

M2Web Platform

Browser-Based Mobile Remote Access

APPLICATION NOTE

AUG-0058-00 1.4 en-US ENGLISH





Important User Information

Disclaimer

The information in this document is for informational purposes only. Please inform HMS Industrial Networks of any inaccuracies or omissions found in this document. HMS Industrial Networks disclaims any responsibility or liability for any errors that may appear in this document.

HMS Industrial Networks reserves the right to modify its products in line with its policy of continuous product development. The information in this document shall therefore not be construed as a commitment on the part of HMS Industrial Networks and is subject to change without notice. HMS Industrial Networks makes no commitment to update or keep current the information in this document.

The data, examples and illustrations found in this document are included for illustrative purposes and are only intended to help improve understanding of the functionality and handling of the product. In view of the wide range of possible applications of the product, and because of the many variables and requirements associated with any particular implementation, HMS Industrial Networks cannot assume responsibility or liability for actual use based on the data, examples or illustrations included in this document nor for any damages incurred during installation of the product. Those responsible for the use of the product must acquire sufficient knowledge in order to ensure that the product is used correctly in their specific application and that the application meets all performance and safety requirements including any applicable laws, regulations, codes and standards. Further, HMS Industrial Networks will under no circumstances assume liability or responsibility for any problems that may arise as a result from the use of undocumented features or functional side effects found outside the documented scope of the product. The effects caused by any direct or indirect use of such aspects of the product are undefined and may include e.g. compatibility issues and stability issues.

Table of Contents

| 1 | Prefa | ce | 3 |
|---|-------|-------------------------|---|
| | 1.1 | About This Document | |
| | 1.2 | Document history | 3 |
| | 1.3 | Related Documents | 3 |
| | 1.4 | Trademark Information | 3 |
| | | | |
| 2 | Intro | duction | 4 |
| | 2.1 | Scope | 4 |
| | 2.2 | Requirements | 4 |
| 3 | | eb Access Configuration | |
| • | neme | | 5 |

| 5 | M2V | Veb Interface | 10 |
|---|-----|----------------------------|----|
| | 5.1 | List View | |
| | 5.2 | Map View | |
| | 5.3 | KPIs | 11 |
| | 5.4 | Specific to Mobile Devices | |

Page

This page intentionally left blank

1 Preface

1.1 About This Document

This document describes how to use the M2Web interface, a Talk2M web platform, for browserbased remote access.

For additional related documentation and file downloads, please visit <u>www.ewon.biz/support</u>.

1.2 Document history

| Version | Date | Description |
|---------|------------|--|
| 1.0 | 2013-12-09 | First release |
| 1.1 | 2014-07-01 | Changed: General adaptation |
| 1.2 | 2015-02-11 | Changed: Document layout |
| 1.3 | 2019-05-21 | Added: KPI integration Changed: Document layout |
| 1.4 | 2020-01-31 | Changed: Remote Access through M2Web, p. 8 |

1.3 Related Documents

| Document | Author | Document ID |
|--|--------|-------------|
| Getting Started with Talk2M | HMS | AUG-0034-00 |
| eCatcher - Security Features with a Talk2M Free+ Account | HMS | AUG-0056-00 |
| Flexy Family User Guide | HMS | UM-0002-00 |
| KPI configuration | HMS | КВ-0278-00 |

1.4 Trademark Information

eWON^{*} is a registered trademark of HMS Industrial Networks SA. All other trademarks mentioned in this document are the property of their respective holders.

2 Introduction

2.1 Scope

This document describes how to use the M2Web interface for mobile remote access.

M2Web is a standard web service of Talk2M which provides secure browser-based mobile access to your remote HMI, web server, PC and panels.

You can access the M2Web platform by browsing to https://m2web.talk2m.com.

As the M2Web remote access, a browser-based access, depends on web protocols, M2Web supports the following protocols:

- HTTP (web pages),
- VNC,
- RDP (remote desktop).

