Avaya SBCE

Avaya SBC

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Administration, upgrades and maintenances

Administration, upgrades and maintenances

Avaya SBCE - Hotfix Installation 8.X

Avaya SBCEs requires patches and hotfixes to be applied regularly.

In this entry lets document the procdure to install a hotfix in a Avaya SBCE 8.1.3

Its important to mention that:

- the procedure is similar for the EMS and SBCE devices.
- root access is required as to stop services and execute the script
- always start with EMS servers
- if SBCE HA start with the secondary servers
- download the correct patch and verify any official changes in the procedure

With the previous comments made, here is the procedure to apply a hotfix/patch :

1) Upload hotfix file to /home/ipcs

2) Change permissions to the file chmod 777 sbce-8.x.x.-xx-xxxxx-hotfix-xxxxxxxx.tar.gz

3) Unzip the hotfix file tar -zxvf sbce-8.x.x.-xx-xxxxx-hotfix-xxxxxxxx.tar.gz

4) Change work directory cd sbce-8.x.x.-xx-xxxxx-hotfix-xxxxxxxx

5) Stop services before patching /etc/init.d/ipcs-init stop

6) Start the script sh install_hotfix.sh

7) Reboot /sbin/reboot

8) Verify version with ipcs-version

Administration, upgrades and maintenances

Avaya SBCE - Upgrade 8.1.0 to 8.1.2 in VMWare

The following procedure was applied to Upgrade Avaya SBCE solution from 8.1.0 to 8.1.2

One key note using this procedure is that the current VMs were not upgraded, new VMs were deployed (maintaining old VMs were turned off and keep just in case rollback is required). In the next entry we will work in a procedure upgrading the current VMs in production.

Here are some important notes:

- New VMs installed with version 8.1.2 require same IPs.
- The order to migrate multiple systems is the following:
  1. Migrate data to the primary EMS first.
  2. Migrate data to the SBCE VMs in any order (HA pair, migrate data to the secondary SBCE first, followed by the primary SBCE.
  3. Migrate data to the secondary EMS last.

Procedure

1) Download 8.1.2 OVA (sbce-8.1.2.0-31-19809.ova)

2) Download latest patch for 8.1.2 version

3) Download 8.1.2 uberutility

4) Create a backup file from current SBCEs in 8.1.0 using uberutility
   4.1) mkdir /archive/createbkp
   4.2) cd /archive/createbkp
   4.3) upload and copy 8.1.2 uberutility to /archive/createbkp
   4.4) decompress uberutility tar -xvf sbce-8.1.2.0-31-19809_uberutility-a50b843901b.tar.gz
   4.5) execute the following script decompress from uberutility
        python ursbce.py --takemigratebackup --filename_with_path=/archive/createbkp/sbce-backup-<version>-<sbce hostname>.tar.gz

4.6) copy the file created to an external device making it available

5) Install the VMs using the OVA with their respective roles (EMS and SBCEs)

6) Set temporary IPs using the wizard thru the console

7) Upload the latest patch into the new VMs (connect using the temporal IPs)

8) Apply the latest patch in all new VMs

9) Upload each backup files created in step 4 to the corresponding new VM.

10) Perform a factory reset in each VM using
sbceconfigurator.py factory-reset

11) Turn off the production SBCE servers (this must be implemented in a maintenance window)

12) Run the wizard in the new VMs using VMWare console

13) Copy the uploaded backup in each server to /archive/backup/upgrade

14) Restore backup (EMS must be migrated first)
/usr/local/ipcs/icu/scripts/ursbce.py --restoremigratebackup --
filename_with_path=/archive/backup/upgrade/file_name.

14) Reboot

15) In case needed disable SIPS Required.
When doing an upgrade to Release 8.1.2 or later, the SIPS Required
option in Server Interworking is automatically enabled after the upgrade.
For any configurations that do not use this feature, you must manually
disable this option after you do the upgrade.
For example, you must disable this option in Server Interworking profiles
when the deployment has or uses Microsoft Teams, Skype for Business,
and Microsoft Lync.

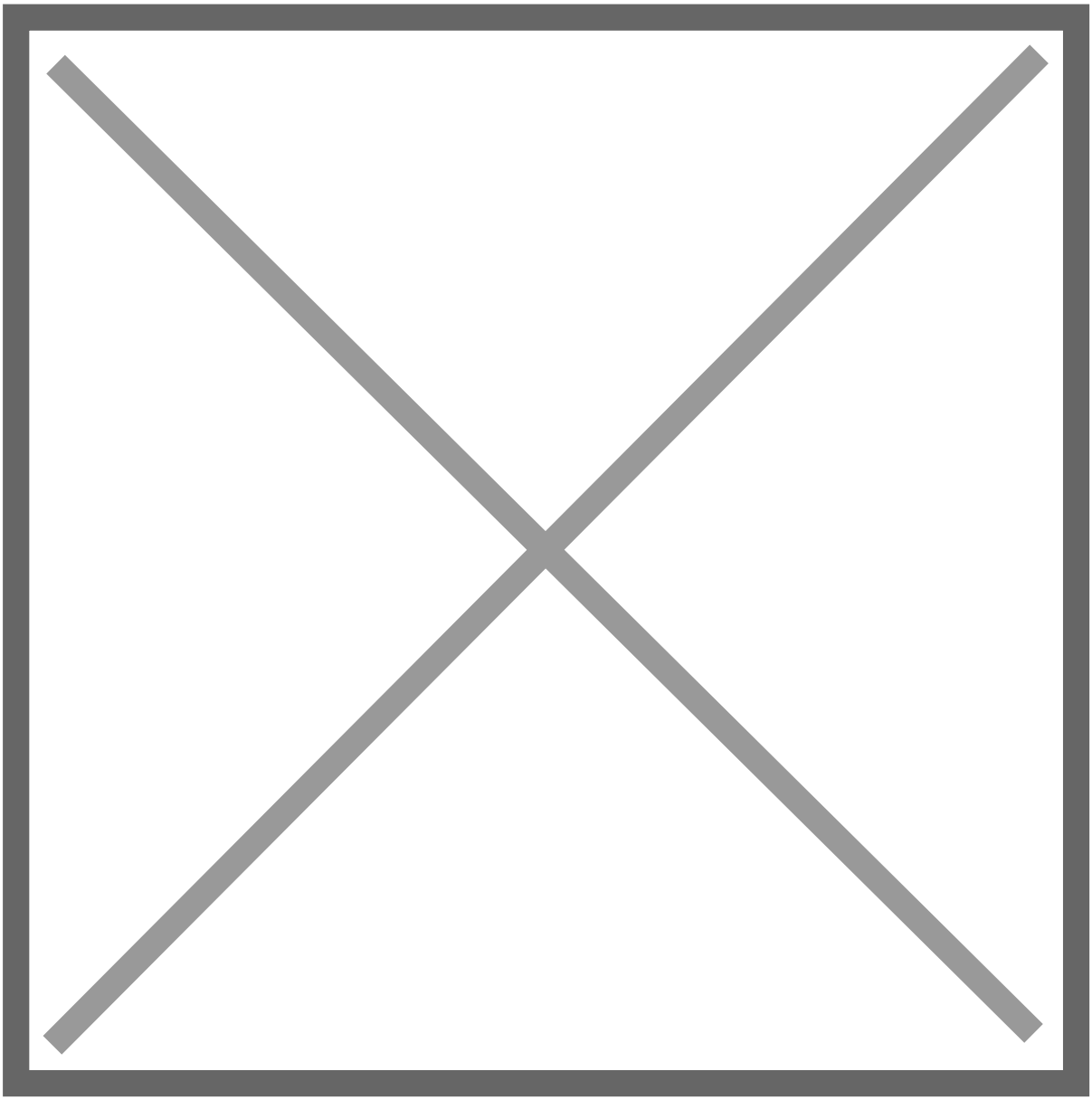
Administration, upgrades and maintenances

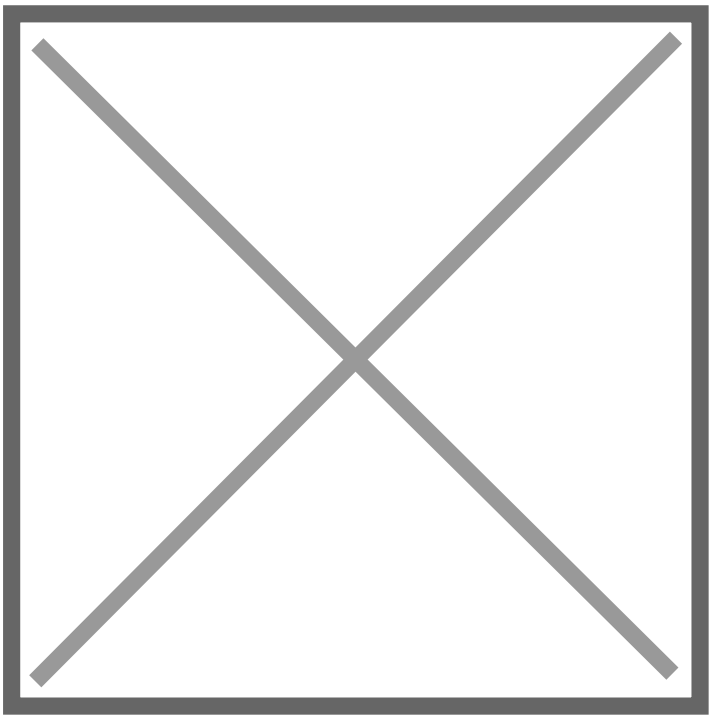
Avaya SBCE - Upgrade 8.1.3.0 to 8.1.3.1 in VMWare

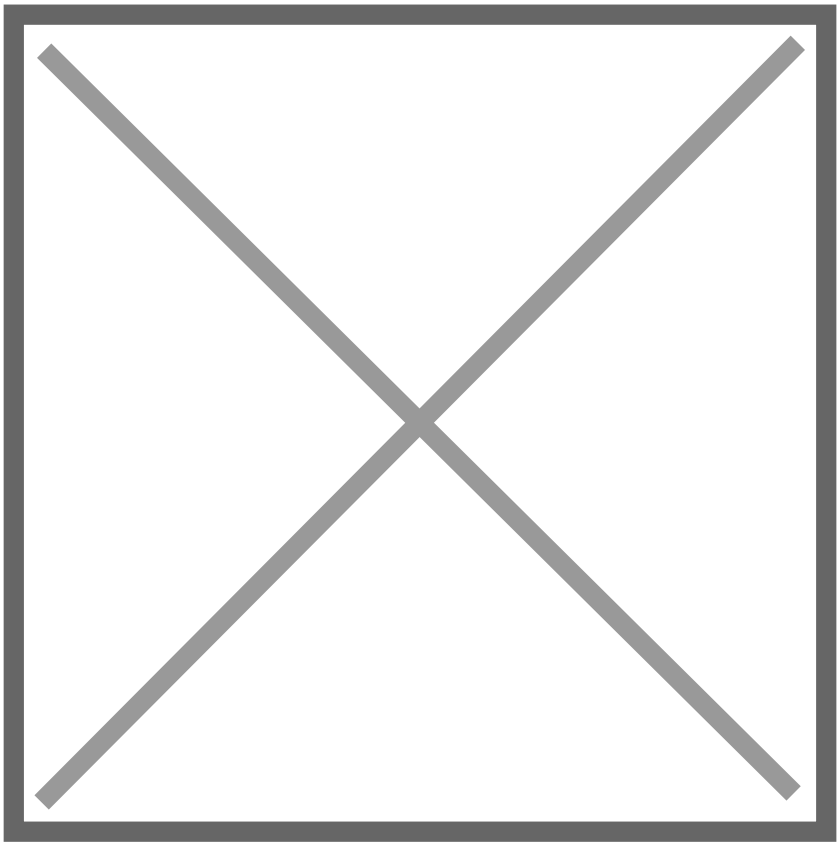
In a previous entry an upgrade to Avaya SBCE solution was implemented migrating the backup from the current (old) to new VMs. In this entry an upgrade will be implemented but using the same production VMs.

Its important to mention that this upgrade will take more time to be implemented and more time to be rolled back (as the same production VMs are used and rolled back in case needed).

The following images show the current version of the EMS and SBCE (GUI and CLI)



