

# Upgrade Guide

## VERSION 28.5 FIRMWARE

This guide has been written to assist installing the VeriFire Tools Software, opening an AFP-3030 Config, updating the AFP-3030 firmware (Bootloader & Service Pack V28.5) and downloading the Config to the AFP-3030.

**It is a strong recommendation of the manufacturer that technicians undertake the AFP-3030 Training Course.**  
Please contact the FireSense office to arrange Training for the AFP-3030.

**NOTE:** Information relating to versions of Software / Firmware in this document are current at the time of writing.  
Please contact FireSense to confirm.

**CAUTION:** Before performing any of the following procedures to any fire systems, ensure the output to the Fire Brigade and all the gas releasing heads on the system have been isolated.

**CAUTION:** Before performing any downloads to the fire system, it is strongly recommended that a backup of the current panel configuration is uploaded to the PC using VeriFire Tools.

**NOTE:** Download operations that change the basic program of the control panel must be performed by responsible and authorised service personnel in attendance at the panel or onsite. After downloading a program, the panel(s) must be tested in accordance with local standards.

## OVERVIEW

- Download VeriFire Tools V10.70 from the FireSense website. <https://www.firesense.com.au/download.html/?cat=101>  
**NB: All software is password protected. Please follow prompts to request password.**
- Install VeriFire Tools V10.70 on PC
- Open VeriFire tools V10.70 and connect PC to AFP-3030 via USB Cable
- Import Existing Config / Upload existing database from panel
- Check firmware version
- **If required**, update firmware by following the V23/24/26.5/27.5 to V28.5 Upgrade Procedure:
  - Save a backup copy of panel database and then upgrade each node to V28
  - Download V28.5 bootloader application to panel (CPU2\_BOOT\_028\_000\_001.hex)
  - Download V28.5 service pack to panel (SPAK\_028\_050\_005.hex)
- Download panel database

**NOTE: Software versions in the images within this document may vary and are not likely to indicate the current version (unless expressly stated)**

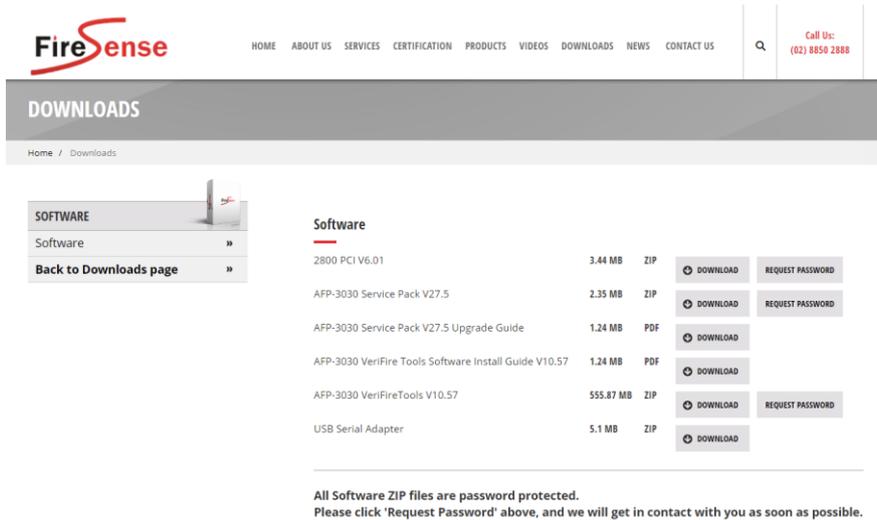
		NSW Head Office	Victoria Branch	Queensland Branch
FireSense Pty Ltd ATF FireSense Trust	Postal Address:	18-20 Brookhollow Ave Baulkham Hills NSW 2153	4/297 Ingles St Port Melbourne VIC 3207	2/225 Queensport Rd Nth Murarrie QLD 4172
ABN: 11 720 788 915	PO Box 7026 Baulkham Hills BC NSW 2153	Ph: (02) 8850 2888	Ph: (03) 9646 4557	Ph: (07) 3890 8842
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## Walkthrough

### INSTALLING VERIFIRE TOOLS / OPENING THE CONFIG DATABASE

**Step 1** A copy of VeriFire Tools & Firmware is supplied on a USB Drive with each FireSense AFP-3030 panel.

An alternative is to download from the Downloads section of [www.firesense.com.au](http://www.firesense.com.au).  
*NB: All software is password protected. Please follow prompts to request password.*

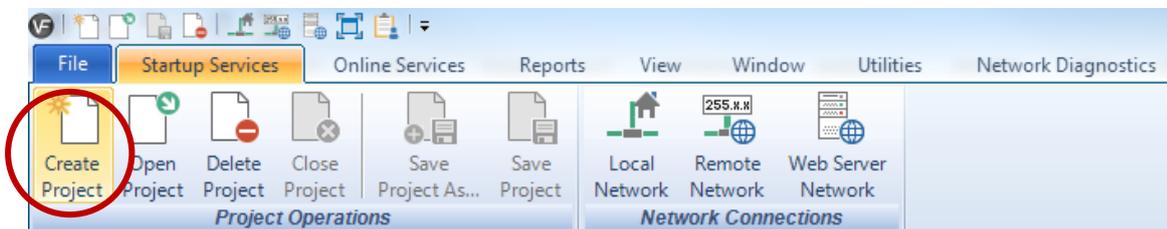


**Step 2** Install the current version of Verifire Tools (V10.70) as shown in the [‘VeriFire Tools Software Install Guide’](#) Document (also on Website / USB)

Click **‘No’** at ‘Software Installation Step 2’ to ensure previous projects are not lost.

