INSTALLATION MANUAL
Linux

Version 15.3 - December 2017

Multicam.LSM

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What's New?

The Multicam Installation manual has not been subject to changes related to new features for release 15.3.

The following changes unrelated to new features, and therefore not highlighted with the **New** icon, have been brought to the configuration manual:

Reviewed procedure for upgrade

- See section "Installing Multicam" on page 9

Description of Reset Bios option added

- See section "Resetting BIOS" on page 20

1. Requirements

> **WARNING**
>
> Before you install Multicam 15 or upgrade to this software version, we suggest that you carefully read this guide and the corresponding release notes.

Multicam 15 can only be installed on EVS servers equipped:

- with an MTPC board HS873, revision A3/A6 or A3/A5
- with 1 GB of RAM
- with a GbE board (TGE)

2. Installing and Upgrading Multicam

2.1. Overview

Installation with USB Key or with XNet(Web) Monitor

You can upgrade Multicam in two different ways:

- Plugging a USB key including the installer into the EVS server.

  This upgrade process is described in the Muticam Installation manual.
- Launching the delivered .gz file via XNet (Web) Monitor.

  This upgrade process is described in the XNet (Web) Monitor user manual.

> **WARNING**
>
> You have to install Multicam from a USB key when you first upgrade to Multicam 15.

Creating a USB Installation Key

When you upgrade Multicam with a USB key, you first need to prepare the USB installation key you will plug into the EVS server.

You will generate the USB installation key using the **Multicam USB Creator** tool.

See section "Creating a USB Installation Key" on page 2 for detailed information on how to create a USB installation key.

Standard Installation vs. Installation with Formatting

Two installation methods are available when you upgrade Multicam with a USB key:

Options	Suited ...
Format and Install Multicam	• for a very first installation • when getting an error about disk not correctly formatted • when you want to erase all the content of the Linux drive partition
Install Multicam	• in all other cases (standard process)

2.2. Creating a USB Installation Key

Introduction

When you first install Multicam 15 on your EVS server, you have to perform the installation from a USB key (of min. 2GB capacity, 4GB recommended).

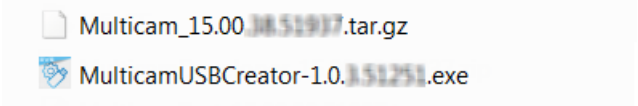
For subsequent installations, you can use the USB key or install via XNet Monitor or XNet Web Monitor.

When you upgrade Multicam from a USB key, you first need to create the USB installation key with the requested version using the **Multicam USB Creator** tool.

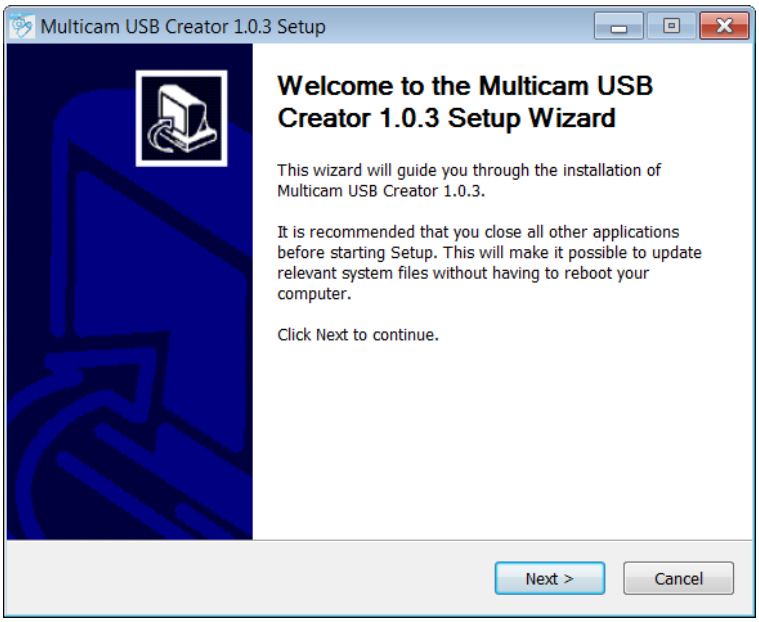
How to Install the Multicam USB Creator Tool

To be able to generate the USB installation key, you need to install the **Multicam USB Creator** tool.

You will find the USB Creator executable on the Multicam package, next to the Multicam version file (.tar.gz):

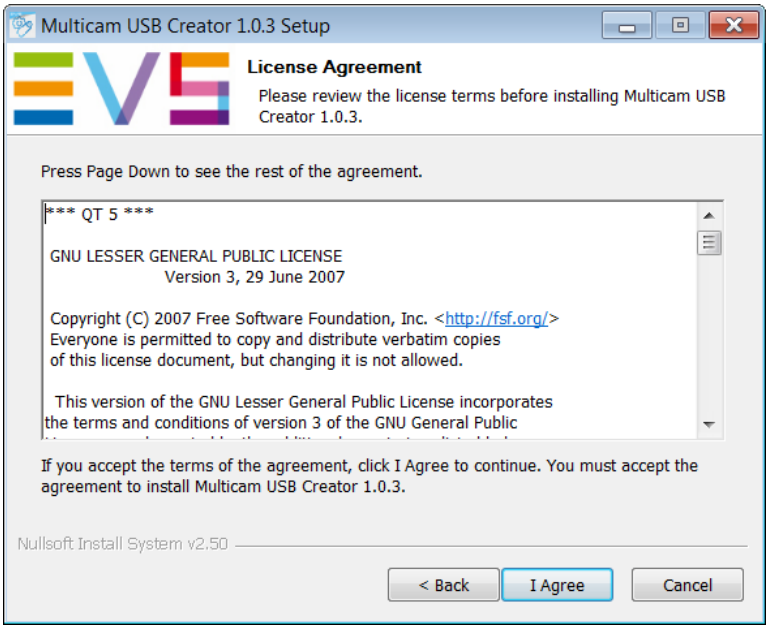


1. Double-click the executable. The Welcome window opens.
2. Click **Next** in the Welcome window.



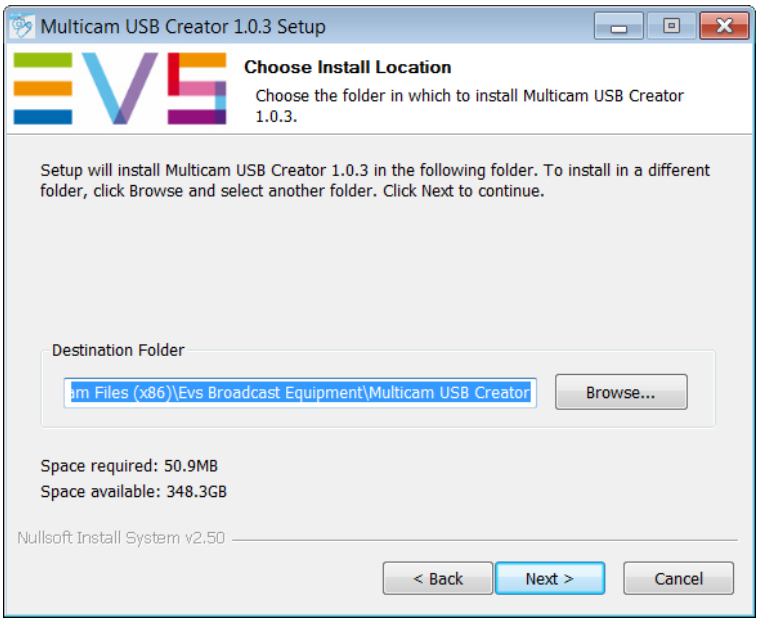
The License Agreement window opens.

