

I/A Series[®] Software Analyzer Management Software (AMS)



The Analyzer Management Software (AMS) package is an Analyzer Management and Maintenance tool for controlling and maintaining 931D Process Gas Chromatographs connected to a Fieldbus on an I/A Series system.

OVERVIEW

The AMS software package consists of an easy-touse collection of interface tools that allow you to effectively manage and maintain multiple 931D Process Gas Chromatographs (PGCs) on an I/A Series system. These tools provide access to the instrument interface of the PGC as well as the historical data in the Application Processor (AP) or Application Workstation (AW). The tools are useful for performing a variety of tasks such as editing instrument configuration, obtaining status information, controlling the instrument, and viewing the results of an analysis. The AMS viewing and editing tools include:

- Chromatogram Viewing Tool (CVT)
- Trend Viewing Tool (TVT)
- Command Line Interface (CLI)
- Window-Oriented Interface (WOI)
- Text Editing Tool (TET)

These tools are executed within the Open Look environment on a Workstation Processor (WP) or Application Workstation (AW) from separate windows which support the cutting and pasting of textual data between windows.



Communication between the AP/WP or AW and the 931D Process Gas Chromatograph is accomplished via a Control Processor (CP) as shown in Figure 1.

USER INTERFACE PROGRAMS

Chromatogram Viewing Tool (CVT)

The Chromatogram Viewing Tool (CVT) provides access to a chromatogram graphic in an Open Look window. The chromatogram graphic can include up to five chromatogram files, each in a different color. These chromatograms can be requested from any analyzer on the network as well as from the historical files on the AP/AW server.

A full length chromatogram including event markers is read from a file. Scaling of both axes is automatic. The time (x) axis is presented in milliseconds. The CVT features full Zoom selection for detailed chromatogram viewing. The chromatogram event markers can be turned on or off. Time and amplitude values are selected by mouse positioning of a cursor directly on the chromatogram graphic. These numeric values are displayed with high resolution and can be pasted from the CVT window directly into the instrument configuration displayed in another open window.

Trend Viewing Tool (TVT)

The Trend Viewing Tool (TVT) provides access to a trend graphic in an Open Look window. Time stamped data is displayed in a trend graph format. The trend data is read from a file created by the extraction of variable data from analysis reports stored in the AP/AW server. The trend file created by the extraction contains a list of each data value tagged with the date and time. The TVT is then used to display the requested trend file. As many as five trend files, each in a different color, can be displayed in one window. The X-axis provides a time line for the trend graph. The Zoom feature provides a method for closing in on the exact time and date of any logged data value or event. The same cut and paste features described in the CVT are available for the TVT window.



Figure 1. AMS Overview

Command Line Interface (CLI)

The Command Line Interface (CLI) is a tool for interfacing with the PGC via commands entered on a CLI command line. The CLI is used to control the instrument, obtain status information, view and edit instrument configuration, and obtain analysis results. The CLI is capable of uploading current configurations and downloading an edited or previously stored configuration to an analyzer as shown in Figure 2. The CLI window supports the cutting and pasting of control times directly from the CVT window to the CLI command line.

The CLI is also a line-oriented programming tool useful for experienced users when complex instrument control is required or significant configuration changes or a new configuration is needed.

Window-Oriented Interface (WOI)

The Window-Oriented Interface (WOI) is a userfriendly alternative to the CLI for accessing the instrument interface to view or edit information and to control the instrument. The WOI format is different from the CLI format; it is menu-oriented rather than command line oriented. The WOI display represents the same WOI display as the PGC front panel with the advantage of a larger viewing area.

The WOI window supports cutting and pasting of control times directly from the CVT window to the instrument interface.

Text Editing Tool (TET)

The Text Editing Tool (TET) is a standard text editor available in an Open Look window. The TET is useful for off-line editing of data accessed via CLI or WOI and viewing reports such as the Chromatogram Diagnostic Report shown in Figure 3.

Requirements

- Chromatographs: 931D
- I/A Series Release 4.0 (or higher) software
 CP30 or later
 - 50 Series AP Server and 50 Series WP Client or optionally, a 50 Series AW Server/Client
 - The minimum system configuration requires one AP Server and one WP Client. As many WP Clients can be specified as required.
 - Any WP client can communicate with any AP server, CP, or PGC on other nodes.

AMS Command Line Interface	
# ams_cli Console ´Host/Task´ Name: AW0001AC0000 Passthru Mux Name: AW0001AMSMUX	
AMS Command Line Interface (CLI) vers. 4.6.	Ш
<pre>[1]> BATCH "do_setup" *** SETUP GC0001 *** Initializing EDIT copy. Loading Setup into EDIT copy. Taking GC Offline. Downloading EDIT to REALdone. Bringing GC back Online. *** SETUP GC0001 DONE *** [11] RUN: END [1]> cd</pre>	

Figure 2. Example of a Batch Command Running in a CLI Window

Text Editor V3 - toms.cdr (edited), dir; /opt/fox/ams/bin File auView au) Edit 🔻) Find au) CHROMATOGRAM DIAGNOSTIC REPORT GC: AT-3518 System status: OK Stream: S1 Cycle status: OK Method: 1 Detector status: OK Cycle start: 02/28/94 16:21:35 Cycle SN: 0000017 Detector D1 Number Feature Name Time Value Sum Max Value Max Time Sum Err Sum Err Time Err -.SCAN_ON..... 025. .0.0 n Ω n ...BOXCAR_SET......25. ..200.. ...00 1 .0 n Ω n 2 -....TICK.....7800. 200....100 7200 3 -....SLOPE_DET_ON....30000....200...232000. .200....1000 232000 0 4 .SLOPE_ON......79200....200...393621.. 200 1621 0 .PEAK_MAX......80200..48869...836049.. .48869...80100 5 100 157890 157890 ...SLOPE_OFF......81200. 6200....182538... ...39472....80200 n. 182538 n 7 0 9600 .SLOPE_ON.....149400....200...536103.. 8222..149400 200 1702 n .5066..150100 9 .PEAK_MAX.....150200...5066....89085. 100 16507 16507 10 ...200.....24640. .4126..150200 24640 n n 11 -....SLOPE_DET_OFF.179000....200...223200.. 223200 0 0 .180000. ..200..179000 12SCAN_OFF... .200. .8000. Ο. 0 8000

Figure 3. Example of Chromatogram Diagnostic Report in TET Window

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