Evos web site description

The aim of the document is clarifying the graphics content and backend behaviour of the EvosWeb web application.

Overall description

EvosWeb is a platform able to show in real-time data incoming from a network of sensor and actuators.

The field of application is large, we need to focus this first implementation of the website for the building monitoring application.

The system is composed of various sensors and gateways.

The sensors can be:

- Temperature sensors
- Humidity sensors
- Light sensors
- Door contact (door open/closed)
- Presence of water (floater)
- Service button
- Pulse counter (for energy or water counter monitoring)

All sensors communicate only via radio over a custom protocol to the gateway.

The gateway collects all the data sent from the sensors, create a custom file with all data in and push this last to an FTP server (file format presented later).

As soon that a new file is available on the FTP server the web application shall read the new uploaded file, decode the content, update the data base and refresh the GUI content.

Typically, a building site is composed of several sensors and gateways. All the associated gateway for each site sent their file to a specific FTP location, i.e. tor each installation a specific FTP location is allowed: it means that all files concerning a specific installed site will be always pushed to a specific location on the FTP server.

All sensors are communicating over radio to a gateway that collect all data into a custom single file and push this last over GPRS to an FTP server.

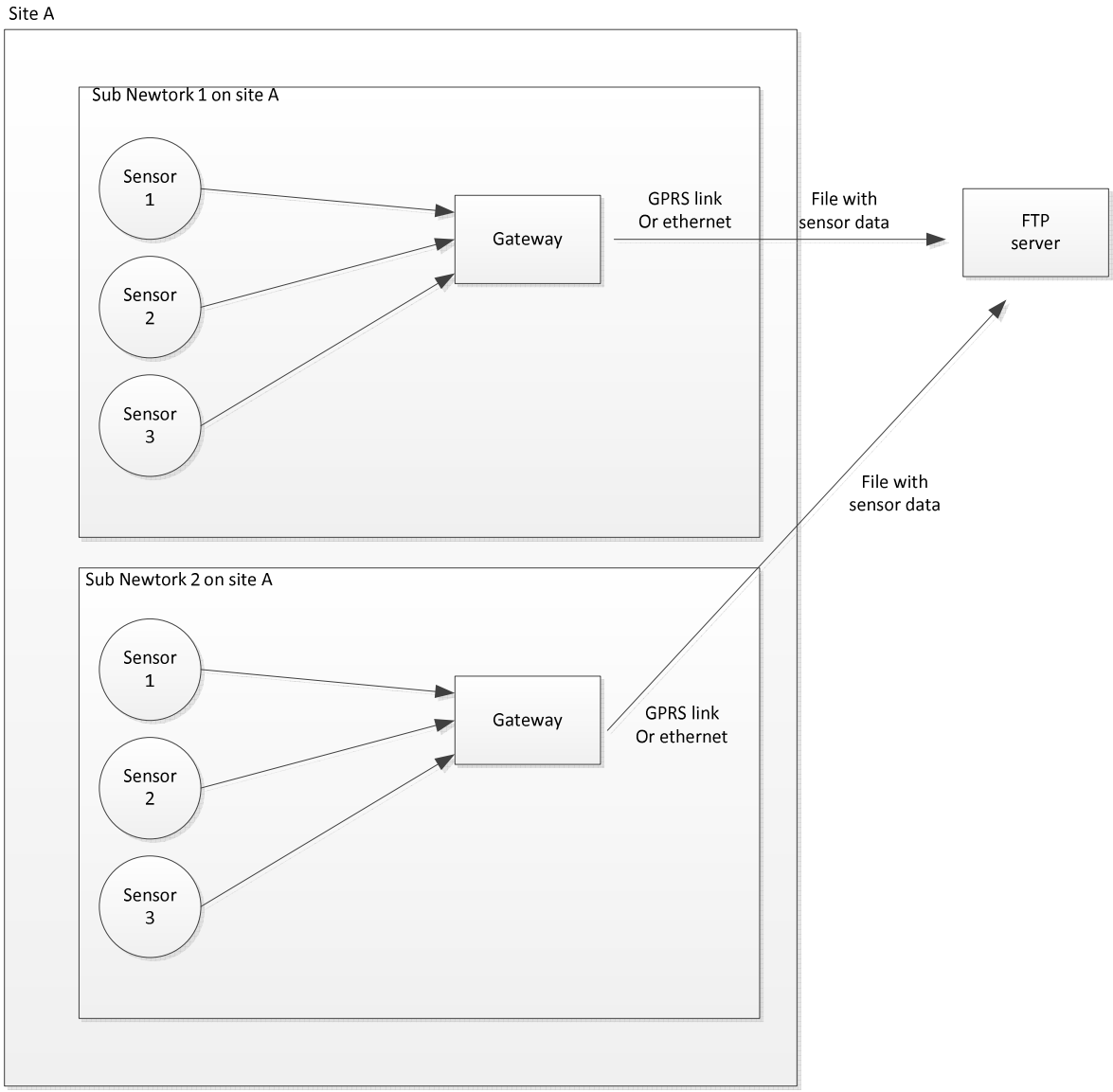

Figure 1 Evos structure overview

Front end description

General

Physical support

1. The website shall be developed to be dynamically visualized on a high-resolution PC (like 4K), iPad (2048 x 1536) and iPhone/Android phone family.
2. The recommended framework is Ionics,
3. Clean and modern and pure graphic line.
4. Easily configurable:
    a. Add custom client logo
    b. Site multi language support: first and default language is English

Proposed interface

Login screen:

Lo

Portfolio page:

After the user login successfully validated, the user will land on the portfolio page.

Note: The user land on the portfolio page only after the first login.

If there is no site the user shall press on the + button and enter the site details (later explained).

If there is only one available site this should be set as “favourite” by default.

If there is multiple site available, the user shall select only one favourite place (exclusive choice).

The cockpit view of the favourite place will be the landing page for the user after its next login.

Cockpit view

The cockpit view resume all the site data at the glance

In particular:

Predictive saving	KWh reduction	Based on smart control the total energy consumption is reduced. Here is represented the saving based on the historical data without the smart mode enable
	Dollar saving	Monetary value of the saved energy /water and others resources
	%	% of saving
Building control	Building Lock	All the sensor on door/windows are armed once the mode in ON. Any variation on a sensor on door/windows will rise an alarm.

	Calling button	If the Calling Bottom are ON the system will deliver a service request to a list of person to be connected.
	Smart Mode button	The smart Mode enable the smart regulation of the building based on the forecasted temperature, historical data of the building usage and others parameter.
Resource daily usage	Overall daily KWh consumption	Electrical energy usage
	Overall daily water m3 consumption	water energy usage
Building life	People on it	The various movement sensor detect an activity in the building
	Conference Room Free	Report the status of the presence of people in the different conference rooms
	Safe armed	The sensor in the safe is locked and armed. If good/safe will open or moved an alarm will be raised to a list of persons.

Actvitiy view

For each part of the sensor/data used for the smart regulation an historical view is available here.