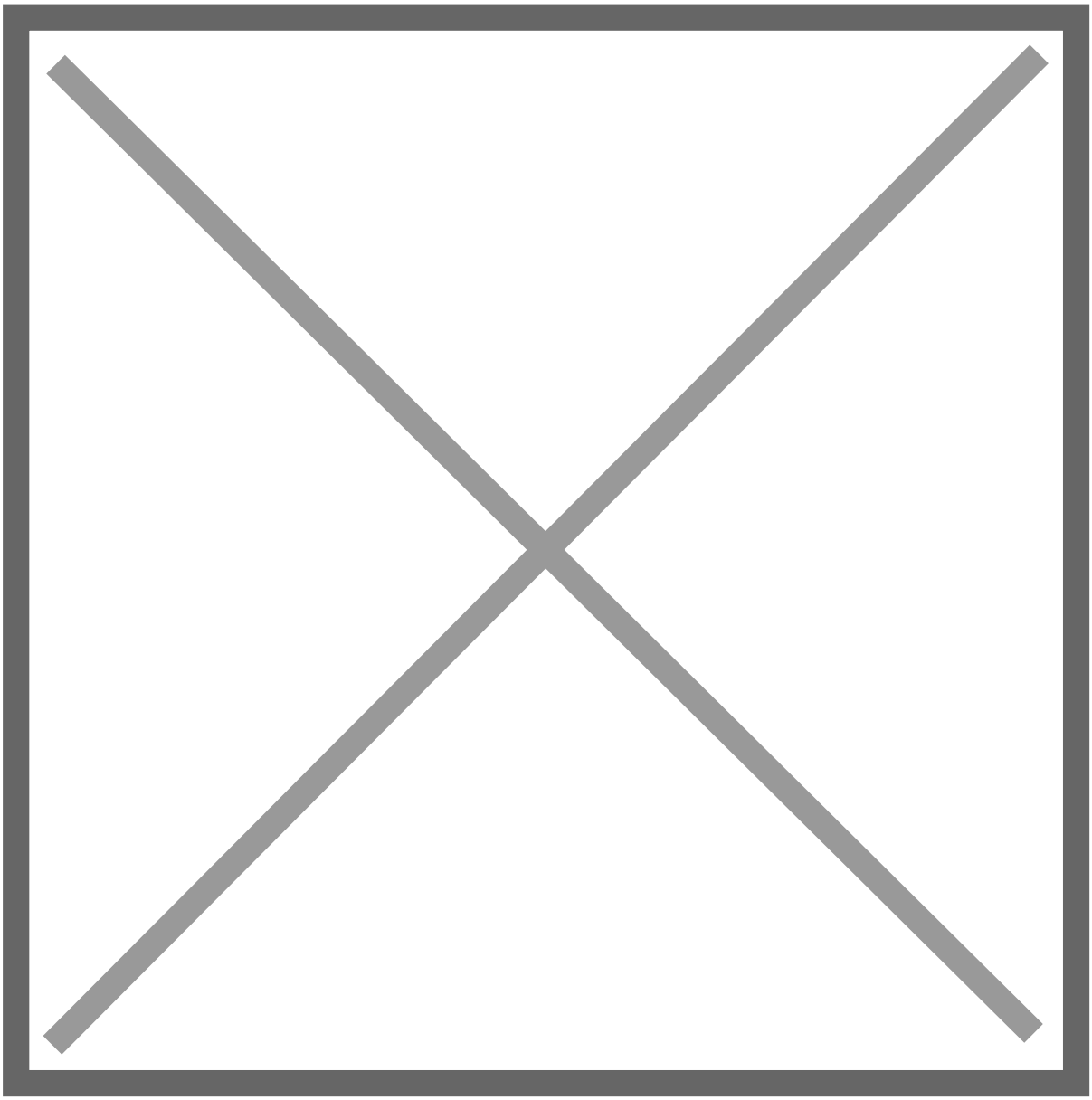




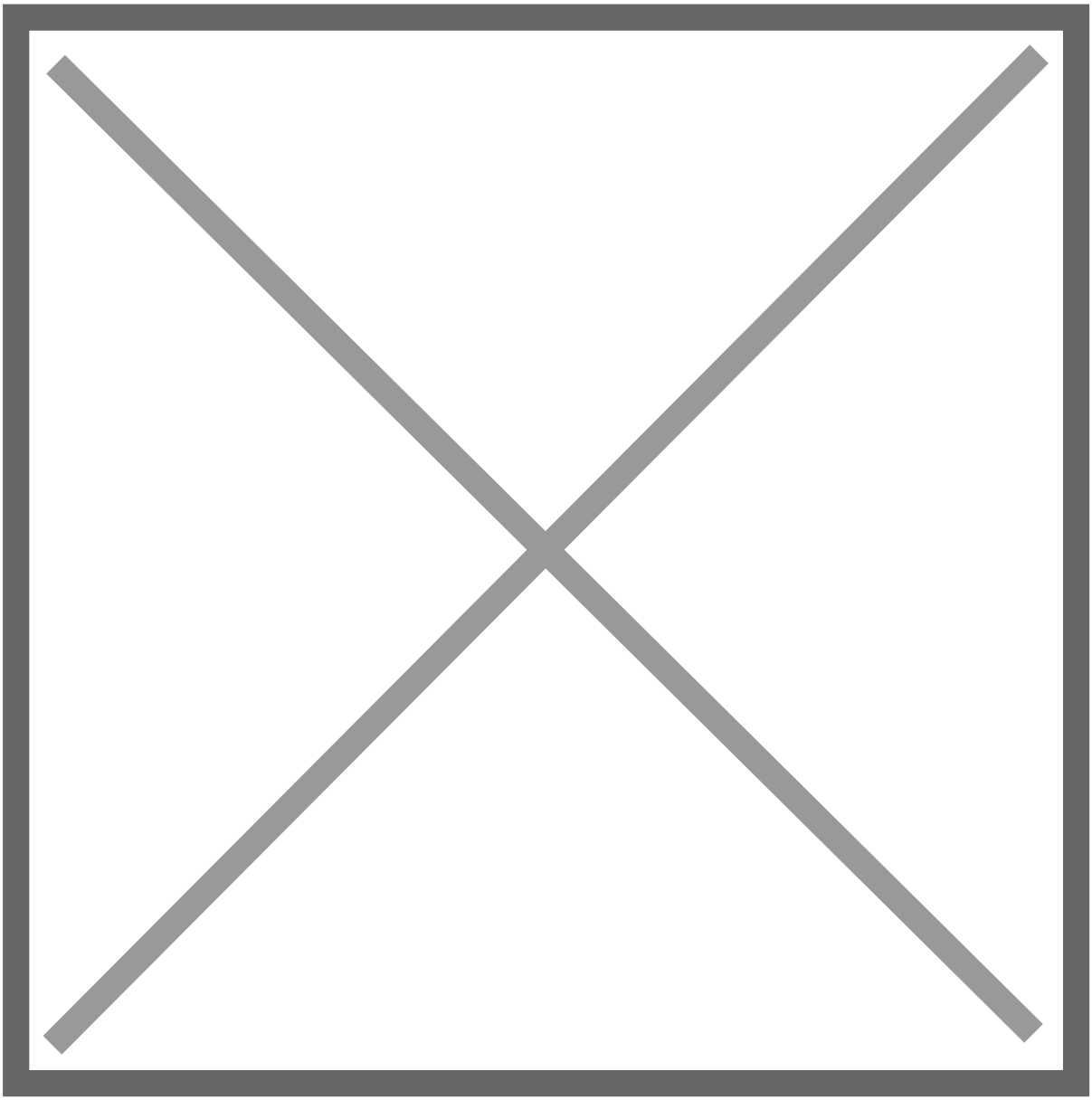
Here is the procedure to upgrade:

1. Download the files from Avaya Support.

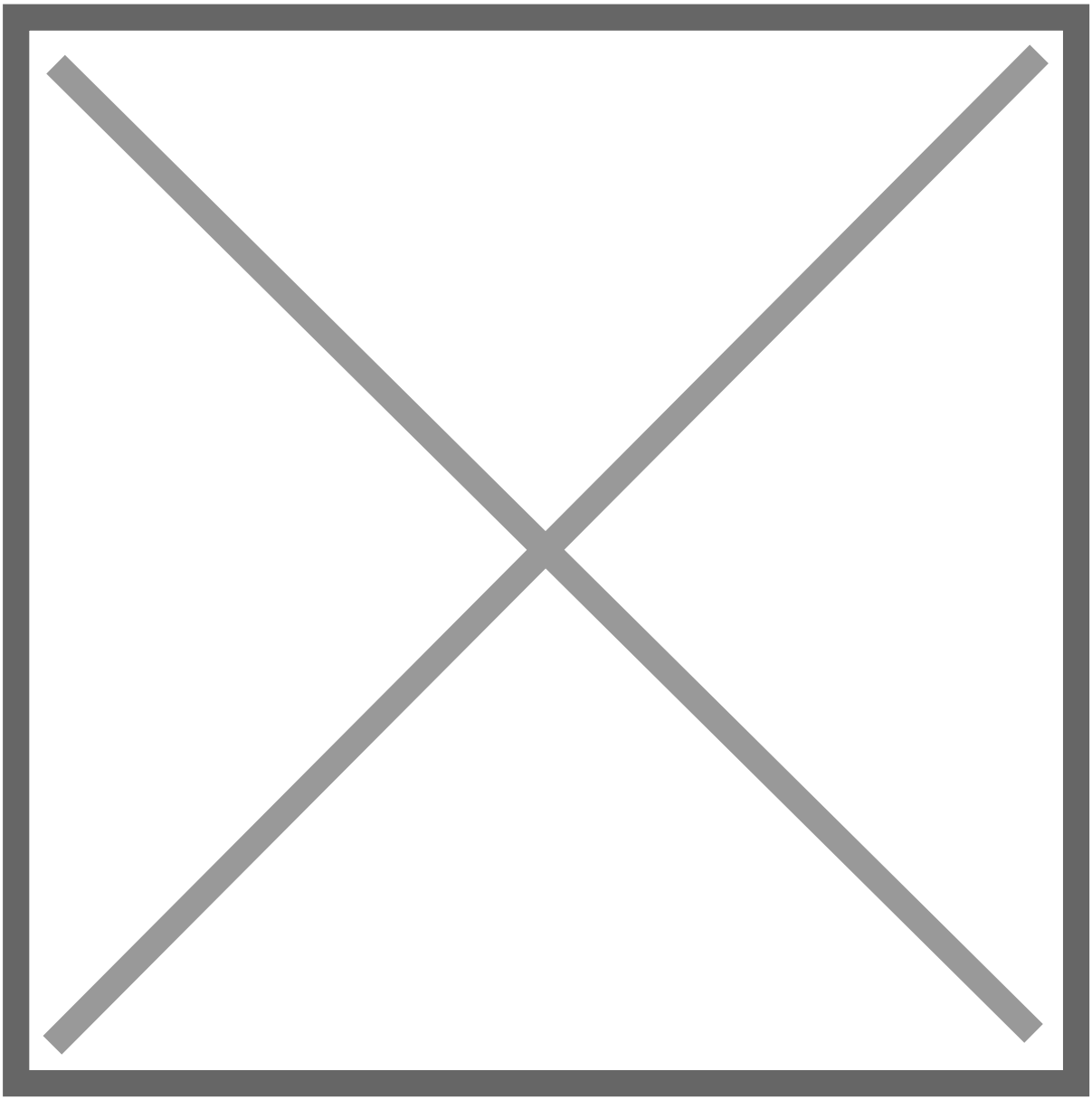
2. Upload upgrade files in ***/archive/urpackages*** in EMS server (here is a screenshot)



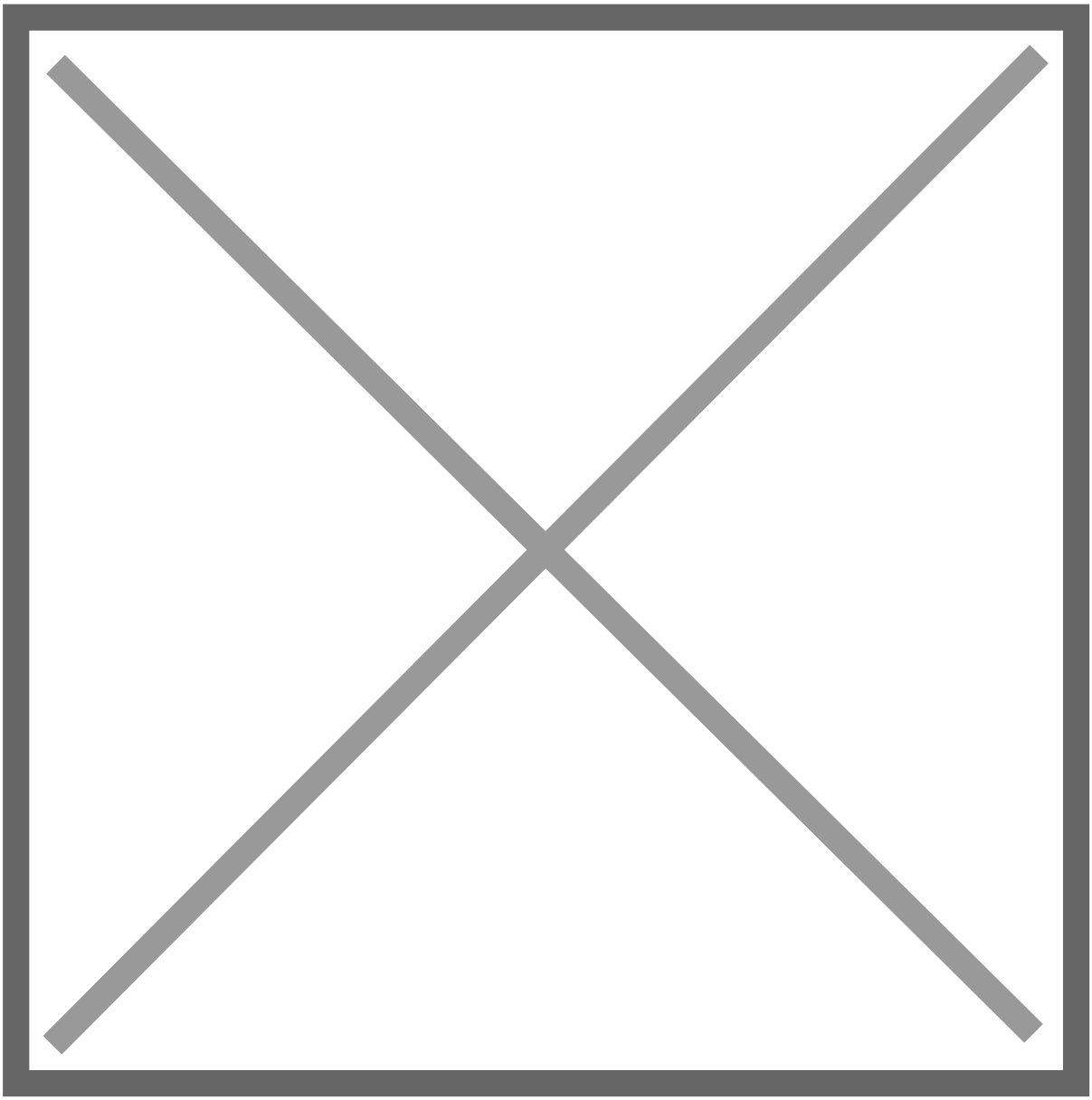
After uploading the files, Software Management will show files and devices to copy files to

