Everyware user manual

SOFTWARE

Connect
Ideas.
Shape
solutions.

Sommario

Introduction

What is Everyware

Everyware software is the ESA Automation solution for both remote access and remote maintanance of Industrial PCs, Operator panels, Industrial routers and their ethernet and serial subnetworks.

The mail goal is provide to the ESA Automation customers an innovative and simple platform in order to access from a remote location both the ESA device and the control systems connected to the ESA device.

The Everyware user can access, control and modify the automation system using a common internet connection with no need of going onsite.
An immediate analisys of the problem is possible and also the travel expenses will be canceled or at least reduced.

Basic concepts

Everyware opens an encrypted connection via standard https or http protocol.
No firewall nor any low level network modifications are required.
A simple standard internet access is more then enough.

The cloud based Everyware Server

The Everyware server is the main component of the Everyware infrastructure.

It is a cloud based application that creates and manages the connection between the different components involved in the automation structure.

The customer Domain

The Domain is a part of the Everyware Server (folder-like structure) created and maintained by each customer.

In the Domain the customer will insert the definition of the devices that have to be remotely accessible.

Typically the domain will have a tree based structure.
Here both the ESA product and the device belonging to the local network are displyed.
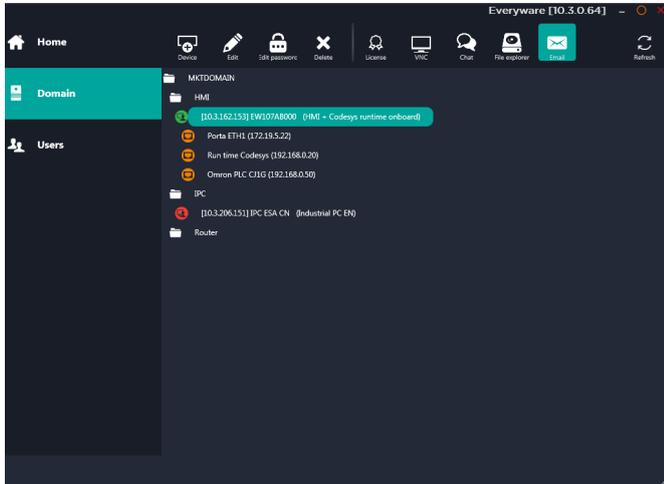
Everyware licensing model

In order to create a domain in the Everyware server namespace it is mandatory to have an official Everyware license code.

Different license code levels are available for both the system test and usage.

TRIAL LICENSE CODE:

The license code is temporary (30 days long) and can be created directly from the home page of the official ESA Automation website.

Open the ESA Automation homepage (www.esa-automation.com) and follow the procedure below:

1- Select Software Activation
2- Select Domain Activation
3- Fill the form and press Generate temporary license

At the end of the procedure a pop up window will be displayed with the temporary license code.

SINGLE DOMAIN – SINGLE USER LICENSE CODE:
A flat domain (single level domain) can be created and the access is for a single user.
It is possible to create different users but the access cannot be multiple.

SINGLE DOMAIN – MULTI USER LICENSE CODE:

A flat domain (single level domain) can be created and the access is multiple.
Different users can access the same domain at the same time.

MULTI DOMAIN – MULTI USER LICENSE CODE:

With the same license code it is possible to create multiple domains and there is no limitation in term of user access.

The ESA customer can create different domains in order to give a separate ambient to his customer that will access his specific application only.
The ESA customer will create his own main domain including all the applications developed for different customers.

This licensing model is for machine builder companies creating separate domains for their end customer.

Platform Architecture

The main components of the Everyware architecture are listed below:

Everyware Control Center
Everyware Runtime (part of the ESA Connect utility)
Server infrastructure

Everyware control center

Everyware control center is the client software installed on the supervisor computer.
It allows the domain management and integrate the connection functionalities for the remote maintanance and support.

Everyware control center setup
The application setup can be downloaded for free from the download section of the ESA website.
The path to be followed is:

Goto the official ESA Automation website: www.esa-automation.com
Follow the registration procedure and you'll receive a password.
Login
Select Download and look for the Everyware application.
Double click on the application and follow the step by step procedure.

