



VSys Log Manager

(Version 2.0.0)

The VSys Log Manager suite enables data on operating conditions and equipment at remote sites to be recorded and used to assist in creating reports, analysis and general trouble shooting. Log Manager comprises two elements. VSys Log Manager software is an optional package that is added to the VSys Management Software suite as required. The Log manager software is not client license dependant and can be installed on all client machines and other computers where the user wishes to have access to the VSys Log Manager features. Vision site modules have Log manager firmware installed as standard.

The data logs are recorded and compiled within the Vision module installed at the remote site. The information can be downloaded locally to a laptop computer or remotely to a VSys client. Where the data is to be downloaded remotely it is recommended that due to the potential volume of data that Ethernet or alternative high speed data link or modem data call is used as the communications medium. When downloaded locally the Log Manager Download program is used in conjunction with the VSys Redirector program. With either a local or remote download the data is presented in the VSys Log Manager Viewer program and is saved as a log profile and can be exported to a Comma Delimited Variable file (CSU).

The information stored for each log can be viewed within the VSys Log Manager Suite in graphical and / or text based formats. When stored on a VSys Client the data can be distributed to other system users and also stored within the system database for future use and analysis of similar activity at other remote sites.

Twenty four individual logs are available on each Vision module that can be associated with the analogue inputs for recording data. Note: logs of digital (binary) input activity are recorded as standard in the VSys database for each 'Set' and corresponding 'Clear' of a programmed digital input, see VSys manual chapter 'Alarms and Events' for further information.

Within the Vision module each individual log is allocated a name for easy retrieval and can be configured as one log. As an additional feature each of the twenty four logs can be configured into five separate logs for enhanced data logging features. Three different modes are available for each individual log, 'Fixed Interval', 'Threshold Change' or both of these modes. A maximum number of 1,385 log samples are available with each Vision module. To ensure that important data is not lost existing logs are not overwritten and all logs are held within the Vision memory until download.

In 'Fixed Interval' mode the data is recorded against a configurable fixed time interval.

In 'Threshold Change' mode the data is recorded against a configurable difference between values.

The logs can be configured to sample until the total maximum number of readings has been reached (1,385), or for a specific number of readings per log or for a specific time period per log. When any of the log setting parameters is met the log readings will automatically terminate.

As an added feature the Vision log parameters can be set to automatically send the value of each log sample to the VSys Management software suite as an event message at the time that the reading is collected. With this feature activated the Vision logging mechanism can be inhibited so that the values for the log are not stored in the Vision module but are automatically stored in the VSys database with the benefit of receiving data logs for that analogue channel for an unlimited period and number of samples. Any or all of the logs can be configured for direct VSys reporting or for local Vision module data storage.

For 'Fixed Interval' mode sampling the minimum sample period is one second and the maximum the equivalent of thirty two days with the period between samples being set in seconds. For 'Threshold Change' mode sampling the minimum difference between the reference values is 0.1 and the maximum is limited the full scale value of the analogue input to which the log is associated. The log automatically displays the same unit of measurement as that for the analogue input to which it is associated.

Each log can be set to activate on an exception and / or formula based alarm and / or event and each log can be referenced to the same activation exception and / or formula so that the individual logs record different information from the same start time.

An example of a typical application is the logging of the changes in dc voltage and room environmental conditions in a telecommunications cabin base station where all of the assets at that site are monitored and controlled remotely. In the event of an ac power source supply failure the standby battery is automatically introduced to support the critical telecommunications equipment and in this situation normal environmental control systems are isolated until the ac power is restored.

Log activity is configured to commence immediately the ac power source failure is detected and continues until the log memory is full or the ac power is restored. In this example changes in values could be recorded for each change of typically, a battery voltage change of 0.1V, temperature for each change of 0.5°C and humidity for each change of 1%rh. Note: typically with this log configuration it would be expected that at the termination of the log process that each log would have a different number of sample entries depending on the rate of change detected by the analogue input associated with the particular data log.

Each change in value is recorded against time and the correlation between the time taken for the equipment load to exhaust the standby battery capacity and / or for room environmental conditions to reach out of specification parameters plotted.

As either condition can potentially cause an equipment emergency shutdown the data can be analysed enabling system planners to select the optimum battery capacity against the predicted operating time for the critical equipment when power to the environmental cooling systems has been interrupted and any standby environmental systems are unable to maintain the room conditions below the maximum permitted. As an added benefit the data obtained also enables planners to set a realistic maximum time to attend site for service personnel to complete rectification procedures.

Further information can be obtained from the VSys and Vision operating manuals that include detailed instructions on set up of the VSys Log Manager Software and Vision Log firmware.

Glossary:

Ethernet	A LAN access medium.
MODEM	Modulator/Demodulator.
Remote Site	A location that is normally remote from the VSys management system and where a remote Vision module(s) is installed e.g. a cabin, building or similar structure.
User	An individual who has access rights and authority to log onto the VSys and/or associated applications.
Vision	A Texcel Technology plc remote site module product.
VSys	The Texcel Technology plc software management system.
VSys Client	The application within the VSys suite running on a client machine that provides the front end interfaces to the user.

Ends.