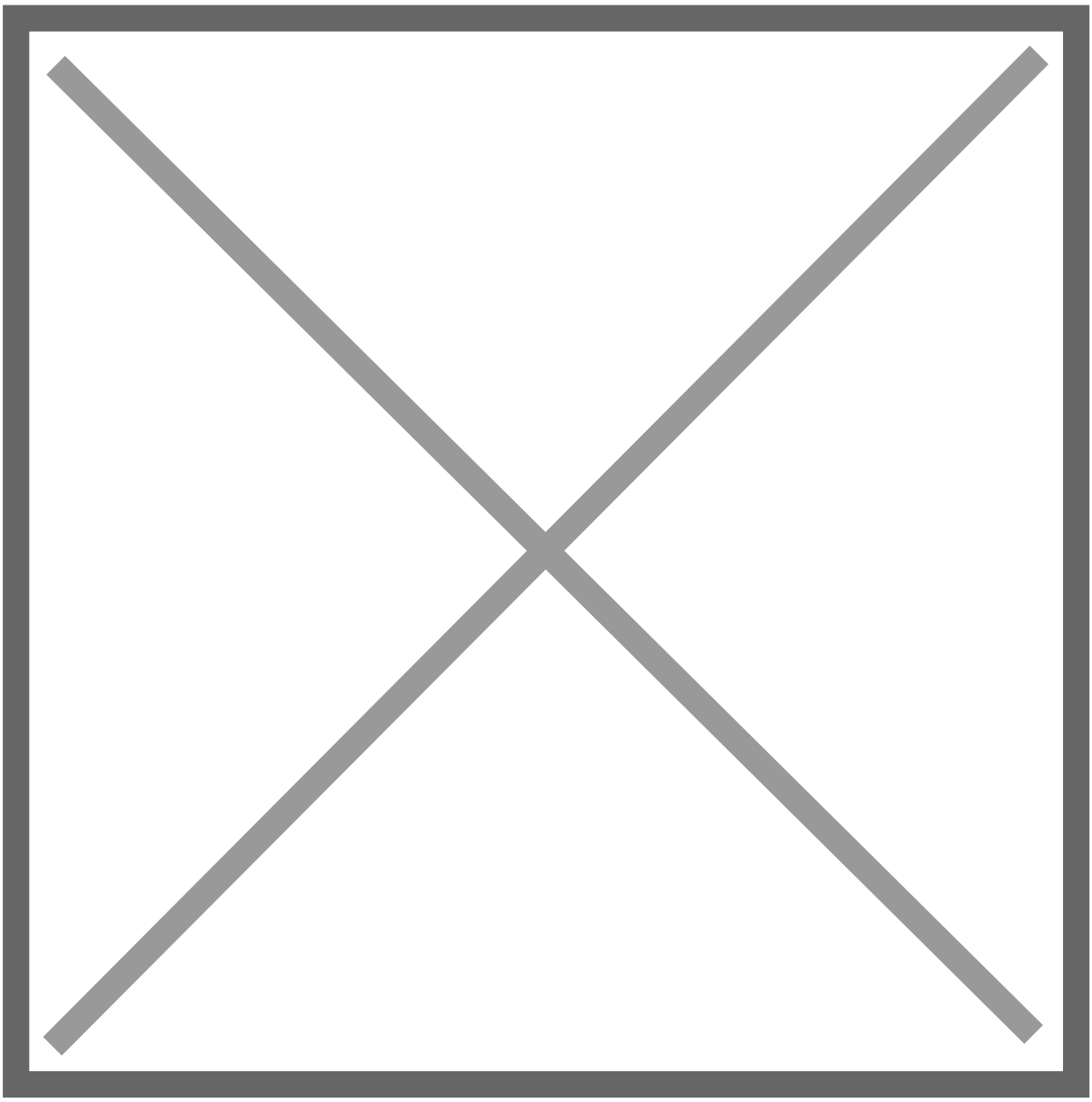


Additionally, the upgrade option is now available under Device Management -> Updates

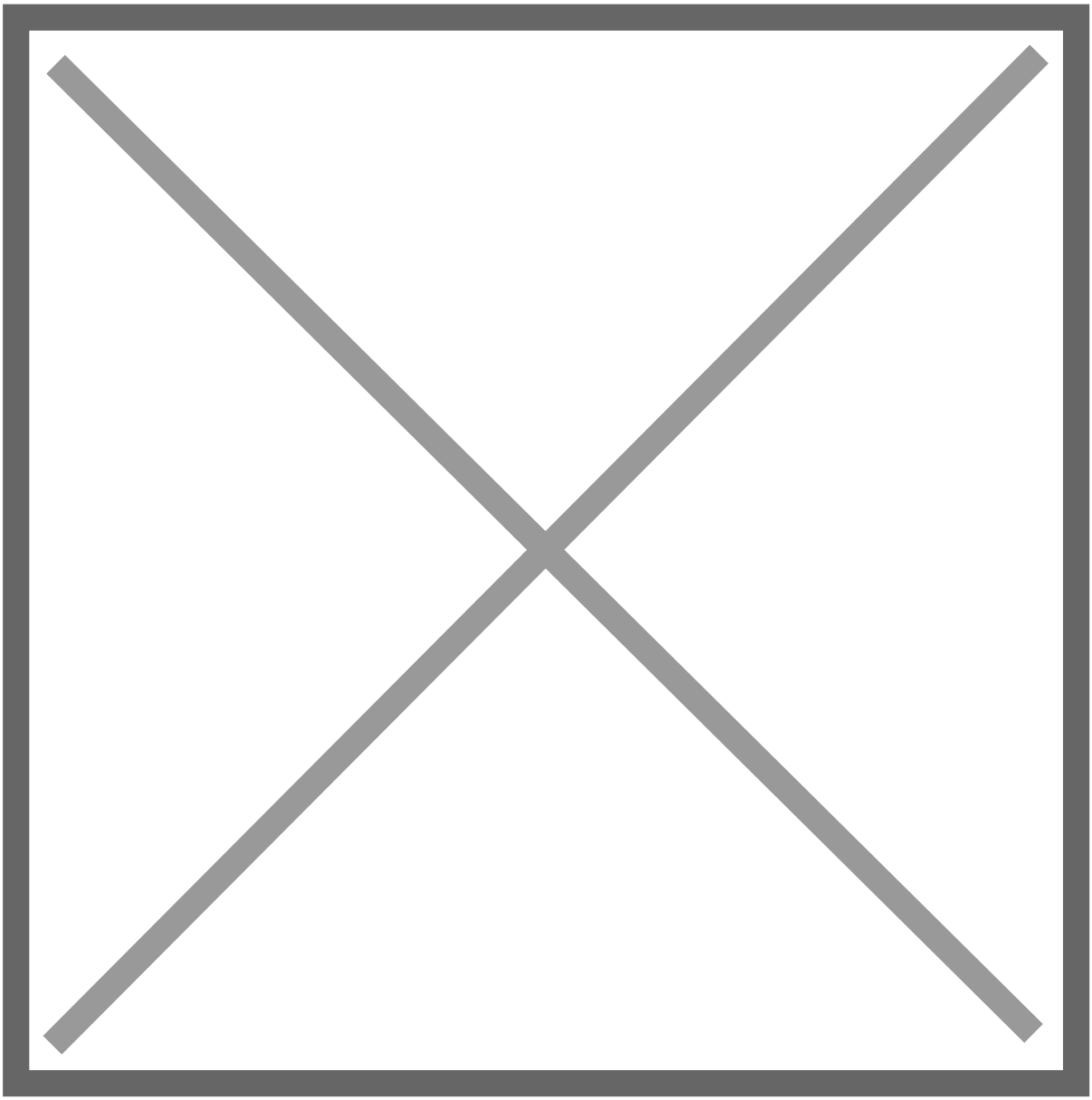


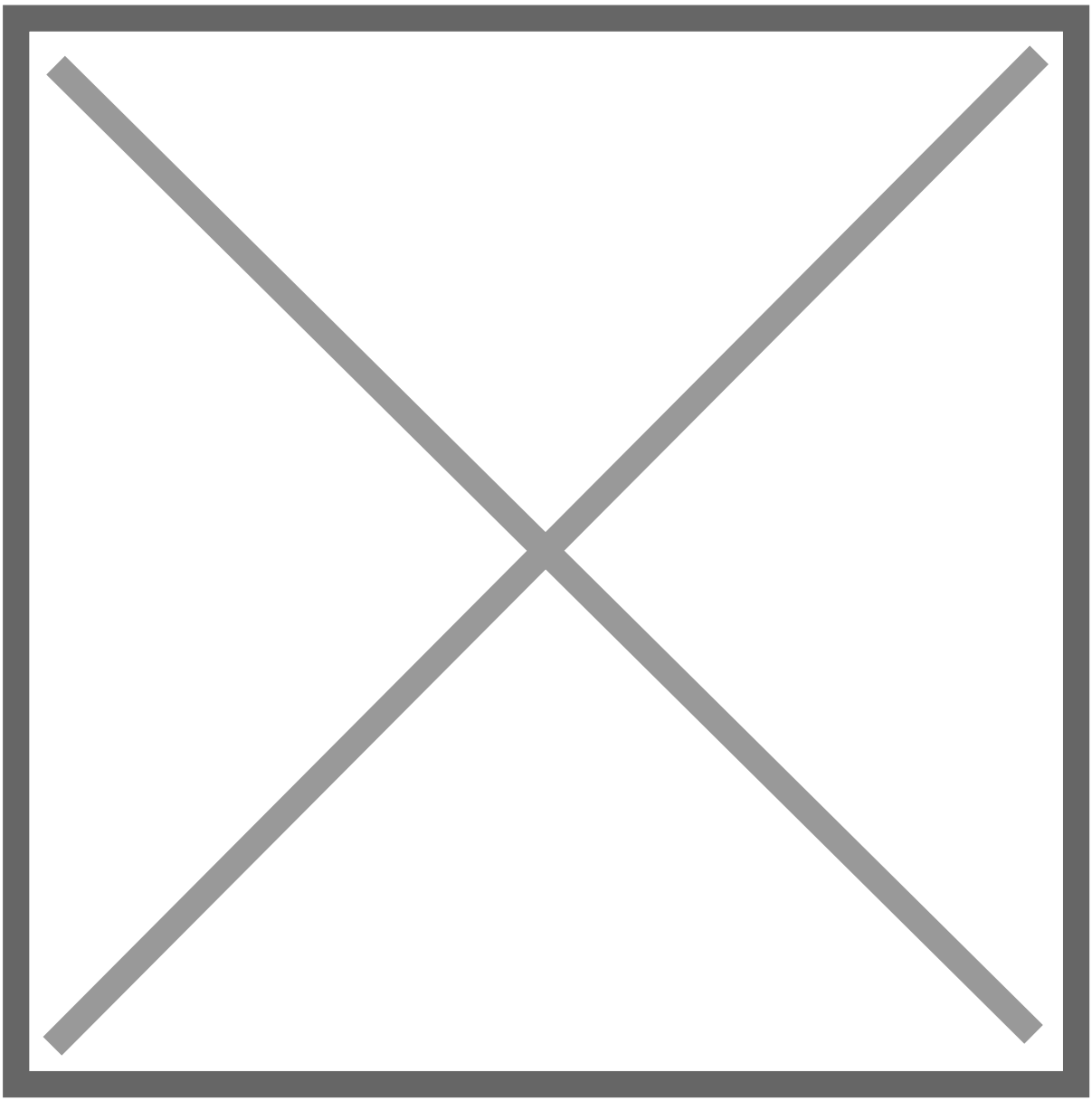
3. Copy the packages to SBCE servers using Software Management to all SBCE servers.

