

Section 1 M00-20-4438 - SiteSentinel[®] Integra[®] and iSite[®] Software Upgrade Procedure

1.1 Integra Upgrade Procedure

This procedure shows the necessary steps to upgrade the Integra console software.

NOTE: This procedure applies to software Version 191, CPU 326 and FPGA 19 upgrade and higher.



NOTE: See the "iSite Software Upgrade" on page 15 section for the procedure to upgrade the iSite Tank Gauge system.



NOTE: The software version number will be shown on the Compact Flash card that comes in the upgrade kit.

Upgrade Needs Chart for Integra 100/500

Current Soft- ware	Upgrade(s) Needed	Parts Needed	Instructions Needed		
Older than V175	FPGA CPU Software	CF Card (ATP) with V191a USB Key (ATP) with upgrade files Latest CABs	Instructions for CPU and FPGA upgrade Instructions for CAB upgrade* IMPORTANT: Unit will need to be reprogrammed after upgrade		
V175-V189	FPGA CPU Software	CF Card (ATP) with V191a USB Key (ATP) with upgrade files Latest CABs	M00-20-4438 Integra Software Upgrade Procedure Instructions for CAB upgrade*		
V191 - V195	Software	Latest CABs	Instructions for CAB upgrade*		
V16Q3.1	Software	Latest CABs	Instructions for CAB upgrade*		

* See M2021 SiteSentinel Integra Configuration Guide, Firmware Section for the upgrade procedure.





NOTES:

Integra and iSite versions older than V175 will not back up and restore.

Integra and iSite software starting with V16Q3.1 has an encrypted database.

You CANNOT backup an unencrypted database version and restore to an encrypted database version. This holds true on full database and configuration only restores.

You must use a CAB upgrade to move from unencrypted to encrypted databases.

The upgrade from V175-V189 to the latest is a 2 step process. First the upgrade to V191a using M00-20-4438 then a CAB to the latest version.

For Integra versions older than V175 the unit will have to be reprogrammed from scratch. The FPGA and CPU upgrades would have to be completed and the unit must be reprogrammed.

The same procedure is followed for an SSR upgrade and CAB upgrade.

Components

The upgrade kit will contain the components shown below



- New Compact Flash (CF) Card (with the latest version software).
- New USB Key (for database log & .cab files).



IMPORTANT: You must use a VNC Viewer if a laptop PC is used for this procedure. This procedure cannot be done in a browser window.





Record and Backup

FUEL MANAGEMENT SYSTEMS OEM Site						
System	Incoming Connection					
Preferences	✓ Enabled Users					
Time / Date	• STATIC O DHCP					
	Subnet: 192.168.0.0 Add New					
Networking	Mask: 255.255.0.0 Remove					
	Start Address: 255.255.254.1 Change user password					
Communications	Email and SMS Transport/WEB Access Ethernet Interface					
Printers	LAN/WAN O DIAL-UP ISP O DHCP O STATIC					
Email & SMS	Record all IP Address: 00:E048-27:31:34					
Security	information Mask: 255.255.2					
Firmware	in these fields					
Installed Options						
	Settings > Utilities > > > > 0.3.5.11					
Logout Settings Help Print	Calibratic Monday Spooler Status Active Alarms Open Alarms Home 09/09/2015 6:07 PM 000					

- 1. Record your Network Settings (these settings will not restore).
 - a. Log in as an Administrator to access the Network Settings.
 - b. Navigate to: Settings > System > Networking.
 - c. Record all network settings as in the illustration above (you can print this information if you have a printer installed).



	Utilities
New unit old Kontron	
Settings	
Address Book	Backup and Restore
Site Summary	Backup Configuration Restore Configuration
System	System Operations
Products	Clear SLD segment for Tank or Group : Select Tank or Group •
Probes/Sensors	Tools script : Apply
Reconciliation	Logfies
Leak Detection	IMPORTANT: Clear Alarms
Iltilities	Back up the system
	database to your
Versions	laptop or flash drive!
	Settings > Utilities > > > > 6.3.5.11
Logout Settings Help Print	Tuesday Spooler Status Active Alarms Open Alarms Home 01/12/2016 01 0 43 156 156 16:14 0 43 156 156

- 2. Back up the database to your PC or a portable drive.
 - a. Go to: Settings > Utilities.
 - b. Click the **Backup database** button.
- 3. Power down the unit.

