

Cloning Yum Repo locally

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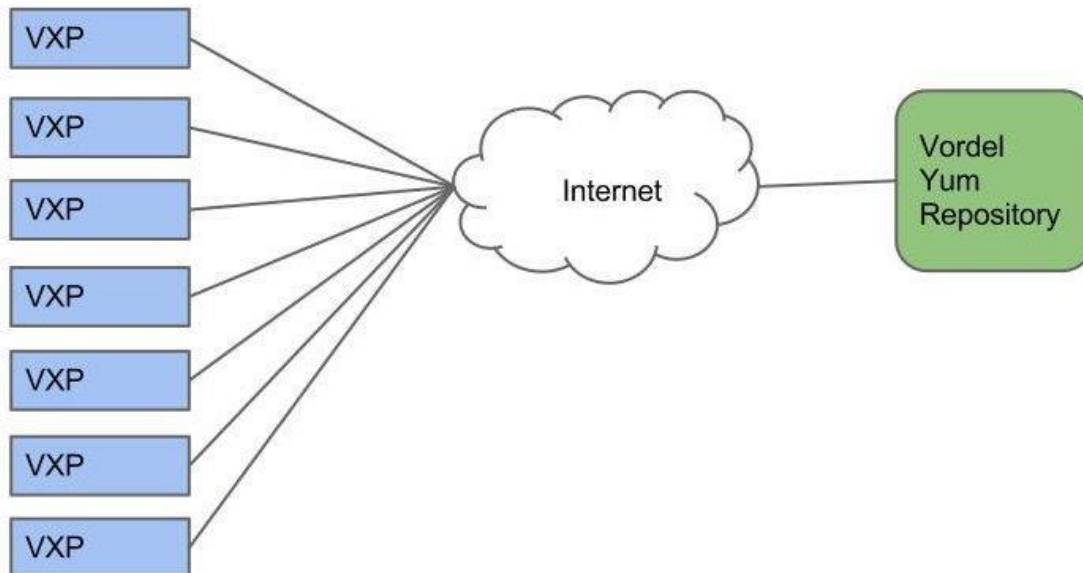
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Introduction

This document describes the steps necessary to create a local mirror of the Vordel kingsofsoa yum repository. The kingsofsoa yum repository contains all the latest updates for the appliance software. The Appliance is pre-configured to connect to this repository over the internet.

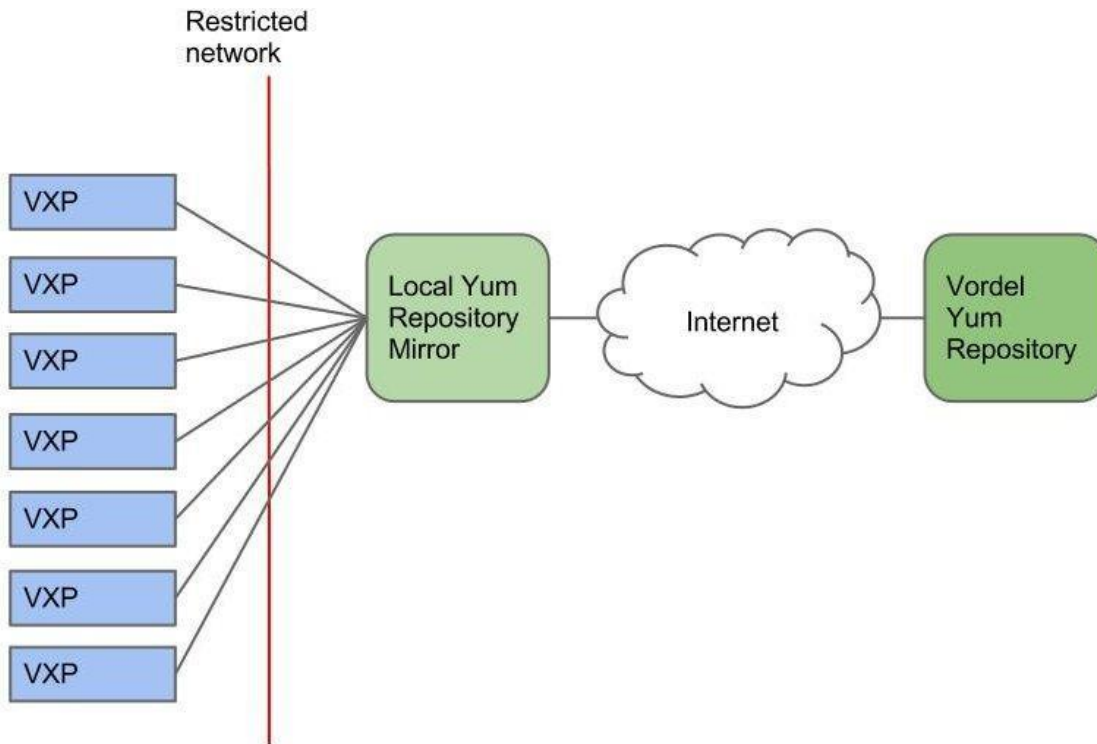
Typical Upgrade Scenario



In some cases the deployment may reside on a restricted network where the Appliances are not able to connect to the Vordel Yum repository across the internet. To support this case it is recommended to set up a local mirror of the Vordel repo and then configure the Appliance(s) on the restricted network to connect to this local repo for the updates. This local repo machine will need a connection over the internet

to the Vordel repo both for the initial mirror step, and periodically to check for updates to any packages.