3. In the License Agreement window, read the license agreement, and press **I Agree**.

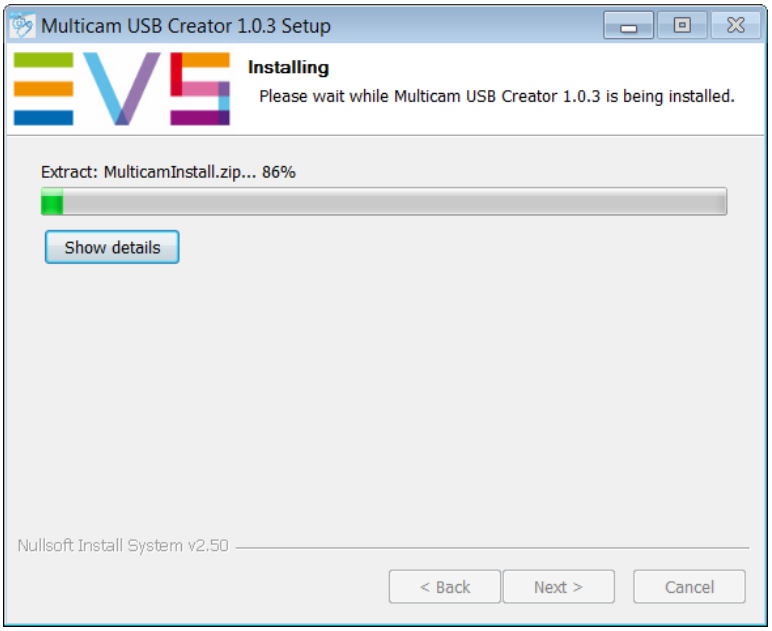


The Choose Install Location window opens.

4. In the Choose Install Location window, click **Browse** to browse to the folder where you want to install the Multicam USB Creator tool, or keep the default installation path, and click **Next**.



5. The Installing window opens and displays a progress bar, as well as details on the installation when you click on the **Show Details** button.



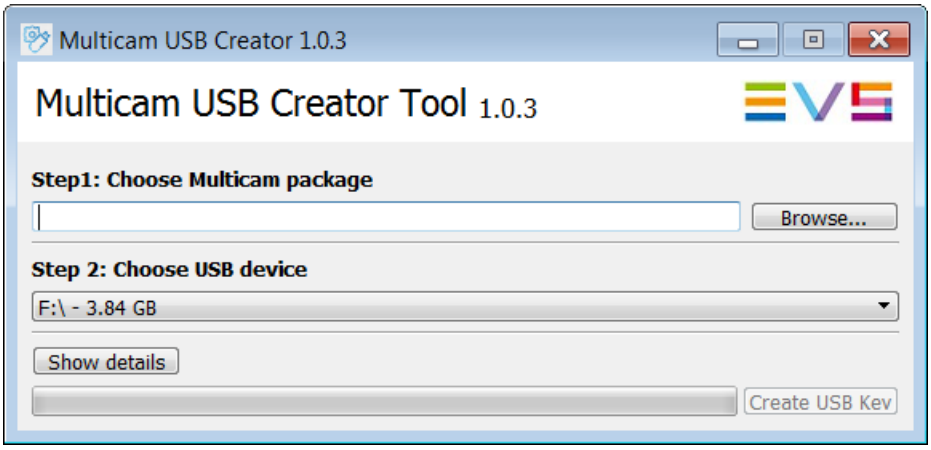
6. When the tool is installed, the Completing Installation window opens. Click **Finish** to close the installation wizard.

How to Generate the USB Installation Key

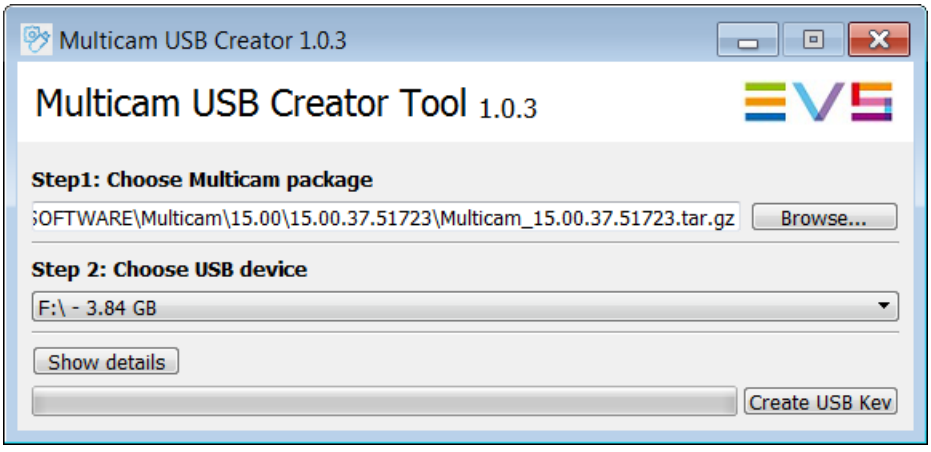
Once the Multicam USB Creator tool is installed on your computer, you can generate your USB installation key with the Multicam version you want to install.

1. Double-click the Multicam USB Creator Tool icon on your desktop.

   The tool opens:



2. In the Multicam USB Creator tool, do the following actions:
   - In the Step 1 area, click the **Browse** button, point to the Multicam installation file (.gz file) and click **Open** to come back to the tool.
   - In the Step 2 area, click the drop-down field and select the USB key to which the installation package should be copied. The USB key must have at least 2GB capacity, and 4GB is recommended.



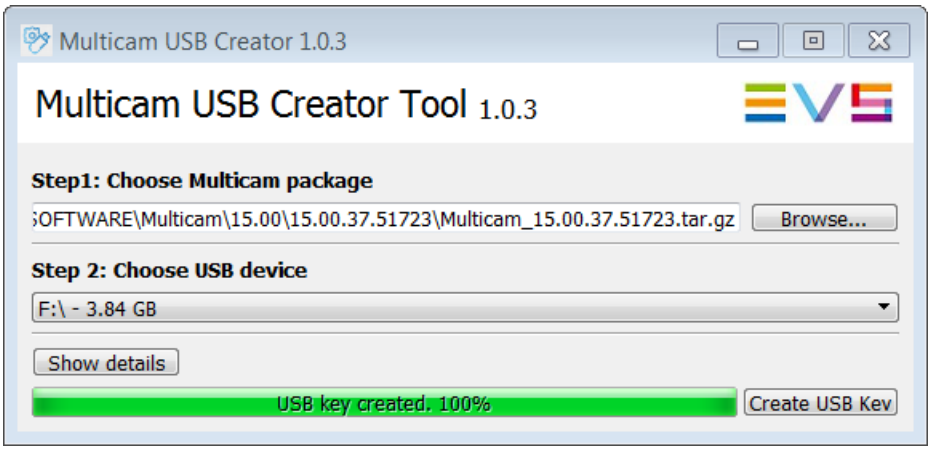
3. Click the **Create USB Key** button to start formatting the key and copying the installation package on the key.

