Veronte Updater

Release 6.14.20/1.0

Embention Sistemas Inteligentes, S.A.

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Scope of Changes

- Version 1.0
 - Added:
 - First version issued

Quick Start

Veronte Updater updates the software version of almost all Embention devices, being **Veronte Autopilot 1x** most of the time.

Once **Veronte Autopilot 1x** has been detected on Veronte Link, download and install **Veronte Updater**.

Veronte Updater supports Windows operating system.

(i) Note

Windows 10 is recommended, but Windows 11 is supported.

System requirements

Before executing this software, users should check the following sections with the minimum and recommended PC hardware requirements.

Minimum requirements

- CPU: Intel Core i5-8365UE
- RAM: 8 GB DDR4
- STO: 256 GB SSD

Recommended requirements

- CPU: 12th Gen Intel(R) Core(TM) i7-12700H 14 cores up to 4,70 GHz
- RAM: 32 GB
- STO: 1 TB SSD M.2 NVMe PCIe

Download and Installation

Veronte Updater software is available in the **Veronte Toolbox** platform. From there, users can download and install the application. For more information, please refer to the Veronte Toolbox user manual.

A **personal account** is required to access **Veronte Toolbox**; create a Ticket in the user's **Joint Collaboration Framework** and the support team will create it for you.

Operation

Once the installation is finished, open **Veronte Updater** and the following main menu will appear:



Veronte Updater - Main menu

Users may notice that there are some tabs at the top of the menu:

- Home: This is the main tab, where the whole update process takes place.
- Advanced tools: When clicked, it displays a drop-down menu with several options to carry out on the connected device: File system, Upload files, Upload backup, Flash tool, Switch BootStage, Configure Remote ID, Flash Remode ID, Identify SD and Upload partition data. For more information, refer to Advanced tools section.

Update process

Since the most frequently updated device is **Veronte Autopilot 1x**, this user manual uses this device as an example. However, all other devices require the same procedure.

Within the same firmware version

() Danger

To update a device within firmware versions **6.14 or higher**, the connection **must not** be via the **USB harness**. For example, configure a connection via RS232 (users can use an RS232-to-USB adapter to connect it to the PC).

Since this user manual will use **Autopilot 1x** as an example, to configure it via RS232:

- 1. Connect the device with **Veronte Link 6.14** via **USB harness**. For more information on this app, refer to the Veronte Link user manual.
- Next, open **1x PDI Builder**, select the connected device and open the PDI online.
- Go to Input/Output menu → I/O Setup panel. Set up a bidirectional connection between RS232 port and a COM Manager port, in this case Commgr port 3 is used.

I/O Setup	Configuration					
CAN Setup	Priority	Producer		Consumer		
Digital Input	High 🕸	USB	\rightarrow	Commgr port 5	Q0	Alway
Serial	High 🔯	External UART	\longleftrightarrow	Commgr port 2	05	Alway
Incremental Counters	High 🔯	RS232	\rightarrow	Commgr port 3	Q_0^0	Alway
	High 🔯	RS485	\leftrightarrow	Commgr port 4	0°	Alway
	High 🔯	Commgr port 0	\rightarrow	Serial to CAN 0	0 ⁸	Alway
	High 🔯	Commgr port 1	\longleftrightarrow	Veronte LTE	Q_{0}^{0}	Alway
	High 🕸	Commgr port 2	\leftrightarrow	External UART	Q ⁰ ₀	Alway
	High 👯	Commgr port 3	\rightarrow	RS232	Q0	Alway
	High 🖓	Commgr port 4	\leftrightarrow	RS485	Q_0^0	Alway
	High 🖓	Commgr port 5	→	USB	00	Alway
	High 🖓	CAN to serial 0	\rightarrow	Commgr port 0	Ø6	Alway
	High 🔯	Veronte LTE	\longleftrightarrow	Commgr port 1	06	Alway

- 1x PDI Builder I/O Setup configuration
 - 4. Go to Communications menu \rightarrow **Ports panel**.

Make sure that the COM Manager port configured in the previous step is set in the **Forward** column, in this case **PORT 3**.

/erontePDI Builder - 1x v4.8 4096 - CONN	ECTED	- x
4.8 -		8 ± 8 5
Ports 4G	Ports	+
Comstats Iridium	Routing O PORT 0 PORT 1 PORT 1 PORT 2 PORT 3 PORT 4 PORT 5 RIDIUM	
PDI Builde Save the co Finally, diso ready to be	r - Ports configuration onfiguration by clicking on the connect Autopilot 1x from the e updated with Veronte Upda	e 🖪 icon. e USB harness. iter 6.14 .

