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# HP OpenView SNMP Developer's Kit and Platform Products

## Technical Data

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### Welcome to HP OpenView

HP OpenView is a complete family of products providing integrated network and system management (NSM) solutions for multivendor distributed computing environments. HP OpenView addresses the pressing need of organizations to ensure the uninterrupted flow of critical business information through their systems and networks. The HP OpenView solution consists of a family of management platforms, a complete set of NSM application development tools, an impressive portfolio of management applications, and a unifying architecture.

The HP OpenView SNMP Developer's Kit and Platform products (the HP OpenView SNMP Management products) provide:



- An application development environment (the HP OpenView SNMP Developer's Kit) for developers who are creating NSM solutions to manage TCP/IP environments using the Simple Network Management Protocol (SNMP).
- A run-time environment (the HP OpenView SNMP Platform) for applications written with the HP OpenView SNMP Developer's Kit.

A broad range of important SNMP management applications is already available from HP and selected third parties. A case in point – HP's Network Node Manager is the top ranked TCP/IP network manager in user surveys conducted by both Data Communications Magazine and Computer World.

## Features and Benefits

### Standards-Based Development Environment

HP OpenView SNMP Management products are standards-based.

The products include the OSF/DME selected HP OpenView Windows (OVW) Graphical User Interface (GUI). OVW is based on X.11 and OSF/Motif. The HP OpenView SNMP Platform dynamically discovers and monitors standard IP-addressable, SNMP MIB II, and user defined SNMP devices.

HP OpenView SNMP Management products provide a stable programming environment, easily portable code, and interoperability with other standards-based systems and devices. Standards-based design opens HP's SNMP products to integration of a wide range of multi-vendor management applications and services.

### Multiple Hardware Support

HP's SNMP Management products are currently available on HP 9000 and Sun SPARC systems. IBM is using HP OpenView source code as a base for its SNMP management products on RS/6000 systems. Additionally, HP is licensing HP OpenView source code to other key computer manufacturers who will further extend the operational breadth of HP OpenView software. The

benefit is that an HP OpenView application written on one system can be quickly transferred to multiple computers.

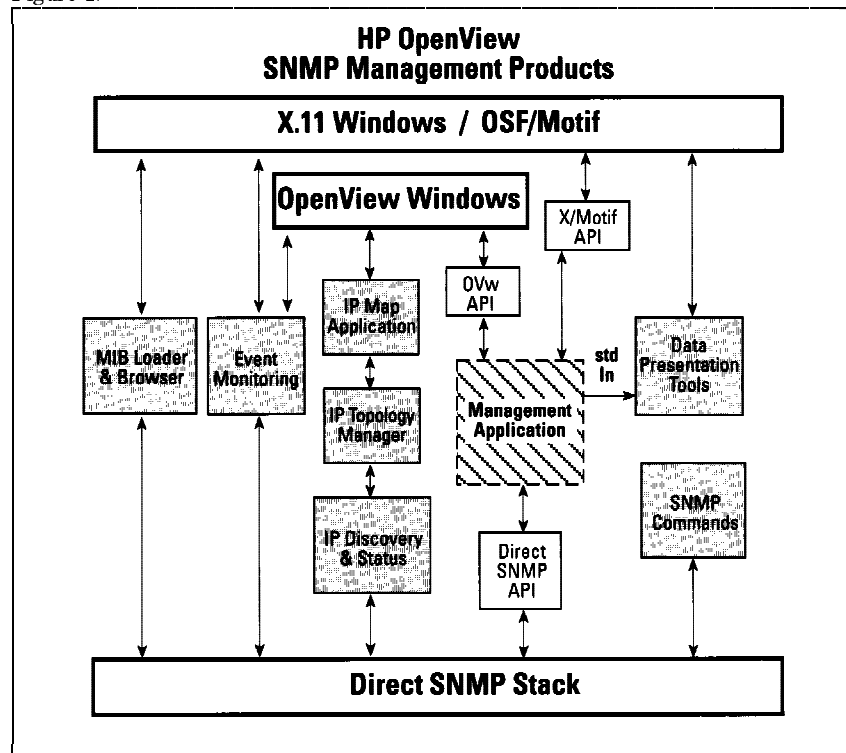
### Developer Support

HP OpenView developers can count on HP as an enthusiastic and able partner in the development process. HP delivers thorough, developer focused documentation and comprehensive five day HP OpenView developer training classes. From multiple locations around the world, HP OpenView Design Consulting service is available to customize HP OpenView SNMP Management products to

meet specific business needs of customers. HP OpenView Developer Assist program provides answers to technical questions directly from HP online support engineers.

