



Real-time analysis, presentation and decision-making



Every thing will soon send data.

The quality of services and products will improve, and costs will be lowered.

You don't need to wait for the future. Assetwolf is now.

FEATURE SUMMARY

Assetwolf is a cloud-based IoT platform.

Devices send data to Assetwolf, which stores data, processes rules, handles security, presents the data to end users and makes decisions.

OUR CUSTOMERS

We work with hardware suppliers, communication providers, and customers around the world to deliver IoT solutions.

We not only make portals look great, but work with customers to put their IoT product ahead of the rest.

Overview

Assetwolf is a cloud-based internet-of-things platform. By collecting simple data from individual things — *assets* — it can aggregate their data; and through structured analysis it can improve the overall quality of service.

Through intelligent processing, it makes possible analysis, visualisation and control like never before, and can drastically reduce running costs.

It allows multiple views of the environment to be created, tailored to the needs of customers, managers, engineers, maintainers or operators.

Smarter facilities management

Assetwolf is particularly suited to the needs of managing physical facilities, such as buildings and other locations; yet it can be deployed in industrial, mobile, educational and domestic environments too.

Connect anything

Any source with network capability can be connected; typically this is a physical asset, but can be a feed of data from another data platform.

Connections can use the well-known and lightweight MQTT protocol, or via HTTP/S REST. There are tools for minimising data transfer, such as in power- and bandwidth-critical situations like mobile and GSM-connected devices. Assetwolf is

agnostic to the type of hardware or its means of connection.

Device management

Built-in device management tools allow automatic monitoring and alerting of asset non-communication.

Periods of lost communication can be handled through a catch-up process.

Assetwolf can send data out to assets, such as for restart or firmware upgrades.

Visualisation

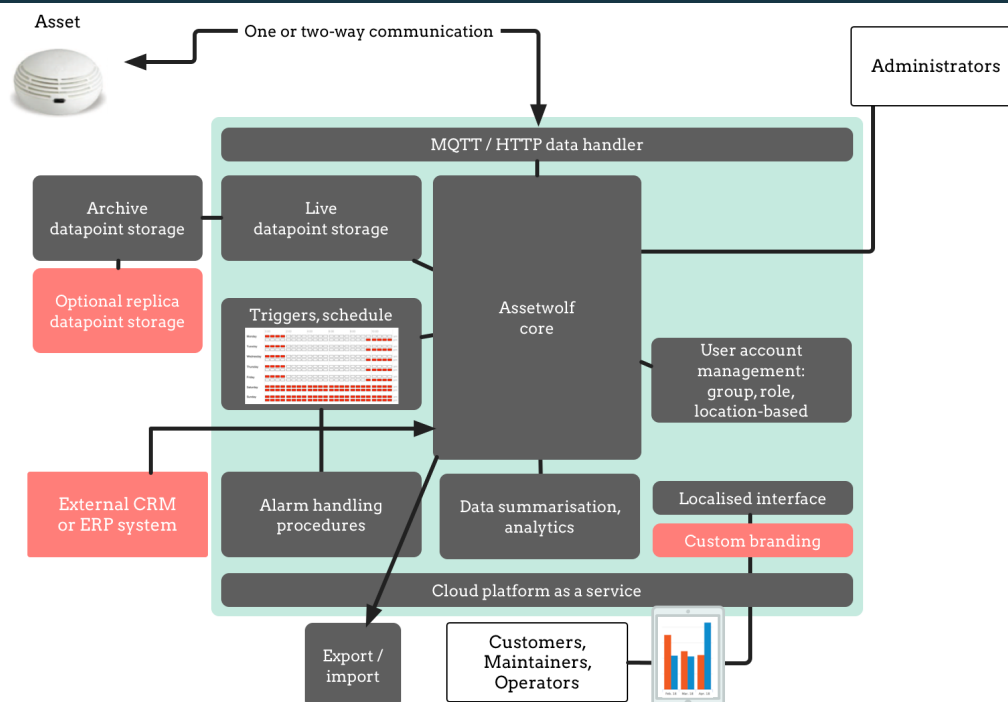
Assetwolf makes data look meaningful by presenting it in appropriate ways:

- floor plans and schematics
- maps and tracks
- graphs and pie charts
- gauges
- status indicators
- custom PDF reports
- smartphone and tablet friendly.

Managing assets efficiently

Assets are grouped together in product classes, thus allowing central organisation of data fields.

From raw incoming data, Assetwolf can perform on-the-fly calculations. These can range from simple arithmetical conversions, or can be



based on complex, user-defined algorithms.

Custom IoT applications

Algorithms can be defined in a scripting language called Phi. This combines a familiar-looking scripting language with statistical functionality. When processing data for one asset, the data from that asset's history can be accessed, and a wider range of assets can be accessed.

All this can happen in real-time, so that alarm conditions can be detected and processed instantly.

Data summarisation

Data at the granular level doesn't help see the broader picture. So Assetwolf includes tools for managing hierarchies of information sources.

A typical facilities management scenario has a location or building at the top of a hierarchy, descending into which one sees floors, areas, rooms and eventually assets.

Data calculated at the asset level ascends to higher levels, and algorithms can be applied at any level up to the broadest. This allows organisation managers to see data being derived and summarised into useful information, in real time.

Metrics and KPIs

Phi allows metrics, and key performance indicators, to be developed at every level.

Unlike the real-time calculations, these are applied in reporting periods that are relevant, such as annual, monthly or daily.

Alarm handling

Trigger conditions can be made using simple rules, or using multiple complex parameters. Procedures can be specified to alert appropriate personnel or send instructions to an asset.

Schedules

Rules can be combined with a weekly rota, including day-of-week and time-of-day schedules, so that alerts are only raised during on-duty times.

Security

Assetwolf handles access control for users, determining any views that should be public, and any that should be restricted to individuals or groups of authorised users.

For consumer-facing situations, users authenticate to see the assets belonging to them. While for the enterprise, users can be grouped according to company and site, thus connecting users with assets within those sites.

Further granular control is available through Roles, which allows Users to be related with Locations in custom ways. User Timers can be used for temporary access.

Interface

Assetwolf can be run with its standard interface, or can be fully customised.

A drag-and-drop interface allows the layout of pages to be easily changed and page elements re-positioned.

Assetwolf can be deployed in multiple languages, with support to translate the entire portal down to field level.

Custom integration

Assetwolf can connect to an ERP or CRM system, so as to reflect regular business processes, such as ordering, service scheduling, service reporting and maintenance contracts.

Scalability

A scalable data storage architecture based on MySQL. Depending on client requirement, we can scale out based on region or other grouping.

For high-availability applications, a multi-server replication option is available.

By Tribal Systems

Assetwolf is developed by Tribal Systems (Tribal Limited), in the UK.