Follow the steps below to carry out the update process of a **Veronte Autopilot 1x**:

 Connect the device (to be updated) to a computer with Veronte Link in another way than USB.

Then, open **Veronte Updater** and select the connected device in the marked area:

Veronte Updater		– 🗆 X
Home Advanced tools		
t)
	Home	
	/x	
	Drag	
	S	
Not selected	Select	Update
Not selected		
1x v4.8 4096 (6.14.28)		

Selecting connected device

2. Load the **.update** file.

There are two ways to do this, dragging the file to the **Drag** area or by using the **Select** button.

The latter option will open the following browser to select the **fw.update** file stored in the user's local storage:



Loading file

3. Once the .update file is loaded, click on **Update** to send the configuracion to the device.



Update loaded

4. The update process will start, the next window will show the progress:

Update device	-
A Do not disconnect the device	
>> Create license backup	ŕ
Done	
>> Waiting for user confirmation	
Waiting	
>> Switch BootStage to Bootloader mode	
Waiting	
>> Waiting for device	
[
Waiting	
>> Writing File System Binaries	
Waiting	
>> Reset and wait boot	
Waiting	
Done	

Update device process

 A confirmation panel will then appear to ensure that the user has not connected the device through the Veronte USB.

Confirm	ation X
The device communica	must be connected by a single mean of tion It is not allowed to use the USB for this action.
	Confirm
	Cancel

Update device process - Confirmation panel

 If the device is connected in a way other than USB, drag the blue arrow to the right until it turns green to confirm and the update process will continue.



Confirmation panel OK

Update device		-
🛕 Do	o not disconnect the device	
>> Waiting for us	er confirmation	
Done		
>> Switch BootSt	age to Bootloader mode	
Done		
>> Waiting for de	evice	
Done		
>> Writing File Sy	vstem Binaries	
Uploading:[8,6%]	- Time remaining: 2.0 min	-
opioadingi(oiovoj	inne remaining the finit	
>> Reset and wai	t boot	_
Waiting		
>> Upload license	2	
Waiting		
	Done	
pdate devi	ce process - Confi	rmed

• Otherwise, click **cancel** and the update process will stop:



Confirmation panel CANCEL

Update device	- ×
Do not disconnect the device	
>> Switch BootStage to Maintenance mode	Â
Done	
>> Create license backup	
Done	
>> Waiting for user confirmation	
Error: User did not consent to start the action	
>> Switch BootStage to Bootloader mode	
Waiting	
>> Whiting for device	_
>> waiting for device	
Waiting	
>> Writing Eila System Binaries	- 1
>> writing the system binaries	
Waiting	
Done	~ ~
	lod

6. When finished, click on **Done**:

Update device	- ×
A Do not disconnect the device	
>> Waiting for user confirmation	^
Done	_
>> Switch BootStage to Bootloader mode	
Done	
>> Waiting for device	
>> waiting for device	
Done	
	-
>> Writing File System Binaries	
Done	_
>> Reset and wait boot	
Done	
	-
>> Upload license	
Done	Ų
Done	

Update device process finished

Upgrade 6.12 to 6.14

Depending on the Veronte Autopilot 1x firmware version:

 If the previous firmware version of Autopilot 1x is lower than 6.12.116, the update process will not be be able to proceed. Therefore, users first need to update it to 6.12.116.

🕛 Error

Upgrading an **Autopilot 1x** to 6.14 with firmware version **lower than** 6.12.116 will result in Autopilot 1x needing an **RMA**.

• If **Autopilot 1x** is on **6.12.116** firmware version, the update process can start.

() Danger

To update a device to firmware versions **6.14**, the connection **must not** be via the **USB harness**. For example, configure a connection via RS232 (users can use an RS232-to-USB adapter to connect it to the PC).

Since this user manual will use **Autopilot 1x** as an example, to configure it via RS232:

- 1. Connect the device with **Veronte Link 6.14** via **USB harness**. For more information on this app, refer to the Veronte Link user manual.
- 2. Next, open **1x PDI Builder 6.12**, select the connected device and open the PDI online.
- 3. Go to Input/Output menu \rightarrow **I/O Setup panel**.

Set up a bidirectional connection between **RS232** port and a COM Manager port, in this case **Commgr port 3** is used.