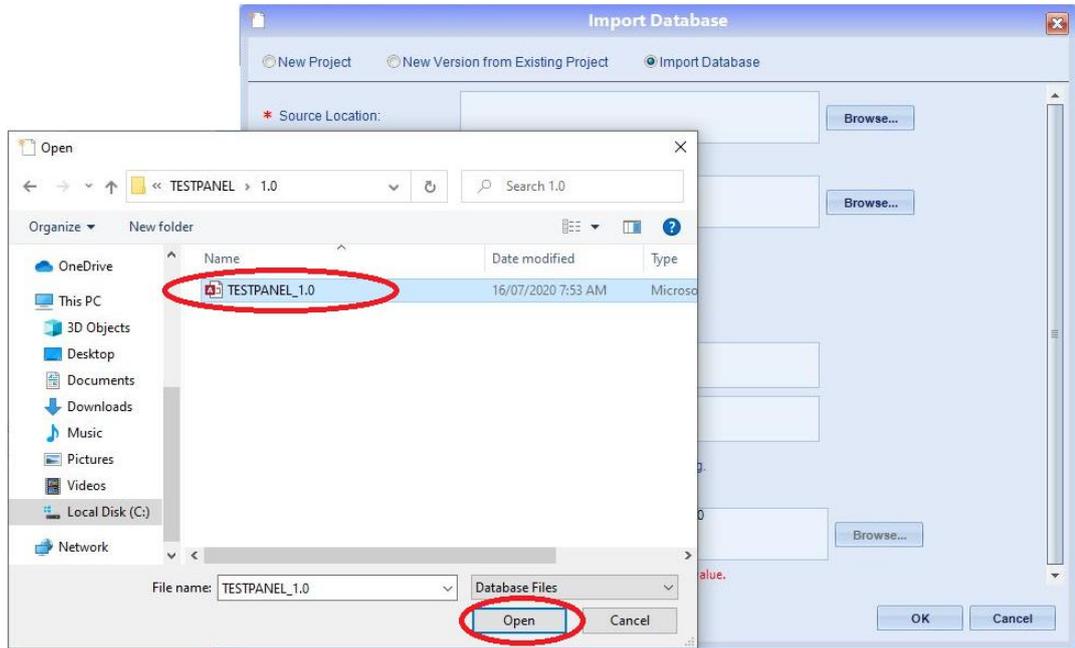
### CREATING A PROJECT

**Step 3** Open up Verifire Tools V10.70 and click **‘Create Project’**.

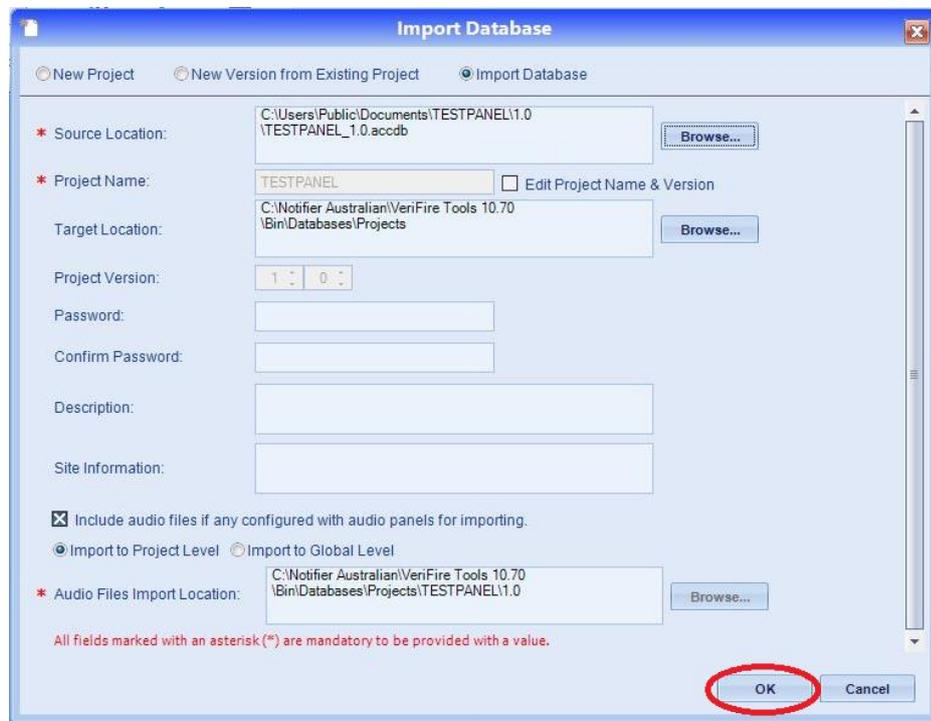


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**Step 4** Click 'Import Database' and click Browse. Select the Config Database (.acddb) and click 'Open' (generally, a 'base' file will be supplied on a USB drive with the 3030 Fire Panel)



**Step 5** Once the Config Database has been selected, ensure the Project name is correct, and click 'OK'.



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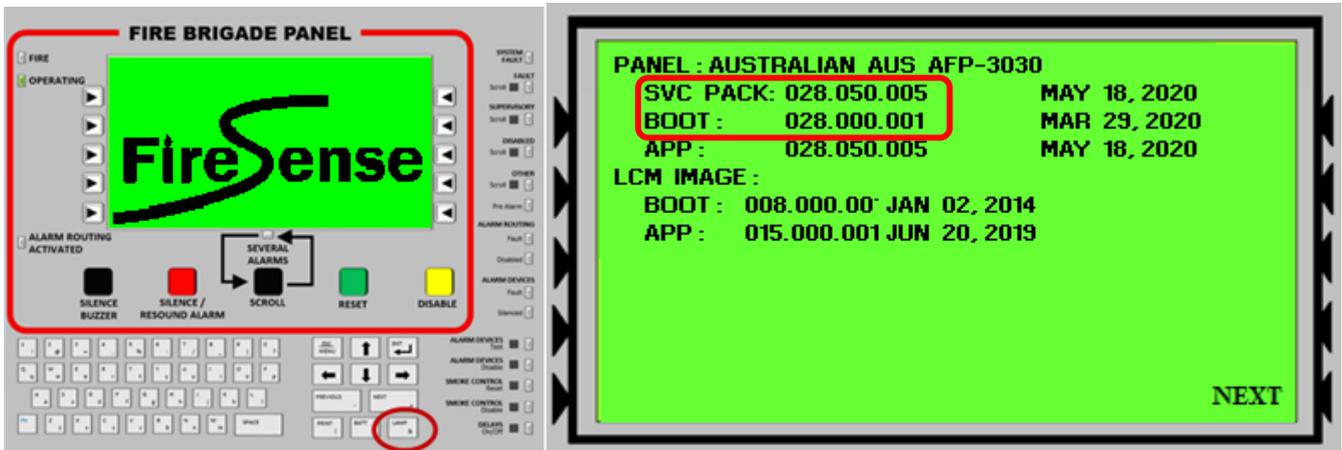
**Step 6** Modify the configuration of the panel as required.

