

Pathfinder Device Discovery & Management Software

Original Instructions for Installation

Document number: SW_0062_00

Tattile srl - Via Gaetano Donizetti, 1 - 25030 Mairano (BS) Italy - Tel. +39 030 97000 - Fax. +39 030 97001 - info@tattile.com



Contact:

Tattile S.r.l. Via Donizetti 1/3/5 25030 Mairano– Brescia, Italy Ph. +39 030 97 000 Fax +39 030 97 001 http://www.tattile.com info@tattile.com



http://www.tattile.com

This publication is copyright protected

Copyright © 2018 Tattile S.r.l. Mairano (Brescia), Italy

This document or any part of it must not be reproduced in any form, nor information therein contained disclosed to third parties, nor methods, procedures or tests described, performed without the authorization of Tattile S.r.l..

All trademarks and logos referenced herein belong to their legitimate owners; third-party brands, product names, trade names, corporate names and company names may be trademarks of their respective owners or registered trademarks of other companies and have been used for purposes of explanation and to the owner's benefit, without implying a violation of copyright law.

Table of Contents

1	About	this Document	5				
	1.1	Scope of this Document	5				
	1.2	Who this Document Is For	5				
	1.3	Typographic Conventions	5				
2	Introc	luction to Tattile Pathfinder	7				
	2.1	Scope and Use of the Product	7				
	2.2	Graphical User Interface	7				
	2.3	Device List Table	8				
	2.4	Icons of the Toolbars	9				
		2.4.1 Main Toolbar	9				
		2.4.2 Device Toolbar	9				
	2.5	The Status Bar	9				
	2.6	Device Management Tabs	10				
3	Installing the Application						
	3.1	System Requirements	11				
	3.2	Downloading the Product	11				
	3.3	Installing the Product	11				
4	Using	the Application	14				
	4.1	Defining the Application Settings	14				
	4.2	Searching for All Connected Devices	16				
	4.3	Using the TCP Direct Connection	16				
	4.4	Displaying the Device Information	16				
	4.5	Modifying the Network Information of the Device	17				
	4.6	Updating the Operating System of the Device	18				
	4.7	Updating the Application Firmware of the Device	18				
	4.8	Rebooting the Device	19				
	4.9	Opening the Device Advanced Configuration Page	20				
5	Troub	leshooting and Support	21				
	5.1	Troubleshooting	21				
	5.2	Support	21				
6	Revisi	on History	22				
7	Index		23				



Table of Figures

Figure 1:	Graphical user interface	7
Figure 2:	Device list table	8



1 About this Document

1.1 Scope of this Document

This document shows the user how to correctly install and use the freeware software tool Pathfinder.

1.2 Who this Document Is For

Table 1 summarizes the groups this document is aimed at, with a brief description of the type of information the manual must supply to help them understand the product.

Readership group	Description	Aim
End User	Operator	Supply all information on:
System integrator	IT administrator responsible for product integration and configuration.	Supply all information on: Product installation Product characteristics Product usage

Table 1:Who this document is for

1.3 Typographic Conventions

Table 2 summarizes typographic conventions and/or styles used in this document so it can be read and understood more easily.

Convention	Meaning
✓ Prerequisite	Preceding condition required before an action.
► Action	Single action.
1. Step	One of a sequence of actions.
– Sub step	Additional steps of an action or a step.
Intermediate outcome	Result of a step.
→ Outcome	Result of an action or a sequence of actions.
• List	List of elements.
– Sub list	Additional elements of a list.
Save	Buttons, windows, tabs; software modules.
[CTRL]	Keyboard strikes
true	Inserted or selected value.
"Finished OK"	Program messages.

Table 2:Typographic conventions



A DANGER! Type and source of danger! (indicates an hazardous situation, that if not avoided, will result in death or serious injury)!

Possible consequences (optional).

▷ Preventive measure.

NOTICE! Type and source of danger! (used to address practices not related to physical injury)!

Possible consequences (optional).

▷ Preventive measure.

Useful suggestion or additional information.

▷ Preventive measure.



2 Introduction to Tattile Pathfinder

2.1 Scope and Use of the Product

Tattile Pathfinder is a freeware software tool designed to analyze a network interface and discover all Tattile devices connected. In particular the tool enables to:

- Discover all Tattile devices connected to the network.
- Retrieve all information about the device.
- Define the production parameters of the device.
- Update the applications of the device.
- Update the firmware of the device.