1x 4.8	Ŧ		🕂 Input / Output			8 1 0	
O	I/O Setup	Configuration					
	CAN Setup	Priority	Producer		Consumer		
\otimes	Digital Input	High 🖓	USB	→	Commgr port 0	Ф°	Always Ok
2	Serial	High 🔯	Veronte LOS	\leftrightarrow	Commgr port 1	0¢	Always Ok
		High 🔯	External UART	\rightarrow	None	Φ_0^0	Always Ok
		High 🔯	RS232	\longleftrightarrow	Commgr port 3	Q _2	Always Ok
Ŧ		High 🔯	RS485	\leftrightarrow	Commgr port 4	Q6	Always Ok
¢°		High 🔯	Commgr port 0	\leftrightarrow	USB	Q_0^0	Always Ok
		High 🔯	Commgr port 1	\rightarrow	Veronte LOS	Q0	Always Ok
¥2		High 🔯	Commgr port 2	\rightarrow	None	Q _0	Always Ok
30		High 🔯	Commgr port 3	\leftrightarrow	RS232	Q _0	Always Ok
		High 🔯	Commgr port 4	\leftrightarrow	RS485	Q0	Always Ok
		High 🔯	Commgr port 5	\rightarrow	Serial to CAN 0	Ø6	Always Ok
		High 🔯	RS custom message 0	\rightarrow	None	Ø8	Always Ok
		High 🔯	RS custom message 1	\rightarrow	None	Q0	Always Ok
6 26		High 🔯	RS custom message 2	\rightarrow	None	Ø0	Always Ok
X		High 🔯	Tunnel 0	\rightarrow	None	Q ⁰	Always Ok
		High 🔯	Tunnel 1	\rightarrow	None	Ф¢	Always Ok
		Hinh RB	Tunnal 2	\rightarrow	None	-86- C	Alwave Ok

1x PDI Builder - I/O Setup configuration

4. Go to Communications menu \rightarrow **Ports panel**.

Make sure that the COM Manager port configured in the previous step is set in the **Forward** column, in this case **PORT 3**.

AG Constats Indium Ports + Route + PORT 0 PORT 1 PORT 2 PORT 3 PORT 4 PORT 5 PORT 4 PORT 5 PORT 4 PORT 5 PORT 4

Follow the steps below to carry out the update process of a **Veronte Autopilot 1x**:

1. Connect the device (to be updated) to a computer with Veronte Link in a way other than USB.

Then, open **Veronte Updater** and select the connected device in the marked area:

Veronte Updater		– 🗆 X
Home Advanced tools		
ť		
	Home	
	Drag	L+
Not selected 👻	Select	Update
Not selected		
1x v4.8 4166 (6.12.116)		

Selecting connected device

2. Load the **.update** file.

There are two ways to do this, dragging the file to the **Drag** area or by using the **Select** button.

The latter option will open the following browser to select the **fw.update** file stored in the user's local storage:

Veronte Updater	- 🗆 X	٥	Update system image					×
Home Advanced tools			$ ightarrow \star \star$ 🛄 > This	s PC > Desktop	> Updates	~ ē	Search Updates	P
		0	rganize 👻 New folder	r			EE 🕶 [
LERC			This PC	^	Name		Date modified	Туре
			3D Objects		🗋 fw.update		12/06/2025 16:14	UPD
	Home		📃 Desktop					
	Home		📙 Updates					
/			🗄 Documents					
		->	👆 Downloads					
			👌 Music					
			E Pictures					
	Drag		Videos					
			🏰 Local Disk (C:)					
S	/		🝐 Google Drive (G:)					
			Network					
				~	<			>
1x y4.8 4166 (6.12,116)	Select Update		File na	me: fw.update		~	Update system image (*.u	pdate 🗸
							Open Ca	ncel

Loading file

3. Once the .update file is loaded, click on **Update** to send the configuracion to the device.



Update loaded

 In the update process, a warning panel about the 4x configuration in Autopilot 1x appears first:



Update device process - Warning panel

- To prevent any error, users should check that the settings in the 4x modes menu in the Autopilot 1x are correct according to the case.
 For this:
 - Close the warning message, close Veronte Updater app and open
 1x PDI Builder v6.12.
 - Go to Modes menu \rightarrow Modes panel \rightarrow **4xVeronte tab**.

Depending on the case:

- If Autopilot 1x is **not apart of a 4x**, the configuration in the 4x
 Veronte tab should be **disabled**.
- If Autopilot 1x is within a 4x, the configuration in the 4x Veronte tab should be as explained in the Autopilot 4x - Integration examples section of the 1x PDI Builder user manual.
- If the configuration has been previously checked and it is correct, click OK and continue the process.