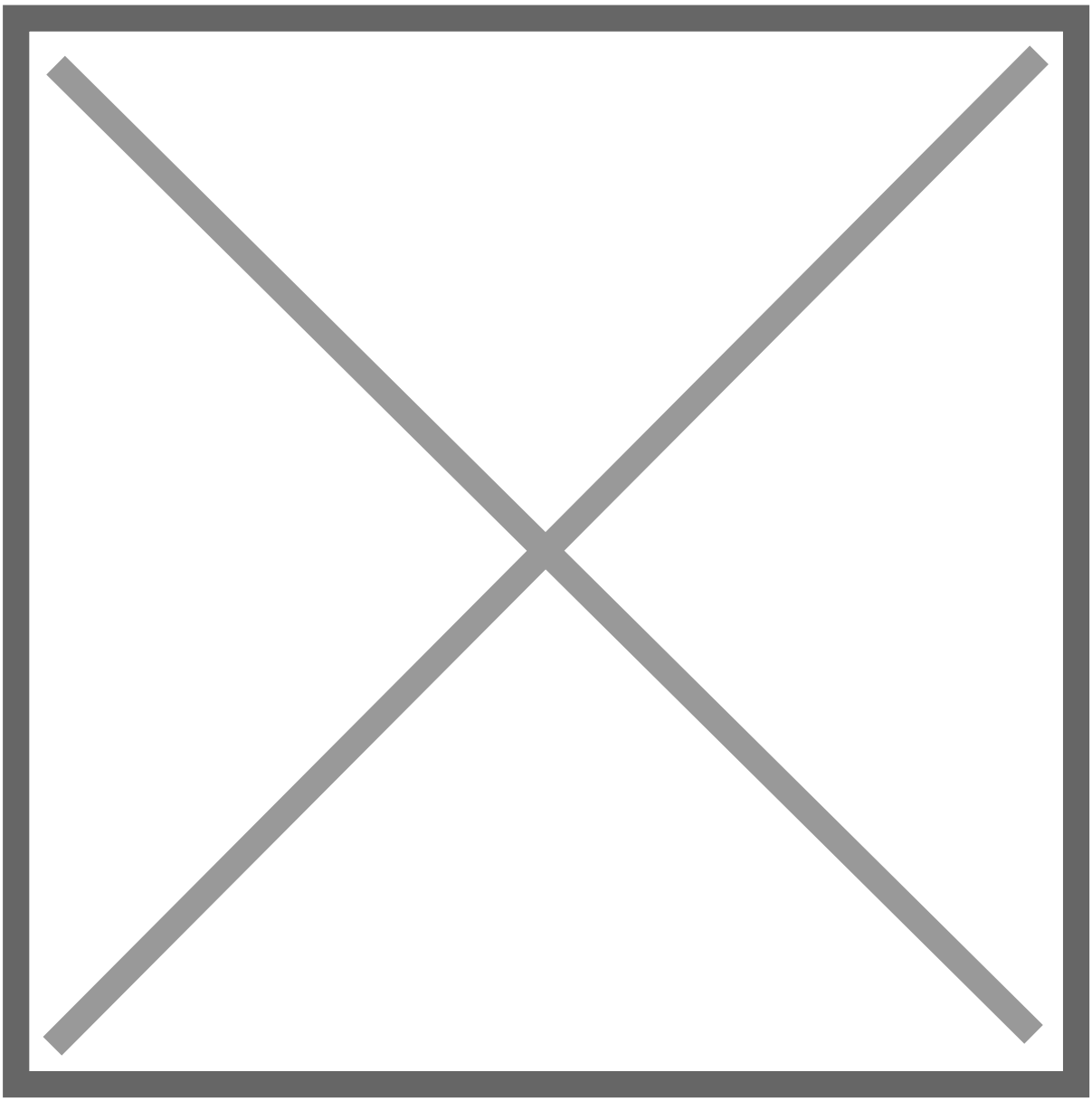


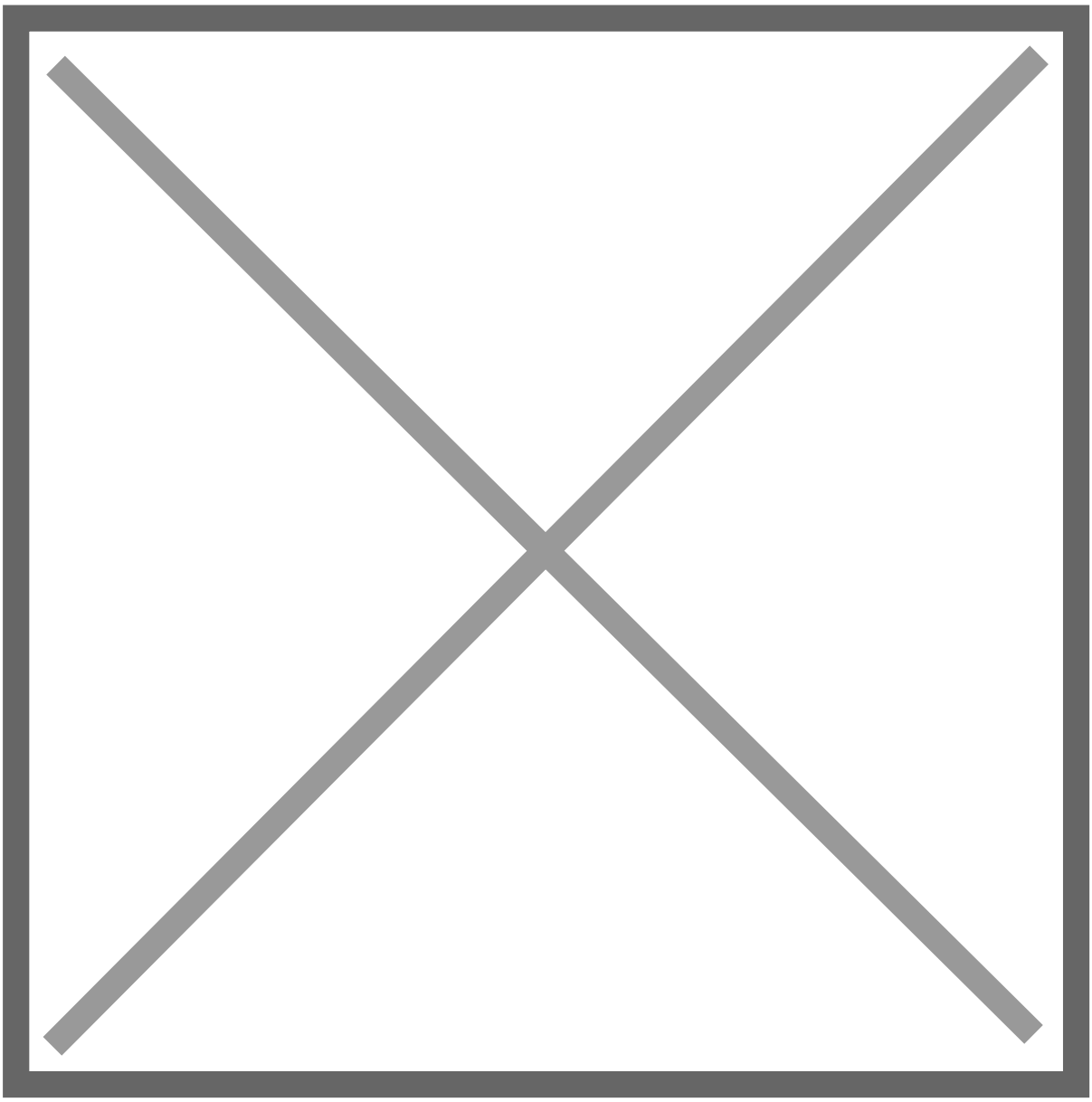


4. Perform upgrade for EMS server first, Device Management -> Updates -> Upgrade

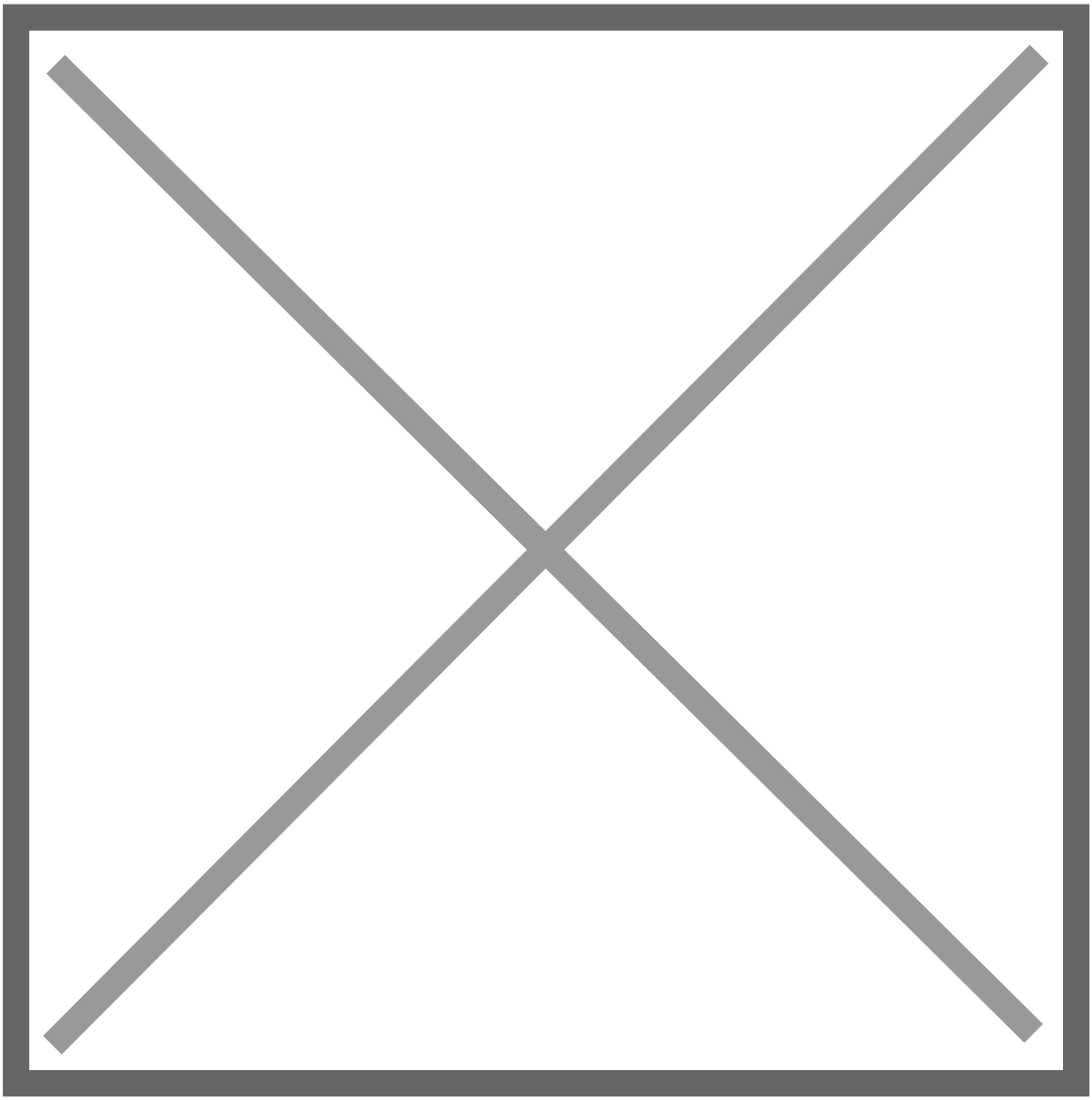




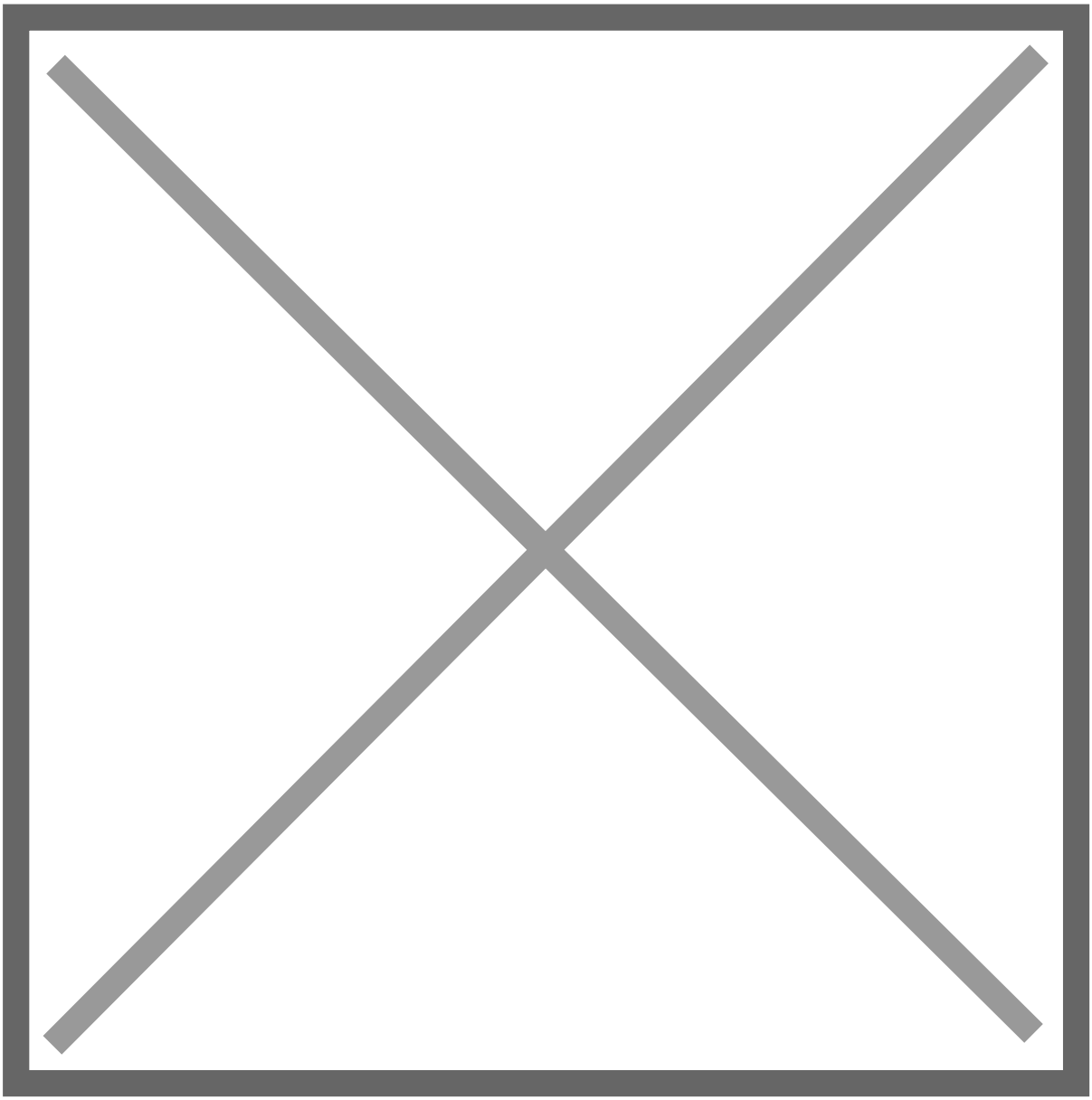


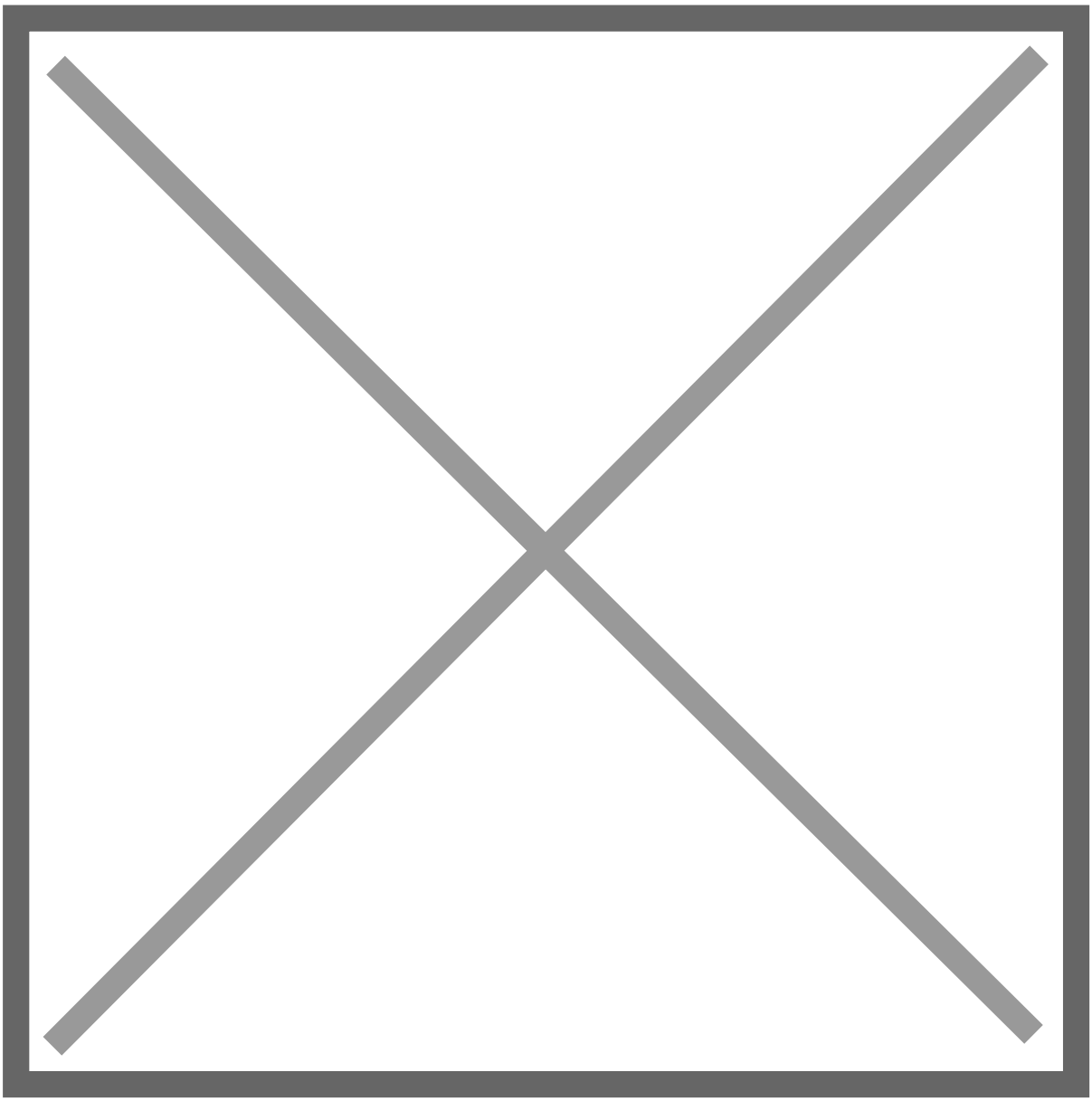


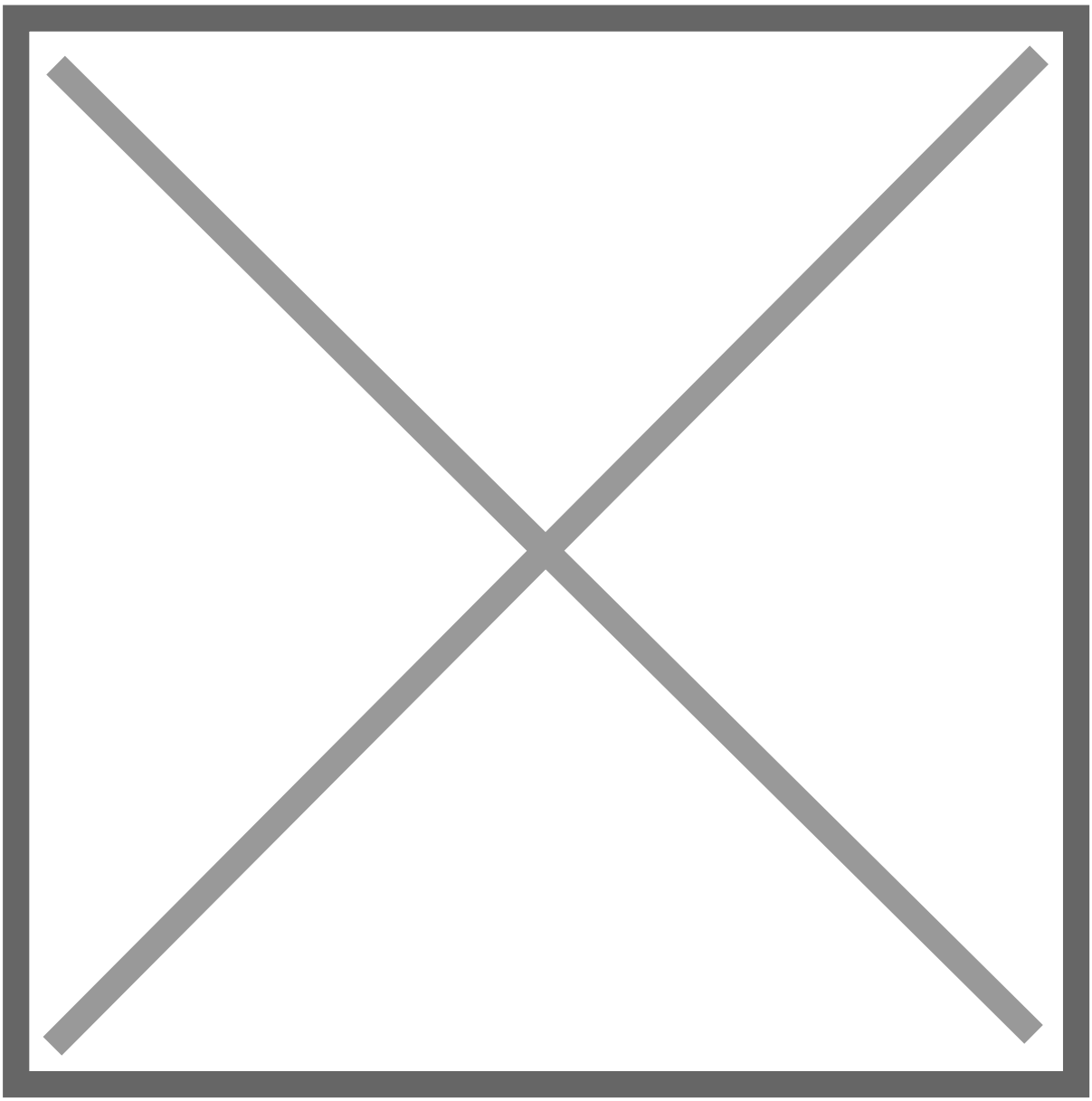
