



**Com.X**

**IP PBX / Gateway**

**ComX Software upgrade procedure**

**(1.3 to 1.4)**

Version 1.5, 24 May 2017

## Document History

Version	Date	Description of Changes
1.0	18/02/2016	Draft – M. Knight
1.1	23/02/2016	M.Knight, minor edits. Upgrade vs. Recovery section added
1.2	24/02/2016	M.Knight – added Com.X10 boot menus
1.3	18/04/2016	M.Knight – added note to expect the “Can't read mirror file” message
1.4	9/05/2016	M.Knight – merged AH changes - Added section on requesting ComX-1.4 licenses
1.5	24/05/2017	A.Harrison - Added warninig regarding connecting via ssh over the network and needing to manually install comx-base and comx-gui



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## 1 Upgrade vs. Recovery

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The Debian package responsible for upgrading Com.X software is also responsible for its recovery. It is able to upgrade Com.X software versions as well as reinstalling an entire Com.X system from scratch. The comma-recovery package operates in two different modes depending on how the Com.X device is booted. For the purposes of upgrade from ComX-1.3 to 1.4 a normal, uninterrupted boot up is sufficient.



## **2 Requesting Com.X Software License**

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Before any software upgrade to 1.4 begins a software license must first be purchased from your distributor. For information and pricing of Com.X-1.4 software licenses please contact your Com.X distributor. Once a license has been purchased from your distributor they will provide you with all the necessary license files to activate your software.



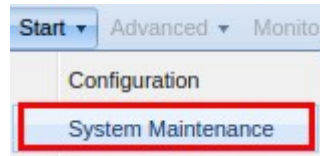
## 3 Comma-recovery

### 3.1 Correct Package Installed?

#### 3.1.1 Via comma-gui

Please ensure that the “comma-recovery” package is at least verion '1.4.4'.

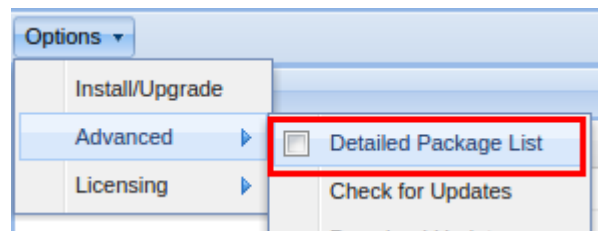
To verify whether the correct version is installed click start -> System Maintenance:



Then click on the 'packages' tab:



Then click “Options -> Advanced -> Detailed Package List”:



In the package list locate the comma-recovery package:

Packages						
Name	Description	Version	Available	State	Top Level	
asteriskcomma-1.8	Open Source Private Branch Exchange (PBX)	1:1.8.17-cma9896	1:1.8.17-cma9896	Up to Date	No	
commamgr	Manager for Comma iTA	1.1	1.2	Ready to U...	No	
commaimg	Comma iTA Image	1.60-cma1	1.65	Ready to U...	No	
comma-ups	Comma UPS support	0.2	0.2	Up to Date	No	
comma-selftest	Far South Networks Com.X Self Test	1.5	1.5	Up to Date	No	
comma-recovery	Comma recovery tools	1.4.3	1.4.4	Ready to U...	No	
asterisk-dahdi	DAHDI devices support for the Asterisk PBX	1:1.8.17-cma9896	1:1.8.17-cma9896	Up to Date	No	
asterisk-misdn	DAHDI devices support for the Asterisk PBX	1:1.8.17-cma9896	1:1.8.17-cma9896	Up to Date	No	



If comma-recovery is not more recent than version: 1.4.4 then update the package by selecting it, then clicking Options -> Install/Upgrade:



### 3.1.2 Via command line:

Use debian to check the version (min: 1.4.4) of comma-recovery:

```
>dpkg -l | grep comma-recovery  
ii comma-recovery          1.4.4      Comma recovery tools
```

To install/update the package:

```
> sudo apt-get update  
> sudo apt-get install comma-recovery
```



## 4 Menu System – Upgrade

This part requires command line access to your unit. You could use ssh via Ubuntu Bash or via Windows putty session.

