I/O Libraries for HP-UX 9.x & 10.20
HP E2091E

Technical Specifications

- **Supports the VXI*plug&play* HP-UX Framework**
- **Works with VXI*plug&play* compliant equipment**
- **Works on external and VXI embedded HP Series 700**
- **Supported by HP VEE, HP BASIC, and ANSI-C**
- **Included with HP V743 controller, HP-1B and MXIbus interfaces**

Description

The HP E2091E I/O libraries for instrument control for HP-UX/700 controllers conforms to the latest VXI*plug-&play* software. This, a significant industry standard, ensures a high degree of interoperability among VXI vendors providing mainframes and instruments, controllers and interfaces, and software. In addition to providing the HP-UX Framework for HP external and VXI embedded workstations, the HP E2091E I/O libraries support HP VEE, HP BASIC, and ANSI C software languages.

SICL (Standard Instrument Control Language), an HP standard I/O library, which preceded the VXI*plug-&play* standard VISA, is available for most HP VXI products introduced before 1996. SICL support for these products will continue. SICL will not be available on products introduced in 1996 and later.

VISA I/O libraries (VXI*plug&play* HP-UX Framework) are not available for HP VXI products at the time of publication. Refer to the HP Website for instrument driver availability and downloading instructions.

This software product comes with the purchase of an HP V743 VXI embedded controller, HP-IB and MXIbus interfaces. The HP E2091E is required when upgrading an existing system. It supports HP-UX 9.x and 10.20. For other HP-UX operating system support, contact your local HP sales office.

VISA I/O Libraries by Controller and Interface

	External Workstations				Embedded Workstation
	GPIB	RS-232	LAN	MXI	
HP-UX 9.X	SICL only	SICL only	SICL only	SICL only	SICL only
HP-UX 10.X	VISA/SICL	SICL only	VISA/SICL	VISA/SICL	VISA/SICL

What is VISA?

As an innovator in test and measurement technology and a leader in setting and supporting standards, HP created the Standard Instrument Control Library (SICL) in June 1993 as a proposed I/O library standard. As other manufacturers in the industry recognized the value of a standard I/O library for test and measurement, the VXI*plug&play* Systems Alliance was formed (see VXI*plug&play* tutorial). The alliance developed the specification for an I/O library similar in features and functionality to SICL. This library is called the Virtual Instrument Software Architecture, or VISA. HP joined the Alliance as an active participant in specifying and bringing these new standards to our customers.

What is VTL?

VTL is the VISA Transition Library. It is a subset of VISA[1] and is based on the most-frequently-used I/O function calls. VTL makes it easy to migrate to the new standard. The calls are similar to SICL calls— for example, *iopen* in SICL is *viopen* in VTL (and VISA). You can continue using your existing SICL applications while adding VTL for new ones.

VTL has been shipping since May, 1995. After completing VTL, HP immediately started development of VISA, which offers more functionality than VTL. When HP begins shipping VISA, it will be 100% compatible with VTL because VTL is a subset of VISA.

(1) Although now shipping VTL, VISA will be shipping in 1996.

What about SICL?

HP is committed to supporting SICL as well as VISA. You can continue to use SICL for all your current program applications, and use VISA for new applications. Your SICL-only programs can run on the same system as VISA-only programs if the programs are talking to different instruments, whether or not the instruments are on the same interface.

One of the main benefits of SICL and VISA continues to be portability between Windows and HP-UX environments. Applications written on HP-UX run under Windows with a simple recompile of the code.

VISA and the VXI*plug&play* Systems Alliance Frameworks

The VXI*plug&play* Systems Alliance divides systems into several Frameworks. The most active of these provides VXI*plug&play* compatibility for the Microsoft Windows environment. The HP-UX Framework is another framework that is especially important to HP customers. The HP-UX Framework is designed to be POSIX-compliant. As with SICL, portability between VXI*plug&play* Frameworks is an important part of VISA functionality.

How to Upgrade from SICL to VISA

As you add new VXI*plug&play* devices to your system, change the I/O function calls from SICL to VISA. Although SICL and VISA function calls may be written into the same application program, this is not an HP supported configuration.

Ordering Information

Description	Product No.
I/O Libraries for HP-UX 9.x & 10.01	HP E2091D
Telephone Support	HP E2091D H00
Update Materials	HP E2091D UAF
Update Materials	HP E2091D UAH
DDS cartridge	HP E2091D AAH

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