

INSTALLATION MANUAL

Version 12.05 - September 2014



Multicam.LSM





Copyright

EVS Broadcast Equipment SA– Copyright © 2003-2014. All rights reserved.

Disclaimer

The information in this manual is furnished for informational use only and subject to change without notice. While every effort has been made to ensure that the information contained in this user manual is accurate, up-to-date and reliable, EVS Broadcast Equipment cannot be held responsible for inaccuracies or errors that may appear in this publication.

Improvement Requests

Your comments will help us improve the quality of the user documentation. Do not hesitate to send improvement requests, or report any error or inaccuracy on this user manual by e-mail to doc@evs.com.

Regional Contacts

The address and phone number of the EVS headquarters are usually mentioned in the Help > About menu in the user interface.

You will find the full list of addresses and phone numbers of local offices either at the end of this user manual (for manuals on hardware products) or at the following page on the EVS website: <http://www.evs.com/contacts>.

User Manuals on EVS Website

The latest version of the user manual, if any, and other user manuals on EVS products can be found on the EVS download center, on the following webpage: <http://www.evs.com/downloadcenter>.

Table of Contents

TABLE OF CONTENTS	II
1. PREREQUISITES	1
2. INSTALLATION ON MTPC USING A USB KEY	3
2.1. Overview of the Installation Menu	3
2.2. Memory Check	4
2.3. EVS Multicam 12 Upgrade	4
2.3.1. General Upgrade Process	4
2.3.2. First Upgrade to Multicam 12	6
2.3.3. End of Upgrade Process	7
2.4. Format C: Drive and Install Multicam 12	8
2.5. Maintenance Menu	10
2.5.1. Overview of the Maintenance Menu	10
2.5.2. Partitioning	10
2.5.3. Versions	11
2.5.4. XHub Upgrade	12
2.5.5. BIOS Reset for HS87x	13
2.5.6. Exit to DOS	14
2.6. Support & Contact Information	14
3. EXPLORING THE STARTUP MENU	15
3.1. Overview of the Startup Menu	15
3.2. Boot Multicam 12	15
3.3. Maintenance Menu	16
3.3.1. Overview of the Maintenance Menu	16
3.3.2. Versions	17
3.3.3. Start OS with PC LAN Support	18
4. ADVANCED PROCEDURES	19
4.1. Adding Multiple Versions on the EVS Server	19
4.1.1. How to Add a Version when Creating the USB Key	19
4.2. Location of EVS & AVCFG Parameters	19
4.3. Downgrading from Multicam 12 to Multicam 10	20
4.3.1. Overview	20
4.3.2. How to Restore the Multicam 10 lines	21
4.3.3. How to Downgrade the Multiviewer	22
4.3.4. How to Change the Active Version	23

1. Prerequisites



Warning

Before you install Multicam 12 or upgrade to this software version, we suggest that you carefully read this guide and the corresponding release notes.

Requirements

Multicam 12 can only be installed on XT2+, XT3, XS (4U, 5U or 6U), XTnano and XSnano systems running with one of these MTPC revisions: A2/A3, A2/A4, A3/A5 or A3/A6 (HS870 or HS873).

To be able to install Multicam 12, at least 256 MB of RAM is mandatory.

Generating the Installation Files

BAT Files

The installation files are delivered in a zip archive including two folders (Image & Install).

Two bat files are delivered with the zip archive. They allow you to generate the following installation files:

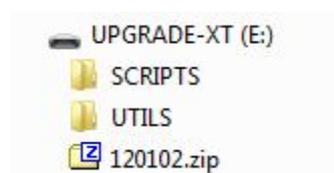
- The `MakeXNetInstallZip.bat` file is to be used to generate a .zip installation file for installation from XNet Monitor.
- The `MakeUSB.bat` file is to be used to generate the installation files on a USB key for direct installation on the EVS server.

How to Generate the Installation Files on a USB Key

This method for generating installation files is used when you directly install Multicam on the EVS server.

To generate the installation files on a USB key, proceed as follows:

1. Extract the initial zip archive to a temporary folder on your windows PC.
2. Insert a blank USB key (256MB or larger) into the PC and check the letter drive assigned to the USB key.
3. In the temporary folder, double-click the `MakeUSB.bat` file and follow the instructions.
4. Indicate the drive letter assigned to the USB key.
5. The key is formatted and installation files are copied to the USB key.