2.2 Requirements

The following software and environment are mandatory:

- <u>eCatcher</u>: version 4.2 or higher must be installed on your computer.
- **Talk2M account**: you need a Talk2M account to configure your Ewon. To create a Talk2M account, please refer to Getting Started with Talk2M from *Related Documents, p. 3*.
- **an Ewon**: the firmware of your Ewon must be version 6.4s4 or higher. It must also be online in eCatcher. To add an Ewon to Talk2M, please refer to Getting Started with Talk2M from *Related Documents, p. 3.*

3 M2Web Access Configuration

Through M2Web, you can access remotely devices (e.g.: HMIs, computers, IP camera) that are plugged in the LAN of an Ewon. We use eCatcher to configure those devices.

Before proceeding with the following procedure, make sure you are disconnected from any Ewon in eCatcher.

To access the list of the LAN devices connected to an Ewon in eCatcher, follow the procedure:

- Select **your Ewon** from the *My Ewons* frame.
- Click on <**Properties**>.

| 🔔 eCato | her (4.2.0 b | uild 14610) | | | | |
|---------|--------------|-------------|-------|-----------|-----------|---------------|
| 2 | Active | connection | | | | |
| | | | | | | |
| Users | My eW | ONs 🕥 | | | | |
| R | 🛨 Add | Properties | 🗎 Log | 💉 Connect | 💽 Refresh | |
| | Status | | Nam | e | | LAN IP |
| Account | Offline | | USA | | | 192.168.140.1 |
| | Offline | ~ | testp | obt | | 192.168.140.2 |
| | 🔊 Online | 1 | Test | _VNC | | 192.168.140.5 |

Fig. 1 Properties of an Ewon

Click on <Configure LAN Devices & Firewall> in the LAN & Firewall section.

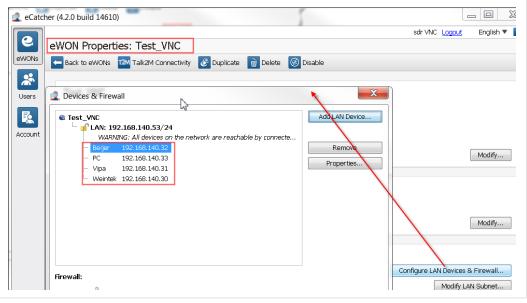


Fig. 2 LAN devices & firewall configuration

If you have not defined yet your LAN devices in this list, you can add them by clicking the *Add LAN Device* button.

As the *Devices & Firewall* window is open (refer to *LAN devices & firewall configuration, p. 5*), follow the procedure:

- Select the desired LAN device.
- Click the <**Properties**> button.
- Check the Visible in M2Web box to make the device accessible through M2Web.

| WON: Test | VNC | | 0* |
|--------------|--|--|--------|
| lame: | Beijer | | ОК |
| P: | 192.168.140.32 | May include subnet. eg: 192.168.140.53/24 or 192.168.140.53/255.255.255.0 | Cancel |
| Description: | | | |
| Port: | All Protocols (including ping) | | |
| | Specific Protocol: HTTP * | | |
| | | | |
| Visible i | M2Web. using : VNC 💌 on port: 5900 | | |

Fig. 3 Visibility of LAN device

• Select <the protocol> that M2Web must use:

| НТТР | Hypertext Transfer Protocol M2Web can use the HTTP if the LAN device features a web server and hosts web pages (e.g.: IP camera). |
|-------|---|
| нттрѕ | Hypertext Transfer Protocol Secure M2Web can use the HTTPS protocol if the LAN device features a secured web server and hosts web pages (e.g.: IP camera). |
| VNC | Virtual Network Computing Open source client/server desktop sharing system which uses the Remote Frame Buffer (RFB) protocol. |
| | M2Web can use the VNC protocol if the LAN device features a VNC server (e.g.: HMI, PC). |
| RDP | Remote Desktop Protocol Microsoft [®] client/server desktop sharing protocol. M2Web can use the RDP protocol if the LAN device is RDP server. (Ex : PC running Microsoft [®] Windows XP,7,) |