Upgrade



1. Remove the CF card and USB drive that are installed in the Main Board. See the illustration above for these locations.







IMPORTANT: In units built before Version 191, the CF card is located in a slot behind the main board heat sink in the lower right corner. The CF card currently installed in that slot must be removed before the new CF card is installed into slot J15 (see illustration above).

- 2. Install the new CF card that contains the latest software and the new USB drive into the Main Board.
- 3. Plug a USB mouse into one of the USB ports on the side of the console.
- 4. Power up the console.



IMPORTANT: Note the time that the unit completes the reboot cycle. It can take as long as two (2) minutes before the scripts *start* to run in the background. Once the scripts start, you must wait a minimum of four (4) minutes from this point for the console to complete all of the scripts.

0.3.5.11
Home

5. To watch the scripts run (and to know when it has started and completed), move your mouse pointer all the way to bottom of the screen. Select the LOG CONSOLE button when it comes into view. The log monitor will come up and you can see the progress of the boot sequence as it occurs.



6. When the log stops for more than 90 seconds, click at the bottom of the window to close it.







NOTE: Before you can restore the database, complete the CPU and FPGA upgrades as shown below. The CPU upgrade should be completed first and the FPGA upgrade second.

CPU Upgrade

	This upgrade will take approximately 20 minutes.
	Firmware
Preferences	Here you can upgrade your iSite's firmware or options. 1. Press brog Select a File 2. Process up
Select the file: WSm Networking Communications	art_CPU_326_nonstop.cab
Printers Email & SMS	
Security Click Apply	File with upgrade to t
Click Upload	Uporade Click Upgrade
Logout Settings Help Print	Settings > System > Fernivare > > C3.57 Monday 04/18/2016 04/18

- 1. Close the system log monitor window.
- 2. Log out and then log back in as an Administrator.
- 3. Navigate to Settings > System > Firmware.
- 4. Click the Browse button.
- 5. If the USB key was recognized by the unit you will see two .cab files.
- 6. Select the file WSmart_CPU_XXX_nonstop.cab (where XXX is the version number).
- 7. Click the **Apply** button.
- 8. Click the **Upload** button.
- 9. Wait for the screen to show **Upgrade file is ready to be applied**. Click the **Upgrade** button.
- 10. A Ready to upgrade dialog box will come into view. Click the Yes button.





- 11. A screen will come up that shows **Upgrade complete**. This indicates that the software has been staged for installation.
- 12. Click **OK** to close the dialog box. The unit will show the sign-on screen.
- 13. Move your mouse pointer all the way to bottom of the screen. Select the LOG CONSOLE button when it comes into view. The log monitor will come up and you can see the progress of the upgrade as it occurs.



14. The log will pause and the screen will show Update thread finished in the log monitor text.





	Uti	lities					
New unit old Kontron							
Settings							
Address Book	Backup an	Id Restore					
	Backup database	Restore database					
Site Summary	Backup Configuration	Restore Configuration					
System	System O	System Operations					
	Maintenance Mode	Coff • Apply					
Products	Clear SLD segment for Tank or Group	Select Tank or Gro					
Probes/Sensors	Tools script	: Apply					
	Coldstart	Clear Alarms					
Reconciliation	Copy Logfiles to Key	Reboot Shut Down					
	Copy Database File to Key						
Leak Detection		Scan Results					
Utilities							
	The upgrade add	is new buttons to					
Versions	the Utilities scree	en.					
The undated software y	version						
will snow here							
Settings Help Print Kontent	Jos > Utilities > > >	> 6.3.5.11 Spooler Status Active Alarms Open Alarms Hom					
	01/12/2016						
	16:14	(0) (43) (156) (in					

- 15. Use the steps that follow to correctly shut down the unit.
 - a. Click LOG CONSOLE to close the log monitor.
 - b. Log out and then log back in as an Administrator.
 - c. Navigate to Settings > Utilities > Shut Down.
 - d. Click Yes in the dialog box that comes up.
 - e. The Unplug system icon will come into view.
 - f. Turn the power switch to the **OFF** position. Wait for the unit to completely power down. Make sure that all Main Board LED lights are off.