Device ADDR	IN STL	Type Code Label	Flash Scan Type	Device Label	Alarm. Ver. Part.	Local Mode Part.	PreAlarm Mode	Silenceable SND Base	CBE 1	CBE 2	CBE 3
1	<input checked="" type="checkbox"/>	Smoke(Photo)	PHOTO	L01D001	<input type="checkbox"/>	<input type="checkbox"/>	Alert	No	Z4		
2	<input checked="" type="checkbox"/>	Smoke(Photo)	PHOTO	L01D002	<input type="checkbox"/>	<input type="checkbox"/>	Alert	No	Z5		
3	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>					
4	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>					
5	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>					
6	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>					
7	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>					

**CHECK PANEL FIRMWARE**

**Step 7** On the 3030/NCA2 panel, press the ‘Lamp’ Test button (below ‘Next’ button) - *Note that older versions require the button to be held.*

After a few seconds, the panel will display what firmware it is currently running.



**Step 8** The current firmware in the panel should be 28.50.

- If the firmware is 28.50, skip the next steps and go to **Step 18** ([Download Panel Database](#)).
- If the firmware is 26.50 or 27.50 proceed onto the next steps to download the firmware supplied by FireSense but skip **Step 15** as there is no need to re-download the Bootloader (panel application code).
- If the firmware is less than 26.50, go to the next step to download the firmware supplied by FireSense.

**NOTE -** All new 3030 panels supplied after 3/8/2020 should be running Version 28.50 unless otherwise specified.

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## FIRMWARE UPDATE – TO VERSION 28.5

- A Service Pack download can be done to a single 3030 / multiple 3030s simultaneously **OR** a single NCA / multiple NCAs simultaneously (*Distributed Download cannot be done between a 3030 and an NCA*).
- The software will also load the relevant software into the LCMs / LEMs so these will need to be connected and programmed when the update is being performed.

If upgrading from an existing 2800, versions of the LCM/LEM's need to be checked. If this is the case, please contact FireSense Technical Support. (NOTE: LCM V7.00 cards are not upgradeable)

**NOTE:** Network sites require further consideration as there may be compatibility issues when upgrading all panels on site to Version 28.5. Certain panels may have incompatible hardware which cannot be upgraded. Please discuss with FireSense Technical Support to determine the best course of action.

**NOTE:** Version 28.5 software requires VeriFire Tools 10.70 or above.  
It is compatible with CPU2-3030PCD Rev D hardware and above.

**NOTE:** The bootloader and service pack download can take over 30 mins (depending on how many nodes / loops etc). Please be aware that the system will remain offline for this period.

**NOTE:** Existing SCS-8A should be upgraded to the latest firmware for all features of V28.5 to operate correctly. Please discuss with FireSense Technical Support to determine the best course of action.

**NOTE: Upgrading to a different Version (eg. V27.5 to V28.5) requires some preparation of the configuration prior to upgrading the firmware within the panel. Please ensure that the password is known and that the existing software is on hand prior to downloading the new firmware!**

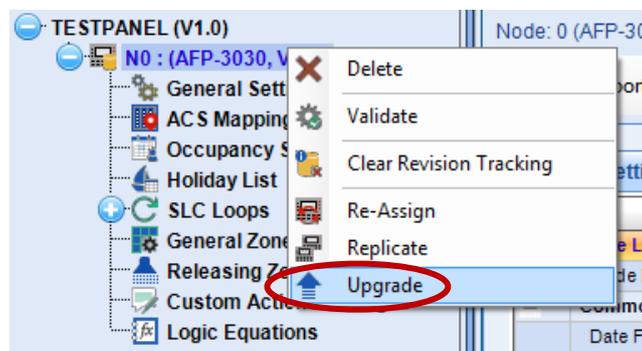
**Failure to do so will leave the panel without a valid configuration as the existing configuration becomes invalid.**

**IMPORTANT: Do not disconnect the cable to the Fire Panel, OR allow the computer to turn off / go to standby OR for the Fire Panel to lose power during the firmware transfer and configuration.**

**Step 9** Make sure the panel password is known.

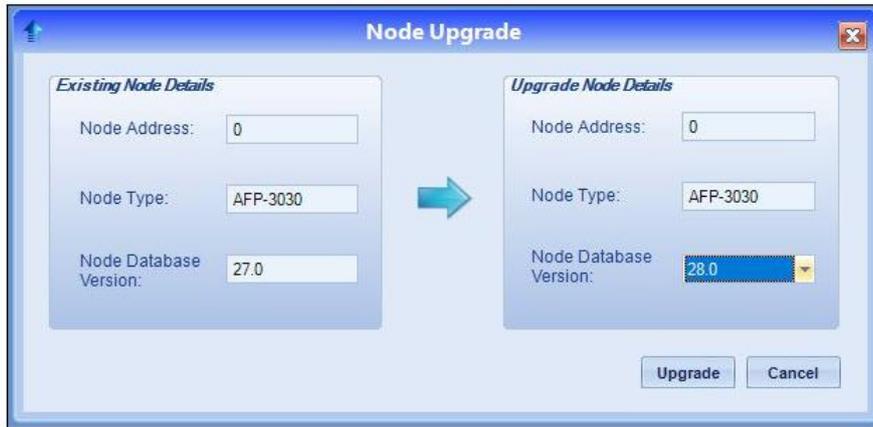
**Step 10** Save a copy of the panel database (*this ensures there's a previous version available should the original software be required.*) Upgrade each node's configuration by right-clicking on the Node and clicking 'Upgrade'.

(NOTE: Zone logic labels aren't stored in the panel and therefore won't be downloaded into the revised config).



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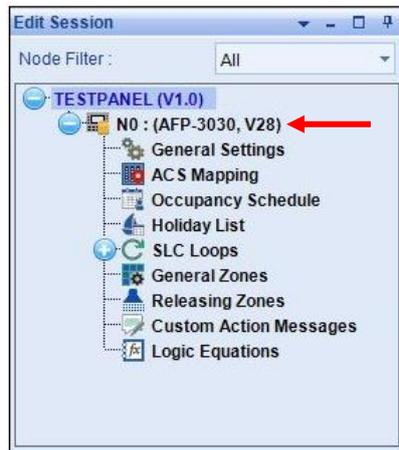
**Step 11** Click the drop down box to change the Database version to V28.0.