Upgrade Scenario with Local Yum Repository Mirror:



To facilitate Appliance upgrade in a Restricted network you must:

1. Create a Local Mirror of the Vordel Yum Repository
2. Modify the Appliance Yum configuration to point to the new Local Mirror for updates. This involves installing a new .repo file in /etc/yum.repos.d on the Appliance

Provided in the document are the steps to modify a VXP Appliance to act as a local yum mirror. This Appliance can either be a physical machine, or a VM - whichever is more suited to the deployment. The Vordel Gateway is used as a http server to allow connections from systems requiring upgrade. A tool is included which will generate a .repo file based on the new Local Repository Mirror.

If the user is familiar with administration and maintenance of yum repositories then it is possible for them to clone the Vordel repo at <http://kingsofsoa.vordel.com/vordel> on their own webserver and then create a yum.repo file for each Appliance on their restricted network.

Requirements

These instructions relate to setting up the local yum repository mirror on a Vordel VXP Appliance. It must be the OEL variant of the Appliance and have a version greater than 6.1.2.

For this it is necessary to have:

1. A system which can access the internet and the restricted network. Note that it is not necessary for the system to be able to access both networks simultaneously. It only needs connectivity to

the internet for the initial setup of the yum repo mirror, and for any updates thereafter.

2. A copy of the `appliance-kingsofsoa-mirror` RPM. This RPM contains tools to ease the setup of the mirror, and can be installed itself through yum.

Install the mirror RPM

Log into the mirror system as root and run the following command to install the `appliance-kingsofsoa-mirror` RPM.

```
# yum install -y appliance-kingsofsoa-mirror
```

After the installation has finished there will be a `kingsofsoa-mirror` directory installed under `/opt`

Create a Local version of the Vordel yum repository

While logged into the mirror system as root, run the following commands

```
# cd /opt/kingsofsoa-mirror/bin
# ./update-local-repo.sh
```

Depending on the speed of your network this command may take some time. There is ~1.5GB of data to mirror. During this time the output is written to `/opt/kingsofsoa-mirror/trace/mirror.log`

After the command has completed there will be a directory structure under `/opt/kingsofsoa-mirror/localrepo`

You should be able to see approximately 600-700 RPMs under `/opt/kingsofsoa-mirror/localrepo/kingsofsoa.vordel.com/vordel/`

Create a .repo file for upgrade machines

The details of your new yum repository (the new local mirror) must be stored on the Appliances you wish to upgrade. This allows the Appliances on the restricted network to point to the new Local Repository Mirror. Without the following changes the Appliances on the restricted network would attempt to connect to the Vordel Yum Repository across the Internet.

The details of the Yum repository to which an Appliance connects is stored in files under `/etc/yum.repos.d` on that Appliance.

A new `.repo` file must be installed in this directory on each Appliance you wish to upgrade.

To create a new repo file for your mirror carry out the following steps on your new Local Yum Repository:

```
# cd /opt/kingsofsoa-mirror/bin
# ./create-yum-repos-file.sh
```

This will create a file `/opt/kingsofsoa-mirror/kingsofsoa-mirror.repo`
In this file the address of your mirror is given in the line:

```
baseurl=http://<IP-Address-of-first-interface>/localrepo
eg
baseurl=http://192.168.0.165/localrepo
```

The IP address used is the IP address of the first interface. You may need to change the value of the URL to match a different IP address on your system. Copy this file to a safe place. In a later step it will need to be added to each Appliance for upgrade.

Start the http server for the yum mirror

A special configuration file allows the Vordel software on the appliance to serve out the files contained in the local yum repo mirror. This server binds to port 80, therefore if you have any services already listening on port 80 it is recommended that they are stopped. You will have to run this server as root, unless the gateway on this system has been configured to run as a non-root user. It is recommended that the Local Yum Repository is only enabled when providing updates.

Note that for **v 6.1.2/6.2.0** of the Vordel Appliance the firewall blocks port 80 by default. You must either open that port in the firewall for v6.1.2/6.2.0, or stop the firewall altogether using the command `# service iptables stop`

To start the repo server run the following:

```
# cd /opt/kingsofsoa-mirror/bin
# ./start-local-repo.sh
```

Install the .repo file on each upgrade machine

This will update the Yum configuration on each Appliance you wish to upgrade. It configures the system to connect to the new Local Yum Repository mirror as opposed to the usual Vordel Yum Repository over the internet.

Log in as root on any machine you wish to upgrade and follow these steps:

1. Remove the files under `/etc/yum.repos.d`
2. Copy the newly created `kingsofsoa-mirror.repo` file to `/etc/yum.repos.d`
3. Execute the command `# yum clean all`

You can now check that the local repo can be detected by running the following:

```
# yum check-update
Loaded plugins: security
kingsofsoa-local
| 951 B      00:00      kingsofsoa-local/primary
```

```
| 688 kB      00:00      kingsofsoa-local
968/968
Skipping security plugin, no data
```

Note that the repo listed is kingsofsoa-local

You may see a list of packages to be updated such as:

Cavium_OEL_Appliance.x86_64	7.0.1-1	kingsofsoa-local
NetworkManager.i386	1:0.7.0-13.e15	kingsofsoa-local
NetworkManager.x86_64	1:0.7.0-13.e15	kingsofsoa-local
NetworkManager-glib.i386	1:0.7.0-13.e15	kingsofsoa-local

Perform upgrade

Log in as root on any machine you wish to upgrade and initiate the update as per the usual upgrade instructions.