



Introduction to Talk2M PRO

USER MANUAL

UM-0005-00 1.0 en-US ENGLISH

Important User Information

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1 Preface

1.1 About This Document

This document explains the concept of Talk2M and more specifically the Talk2M PRO account, its PRO features and where to find them in the eCatcher software.

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

1.2 Document history

Version	Date	Description
1.0	2019-05-30	First release

1.3 Related Documents

Document	Author	Document ID
Security Features for Talk2M PRO	HMS	AUG-0057-00
Add an Ewon to a Talk2M account	HMS	AUG-0084-00
Manage device access with a Talk2M PRO account	HMS	AUG-0086-00
Configure Ewon Tags as KPI	HMS	KB-0278-00

1.4 Trademark Information

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2 Introduction

Talk2M is a secure industrial connectivity service in the cloud allowing easy remote access and remote monitoring of industrial devices.

With Talk2M's VPN client software, eCatcher, users can connect to their remote equipment for programming and troubleshooting.

Users can also use Talk2M's HTTPS web portal, M2Web, to monitor remote HMIs, PCs, and web servers.

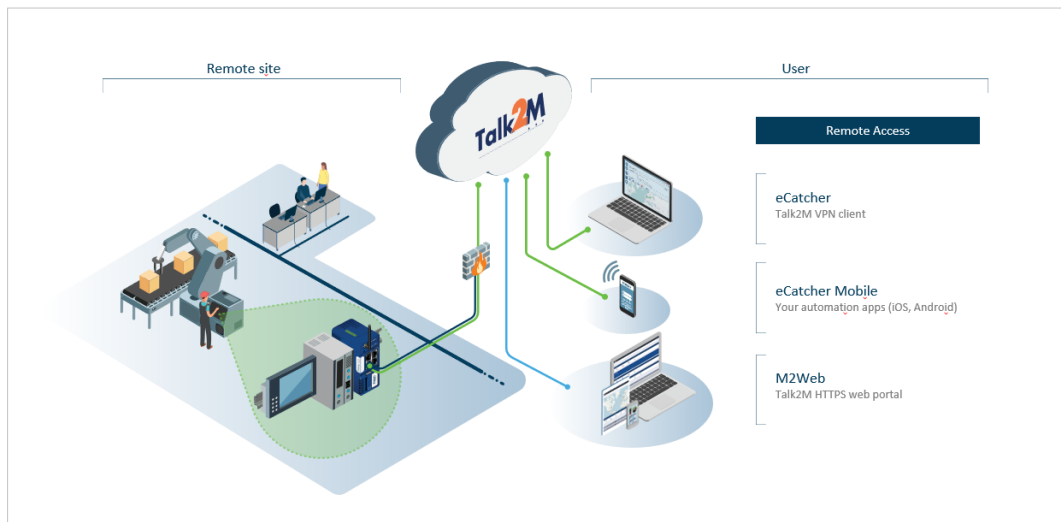


Fig. 1 Talk2M service

3 Remote Access

Talk2M is designed to securely allow users to connect to their remote assets for troubleshooting and monitoring.

On one side, an Ewon connected to a machine establishes a secure VPN connection to the Talk2M infrastructure.

On the other side, authorized users establish a secure connection to Talk2M which then acts as a relay between the user and the Ewon.

Different tools can be used to take advantage of the Talk2M service:

eCatcher

The Talk2M's VPN client for desktops and laptops.

Users connecting to remote equipment using eCatcher can run their PLC's programming and monitoring software from their PCs and communicate with their equipment as if they were locally connected.

eCatcher is also the Talk2M account management software for Ewon device management, user permissions management, and account setup.

eCatcher Mobile

The Talk2M mobile app for remote access to remote equipment from smartphones or tablets.

M2Web

The Talk2M web tool allowing a remote access to HMIs, PCs, and cameras from a web browser.

3.1 Add an Ewon to a Talk2M Account

An Ewon can be added to a Talk2M account in different ways.

Typically, new Ewons are added to an account in eCatcher from the Ewons screen.