**Please note:** Before upgrading review existing Alarm Verification Timers. This value may be modified.



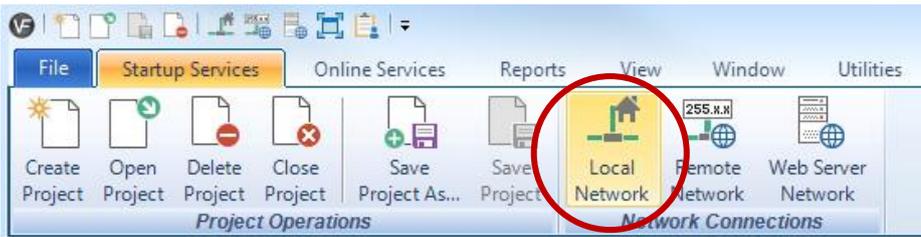
**Step 12** Perform this process for each node that is being upgraded. Each node's database version should indicate that it is now V28.



**Now that the configuration(s) have been upgraded and a backup has been saved, the firmware can be downloaded into each node [either individually (via 3030/NCA2) or simultaneously by doing a Distributed Download (via the network card)]**

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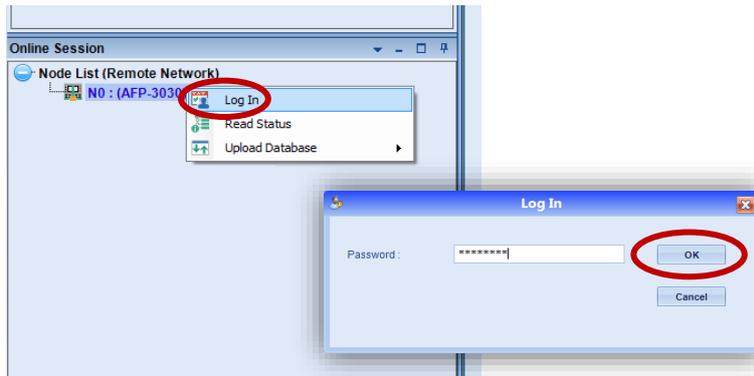
**Step 13** Connect to the panel by clicking 'Local Network'.



**Step 14** Click on the Node in the 'Online Session' window. Right click on the node and select 'Login'.

Enter the Panel Password (*The default Password is eight zeros – i.e. '00000000'*).

Click 'OK'.



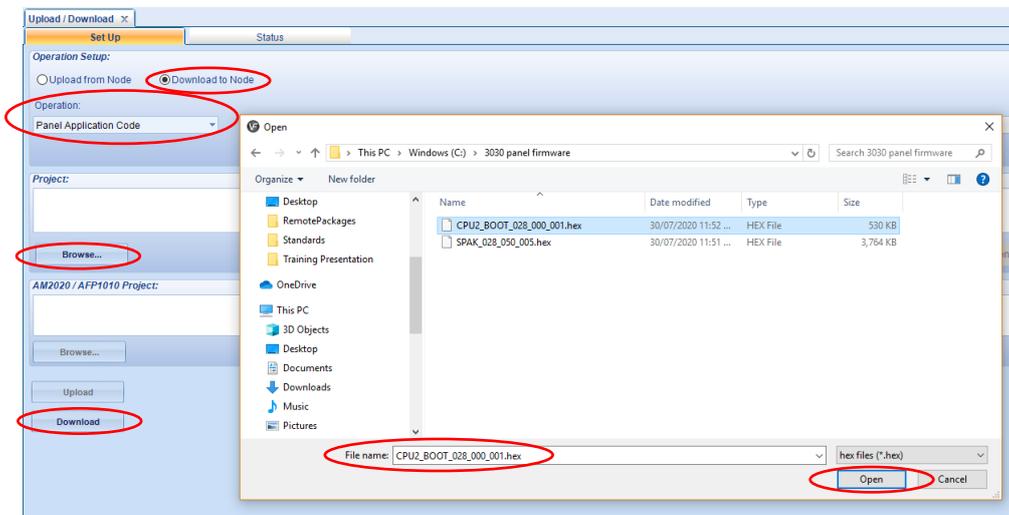
## DOWNLOAD CPU2 BOOTLOADER APPLICATION TO PANEL

**Step 15** Select 'Download to Node'.

Select 'Panel Application Code' from the dropdown list.

On 'Project', click, 'Browse'. Select the Boot File supplied (.hex) and click 'Open'.

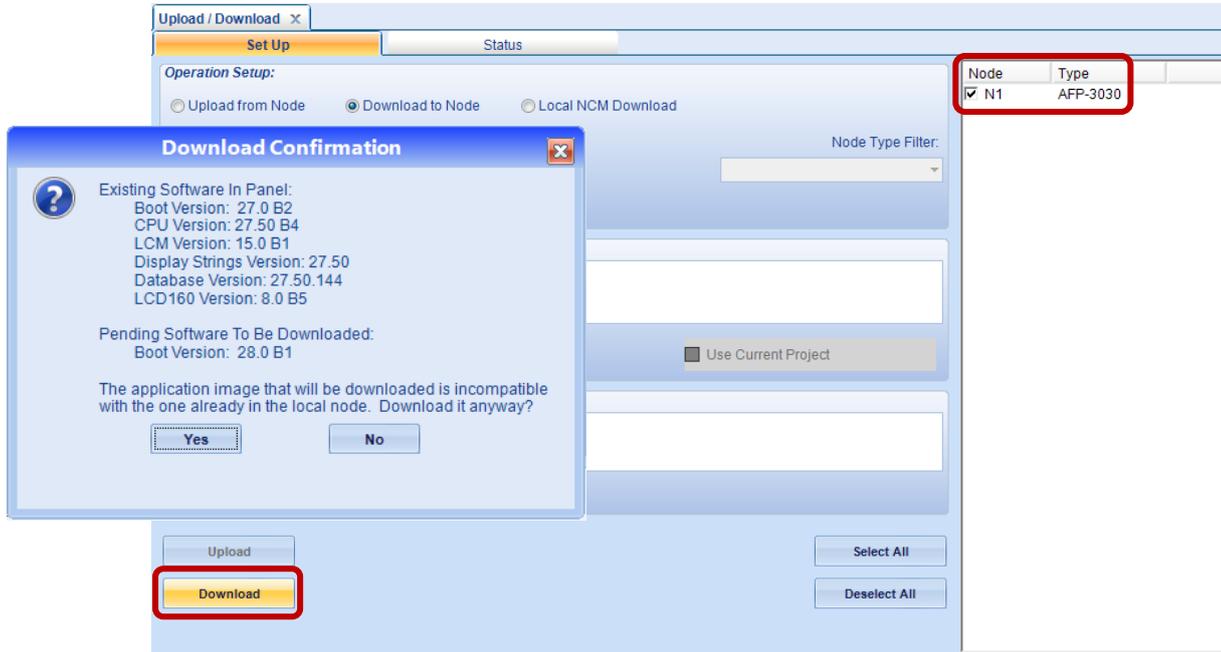
*The Boot File can be found on USB supplied, or via the Downloads section of [www.firesense.com.au](http://www.firesense.com.au)*