   The following warning message is displayed: **"Are you sure you want to erase all the content of the selected drive?"**

4. Click **OK** to confirm you want to proceed to the key creation.

   A progress bar is displayed.

   When the progress bar shows 100%, the installation package is prepared on the the USB key, and you can close the tool clicking the cross in the upper right corner:



The USB installation key is now ready, and you can proceed to the installation of the Multicam version on the EVS server. See section "Installing Multicam" on page 9.

Once the USB installation key has been created, you can reuse it to install other Multicam packages. You will simply have to copy the .gz installation file in the **Package** folder created on the USB installation key.

You can have several installation files on an USB key. In this case, you are asked to select the Multicam version you want to install at the beginning of the installation process.

2.3. Formatting the System Drive Partition

When to Format the System Drive Partition?

NOTE

Formatting the system drive partition will format the Linux partition. It will keep the Windows CE partition.

In the following cases, you need to select the option **Format and install Multicam** in the Multicam Installation window:

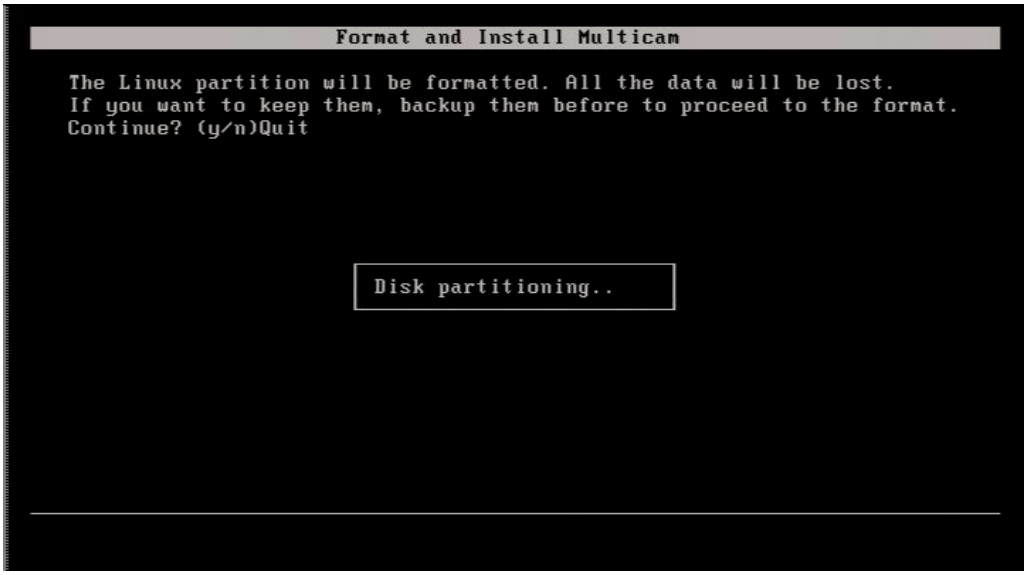
- when you install Multicam 15.00 for the first time.
- when you want to erase all the content of the system drive partition and perform a full installation.
- if you get the error message: **"Disk not correctly prepared for installation"**.

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

When the disk has been formatted, the standard installation automatically follows. See section "Installing Multicam" on page 9.

Required Confirmation

When you launch the system drive formatting, a warning states that the system drive partition will be cleared during the operation:



You need to validate the action:

- Pressing **N** will cancel the operation and return to the installation menu so that you can still back up your data before fomatting the drive.
- Pressing **Y** will proceed to the format of the drive before installing the Multicam.

2.4. Installing Multicam

Overview

The standard installation process includes the following steps.

The steps requiring the user intervention in all cases are followed by **user** between brackets:

1. Inserting the USB key (user)
2. Selecting the Multicam version on the USB key (user)
3. Check of the disk format (automatic)
4. Check of the memory size (automatic)
5. Check of the current version (automatic)
6. Check of disk space available (automatic)
7. Installation of Multicam (automatic)
8. Configure the VGA resolution (user)
9. Configuring the PC LAN 1 Address (user)
10. End of installation process (automatic)

By clicking the hyperlink, you will directly jump to the detailed section in the installation process.

Principles

When you upgrade to Multicam 15 for the 1st time, a new Linux partition is created on which Multicam 15 will be installed. The Windows CE partition is preserved. You will still be able to start Multicam 14 on your EVS server.

When **upgrading from Multicam 12 or 14 to Multicam 15**, your data is preserved on the EVS server (clips, keyword dictionaries, configuration lines). You do not have to back up data before upgrading to Multicam 15.

Should you want to **upgrade to Multicam 15 from a Multicam version earlier than Multicam 12**, first upgrade to Multicam 12 using the former installation process, then upgrade to Multicam 15 using the new installation process documented in this manual.

Should you want to **install Multicam 14 on an EVS server where only Multicam 15 has been installed**, you need to generate a USB installation key following the former installation process documented in the Multicam 14 Installation manual. This installation process will create the Windows CE partition.

How to Install Multicam 15

NOTE

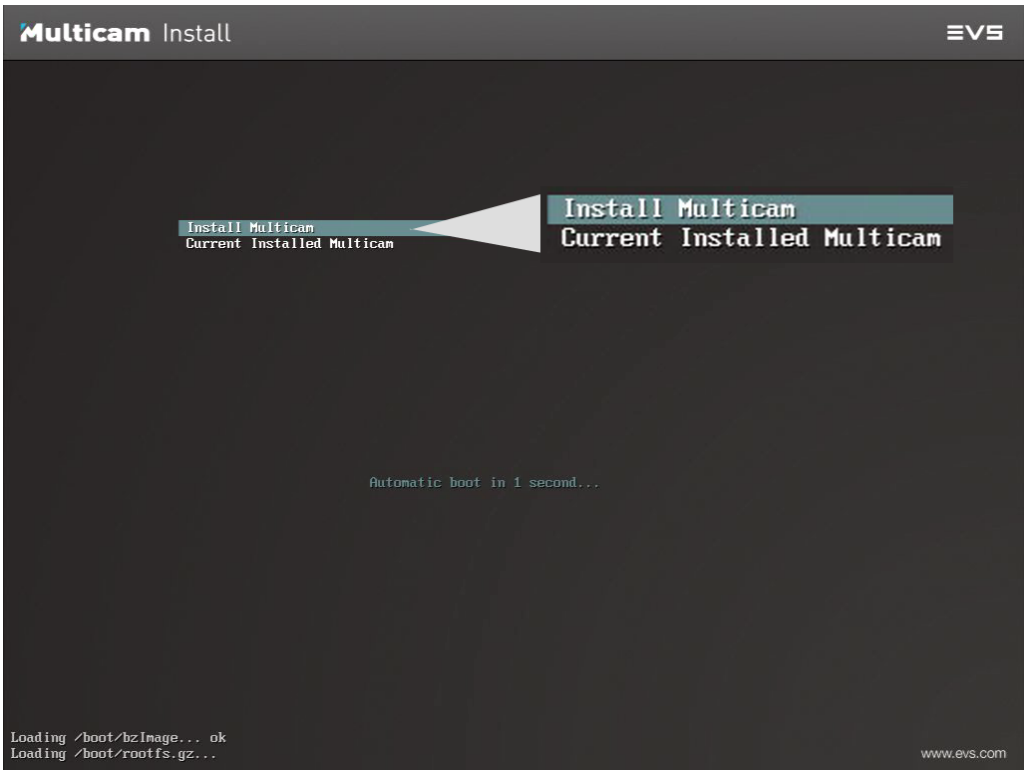
Should the USB key disconnect from the server, an error message would appear during the installation process to inform you that the installation has failed. In this case, you need to reboot the server and restart the installation process.