5. Verify upgrade in Device Management (EMS running 8.1.3.1), after EMS upgrade is normal that SBCEs are shown as Down.

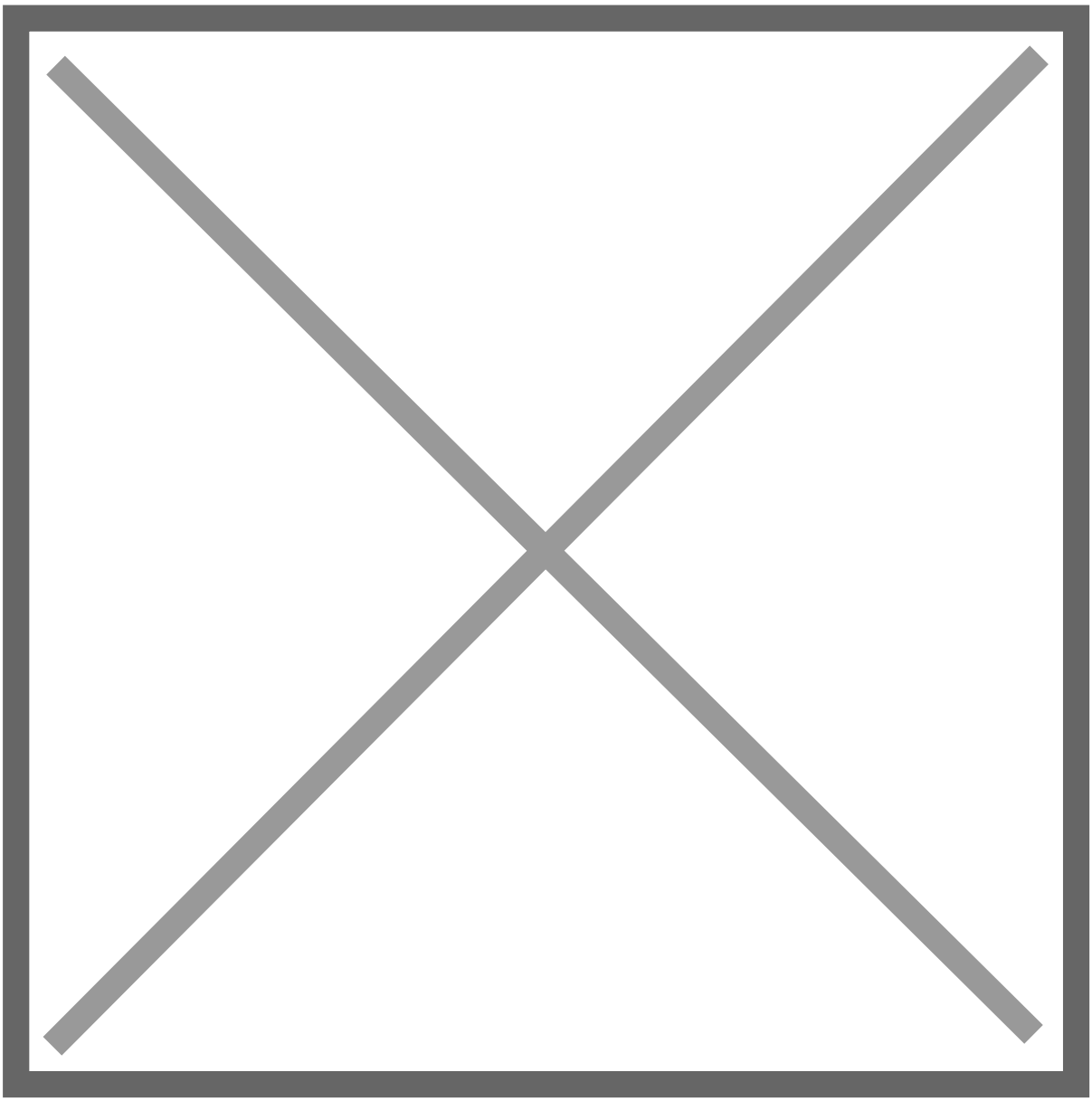


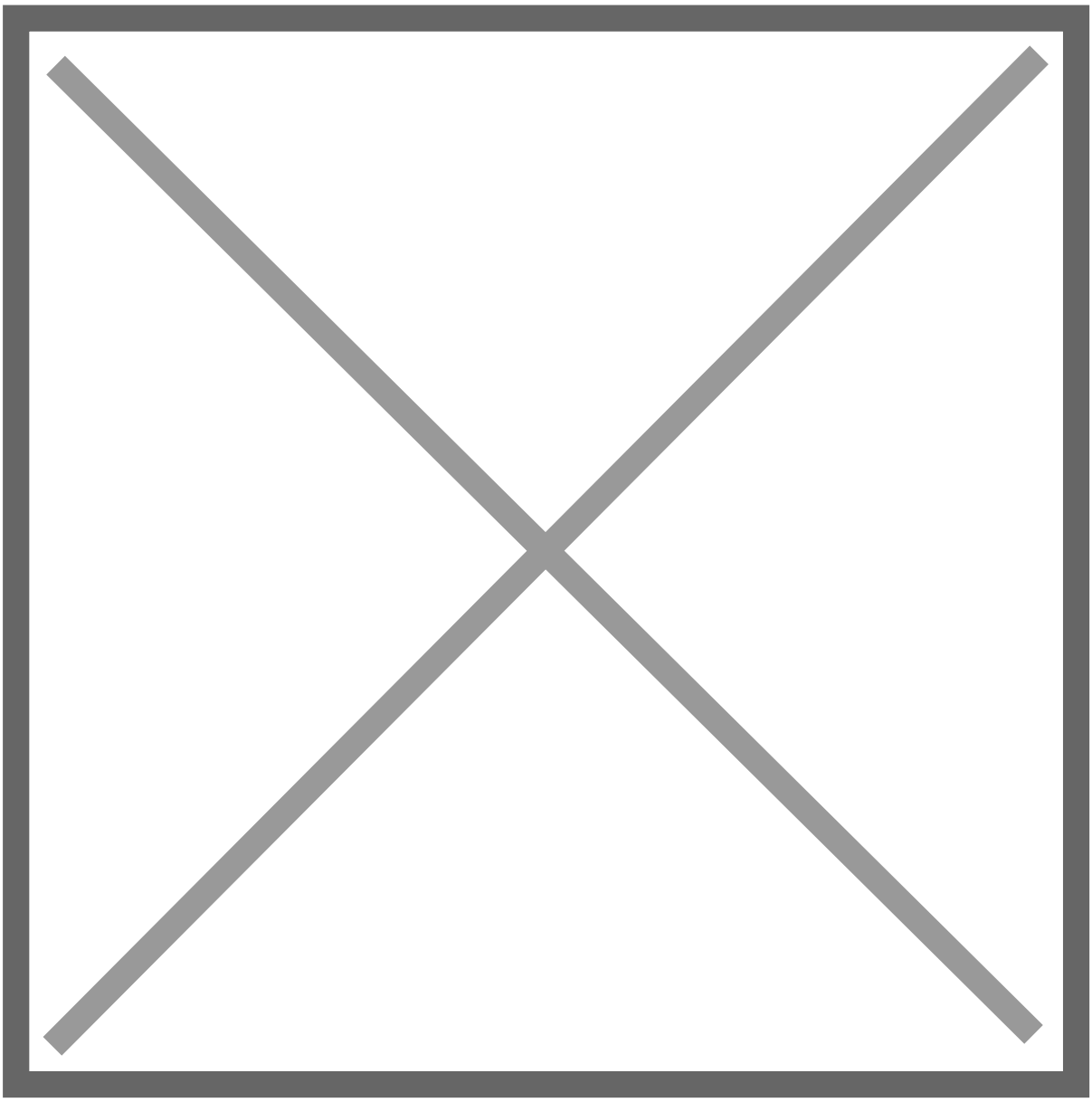
6. Continue upgrading SBCE servers Device Management -> Updates -> Upgrade (start with Secondary servers in HA environment)