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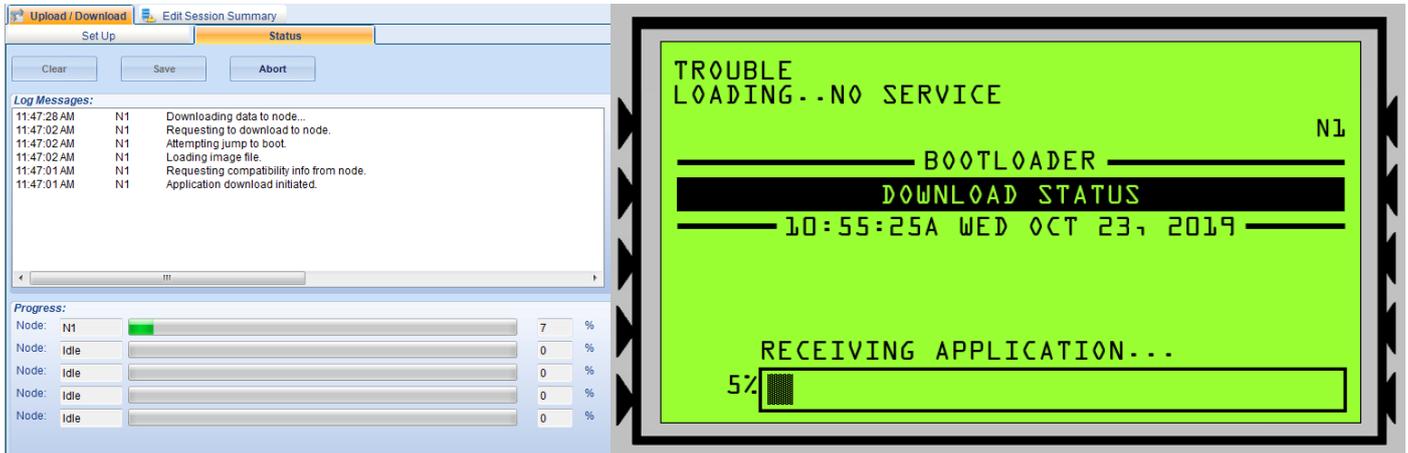
**Step 16** Once the file has been selected, select the panels which require updating, then click 'Download.'

A confirmation screen will indicate that the software is not compatible, and the file transfer will commence.



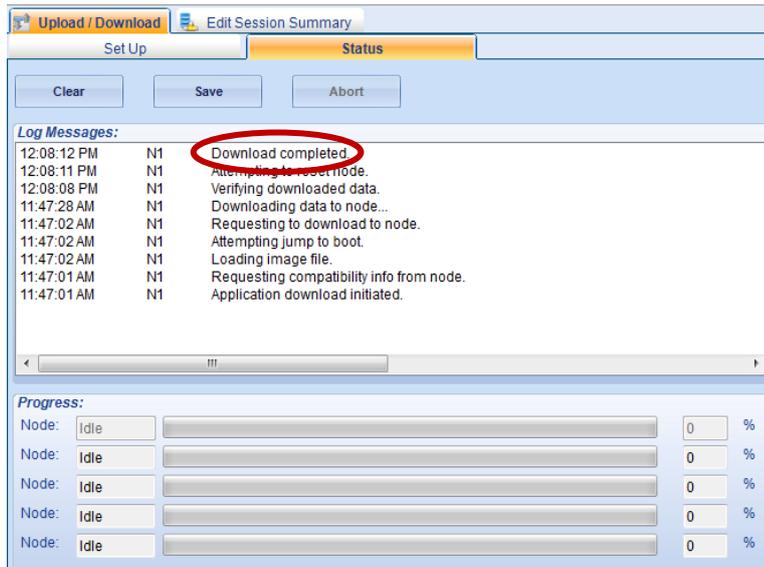
**NOTE:** The bootloader application download takes approx. 10-15mins

**IMPORTANT:** Do not disconnect the cable to the Fire Panel, or allow the computer to turn off / go to standby OR for the Fire Panel to lose power during the firmware transfer.



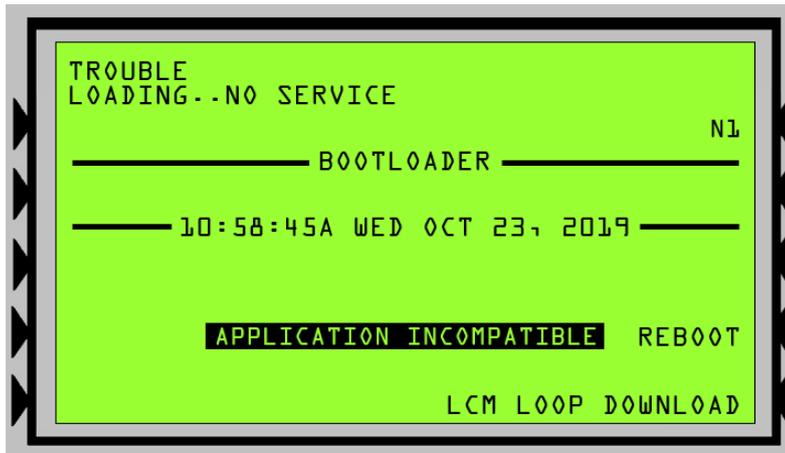
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When the file transfer has finished, the Log will show that the Download has completed.