1. Inserting the USB key

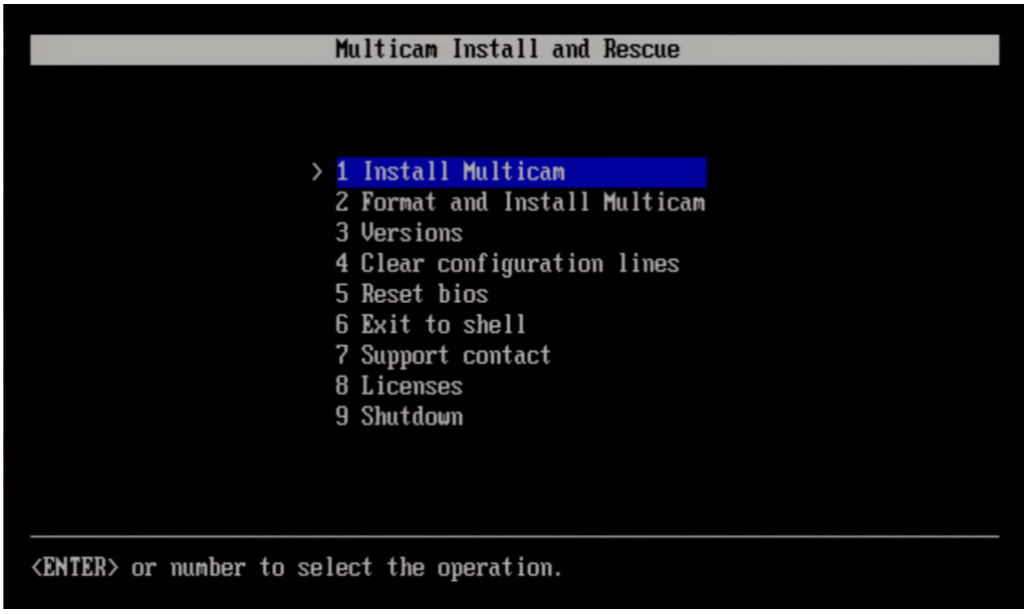
You have previously prepared the USB installation key as described in section "Creating a USB Installation Key" on page 2.

1. Shutdown the EVS server, insert the USB installation key and switch on the EVS server.

   The EVS server detects a USB key is inserted, and displays the following window if you have already a version of Multicam installed on your EVS server:



2. Press **Enter** to enter the Multicam Install and Rescue window or wait 5 seconds and the window will automatically be displayed:

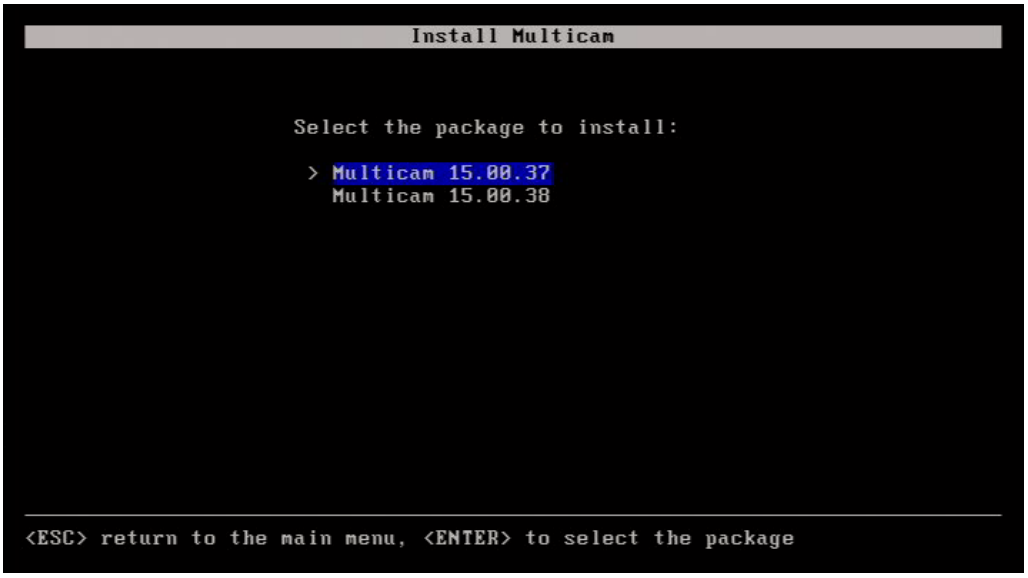


The **Install Multicam** option is selected by default.

Press **Enter** to launch the Multicam installation process.

2. Selecting the Multicam Version on USB Key

If several Multicam versions are available on the USB key, you will be prompted to select the version you want to install:



- Press the up and down arrows to select the version you want to install and press **Enter**.

The installation process is directly launched.

3. Check of Disk Format

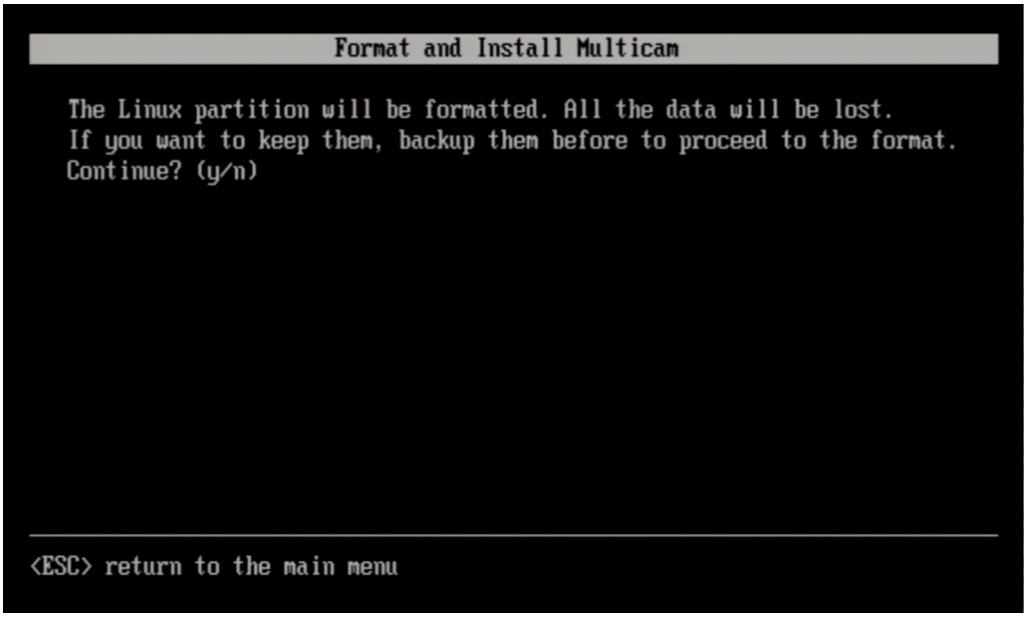
During the installation process, the disk format is checked to make sure that the disk is correctly formatted for the installation.