Once the installation procedure is complete the below homepage will be displayed:
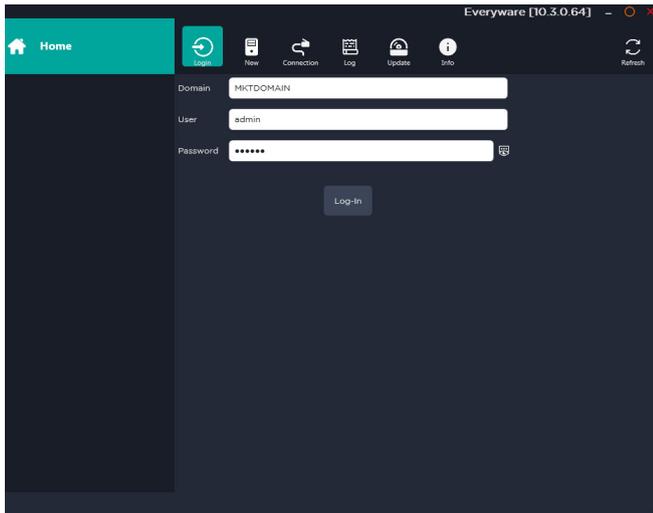
New

This option is for the domain creation.
Before starting the domain creation procedure it is mandatory to have a valid license code (temporary or permanent).
Press the New button and the window below will be displayed:
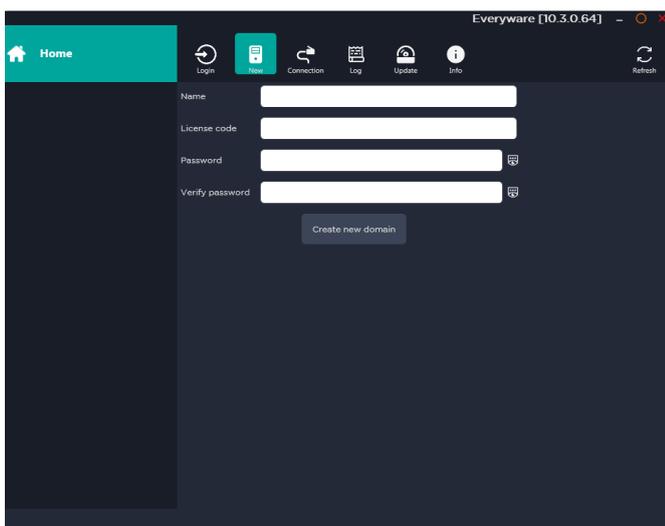
The user has to enter the following parameters:
Domain name
License Code
Password for the domain access
Verify password

Once the procedure is completed an empty domain will be displayed.
For the domain user creatin and device registration goto the specific parameter of this document.

Connection

Everyware is an internet based application so the very first step is define the parameters necessary for the internet connection.
The connection menu is both for the Everyware settings and the proxy (if required).
By default the port to be used is the 443 and the protocol is https.
In case this protocol is forbidden the user can select port 80 and http protocol.
Local connection has to be selected in case the infrastructure to be used is the local LAN and the internet access is not required.

Log

The Log menu enables the logging of the messages exchanged via the cloud platform.
This log buffer can be enabled, refreshed and exported to an external text file for a more detailed analisys.
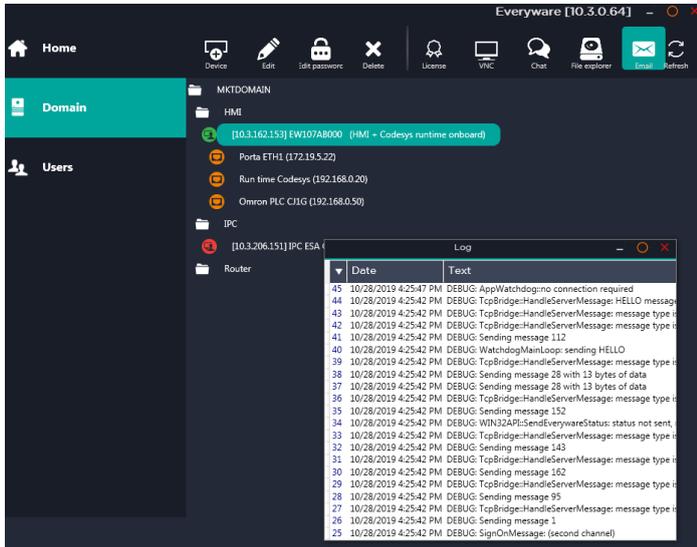
Update