2.2 Graphical User Interface



Device Management Tabs

The main page has the following functions:

Function	Description
Discovery Commands	Allow to search for devices on a selected network interface
Device Filter	Allows to filter the list of devices displayed in the device list table
Direct Connection	Allows to directly connect to a device via TCP
Multiple selection	Allows to select multiple devices
Device List Table	Shows a list of devices connected to the selected network interface
Main Toolbar	Allows to manage the application
Device Management Tabs	Allow to manage the selected device
Status Bar	Shows information about the connection more and status
Device Toolbar	Allows to manage the parameters of the selected tab

Table 3:Functions of the main page

2.3 Device List Table

Figure 2 is an example of the device lists table.

Q 172.25.100.	44 ~ 🝸 I	ilter devices	172.25.100.252	N	fultiple selection	¢? 🏜
Device Code	IP Address	MAC Address	NetBiosname	Serial number	Application	
F01765	172.25.100.249	00:0B:AB:C8:15:07	tattile_16071985	16071985	VEGA SMART 2HD COLOR 12.23.1 ITA-EU Jan 22 2018 10:46:18 [RUN]	
了 F01761	172.25.100.252	00:0B:AB:C8:15:98	tattile_1701002824	1701002824	VEGA SMART 2HD 12.22 Oct 25 2017 09:08:38 [NOT_RUNNING]	
F01761	172.25.100.252	00:0B:AB:C8:15:98	tattile_1701002824	1701002824	VEGA SMART 2HD 12.22 Oct 25 2017 09:08:38 [NOT_RUNNING]	
F01750	172.25.100.74	70:B3:D5:B2:1F:08	tattile_device	0	VEGA BASIC 12.23.22 ARE-GCC Jan 22 2018 08:58:16 [NOT_RUNNING]	
F01750	172.25.155.10	70:B3:D5:82:5B:B3	CANCELLO_EXIT	1714004007	VEGA BASIC 12.23.1 ITA-EU Dec 20 2017 13:55:43 [RUN]	
F01761	172.25.6.143	00:0B:AB:CC:EB:72	tattile_1710022304	1710022304	FREEFLOW SMART 2HD 12.23.1 ITA-EU Jan 22 2018 10:54:43 [RUN]	
F01750	172.25.80.106	70:B3:D5:82:5B:00	BASIC_CANCELLO	1701001863	VEGA BASIC 12.23.1 ITA-EU Dec 20 2017 13:55:43 [RUN]	
F01750	172.25.80.107	70:B3:D5:82:5B:C0	CANCELLO_IN	1714004009	VEGA BASIC 12.23.1 ITA-EU Dec 20 2017 13:55:43 [RUN]	
F01750	172.25.81.121	70:B3:D5:82:53:E8	tattile_1601005658	1601005658	VEGA BASIC 12.23.1 ITA-EU Jan 17 2018 09:26:23 [RUN]	
F01761	172.25.81.123	00:C0:08:8E:EB:15	tattile_device	0	VEGA SMART 2HD 12.23.1 ITA-EU Jan 22 2018 10:46:18 [NOT_RUNNING]	
🛞 F01750	172.25.83.23	70:B3:D5:B2:1F:04	tattile_20101987	20101987	VEGA BASIC 12.23.1 ITA-EU Jan 22 2018 09:57:17 [RUN]	
F01750	172.25.85.1	70:B3:D5:82:5B:45	LAB1_BASIC_LONG	1714003917	VEGA BASIC 12.23.14 ITA-EU TEAS Dec 20 2017 13:55:43 [RUN]	
F01765	172.25.85.2	00:C0:08:8E:EA:F4	LAB2_SMART_COLOR	1701002730	VEGA SMART 2HD COLOR 12.23.1 ITA-EU Dec 20 2017 13:56:23 [RUN]	
F01761	172.25.85.3	00:0B:AB:C8:13:E4	LAB3_SMART	1701002822	VEGA SMART 2HD 12.23.17 USA-NM-AZ-TX-OK-CO-UT Dec 20 2017 13:56:23 [RUN]	
F01752	172.25.85.4	70:B3:D5:82:5B:03	LAB4_BASIC_LONG	1701002122	VEGA BASIC 12.23.1 ITA-EU Dec 20 2017 13:55:43 [RUN]	
F01589	172.25.85.9	00:C0:08:89:92:AE	LAB MOBILE	1514003771	ANPR Mobile Ver.2.20 Oct 25 2016 16:16:27 [RUN]	

Figure 2: Device list table

The following table lists the available elements of the device list table and the corresponding context information.