If this is not the case, the installer displays the following message:

**"Disk not correctly prepared for installation.
Please reboot the server and retry the installation of Multicam"**.

In this case, you need to restart the installation selecting the **2. Format and Install Multicam** option from the Multicam Installation menu.

If you have to select the option 2, you will have to type **Y** to confirm that the Linux partition will be created and formatted:



4. Check of Memory Size

During the installation process, the memory size is checked to make sure that 512GB of RAM is available on the MTPC board.

If this is not the case, the installer displays the following message:

**"Not enough memory to install or start Multicam 15.
Please contact your EVS regional office"**.

In this case, you need to request an upgrade of the MTPC board to the EVS regional office.

5. Check of Current Version

During the installation process, the highest installed version is checked.

Should the same Multicam version already be installed, you would be asked whether you want to overwrite the existing installation.

6. Check of Disk Space Available

During the installation process, the disk space is checked to determine whether the disk has enough space to install a new version.

If this is not the case, the installer displays the following message:

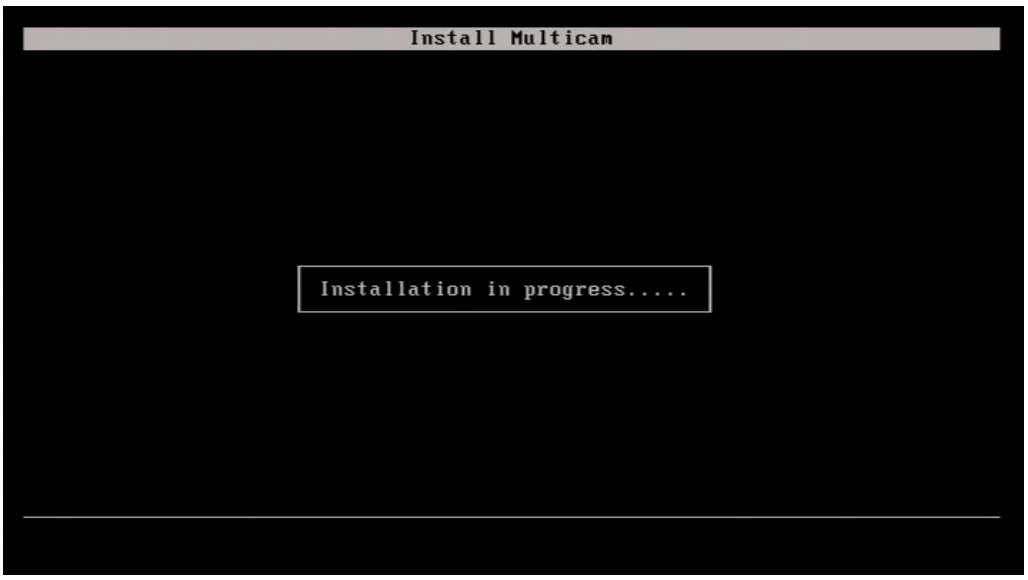
"Package installation failed! Not enough space available for installation of Multicam, XXX MB are missing. Please delete unused version and relaunch the installation process."

In this case, you are redirected to the maintenance menu from which you can uninstall unused versions. See section "Managing Multicam Versions" on page 18.

7. Installation of Multicam

Once all checks have been performed, the installer proceeds to the installation.

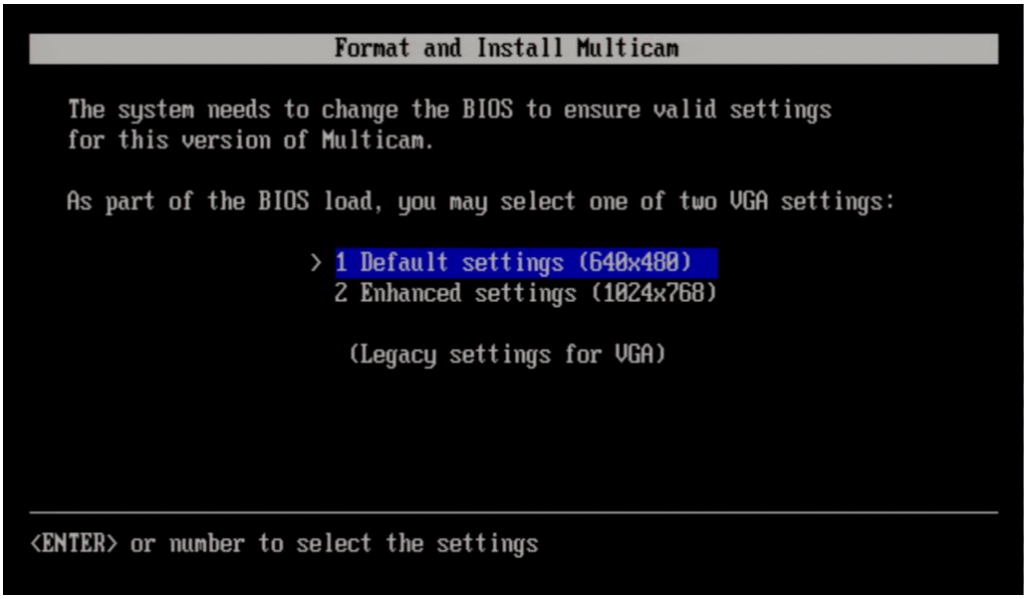
During the installation, the message "Installation in progress" is displayed:



8. Configuring the VGA Resolution

You will be requested to select the appropriate resolution for the VGA:

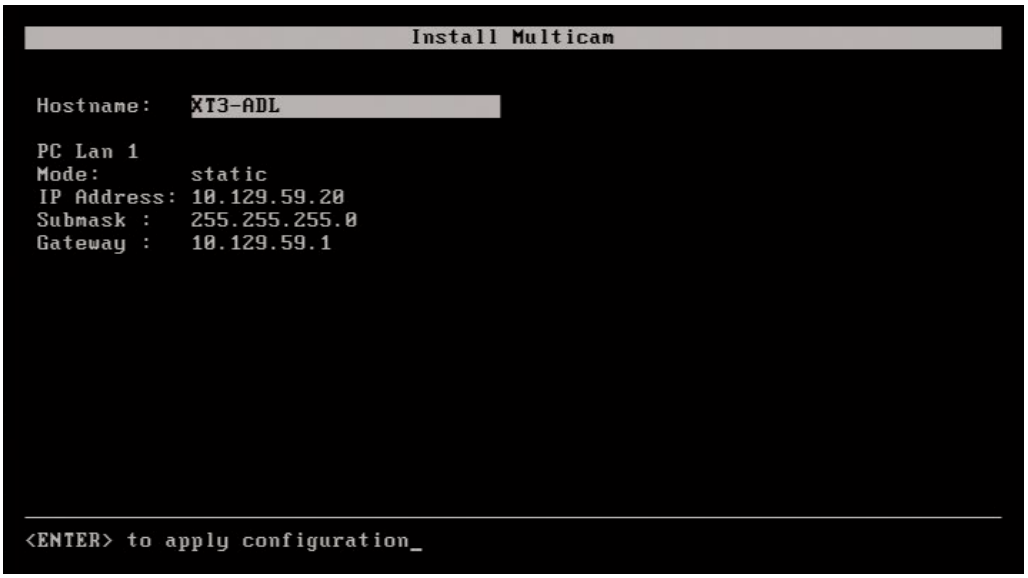
1. Use the up and down arrow keys to select the requested value.
2. Press **Enter** to validate:



9. Configuring the PC LAN 1 Address

When Multicam has been successfully installed, the following window is displayed to let you enter the hostname and the PC LAN 1 address of the EVS server.

