Alternate Installation Methods Documentation

Release 0

ZCA

July 18, 2016

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CHAPTER 1

Latest Current Packages

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1.1 RHEL/Centos/Scientific Linux

Version	Arch	EL 5	EL 6
4.1.70-1460	i386	EL5_i386_4.1.70-1460	*EL6_i386_4.1.70-1460*
	x86_64	EL5_x86_64_4.1.70-1460	*EL6_x86_64_4.1.70-1460*
4.1.70-1459	i386	EL5_i386_4.1.70-1459	*EL6_i386_4.1.70-1459*
	x86_64	EL5_x86_64_4.1.70-1459	*EL6_x86_64_4.1.70-1459*
4.1.70-1455	i386	EL5_i386_4.1.70-1455	*EL6_i386_4.1.70-1455*
	x86_64	EL5_x86_64_4.1.70-1455	*EL6_x86_64_4.1.70-1455*

1.2 Ubuntu/Debian

Version	Arch	Ubuntu 10x LTS	Ubuntu 11.x
4.1.70-1460	i386	*UB10_i386_4.1.70-1460*	*UB11_i386_4.1.70-1460*
	x86_64	*UB10_x86_64_4.1.70-1460*	*UB11_x86_64_4.1.70-1460*
4.1.70-1459	i386	*UB10_i386_4.1.70-1459*	*UB11_i386_4.1.70-1459*
	x86_64	*UB10_x86_64_4.1.70-1459*	*UB11_x86_64_4.1.70-1459*
4.1.70-1455	i386	*UB10_i386_4.1.70-1455*	*UB11_i386_4.1.70-1455*
	x86_64	*UB10_x86_64_4.1.70-1455*	*UB11_x86_64_4.1.70-1455*

1.3 Suse Linux

Version	Arch	SUSE LES 11x	openSUSE 12x
4.1.70-1460	i386 x86_64	*SU11_i386_4.1.70-1460* *SU11_x86_64_4.1.70-1460*	*SU12_i386_4.1.70-1460* *SU12_x86_64_4.1.70-1460*
4.1.70-1459	i386 x86_64	*SU11_i386_4.1.70-1459* *SU11_x86_64_4.1.70-1459*	*SU12_i386_4.1.70-1459* *SU12_x86_64_4.1.70-1459*
4.1.70-1455	i386 x86_64	*SU11_i386_4.1.70-1455* *SU11_x86_64_4.1.70-1455*	*SU12_i386_4.1.70-1455* *SU12_x86_64_4.1.70-1455*

CHAPTER 2

Setup a ZCA Build Server

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2.1 Intro

Lets use Chef to provision build servers. Start by getting the chef client installed onto your new build server machine. Don't worry about Chef server we will only by using Chef-Solo

2.2 Install Chef Client

The following command, run as root, should install the Chef Client on most 'nix systems:

```
curl -L http://www.opscode.com/chef/install.sh | sudo bash
```

2.3 Configure Chef Solo with a ZCA Flare

Run the following commands to get setup to use the ZCA build cookbooks:

```
cd /tmp
wget --no-check-certificate -N https://github.com/ZCA/Packages/zipball/master -O master.zip
#the output folder name is random, hence the move
unzip master.zip && mv ZCA-Packages* zca_packages
mkdir /etc/chef
cp /tmp/zca_packages/chef-repo/.chef/solo.rb /etc/chef
#Create an alias to save typing, not required
alias chefzca='chef-solo -c /tmp/zca_packages/chef-repo/.chef/solo.rb -j /tmp/zca_packages/chef-repo/
```

2.4 Chef Will Take It From Here

That should pretty much do it, just kick chef-solo into gear using our new alias:

```
chefzca
```

I noticed on Centos 5.7, that something in the RabbitMQ recipe croaks on first execution, running chefzca a second time (doing nothing else), results in everything completing without error

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Building EL6 Packages

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CHAPTER 4

Building Ubuntu Packages

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4.1 Setup Build Server

Start by setting up a build server using our chef cookbooks Setup a ZCA Build Server