### 4.1.1 Validating correct repository URL

In order to successfully upgrade from comx-1.3 to comx-1.4 the ComX unit needs to have the correct repository URL.

This url lives in file: `/etc/apt/sources.list`

1. Open the file for viewing:

```
> nano /etc/apt/sources.list
```

2. The correct URL is listed below. This should be the only URL listed in the file.

```
deb http://update.commanet.co.za/repo/comx-1.3.x lucid main
```

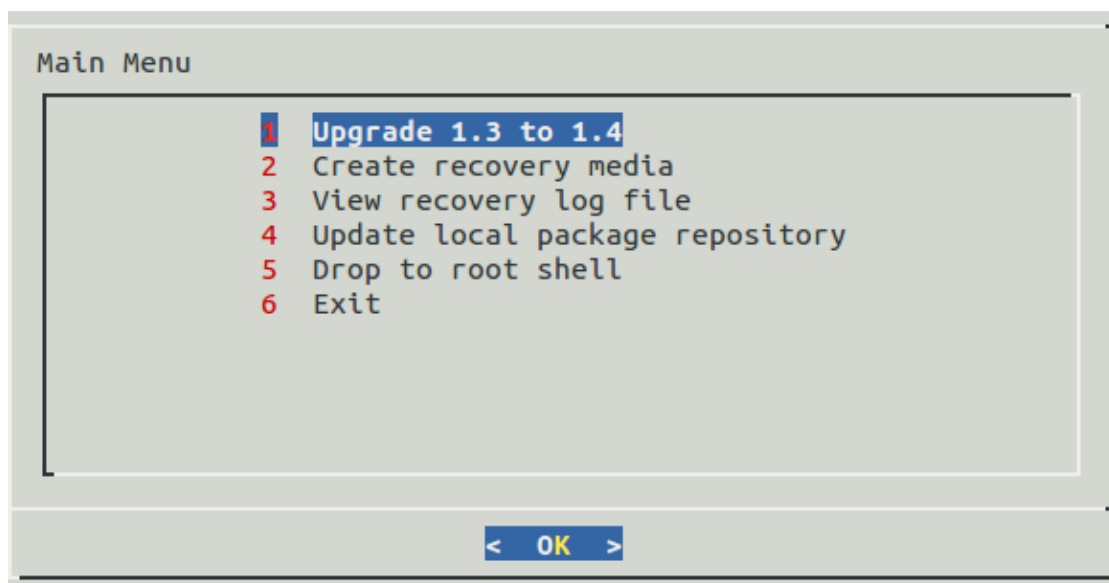
### 4.1.2 Accessing the menu

The comma-recovery menu system can be accessed via command line:

```
/usr/share/comma-recovery/bin/cr_main
```

### 4.1.3 Performing the upgrade

1. Select “Upgrade 1.3 to 1.4”







2. The script will continue through a number of steps. Eventually arriving at the do-release-upgrade step where it will remain for some time.

```
Step 8: do-release-upgrade -f
DistUpgradeViewNonInteractive
```

**NB: At this point you may see a “can't read mirror file” message popping up. Do not worry about this, just allow the process time to complete.**

**NB: expect an 1.5 ~ 2 hour delay for software update depending on your connection rate to update.commanet.co.za**

3. If successful, the unit will reboot, this time in Ubuntu 12.04 (precise). Complete.
4. If not successful check the URL in /etc/apt/sources.list (See 4.1.1) and repeat step 4.1.3

**Note: If you are connected to the device via ssh, rather than directly through a console cable, then the ssh session will be ended towards the end of the upgrade procedure, without performing the final steps of the upgrade.**

**Upon logging back in, you will need to issue the command:**

```
sudo apt-get install comx-base-1.4 comx-gui-1.4
```



# 5 USB Recovery/Install Disk

A Recovery/Install USB flash drive may be supplied to you or you may create one from an existing installation. These USB drives will be flashed with ComX-1.4 (or 1.3 depending on which system the disk is flashed with) and comma-recovery software.