This option is for the automatic update of the application in case a new release is available on the ESA automation website.
With the Check update now button the user can look for the update or select the automatic update flag.
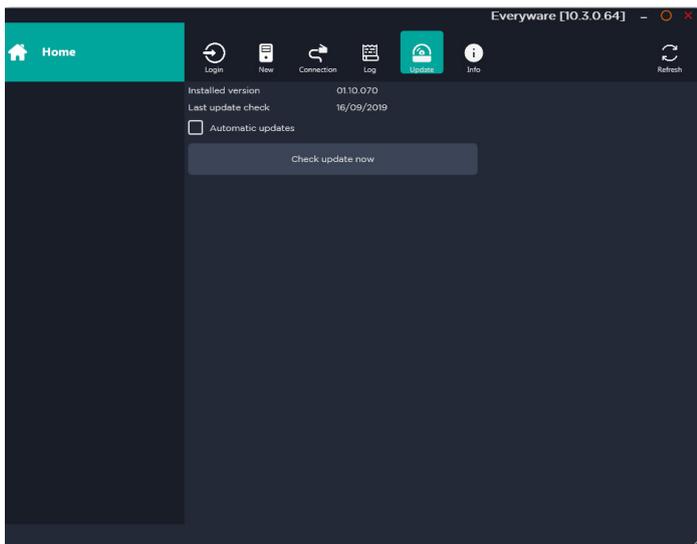
Info

A pop up window with the current product release is displayed.
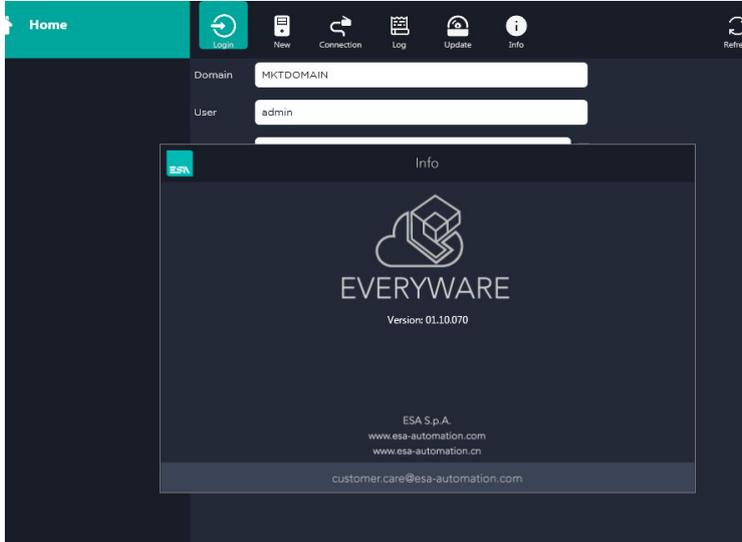
Login

With this procedure the user can access his own domain where his applications are registered.
In order to access the domain it is mandatory to enter:

Domain Name
User
Password
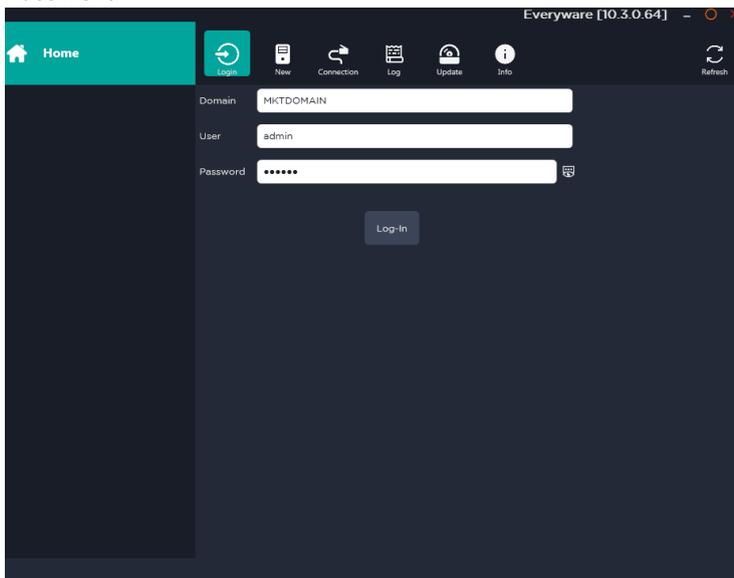
Once the user is logged in the complete domain tree is displyed with the status of each deviced displayed via the device colour:

GREEN: the remote device is online and can be accessed via Everyware.
RED: the remote device is offline and cannot be accessed.
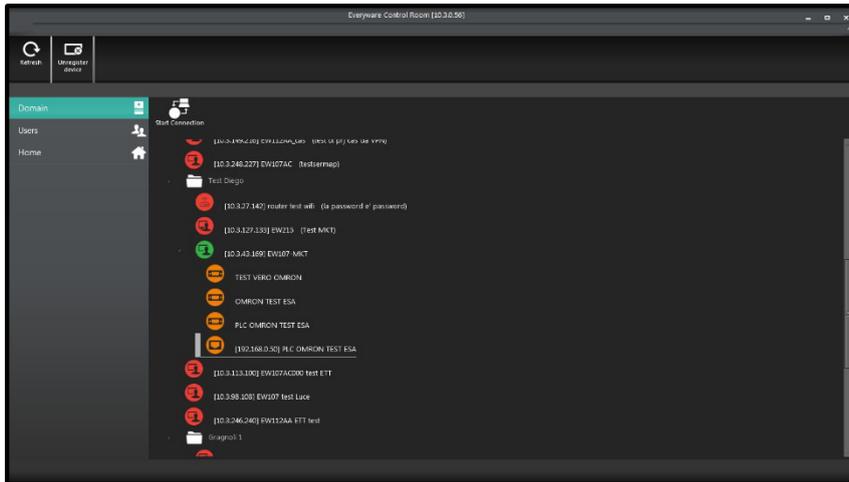
Once the logged in device is selected the user can choose between the following functionalities:

VNC: Remote desktop (valid for devices with a User Interface, HMI and IPC)
The user does have the complete control of the remote unit.

CHAT: Chat utility with the remote user in front of the device.

FILE EXPLORER: file transfer utility.

VPN tunnel: the user can select the device target of the VPN and press the Connect Icon.
The VPN will be automatically created.

Everyware Runtime

Everyware runtime is the application to be installed on the target device that has to be added and managed via the Everyware infrastructure.

The HMI from ESA do already have this runtime preinstalled.
In case of an X86 based device this utility have to be installed.

Once installed and started double clicking on the desktop icon (the first time the runtime has to be started manually), a small ESA icon will be added to the taskbar.
By clicking on this icon the following menu will be displayed:
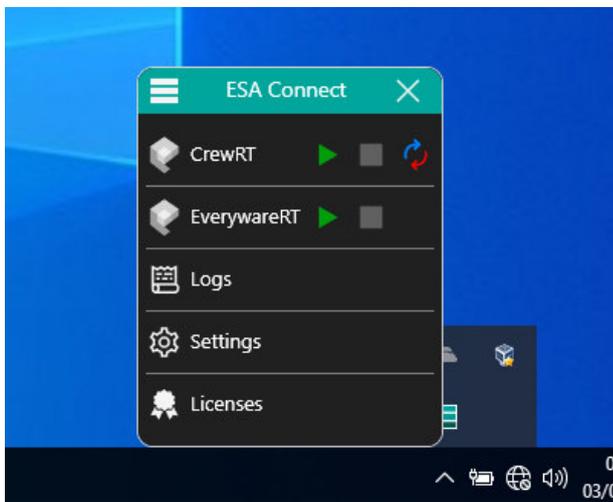
The first two selections will be used in order to start manually CREW RUNTIME and EVERYWARE RUNTIME.

