Installation/configuration of openVZ

- Install php, Apache server, mysql server and PhpMyAdmin
- Install OpenVZ and its rpms and configure as per the following steps: http://www.howtoforge.com/installing-and-using-openvz-on-centos5.2
- Please do not use LVM to create partitioning of OpenVZ server. Plain partitioning required for OpenVZ.
- Strictly disabled 'seLinux'
- Install J2SE runtime environment 5.0 to load the ssh applet
- 'Replace and Echo' command should be installed on the server
- Install following perl modules:
    - Expect
    - Net::SCP::Expect
    - Net::SSH::Expect
    - Net::SSH::Perl
    - MIME::Base64

- Create a file named '**copyPublicKey.pl**' under */var/www/cgi-bin directory* and place the following code in to it.

```
#!/usr/bin/perl
use MIME::Base64;
use Net::SCP::Expect;
my $scpe = Net::SCP::Expect->new;
$password = decode_base64(@ARGV[0]);
$serverHostname = decode_base64(@ARGV[1]);
$scpe->login("root", $password);
$scpe->scp('/root/.ssh/id_rsa.pub',$serverHostname.':.ssh/id_rsa.pub');
```

- Following lines should be uncommented under "/etc/ssh/sshd_config"
    - RSAAuthentication yes
    - PubkeyAuthentication yes
    - AuthorizedKeysFile .ssh/authorized_keys
- Install vzdump and vzrestore commands on OpenVZ server.
- Download OS templates under /vz/template/cache/ directory
- Generate and transfer ssh key from panel server to new server

- Yum install gcc
- openVZ VM backup is only to restored when VM itself exists on the server
- OpenVZ VM backup directory location is /backup

Installation/configuration of Xen on new server

- Install php, Apache server, mysql server and PhpMyAdmin
- Install Xen and its rpms and configure as per the following steps: http://www.howtoforge.com/installing-xen-on-centos-5.2-i386
- Second drive partition should be Linux LVM
- Strictly disabled 'seLinux'
- Install J2SE runtime environment 5.0 to load the ssh applet
- 'Replace and Echo' commands should be installed on the server
- Install following perl modules:
    - Expect
    - Net::SCP::Expect
    - Net::SSH::Expect
    - Net::SSH::Perl
    - Unix::PasswdFile
    - MIME::Base64

- Following lines should be uncommented under "/etc/ssh/sshd_config"
    - RSAAuthentication yes
    - PubkeyAuthentication yes
    - AuthorizedKeysFile .ssh/authorized_keys
- Make following necessary changes in the /etc/xen/xend-config.sxp file
    - (xend-relocation-server yes)
    - (xend-relocation-port 8002)
    - (xend-relocation-address '10.0.0.1')
    - Do not use 'xm destroy' after vm migration
- logical volume group name must be 'vg0' only
- Create a file named 'changepasswd.pl' under / *var/www/cgi-bin directory* and place the following code in to it.

```
#!/usr/local/bin/perl
$newpass = @ARGV[0];
$lvg = @ARGV[1];
```

```
use Unix::PasswdFile;
$pw = new Unix::PasswdFile "/mnt/".$lvg."/etc/passwd";
$pw->passwd("root", $pw->encpass($newpass));
$pw->commit();
```

- Create a file named 'copyPublicKey.pl' under / *var/www/cgi-bin directory* and place the following code in to it.

```
#!/usr/bin/perl
use MIME::Base64;
use Net::SCP::Expect;
my $scpe = Net::SCP::Expect->new;
$password = decode_base64(@ARGV[0]);
$serverHostname = decode_base64(@ARGV[1]);
$scpe->login("root", $password);
$scpe->scp('/root/.ssh/id_rsa.pub',$serverHostname.':.ssh/id_rsa.pub');
```

- Create a directory named 'templates' under /etc/xen/ and download OS images [templates]
- Directory names for storing OS images [templates] under /etc/xen/templates/ must be as follows:
    - For 32bit xen OS images [templates]:-
        - CentOS5.5_32bit
        - Debian5.0_32bit
        - Ubuntu10.04_32bit
    - For 64bit xen OS images [templates]:-
        - CentOS5.5_64bit
        - Debian5.0_64bit
        - Ubuntu10.04_64bit

  Please change the version numbers according to your os image version
- Generate and transfer ssh key from panel server to new server
- Create a directory named 'backup' on / partition [/backup] to store xen VM backups
- Yum install gcc
- Xen VM backup directory location is /root/vmbackup/

Note: Once the Xen VM gets restored from backup then it will get rebooted automatically, so it will be in proper status after reboot process.