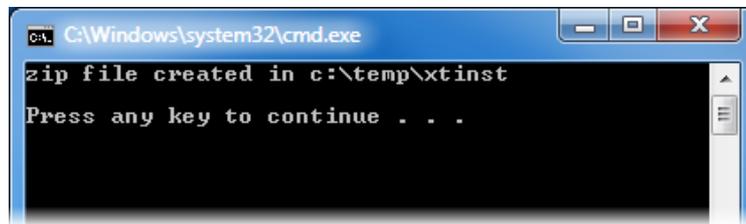


How to Generate the Installation Zip File

This method for generating installation files is used when you install Multicam from an XNet Monitor application.

To generate the installation zip file, proceed as follows:

1. Extract the initial zip archive file to a temporary folder on your windows PC.
2. In the temporary folder, double-click the `Make XNet Install Zip.bat` file.
3. When the installation zip file is created, the following message is displayed on the command prompt:



The installation .zip file is stored on `C:\temp\xtinst`, and its name is made up of the current release, version and build numbers.

4. Copy the installation .zip file to the computer where XNet Monitor is installed, and from which you will install the Multicam application.

Refer to the XNet Monitor user manual for a detailed procedure for Multicam installation via XNet Monitor.

2. Installation on MTPC using a USB Key

2.1. Overview of the Installation Menu

To access the installation menu, you need to insert the USB key including the Multicam installer into the MTPC front panel of the EVS series server and reboot the system.

```
EVS Multicam 12.01.xx Installation Menu

Main Menu

1. EVS Multicam 12.01.xx Upgrade
2. Format C: drive and install Multicam 12.01.xx
3. Maintenance
4. Support contacts

Enter a choice: 1_

[UP/DOWN] -> Navigate, [ENTER] -> Select item, [ESC/BACKSPACE] -> Previous Menu
```

From the installation menu, four options are presented:

1. **EVS Multicam Upgrade:** This option means that only the core files of the Multicam 12 application will be copied to the system drive partition, and a process is used to migrate previous configuration files into the upgraded version.
2. **Format C: and Install Multicam:** This install option means a full formatting of the system drive partition will be performed, followed by a clean installation of Multicam 12.
3. **Maintenance:** This option allows the access to various support processes and tools such as BIOS reloading.
4. **Support Contacts:** This option provides contact information to EVS support offices.

2.2. Memory Check

Before starting the installation of Multicam 12, the system will check if enough memory is installed on the server. The system needs at least 256 MB of RAM.

If not enough memory is detected, the following message will be displayed:

```

*****
*****
**                                     **
**  Not enough memory to install or start Multicam 12.  **
**                                     **
**           Please contact your EVS regional office.    **
**                                     **
*****
*****

```

2.3. EVS Multicam 12 Upgrade

2.3.1. General Upgrade Process

Introduction

For upgrading to a more recent version of Multicam, you need to select the first option in the Installation Menu: **EVS Multicam 12.XX.XX Upgrade**.

The upgrade is performed automatically. The total duration of the operation (upgrade Multicam + quad MTPC) is around 12 minutes.



Warning

When you upgrade to Multicam 12 for the first time and you want to keep clips recorded with a Multicam 11 or lower, you need to back up the clips with XTAcess prior to upgrading Multicam.

A full installation process include the following steps. Some of the steps are optional and/or depend on the version previously installed:

1. check of current version (warning when you have to perform a clear clip after installation)
2. upgrade of Multicam
3. update of the MTPC BIOS
4. upgrade of the quad MTPC (when you upgrade to Multicam 12 for the first time)
5. notification to set a jumper for the VGA2TV adapter

The steps 1, 3, 4 and 5 are briefly explained in this section.



This message is followed by a more detailed explanation:



The startup procedure is interrupted and Multicam comes back to the setup screen.

From this screen, you can clear the video disks and restart your Multicam 12.

2.3.3. End of Upgrade Process

Installation with a USB Key

When you have started the upgrade from the Installation menu, the server upgrades the Multicam. When the upgrade is finished, you are asked to remove the USB key and restart the server.

During the restart, the quad MTPC will be upgraded. Once the upgrade is finished, the server continues to boot normally.

Installation with XNet Monitor

During the installation with XNet Monitor, your server will restart automatically then install the new version and open the window where you can launch a configuration line.

A warning message might appear on the screen:



The message asks you to power off/on the server. In this case, a simple reboot of the software is not enough, **you have to turn off/on the power switch**.

During the restart, the quad MTPC will be upgraded. Once the upgrade is finished, the server continues to boot normally.