The panel will then continue to update the various components on its own.

Once complete, the panel screen will show 'Application Incompatible'. At this point, proceed to the next step.



**NOTE: For 3030 CPU's without a display, the fault 'N# Loading - No Service...' will be present on the NCA.**

**Wait until the node appears in the online session in VeriFire Tools before proceeding.**

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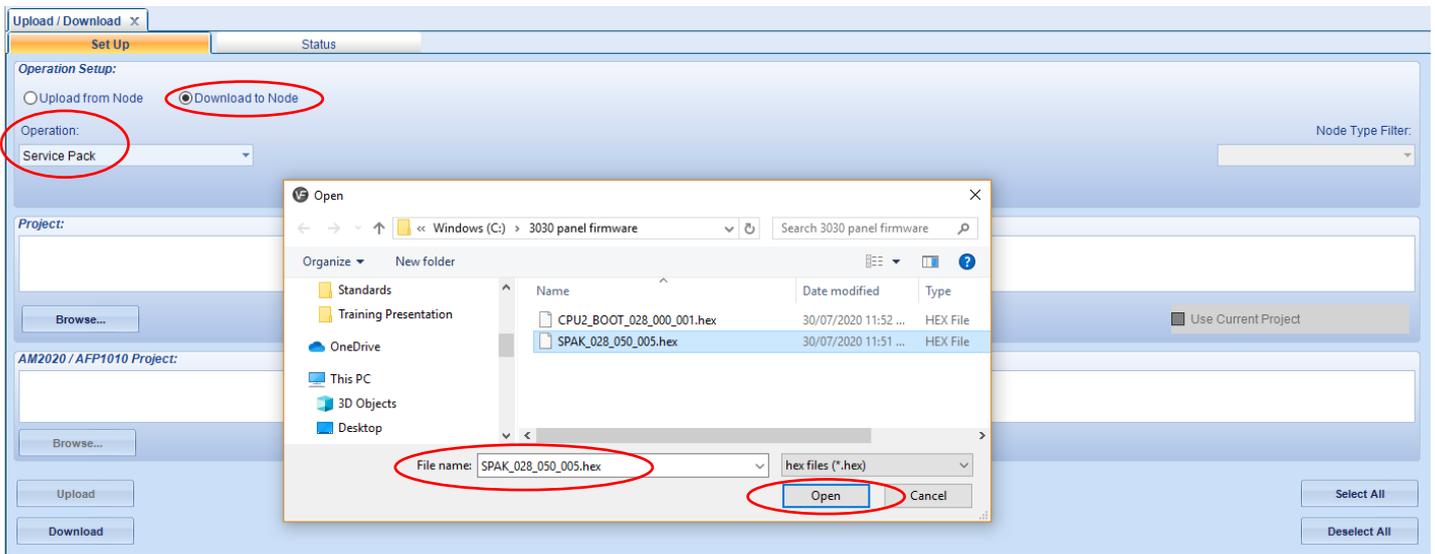
## DOWNLOAD SERVICE PACK 28.5 TO PANEL

**IMPORTANT:** When upgrading the panel's service pack, the Loop cards must be connected prior to doing the download.

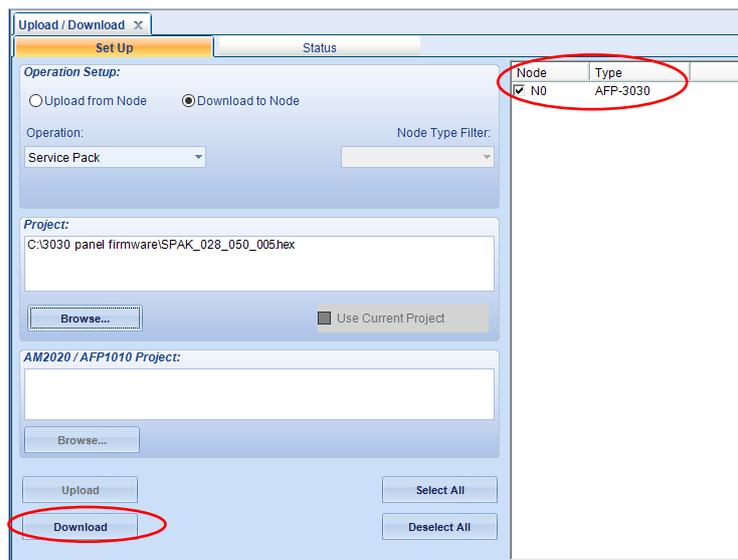
If the loops are added in after, a 'Hardware Mismatch' will be displayed as the firmware versions will not be up to date. This is especially important for CPU's which do not have a display, as the 'Hardware Mismatch' cannot be seen and the user will not understand why the panel hasn't rebooted.

**Step 17** Select 'Download to Node', then from the drop-down list, select 'Service Pack'.  
Click 'Browse' to select the Firmware File (.hex).  
Select the Service Pack that has been provided and click 'Open'.

The Service Pack 28.5 can be found on USB supplied, or via the Downloads section of [www.firesense.com.au](http://www.firesense.com.au)



Once the file has been selected, select the panels which require updating, then click 'Download'.

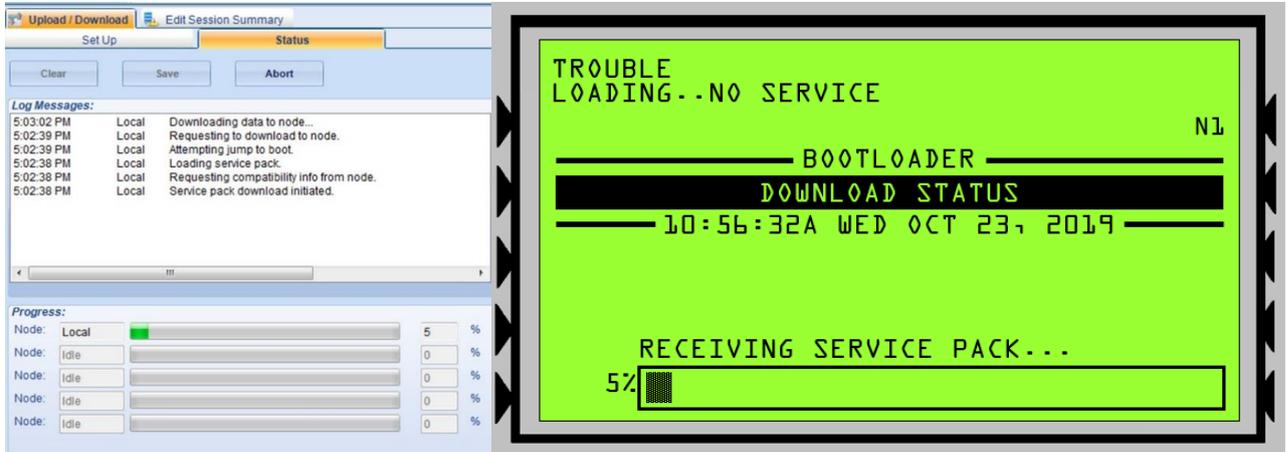


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The file transfer will commence.