Element	Description	
ĉ	New device discovered	
۲	Device currently disconnected	
Device Code	Device product code	
IP Address	Device IP address	
MAC Address	Device MAC address	
NetBiosName	An internal name associated to the device to facilitate device identification	
Serial Number	Device serial number	
Application	The application currently running on the device	
	The application version	
	The application status, running or stopped	

2.4 Icons of the Toolbars

2.4.1 Main Toolbar

Table 4 lists the available icons of the main toolbar and the corresponding context information.

lcon	Description
‡	To define the application settings
?	To open the user manual documentation
	Used only for remote desktop support by your Tattile Support Service

Table 4: Icons of the main toolbar

2.4.2 Device Toolbar

Table 5 lists the available icons of the device toolbar and the corresponding context information.

Таb	lcon	Description
Main	C	To reboot the selected device
	2	To copy the current device information to the clipboard
Network	1	To update the parameter settings for the selected device
opdate	*	To update the parameter settings for multiple selected devices
Update	-	To open the Browse window and select the desired file to upload

Table 5: Icons of the device toolbar

2.5 The Status Bar

The Status Bar shows the following information.

Message	Description
Connection establish with device <ip address=""></ip>	Message with a green background color to mean that the connection to the selected device completed successfully.
Connection failed!	Message with a yellow background color to mean that the connection to the selected device was failed.

Table 6: Messages of the status bar

2.6 Device Management Tabs

Table 7 lists the available tabs and the corresponding context information.

Tab	Description	
Main	Allows to:	
	Retrieve device information.	
	Copy the device information to the clipboard.	
Network	Allows to:	
	• Define the network settings.	
Update	Allows to:	
	Update the device firmware.	
	Update the device applications.	

Table 7:Device management tabs



3 Installing the Application

3.1 System Requirements

- Operating system: Windows 7 or higher
- .Net Framework 4.5.2 or higher
- **RAM**: 4GB

3.2 Downloading the Product

This function allows the user to download the freeware software tool Pathfinder from the Tattile web site.

- ✓ The user is already registered at the Tattile web site.
- Connect to the download page of the Tattile web site: http://www.tattile.com/download-area-product-choice/.
- 2. From the first drop-down menu select Traffic.
- 3. From the second drop-down menu select Traffic Common Area.
- 4. Click the button **View the available files**.
- A registration page is displayed if the user is not already registered at the Tattile web site.
 - ▷ Register to the Tattile web site to continue the download.
- 5. Click the link of the current Pathfinder version to save the file on your PC.
- → The ZIP file is now ready for installation.

3.3 Installing the Product

This function allows the user to correctly install the freeware software tool Pathfinder.

- ✓ The download of the product is completed.
- Launch the executable file to start the installation wizard. The Select Setup Language dialog is displayed.

2. From the drop-down menu select the desired language and click **OK**.



The Setup window is displayed.

😥 Setup - Tattile Pathfinder		
	Welcome to the Tattile Pathfinder Setup Wizard This will install Tattile Pathfinder version v2. 1.0 on your computer. It is recommended that you close all other applications before	
	continuing. Click Next to continue, or Cancel to exit Setup.	
	Next > Cancel	

3. Click **Next** to continue.

The Select Destination Location window is displayed.

授 Setup - Tattile Pathfinder	
Select Destination Location Where should Tattile Pathfinder be installed?	
Setup will install Tattile Pathfinder into the following fi	older.
To continue, click Next. If you would like to select a different f	older, click Browse.
D:\Programme\Tattile\Pathfinder	Browse
At least 69.8 MB of free disk space is required.	
< Back	Next > Cancel

- 4. Click the **Browse** button to select the installation folder.
- 5. Click Next to continue.

The Select Additional Tasks window is displayed.

Which additional tasks Which additional tasks should be performed?
Select the additional tasks you would like Setup to perform while installing Tattle Pathfinder, then dick Next. Additional icons:
 ✓ Create a deskup icon ✓ Create a Quick Launch icon



 Select the desired additional icons and click Next to continue. The ready to Install window is displayed.

B Setup - Tattile Pathfinder
Ready to Install Setup is now ready to begin installing Tattile Pathfinder on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location: D:\Programme\Tattile\Pathfinder Additional tasks: Additional icons: Create a desktop icon Create a Quick Launch icon
· · · ·
< Back Install Cancel

7. Click **Install** to continue.

A progress bar shows the installation progress.

The final window is displayed.

j Setup - Tattile Pathfinder	
	Completing the Tattile Pathfinder Setup Wizard
	Setup has finished installing Tattile Pathfinder on your computer. The application may be launched by selecting the installed icons.
	Click Finish to exit Setup.
	🕼 Launch Pathfinder
Z	
	Finish

- 8. Click **Finish** to end the setup and launch the application.
- → Tattile Pathfinder is correctly installed on your PC.