Then the activation key or Ewon configuration files generated by eCatcher can be used to configure the Ewon hardware device either through its web interface or from an SD card or USB drive.

Information about adding an Ewon to a Talk2M account can be found in Add an Ewon to a Talk2M account from the [Related Documents, p. 3](#)

3.2 View Data through Talk2M

Ewon Flexy connected to Talk2M can be configured to display KPIs (Key Performance Indicators) in M2Web and eCatcher Mobile.

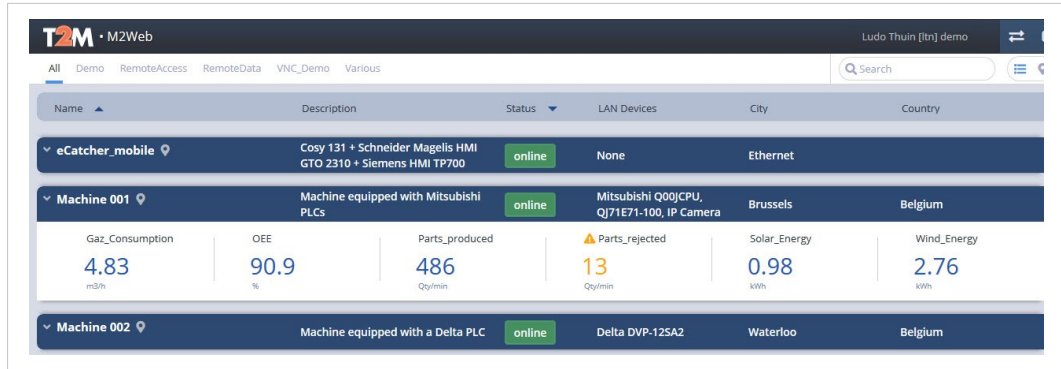


Fig. 2 M2Web platform

See Configure Ewon Tags as KPI from the [Related Documents, p. 3](#) for information about configuring and displaying KPI.

4 User Groups and Ewon Pools

User Groups and *Ewon Pools* are used with a Talk2M PRO account to define which users have access to which Ewons and what permissions those users have on *Ewon Pools* and other *User Groups*.

By default, a Talk2M PRO account has two *User Groups*, an **<Administrator group>** that has all permissions and can access all Ewons and a **<Users group>** that can access Ewons in the default Ewon pool.

The default Ewon pool is called the **<Device pool>**.

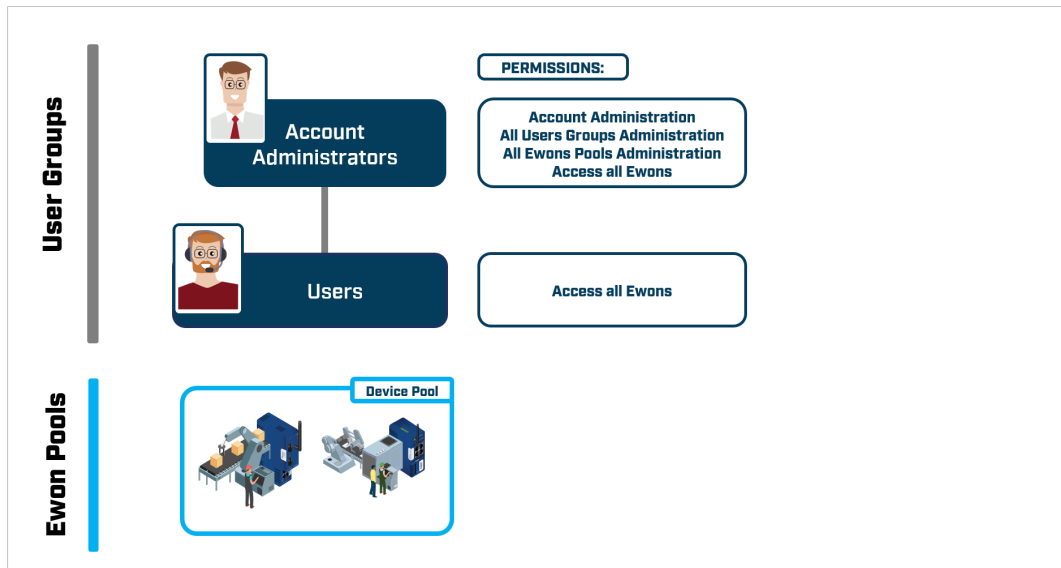


Fig. 3 User permissions

User Groups and *Ewon Pools* can be used to create more complex access rights.

