

## **Updating System Components in eTOP500/600 series (UN30) units**

This document describes how to update the system components of eTOP500/600 series HMI products, including Operating System and JMobile Runtime

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## 1 Introduction

eTOP500/600 series products offer powerful tools for a complete upgrade of the system components. Upgrade can be done using USB/SD Card that include the new software modules and running on the device the procedure described in details in this document.

The update tool on the panel also provides the user with detailed information on the components actually running in the system.

## 2 System Settings Tool

The System settings tool comes in the shape of a rotating menu with navigation buttons at top and bottom to scroll between the available options. The tool is showed in Figure 1.

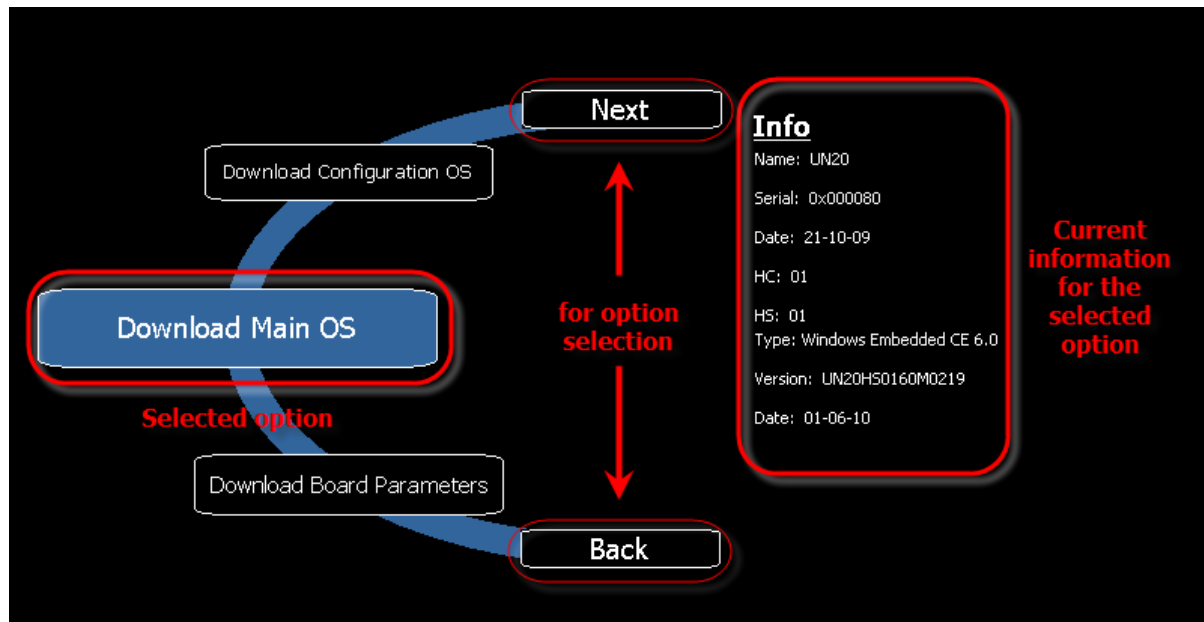


Figure 1

On the left side the components and functions are highlighted and, per each of them, the right side ("Info" pane) shows the information about the current version, when applicable. Figure 1 shows, as example, on the right, the information reported when Download Main OS command is selected.

System Settings has two operating modes: **User Mode** and **System Mode**. The main difference between them is the "state" of the panel:

- User Mode can be accessed when JMobile runtime is running;
- System Mode can be accessed through a special procedure also when runtime is not running, or when panel is facing a software failure.

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**Warning:** the navigation into System Settings tool in System Mode on eTOP515, eTOP607M and eTOP610 Glass panel require use of an **external mouse**.

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To access **System Settings tool in System Mode** use one of the below explained procedures:

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**Warning:** if you are updating an eTOP500/600 series Glass panel it is necessary to use the **BIN file procedure**

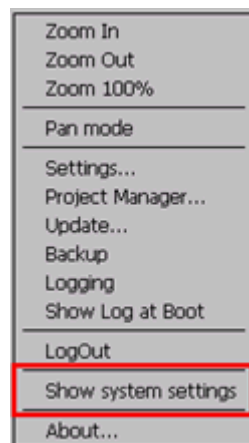
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- **TAP-TAP sequence:** this procedure consists in a tap-tap sequence over the touch interface during power-up phase. Tap-tap consist in a high frequency sequence of touch activations by simple means of the finger tapping the touch screen performed during the power-up phase and started immediately after the panel is powered on. When the procedure succeeded the system returns a visual feedback, the text: "Tap Tap detected, Going to Config Mode" is displayed in page.