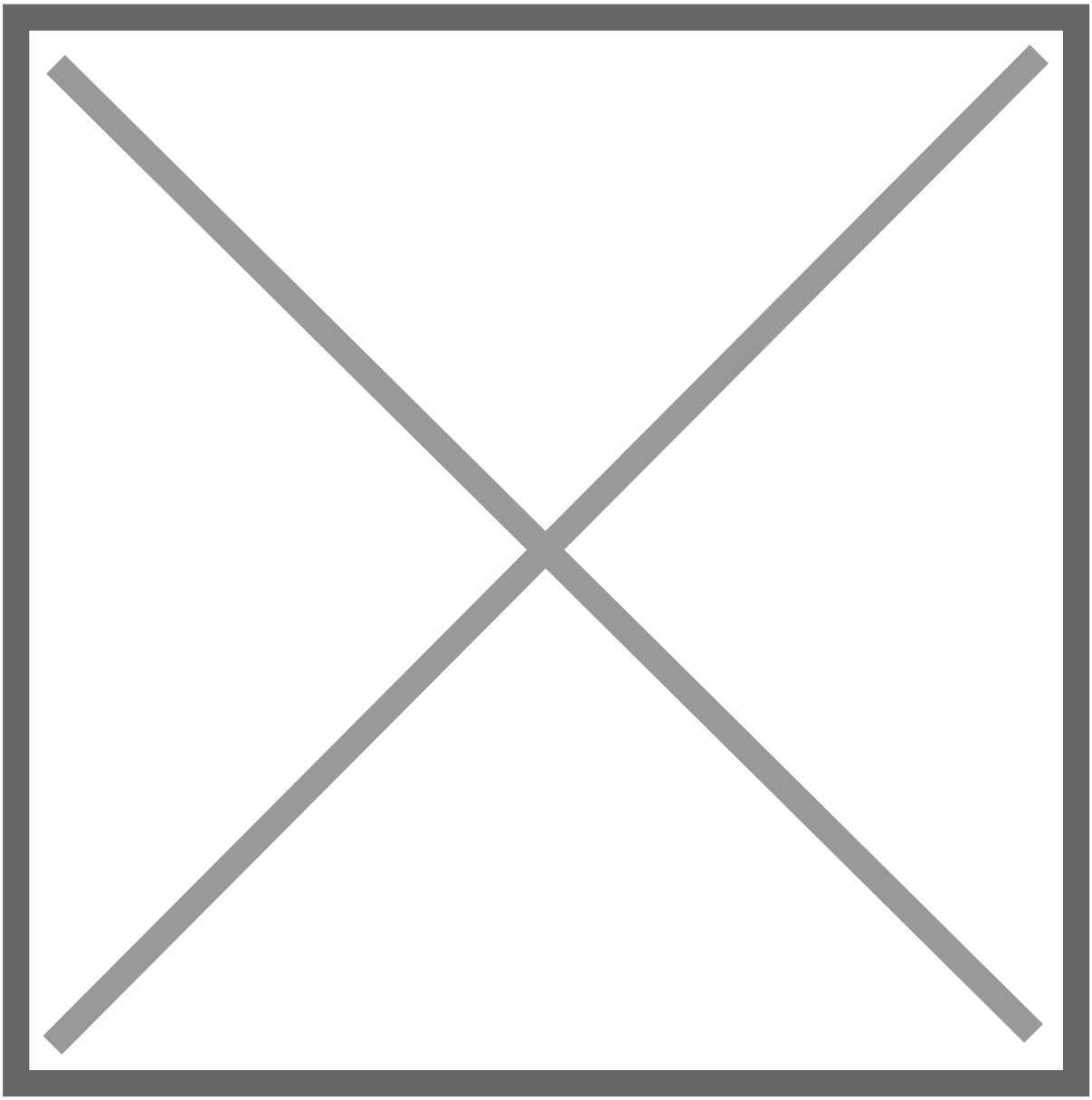




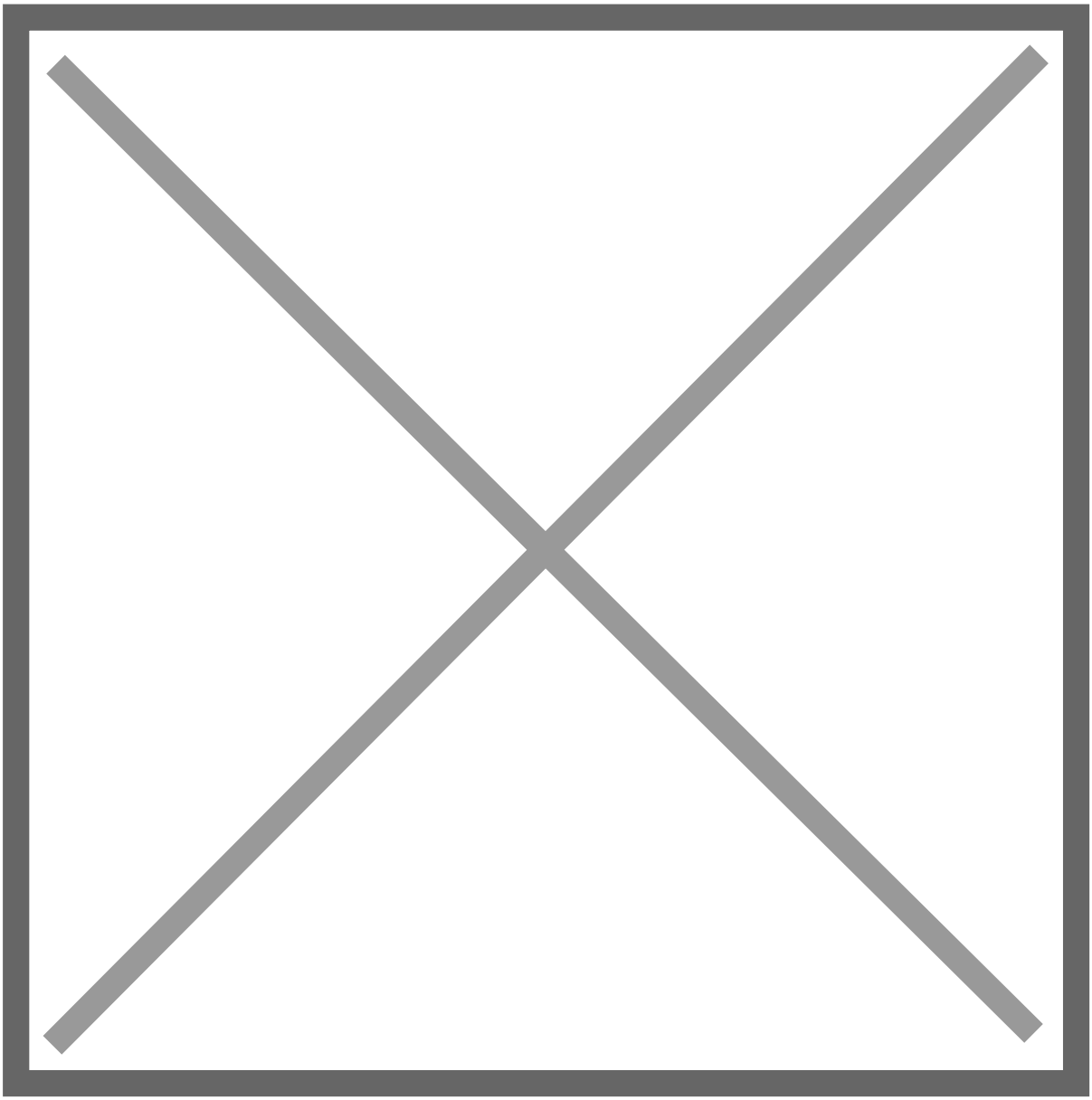


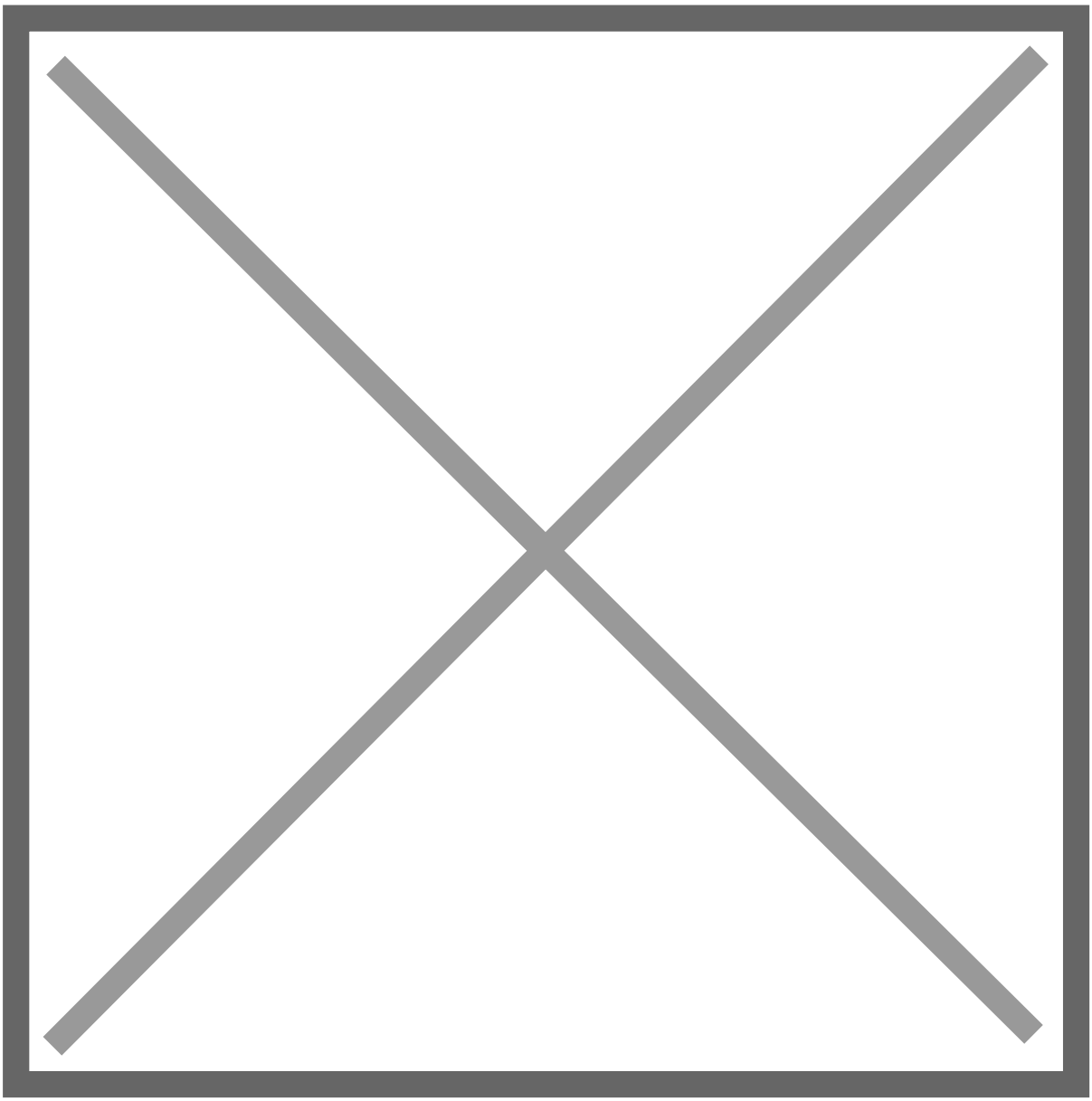


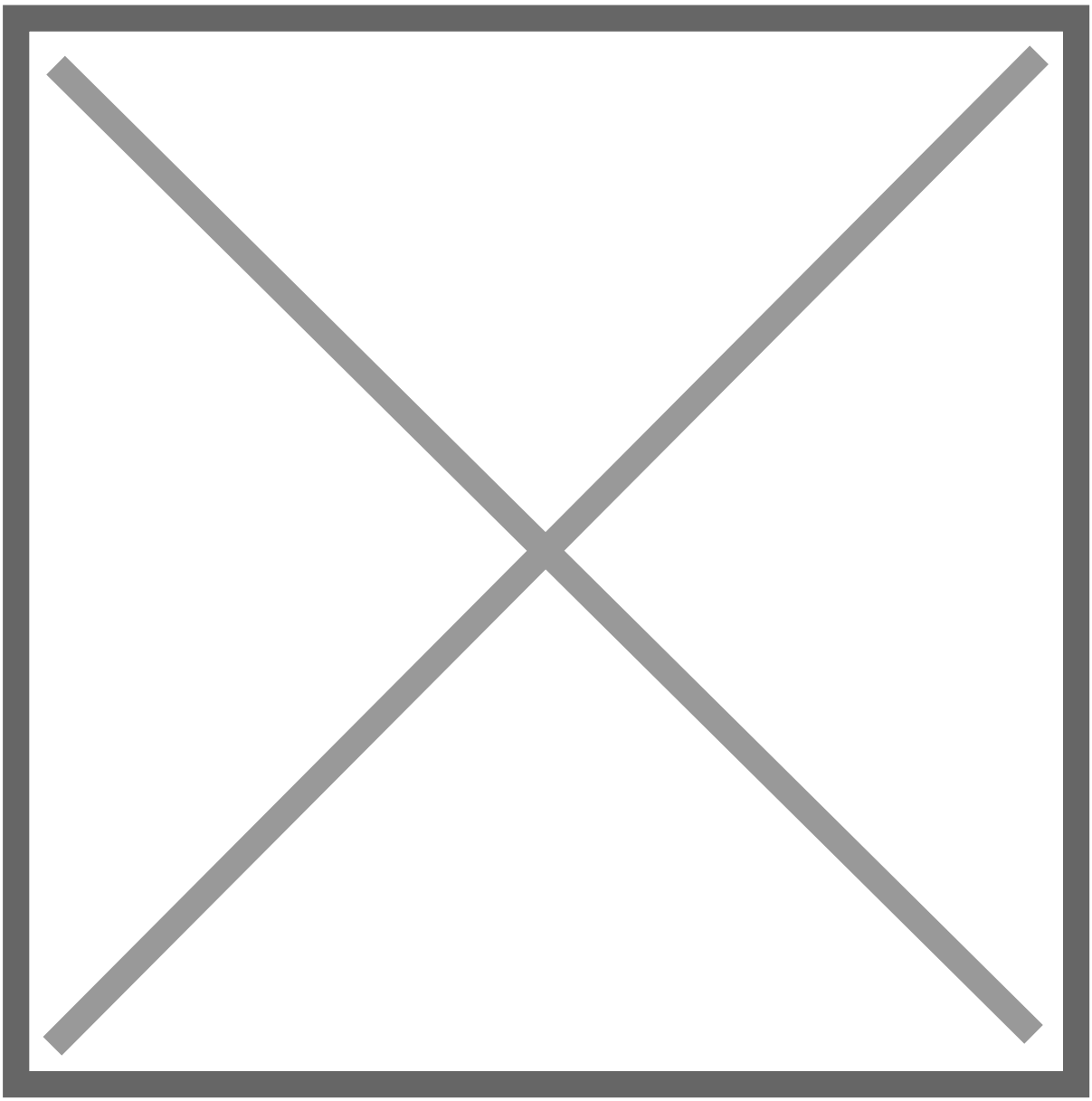
7. Verify upgrade in Device Management (SBCE running 8.1.3.1)

