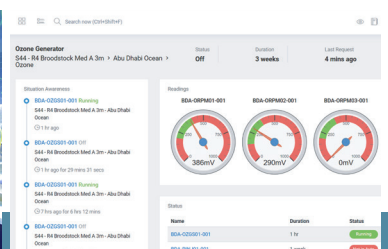
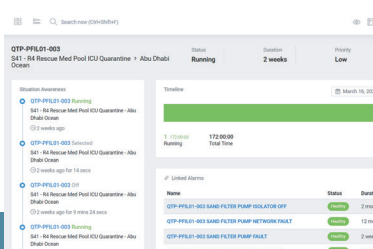




The future in system monitoring and notifications

The **ELSS Intelligent portal** is an intuitive Web Interface that manages storage of collated data on the 'ELSS Intelligent Portal Cloud'.

Information can be collected in a number of various ways ranging from basic manual entry into a web-based Spread Sheet (for Clients with less Automation controlling their LSS), through to full interrogation of the existing LSS Control System and then harvested by our intelligent Interface Modules and transmitted to the cloud.



Key Features

Water Qualities

Any of the Water Quality Data for exhibits can be collected, either automatically or manually entered.

Equipment Status

LSS equipment status can be logged, either as an event or alarm condition.

Maintenance

Equipment service history can be logged. For example pump or UV Lamp running hours. These events can be set to trigger messages for service intervals. Water quality calibration readings can be stored to give a history of probe calibrations.

Gauges

Critical readings can be displayed as highly visual clear dial gauges with coloured sections to highlight out of tolerance readings.

Power Monitoring

LSS Power demand can be monitored to allow for costs to be allocated to separate exhibits. Changes in power usage can be highlighted and the system can be used to monitor power saving changes for benefits. Costings per unit can be entered into the system to give the water usage as an actual cost.

Water usage

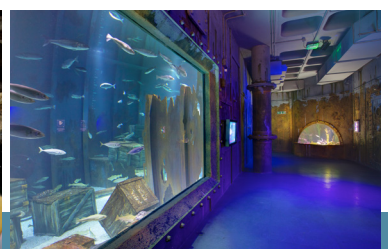
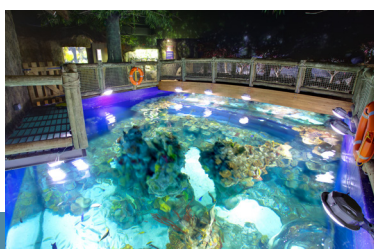
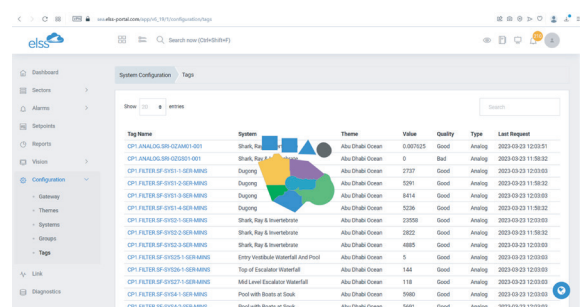
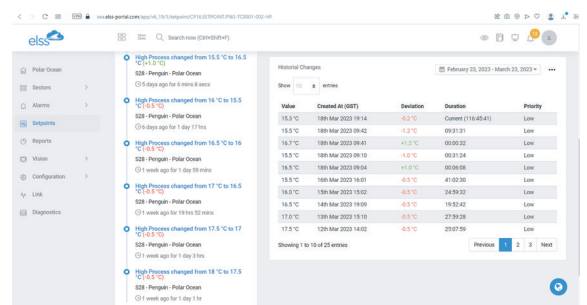
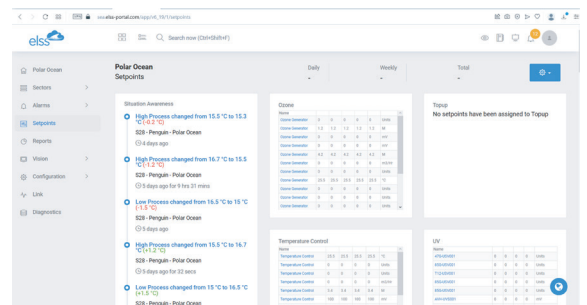
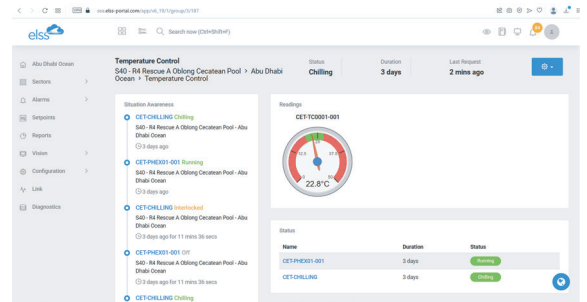
Water usage can be monitored to detect if an exhibit is using excessive water, more than usual. Costings per unit can be entered into the system to give the water usage as an actual cost.