For example, within a company, the company's service organization might need its engineers to be able to access any Ewon at any site.

Within that organization, though, only the service managers should be able to add or delete Ewons to the account or grant or revoke access rights to their engineers.

In addition, the company might want to allow users at each site to have access to view the KPIs from the Ewons at their own locations but only through M2Web.

By creating multiple **<User groups>** and **<Ewon Pools>** and granting appropriate permissions to each group, the company can make sure that users only access the equipment for which they have authorization.

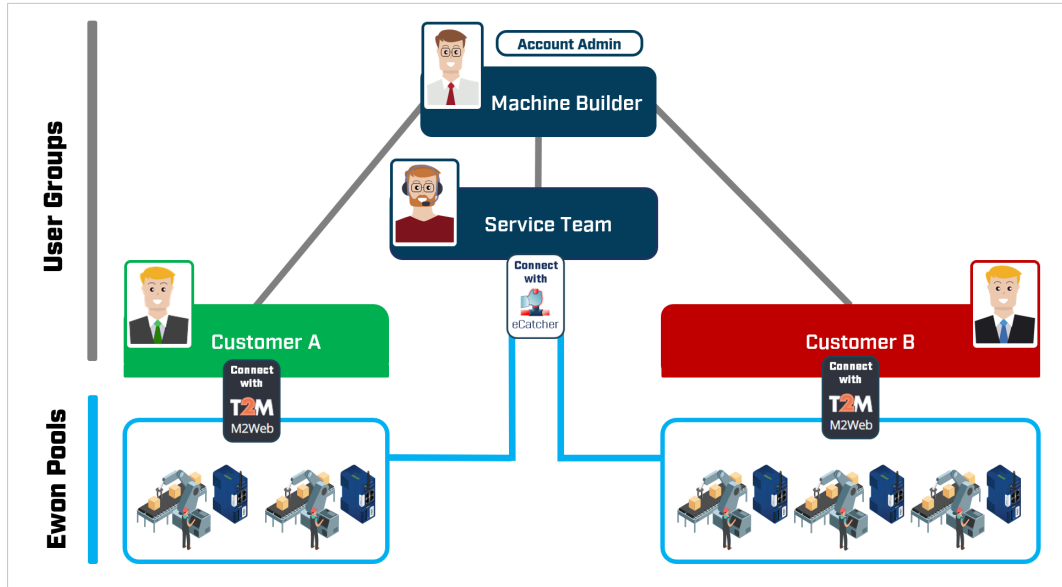


Fig. 4 Overview of Groups and Pools

5 Concurrent Connections

With a Talk2M PRO account, multiple users can make eCatcher connections to the same or different Ewons at the same time.

These simultaneous eCatcher connections are referred to as **concurrent connections**.

Concurrent connections refer only to eCatcher connections! Simultaneous connections through M2Web and eCatcher mobile are unlimited.



Fig. 5 Example of concurrent connections

5.1 Limits

By default, a Talk2M PRO account supports up to three eCatcher concurrent connections. However, this number can be adjusted if needed.

The number of concurrent connections supported by a Talk2M PRO account can be found in the **<Credit & Contract>** portion of the **<Account>** screen in eCatcher.

Account administrators can modify the contract to increase or decrease the number of concurrent connections in the **<Credit & Contract>** area.

Changing the number of concurrent connections will impact the price of the Talk2M PRO account and changes are applied immediately.