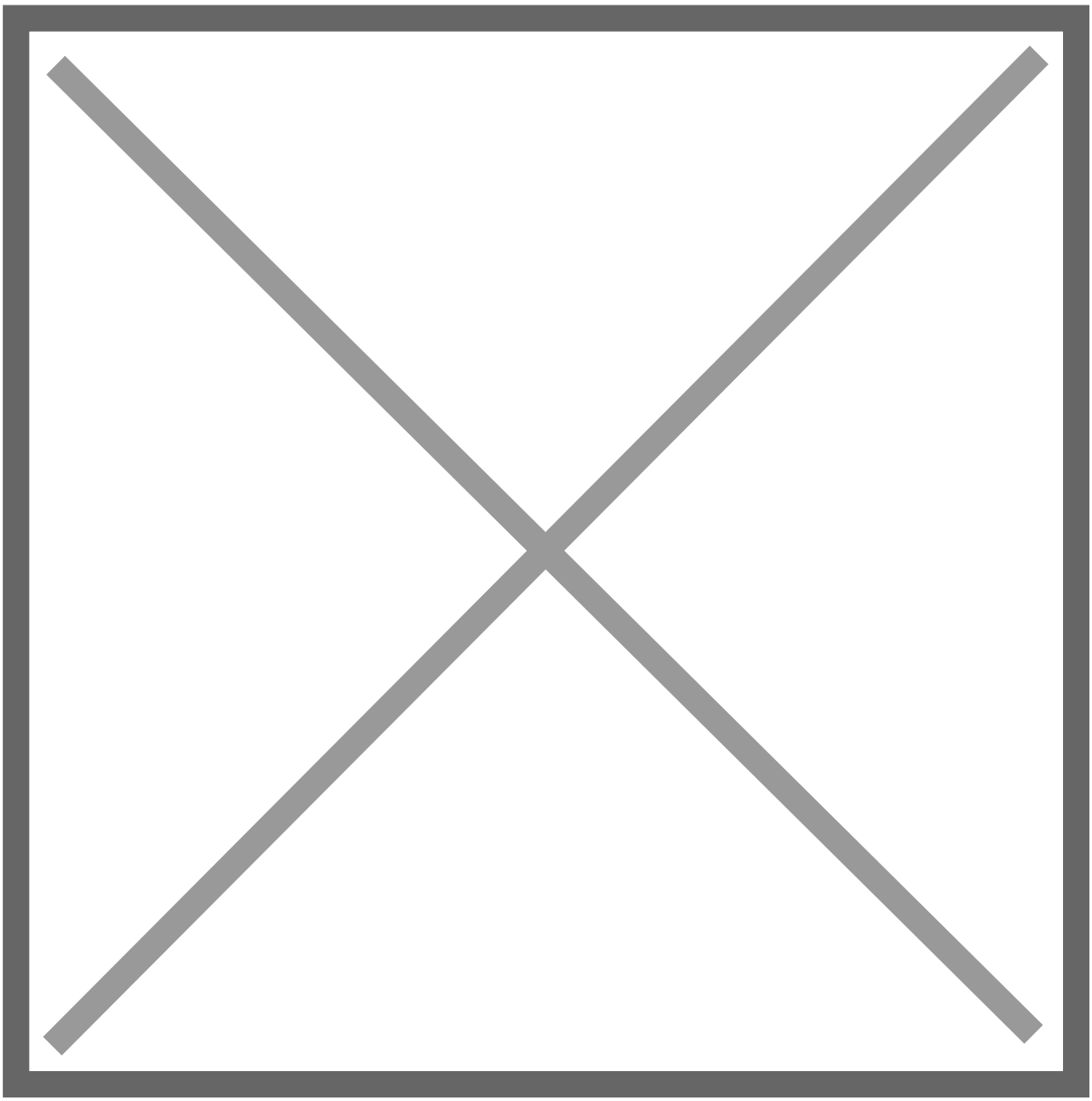


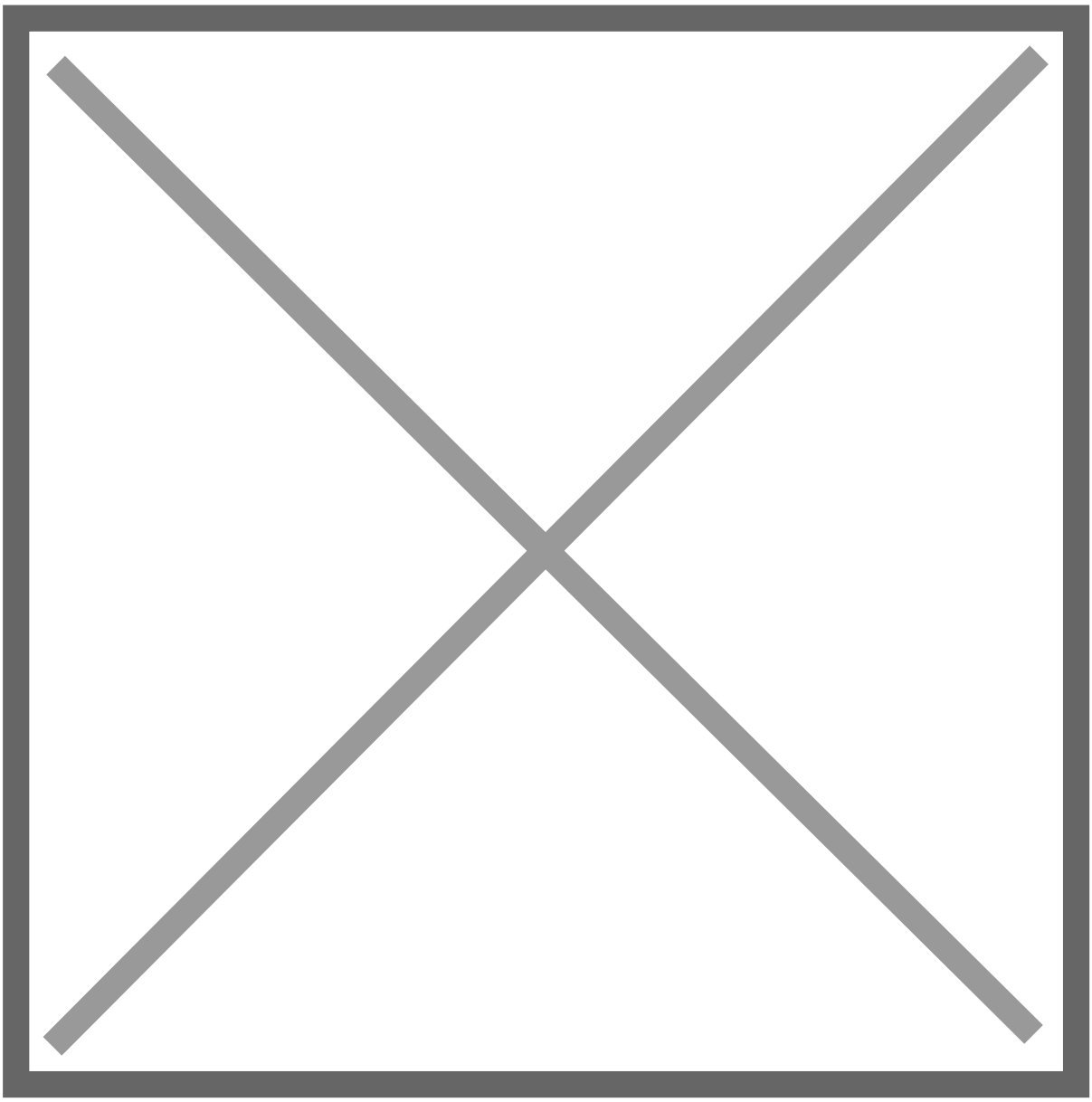
8. Rollback is available under Device Management -> Updates -> Rollback





