
Subject: How to create our own templates?

Posted by [acerbaturix](#) on Thu, 08 Sep 2005 15:15:29 GMT

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Hello,

I was looking for information about how to create my own OS Template, and I don't found anything.

It is possible or we are limited to only the "official" OS Templates?

Thanks for your time.

Subject: Re: How to create our own templates?

Posted by [kir](#) on Thu, 08 Sep 2005 15:42:38 GMT

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There is still no documentation on how to create OS templates, and it's me whom to blame I will write one soon, sure!

Still, it's not very complicated task, and I will describe it here in very short form. First you need to read OS template cache preparation to learn the terms used below, and some background info about templates. Any questions - please ask.

In order to have a OS template, you need to create its metadata first. Metadata is basically a list of packages to be installed, a list of (yum) repositories that have those packages, a few scripts to be executed on various stages of template cache creation. Also you need to have a few packages of your own, to provide things which are not needed inside a VPS (e.g. kernel).

Currently, the only distributions supported by packaging tools (vzpkg) are RPM-based distros, e.g. Red Hat, Fedora, CentOS, and probably SuSE and Mandriva (nobody tried last two distros yet). Actually, OpenVZ supports any distros, e.g. Debian, Gentoo etc., it is not RPM-specific, but tools currently exists only for RPM.

I will continue tomorrow or this night. Please let me know if this is what you need (e.g. if you want to create Debian template I can't currently help you).

Subject: Re: How to create our own templates?

Posted by [dev](#) on Mon, 12 Sep 2005 08:00:59 GMT

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Kir, please, create a bug in bugzilla to add a separate document in "Documentation" tab.

Subject: Re: How to create our own templates?
Posted by [dim](#) on Mon, 12 Sep 2005 09:17:08 GMT
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This bug is already there, no need to add new one -
http://bugzilla.openvz.org/show_bug.cgi?id=7

Subject: Re: How to create our own templates?
Posted by [kir](#) on Mon, 12 Sep 2005 10:26:56 GMT
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IMHO this should be described in user's guide. well, separate article won't hurt.

The problem is I'm currently changing template tools, some of the changes will be incompatible (addition of "architecture" to templates, using different versions of privately-provided RPM binaries and libs) and will require changes in docs. Thus I want to incorporate all these changes and deliver newer template tools and templates, then document all that.

PS barmaley@ was able to create FC1 distro without any docs in half a day. same for dim@, only the distro was centos4.

Subject: Re: How to create our own templates?
Posted by [medved](#) on Thu, 25 May 2006 16:06:17 GMT
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Can You give me information how to create Red Hat based templates (RH 7.2, RH 9, RHEL3).

Subject: Re: How to create our own templates?
Posted by [kir](#) on Thu, 25 May 2006 17:19:11 GMT
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Basically, our template tools are using yum with --installroot argument and separate configuration file with yum repos specified for the given distro.

You can just copy over the whole physical server with RH7.3 installed, tar it, put into /vz/template/cache directory and use.

Additional tricks are:

1. removing getty lines from /etc/inittab
 2. adding - (minus, dash) signs before file names in /etc/sysctl.conf (for better I/O performance).
-

3. linking /etc/mtab to /proc/mounts for df etc. to work:

```
rm /etc/mtab
```

```
ln -s /proc/mounts /etc/mtab
```

4. Setting

```
PROMPT=no
```

in /etc/sysconfig/init (on distros which have that).

5. removing some cron jobs from /etc/cron.daily

And so on. Strictly speaking they are not required for you newly created template to work -- but highly recommended.

Subject: Re: How to create our own templates?

Posted by [vmvmvm](#) on Fri, 26 May 2006 03:13:11 GMT

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kir wrote on Thu, 25 May 2006 13:19

You can just copy over the whole physical server with RH7.3 installed, tar it, put into /vz/template/cache directory and use.

I thought a 7.3 install would not work because it uses a different kernal. I thought all ve's need to run the same base kernal?

Subject: Re: How to create our own templates?

Posted by [kir](#) on Fri, 26 May 2006 06:24:24 GMT

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VEs do not run a kernel -- they use the host system's kernel. So it does not matter what kernel you have in a VE and if you have it at all.

Subject: Re: How to create our own templates?

Posted by [dev](#) on Fri, 26 May 2006 06:42:33 GMT

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2.6 kernel is pretty good backward compatible with 2.4. You can safely run Redhat7.3 on OpenVZ, the only thing you should care about is NX bit support. If your processor supports NX bit, then you will need to add 'noexec=off' to kernel commandline (and reboot). You can simply add

this parameter by default if don't know whether CPU supports it or not (cat /proc/cpuinfo, line "flags: ... nx... ").

Subject: Re: How to create our own templates?
Posted by [vmvmvm](#) on Fri, 26 May 2006 14:54:33 GMT
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dev wrote on Fri, 26 May 2006 02:42 You can safely run Redhat7.3 on OpenVZ

Awesome! Does anyone have a 7.3 template? Would make my life so much better. Right now I have to run 7.3 in Microsoft's crappy "Virtual PC" product when I need access to a 7.3 machine.

If anyone has a 7.3 template I would love to have a copy of it (I'm afraid I still don't quite understand the process of building my own template - though I'm going to try again tonight!)