2.4. Format C: Drive and Install Multicam 12

Introduction

When you install Multicam for the first time or when you want to erase all the content of the system drive partition and perform a full installation, you need to select the second option in the Installation menu: **Format C: and install Multicam 12.XX.XX**.

A full install starts by erasing all the contents of the system drive partition.

```
          EVS Multicam 12.01.xx Installation Menu

Main Menu

1. EVS Multicam 12.01.xx Upgrade
2. Format C: drive and install Multicam 12.01.xx
3. Maintenance
4. Support contacts

Enter a choice: 1_

[UP/DOWN] -> Navigate, [ENTER] -> Select item, [ESC/BACKSPACE] -> Previous Menu
```

Besides the upgrade process itself, some additional actions are performed during installation, which generate messages and require a user input.

These additional steps are described in this section.

2.5.3. Versions

Introduction

When you select the Versions option from the Maintenance menu, the Version window is displayed. As you can install up to five Multicam versions on the EVS server, you can manage these versions and delete one or more versions if needed. The Version window allows you to manage the Multicam versions installed on the EVS server.

The following options are offered and explained below:

- Delete a Specific Version
- Delete all Versions
- Restore Multicam 10 Lines

Highlight the requested option with the Arrow keys, then press **Enter** to either open a secondary window, or validate the action.

How to Delete a Specific Version

The **Delete a Specific Version** option in the Version menu allows you to remove one or more versions from the server.

From the list of Multicam versions installed on the EVS server, highlight the version you want to delete using the Arrow keys, and press **Enter** to validate.

```
EVS Multicam 12.01.xx Startup Menu

Delete a specific version

1. 1201xx
2. 1201yy
3. 1201zz

Enter a choice: 1

[UP/DOWN] -> Navigate, [ENTER] -> Select item, [ESC/BACKSPACE] -> Previous Menu
```



```
EVS Multicam 12.01.xx Installation Menu

XHub Upgrade

1. Multicam 12 - Upgrade XHub to version 3.03
2. Multicam 12 - Upgrade XHub[2] to version 3.03

Enter a choice: 1

[UP/DOWN] -> Navigate, [ENTER] -> Select item, [ESC/BACKSPACE] -> Previous Menu
```

2.5.5. BIOS Reset for HS87x

If needed, the Multicam can reset the BIOS of the MTPC. Two choices are available; the option to be selected depends of the hardware used for the VGA.

```
EVS Multicam 12.01.xx Installation Menu

BIOS reset for HS87x

1. Reset BIOS for multicam 9 and later - Defaultsettings (640*480)
2. Reset BIOS for Multicam 9 and later - Enhanced settings (1024*768)

Enter a choice: 1

[UP/DOWN] -> Navigate, [ENTER] -> Select item, [ESC/BACKSPACE] -> Previous Menu
```

2.5.6. Exit to DOS

The DOS prompt will allow the user to exit to a traditional DOS prompt that allows performing advanced and complex maintenance and support operations.

2.6. Support & Contact Information

	WORKING HOURS	NON WORKING HOURS	EMAIL
APAC			
Australia	+61 02 9452 8600	+61 420 30 73 87	support@evs-asia.com.hk
China	+86 139 1028 9860	+86 139 1028 9860	support@evschina.com
India	+91 22 6697 2215	+91 98 9017 5958	support.india@evs.tv
Hong Kong	+852 94 01 23 95	/	support@evs-asia.com.hk
EMEA			
Belgium	+32 4 361 70 00	+32 495 284 000	support@evs.tv
France	+33 1 46 99 9003	+32 495 284 000	support.france@evs.tv
Germany	+49 89 4111 949 77	+32 495 284 000	support.germany@evs.tv
Iberica	+34 91 490 39 33	+32 495 284 000	support.iberica@evs.tv
Italy	+39 334 631 1493	+32 495 284 000	support.italy@evs.tv
MiddleEast	+971 4 3654 231	+32 495 284 000	support.middle-east@evs.tv
UK	+44 1372 387 266	+32 495 284 000	support.uk@evs.tv
NALA			
Canada	+1 514 400 9369	+1 514 400 9369	support.canada@evs.tv
Mexico	+52 55 46 31 22 09	+52 55 46 31 22 09	/
Usa	+1 973 575 7813	+1 973 575 7813	support.usa@evs.tv
Press any key to continue ...			