4 Using the Application

4.1 Defining the Application Settings

This function allows the user to set the main parameters of the application. In particular this function allows to define:

- The connection parameters to a device.
- The layout information to display.
- Click the Settings icon to view the available options. The PathFinder Application settings window is displayed.

		PathFinder Applicatio	n settings		x
Con	nections				
🕑 User	roptions				
🕑 Data	a columns				
👽 Cust	om actions				
				OK Can	cel

2. Define the **Connections** parameters:

Parameter	Description
Service Port	Allows to specify which port the device uses to respond to the search function.
	Default value: 42000.
Discovery Timeout (ms)	Allows to define the time interval in ms before the system displays the results of a discovery action. Default value: 500 ms.
Connection Timeout (ms)	Allows to define the time interval in ms the system must wait for a TCP answer before closing the socket. Default value: 500 ms.



3. Define the **User options** parameters:

Parameter	Description	
Show emulators	When selected, the device list table shows also the available emulators of the Tattile Nautilus application.	
Show extra data	Hides or shows the device images, if available.	
Query on double click	The information of the selected device and the connection to the device is established only when double clicking on the device name.	
Show missing devices	When performing a new device search, the Device List Table shows both the newly connected devices and the devices, previously connected, that are currently disconnected	

- 4. Define the **Data columns** parameters:
 - Select or clear the desired option to show or hide additional device information in the Device List Table.
- 5. Define the **Custom actions** parameters to assign a maximum of 4 applications for each device. The user launches the applications from the context menu of the device:
 - Label: Type the name to display in the context menu of the selected device
 - **File name**: Type the absolute path and the name of the executable file
 - Arguments: Type the arguments to assign to the executable file

If the executable application must connect to the device when launched the command use **%ip**.

 ◇ Connections ◇ User options ◇ Data columns ◇ Custom actions > Define custom actions to appear on the device context menu Action 1 Action 2 Action 3 Action 4 Label: Putty File name: putty Arguments: -ssh %ip -1 root -pw MmEyMGQ5YW 		PathFinder Application settings	×
File name: putty Arguments: -ssh %ip -I root -pw MmEyMGQ5YW	Connections User options Data column Constant C	s ons actions to appear on the device context menu n 2 Action 3 Action 4 Putty	
	File name: Arguments:	putty -ssh %ip -I root -pw MmEyMGQ5YW	

- 6. Click **OK** to confirm.
- → The changes are saved and the new parameter settings are now active.



4.2 Searching for All Connected Devices

This function allows the user to search for any device connected to a defined network interface. Pathfinder executes a broadcast search on the selected network interface and is able to detect any Tattile device connected to the network.

The function is useful when the user needs to connect to a new device.

- 1. From the **Network Interface** drop-down menu select the desired network where the device are connected.
- 2. Click the **Refresh networks Q** icon.
- → The **device list table** shows all the Tattile devices found in the network.

4.3 Using the TCP Direct Connection

This function allows the user to directly connect to a device when the IP address of the desired device is known.

The function is useful, for example, when the communication ports of the Pathfinder are disabled on the host PC and the user is unable to detect any device.

- 1. In the **Manually add IP:Port** text field type the IP address of the desired device.
- 2. Click the **Refresh networks Q** icon.
- The device is added to the Device List Table and is marked with the icon C.
- → The **Disconnect** button is enabled.
- → The **Connect** button is disabled.

4.4 Displaying the Device Information

This function allows the user to view the information of a selected device.

In particular this function displays:

- The version of the device operating system.
- Date and time of the device.
- Production parameters of the device.
- Connection and interface parameters.
- An image of the device, if available.

The function is useful, for example, when the user needs to know the number of heading of the device.

1. Search for all connected devices.

The **device list table** shows all the Tattile devices found in the network

2. In the **Device list table** select the desired device.



3. Select the Main tab.



- All information for the selected device are displayed.
 - It is possible to copy the information to the clipboard.
 - \triangleright Click the icon 2.

4.5 Modifying the Network Information of the Device

This function allows the user to customize the network information of the device. The function if useful, for example, when the user needs to modify the IP address of the device.

- Search for all connected devices.
 The device list table shows all the Tattile devices found in the network.
- 2. In the **Device list table** select the desired device.
- 3. Select the Network tab.

The options for the selected tab are displayed.

