

ICESPY PC SOFTWARE (ICESPY SYSTEM 5) FUNCTIONAL SPECIFICATION: SYSTEM5LOG

Overview

The purpose of Sys5Log is to continuously monitor any IceSpy interfaces attached to the PC, and to download data from them automatically at intervals sufficient to maintain continuous sets of recorded data. Continuous operation of the application is protected (in case of user cancellation) by 'Sys5Control' Windows Service

Minimum PC Requirements

Note: The following requirements are intended as guidelines only. The advertised specifications for modern PCs (RAM, Processor speed and hard-disk size) do not on their own define how well a PC will operate - other factors such as 'bus speed' are equally or more important. In particular some PCs sold for the 'home' market are not good at running database applications. Also, many manufacturers keep down the cost of a PC by allocating a portion of the main system memory (RAM) to the display hardware. Although this works adequately for most general office tasks it can slow down drawing of graphs by System5.

RAM: For up to 50 sensors: 128MB for server (database storage), 64MB for clients (view and adjust data). For more than 50 sensors these figures may need to be doubled.

Processor speed: For up to 50 sensors, at least 500MHz. For 50 sensors or more, 1GHz or faster is recommended.

Storage: 100MB free disk space for the software - please allow more for the database which will grow at 32kB per sensor per day. For 20 sensors over 3 months this is about 60Mb. Also, allow space for database backups, preferable on a different PC or removable storage.

Operating System: Windows 2000 (SP1 or higher), XP Home (small systems only) or XP Pro (SP1 or 2), 2000 Server or 2003 Server (SP1 or higher)

Please note that NT4 and 'Vista' are not supported by System5.

Monitor: 1024 x 728 resolution or higher.

Connection: Ethernet and/or USB (1.1 or higher) and/or RS232 serial port

Functions

- Creation of IceSpy-specific SQL database on first run
- Automatic update of database, if required, on subsequent runs.
- Continuously monitor data from SCOUT units via BASE or BRIDGE units
- Automatic detection of UDP broadcasts from any connected Base network modules in same network subnet at any time
- Automatic detection of serial broadcasts (USB or RS232) from any directly connected BASE serial modules or BRIDGE units when application starts or is restarted manually
- Download data from BASE and BRIDGE automatically at intervals sufficient to maintain continuous sets of recorded data.
- Additional download of SCOUT units on request, in order to complete any missing data caused by "out of radio range"
- Broadcasts from Base and Bridge units will transmit ID string at least once per minute. ID string includes serial number of Base. These broadcasts enable Base units to be 'found' automatically with no user intervention or setup.
- Download of lists of sensors being recorded in Base units and automatic creation of corresponding tables in database

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- Newly-found Sensors placed into Zone 0 by default
- Automatic upload (to Base) of changes to sensor lists as required by authorised users and determined via [Sys5Adjust](#)
- Automatic upload (to Base) of changes to sensor types, zones and alarm settings as required by authorised users and determined via [Sys5Adjust](#)
- Individual sensors can have settings changed (via Sys5Adjust) without restarting recording or upsetting other sensors in any way.
- Automatic downloading of recorded data from Sensors whose data is being collected by any attached Base or Bridge unit(s), to ensure continuous data records in database for later viewing by [Sys5View](#)
- Automatic sending of alarm indications via internet connection or modem:
 - Relaying of critical (remote) alarms (by email or text message) to different personnel for each zone, according to parameters set via Sys5Adjust
 - Cancellation of critical repeated (remote) alarms, once acknowledged from Sys5View application or remotely via email.
 - No alarms are caused by sensors in zone 0
 - Automatic creation of audit trail for alarm events
 - See 'System5 Adjust' for more details of alarm parameters.
- Continuous operation:
 - Automatic startup on reboot of PC via Sys5Control (no user required to be 'logged on')
 - Protection from system 'crashes' via Sys5Control
 - No 'modal' dialogs appearing (e.g. error messages) which require input from users before recommencing of essential operation
- In conjunction with Sys5Calc, will calculate and store values of 'virtual' sensors for display and analysis purposes – for example, Mean Kinetic Temperature, Pasterisation rates.

Data

- A set of working copies of the tables in the database, held in application memory for speed of access.
- Any non-transient data which has been changed is written to the database as soon as practical.
- Transfer of data between application and connected Base units using XML format.
- Continuous output of daily system log file for technical support – one file for each day of week. Recent Log file data can also be viewed on screen

Interfaces

- Basic desktop interface on PC providing:
 - Current read status of sensors
 - Ability to manually add IP addresses of Base units not found via UDP (e.g. different subnets) (System administrator only)
 - Ability to clear all data from chosen Base units (System administrator only)
 - Option to re-scan data ports for new Bases
 - Option for view current lists of sensors stored in bases, and standby lists
 - Option to view automatic swaps of sensors between Bases, or to initiate manual swaps.
 - Scrolling list view summarising all successful data transactions via interfaces, and error messages
- Automatic detection of UDP broadcasts from any connected Base network modules in same network subnet, at any time.
- Automatic detection of serial broadcasts (USB or RS232) from any directly connected Base serial modules, at system start-up
- Modem required in PC for download of data from Base units connected via modem, and for transmission of SMS alarm messages via telephone system – standard landline modem or GSM modem GSM available Q3 2006
- email server required (via network) for transmission of email alarms. Internet connection and prepaid credits required for sending of web-based SMS alarms

END OF DOCUMENT
