Subject: faking arch
Posted by dlzinc on Tue, 23 May 2006 21:10:49 GMT
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I have a 64-bit system running a 64-bit kernel and a mix of CentOS 64-bit and CentOS 32-bit VEs. The problem is that some software uses the (uname) arch to determine whether the system is running a 64-bit OS or a 32-bit OS, of course it gets confused when it can't find 64-bit libraries in CentOS 32-bit...

Is there a way I can fake arch per-vps? i.e. have it so that calls made to the kernel requesting it to report the arch will report x64_64 for some VEs and i686/i386 for others?

Subject: Re: faking arch
Posted by almahdi on Sat, 24 Jun 2006 07:11:01 GMT
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You may want to replace the uname binary with this simple bash script:

```
#!/bin/bash

case "$1" in
'-a')
  echo "Linux $HOSTNAME 2.6.13 #1 Sat Sep 3 21:11:20 PDT 2005 i686 unknown unknown
GNU/Linux"
  ;;
'-n')
  echo "$HOSTNAME"
  ;;
'-r')
  echo "2.6.13"
  ;;
'-v')
  echo "#1 Sat Sep 3 21:11:20 PDT 2005"
  ;;
'-m')
  echo "i686"
  ;;
'-p')
  echo "unknown"
  ;;
'-i')
  echo "unknown"
  ;;
'-o')
  echo "GNU/Linux"
  ;;
```

```
*)
  echo "Linux"
esac
```

Dont forget to give it executable rights.

You may want to change the kernel version too..

Subject: Re: faking arch
Posted by dev on Sun, 25 Jun 2006 07:14:43 GMT
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there is so called setarch.rpm with setarch utility exactly for this. Also, starting from some version vzctl should call setarch itself if VPS init is 32bit.

Subject: Re: faking arch
Posted by dlzinc on Mon, 26 Jun 2006 02:27:31 GMT
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The uname script only works for things that actually call /bin/uname. At the moment, I've replaced /bin/bash with a slightly modified setarch that setarch's then runs the real bash. Is there a bug open or version-eta for the vzctl setarch feature?

Something interesting...
If I do:
setarch i686 vzctl start 200
then SSH into the VPS and do uname -ar, it will say i686. If I do vzctl enter 200, it'll say x86_64.

So for now, a "cleaner" solution seems to be doing setarch to vzctl.

Subject: Re: faking arch
Posted by dev on Mon, 26 Jun 2006 08:34:59 GMT
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Can you please post a bug in http://bugzilla.openvz.org, Igor will check then.
This will help tracking and make sure it will be fixed, not lost.