**NOTE:** The service pack download takes approx. 10-15 mins (depending on how many loops etc).

**IMPORTANT:** Do not disconnect the cable to the Fire Panel, OR allow the computer to turn off / go to standby OR for the Fire Panel to lose power during the firmware transfer.

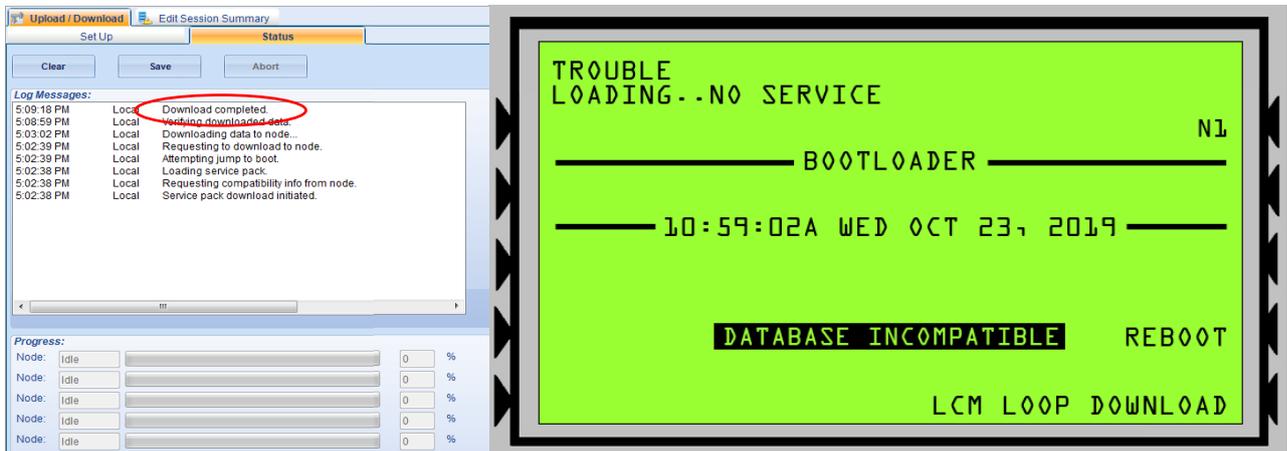


When the file transfer has finished, the Log will show that the Download has completed.

Once the Download has completed, the laptop can be disconnected.

The panel will then continue to update the various components on its own.

Once each panel's firmware has been updated, the panel will reboot and display 'Database Incompatible'. The configuration then needs to be re-downloaded into the respective panel(s) – proceed to the next step.

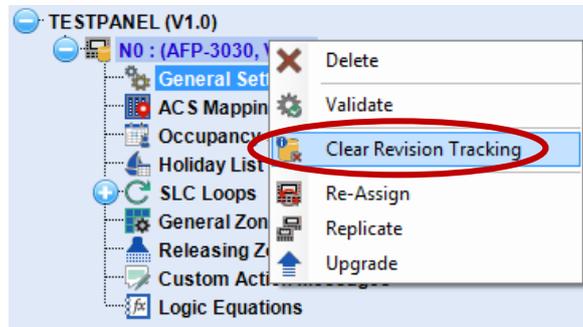


**NOTE:** For CPU's without a display, the fault 'N# Loading – No Service...' will be present on the NCA. Wait until the node appears in the online session in VeriFire Tools before proceeding.

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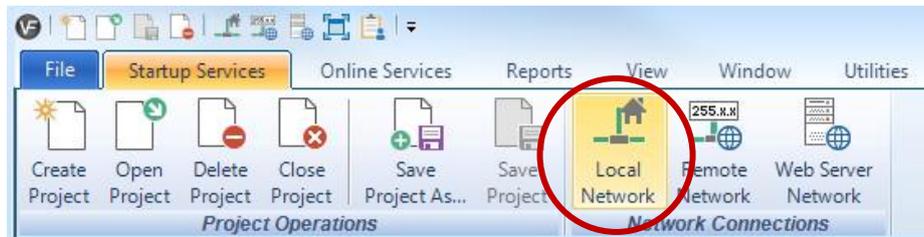
## DOWNLOAD PANEL DATABASE

**Step 18** The 'Revision Tracking' will need to be cleared to allow the file to be transferred – To do this, right click on the Node ('NO') in the 'Edit Session' window and 'Clear Revision Tracking'.



*(This feature prevents downloading an older / different config inadvertently. Please refer to the 'Revision Tracking' Document (also on USB) for additional information.)*

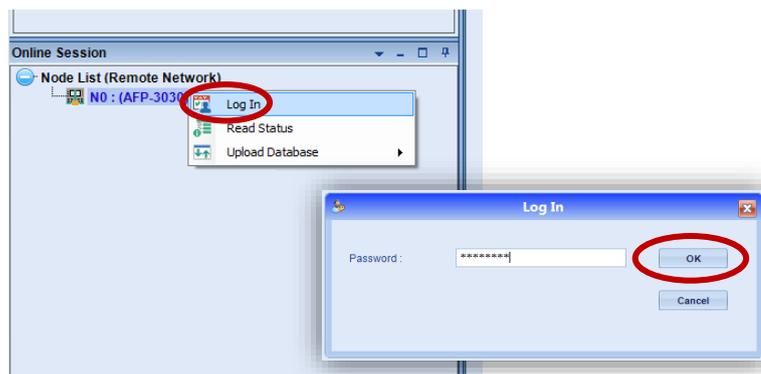
**Step 19** Connect to the panel by clicking 'Local Network'.