3. Exploring the Startup Menu

3.1. Overview of the Startup Menu

When booting the EVS server after a Multicam 12 installation, the following startup menu is displayed each time:

- If you want to boot the Multicam 12, highlight option <1> and press **Enter**.
- If you want to enter the Maintenance menu, highlight option <2> and press **Enter**.
- If you want to display contact and support information, highlight option <3> and press **Enter**. See section "Support & Contact Information" on page 14.

```
EVS Multicam 12.01.xx Startup Menu

Main Menu
 1. Boot Multicam 12.01.xx
 2. Maintenance
 3. Support

Enter a choice: 1

[UP/DOWN] -> Navigate, [ENTER] -> Select item, [ESC/BACKSPACE] -> Previous Menu
```

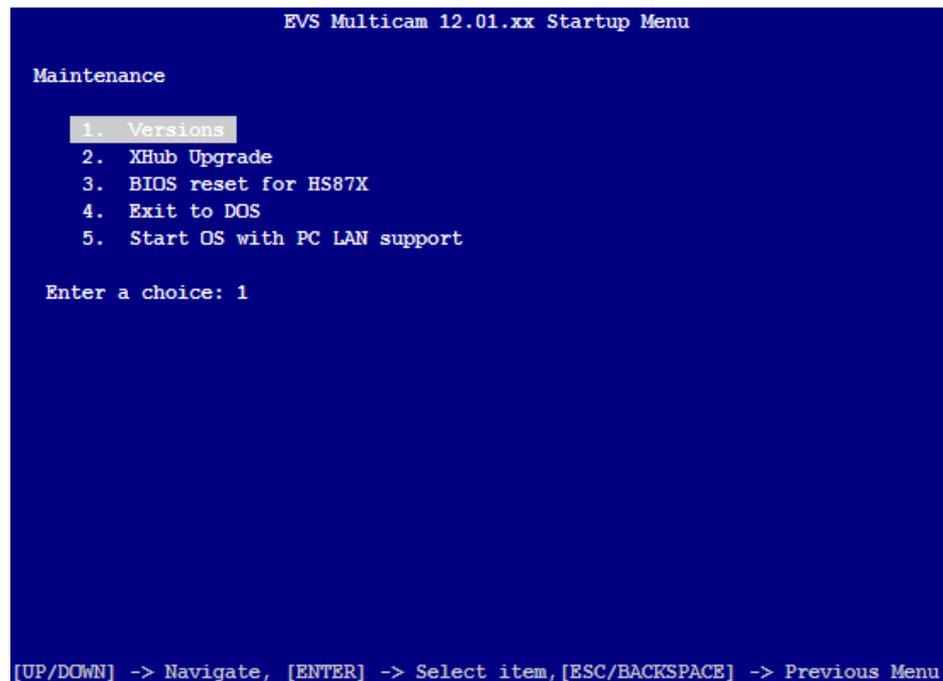
3.2. Boot Multicam 12

If this option is selected, the system boots the version that is currently active. The initial boot menu will proceed after 5 seconds if the user does not press a key.

3.3. Maintenance Menu

3.3.1. Overview of the Maintenance Menu

From the Startup menu, the Maintenance option opens the following Maintenance menu. This menu, which is similar to the Maintenance menu available from the Installation menu, offers different possibilities to maintain the server. The user has the possibility, among others, to manage the version, upgrade an XHub and reset the BIOS.



The following table presents the various options and refers to the relevant sections:

Option	Description
Versions	Allows users to delete one or more Multicam versions on the EVS server. See section "Versions" on page 17.
XHub Upgrade	Allows users to upgrade XHub and XHub[2] versions. See section "XHub Upgrade" on page 12.
BIOS reset for HS87X	Allows users to reset the BIOS of the MTPC. See section "BIOS Reset for HS87x" on page 13.
Exit to DOS	Allows users to exit the startup and open a DOS command prompt. See section "Exit to DOS" on page 14.
Start OS with PC LAN Support	Allows users to start the OS, only for the purpose of file transfer via PC LAN. See section "Start OS with PC LAN Support " on page 18

3.3.2. Versions

Introduction

When you select the Versions option from the Maintenance menu, the Version window is displayed. As you can install up to five Multicam versions on the EVS server, you can manage these versions and delete one or more versions if needed. The Version window allows you to manage the Multicam versions installed on the EVS server.

```
EVS Multicam 12.01.xx Startup Menu

Versions

1. Change active versions
2. Delete a specific version
3. Delete all versions
4. Restore M10 lines (for M10 use only)

Enter a choice: 1

[UP/DOWN] -> Navigate, [ENTER] -> Select item, [ESC/BACKSPACE] -> Previous Menu
```

