Sentor Application White Paper
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Sentor Remote Monitoring and Control Systems

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Remote Tower Site - Control and Monitoring of Critical Infrastructure & Management and now through Cloud and Google Maps you can view sites the world over.

SENTOR
Mission Critical Control Systems

Sentor is a complete Tower Site Automation and Control System

Remote Tower Site Alarm Monitoring and Control Systems now through Cloud

Most Tower Site operators are fully aware of the short comings of Monitoring Systems on the market that claim to monitor their equipment Alarms and deal with these issues in a timely and cost effective manner.

Almost ALL Monitoring Systems are a compromise and have been adapted from other systems such as basic factory floor SCADA systems or from computer based network systems running SNMP (Simple Network Management Protocol).

Tower Site Monitoring and Control Systems built by industry people who have spent most of their lives in the Radio/Wireless Industry are extremely rare if not non-existent but Sentor is one of these systems.

Sentor started development in the early 90's and was designed by Radio Communications Engineers wh o realized that there was no system on the market that provided FULL Remote Monitoring and Control of all equipment on these distant sites.

The equipment and services that needed to be interfaced to Sentor and be provided by Sentor was wide ranging and extremely difficult and expensive to accomplish.

Tower Sites have a huge amount of expensive equipment installed and ALL of these systems are Monitored and Controlled intelligently by Sentor. Just some of the systems include a list the following….

- Aviation Tower Light Alarms
- Remote Site Security & Access Control
- Radio Forward & Reflected Power (VSWR)
- Weather
- Received Signal Strength (RSSI)
- Automatic Transmitter/Antenna Changeover
- Antenna Performance & Down Tilting
- Co-Axial Cable Health
- Remote Battery and Rectifier Health
- Radiation Measurements
- Site Power Health (AC/DC/Solar)
- Automated Backup Power Cutover
- Fire and Smoke Detection and Alarms
- Temperature Control (Air Conditioning)
- Full Dada Base with Remote Web Interface
- Fully Automated Alarm Calls
- Remote Computer Control & Programming
- Web Enabled TCP/IP and Ethernet
- Multiple Protocols (SNMP etc…)
- FULL Server and Monitoring Service

These are only a few things that Sentor is cable of accomplishing. Obviously you need to attaché the sensors and devices to measure some of these things but the customizations are endless. Many customers have asked Sentor to Monitor and Control many things such as Environmental Monitoring, Agriculture Solutions, Gates, Water Reticulation and Management and Building Automation just to name a few.

How does Sentor do it ?

Sentor built its own specialist hardware and software to be able to accomplish these feats. In fact Sentor was the very first Controller to be Windows® compatible way back with Win 3.11. Since then we have moved with the times now being compatible with the latest Win dows© releases and now Linex/Android with the i7000 product range.

Sentor hardware is a fully stand alone intelligent and programmable input/output automation control ler which incorporates Fully Programmable Analogue and Digital Inputs and Outputs (see spec sheet for details). The inputs and outputs are controlled by the SENTOR FUZZY LOGIC SOFTWARE which uses a drag and drop programming method with plain English statements called Scenarios An example of the code may look like this,

"If SECURITY is B REACHED then CALL POLICE and SET CAMERA AND SIREN to ON".

This type of easy programming language system allows company technicians or remote control room staff to easily re-set thresholds and chang e parameters when required.

By utilizing the GUI (Grap hical User Interface) a fully active picture is seen showing live bitmap Icons and actual readings of Voltages, Temperatures, Power Readings in Watts or dBm and even a full event log all recorded and downloaded automatically to the remote server located at your office or Monitoring Center or the **Sentor Cloud Data Base** which can be viewed through Smart Devices with a web browser . Larger customers may want their own Sentor Server which is available on request however most customers only require a dedicated Termi nal attached permanently to the Remote Server via the Internet. This also means that any technician in the field can log into the Cloud or Base S erver over the internet f rom anywhere with a SSL socket (Secure Socket Link) and view or manually fix a site without the need to go there.

HUGE SAVINGS

The site maintenance costs drop rapidly and the up time increases the moment Sentor is installed. For Cellular operators this is absolutely critical to the revenue base of the company. Indeed Sentor pays for itself within a very short period of time.

REVENUE BASED SERVICES

Revenue Based Businesses can ut ilize the Sentor Data Base Systems and hardware for customers and will generate significant income.

CUSTROMERS

Customers Include Motorola USA, LA Transit Authority, Telstra Australia, Lattice Towers USA, Transgrid Electricity Australia, Lawrence Livermore National Labs (USA .Gov) , City o f Corona CA, Geauga County OH, Sydney Cricket Ground and Football Stadium and many more ….

STOP PRESS

Sentor Develops Latest Cloud Database Service with Google- Maps and Google - Earth

Sentor has always been able to monitor Multiple Sites but now we can do this over the Web using Google Maps or Google Earth.

Now you can Monitor and view as many sites as you want and all in the one viewing platform utilizing Google.

Google Maps or Google Earth will display multiple sites around the world either in your Country, State or City.

By clicking on the site list in Google the maps will pan to t hat site anywhere in the world and then by clicking on the site marker a box will appear showing you the liv e readings and alarms at that site.

All reading s have a graph which can be viewed by a simple mouse click showing a historical graph of that device over a specified time period.

All you need is a network connection f rom each site back to the Central Computer which is connected to the internet and Sentor and Google will do the rest.

All Data is fully backed up in the local computer AND on the Google app engine so at no time can you lose the historical information about each site.

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