Main Network	Jpdate
172.25.81.120	Network settings
Interface eth0	·
DCHP Enable IP Address: Metmask: Gateway	d 172.25.81.120 255.255.0.0 0.0.0.0
	~

- From the Interface drop down menu select the network interface number you wish to edit, eth"x". The system displays the values of the parameters associated to the selected interface.
- 5. To edit the interface parameters select the **DHCP Enabled** check box. The parameters are now available for editing.
- 6. Modify the desired information.
- 7. To edit the gateway parameters, select the Gateway check box.
- 8. Click **Apply** to confirm.
- → The new parameters are now in use.



4.6 Updating the Operating System of the Device

This function allows the user to update the operating system of one or more devices at the same time. The update file is a GPG or BIN file type.

The function is useful when a new updated is made available from Tattile.

- Search for all connected devices. The **device list table** shows all the Tattile devices found in the network.
- 2. In the **Device list table** select the desired device(s).
- 3. Select the **Update** tab.

The options for the selected tab are displayed.



4. Click the 🖿 icon.

The default Browse window is displayed.

- 5. Browse to the folder where the file is saved and select the file.
- 6. Click the 🛨 icon.
- ➡ A progress bar shows the installation progress. At the end of the operation the output pane shows a confirmation message, and the application automatically reboots the device.

4.7 Updating the Application Firmware of the Device

This function allows the user to update the firmware of the applications available on the device. The update file is a BIN file type.

The function is useful when a new updated is made available from Tattile.

- Search for all connected devices. The **device list table** shows all the Tattile devices found in the network.
- 2. In the **Device list table** select the desired device(s).



3. Select the **Update** tab.

The options for the selected tab are displayed.

Main Network Update 172.25.80.106 Update device (.gpg or .bin)	Select gpg file and upload: 📂 🔶 🔱
Update file: Update_device.tar.gz.gpg	
	· · · · · · · · · · · · · · · · · · ·
	v.,
16 devices	

4. Click the 🔁 icon.

The default Browse window is displayed.

- 5. Browse to the folder where the BIN file is saved and select the file.
- 6. Click the 🕇 icon.
- ➤ A progress bar shows the installation progress. At the end of the operation the output pane shows a confirmation message, and the application automatically reboots the device.

4.8 Rebooting the Device

This function allows the user to shut down and restart the selected device. The function is useful, for example, when the device is not responding.

1. Search for all connected devices.

The **device list table** shows all the Tattile devices found in the network.

- 2. In the **Device list table** select the desired device.
- 3. In the **Device Toolbar** click the **Reboot** icon 😃.

A conformation message is displayed.

172.25.100.74 Device information	<u>دا</u> ۵
Name Value	
Device type F01750	n.
IP address 172.25.100.74	
MAC address 70:B3:D5:B2:1F:08	
Serial number 0	
Machine code 45062	
Application VEGA BASIC 12.23.22 ARE-GCC Jan 22 2018 08:58:16 [NOT_RUNNING]	STattile 22
Boot version 1.3	
Image version 1.10	
Kernel version 3.10.31-ltsi-tat1-svn277 #2 SMP PREEMPT Tue Oct 17 16:00:15 CES	
Driver version 2.0.0	
Fpga version 27,0,0,0,	
Reboot selected device ?	

- 4. Click **OK** to continue.
- → The device is rebooted.



4.9 Opening the Device Advanced Configuration Page

This function allows the user to access the web page of the advanced configuration of the device. The access is made through a secure HTTP(s) connection.

The function is useful, for example, when the user needs to configure advanced parameters of the device.

- Search for all connected devices. The **device list table** shows all the Tattile devices found in the network.
- 2. In the Device list table right click on the desired device and select Open web page.
- → The device web page for the advanced configuration is displayed.



5 Troubleshooting and Support

5.1 Troubleshooting

The freeware software tool Tattile Pathfinder cannot find the device

- The device is not correctly powered
- > Check the device is correctly cabled to the power supply
- > Check the power supply is 24 VDC and at least 5 A
- Check the cable PIN OUT
- The device network is not correctly cabled
- Check the Ethernet wiring
- If necessary, cable a new connector

Cannot access the web interface

- The device IP address does not belong to the same netmask of user's PC
- Modify the IP address of the device or of the PC
- The PC is configured for DHCP IP assignment
- > Define a static IP address to the PC belonging to the host address of the device

The web interface does not display the live stream of the device

- The device is not responding
- Restart the device
- > If the problem persists, contact your sales representative

5.2 Support

If you need advice or support, you can contact the Tattile technical support using the references located in the front pages of this manual.

6 Revision History

Rev.	Date	Description	Author	Approved by
00	2018-04-11	First Release	P. Forti	F. Carta



7 Index

С

Copying output information to clipboard 17

G

Graphical Interface

Icons of the Device Toolbar 9 Icons of the Main Toolbar 9

S

showing device additional information 15