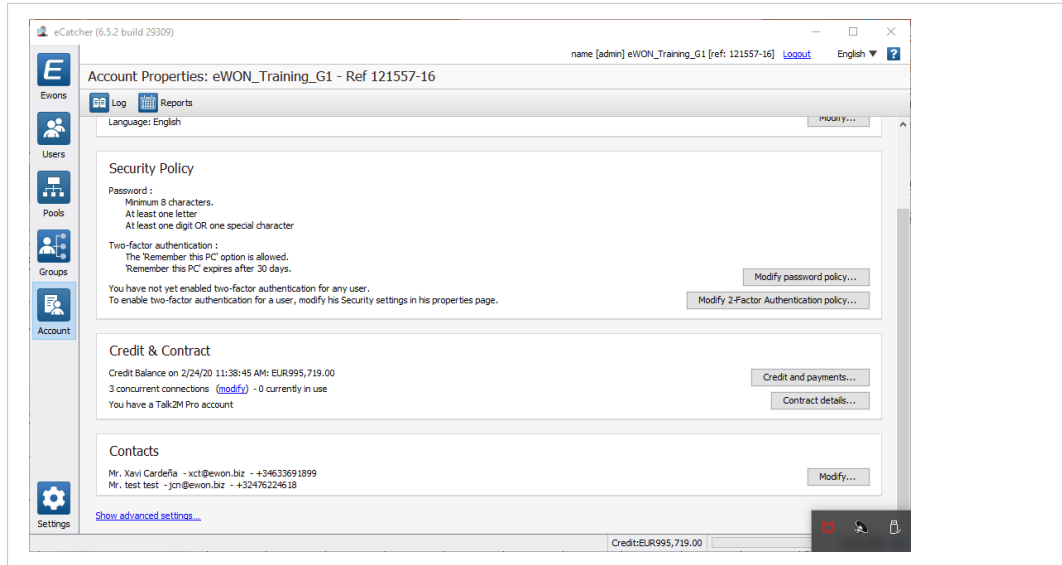


Fig. 6 Concurrent connection in <Credit & Contract>

5.2 Reservation

If all the available concurrent connections are in use, any additional user who tries to connect through eCatcher to an Ewon will receive an error message.

The user must then wait until one of the other users disconnects or until an administrator disconnects a connected user.

Under some circumstances, it could be helpful to reserve one or more of the concurrent connections for a specific user group.

Reserved connections are defined in the *Reserved Concurrent Connections* section of the <Advanced Settings> in the <Account> screen in eCatcher.