() Error

If users perform the update process with this configuration incorrectly, the migration to 6.14 will lead Autopilot 1x to a Loaded with errors status. Users can find a solution to this in the Incorrect configuration when upgrading from 6.12 to 6.14 - Troubleshooting section of the present manual.

5. If the update process can continue, the following message will appear. This is because updating a device will format it and a backup is the only way to restore the previous configuration.





Export configuration message

6. Choose the folder where the backup will be stored as a **.backup** file:

← → • ↑ 📙	→ This PC → Des	ktop → backups	~	Q	Search backups		2
Organize 🔻 🛛 Ne	w folder					— –	
🧊 3D Objects		^	No items p	aatch	voursearch		
📃 Desktop			No items in	laten	your search.		
Documents							
🕂 Downloads							
🁌 Music							
Pictures							
📑 Videos							
🎬 Local Disk (C:)						
🛆 Google Drive	(G:)						
💣 Network							
		¥					
File name:	veronte4_8-6.12.11	l6-4166-pdif.backup					
Save as type:	Veronte Config file	(*.backup)					
Lida Faldara					Save	Cancel	
Hide Folders					Jave	Cancer	

7. The update process will start, the following windows will show the progress:

Update device —
Do not disconnect the device
>> Check 4x configuration
Done
>> Create backup
Done
>> Create license backup
Done
>> Check for devices in bootloader mode
Done
>> Waiting for user confirmation
Waiting
>> Updating bootloader
Waiting
Done

Update device process

 A confirmation panel will then appear to ensure that the user has not connected the device through the Veronte USB.



Update device process - Confirmation panel

 If the device is connected in a way other than USB, drag the blue arrow to the right until it turns green to confirm and the update process will continue.



Confirmation panel OK

Do not disconnect the device
>> Check for devices in bootloader mode
Done
>> Waiting for user confirmation
Done
>> Updating bootloader
Uploading:
>> Waiting for device
Waiting
>> Flashing command sent
Waiting
>> Waiting for device to enter bootloader mode
Waiting

• Otherwise, click **cancel** and the update process will be cancelled:



Confirmation panel CANCEL

Update device —
A Do not disconnect the device
>> Check 4x configuration
Done
>> Create backup
Done
>> Create license backup
Done
Done
>> Check for devices in bootloader mode
Done
>> Waiting for user confirmation
Error: User did not consent to start the action
>> Updating bootloader
Waiting
v
Done
Update device process - Cancelled

9. When finished, click on **Done**:

Update device —	
A Do not disconnect the device	
>> Waiting for device to enter bootloader mode	^
Done	
>> Modifying OTP information	
Done	
>> Writing File System Binaries	
Done	
>> Reset and wait boot	Π
Done	
>> Import backup	
Done	
>> Upload license	
Done	Ű
Done	

Update device process finished

(i) Note

During the update the device has been formatted and consequently the Autopilot 1x configuration has been deleted.

Therefore Veronte Link will show it as Maintenance mode and PDIF: Failed load.

😔 Vero	onte Link			Ø localhost	💄 Login
⇔ Devie	ces Connection	°€ Sessions	Cloud connection	۳۳ [،] C	<i>∓</i>
	1x - 4166 v.6.14.28 - Port: CO	M3 intenance mode) 🜘 PD	IF: Failed load	88 🖾	ຜ ×
R OF	mbention di Terms ar	d Conditions		8	8 C

10. Finally, upload the **.backup** file obtained in step 6.

Use the Upload backup tool of Veronte Updater. For this:

 $\circ\,$ Click on Advanced tools $\,\rightarrow\,$ $\,$ **Upload backup**.

🗐 Veronte Up	dater			_		х
Home Adv	anced tools					
File	system					
Upl	oad files	JERONTE	c 🕰 ר			
Upl	oad backup	PORTER				
Flas	h tool					
Swit	tch BootStage	Home				
Con	figure Remote ID					
Flas	h Remote ID	l l				
Mig	rate Remote ID					
🚽 Ider	ntify SD					
🖣 Upl	oad partition data	Drag				
-					_	
		\				
1x y/ 8 /166	(6 14 28) -	Salact	1 (Unda	ta	
12 14:0 4100	(0.14.20)	Select	J	opua	ie .	J

Upload backup

 Load the .backup file. There are two ways to do this, dragging the file to the Drag area or by using the Select button.

The latter option will open the following browser to select the **.backup** file stored in the user's local storage:



Upload backup - Select .backup file

 Once the .backup file is loaded, click on **Update** to send the configuracion to the device.



