpd/conf.d/cacti.conf
Listen 8800
<Virtualhost *:8800>
 Documentroot "/svc/cacti/public_html"
 Customlog "logs/cacti-access.log" combined
 errorlog "logs/cacti-error.log"
</Virtualhost>
```

4. Apache □□ □□

```
# vi /etc/httpd/conf/httpd.conf
...
<Directory ></Directory>
   AllowOverride none
   Require all denied <-- □□□□ □□ □□□□ □
</Directory>
...
* Cen6 = Deny from all □□ □□ □□
```

5. apache name□□ (Option)

```
# vi /etc/httpd/conf/httpd.conf
...
ServerName localhost
...
```

6. php □□

```
#vi /etc/php.ini
...
;date.timezone = --> timezone= Asia/Seoul □ □□
```

7. Cacti webapp □□□□ □ □□

```
# mkdir /svc/cacti/
# wget 'https://www.cacti.net/downloads/cacti-0.8.8h.tar.gz'
# tar -zxvf cacti-0.8.8h.tar.gz
```

```
# mv cacti-0.8.8h /svc/cacti/public_html
# cd /svc/cacti/public_html
```

8. Cacti DB □□

```
# mysql -u cacti -p cacti < cacti.sql
Enter password: {cacti□□□□ □□ }}}}
* Cacti DB □□□ □□ □ 2211□□ rows □□□ □□□□□ □□□□ (2217□□ □□□ rows □□□□□
□□ □□ )
```

rows int(12) NOT NULL default '600', --> ₩rows₩ int(12) NOT NULL default '600', □□
□□

9. DB □□ (□□ □□□□ □□□□ □)

```
$> vi /svc/cacti/public_html/include/config.php
...
database_default=□□□□□□□□
database_hostname=DB□□ IP
database_username = □□□□□□ □□ □□□□□
database_password = □□ □□□ □□□□
database_port = DB□□□□
database_ssl = DB□□□ SSL □□□□
url_path = □□□□ □□ □□ (http://127.0.0.1/cacti/□□ □□□□ □□ □□ "/cacti/" □ □□□□□ □
```

10. Apache □□□ □□□□ □□ □ □□□ □□

```
#apachectl configtest
OK
# systemctl start httpd;systemctl enable httpd
Created symlink from /etc/systemd/system/multi-user.target.wants/httpd.service to
/usr/lib/systemd/system/httpd.service.
* Cent6 = /etc/init.d/httpd start;chkconfig httpd on □□ □□
```

11. □□□□ □ □□ □□ □□□□ □□

```
$> ps -ef | grep http
root     32439     1  0 17:54 ?        00:00:00 /usr/sbin/httpd -DFOREGROUND
apache   32441 32439  0 17:54 ?        00:00:00 /usr/sbin/httpd -DFOREGROUND
apache   32442 32439  0 17:54 ?        00:00:00 /usr/sbin/httpd -DFOREGROUND
apache   32443 32439  0 17:54 ?        00:00:00 /usr/sbin/httpd -DFOREGROUND
```

```
apache   32444 32439  0 17:54 ?        00:00:00 /usr/sbin/httpd -DFOREGROUND
apache   32445 32439  0 17:54 ?        00:00:00 /usr/sbin/httpd -DFOREGROUND
root     32512 20163  0 17:55 pts/0    00:00:00 grep --color=auto http

$> netstat -antp | grep httpd
tcp6       0      0 :::8800                 :::*                    LISTEN      32677/httpd
```

12. □□□□□□□ □□ URL : http://{{□□ IP}}:8800
13. select type of install □ new install □□ □ Next
14. □□□□□ □□□□ □□□ □□□ □□ □ □□□ Finish
15. □□ □□□ □□□ user : admin / password : admin
16. □□□□ □□ □□
17. Poller □□ □ □□

```
$> /bin/php /svc/cacti/public_html/poller.php
...
$> echo "* * * * * /bin/php /svc/cacti/public_html/poller.php > /dev/null" >> /var/spool/cron/root
```

Centos□□ HP PSP□□

1. hpe.com □□ □□ □□□ □□□ □□ □□□□
   image-1654668614770.png

2. snmp □□□ □□ □ □□□

