

TECHNICAL BULLETIN

CODEX OS INSTALLATION GUIDE Codex S-Series and XL-Series

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CodexOS Installation Guide - S and XL-Series

This document details the procedure to install the new CodexOS operating system on a Codex S or XL-Series, and then install the latest Codex Production Suite (vlt-4.5.0-04611) software version.

Hardware Requirements

- Codex S or XL Series.
- 2.5" SSD to install CodexOS to (optional for XL-Series).
- USB disk to use for base image boot disk.
- USB disk to use for copying latest software after CodexOS install.
- USB keyboard and mouse.
- Mac to create boot disk and install disk for Codex Production Suite.

Software Requirements

Download the CodexOS base image (codex_base.20170531.iso, 878.7MB) from:

http://admin.codex.online/?action=asset&id=3240A718-960D-41DC-B9F0-848CFFAB4104

Download the latest Codex Production Suite Software, version 4.5.0-04611, for S/XL-Series from https://codex.online/software

Installation Procedure

1. On XL Series, you can optionally install an additional disk for CodexOS into one of the side slots. Otherwise on XL or S Series you can install CodexOS on the current system disk, which will overwrite the contents.

2. Connect the USB disk to a Mac. This disk will be used as the boot disk for the CodexOS installation base image. Unmount it using Disk Utility, but leave it connected to the Mac.

3. On Mac, use Terminal and the command 'diskutil list' to identify the device name of the boot disk, for example '/dev/disk2'. The existing volume name of the disk, or the capacity, can be used to identify the correct device:

	1	ali — -bash — 80×24		
Last login	: Mon Nov 7 12:18:23 (on ttys000		B
[Alis-MacBo	ok-Pro-2:~ ali\$ diskut:	il list]
/dev/disk0	<pre>(internal, physical):</pre>			
#:	TYPE	NAME	SIZE	IDENTIFIER
0:	GUID_partition_scheme		*500.3 GB	disk0
1:	EFI	EFI	209.7 MB	disk0s1
2:	Apple_CoreStorage	Macintosh HD	499.4 GB	disk0s2
3:	Apple_Boot	Recovery HD	650.0 MB	disk0s3
/dev/disk1	(internal, virtual):			
#:	TYPE	NAME	SIZE	IDENTIFIER
0:	Apple_HFS	Macintosh HD	+499.1 GB	disk1
		Logical Volume on d	isk0s2	
		A8E5DC30-61B1-4E1C-	A024-77B9D87965	53E
		Unencrypted		
/dev/disk2	(external, physical):			
#:	TYPE	NAME	SIZE	IDENTIFIER
0:	FDisk_partition_scheme		*8.0 GB	disk2
1:	DOS_FAT_32	ANACONDA	8.0 GB	disk2s1
Alis-MacBo	ok-Pro-2:~ ali\$			

4. Copy the file codex_base.20170531.iso to the boot disk device using dd in Terminal. For example:

sudo dd if=/Users/mike/Desktop/codex_base.20170531.iso of=/dev/rdisk2 bs=4m

Note: this will overwrite the disk contents, so be sure the correct disk is specified. It is recommended to detach all other disks from the system first to avoid accidental overwriting of the wrong disk.

When the file has finished copying the Mac will report that the disk is not recognised - click Ignore and disconnect the disk:



5. Connect the boot disk to a USB3 port on the S or XL Series and start the machine with a keyboard and mouse connected.

6. Press the power button to start the machine. On S Series, press the power button a second time to turn on the screen backlight. During boot up, press the Del key until the BIOS screen is shown.

7. Press the left cursor key to get to the Exit menu, where you can see the options for Boot Override. Select the boot disk and press Enter.

8. When the system reboots a screen will be shown with two options:

'Install Codex Production Suite base Vault S'

'Install Codex Production Suite base Vault XL'

Use the keyboard to select the correct option for the S or XL hardware, and press Enter.

9. The system will load the CodexOS installation program, and this screen will be displayed:

CodexOS INSTALLER		CODEX	
CODEX H	ARDWARE		
Q	CODEX HARDWARE Valid serial number required		
LOCALISA	TION		
O	DATE & TIME Europe/London timezone		KEYBOARD English (UK)
, á	LANGUAGE SUPPORT English (United Kingdom)		
			Quit Begin Installation
Wed 31 May 13:08:39 BST 201	7		Hard disks will remain untouched until you click 'Begin Installation'.
A Please complete items mar	ked before continuing to the next stage		

10. Click on the CODEX HARDWARE option, and this screen will be displayed:

CodexOS INSTALLER		CODEX	Main Menu
Serial Number			
Last 4 digits of unit's serial n	umber:		
Device Selection			
Select the device you would	ike to install to. This will rema	in untouched until you click on the main menu'	s "Begin Installation" button.
Local Standard Disks			
8192 MiB	8192 MiB	8192 MiB	
ATA VBOX HARDDISK	ATA VBOX HARDDISK	ATA VBOX HARDDISK	
sda / 992.5 KiB free	sdb / 8192 MiB free	sdc / 8192 MiB free	
🛕 No disks selected. Please selec	t a disk for installation.		

11. In the box provided, enter the last 4 digits of the machine serial number, which is used to set the hostname during installation.

Below this, click to select the disk to install to. All connected disks are displayed, so be sure to select the disk fitted into the side of the XL if you would like to install CodexOS there, rather than the existing system disk.

