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AssetIP from Redhand

Further Information and Technical Specification

AssetIP is a member of the RedHand suite of software products aimed at the security market. It uses active RFID tags, which when fixed to an asset emits a code if it is disturbed. AssetIP is invaluable in Art Galleries, Museums etc.

RFID Tags explained

We are used to RFID (Radio Frequency Identification) tags. They are everywhere in shops on merchandise. When passed through an RF field the tags become energised and send out a digital code to be picked up by the aerial by the exit door. These tags are known as passive RFID. They have no battery and rely on the RF field to provide a very small amount of energy for them to operate. The drawback to this technology is the small range – usually no more than a metre or so.

AssetIP uses active RFID tags. These have a small battery in them and emit a unique digital code when they are moved. They are sealed units and the batteries have a life of approaching 5 years. They are more expensive than passive tags and are of course bigger, but technological advances are closing the gap all the time.

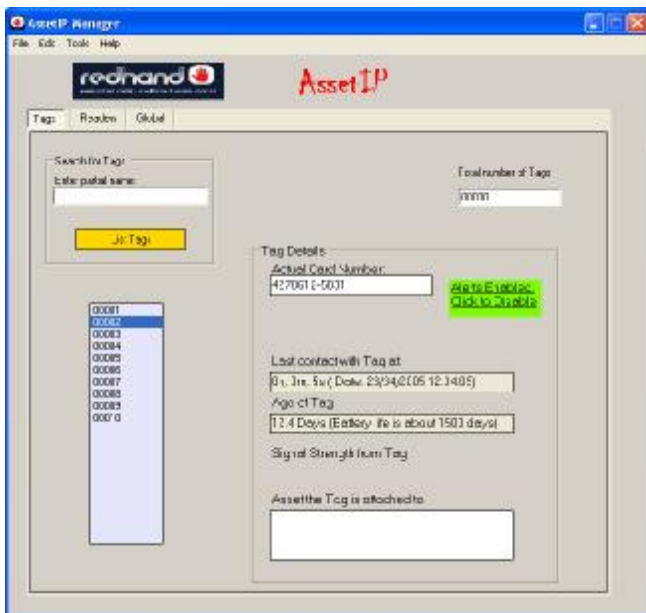
AssetIP – the principles

Tags are fixed to assets that you do not want moved. These are about the size of a credit card and we can supply magnetic tape to attach them. There is a magnetic sensor inside the tag that will alarm if an attempt is made to remove the tag.

An RFID reader is placed somewhere convenient in a central location. This reader has an aerial. Depending on the local situation, this aerial may be a small omni-directional whip about 150mm long. In this instance the reader could be mounted on one of the internal walls within range of the asset. The useful range of this is about 20m, but is reduced when going through walls. Alternatively, a high gain aerial may be fitted which is a flat plate about 300mm square. This has a line of site range of around 50-60m and is cardioid in shape. Again walls will reduce this.

Any number of readers can be employed with the software to ensure maximum coverage. The readers connect to the Network via a small interface box.

AssetIP – The Software



There are two parts to the software. The **Tag Manager** interface was designed to be very easy to use. It allows you to enter the tags and the asset that the tag is attached to.

In Manager you can also set up the readers and ensure that they are working correctly. The Tag page can provide information about each tag including the time it was last 'seen' and also the battery life.

Watchdog has no user interface and is responsible for communicating with the readers. The software will not respond to 2 or less signals in a single 5 second period. This is to ensure filtering out misreads due to accidental short-term vibration.

If a tag has been detected for longer than 5 seconds an audio WAV file is played. This can simply be routed to speakers so that staff are made aware.

An optional SMS message can be sent to selected phones. This will also give details of the asset concerned.

AssetIP has been designed to operate alongside VisionIP, RedHand's Networked Camera Surveillance system. A relay on one of the cameras or servers can be actuated which can easily be routed to external sounders, or to RedHand AccessIP Door Access Control.