The following options are offered and explained below:

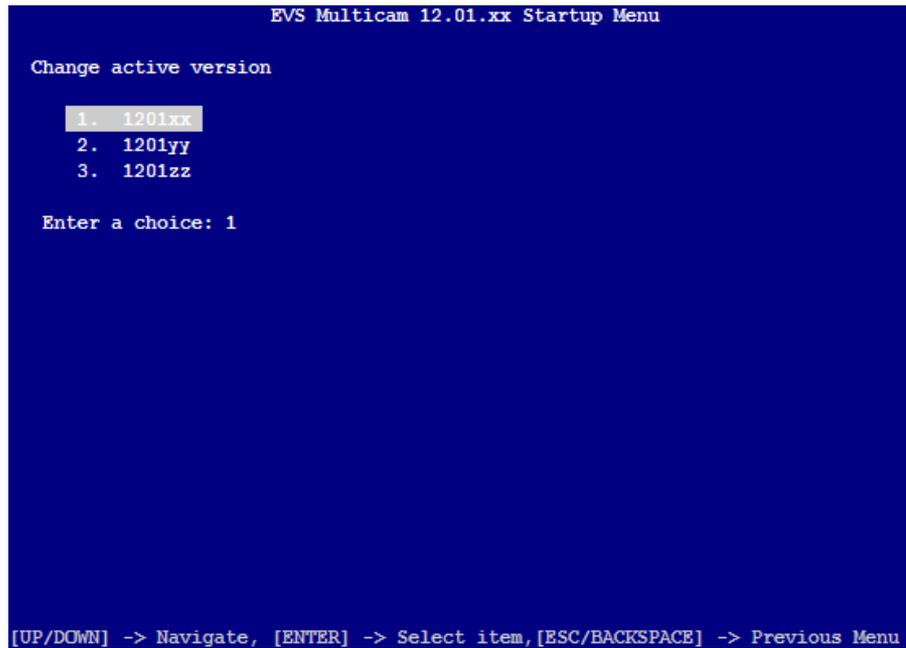
- Change Active Version
- Delete a Specific Version
- Delete all Versions
- Restore M10 Lines

Highlight the requested option with the Arrow keys, then press **Enter** to either open a secondary menu, or validate the action.

How to Change the Active Version

With this option, you can easily and quickly swap to one of the Multicam versions installed on the EVS server. A quick extraction is done in the background and you can upgrade or downgrade in minutes without using the USB key.

When changing the active Multicam version, a series of warning messages might appear. Due to differences in operating system and file management between Multicam 8 and Multicam 12, an automatic BIOS update is performed and clearing the video disks is required whenever an upgrade is engaged between incompatible Multicam versions.



```
EVS Multicam 12.01.xx Startup Menu

Change active version

1. 1201xx
2. 1201yy
3. 1201zz

Enter a choice: 1

[UP/DOWN] -> Navigate, [ENTER] -> Select item, [ESC/BACKSPACE] -> Previous Menu
```

How to Delete a Specific Version

See section "Versions" on page 11 in the installation menu.

How to Delete All Versions

See section "Versions" on page 11 in the installation menu.

How to Restore M10 lines (for Multicam 10 use only)

See section "Versions" on page 11 in the installation menu.

3.3.3. Start OS with PC LAN Support

This is an advanced maintenance mode, not advised unless you feel comfortable with the server.

This mode allows booting to perform file transfers from the PC LAN, but will block the boot up of the system. This does not allow for defining the PC LAN address that must have been defined previously.

4. Advanced Procedures

4.1. Adding Multiple Versions on the EVS Server

4.1.1. How to Add a Version when Creating the USB Key

**Note**

This procedure is an advanced operation and is not advised to be performed unless you feel comfortable with the server and you follow the procedures described in this section.

Example: How to Add a Multicam 11.02.80 when Creating the USB Key of Version 12.05.XX

1. Download the zip file of the version 12.05.XX from the EVS web site.
2. Extract the 1205XX zip in a temporary folder. The zip contains two folders (Image & Install).
3. Download the zip file of the version 11.02.80 on the EVS web site
4. Extract the 110280.zip in a different temporary folder.
5. In the temporary folder of 110280 use `MakeZip.bat`.
6. Extract the zip created to the folder `\Install\ADDONS\VERSIONS` in the temporary folder of 12.05.XX
7. Create a USB key using `MakeUsbKey.bat` in the temporary folder of 12.05.XX.