Independent Software Vendors (ISVs) can rely on HP for assistance in developing and marketing their HP OpenView-based products. HP backs its business partners with the top-rated HP OpenView Solution Partners Program, the widely distributed HP OpenView Solutions Catalog (listing both HP and partner products), and joint marketing programs.

Figure 1.



## Product Descriptions

### HP OpenView SNMP

Management products are of two types: a developer's kit and a run-time platform.

- The developer's kit includes the header files and libraries necessary to develop applications using the HP OpenView SNMP application program interfaces (APIs).
- The run-time platform contains those executables necessary to run HP OpenView applications.

See figures 1 and 2 for the component and product structure views of the SNMP Management Products.

### HP OpenView SNMP Developer's Kit

The HP OpenView SNMP Developer's Kit is designed for developers writing NSM applications that manage SNMP/TCP/IP devices and networks and require a standard, integrating graphical user interface. The SNMP Developer's Kit supports two major APIs: the Direct SNMP API and the HP OpenView Windows (OVw) API.

The Direct SNMP API provides access to the SNMP stack to perform management operations on SNMP devices. Additionally, the SNMP API includes programmatic access to the HP OpenView trap dispatcher so that applications can receive and process traps (events) sent to the management station.

The OVw API provides programmatic access to HP OpenView Windows for the purposes of interacting with the network map (the map is created by SNMP Platform functionality), drawing and modifying application specific submaps, and registering applications in a menu-bar. HP OpenView Windows was selected by OSF for the DME, so developers can begin training and applications development confident that their investment will be protected into the future.

The HP OpenView SNMP Developer's Kit contains the HP OpenView SNMP Platform.

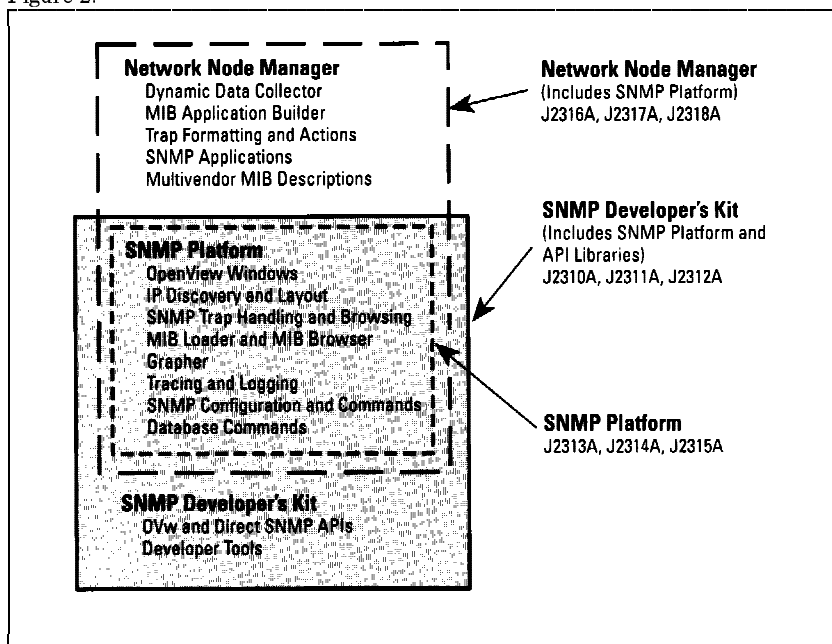
### HP OpenView SNMP Platform

The HP OpenView SNMP Platform contains the executables which support the API calls of the SNMP Developer's Kit. It includes HP OpenView Windows, automatic IP discovery and layout (that is, automatic node discovery and map creation), the SNMP run-time library, trap handling, and an end user accessible MIB loader and MIB browser.

### SQL Database Option

Both the HP OpenView SNMP Developer's Kit and Platform contain, as an option, the run-time version of Ingres' SQL relational database. The Ingres database option consists of the Ingres Intelligent Database, Version 6.4, from the

Figure 2.