IMPORTANT: Do not unplug the battery!

- 16. Power on the Integra and the CPU upgrade will continue automatically.
- 17. When the Home screen comes up, move your mouse pointer all the way to bottom of the screen. Select the LOG CONSOLE button when it comes into view. The log monitor will come up and you can see the progress of the CPU update as it occurs.









NOTE: Watch the scripts as they run in the log to see when the CPU has been updated (the last sector is 4).

18. When the upgrade is complete the CPU will restart without a complete system reboot.



- Watch the log until the new Firmware version shows. When the reboot is complete, Check the log to
 make sure the **Firmware** version number is correct. In the example above, the Firmware version is
 3.26 (this can usually be seen 3-4 lines up from the bottom of the log).
- 20. Use the **Reboot** button that now shows on the Utilities screen (see the Utilities screen illustration above) to manually reboot the system.





FPGA Upgrade

1. Log out of the system, then log back in to the Integra as an Administrator with the factory password (*).

	Firmware
Quality Lab	
System	
Preferences	Here you can upgrade your iSite's firmware or options.
Time / Date	2. Press upload to save file to system. 3. Press upgrade to upgrade the system
Networking	
Communications	Click the
Printers	Browse Button
Email & SMS	
Security	File with upgrade to be applied:
Firmware	Browse
Installed Options	Uprade Uprade
	Settings > System > Firmware > > 6.3.5.7
Logout Settings Help Print	Caryboard Californiation Monday Spooler Status Active Alarms Open Alarms Home 04/18/2016
━ 🛞 (?) 🖶	3.59 PM (1) (22) (94) (1)

- 2. Navigate to Settings > System > Firmware.
- 3. Click the **Browse** button.





	Firmware
Quality Lab	
System	
Preferences	Here you can upgrade your iSite's firmware or options.
Time / Date	2. Press up 3. Press up 5. Press up
Select the file: WSn	art_FPGA_19.00_nonstop.cab
Communications	
Printers	
Email & SMS	
Security Click Apply	Scroll Apply Cancel Scroll File with upgrade to t
Finnware	Browse
Click Upload	Upload Upgrade
	Settings > System > Firmware > > 6.3.5.7
Logout Settings Help Print	Keyboard Calibration Monday Spooler Status Active Alarms Open Alarms Home
	Out / BZ/016 Out / BZ/016 3.59 PM 1 v. 1601.6 0.2000 by OPW Fuel Management System

4. If the USB key was recognized by the unit you will see two .cab files.



NOTE: The version numbers of these .cab files can be different than the examples.

- 5. Select the file WSmart_FPGA_XX.XX_nonstop.cab (where XX.XX is the version number...
- 6. Click the Apply button.
- 7. Click the Upload button.
- 8. Wait for the screen to show Upgrade file is ready to be applied. Click the Upgrade button.
- 9. A Ready to upgrade dialog box will come into view. Click the Yes button.
- 10. A screen will come up that shows **Upgrade complete**. This shows that the software has been staged for installation.
- 11. Click **OK** to close the dialog box. The unit will show the sign-on screen.
- 12. Move your mouse pointer all the way to the bottom of the screen. Select the LOG CONSOLE button when it comes into view. The log monitor will come up and you can see the progress of the upgrade as it occurs.