| eWON: Te | at_VNC | | |
|----------------------|--|--|--------|
| Name: | Beijer | | ОК |
| IP: | 192.168.140.32 | May include subnet. eg: 192.168.140.53/24 or 192.168.140.53/255.255.255.0 | Cancel |
| Description Port: | All Protocols (including ping) Specific Protocol: HTTP | | |
| Visible | in M2Web. using : VNC HTTP VNC RDP | | |

Fig. 4 Protocol selection

We recommend the previous method to set the protocol associated to your LAN devices as it also allows you to define a specific port (i.e.: *on port:*).

Alternatively, a second method consists in using the port filtering dropdown near the **Specific Protocol**> field.

| eWON: Te | st_VNC | | | | |
|-------------|--|---|--|----------------------------|-------------|
| Name: | PC_Remote | | | | ОК |
| IP: | 192.168.140.17 | | May include subnet. eg: 192.168.140.53/24 or 192 | 2.168.140.53/255.255.255.0 | Cancel |
| Description | : | | | | |
| Port: | All Protocols (inclu | ding ping) | _ | | |
| Visible | Specific Protocol: in M2Web. | | | | |
| | WC Or not. WARNING the eWO | EIP (Rockwell) Fins EIP (Rockwell) Fins VNC | netner declared nereabove avs and proxies enabled in dnnected users. | | Modify |
| | Al we | Remote Desktop HTTPS | | OK Cancel | Firewall |
| L | AN devices: Advantech (192.168.140.35) and 3 o | TCP | (192.168.140.32), PC_Remote | Modify LA | N Subnet |
| | | | Credit:€15 | 00 | Idle Talk 2 |

Fig. 5 Specific protocol selection

In this case, you cannot modify the port. M2Web uses then the default port of the selected protocol which resumes to:

- HTTP: port 80.
- VNC: port 5900.
- RDP: port 3389.

You can then click the **OK** buttons to save the configuration.

4 Remote Access through M2Web

To access your devices through M2Web, follow the procedure:

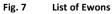
- Open your web browser.
- Browse to the following URL: <u>https://m2web.talk2m.com</u>
- Enter your account name, username and password of your Talk2M account.

| | M2Web |
|----------|---------------|
| Account | |
| Username | |
| Password | |
| | |
| Connect | |
| For | rgot password |
| | Terms of Use |

Fig. 6 M2Web platform

M2Web displays a list of Ewons that are linked to the Talk2M account and accessible to the user. M2Web divides the Ewon in two sections: Online and Offline.

| T2M • M2Web | | | | Ludo Thuin [ltn] demo 🔁 🕻 |
|--------------------------------|--------------------------------|---|--------------------|---------------------------|
| All Bacnet Delta Demo Mitsubis | hi Mitsubishi_Cosy Omron Other | RemoteAccess RemoteData Rockwe | il Rockwell_Cosy 👻 | Q Search |
| Name 🔺 | Status 🔻 | LAN Devices | City | Country |
| ∼ eCatcher_mobile ♀ | online | None | Ethernet | |
| Ƴ Machine 001 ♥ | online | Mitsubishi Q00JCPU, QJ71E71-100, IP Camera | Brussels | Belgium |
| ∽ Machine 002 ♀ | online | Delta DVP-12SA2 | Waterloo | Belgium |
| × Machine 003 ♀ | online | Mitsubishi FX3GE PLC, GOT1000 HMI, IP Camera | Antwerp | Belgium |
| ∽ Machine 004 ♀ | | Mitsubishi FX3U-16M PLC | Disugas | Dalaium |



M2Web displays a list of Ewons even if the devices behind the Ewons have not been configured to be visible in M2Web.