Upload backup - Upload

 $\,\circ\,$ Once the process, finish, click on Done.



Upload backup - Upload process

Autopilot 1x should now be in version 6.14 with the migrated PDI and switch to **Normal mode** and **Ready** status:

😔 Veronte Link	Ø localhost Login
⇔ Devices	Cloud connection 614 C
1x - 4166 v.6.14.28 Port: COM3 Connected Normal mode PDIF: Read	S 🖉 🕫 x

Veronte Link - Normal mode and Ready

Autopilot 4x

To update an Autopilot 4x, the 3 Autopilots 1x and the Arbiters, it is necessary to start the process by updating first the Autopilots 1x.

Autopilots 1x within the 4x

When updating an **Autopilot 1x within a 4x** from firmware version **6.12** to **6.14**, users should carefully follow these additional steps, in addition to those already explained for updating a device from 6.12 to 6.14 in the previous section.

(i) Note

Each Autopilot 1x has to be updated individually.

- First, connect **Dev Harness 4x** to Autopilot 4x, power up the 3 Autopilots 1x and connect them to PC via USB.
- 2. Check that the configuration of RS232 connection of all autopilots is correctly done as detailed in the Upgrade 6.12 to 6.14 section.
- 3. Users can now unplug the Autopilots 1x and disconnect all USB from the PC.

- 4. Now, connect **Veronte Harness Yellow** to Autopilot 4x, power up it and connect it to the PC.
- 5. Open **4x PDI Builder** app, select the connected **Autopilot 4x** and click the **Open 4xVeronte** option to access its configuration.
- 6. Go to Arbitration menu → Config panel. In this panel users must set the Autopilot 1x to be updated as Fixed. The relations between mode and Autopilots 1x are as follows:

Mode	Autopilot 1x
Fixed 0	Autopilot 1
Fixed 1	Autopilot 2
Fixed 2	Autopilot 3

That is, if we want to update Autopilot 1, the metod Fixed 0 should be set.

- 7. Save the configuration by clicking on the \square .
- 8. Connect Autopilot 4x to PC via the RS232 connector of the Dev Harnes 4x
- 9. Now, it is necessary to force Autopilot 4x to maintenance mode. For this:
 - With Autopilots 1x unplugged (that is, with Dev Harnes 4x unplugged), connect the I2C pins or press the mainteance mode button of Dev Harness 4x (depending on the user harness).
 - 2. Turn on only **Autopilot 1**. **Don't power up Autopilots 2 and 3** to avoid arbitration initialization.

i Note

If the Autopilot 1x being updated is Autopilot 2, turn un only Autopilot 2, and the same for Autopilot 3.

- 3. Finally, disconnect both pins or release the button (depending on the user harness).
- 10. Only **Autopilot 1** should be recognized by **Veronte Link**.

11. Finally, follow the steps detailed in the Upgrade 6.12 to 6.14 section to update it.

Autopilot 1 should be correctly migrated to 6.14 firmware version.

Then, to update Autopilots 2 and 3 repeat the process from step 4, in each case configuring the arbiter to the corresponding mode.

For more information on the harnesses, please refer to Harnesses - Hardware Installation of the **4x Harware Manual**.

Arbiters within the 4x

The process for upgrading Arbiter A is the same as that explained in the Upgrade 6.12 to 6.14 section; no further steps are needed.

Advanced Tools

Together, the processes listed under the **Advanced Tools** tab, involve the entire update process described above, except for the Configure Remote ID, Flash Remote ID and Upload partition data which are not part of the upgrade process.

In other words, this allows the user to submit the device to only one of the processes that is carried out during the entire update process.

These are detailed below:

File system

By selecting this option, the file memory of the connected device will be prepared for the update process.

Simply, select the unit to be prepared and click **Prepare**:



File system

Before the process starts, users must save a back up of the current configuration.



Export configuration message

The preparation process will then start and the following windows will show the progress:

Preparing file syste	m	-	-
🛕 Do	not disconnect the	e device	
>> Create backup			î
Done			
>> Switch BootSta	ge to Maintenance	mode	
	-		
Done			
>> Waiting for dev	vice		
_			
Done			
>> Create license	backup		
Done			
>> Format and res	et		
Done			
>> Waiting for dev	vice		
Waiting			~
	Done		

File system process

When finished, click on **Done**:

Preparing file system	– ×
A Do not disconnect the device	
>> Create license backup	
Done	
>> Format and reset	
Done	
>> Waiting for device	_
>> waiting for device	
Done	
	-
>> Checking partition status	
Dana	
Done	_
>> Upload license	
Done	
	-
Done	

File system process finished

Upload files

In this tab, the user can load the updating files to the correponding **slots** of the connected device.