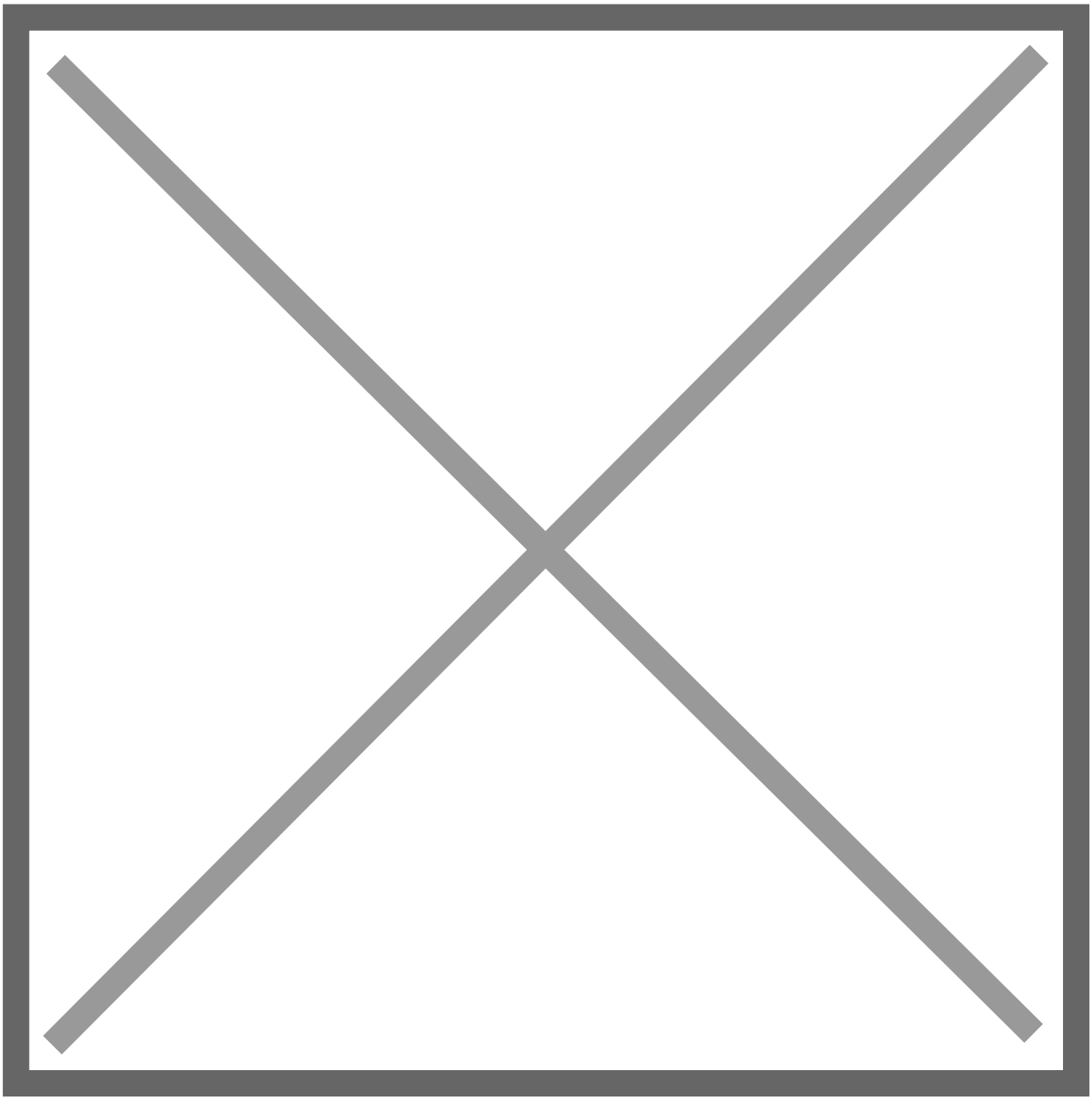


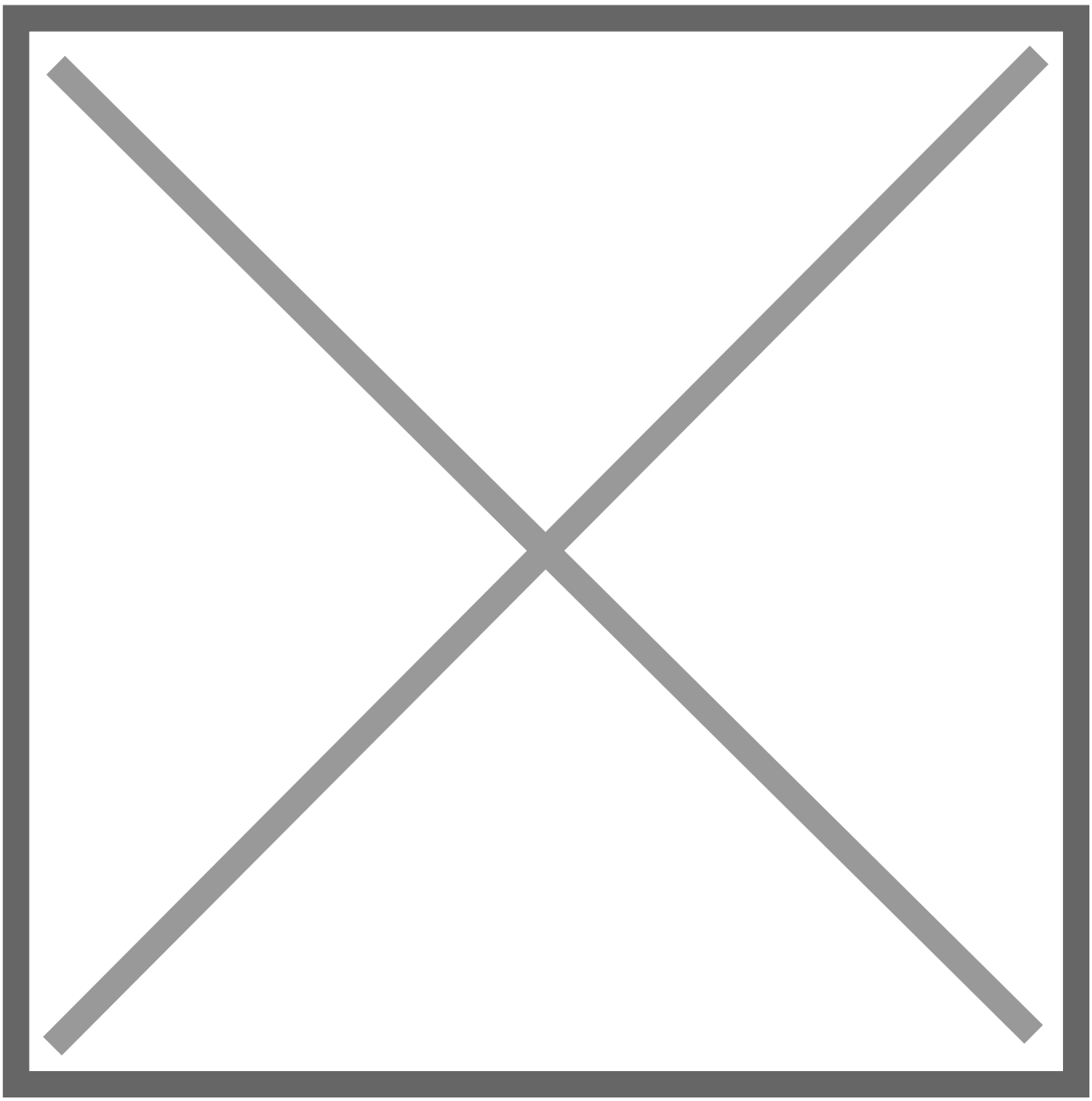


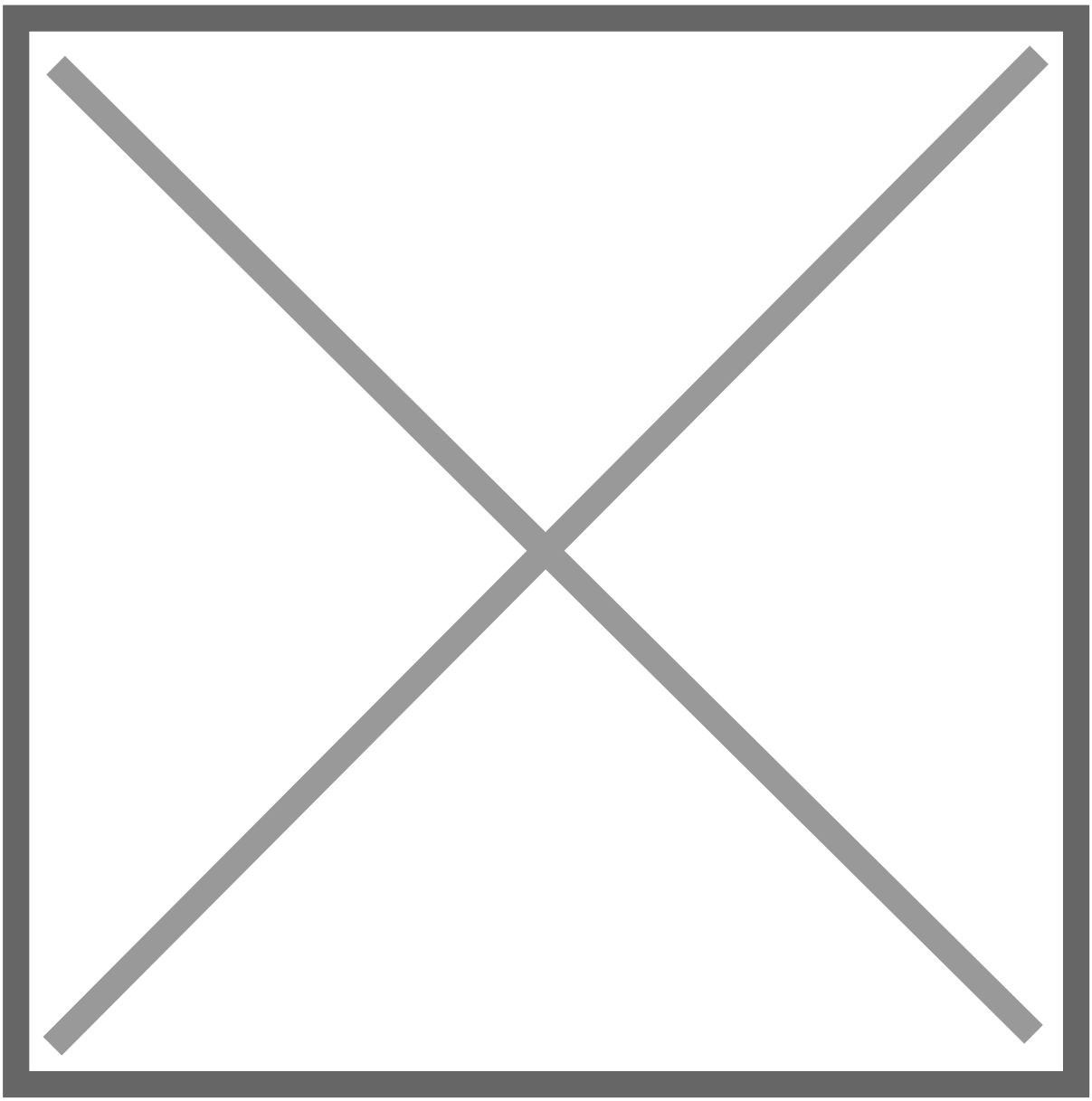


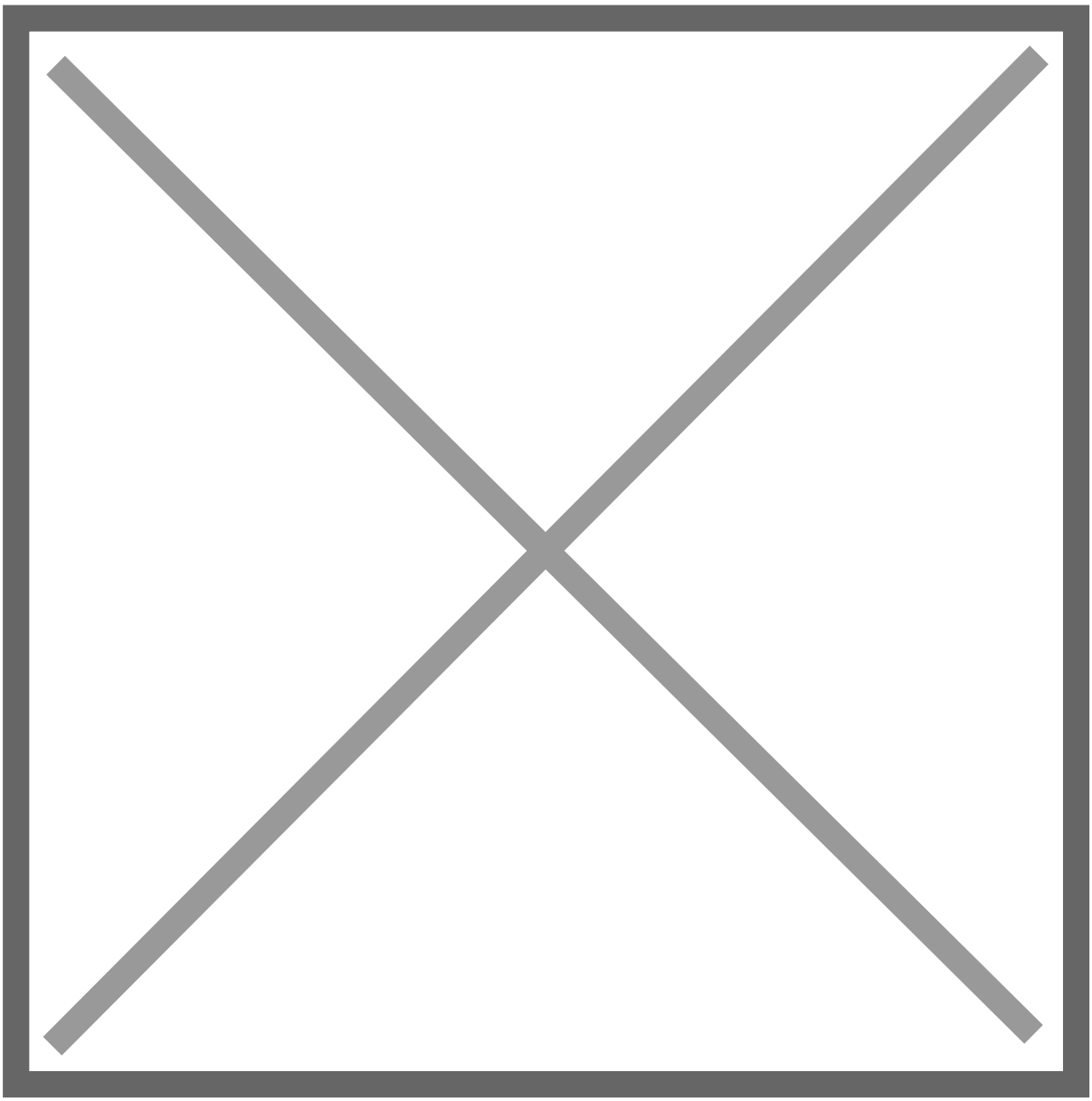
After SBCE downgrade is completed is normal to be marked as Down.

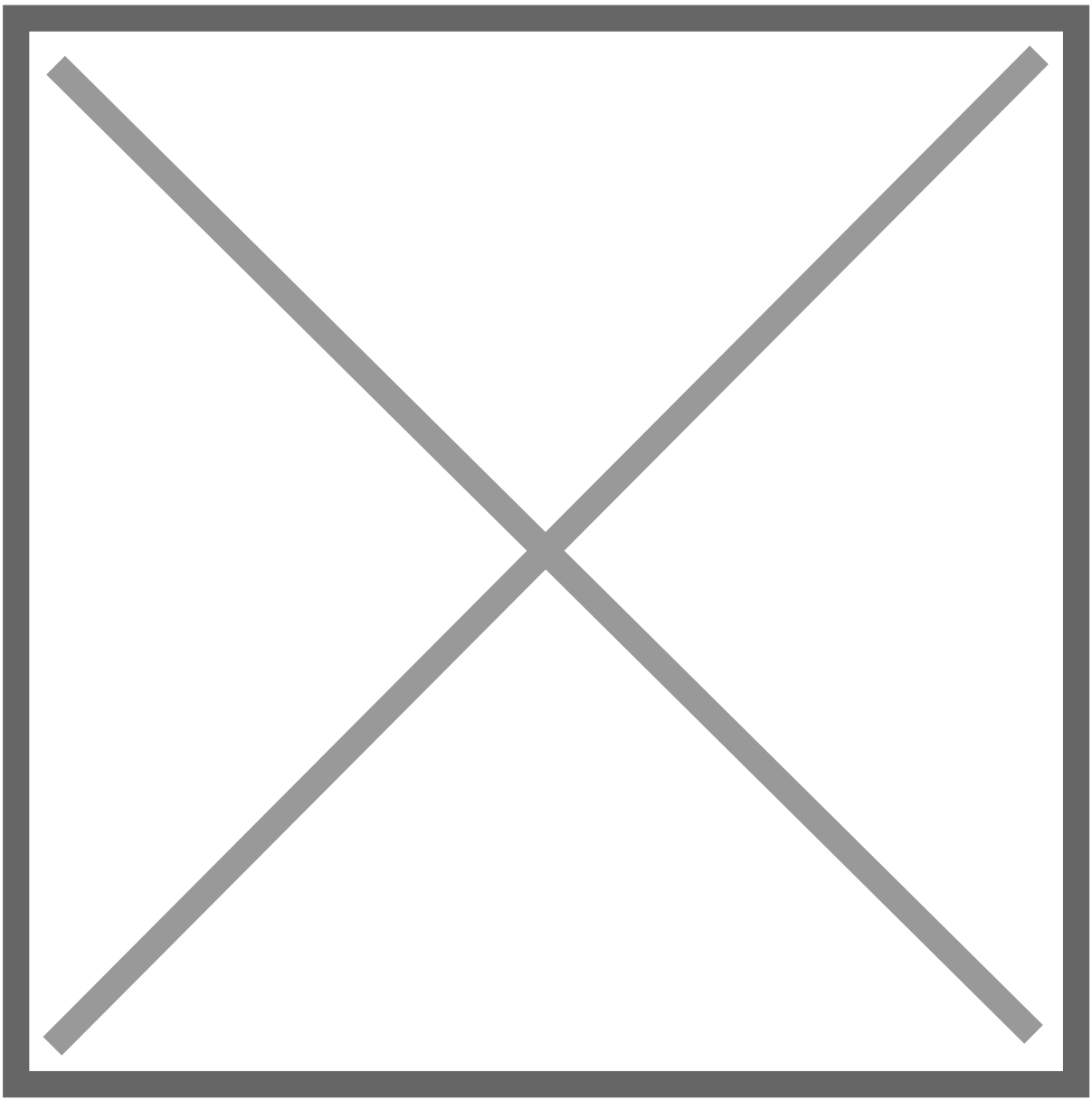
EMS needs to be downgraded.

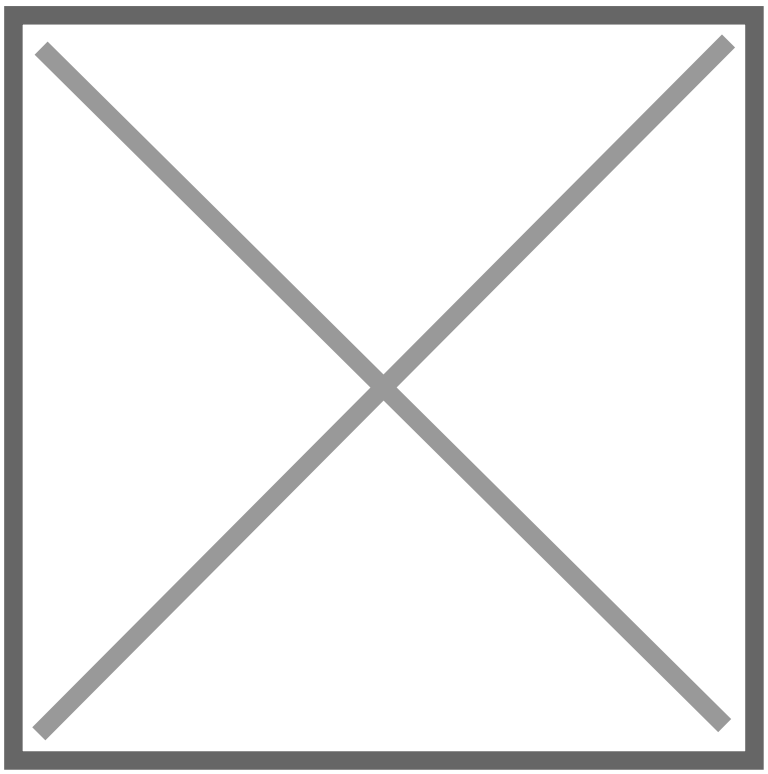


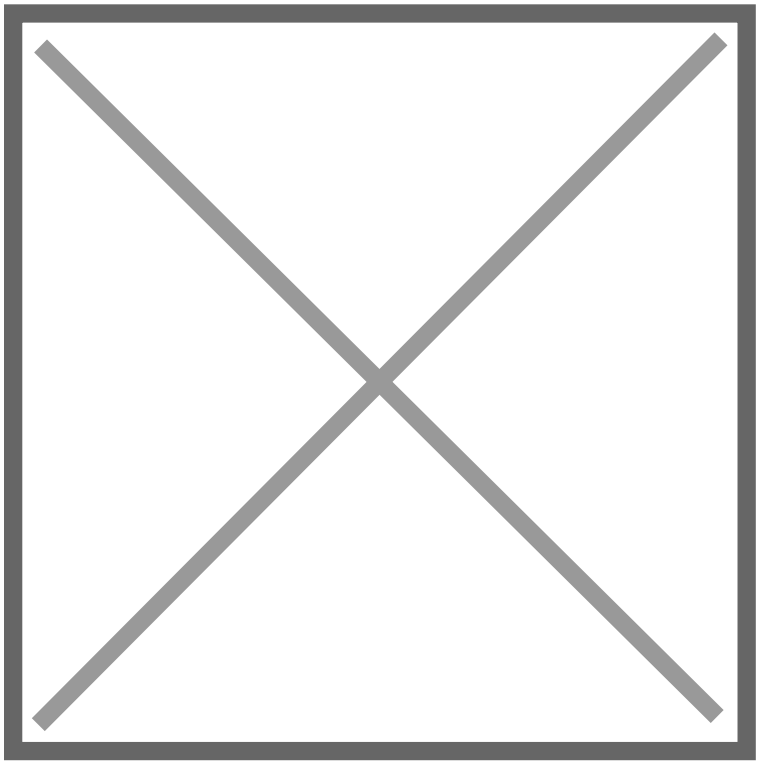












Troubleshooting

Avaya SBCE - troubleshooting commands

ASBCE Troubleshooting Commands

Commands and Files	Purpose
showflow 310 static	This command will show all the flows added on the SBC PCF for each interface.
showflow 310 dynamic	This command will show all the dynamic media flows opened on PCF.
netstat -atunp	This command will give idea about the machines connected to particular process and ports.
ip ru ls	This command will give list of route table names for each interface. (ex [route table name] : csrtable106)
ip ro ls table <route table number>	This command will give the default route information for the particular route table. (ex [route table number]: 106)
cat /usr/local/ipcs/etc/ipcs.cfg	This file shows info about SBC management interface and port numbers.
cat /usr/local/ipcs/etc/sysinfo	This file shows info about SBC configuration state, node id, serial number, version, ntp server.. etc.
ls -lLR /usr/local/ipcs/cert	This command will give info about SBC certificate/ keys information.
iptables -n --list --line-number -v -x	This command will give info about packets ACCEPTED/DROPPED by iptables with rule numbers.
arp -n	This command will give info about ARP table.
ethtool <interface name>	This command will show the status like duplex type, speed , link status of the interface.
pstree -Apanlu	This command will show the process tree of all the process on the system.
df -h	This command will show the disk status of the system.
dmesg	This command will give kernel log details .
free -m	This command will give the system memory and swap memory details .
find /usr/local/ipcs/log/ -print | grep -i critical |xargs ls -lt	This command will give the SBC process critical log files with timestamp.
cat /proc/cci/pcf/status	This command will give the SBC PCF status.
ls -ltrh /usr/local/ipcs/bin/	This command will display the latest core files .
ip -6 neigh	This command will display ARP or NDISC cache entries.
ip -6 ru ls	This command will give list of IPV6 route table names for each interface. (ex [route table name] : csrtable106)
ip -6 ro ls table <route table number>	This command will give the default IPV6 route information for the particular route table. (ex [route table number]: 106)
ip6tables -n --list --line-number -v -x	This command will give info about ipv6 packets ACCEPTED/DROPPED by ip6tables with rule numbers.
/build/bin/tash "counters status" | grep DYN	This command will give number of flows dynamic flows on tilera card.