4.2. Location of EVS & AVCFG Parameters

From Multicam 11, the way to store the parameter files has changed. The file structure has been completely redesigned. The files used from Multicam 11 are not compatible with the files used in the earlier versions.

The line definitions are now stored in `\LSMCE\DATA\SETUP` as `CFG000XX.LIN` files

Old AVCFG configuration parameters (prior to Multicam 11) that have been converted during the Multicam 12 boot are located in `\LSMCE\DATA\SETUP\OLDAVCFG`.

When creating the USB installation key, setup files can be inserted in the temp folder (\Image\LSMCE\DATA\SETUP) to allow pre-configured files to be dropped by the Multicam 12 installer.

4.3. Downgrading from Multicam 12 to Multicam 10

4.3.1. Overview

**Warning**

If you want to run a Multicam 10 version again, you have to restore the Multicam 10 lines before changing the version from Multicam 12 to Multicam 10. Indeed there is no possibility to restore the Multicam 10 lines once downgraded to Multicam 10.

Introduction

When you want to downgrade your Multicam from a Multicam 12 version to a Multicam 10 version, follow the three-step process specified below and the corresponding procedures.

This procedure can be used if you already have a Multicam 10 version installed on the server.

- [Restoring the Multicam 10 lines](#)
- [Downgrading the Multiviewer](#)
- [Changing the active version](#)

4.3.2. How to Restore the Multicam 10 lines

1. Go to the Startup Menu.

```
EVS Multicam 12.01.xx Startup Menu

Main Menu

1. Boot Multicam 12.01.xx
2. Maintenance
3. Support

Enter a choice: 1

[UP/DOWN] -> Navigate, [ENTER] -> Select item, [ESC/BACKSPACE] -> Previous Menu
```

2. Select the Maintenance sub menu.

```
EVS Multicam 12.01.xx Startup Menu

Maintenance

1. Versions
2. XHub Upgrade
3. BIOS reset for HS87X
4. Exit to DOS
5. Start OS with PC LAN support

Enter a choice: 1

[UP/DOWN] -> Navigate, [ENTER] -> Select item, [ESC/BACKSPACE] -> Previous Menu
```

3. Select the Versions sub-menu.

```
EVS Multicam 12.01.xx Startup Menu

Versions

1. Change active versions
2. Delete a specific version
3. Delete all versions
4. Restore M10 lines (for M10 use only)

Enter a choice: 1

[UP/DOWN] -> Navigate, [ENTER] -> Select item, [ESC/BACKSPACE] -> Previous Menu
```

4. Select the **Restore M10 lines (for M10 use only)** option and press **Enter** to validate.

4.3.3. How to Downgrade the Multiviewer

When you downgrade to a Multicam 10 version, you have to manually downgrade the internal Multiviewer available through the MTPC board.

To downgrade the Multiviewer, proceed as follows:

1. Prepare a USB key with the installation files for a Multicam version 11.XX or 12.02 as described in the procedure "How to Generate the Installation Files on a USB Key" on page 1.
2. Inset the key into the EVS server on which you need to downgrade the Multiviewer
3. Power off and on the EVS server.
4. In the Startup menu, select the option Maintenance (2) to enter the Maintenance menu.
5. In the Maintenance menu, select the option Exit to dos (4) to open the DOS command prompt.
6. In DOS, navigate to C:\UTILS\Quad.
7. Force the server to execute the ug_mtpcq file with the following command:
ug_mtpcq.exe -f.

4.3.4. How to Change the Active Version

1. In the Versions menu select the sub menu **Change active versions**.

```
EVS Multicam 12.01.xx Startup Menu

Versions

1. Change active versions
2. Delete a specific version
3. Delete all versions
4. Restore M10 lines (for M10 use only)

Enter a choice: 1

[UP/DOWN] -> Navigate, [ENTER] -> Select item, [ESC/BACKSPACE] -> Previous Menu
```

2. In the new menu, select your Multicam 10 version.
Your server will activate the Multicam 10 version and reboot.

Corporate
+32 4 361 7000

North & Latin America
+1 973 575 7811

Asia & Pacific
+852 2914 2501

Other regional offices
www.evs.com/contact

EVS Headquarters
Liège Science Park
16, rue Bois St Jean
B-4102 Seraing
Belgium

EVS Broadcast Equipment is continuously adapting and improving its products in accordance with the ever changing requirements of the Broadcast Industry. The data contained herein is therefore subject to change without prior notice. Companies and product names are trademarks or registered trademarks of their respective companies.



To learn more about EVS go to www.evs.com