Important

This option is **not supported for version 6.14 or higher**. If users try to upload the files in these versions, the following message will appear:



There are two ways to do this:

 Doing it the same way as in the Home tab, i.e. selecting a .update file and letting Veronte Updater internally place each .bin file contained in the .update file into each slot.

For instance, if slot 0 is selected, one of the <u>.bin</u> files will be placed here and the other in the next slot, slot 1.

2. Selecting a slot and uploading the first <u>.bin</u>, then selecting the next slot and uploading the second <u>.bin</u> file.

(i) Note

The available slots in memory are displayed in the drop-down menu under the unit selection drop-down menu.

In this example, the first option has been done:

• First, select the slot to locate the .update file:

Veronte Updater		– 🗆 X
Home Advanced tools		
	Drag	
1x v4.8 4166 (6.12.112) ▼ 0 ▼ 0	Select	Upload
1		
2		
3		
4		
5		
6 0		
8		
9		
×		



• Secondly, drag the file to the **Drag** area or click on **Select** and select it from the local storage:

Veron	te Updater		- 0	×	💋 Up	ate binary	file					×
Home	Advanced tools				~	~ ^	📙 > This P	C → Deskto	op > Updates	~ Ö	Search Updates	P,
				_	Orga	ize 🕶	New folder				855	- 🗉 🕜
						his PC		^	Name	Date modified	Туре	Size
					1	3D Object	5		veronte-v6.12.116_2024-10-23_08-05-27.u.	17/06/2025 15:07	UPDATE File	1,025 KB
		Delevel text				Desktop						
		Upload tool			6	Documer	ts					
		/			. 4	Download	ls					
						Music						
1	919					Pictures						
		•			8	Videos						
a		Drag				Local Dis	: (C:)					
						Google D	rive (Z:)					
		S				letwork						
								~				
1x v4	.8 4166 (6.12.112) •	Select					File name			~	Upload EOC image	(*.update;*.) ~
0											Open	Cancel

Upload files - Loading file

• Once the .update file is loaded, click on **Upload** to send the configuracion to the device:

Veronte Updater		- 🗆 X
Home Advanced tools		
U		D
	Upload tool	
	Update Loaded	
1x v4.8 4166 (6.12.112) ▼ 0 ▼	Select	Upload

Upload files - Update loaded

• The process will start and the following windows will show the progress:



Upload files process

• When finished, click on **Done**:

Upload Files 🗙
A Do not disconnect the device
>> Writing file system
Done
Second Done second
Done

Upload files process finished

Upload backup

By selecting this option, users can **upload** the **.backup** file to the connected device.

Veronte Updater		- 🗆 X
Home Advanced tools		
	Upload backup files	
	Drag	
1x v4.8 4096 (6.14.28) ▼	Select	Upload

Upload backup

 Load the **.backup** file. There are two ways to do this, dragging the file to the **Drag** area or by using the **Select** button.

The latter option will open the following browser to select the **.backup** file stored in the user's local storage:



Upload backup - Select .backup file

2. Once the .backup file is loaded, click on **Update** to send the configuracion to the device.



Upload backup - Upload

3. Once the process, finish, click on **Done**.



Upload backup process

Flash tool

This tab will flash the device. That is, the connected device is reset and the files previously loaded into memory (in the slots) will be uploaded to the connected device.

Important

This option is **not supported for version 6.14 or higher**. If users try to flash the device in these versions, the following message will appear:



Simply choose the desired unit to be flashed and the slot where the .update file has been located and click **Flash**:



Flash tool

The flashing process is quite quickly, finally click on **Done**:

>> Flashing —	×
▲ Do not disconnect the device	
>> Flashing	
Done	
Done	
Done and the	

Flash tool process

Switch BootStage

With this option, users can switch between the modes shown in the drop-down menu.

S Veron	te Updater			_	×
Home	Advanced tools				
		BootStage tool	رچ)		
			C		
	1x v4.8 4096 (6.14.28) Vormal mode ✓]	Sw	itch	
	Bootloader mode Maintenance mode				

Switch BootStage

- Normal mode
- Bootloader mode: This is the mode a device must be in to be updated.
- Maintenance mode

Select the desired mode to switch to and click **Switch**:

S Veron	te Updater				_	Х
Home	Advanced tools					
			DITER	رچ		
			BootStage tool			
				[]]	
	1x v4.8 4096 (6.14. Bootloader mode	28) 👻		Swi	tch	

Switch BootStage - Switch to Bootloader mode

Once the process, finish, click on **Done**.