SMS / Email Alarm

Alarms and notifications pertaining to the above can be both sent Email and SMS messages. The ELSS Intelligent Portal System will repeat the messages at a user defined interval until the alarm condition has been acknowledged.

Trending

All water qualities, power usage, and water usage logged can be viewed as trends or tabular data. The data can be filtered to display the latest data or back into history to track any events.



Key Features

■ SMS / Email Alarms

With the proliferation of Smart-Phones and Facility owners, Operators and Maintenance teams being in constant touch through various Web Enabled devices, the ELSS Intelligent Portal embraces this and we see the foresee using Email as notification being the "Norm" as we evolve. That said, we still hold traditional tried and tested methods close to our ideology, hence why we have developed the ELSS Intelligent Portal SMS feature using the "net" to actually generate SMS to any GSM Phone. With a combination of both Email and SMS notification, rest assured that responsible personnel will be in constant touch with the Systems.

■ Water Qualities

Any of the Water Quality Data for exhibits can be collected, either automatically or manually entered. Most Aquariums now have Parameters such as Temperature, ORP (Redox), pH etc measured electronically, this Data can be gathered and displayed as Graphs and Trends. However, numerous other Water Quality Data such as Nitrate, Nitrite, Ammonia, Salinity etc are for the most part measured manually and then recorded into Spreadsheets and suchlike. The ELSS Intelligent Portal accepts this manual entry, converts and then displays as Trends and Graphs, making it very easy for operators and Lab technicians to spot abnormalities at a glance, without the need to thumb through countless pages of readings in numerical format.

■ Equipment Status

Reduce your exposure to someone accidentally switching off a critical pump or other piece of Aquatic Life Support equipment – The ELSS Intelligent Portal sends out notifications every time a piece of LSS Equipment changes status, i.e. Starts / Stops.

■ Maintenance

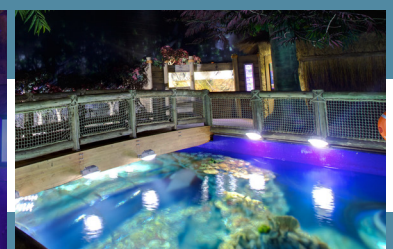
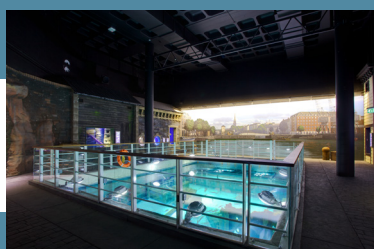
Preventative maintenance is imperative in both prolonging the lifespan of your Systems and reducing the need for knee-jerk reactions to equipment operational issues as and when they inevitably will happen. With the ELSS Intelligent Portal maintenance recording tool, all historical servicing records are easily recorded and viewed. This makes scheduling for items such as the servicing of the Mechanical Seals on a Pump a seamless task.

■ Gauges

Throughout the years in the Engineering and Technology industry, Gauges have played a pivotal role. They provide at a glance a very clear illustration of "good or not so good!"

From Fuel Gauges in Automobiles to Pressure Gauges on Sand Filters, Operators and End Users rely on this simple, but effective technology. Although futuristic in

our Engineering approach, we still strive to make our Platform user friendly, and highlight potential problems in very easy to identify way.



Key Features

Power Monitoring

In an age where we try to make our Life Support Systems as energy efficient as possible, we see the ability to be able to quantify power usage as an extremely useful tool in the box. From small facilities, where management may want to monitor costs per exhibit in relation to visitor experience, through to large intuitions who own and operate Aquariums and Theme Parks globally who may find the thought of easily comparing costs per site an extremely beneficial feature.

Again, the ELSS Intelligent Portal puts all Data in an easy to decipher format under one Platform.

Water usage

As with Power, Water costs money. Either making artificial seawater, or even pumping from the ocean, it has a cost associated with it. The ELSS Intelligent Portal can monitor daily/weekly/monthly usage. This Data can be easily reviewed in conjunction with other information held on the Portal such as, Backwashing events, Nitrate levels etc.

Questions like:

Are we carrying out too many water changes? Do we really have a Nitrate problem?

Having all this critical Data in one easy to view platform helps in painting a very clear accurate picture of what is exactly occurring.

Trending

Tends and Graphs are not unlike Gauges. They provide at a glance an extremely clear picture of the Status of your System as a whole through to analysing much more finer and in-depth information. The ELSS Intelligent Portal has the ability for operators to run reports, print trends or even save as CSV files. We like Trends and Gauges!