To connect to a LAN device, follow the procedure:

- Click on the Ewon that is connected to your the LAN device. This extends the Ewon row and displays the LAN devices that are plugged in the Ewon.
- Click on the <LAN device> you would like to connect to.



Fig. 8 Connection to a LAN device

Your browser opens a new window / tab and displays the content of your LAN device (e.g.: a picture coming from the IP camera).

In case you need to come back to the M2Web platform, M2Web displays a menu of commands to send automatic requests

To open the menu of commands, tap the icon on the top left corner of the screen.



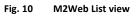
Fig. 9 Special actions for mobile devices

5 M2Web Interface

5.1 List View

The List view is the one by default when log in to your Talk2M account through M2Web.

| All Demo RemoteAccess | RemoteData VNC_Demo Va | rious | | | | Q Search | |
|-----------------------|------------------------|---|----------------------|--------------|---|----------|---------|
| Name 🔺 | | Description | | Status | LAN Devices | City | Country |
| ′eCatcher_mobile 💡 | | Cosy 131 + Schneider Maj Siemens HMI TP700 | gelis HMI GTO 2310 + | online | None | Ethernet | |
| ′ Machine 001 ♀ | | Machine equipped with M | litsubishi PLCs | online | Mitsubishi Q00JCPU, QJ71E71-100, IP Camera | Brussels | Belgiun |
| Gaz_Consumption | OEE | Parts_produced | A Parts_rejected | Solar_Energy | Wind_Energy | | |
| 6.03 | 90.9 | 486 | 13 | 1.1 | 2.85 | | |



The columns displayed in the List view are fixed as:

- Name,
- Description,
- Status,
- LAN Devices,
- City,
- Country

If your Ewon Flexy has KPIs, they will automatically show under the Ewon device name. For more info, refer to *KPIs*, *p.* 11.

5.2 Map View

By default, M2Web displays a list of the Ewons that are linked to your Talk2M account.

Another display is possible: the Map view.

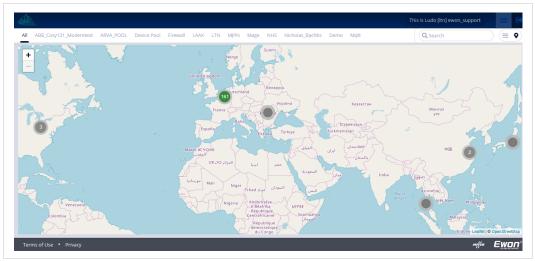


Fig. 11 Map View

The map view allows the user to see his Ewons displayed on a map for geolocation purpose.

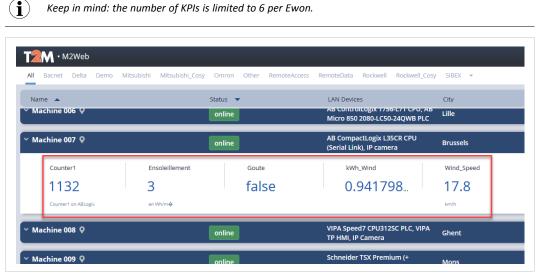
If multiple Ewons are too close to one another, the map regroups them into a single dot. By clicking on the dot, you will zoom in the map and divide the Ewons into a more accurate geolocation. This step can be repeated until each Ewon is visible.

5.3 KPIs

KPIs — Key Performance Indicators — are those tags that represent important information about the health, performance or targeted key values of a machine.

If a connected Ewon Flexy is configure to display its KPIs in M2Web, the values of those KPI tags and their current alarm status will appear below the device name and information in the list view of M2Web. The KPIs are configured from the tag setup page and visible in the Summary page of the Flexy family devices.

See KPI configuration from the *Related Documents, p. 3* for more information about configuring KPIs on an Ewon Flexy.