	LOG CONSOLE
Aug 27 14:49:01 <5y5 Aug 27 14:49:02 <5y5 Aug 27 14:49:03 <5y5	Ope Converte UND CONVECT UND 27 144243 (demonstrip) divet/(4ddd:1); UND 27 144243 (demonstrip) divet/(4ddd:1); UND 27 144250 (demonstrip) div
Aug 27 14:49:12 <sys< th=""><th>.info> otainit[ad601c4a]: WDI client: 61/3 removed.</th></sys<>	.info> otainit[ad601c4a]: WDI client: 61/3 removed.
	Aug 27 144351 cdemontho direkti(4560C1)) orale table (b_thread) 0 Aug 27 144354 cdemontho direkti(4560C1)) orale table (b_thread) 0 Aug 27 144354 cdemontho direkti(4560C1)) orale table (b_thread) 0 Aug 27 144359 cdemontho direkti(4560C1)) AUT damot 617 tenoned. Aug 27 144359 cdemontho direkti(4560C1)) AUT damot 617 tenoned. Aug 27 144439 cdemontho direkti(4560C1)) AUT damot 617 tenoned. Aug 27 144439 cdemontho direkti(4560C1)) AUT damot 617 tenoned. Aug 27 144439 cdemontho direkti(4560C1) AUT damot 6173 wtf]meost 30000 m ed group but goto. Aug 27 144439 cdemontho direkti(4560C1) AUT damot 127 wtf]meost 30000 m ed group but goto. Aug 27 144439 cdemontho direkti(4560C1) AUT damot 127 wtf]meost 30000 m ed group but goto. Aug 27 144439 cqr.mbo otart[4560C1] Status or exament updates Aug 27 144431 cqr.mbo otart[4560C4] W0T demt 6173 removed.

- 13. The log will pause and the screen will show Update thread finished in the log monitor text.
- 14. Use the steps that follow to correctly shut down the unit.
 - a. Click LOG CONSOLE to close the log monitor.
 - b. Log out and then log back in as an Administrator.
 - c. Navigate to Settings > Utilities > Shut Down.
 - d. Click Yes in the dialog box that comes up.
 - e. The Unplug system icon will come into view.
 - f. Turn the power switch to the **OFF** position. Wait for the unit to completely power down. Make sure that all Main Board LED lights are off.



15. Power on the Integra and the FPGA upgrade will continue automatically.



REMINDER: This upgrade will take approximately 20 minutes to complete. Please be patient.

16. When the Home screen comes up, move your mouse pointer all the way to bottom of the screen. Select the LOG CONSOLE button when it comes into view. The log monitor will come up and you can see the progress of the FPGA update as it occurs.







NOTE: Watch the scripts as they run in the log to see when the FPGA has been updated (the last sector is 3).

17. The gauge will automatically reboot when the upgrade is complete.

	you are using a VNC Viewer you must reconnect at this time.
Aug 27 15:13:21 <pnet.into> Aug 27 15:13:21 <pnet.notic Aug 27 15:13:22 <pnet.info> Aug 27 15:13:22 <ps:info></ps:info></pnet.info></pnet.notic </pnet.into>	CONCENTION CONTRACT OF THE PROVIDENCE OF THE PRO
	Big 27 Big 20 cmsr4bit Big

- 18. When the reboot is complete, check the log to make sure the FPGA is the correct version number. In the example above, the FPGA version is 19.
- 19. Log out and then log back in as an Administrator.



20. Make sure that both, FPGA and CPU (Firmware) version numbers are correct as in the illustration above. In this example the Firmware version is 3.26 and the FPGA version is 19.





Restore Network Settings

- 1. Plug in a network cable if the unit is on a network.
- 2. Program custom network settings through the console if the site is not set to the factory default IP address (169.254.1.111).

