

Site Name	Next Call/Status	Interval	Operation	Comms Mode	User Comments	#
W1_Land_1a	10:50 Sun, Jun 2	8:00:00	Continuous	PC Modem 1234567	Pump Station 10 and 11	1
W1_Land_1b	10:50 Sun, Jun 2	8:00:00	Continuous	PC Modem 1234567	Pump Station 10 and 11	2
Flow_Canal	10:50 Sun, Jun 2	8:00:00	Continuous	PC Modem 1456789	Pump Station, Flow and Canal	3
Kitch_Passabeta	10:57 Sun, Jun 2	8:00:00	Continuous	PC Modem 1877890	Pump Station, Vista and Passa...	4
Pond_1	10:50 Sun, Jun 2	7:00:00	Continuous	PC Modem 4059890	Treatment Pond 1	5
Pond_2	10:50 Sun, Jun 2	7:00:00	Continuous	PC Modem 4059897	452-9899	6

RUN-TIME DISPLAY OF QUEUED CALLS AND STATUS

### OVERVIEW.....

The HyperWare™ Automation Program (HAP) is a stand-alone software application that simply automates interrogation and alarming functions performed during the regular use of field located data loggers. HAP can be configured to automatically call or receive calls from loggers then perform data downloads, memory clears, collected data file conversion, posting of Alarm messages, and even the generation of User customized reports through Windows™ automation to Excel. Designed to run as a true 32 bit application under Windows 95, 98 or NT, HAP provides unattended interrogation of HyperLogger, ModuLogger, or Mini data loggers via a telephone modem, RS-232, or RF Modem serial connection. HAP will

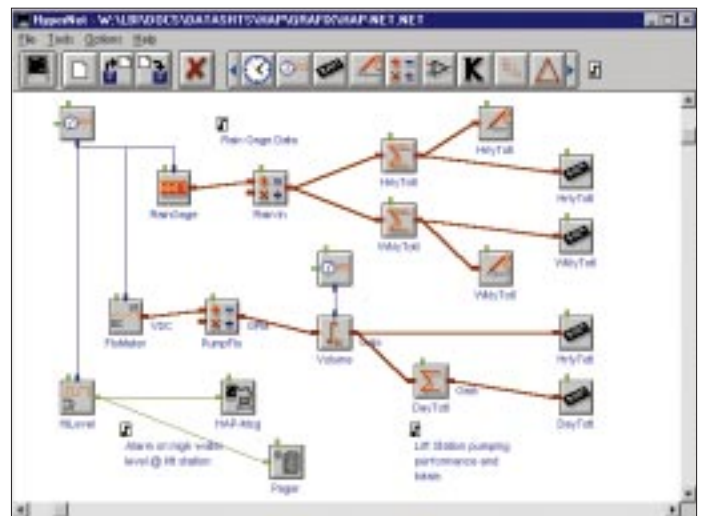
### FEATURES

- Auto-Poll mode interrogates remote loggers on a User defined schedule
- Auto-Answer mode accepts alarm and scheduled calls from remote loggers
- Supports logger initiated Alarm Pop-Up Message display
- Win 95, 98 and NT compatibility; Y2K Certified
- Log file maintained of interrogation status and errors
- Custom report forms simply built in Excel
- Automation links to Excel for report generation
- Programmable on a site by site basis
- Compatibility with ModuLogger™ and HyperLogger™ data logger families.

support both PC originated interrogation of field loggers (Auto-Poll mode) as well as receipt of calls originated by field loggers (Auto-Answer mode). In addition to data transfers from loggers to files on a PC, HAP's powerful report generation feature facilitates automatic generation of User designed custom reports. With the report generator, Users can simply build a report template within Excel, then upon interrogation of a logger, the template is completed with field data and printed or sent to other applications.

### Applications ...

- Remote tank inventory level reporting systems
- Automated Pump Station performance reporting
- Automated plant floor machine productivity surveys
- Process performance monitoring
- Automatic generation of daily, weekly, etc. performance reports
- Receive notification of Alarm States from field sites
- Automation of repetitive logger interrogation tasks
- Off-peak phone rate data downloads



EXAMPLE OF DATALOGGER PROGRAM EMPLOYING HAP CALL-OUT WITH DATA DOWNLOAD AND/OR REPORTING

# HAP™

## Operational Specifications



**AUTO-POLL MODE.....** In the Auto-Poll mode, information on each logger site to be interrogated is entered into HAP as a Site File.

