Sample IPVS Scripts
Sample IPVS Scripts

These sample scripts are to start and configure your router with EzPlanet ipvs firmware to run as a Layer 2 Load Balancer, based on LVS (kernel ip_vs modules + ipvsadm).

The Load Balancer will work on any network interface associated to your router/load balancer.

This sample is to configure the internal interface (private network) to load balance one virtual service on two real servers. With **ipvsadm** we can instruct the load balancer to forward only specific ports, however to maintain a simple example here I have specified **port:0** which means, every incoming request on any port will be forwarded to the real server.

Before you begin:

1. Make sure that jffs2 is enabled (must have 8MB Flash or more) Administration->JFFS2 Enable
2. Make sure that nvram rc_startup is set to /jffs/etc/rc.local as follows

```
nvram set rc_startup="/jffs/etc/rc.local" nvram commit
```

The following scripts are represented with their full path. Create the directories as needed.

/jffs/etc/rc.local

```
for i in /jffs/etc/init.d/S* ; do $i start done echo '* * * * * root
/jffs/sbin/checkRealServers.sh' >> /tmp/cron stopservice cron && startservice cron
```

/jffs/etc/init.d/S10ipvsadm

```
: BASE_DIR=/jffs/etc/ipvsadm.dinsmod ip_vs_wlc insmod ip_vs_lccd $BASE_DIR for f in `ls vlan*`;
do INT=10 for i in `cat $f` ; do ifconfig $f:$INT $i netmask 255.255.255.255 up iptables -I
INPUT -d $i/32 -j ACCEPT INT=`expr $INT + 1` done donefor i in ${BASE_DIR}/*.vs ; do ipvsadm -R
< $i done for i in ${BASE_DIR}/*.start ; do ipvsadm -R < $i doneipvsadm --start-daemon master
--mcast-interface vlan0
```

This is the list of virtual servers (on the internal private lan):

/jffs/etc/ipvsadm.d/vlan0

```
192.168.10.10
```

Real server **one** enable code:

/jffs/etc/ipvsadm.d/192.168.10.23.up

```
-a -t 192.168.10.10:0 -r 192.168.10.23 -g -w 1 -a -u 192.168.10.10:0 -r 192.168.10.23 -g -w 1
```

Real server **two** enable code:

/jffs/etc/ipvsadm.d/192.168.10.48.up

```
-a -t 192.168.10.10:0 -r 192.168.10.48 -g -w 1 -a -u 192.168.10.10:0 -r 192.168.10.48 -g -w 1
```

Real server **one** disable code:

/jffs/etc/ipvsadm.d/192.168.10.23.down

```
-d -t 192.168.10.10:0 -r 192.168.10.23 -d -u 192.168.10.10:0 -r 192.168.10.23
```

Real server **two** disable code:

/jffs/etc/ipvsadm.d/192.168.10.48.down

```
-d -t 192.168.10.10:0 -r 192.168.10.48 -d -u 192.168.10.10:0 -r 192.168.10.48
```

make symbolic links as follows for those real servers that you want to be brought up when the load balancer boots (this saves some lost connections if you have a stand-by backup like I do):

```
cd /jffs/etc/ipvsadm.d ln -s ./192.168.10.23.up 192.168.10.23.start
```

This file contains the list of real servers to be probed by our simple check script:

/jffs/etc/ipvsadm.d/realServers

```
192.168.10.23 192.168.10.48
```

And finally the script that will check for real servers' availability and configure ipvsadm on the fly:

/jffs/sbin/checkRealServers.sh

```
#!/bin/sh PATH=$PATH:/sbin:/usr/sbin:/jffs/bin:/jffs/sbin BASE_DIR=/jffs/etc/ipvsadm.d
TMP_DIR=/tmp REAL_SERVERS=realServersfor i in `cat $BASE_DIR/$REAL_SERVERS`; do ping -qc 3 $i >
/dev/null RESULT=$? if [ $RESULT -gt 0 ]; then if [ ! -f $TMP_DIR/$i.down ]; then ipvsadm -R <
$BASE_DIR/$i.down date > $TMP_DIR/$i.down fi else if [ -f $TMP_DIR/$i.down ]; then ipvsadm -R <
$BASE_DIR/$i.up rm $TMP_DIR/$i.down fi fi done
```

Sample IPVS Scripts (en)
Creator: XWiki.haydude Date: 2007/07/23 19:29
Last Author: XWiki.haydude Date: 2007/07/24 11:48