Click on the Node in the 'Online Session' window. Right click on the node and select 'Login'.

Enter the Panel Password (*The default Password is eight zeros – i.e. '00000000'*).

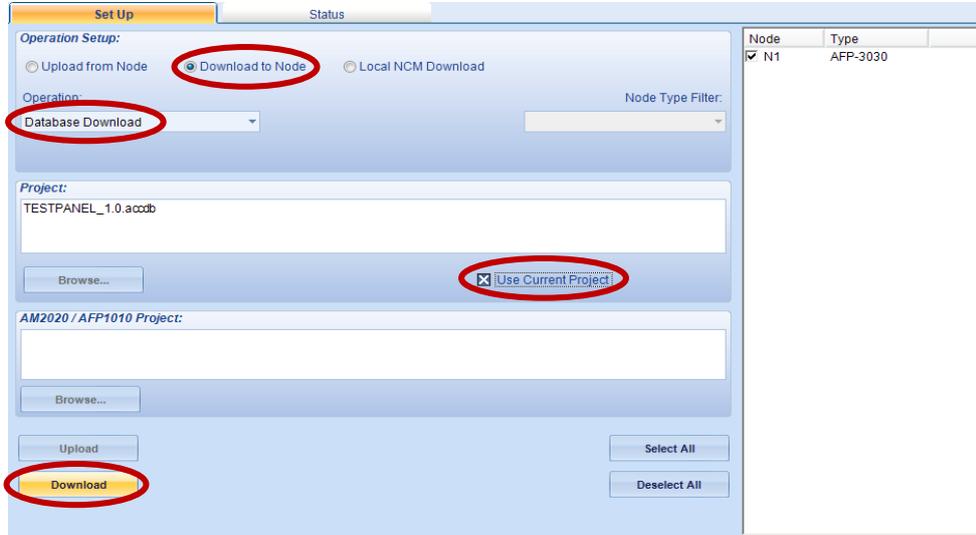
Click 'OK'.



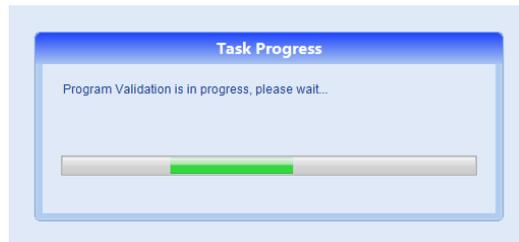
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**Step 20** Select 'Download to Node' then select 'Database Download' from the drop-down menu.

Click 'Browse' to select a particular database file, or select 'Use Current Project' (if the config is already open). Click 'Download'.



The Validation Tool will then confirm the file is OK prior to downloading to the panel.



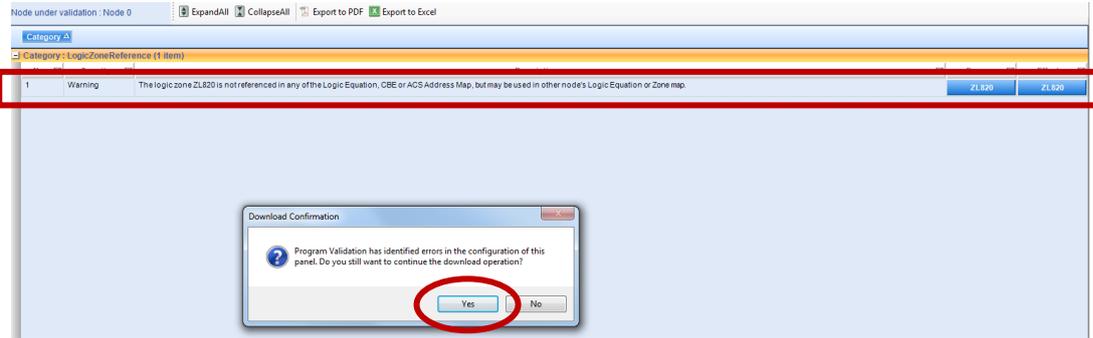
**Please note:** The Validation Tool may pick up some errors and come up with a notification:  
 “Program Validation has identified errors in the configuration of this panel”.

It may bring up some Warnings / Errors such as:  
 “The detector L1D1 does not turn on an output through general zone Z1” OR  
 “The logic zone is not referenced...” etc.

Some of these ‘issues’ aren’t a problem – the validation tool is just highlighting that additional functionality may have not been added. Review the list to confirm that the identified warnings / errors are acceptable. If so, click ‘Yes’ to continue downloading.

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**\*\*If the Validation Tool finds a critical 'error' the database may not be able to download to the panel. Please check the config is correct and after fixing the issues, try downloading again.\*\***

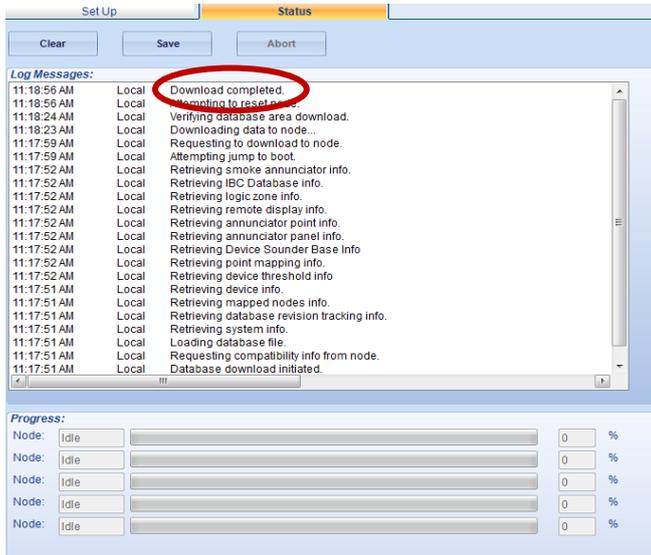


*If this is the first time a program is being downloaded to the panel, the Downloader may see a discrepancy between the existing config and the new config. This is OK. Click 'Yes' to Continue.*

*If this is an existing panel, ensure that the latest version of the config is being used to avoid overwriting changes made by another technician.*



The system will then automatically reboot.



**The firmware in the panel has now been upgraded to V28.5.**

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