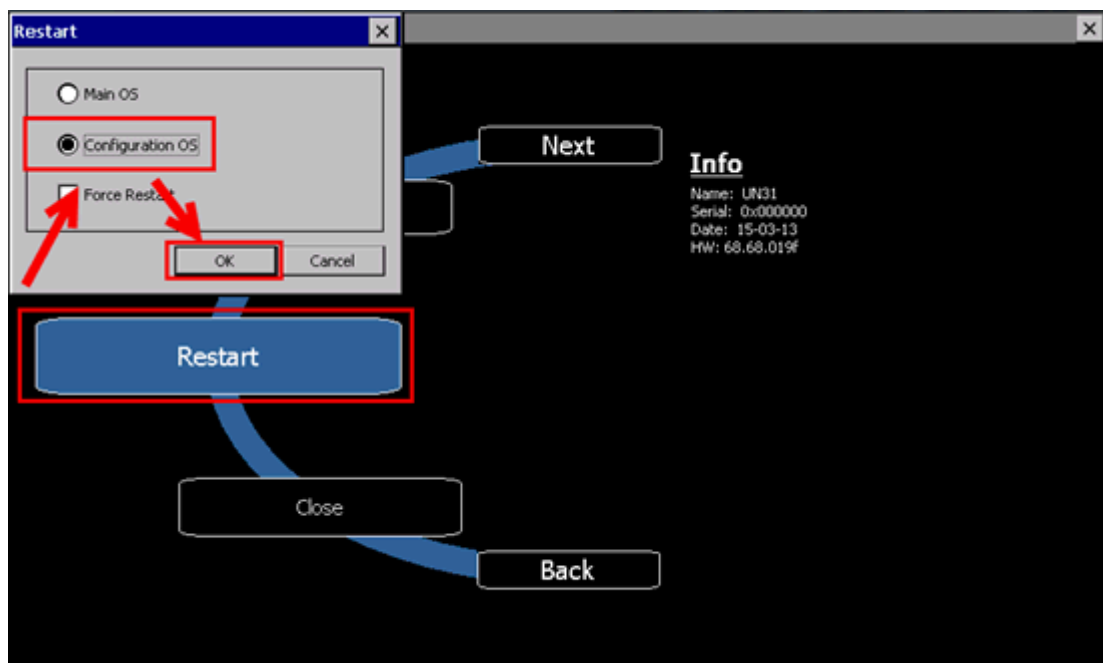
- **BIN file procedure:** this procedure consists in the use of an SD Card, containing a specific file, called "\$0030D8\$.bin". Copy the BIN file into the SD Card, then insert the card into the proper slot on the panel. Power on the panel, when the file is detected the system returns a visual feedback, the text: "Tap Tap detected, Going to Config Mode" is displayed in page.

**Note:** "\$0030D8\$.bin" file can be found into [this FAQ](#) available on the JMobile web site, and it can be also provided on demand by Exor International Technical Support department.

- **Restart voice procedure:** When JMobile Runtime is running, it's possible to restart the panel in Configuration OS, so the panel will restart in System Settings in System Mode. To do this you need to access the System Settings in System Mode rotating menu from the context menu by selecting the "Show system settings voice"



Once into the rotating menu navigate until you find the "Restart" voice and press on it, then into the Restart dialog select "Configuration OS" and confirm with OK. The panel will reboot and restart in System Settings in System Mode.



**Note:** this method requires BSP 1.66 or newer for eTop500/600 series units.

### 3 Update of the System components via USB/SD Flash Drive

Files for upgrade are distributed on demand by Exor International Technical Support department and depend on the product code and on current BSP version running on panel.

Using wrong files for upgrade, not provided by Technical Support, may result in system malfunctions and even in an unusable system.

Upgrade steps described below show procedure using an USB Flash Drive that is recognized from panel as "USBMemory" drive. Is possible, as an alternative, to use an SD Card that is recognized from panel as "Storage Card" drive.

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**Warning:** Only units with regular serial number can be upgraded; units marked as "prototype" or having "Prot." serial number **cannot** be upgraded.

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#### 3.1 Upgrade Steps

These are steps to follow:

1. Copy all files provided in a USB Flash Drive and plug it into one of the USB ports of the panel.
2. Start the panel into System Settings tool in System Mode following one of the procedures explained in previous chapter.
3. Navigate the menu and locate the "**Download Configuration OS**" item, then press on it. The file browser will then appear; select the "**configs\_UN30HSXX60M0xxx.bin**" file from the USB Flash Drive then confirm and proceed with the upgrade. Figure 2 shows an example.