Switching BootStage —
A Do not disconnect the device
>> Switch BootStage to Maintenance mode
Done
>> Switch BootStage to Bootloader mode
Done
Done

Switch BootStage process

Configure Remote ID

△ Warning

THIS IS NOT PART OF THE UPGRADE PROCESS.

In this panel, the Remote ID of the connected **Autopilot 1x** is configured.

i Note

This panel only applies to Veronte Autopilots 1x with **Remote ID**.

There are different settings:

- UAV Identification
 - **UAV Type**: Select between the options the **type of the platform**.
 - **ID Type**: Select the type of ID that will appear in external Remote ID applications.

Seronte Updater		- 🗆 X
Home Advanced tools		
	Remote ID Configuration	
	UAV Type None • ID Type None •	
1x v4.8 4096 (6.14.28) UAV Identification 👻	,]	Configure

Configure Remote ID - UAV Identification

Operation Description

Users can write a brief description of the mission. It is optional and its maximum length is 23 bytes.



Configure Remote ID - Operation Description

• UAV Classification

Define the three classifications of the aircraft:

- 1. Region where the aircraft will fly.
- 2. Risk classification according to EASA:
 - Open: Low risk. LOS with an operator is required, it must be at safe distances from airports and flights over crowds are not allowed.
 - Specific: Increased risk. Approval is required by the National Aviation Authority, which is based on the Specific Operations Risk Assessment.
 - Certified: High risk. Regulations similar to manned aviation, with approval for all the systems employed.
- 3. Open category defined by EASA.

Veronte Updater		- 🗆 X
Home Advanced tools		
	Remote ID Configuration	
	EU Classification European Union -1 Undeclared -2 Undeclared -3	
1x v4.8 4096 (6.14.28) UAV Classification	j	Configure

Configure Remote ID - UAV Classification

• UAV Operator ID

Enter the Operator ID of the user.

Veronte Updater	– 🗆 X
Home Advanced tools	
Remote ID Configuration	
Operator ID	
1x v4.8 4096 (6.14.28) UAV Operator ID	Configure

Configure Remote ID - UAV Operator ID

Once the configuration has been finished, click on **Configure** to upload the configuration to **1x**.

For more information about this product, please contact sales@embention.com.

Flash Remote ID



With this option, users can update the Remote ID product.



Flash Remote ID

Load the **.bin** file. There are two ways to do this, dragging the file to the **Drag** area or by using the **Select** button.

The latter option will open the following browser to select the **.bin** file stored in the user's local storage:

👩 Veronte U	Updater		– 🗆 🗙	Upload RID application			×
Home A	Advanced tools			← → ~ ↑ 📴 > This PC > Desktop > remote id	√ Ō	Search remote id	٩,
				Organize 👻 New folder		lee 👻 🛛	•
				OneDrive - Personal Name		Date modified	Туре
				This PC		17/06/2025 17:03	BIN
		Flash Remote ID		3D Objects			
				Desktop			
		<pre>/*****</pre>	ول_	Documents			
				P 🕹 Downloads			
				h Music			
				E Pictures			
100		Drag		📱 Videos			
				Local Disk (C:)			
		S		🛆 Google Drive (G:)			
				A Makurah			
				Vetwork v <			>
1x v4.8 40	96 (6.14.28)	 Select 	Flash	File name:	~	Upload EOC image (*.bin)	~
						Open Car	ncel

Flash Remote ID - Select .bin file

Once the .bin file is loaded, click on **Flash** to start the process.

For more information about this product, please contact sales@embention.com.

Identify SD

Selecting this option will identify the file memory capacity of the connected device.

Simply select the unit to be indentified and click **Identify**:



Identify SD

As the identification process is quite fast, a message with the information about the capacity of the SD card will quickly appear:



Identify SD message

Finally click on **Done**:

IdentifySD — 🗙						
Do not disconnect the device						
>> Requesting SD information						
Done						
Done work						

Identify SD process

Upload partition data

△ Warning

THIS IS NOT PART OF THE UPGRADE PROCESS.

Veronte Updater shall require the user to carry out this action in the event that the device's file memory has **no magnetic field and geoid data**.