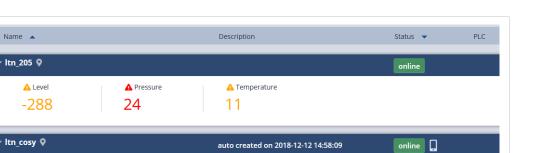
To know how to configure the KPIs on your Ewon Flexy, please refer to the Flexy Family User Guide from the *Related Documents, p. 3*.

5.3.1 Alarms

M2Web can also display the alarm status of a KPI.

Depending on the alarm level, M2Web shows the value of the KPI in a different color:

- KPI is blue when its value is in normal state.
- KPI is orange with a warning icon if its value reaches the **low** or **high** alarm status.
- KPI is red with a warning icon if its value reaches the **lowlow** or **highhigh** alarm status.



auto created on 2018-12-12 10:29:42

Fig. 13 KPI in alarm

ltn_flexy 🛛

Name 🔺

The alarm status is also displayed on the map view.

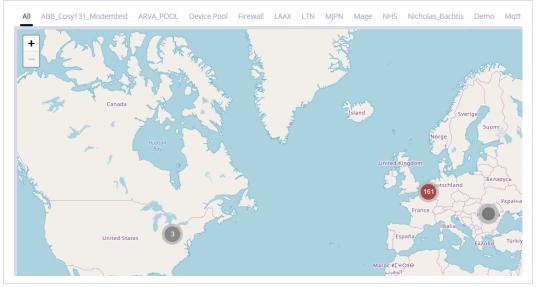


Fig. 14 KPI in alarm on map view

If multiple Ewons are regrouped into a single dot, the color of the dot will represent the most severe alarm.

5.4 **Specific to Mobile Devices**

Mobile devices don't have physical keyboard or mouse. Without a keyboard or a mouse, you cannot write a text or do a right-click.

M2Web provides a set of commands that allows you to perform all required actions using the touch screen.

To open the menu of commands, tap and hold the area displaying the screen of the remote device (not the black area around).

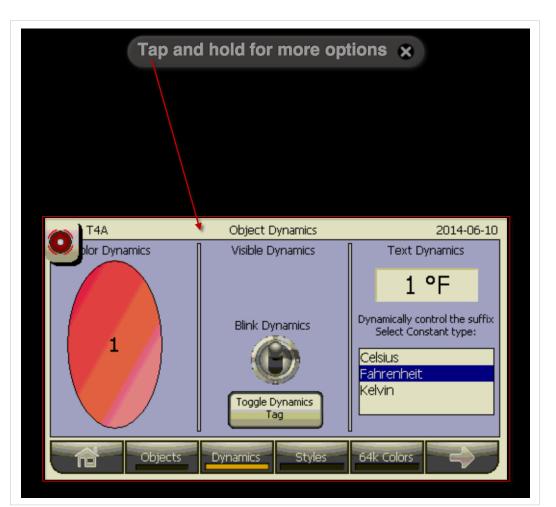


Fig. 15 Triggering the menu of commands

You then have the possibility to:

- display a keyboard,
- make a zoom in/out,
- send a right-click command,
- perform a CTRL+ALT+DELETE.

The *Home* button allows you to close the connection and come back to the M2Web platform.

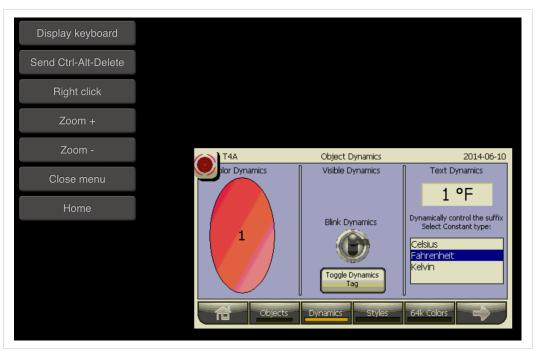


Fig. 16 Menu of commands

This page intentionally left blank