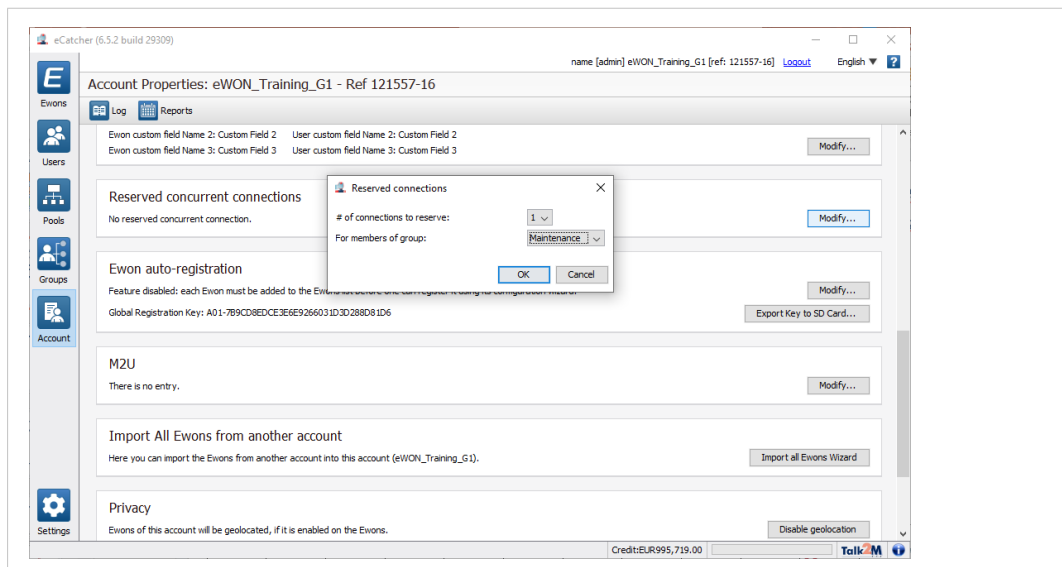


Fig. 7 Reserved concurrent connections

6 Security

Talk2M has a variety of configurable security features to allow account administrators to match their Talk2M account's security levels with their corporate security policies.

More detailed information about the security features of Talk2M accounts is available in the Security Features for Talk2M PRO from [Related Documents, p. 3](#).

6.1 Password Management

Password management is an important part of any organization's security policy.

For Talk2M PRO accounts, administrators can select among many password criteria to fit the requirements of their organization.

Administrators can specify the minimum length for valid passwords, set requirement for the contents of the password such as requiring numbers or non-alphanumeric characters, force users to reset their passwords after a specified period of time, and require a minimum number of unique passwords before a user can reuse one of their previous passwords.

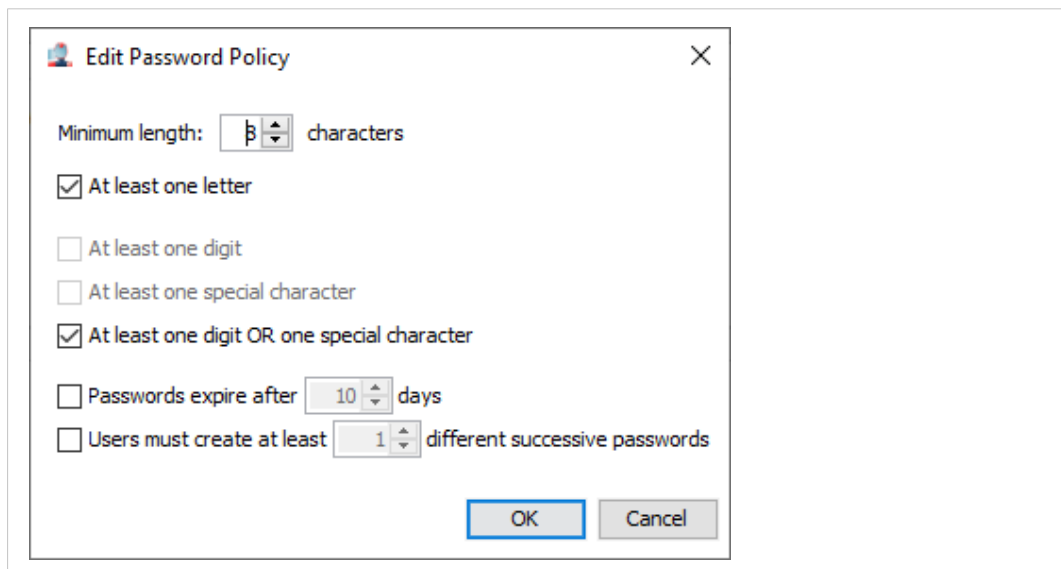


Fig. 8 Password policy configuration

6.2 Two-Factor Authentication

Two-factor authentication provides an additional layer of security by confirming a user's identity using two different components.

When two-factor authentication is enabled for a user on a Talk2M PRO account, after the user enters his Talk2M login credentials into eCatcher or M2Web, Talk2M will send an SMS with a one time code to the mobile number stored for this user.

The user will then need to enter that code to access the account.

For Talk2M PRO accounts, administrators can allow users to use their PCs as the second authentication factor.

When a user logs in using the code to their mobile phone, the user will be able to select **<Remember this PC>**.

Once that box is checked, any future logins from this PC by this user will not require the code from Talk2M unless the administrator revokes that right.

The expiration time of the **<Remember this PC>** option can also be configured. When the option expires, the user will need to authenticate with a text message passcode before being able to log in again.