*This Site File includes:*

- Communication details such as port, site phone number, etc.
- Polling Frequency, Timing and Number of interrogations
- Interrogation Actions such as download data, memory clear, etc.

**DATALOGGER SITE CONFIGURATION**

Task Name	End Inventory (Maib)	Unit Name	Cardinal	Unit ID	Status
Task-12	2451.2	Unit ID	St.Louis 1A		Executing RUN Program
Task-7	8144.4	Operation Mode			
Task-14	6038.6	%Memory Remaining	50		
Task-43	3828.7	Sample Logged	1690		
		Supply Voltage	15.3 VDC		
		Battery State	GOOD		

**AUTOMATED EXCEL REPORT GENERATION AND MACRO EXECUTION**

- Download data post-processing operations to perform such as Excel and/or ASCII output file conversion

- Excel Report Generation Options (report template to be used)

In Auto-Polling operation, the PC then automatically sequences through interrogations of remote loggers performing the operations specified in the Site Files. HAP can be minimized and operation continues "behind the scenes".



**AUTO-ANSWER MODE.....** In the Auto-Answer mode, HAP running on a PC accepts incoming calls from field loggers. After answer and connection, HAP then interrogates the logger based on User programmed instructions received from the calling logger. Auto-Answer mode capabilities closely parallel capabilities offered in the Auto-Poll mode... with the main difference being that in Auto-Answer mode, the logger initiates the connection and provides the interrogation instructions. A logger to be used with HAP running in Auto-Answer mode must first be programmed with a Program Net containing a HAP icon. The Program Net is developed using the standard HyperWare™ graphic programming method supplied within the HyperWare™ program (supplied at time of logger purchase). Typically, the included HAP icon(s) will initiate a call-out to a PC running HAP upon alarm conditions such as near full memory, periodically based on time, or upon reaching an alarm threshold.



**ALARM POP-UP MESSAGES...** Additionally, a logger programmed with a HAP icon can send "Pop-Up Messages" to a PC running HAP. Upon an alarm event, the logger will contact the PC running HAP and display the text messages in a window.



**HAP REPORTER...** Reporter is an integral part of HAP that allows for unattended report generation using data collected from a logger. The report is generated from a User defined template (built simply within Excel) that is "filled-in" with data provided by the logger during serial communication interrogation. Report templates can include User provided text and formatting, logger supplied fields (such as Probe Point values, logger Unit Name and ID, active logger messages, Status parameters, etc.), and macros for further processing. The Template Builder function within HAP provides a quick and simple method for Users to build custom report templates within Excel. Fields, formatting, equations, macros, etc are merely entered into cells, then the file is saved as a Template... to be filled in automatically with logger data during an interrogation session. With the inclusion of Excel (or Visual Basic) macros in the Template, powerful additional data processing can be performed. Reports, mathematical analysis, graphing, etc can all be fully automated.

**HAP USER INTERFACE...** An intuitive User interface allows for quick and simple configuration of automated logger interrogation sequences. Polling Files can include different combinations of loggers and reporting functions and are totally customizable by the User. HAP operational status is readily viewed on the Status Bar and HAP performance, outputs, and errors are logged to a viewable "HAP Log" text file.

**AUTOMATION LINKS ...** In addition to the provided Excel link, HAP can be linked to other applications via Visual Basic Automation. Contact Logic Beach for capabilities.

**SYSTEM REQUIREMENTS ...** Data Logger: One or more HyperLogger, ModuLogger or Mini loggers running Firmware V4.00 or later and HyperWare 4.00 or later. PC: 486 or faster with commensurate hardware capability. RS-232 port, Hayes compatible modem and/or Logic Beach specified RF Modem depending on desired serial interrogation mode. Mouse, Windows installed printer (for printing of generated reports) Software: Windows 95 or NT. Excel 5.0 or later required for Report Generation feature. HAP is Y2K compliant.

*See Logic Beach Products on the World Wide Web .....[www.logicbeach.com](http://www.logicbeach.com)*

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