Follow the steps below to upload the needed partition data:

 Simply select the desired unit, choose Magnetic field or Geoid and click Upload:





Upload partition data - Uploading Magnetic field

2. If the device already has the data to be uploaded, a window will pop up to confirm continuing with the process.

Veronte Updater

CONFIRMATION	× CONFIRMATION >
Your device might contain the Magnetic field data	Your device might contain the Geoid data
Do you want to continue with the process?	Do you want to continue with the process?
OK Cancel	OK Cancel

Upload partition data - Process confirmation

3. Once confirmed, the uploading process will start and the following window will show the progress.

∆ Warning

Writting file step is a long and slow process that can take a few hours.

Upload files to partition — 🗙				
A Do not disconnect the device				
>> Requesting SD information				
Done				
>> Requesting file information				
Done				
>> Switch BootStage to Maintenance mode				
Done				
>> Waiting for device				
Done				
>> Check partition				
Done				
>> Writing file				
Uploading:[5.25%] - Time remaining: 525.3 min				
Done				

Upload partition data - Uploading process

When finished, click on **Done**.

Troubleshooting

Incorrect configuration when upgrading from 6.12 to 6.14

If users have an incorrect configuration of **4x modes** menu in firmware version 6.12 when doing the upgrate to 6.14, the following must be done to fix it:

- First, users will need to have downloaded the .ver file of the Autopilot
 Ix configuration to be fixed before starting the upgrade process.
 If they have not downloaded it, please contact the support team by
 opening a Ticket in the user's Joint Collaboration Framework for further
 assistance on this.
- Open 1x PDI Builder app v6.12.62 or higher and click on the 1x
 Veronte option to access the app in offline mode.

1xVeronte PDI builder • (v.6.12.62)	- 🗆 X
🖿 1xVeronte	
Build PDI to configure your 1xVeronte	
🛨 Upload PDI	
Upload PDI to the 1xVeronte, this option can't be undone	Open PDI online and work with it

Incorrect configuration when upgrading from 6.12 to 6.14 - 1x PDI Builder v6.12

Then click on the icon to load the .ver file, select it in the user's local storage and click Select.



Incorrect configuration when upgrading from 6.12 to 6.14 -Select .ver file

- 4. Modify the settings in the **4x Veronte** tab of the **Control menu** to correct the autopilot configuration.
- Now downlaod the .ver file with the correct configuration by clicking on the icon and save it to the local storage.
- 6. Open **1x PDI Builder** app **v6.14** and click on the **Upload PDI** option to load the <u>.ver</u> file with the correct configuration to the connected

Autopilot 1x.

Weronte 1x PDI Builder (v.6.14) 80)	– 🗆 X
🖿 1xVeronte	
Build PDI to configure your 1xVeronte	
1 Upload PDI	生 Open 1xVeronte
Upload PDI to the 1xVeronte, this option can't be undone	Open PDI online and work with it
Maintenance mode (loaded with errors)	Ix v4.8 4166 (6.14.28) ▼

Incorrect configuration when upgrading from 6.12 to 6.14 - 1x PDI Builder v6.14

- 7. Select from the user's local storage the .ver file previously downloaded with the proper configuration.
- 8. Finally, save the configuration by clicking on the 🖺 icon.

Autopilot 1x should now be in version 6.14 with the correct migrated PDI.

Software Changelog

This section presents the changes between the previous software version (**v. 6.12.12**) and the current (**v.6.14.20**).

Added

- User confirmation alert concerning connection via USB when updating to version 6.14
- Warning message devices 1x, CEX, MEX, MC110 and MC01S to update to the latest 6.8 version available before updating to 6.12
- User confirmation alert prior to the update to check 4x configuration
- New options in **Advanced Tools**:
 - Upload backup
 - Switch BootStage
 - Configure Remote ID
 - Migrate Remote ID: to provide support to migrate internal Remote ID module from old version (1.1) to new one (6.12)
- Safety warning when Upload File System Binaries step fails when updating a device
- Process to read the serial number for Remote ID configuration

Improved

- Processes are stopped when the device is disconnected
- License is backed up when formatting a device
- Upload the device's configuration after updating firmware
- Aditional process to check partition state after a format operation
- Autoscroll during Veronte Updater processes
- Mechanism to handle SD's data maps integrity (magfield and geoid)
- Device name not fully visible for longer names
- Ambiguous naming for "Request information" processes. Changed to "Request SD information" and "Request file information"

Changed

- Backup format changed from .ver to .backup, containing configurations in XML format rather than binary
- Upload files advanced tool disabled for devices with firmware version 6.14 or higher
- Flash tool advanced tool disabled for devices with firmware version 6.14 or higher

Removed

• Feedback button