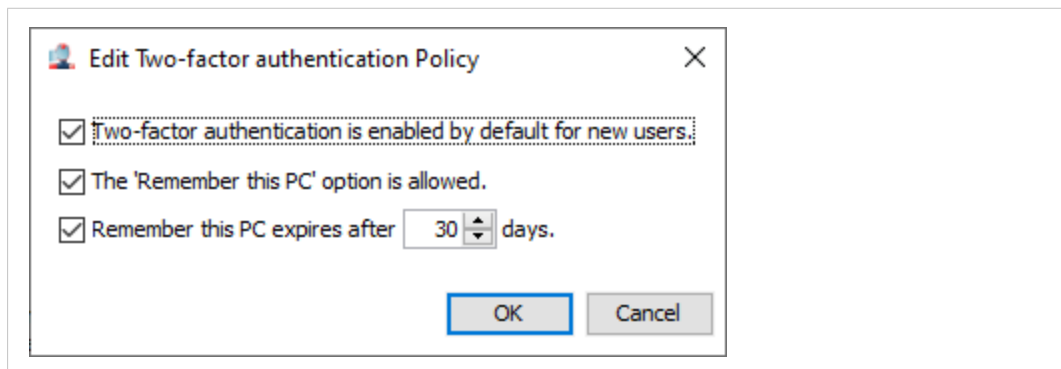


Fig. 9 2FA configuration

6.3 Auto Registration

The Ewon auto-registration feature permits adding Ewons to a Talk2M account without the need to create the Ewon first inside the account.

For example: an Ewon can be configured with an SD card or USB stick with a **Global Registration Key (GRK)**. This allows the person installing the Ewon to configure it without the need of access to eCatcher or to the Ewon's web interface.

When registering an Ewon with a **Global Registration Key (GRK)**, the Ewon will be automatically added to the pool set in the *Auto-registration* section of the **<Advanced Settings>** in the **<Account>** screen.

Talk2M PRO account administrators can also disable the auto-registration feature.

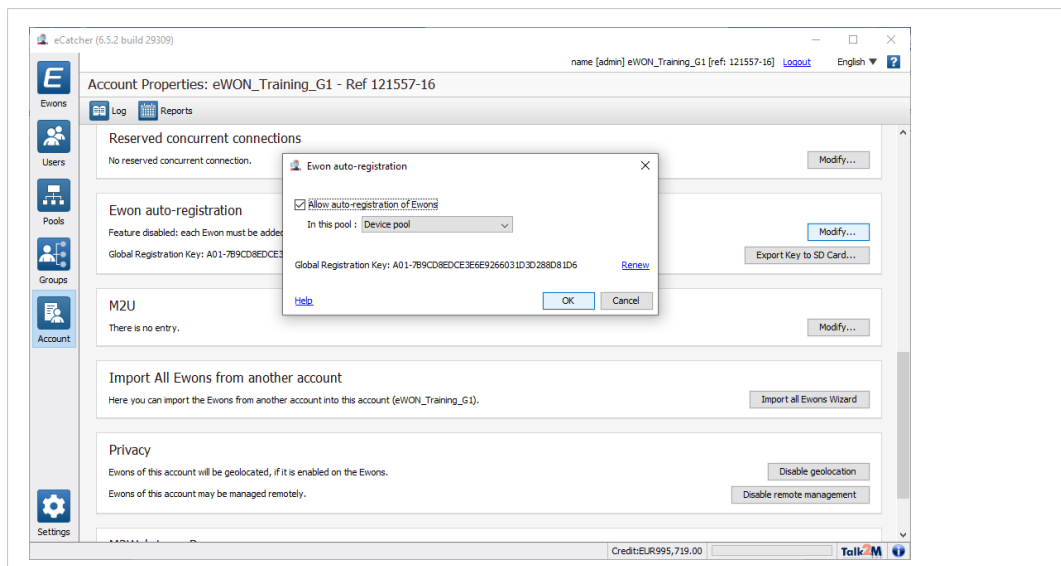


Fig. 10 Auto-registration with Global Registration Key

6.4 Firewall Levels

Talk2M offers remote access to devices behind Ewon routers.