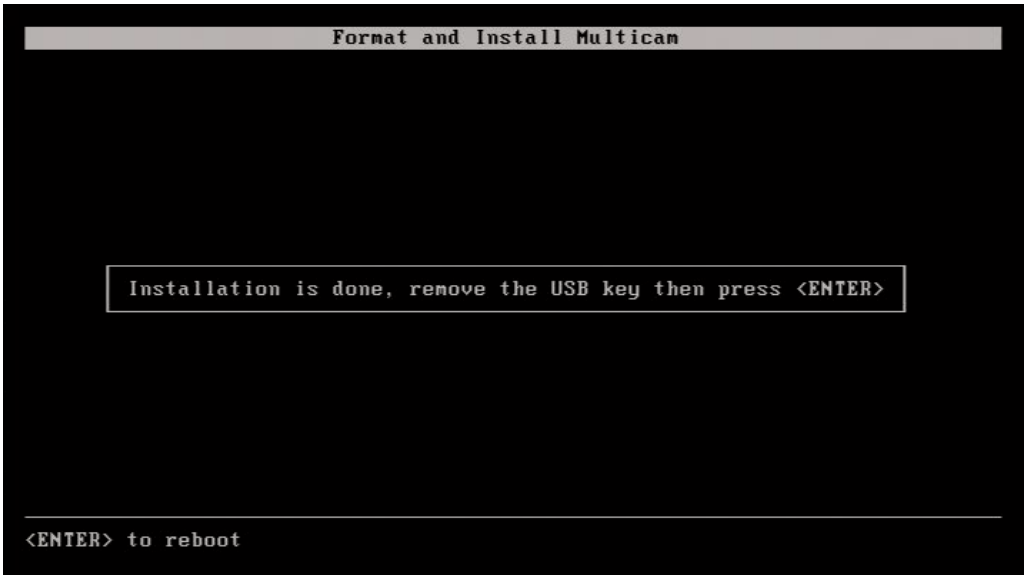
1. Use up and down arrows to select a field.
2. Type the value, and press **Enter** to validate the changes.
3. Press **Enter** again to apply the configuration.



The entered data will be populated to all Multicam configuration lines.

9. End of Installation Process

When the installation process is finalized, you will be requested to remove the USB key and press **Enter** to reboot the EVS server:



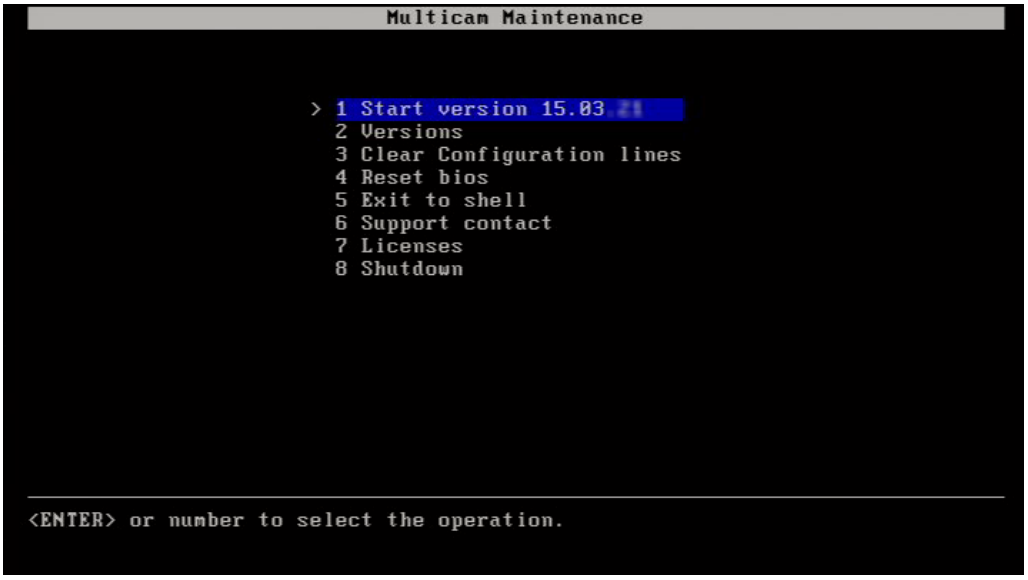
3. Maintaining Multicam

3.1. Multicam Maintenance Menu

Introduction

The **Multicam Maintenance** menu is similar, but not identical, to the **Multicam Install and Rescue** menu: The 1st two installation commands are replaced by a start command.

The first chapter of this manual deals with the installation process, which covers the installation commands. This chapter deals with the maintenance options available in the Multicam Maintenance menu.



Accessing the Multicam Maintenance Menu

1. Switch on or reboot the EVS server.
2. If Multicam 14 (or lower) and Multicam 15 are available on your server, the system will first request you to select whether you want to access Multicam 14 (or lower) or Multicam 15 .

   If you do not select anything within 7 seconds, the EVS server will automatically boot onto the last drive partition used.

When the EVS server boots onto the Linux partition to access Multicam 15, the Multicam Maintenance window displayed above opens after the boot sequence.

If you do not select one of the following commands within 7 seconds, the active Multicam version is automatically launched.

How to Select a Command

Proceed as follows to call the commands:

1. Select the requested command in the Multicam Maintenance menu using the keyboards up and down arrows.
2. Press **Enter** to execute the command or enter the sub-menu.

Available Commands

The following commands are available. You can click the section corresponding to the command to jump to a description of the command:

Command	Section
Start version 15.XX.XX	"Starting Multicam" on page 17
Versions	"Managing Multicam Versions" on page 18
Clear Configuration Lines	"Clearing Configuration Lines" on page 19
Exit to shell	"Accessing the Linux Shell" on page 21
Support contact	"Viewing Support Information" on page 21
Licenses	"Viewing License Information" on page 22
Shutdown	"Shutting Down the EVS Server" on page 22

3.2. Starting Multicam

How to Start the Active Version

As you are in the Multicam Maintenance menu, Multicam will automatically start with the active version (last version used or installed) within 7 seconds if you do not press any key on the keyboard.

You can also select the **Start Version 15.XX.XX** command to manually start the Multicam active version more rapidly.

By default, the active version is the version you ran or installed last on the EVS server.