## 5.1 Installing ComX-1.4 from USB Flash disk

- 1. Accessing the boot menu:

With a serial cable connected to your console interface reboot the unit.

Restart or power up your unit, interrupting the boot by pressing either tab or Esc as soon as you see output on the console or hear a beep,

On Com.X5 units press the 'Esc' key to break into the boot menu.

On Com.X10 unit press the 'Tab' key to break into the boot menu.

- 2. Select "Boot Manager"

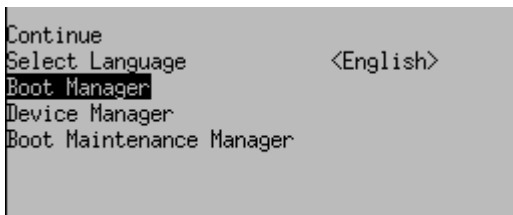


Illustration 2: Com.X5 Boot Menu

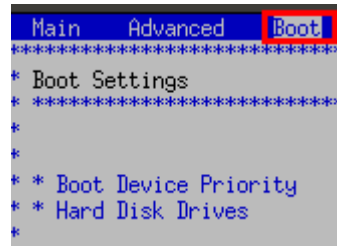
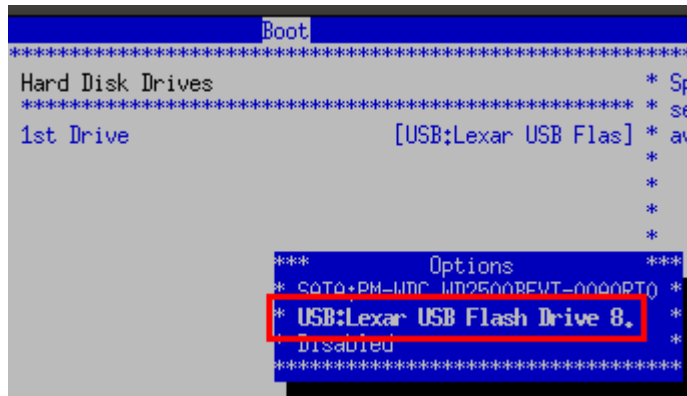


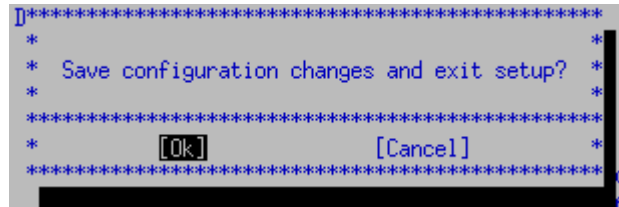
Illustration 1: Com.X10 Boot Menu

- 3. (Com.X10) under the boot menu go to the "Hard Disk Drives" menu. Select the USB drive you plugged in as the "1st Drive".





4. (Com.X10) go to the Exit menu and save configuration changes and exit.:



5. (Com.X5) Select "EFI USB Device"