```
$> yum install net-snmp -y
```

3. □□ □□

```
$> tar -zxvf hp-psp-8.60-8-CentOS.tar.gz
$> cd psp/CentOS/5/i386/current
```

4. HP PSP □□ □ □□□□

```
$> yum localinstall ./*.rpm
$> /sbin/hpsnmpconfig

This configuration script will configure SNMP to integrate with the HP SIM and
the HP System Management Homepage by editting the snmpd.conf file. The HP-SNMP-Agents can also
exist in a more secure
SNMP environment (e.g. VACM) that you have previously configured. See the
hp-snmp-agents(4) man page for specific details on how to configure the VACM entries
in the ‘snmpd.conf’ file. You may press <ctrl+c> now to exit now if needed.

Do you wish to use an existing snmpd.conf (y/n) (Blank is n): □□

You will now be asked a series of SNMP configuration questions. How you answer
these question will affect the way SNMP behaves. Configuring SNMP could have
security implications on your system. If you are not sure how to answer a
question, you can abort by pressing and no changes will be made to
your SNMP configuration.

Enter the localhost SNMP Read/Write community string
(one word, required, no default): public
Re-enter the same input to confirm: public
ACCEPTED: inputs match!
```

```
Enter localhost SNMP Read Only community string
(one word, Blank to skip):
Enter Read/Write Authorized Management Station IP or DNS name
(Blank to skip): □□
Enter Read Only Authorized Management Station IP or DNS name
(Blank to skip): □□
Enter default SNMP trap community string
(One word; Blank to skip): □□
Enter SNMP trap destination IP or DNS name
(One word; Blank to skip): □□
The system contact is set to
syscontact Root <root@localhost> (configure /etc/snmp/snmp.local.conf)
Do you wish to change it (y/n) (Blank is n): □□
The system location is set to
syslocation Unknown (edit /etc/snmp/snmpd.conf)
Do you wish to change it (y/n) (Blank is n): □□

================================================================
=================
NOTE: New snmpd.conf entries were added to the top of /etc/snmp/snmpd.conf
================================================================
=================
snmpd is started
```

5. HP PSP □□□ □□

```
$> /etc/init.d/snmpd start
$> /etc/init.d/hp-snmp-agents start
$> /etc/init.d/hpsmhd restart
$> /etc/init.d/hp-health start
$> /etc/init.d/hp-asrd start
```

6. PSP □□ □□ □□

```
$> netstat -antp | grep hp
...
tcp   0  0  0.0.0.0:2381    0.0.0.0:*  LISTEN   9035/hpsmhd
tcp   0  0  0.0.0.0:2301    0.0.0.0:*  LISTEN   9035/hpsmhd
...
```

7. PSP □□□□ - http://□□ IP:2381/ (□□□□□ root□□□ □□)
   image-1654668602392.png

8. psp□□□ □□□□

```
$> yum erase hp*
```

9. HP □□□□ □□

□□□	□□□
hp-health	hhp □□□□□□□□□□□□□□
hponcfg	iLO □□□□□□□□□□
hp-snmp-agents	□□□ management snmp □□□□
hpsmh	□□□□□□□□□□

hp-smh-templates	□□□□□□□
cpqacuxe	□□□□□□□□□□
hp-ams	iLO□□□□□□□□

Centos□□ zabbix□□□□

OS : Centos6

1. □□□ □□□ □ : apache, php, mysql

```
$> yum install httpd mysql-server -y
```

2. □□□□ □□

```
$> yum install -y net-snmp net-snmp-devel net-snmp-utils curl-devel libxml2-devel
```

3. □□ &□□

```
$> groupadd zabbix
$> useradd -g zabbix zabbix

$> tar -zxvf zabbix-2.4.5.tar.gz
$> cd zabbix-2.4.5
$> ./configure \
--prefix=/usr/local/zabbix \
--with-mysql=/usr/local/mysql/bin/mysql_config \
--with-net-snmp \
--with-libcurl \
--with-libxml2 \
--enable-server \
--enable-agent
$> make;make install
```

* □□□□ /usr/local/zabbix, mysql□□ □□□ /usr/local/mysql

4. DB□□

```
$> mysql -u root
mysql> create database zabbix;
mysql> grant all privileges on zabbix.* to zabbix@localhost identified by 'zabbix1';
```