Next Install a Few extra packages. This will get included into the main cookbooks, if this process pans out

    sudo apt-get install dpkg-dev debhelper devscripts fakeroot linda dh-make

4.2 Get to Work

Start by getting logged in as the zenoss user and getting into the source directory:

```
sudo su - zenoss
cd ~/install-sources
```

Use *dh_make* to setup some structure:

```
dh_make -n -s -p zenoss_4.1.70
```

Edit *debian/control*. @Todo: Flush This Out

Edit *debian/rules*. @Todo: Flush This Out

Kick off a build:

```
fakeroot debian/rules clean
```

4.3 References

The following pages were used as references when deriving this process.

- http://www.debian.org/doc/manuals/maint-guide/maint-guide.en.pdf
- http://www.debian-administration.org/articles/336
- http://www.debian-administration.org/article/337/Rolling_your_own_Debian_packages_part_2
- http://grumbel.blogspot.com/2010/05/how-to-build-ubuntu-package.html
- http://answers.oreilly.com/topic/451-how-to-create-an-ubuntu-package/

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Source Installation EL6

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9.1 64 Bit

9.1.1 What Is This

Notes from my attempt to install Alpha 4 on Centos 6.2 from Source

THIS DOES NOT WORK YET

9.1.2 Prepare Server For Building

9.2 Manually Prepare The Server

This is the process that worked for me, it may not be the most optimal and your mileage may vary. In some cases I've split groups of commands onto multiple lines for readability

Start by turning off iptables. Security nuts, feel free to open only the required ports as listed in the official installation guide:

```
service iptables stop
chkconfig iptables off
```

Ensure your umaks is set:

```
umask 022
```

Install Pre-Req Packages:

```
yum -y install binutils gcc make swig autoconf wget
```

Download and Install MySQL Components:

```
cd /tmp
wget http://www.mysql.com/get/Downloads/MySQL-5.5/MySQL-server-5.5.21-1.linux2.6.x86_64.rpm/from/http
wget http://www.mysql.com/get/Downloads/MySQL-5.5/MySQL-client-5.5.21-1.linux2.6.x86_64.rpm/from/http
wget http://www.mysql.com/get/Downloads/MySQL-5.5/MySQL-devel-5.5.21-1.linux2.6.x86_64.rpm/from/http
rpm -ivh MySQL-client-5.5.21-1.linux2.6.x86_64.rpm
rpm -ivh MySQL-server-5.5.21-1.linux2.6.x86_64.rpm
rpm -ivh MySQL-devel-5.5.21-1.linux2.6.x86_64.rpm
```

Configure MySQL to start automatically, start it and ensure a blank password:

```
chkconfig mysql on
service mysql start
mysqladmin -u root password ''
mysqladmin -u root -h localhost password ''
```

Install Pre-Req Packages:

```
#Splitting on multiple lines for readability only
yum -y install tk unixODBC memcached perl-DBI net-snmp net-snmp-utils gmp bc
yum -y install libgomp libgcj.x86_64 libxslt liberation-fonts-common unzip
chkconfig memcached on
service memcached start
```

Install erlang (Needed by RabbitMq). I'm not aware of an available RPM, so from source Additionally, I couldnt get around using epel for this. Someone with some more skillz than me, might be able to get this working without epel:

```
rpm -ivh http://download.fedoraproject.org/pub/epel/6/i386/epel-release-6-5.noarch.rpm
yum -y install erlang
#done with epel, remove it
rpm -e epel-release
```

Install RabbitMQ:

```
wget http://www.rabbitmq.com/releases/rabbitmq-server/v2.7.1/rabbitmq-server-2.7.1-1.noarch.rpm
rpm -ivh rabbitmq-server-2.7.1-1.noarch.rpm
chkconfig rabbitmq-server on
service rabbitmq-server start
```

Create a zenoss user for RabbitMQ (Internal to RabbitMQ User):

```
rabbitmqctl add_user zenoss zenoss
rabbitmqctl add_vhost /zenoss
rabbitmqctl set_permissions -p /zenoss zenoss '.*' '.*' '.*'
```