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Ask/Ingres Corporation. The Ingres database is currently used for storing IP topology information gathered by the HP OpenView SNMP Platform. Users can access the stored data through interactive SQL queries and report generation tools provided with the Ingres SQL database option.

Database application development tools (that is, programmatic access to the database) are sold and supported by Ingres.

### **Developer Support Products**

HP has a wide range of support products designed to minimize the time-to-market of HP OpenView-based solutions.

### **HP OpenView Developer Assist**

Developer Assist provides expeditious developer assistance through direct phone access to HP online support engineers located in the facility where HP OpenView product design and development takes place. Customers can also submit questions and service requests through electronic mail.

Customers receive acknowledgment of their electronic mail or phone messages within 24 hours.

### **Software Materials Update Service**

For a monthly fee the Software Materials Update Service provides automatic distribution of minor revisions to the SNMP Management Products.

### **HP OpenView Developer Training**

Customers can purchase a five day class describing the HP OpenView architecture, the various APIs contained in the HP OpenView SNMP Developer's Kit, and the basic strategies for building network and system management applications.

### **HP OpenView Design Consulting**

Design Consulting provides personalized consulting to aid in the implementation of customer applications. Example services are

- requirements analysis
- application design
- design review
- object modeling assistance
- third party product integration

Design Consulting services are specified in a contract tailored to meet individual requirements.

### **HP OpenView Contractual Support**

For developers requiring customized combinations of support products, individualized support contracts are available. Pricing and services are based on specific needs.

### **Related Products**

HP OpenView Network Node Manager (see Applications in the "Ordering Instructions" section) is an end user application which provides fault, configuration, and performance management of multivendor TCP/IP networks. The Network Node Manager includes the HP OpenView SNMP Platform.

### **Recommended Systems**

#### **HP Hardware and Software:**

- HP 9000 S300, S400, S600, S700, or S800
- HP-UX 8.0x
- RAM: S300/S400 require 24MB minimum, S600/S700/S800 require 32MB minimum
- Free disk space: all HP systems require 80MB of disk space for installation and 100MB of swap space (a total of 180MB of free space)

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### Sun Microsystems Hardware and Software:

- Sun SPARCstations 1+, 2, IPC (or greater class systems)
- SunOS 4.1.1 and 4.1.2
- RAM: 24MB minimum
- Free disk space: 80MB of disk space for installation and 100MB of swap space (a total of 180MB of free space)

To install and operate as a server, the optional Ingres SQL database requires at least an additional 120MB of disk space and 8MB of RAM. To operate as an Ingres client, 65MB of additional disk space is required.

### For More Information

For more information, contact your HP Representative. The HP OpenView Technical Evaluation Guide, Release 3.1 (HP P/N 5091-5134E), includes a detailed technical description of the HP OpenView SNMP Management products and individual components.

### Ordering Instructions

To order the following products contact your local sales office. Note that DAT and CD ROM media options are available for all products and options. Other media options, such as 1/2 inch tape or QIC, are not available on all hardware systems.

### Developer's Kits

- **J2310A** HP OpenView SNMP Developer's Kit for the HP 9000 S300 and S400
- **J2311A** HP OpenView SNMP Developer's Kit for the HP 9000 S600, S700, and S800
- **J2312A** HP OpenView SNMP Developer's Kit for Sun SPARC

### Platforms

- **J2313A** HP OpenView SNMP Platform for the HP 9000 S300 and S400
- **J2314A** HP OpenView SNMP Platform for the HP 9000 S600, S700, and S800
- **J2315A** HP OpenView SNMP Platform for Sun SPARC

### Key Options (note: this is not a complete list)

- 001** 1/4-inch tape media and manuals
- 004** DAT media and manuals
- 005** CD ROM media and manuals
- 008** License-to-use (for one developer or single SNMP platform system)
- 015** Additional manual set
- 024** Ingres DAT media and manuals
- 025** Ingres CD ROM media and manuals
- 028** Ingres License-to-use (for one user or single SNMP platform system)

### Phone-In Support

- **32013A**, Option #010 HP OpenView Developer Assist Plus

### Applications

- **J2316A** HP OpenView Network Node Manager for the HP 9000 S300 and S400
- **J2317A** HP OpenView Network Node Manager for the HP 9000 S600, S700, and S800
- **J2318A** HP OpenView Network Node Manager for Sun SPARC

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