However, it is recommended to limit which devices on the Ewon’s LAN are accessible or limit access to only certain users.

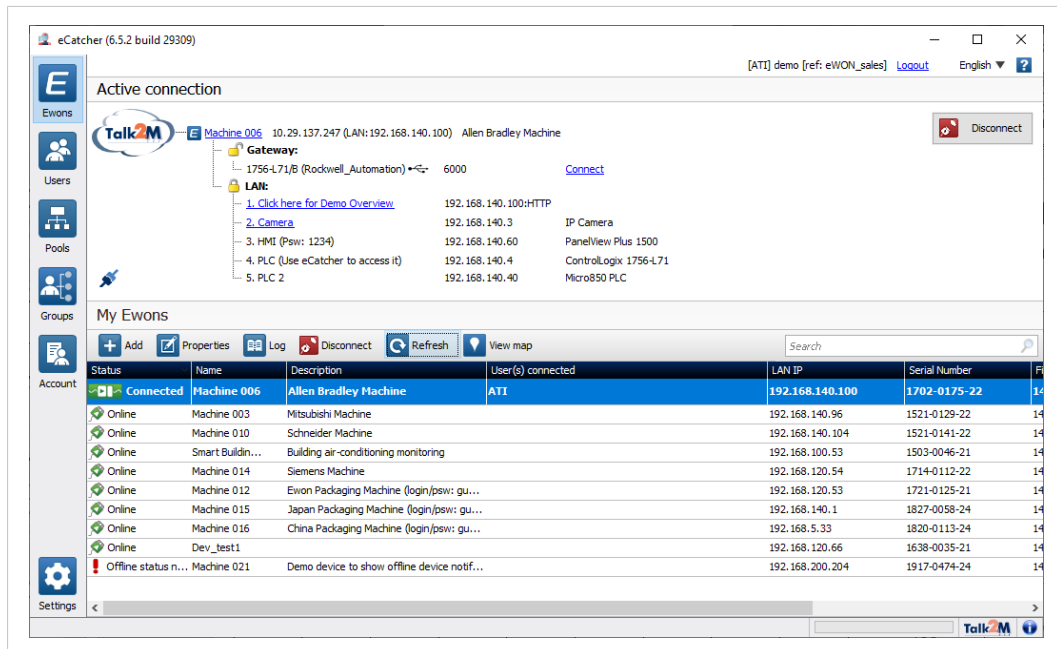


Fig. 11 Ewon with firewall rules

Talk2M PRO accounts offer four configurable firewall levels to restrict device access.

When device access is restricted, administrators can grant access for all users or restrict access to only specified user groups.

The 4 firewall levels are the following ones:

- Standard** Users connected to an Ewon device have access to all devices on its LAN as well as to the Ewon gateways and to all the Ewon’s own services such as its web server and ftp server.
- High** Users can only access declared LAN devices and only on specified ports.
- Enforced** Administrators also have ability to restrict access to the Ewon’s gateway services including its Ethernet to serial gateways and its proxy gateways.
- Ultra** Access to services such as the Ewon’s web server, ftp server, and USB over IP feature can be restricted.

7 Online / Offline Notifications

A device pool of a Talk2M PRO account can be configured to send out email notifications if an Ewon belonging to the pool stays offline for an extended time.

This feature is especially useful when monitoring critical systems.

Administrators can specify:

- an offline duration of 3 hours, 6 hours, 12 hours, 1 day, or more
- the notification list which can include entire user groups, individual users, or individual email addresses.