Install Java JRE:

```
wget http://download.oracle.com/otn-pub/java/jdk/6u31-b04/jre-6u31-linux-x64-rpm.bin
chmod +x jre-6u31-linux-x64-rpm.bin
./jre-6u31-linux-x64-rpm.bin
```

Install Python27 (This method MIGHT be dangerous for YUM, I don't know enough yet to be sure) Maybe look at creating an RPM: https://bitbucket.org/st3fan/fxhome/changeset/9386908e927d:

```
wget http://www.python.org/ftp/python/2.7.2/Python-2.7.2.tgz
tar -zxvf Python-2.7.2.tgz
```

```
cd Python-2.7.2
./configure -with-zlib=/usr/include
make
make install
echo /usr/local/lib >> /etc/ld.so.conf
```

Setup User and Environment:

```
useradd zenoss

echo export ZENHOME=/opt/zenoss >> /home/zenoss/.bash_profile
echo export PYTHONPATH=$ZENHOME/lib/python:$ZENHOME/ >> /home/zenoss/.bash_profile
echo export PATH=$ZENHOME/bin:$PATH >> /home/zenoss/.bash_profile
echo export INSTANCE_HOME=$ZENHOME >> /home/zenoss/.bash_profile

mkdir /opt/zenoss
chown zenoss /opt/zenoss
```

Install Subversion Client and Pull The Source:

```
yum -y install svn gcc-c++ protobuf-c libxml2-devel pango-devel
```

Install Maven. We need the Java JDK for this:

```
wget http://download.oracle.com/otn-pub/java/jdk/6u31-b04/jdk-6u31-linux-x64.bin
chmod +x jdk-6u31-linux-x64.bin
./jdk-6u31-linux-x64.bin
#press enter when prompted
mv jdk1.6.0_31 /usr/java

http://linux-files.com//maven/binaries/apache-maven-3.0.4-bin.tar.gz
tar -zxvf apache-maven-3.0.4-bin.tar.gz -C /opt
ln -s /opt/apache-maven-3.0.4/bin/mvn /usr/sbin/mvn
```

Setup for building:

```
mkdir /opt/zenoss
chown zenoss:zenoss /opt/zenoss
su - zenoss
PATH=/opt/zenoss/bin/:$PATH:/usr/java/jdk1.6.0_31/bin/
PYTHONPATH=$PYTHONPATH:$ZENHOME/
```

9.3 Prepare the Server using Chef-Solo

Setup a ZCA Build Server

9.3.1 Start The Build Process

Clone the svn repo:

```
sudo su - zenoss
umask 022
cd /tmp
svn co http://dev.zenoss.org/svn/trunk/inst zenossinst
```

Kick off the installation script:

```
cd zenossinst
./install.sh
```

Fix some files

- Insert the following into line *160* of install-functions.sh. It appears that this file gets created without execute permissions (despite our umask) and needs to be executable:

```
        chmod a+x $ZENHOME/bin/zenglobalconf
```

Answer as Follows (all Defaults):

```
Relstorage db type [mysql]:
Relstorage host [localhost]:
Relstorage port [3306]:
Relstorage admin username [root]:
Relstorage admin password []:
Relstorage database name [zodb]:
Relstorage db username [zenoss]:
Relstorage db user password [zenoss]:
ZEP db type [mysql]:
ZEP db host [localhost]:
ZEP db port [3306]:
ZEP db admin username [root]:
ZEP db admin password []:
ZEP db name [zenoss_zep]:
ZEP db username [zenoss]:
ZEP db password [zenoss]:
RabbitMQ hostname [localhost]:
RabbitMQ SSL [y/N]:
RabbitMQ port [5672]:
RabbitMQ virtual host [/zenoss]:
RabbitMQ username [zenoss]:
RabbitMQ password [zenoss]:
```

Go get a coffee or soda, your going to be waiting for a while

9.4 32 Bit

TBD

CHAPTER 10

Source Installation Ubuntu

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