CREW RUNTIME is listed cause the same application is intended to run scada applications developed via Crew editor but independently from EVERYWARE runtime.

Logs

This option will display the Log buffer; mainly used during the startup of the machine for debugging purpose.
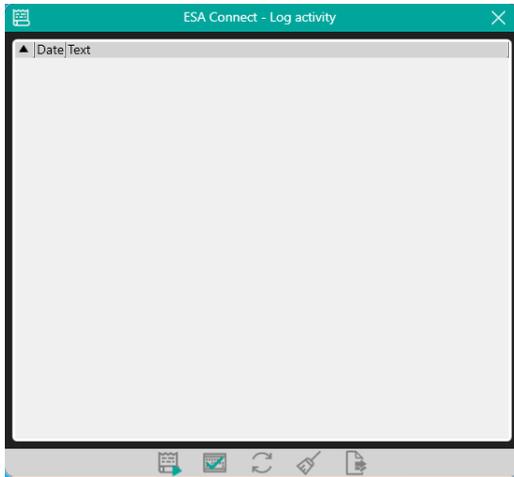
The small icon at the bottom of the window are:

START: start the logging
STOP: stop the llogging
REFRESH: reload the uupdated buffer
CLEAN: clean the buffer
EXPORT: the buffer will be exported to Excel

Settings

The setting menu does embed different setting parameters:

Common
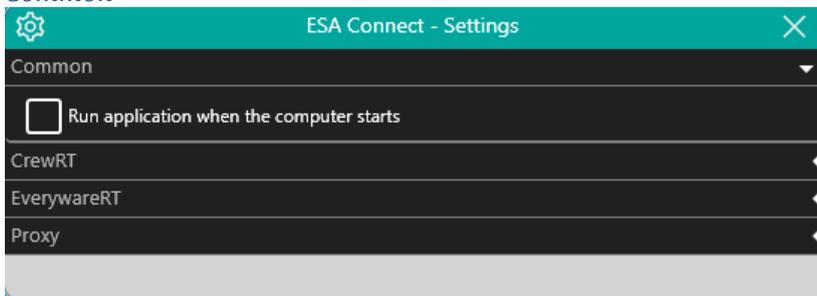
The user can select if the runtime does have to start automatically at the startup.

CrewRT
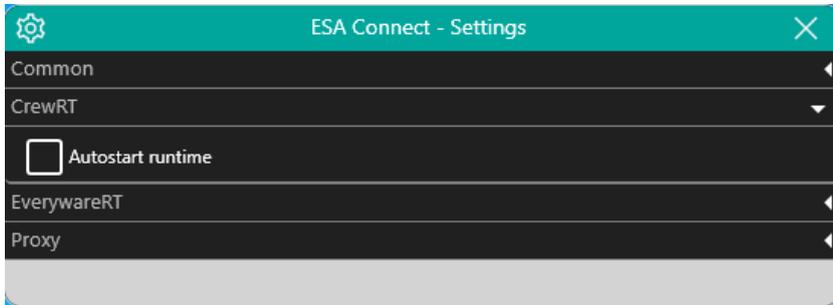
The Crew Scada run time has to start automatically when the computer starts

EverywareRT
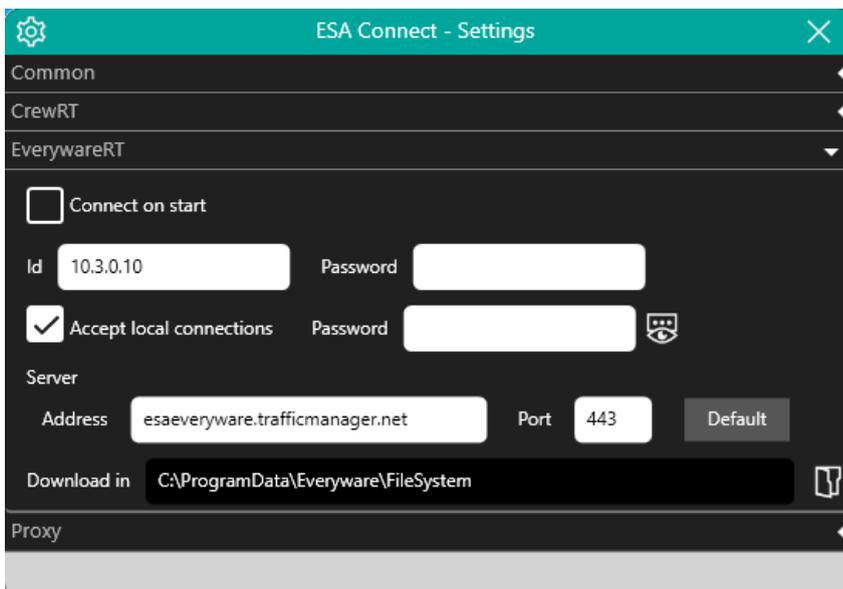
Connect on start:
the Everyware run time has to start automatically and set up the connection to the Everyware server automatically.