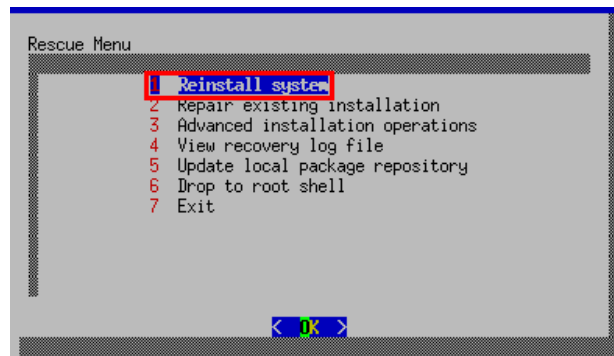


6. Allow the unit time to boot into recovery mode. Then access the menu with:

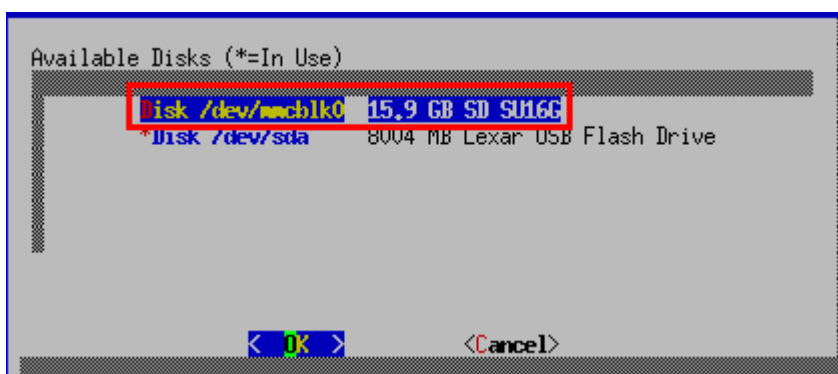
```
/usr/share/comma-recovery/bin/cr_main
```

Note: You may be presented with the recovery menu automatically after the reboot.

7. You will now be given the option to "Reinstall System", select this option. Press OK to the next series of messages:

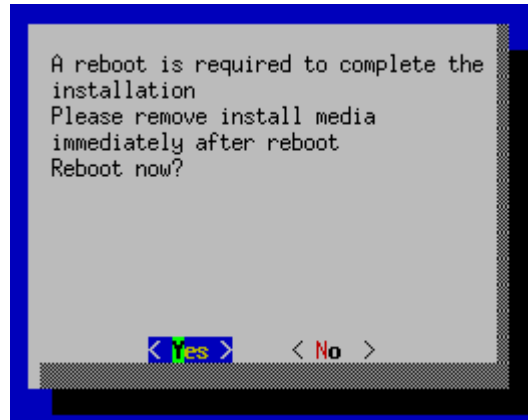


8. Select the disk you want to reinstall:





9. At this point you can expect a considerable delay: ~ 1 hour for the installation to complete.
10. Once complete you should get a prompt asking you to reboot, select 'Yes':



Note: The process takes a long time, and does not always provide output that is understandable to an installer/administrator. It is important not to end the process prematurely based on an assumption that it has failed. Unless an explicit failure message displays, and returns you to your command line session, assume that the upgrade is in process and working as expected.



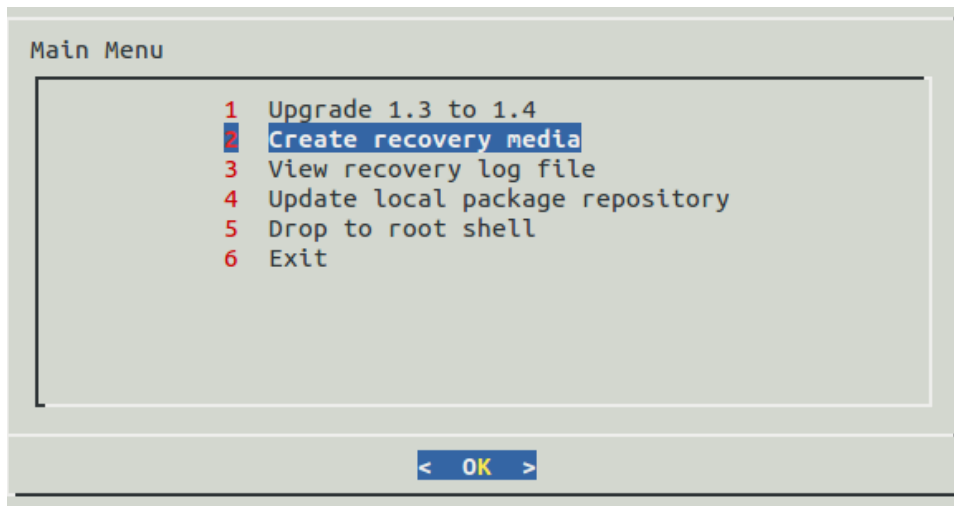
## 5.2 Creating a recovery disk

This must be done from a correctly working ComX-1.4 installed unit.