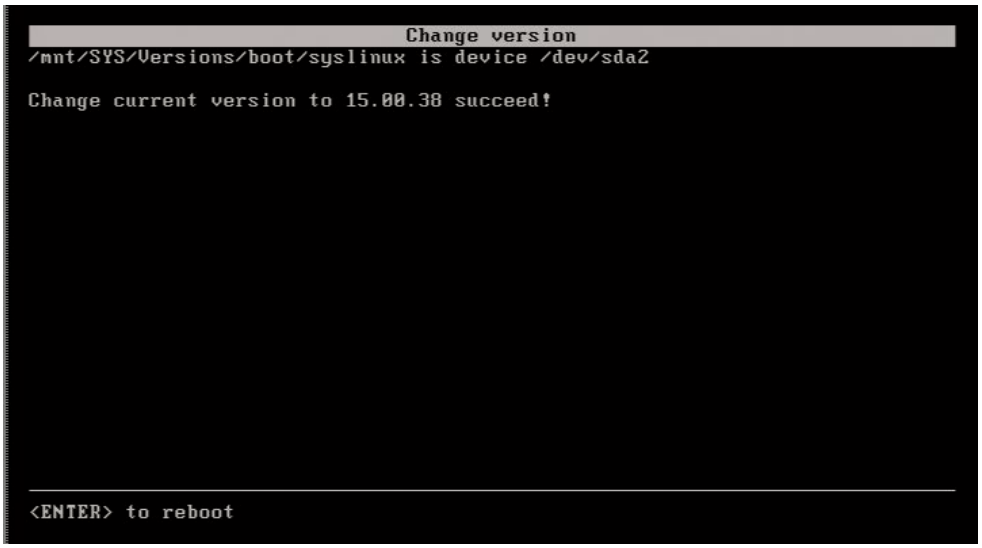
How to Start Another Multicam Version

You can start another Multicam version, even a Multicam 14 or lower, by changing the active version as follows:

1. Select **2. Versions**.
2. Select **1.Change active version**.

3. Select the Multicam version you want to start with the up and down arrows, and click **Enter**.

   A Change Version window opens with the confirmation message that your active version has successfully been changed:



4. Press **Enter** to reboot the EVS server.

The Multicam Maintenance menu will be displayed again, and the new active version can be launched manually or automatically after 7 seconds.

3.3. Managing Multicam Versions

Introduction

In the Multicam Maintenance menu, select the **Versions** command to access a sub-menu from which you can manage the Multicam version, and perform the following actions described below:

- Changing the active version

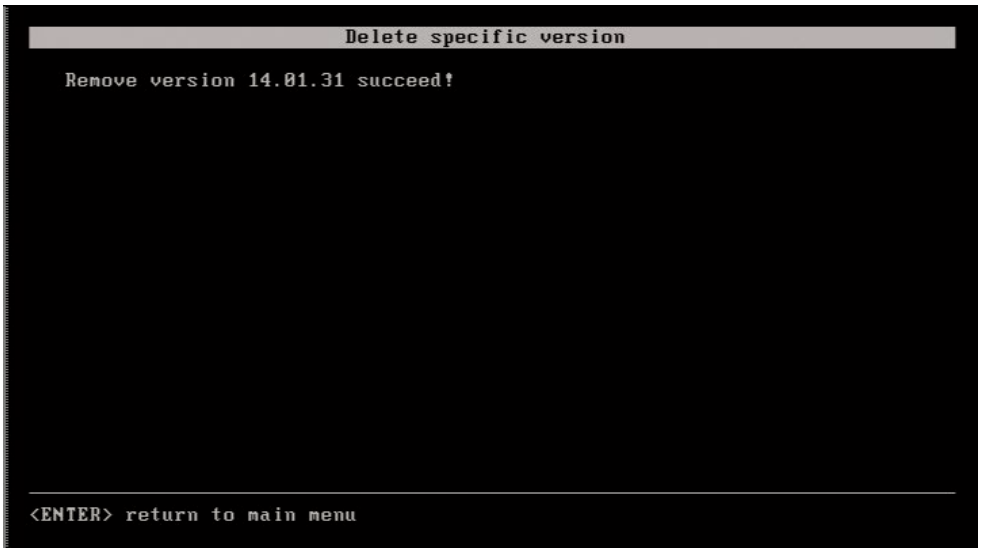
  (See section "How to Start Another Multicam Version" on page 17)

- Deleting a specific version
- Deleting all unused versions

How to Delete a Specific Version

1. Select **Versions** in the Multicam Maintenance menu.
2. Select **Delete specific version**.
3. Select the Multicam version you want to delete with the up and down arrows, and click **Enter**.

   A Delete specific version window opens with the confirmation message that the selected version has successfully been removed:



4. Press **Enter** to return to the Maintenance menu.

How to Delete all Unused Versions

This command allows you to delete all Multicam versions except the active version:

1. Select **Versions** in the Multicam Maintenance menu.
2. Select **Delete all unused versions**.

   A warning message asks you to confirm the deletion command:

   "All versions of Multicam will be deleted, continue? y/n"
3. Type **y** and press **Enter** to confirm the Delete command.

   During the deletion, the message **"Uninstall in progress"** is displayed, followed by the message **"Remove versions XX.YY.ZZ succeeded"** for each deleted version.
4. When all versions are deleted, press **Enter** to return to the Maintenance menu.

3.4. Clearing Configuration Lines

If your configuration lines become invalid further to an upgrade or downgrade of Multicam, you can clear them from the Multicam Maintenance menu.

1. In the Multicam Maintenance menu, select the **Clear configuration lines** command.

   A warning message asks you to confirm the clear command:

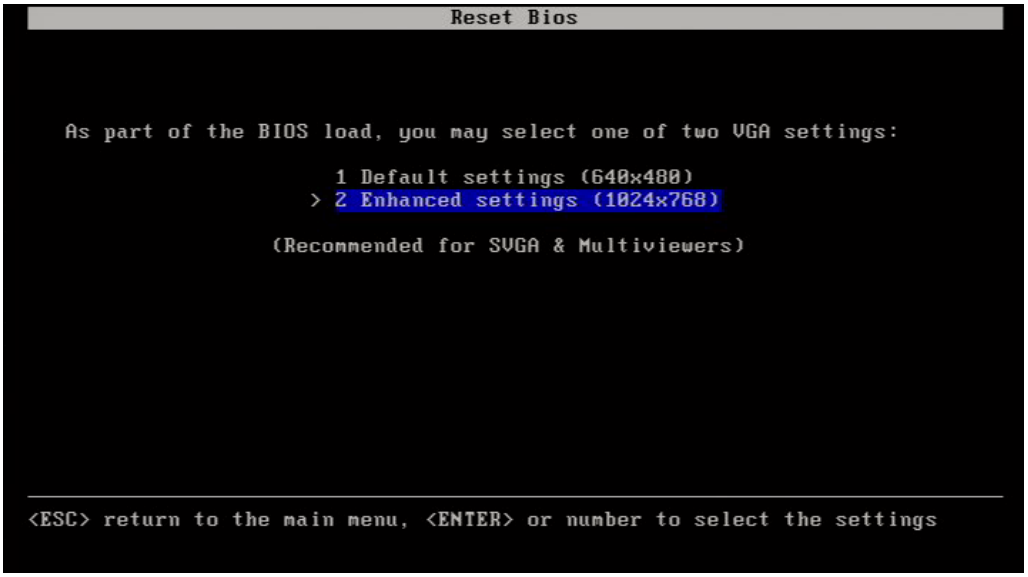
   "All configuration lines of Multicam will be deleted, continue? y/n"
2. Type **y** and press **Enter** to confirm the Clear command.
3. When all configuration lines are deleted, press **Enter** to return to the Maintenance menu.