The image below shows the screen with a disk selected for installation:

	CodexOS INSTALLER		CODEX	Main Menu
s	erial Number			
	Last 4 digits of unit's serial numbe	r: 1234		
D	evice Selection			
	Select the device you would like to Local Standard Disks	o install to. This will remain	n untouched until you click on the main menu's "Begin Installatio	n" button.
	8192 MiB	8192 MiB	8192 MiB	
	ATA VBOX HARDDISK AT	A VBOX HARDDISK	ATA VBOX HARDDISK	
	sda / 992.5 KiB free so	db / 8192 MiB free	sdc / 8192 MiB free	
			Disks left unselected will not be affected	by the installation.

Click 'Main Menu'.

12. If the selected disk is not blank (which is likely if the disk is not brand new), this screen will be shown detailing the current partitions:

		G	ODEX			Main Men	iu
Serial Num	ber						
Last 4 die	its of unit's serial number: 1234					_	
Device Sel	RECLAIM DISK SPACE						
Select the	You can remove existing file systems to free up space for There is also free space available in pre-existing file syste	r this ins ems and	tallation. Removing a fil can be made available fo	e system will permane or the installation belov	ntly delete all o w. Back-up your	f its contents. data first. ton.	
Local Stan	Disk	Name	File System	Reclaimable Space	Action		
	👻 8192 MIB ATA VBOX HARDDISK	sda		7966 MiB total	Preserve		
	/boot (CentOS Linux Linux 7.3.1611 for x86_64)	sdal	ext4	799 MiB of 1024 MiB	Preserve		
	codexos	sda2	physical volume (LVM)	Not resizeable	Preserve		
ATA VE							
sda /							
						nstallai	tion.
	Preserve Delete Shrink					Delete all	
	1 disk; 7966 MiB reclaimable space (in file systems)						
			1 U	Tota	l selected space	to reclaim: O	
			Installatio	on requires a total of Z	BOI.U2 MIB for	system data.	
				Ca	Rec	aim space	

To prepare the disk for installation of CodexOS, click 'Delete all' and then 'Reclaim space'. Then click 'Main Menu'.

13. The main screen of the installer will be displayed again - at the bottom of the screen click 'Begin Installation'.

A progress bar will be shown while CodexOS is installed to the disk:

CodexOS INSTALLER		CODEX		
USER SET	TINGS			
C7	ROOT PASSWORD Root password is set		USER CREATION Administrator codex will be created	
		k		
O Creating xfs	on /dev/mapper/codexos-root			

When the installation is complete the screen below will be displayed:

CodexOS INSTALLER	CODEX
USER SETTI	NGS
	ROOT PASSWORD USER CREATION Root password is set USER CREATION Administrator codex will be created
	*
Complete!	
	CodexOS is now successfully installed. You can now restart your device.
▲ Use of this product is sub	bject to the license agreement found at /usr/share/codex-release/EULA

14. Click 'Reboot' to complete the installation of CodexOS.

15. If you have installed CodexOS to a new disk in the side slots of a Codex XL-Series, unplug the boot disk, and during boot press Del again to get to the BIOS. To set the machine to always boot from the CodexOS disk, go to Boot->Hard Drive BBS Priorities, and set the CodexOS disk as the first boot option. Alternately, you can leave the current boot disk setting, and choose to override it temporarily by going to the Exit menu, where you can select a boot overide from the disks shown at the bottom of the screen. When you have made the settings change, press F4/F10 to Save & Exit.

16. The first time CodexOS starts, a login prompt will be shown, e.g.

vaultxl1234 login: _

17. If a '~bash' prompt is shown instead, type 'su' and press Enter, then type the password 'codex' and press Enter.

Now the Codex Production Suite software needs to be copied to the machine and installed, using the instructions in the next section.

Copying software from USB drive and installing

1. Format a USB drive with an 'MS-DOS (FAT)' filesystem on Mac/Windows.

2. Copy the software package (vault-4.5.0-04611.tgz) onto the USB drive.

3. Connect the USB drive to the S/XL-Series.

4. Using the keyboard connected to the S/XL-Series, type the following command and press Enter to create a mount-point for the USB drive:

mkdir /mnt/usb

5. Type the following command and press Enter to identify the device letter for the USB drive:

fdisk -1

The USB drive can be identified by the size that is shown (e.g. 8053MB). The USB drive will commonly be 'sdb' if the machine only has a system disk, but may be a higher letter (e.g. 'sdc', 'sdd', etc) if there additional disks fitted (in particular in an XL-Series).

6. Type the following command and press enter to mount the USB drive:

mount -t vfat /dev/sdb /mnt/usb

7. Type the following command and press Enter to copy the software from the USB drive to the system disk of the machine:

cp /mnt/usb/vault-4.5.0-04611.tgz /tmp

8. Type the following command and press Enter to move to the /tmp directory:

cd /tmp

9. Type the following command and press Enter to unpack the .tgz file:

tar xvf vault-4.5.0-04611-CodexOS.tgz

10. Type the following command and press Enter to change into the directory that is created:

cd vault-4.5.0-04611-CodexOS

11. Type the following command and press Enter to start the install script:

./install.sh

12. Status information will be printed as dependencies are resolved and packages installed. This may take up to around 5 minutes. When the installation completes you will be prompted to press Enter to reboot the machine.

13. When the system boots the Codex software will load, and you will need to create an Admin account and obtain a licence for the software using the System Key.

If any issues occur during installation please report these to support@codex.online.