```
mysql> flush privileges;
mysql> quit
```

```
$> cd database/mysql/
$> mysql -u zabbix -p zabbix < schema.sql
$> mysql -u zabbix -p zabbix < images.sql
$> mysql -u zabbix -p zabbix < data.sql
```

* MYSQL import□ □□□□ □□ □

5. Frontent □□

```
$> vi /usr/local/zabbix/etc/zabbix_server.conf
...
DBName=zabbix
DBUser=zabbix
DBPassword=zabbix1
```

*□□□□□ DBName, DBUser, DBPassword□ □□□ □□□ □□□□ □□□□ □□

6. Frontend □□

```
$> cp -ar {□□□ }/frontends/php /usr/local/apache2/htdocs/zabbix
```

7. □ □□□□□ □□ (□□□□□ ID□ Admin, □□□□□ zabbix)

```
http://□□ IP/zabbix
```

dell □□ Open Manage Server Administrator□□

□□□ □□□□

```
$> wget -q -O – http://linux.dell.com/repo/hardware/OMSA_6.3/bootstrap.cgi | bash
$> yum -y install srvadmin-all
$> /opt/dell/srvadmin/sbin/srvadmin-services.sh start
```

□□□□ https://□□ IP:1311

□□□ □□□ root□□

□□□ : Dell 2950, Centos 5.8 x86

centos 6□□□ 32□□□ □□□ □□□ , 64□□□ □□□□□□□ □□□ ..□ _□

URL : http://linux.dell.com/wiki/index.php/Repository/OMSA#Yum_setup

PCP□□□ □□□ □□□□

1. □ □
   1. PCP;Performance Co-Pilot□ □□□□ □□□□ / □□□ / □□ □ □□□ □□ □□□□□ □□□ .
   2. □□□ □□□□ □□ □□□□□ □□□ □□□□□ □□ □□ □□ □□ □□□□
   3. □□□ □□□ □□□□ □ □□ □□
   4. □□ □□ □□ □□
2. □□□ □□ 1. □□□ □□ □□□ □□□ □□ □□
   1. 1. pmcd - □□ □□ □□
      2. pmda - □□ □□ □□□ □□□□ ,
      3. pminfo / pmstat - □□□ □□ / □□ / □□□□
   2. □□□ □□□ □□ □□ □□□ □□ □□□ □□ □□
      1. □□ □□ □□
      image-1659416994705.png
      1. □□ □□ □□ □□

         image-1659416948819.png
      2. □□□□ □□

         image-1659416975056.png
         image-1659416966575.png
   3. □□ □□
      1. pmcd - □□ □□ □□□ □□
      2. pmie - □□ □□ □□

3. pmlogger - □□ □□ □□
4. pmproxy - □□□ □□ □□ □□□□ (REST API □□□)

4. Redhat□□ □□□ □□□ □□ □□ 1.

□□□ □□□ □□□□

□□□	**1~10**	**10~100**	**100~1000**
pmcd	n□	n□	n□
pmlogger	□□1□□□(n□)	n□/10~n□	n□/100~n□
pmproxy	□□1□□□(n□)	n□	n□/100~n□

redis	□□1□□□(n□)	n□~n/10□	n□/100~n/10□
redis□□□□□□□	X	□□	□□
□□□□	□□/□□/□□□□□□	□□/□□/□□□□□	□□or□□□□□

1. □□ □□□□ □□ (□□ □□ □□□□ , 10□ □□ □□)

□□□□	**10**	**50**

□□□□□□□□□(1□□□)	91MB	522MB
pmlogger□□□	160MB	580MB
pmlogger□□□□□□□□(1□□□)	2MB	9MB

pmproxy□□□	1.4GB	6.3GB
Redis□□□(1□□□)	2.6GB	12GB

2. □□ □□□□ □□ (□□ □□ □□□□ , 60□ □□ □□)

□□□	**10**	**50**	**100**
□□□□□□□□□□(1□□□)	20MB	120MB	271MB

pmlogger□□□	104MB	524MB	1049MB
pmlogger□□□□□□□□□(1□□□□)	0.38MB	1.75MB	3.48MB
pmproxy□□□	2.67GB	5.5GB	9GB

Redis□□□(1□□□)	0.54GB	2.65GB	5.3GB