Id:
Here the user has to enter the device Id defined by the Everyware server during the registration procedure.

Password:
Here the user has to enter the connection password in order to setup the connection to this specific device.
The same password has to be entered during the device registration procedure.

Accept local connection:

Everyware can be used also in a local network without the need of any internet connection nnor any external server management.
This flas does enable the local connection.

This flag is necessary also for the Crew Scada application download procedure.

Password:
Password for the local connection

Server:
Address and port to be used for of the Everyware Server remote connection.

Proxy:
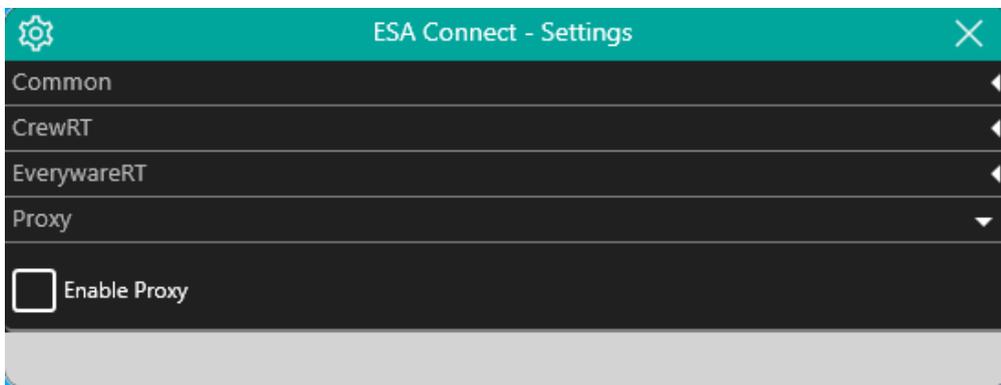
To be selected in case a proxy is mandatory in order to have the Internet connection.

Licenses
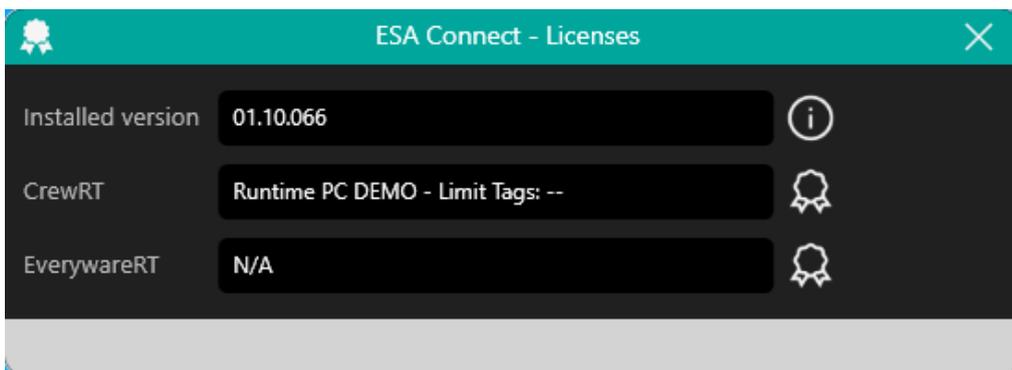
In this section the user can add both the Crew Runtime and the Everyware Runtime licenses.

By default both of them are in DEMO mode; it means they run for 30 minutes than the user have to restart manually.

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