Remove Upgrade Files from the USB Key

	Secu	ırity					
	Firmware						
	Installed Options						
	Programs	L. Communication					
	Pavonites						
	Cottingo	Miorocoft Word Dod	Settings	>	System	>	Netwoi
	Dun		Keyboard	Calibratio	n	Thu	ursday
				(i		08/2	27/2015
	💐 S <u>u</u> spend	windows Explorer				2:2	
Ī	👭 Start 🛛 LOG C	ONSOLE			OTA System Init	and both	LUN LUC Mon

- 1. Move your mouse pointer all the way to bottom of the screen. Click the Start button. Select, Programs > Windows Explorer.
- 2. Navigate to Disk 2.
- 3. Double click the drive icon.
- 4. Delete each of the files below (Right click the file and select Delete from the popup menu).

WSmart_CPU_XXX_nonstop.cab, WSmart_FPGA_XX.XX_nonstop.cab,

igui.ntm, M00-20-4438.pdf

- 5. Close the Explorer window (click the "X" in the top right corner).
- 6. Navigate to Settings > Utilities.
- 7. Click the **Restore database** button.
- 8. Make sure all data has been restored.

If more information is necessary, refer to the <u>M2021 SiteSentinel Integra Configuration Guide</u> on the <u>https://www.opwglobal.com/opw-fms</u> website.

Do not forget to clear your browser cache before and after the restore.





2.1 iSite Software Upgrade

All previous versions of iSite software must be upgraded. Refer to the Upgrade Needs Chart below.

iSite

Current Soft- ware	Upgrade(s) Needed	Parts Needed	Instructions Needed
Older than V175	CF Card USB Key Software	CF Card (ATP) with V191a USB Key (ATP) with upgrade files Latest CABs	Instructions for CAB upgrade* IMPORTANT: Unit must be reprogrammed after upgrade.
V175-V189	Software	CF Card (ATP) with V191a USB Key (ATP) Latest CABs	M00-20-4438 Integra Soft- ware Upgrade Procedure Instructions for CAB upgrade*
V191 - V195	Software	Latest CABs	Instructions for CAB upgrade*
V16Q3.1	Software	Latest CABs	Instructions for CAB upgrade*

* See M2021 SiteSentinel Integra Configuration Guide, Firmware Section for the upgrade procedure.

NOTES:

Integra and iSite versions older than V175 will not back up and restore.

Integra and iSite software starting with V16Q3.1 has an encrypted database.

You CANNOT backup an unencrypted database version and restore to an encrypted database version. This holds true on full database and configuration only restores.

You must use a CAB upgrade to move from unencrypted to encrypted databases.

The upgrade from V175-V189 to the latest is a 2 step process. First the upgrade to V191a using M00-20-4438 then a CAB to the latest version.

For iSite versions older than V175 the unit will have to be reprogrammed from scratch after the upgrade.

The same procedure is followed for an SSR upgrade and CAB upgrade.



IMPORTANT: THERE ARE NO FPGA OR CPU UPGRADES ON THE iSite PLATFORM.





Record and Backup

Record your Network settings as in "Record and Backup" on page 3 before you proceed. You can take a snapshot of these settings from the Networking screen for convenience.

Upgrade



The location of the iSite CF card slot and USB ports are shown above.

IMPORTANT: For iSite versions older than V175 the unit will have to be reprogrammed from scratch after the upgrade.

To reprogram the iSite refer to the M2021 SiteSentinel Integra Configuration Guide. Use the QR Code or the link below to get access to the pdf manual on the opwglobal web site.







https://www.opwglobal.com/docs/libraries/opw-fms/manuals/opw-fms-manuals/m2021-integraconfiguration-guide.pdf?sfvrsn=382899c4_10

Send Serial Number to OPW-FMS



iSite users must send the Serial Number information for all units to OPW-FMS. The Serial Number can be found on the product label on the side of each unit. Email this information to Pete Neil, Global Product Manager at:

pete.neil@doverfs.com





Revisions

Revision #	ECO	Effective	Software Version	Key Changes
0	1183	6/28/2017	na	Initial Release
1	1222	8/22/2017	na	Add specific iSite information
2	1391	7/2/2018	na	Replaced page number with section of referenced manual as best prac- tice. Added hyperlink to referenced manual.



NOTE: It is possible that older software versions might not support all features