3.5. Resetting BIOS

If needed, Multicam can reset the BIOS of the MTPC board.

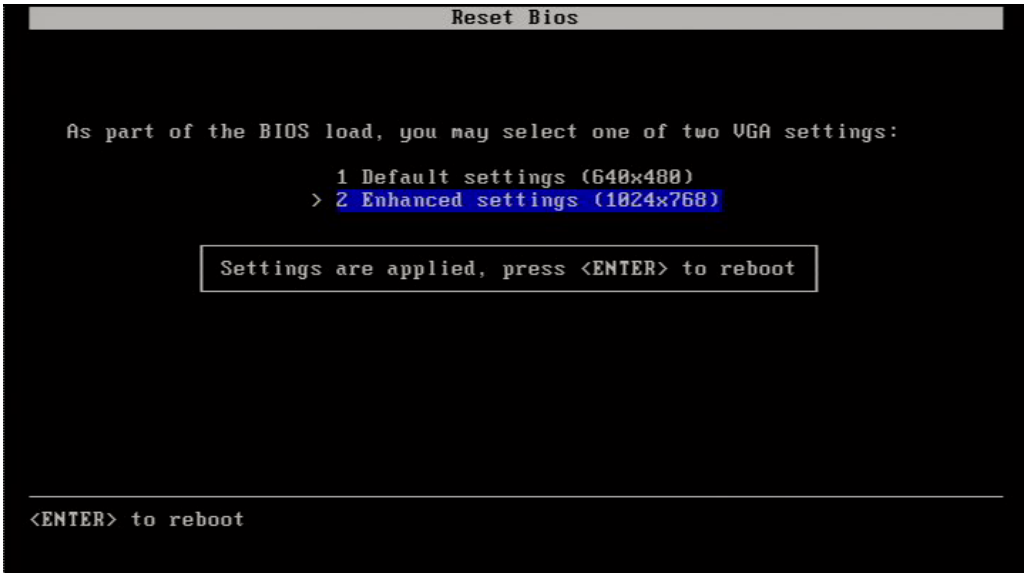
As part of resetting the BIOS, you are prompted to select the VGA resolution:

1. Select the requested setting and press **ENTER**



The settings are then applied.

2. Press **ENTER** again to reboot.



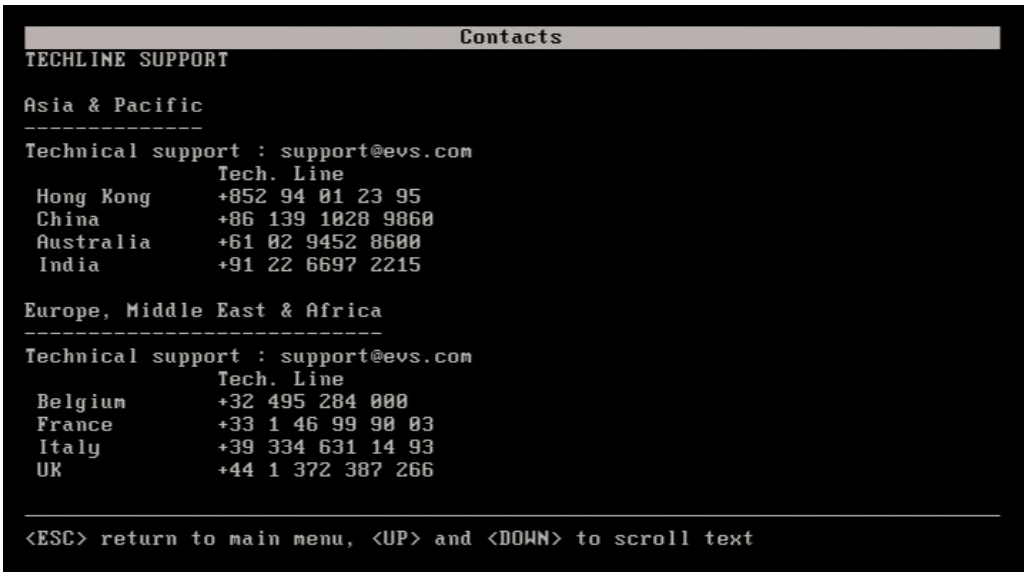
3.6. Accessing the Linux Shell

In the Multicam Maintenance menu, select the **Exit to shell** command to exit the Multicam Maintenance menu and goes back to the Linux shell to be able to use command lines.

This is possible to activate specific parameters via a file that will launch the Linux command lines. Contact the technical support for additional information.

3.7. Viewing Support Information

In the Multicam Maintenance menu, select the **Support contact** command to view all support contacts for the EVS video servers:



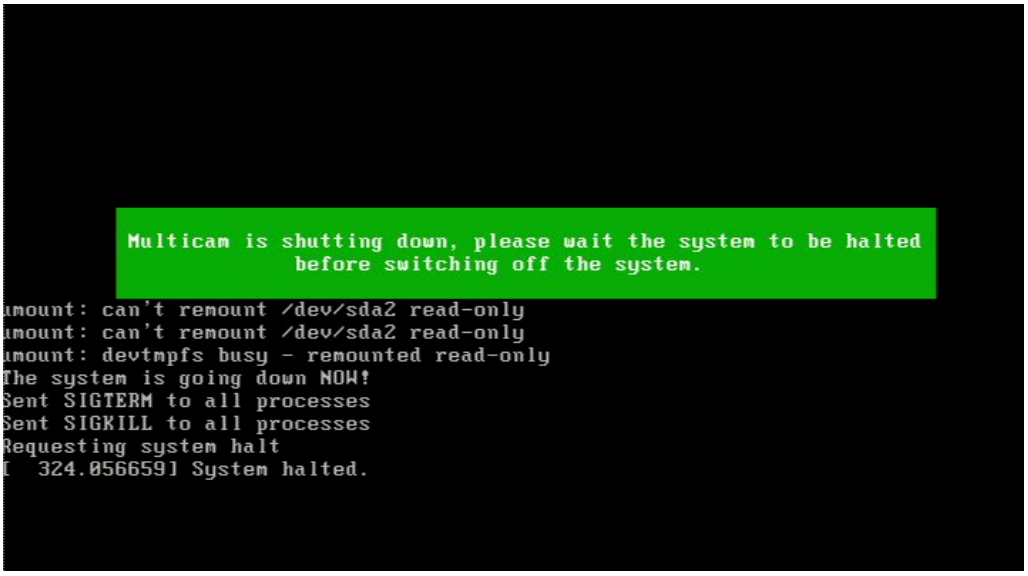
3.8. Viewing License Information

In the Multicam Maintenance menu, select the **Licenses** command to view all open source software licenses used by Multicam:

3.9. Shutting Down the EVS Server

In the Multicam Maintenance menu, select the **Shutdown** command to shut down the EVS video server.

You can switch off the server when the **System halted** message is displayed:



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