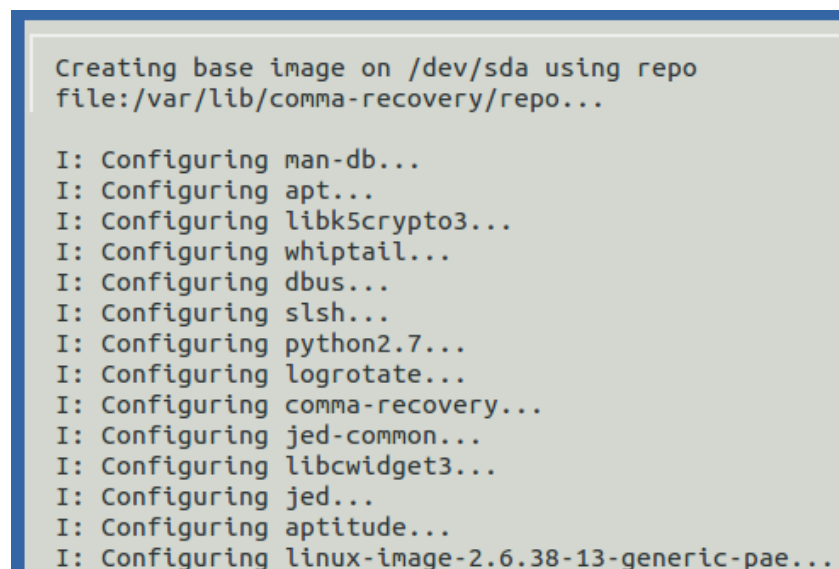
1. Accessing the menu:

```
/usr/share/comma-recovery/bin/cr_main
```

2. Select "Create recovery media":

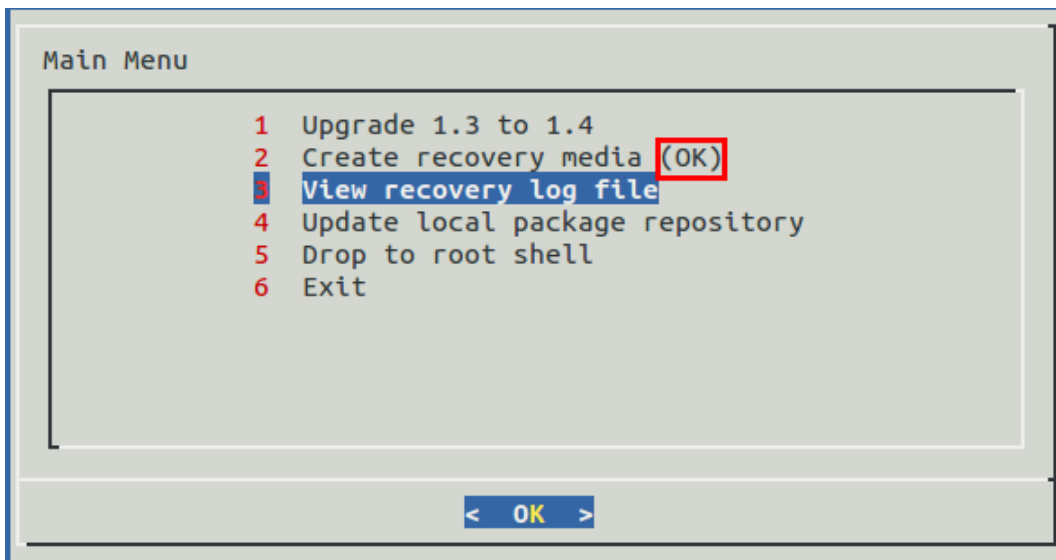


3. There may be a considerable delay (~1 hour) at this point while the comma-recovery software creates a bootable flash disk:





4. If successful you should be presented with an 'OK' next to "Create recovery media":



Unplug the flash disk and store in a safe place for later use.