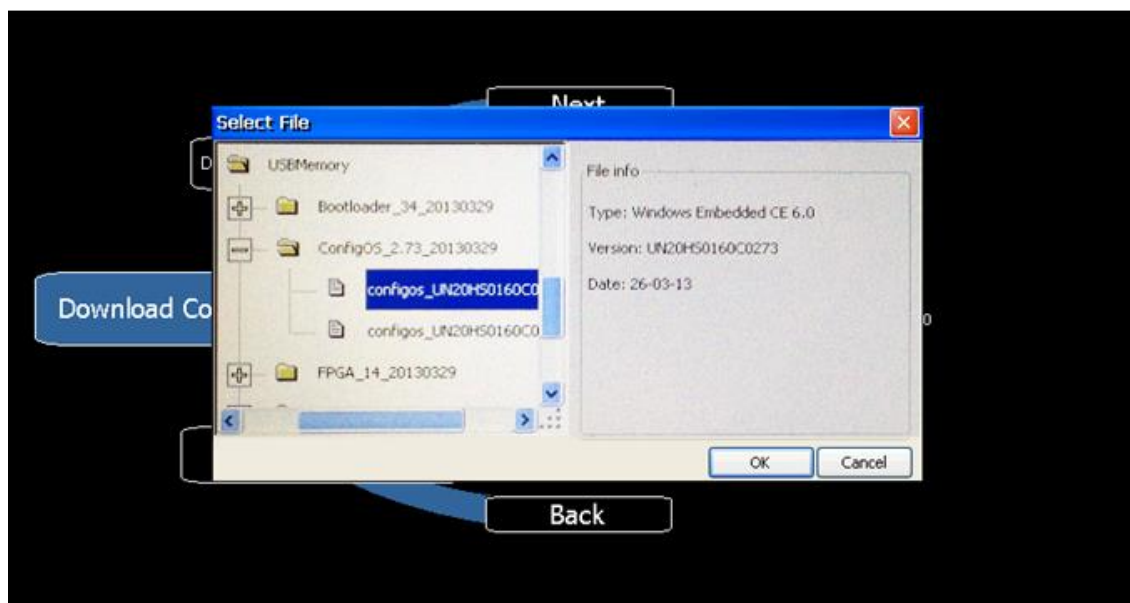


Figure 2

Once the upgrade process has been completed restart the panel and activate again the System Settings tool in System Mode as explained in previous chapter.

4. This step optional unless is required by Exor International Technical Support department.

Navigate the menu and locate the "**Format Flash**" item to format the panel flash memory.

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**Warning:** The system may appear stuck for a while. Please make sure to **not power OFF** the panel during this operation.

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Wait for the format process to be completed, when the format is completed the format window is automatically closed and the menu can be operated again.

5. Navigate the menu and locate the "**Download Main OS**" item, press on it and, when the file browser appear, select the "**mainos\_UN30HSXX60M0xxx.bin**" file from the USB Flash Drive. Wait for the upgrade to be completed.
6. Navigate the menu and locate the "**Download Bootloader**" item, press on it and, when the file browser appear, select the "**uboot\_UN30HSXX60xxx.bin**" file from the USB Flash Drive. Wait for the upgrade to be completed.
7. This step is optional, proceed only if FPGA file is provided.  
Navigate the menu and locate the "**Download Main FPGA**" item, press on it and, when the file browser appear, select the "**h148xbcxxrxx.bin**" file from the USB Flash Drive. Wait for the upgrade to be completed.
8. This step is optional, proceed only if FPGA file is provided.  
Navigate the menu and locate the "**Download Safe FPGA**" item, press on it and, when the file browser appear, select the "**h148xbcxxrxx.bin**" file from the USB Flash Drive. Wait for the upgrade to be completed.
9. This step is optional, proceed only if System Supervisor file is provided.

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**Warning:** System Supervisor component can be upgraded only if actual version on panel is v4.13 or above. Version v4.08, v4.09, v4.10 and v4.11 **must not** be updated, they do not support automatic update from System Settings.

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Navigate the menu and locate the "**Download System Supervisor**" item, press on it and, when the file browser appear, select the "**packaged\_GekkoZigBee\_v4.xx.bin**" file from the USB Flash Drive.

Wait for the upgrade to be completed, the panel should now restart automatically; if not, restart the panel manually.

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**Note:** When all the upgrades are completed, just power cycle the unit to return to normal operation. Power cycle is required only ONCE after all the components have been updated.

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### 3.2 JMobile Runtime installation

If the flash format operation, described at step 4 of the previous chapter, has been executed, the panel requires now the installation of the JMobile runtime.

The runtime installation procedure depends on the current BSP version installed on the panel, please verify the BSP version and follow one of the below reported procedures.

#### 3.2.1 In case of BSP version $\geq 1.54$

From BSP version 1.54, when no runtime is installed, the panel starts with Runtime Loader, the Loader screen is showed in Figure 3.



Figure 3

In this case the Runtime will be automatically installed into the panel from JMobile Studio at the first project download.

It is also possible to install the Runtime using an USB Flash Drive. To create the installing package you need to select the Update Package option from the Run > Manage Target menu of JMobile Studio, once the package on the USB Flash Drive has been created it is possible to install it on panel by pressing on the Transfer from disk button.

For more informations regarding the installation via USB Flash Drive we suggest to refer to JMobile Studio Help.

### 3.2.2 In case of BSP version < 1.54

Install the JMobile Suite software on the computer and locate the “runtime” folder under JMobile Suite installation directory.

Copy the entire folder “UN30\_SDK (ARMV4I)” on the USB Flash Drive.

Rename the “UN30\_SDK (ARMV4I)” folder name in “**qthmi**”. Please note the system is case sensitive, the new name has to be with lower cases.

Insert the USB Flash Drive on the panel USB port, open “My Device”, open “USBMemory” and copy the entire “qthmi” folder from USB to the Panel Flash disk immediately under the root: \Flash\qthmi. Cycle the power of the unit to return to normal operation; the panel will start launching automatically the JMobile Runtime during the boot up phase.