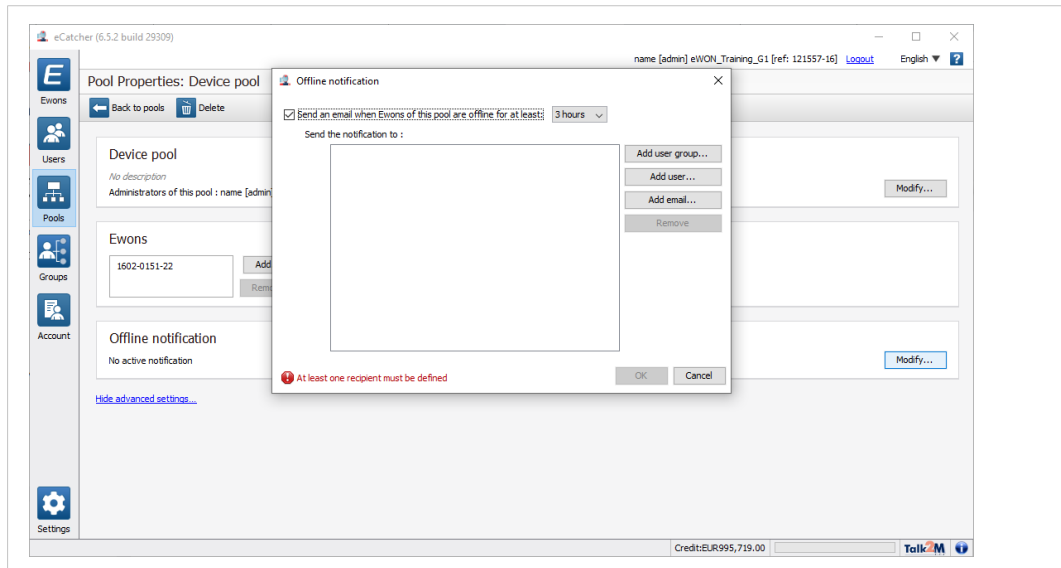


Fig. 12 Notification online – offline status

8 Automatic Reporting

8.1 Financial Report

It is important to monitor the current credit balance in order to reorder new service packages in a timely fashion and prevent the termination of the service.

Every month, the account contacts — as specified in the *Contacts* screen of the **<Account information>** in eCatcher — receive a detailed financial statement containing information about the current balance and any charges for the month.

Monthly consumption : January 2020		2020-01-01 to 2020-01-31	
	Quantity	Unit Price	Total Price
Number of Ewons	1	0.00	0.00 EUR
Concurrent eCatcher Connections	3	20.00	60.00 EUR
Traffic Included in Pack	6.0 GB	0.00	0.00 EUR
Additional Traffic	0 MB	4.00 / 1GB	0.00 EUR
Total Traffic	0 MB	0.00	0.00 EUR
SMS Included in Pack	50	0.00	0.00 EUR
Additional Paid SMS	0	0.15	0.00 EUR
Authentication SMS	0	0.00	0.00 EUR
Max DataMailbox Storage (number of points)	0		
Total			60.00 EUR

Credit history		Credit Balance on 2020-01-31: 995719.00 EUR
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Fig. 13 Example of a financial report

The report can also be manually downloaded from the **<Credits and Payments>** screen of the **<Account information>** in eCatcher.

Date	Description
1/30/20	Monthly consumption (January 2020)
12/30/19	Monthly consumption (December 2019)
11/29/19	Monthly consumption (November 2019)
10/30/19	Monthly consumption (October 2019)
9/29/19	Monthly consumption (September 2019)
8/30/19	Monthly consumption (August 2019)
7/30/19	Monthly consumption (July 2019)
6/29/19	Monthly consumption (June 2019)

Fig. 14 List of financial report

8.2 Connection Report

For many organizations, being able to track who has connected to different remote assets is an important part of their business practice.

The *Connection Log Report* documents every connection to an Ewon.

Administrators can easily see which users connected to which Ewon, the date and duration of the connection, and the type of remote connection. Information about the amount of traffic through the Talk2M VPN tunnel, DataMailbox storage, and API calls is available by device.

The current month's connection log report can be downloaded as a PDF and previous months' logs can be downloaded in multiple file formats to allow for easy data import into other applications.

