



MetaConsole

Netaphor The network management company



Based in Irvine, CA, Netaphor provides management solutions and services to Fortune 1000 companies such as Canon, Cisco, 3Com, Konica, and Toshiba. Storage and imaging vendors, such as Z-Force and Minolta, bundle MetaConsole with their hardware.

Netaphor provides a complete solution – application and protocol-level tools, enterprise console clients, and services from MIB design to agent and client implementation.

“Licensing MetaConsole gives us a time-to-market advantage in providing our management aggregation benefits to the marketplace.”

– Vladimir Miloushev, Founder and CTO, Z-Force, Inc.

“Adopting MetaConsole preserves in-house development resources while providing users with a proven solution.”

– Dennis Amorsano, director and assistant general manager of Canon U.S.A.’s Copier and Networked Office Systems

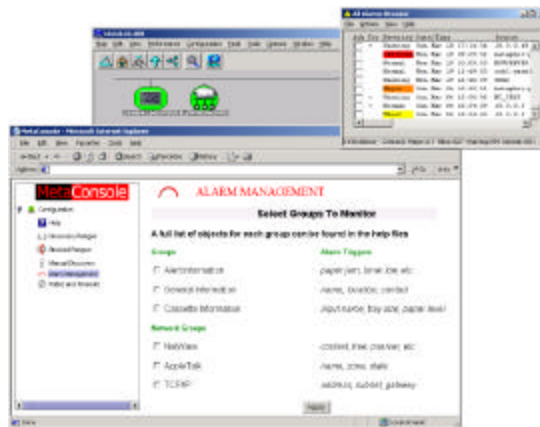
Highlights

- SNMP (v1/v2c/v3)
- Java-based multi-platform support
- Automatic integration with Unicenter, OpenView, and NetView
- Auto discovery
- Log alarms to external DB
- Localization with double-byte support
- Ready to deploy using MetaConsole installer

Do you need to develop a management application? Supporting SNMPv3? Integrating with HP OpenView, IBM NetView, or CA Unicenter?

MetaConsole provides everything you need to create and deploy your enterprise management application. It has built-in support for the major enterprise management systems, SNMPv3, multi-language capability, an alarm log and browser, and easy-to-use developer API. MetaConsole also includes smart plug-ins for CA Unicenter, HP OpenView, and Tivoli Enterprise... and works as well within a standard Web browser or Microsoft Management Console (MMC).

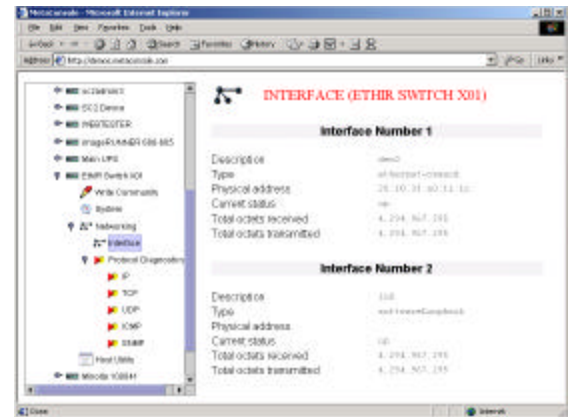
MetaConsole-based applications manage a variety of storage, imaging, server, and other network devices. Alarm management, normally available only in high-end consoles, is integrated within MetaConsole’s MMC and browser implementations. With its scalable architecture, MetaConsole can be deployed in a workgroup using MMC and browser-based solutions, while large enterprises can deploy one or more of the MetaConsole smart plug-ins.



Benefits

A manufacturer of hardware or software, when providing management capabilities, benefits from MetaConsole’s short development cycle and support of many consoles. MetaConsole is an open-ended solution, allowing manufacturers to offer their customers a management environment in which MetaConsole solutions from all manufacturers can operate together.

An enterprise that wants to consolidate its management tools under one umbrella benefits from the consistency and uniformity that MetaConsole provides.



An integrator or developer who creates custom solutions benefit from MetaConsole’s easy and powerful tools — easier and more powerful than a platform’s or management console’s tools and than available third-party tools. Creating a MetaConsole solution allows developers to concentrate on the management aspects of their devices instead of environmental (console or platform) issues.

Technical abstract

MetaConsole is built with

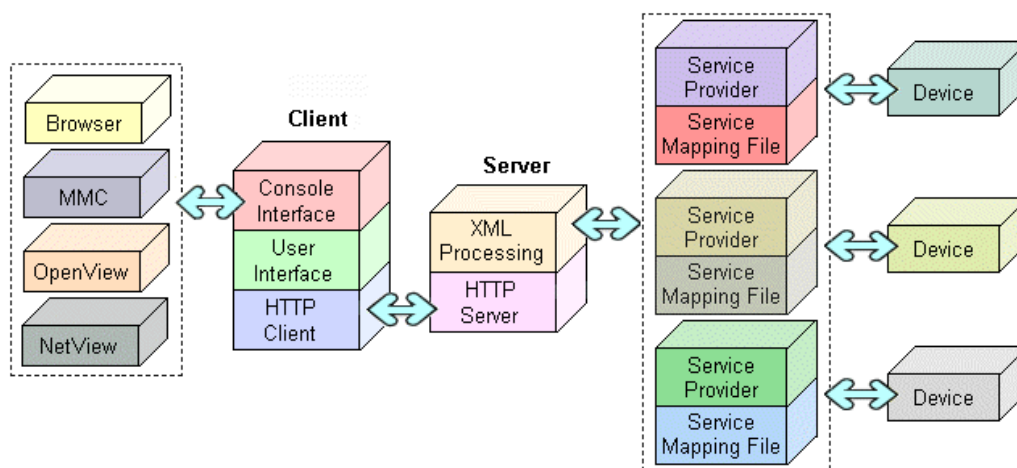
- A flexible “many to many” three-tier architecture
- Extensive reuse of components
- Java and XML

The interface for managing a particular network device or service provides the same core set of functions when added to any management console. At the same time, the client conforms to that console’s look and feel and leverages error handling and other functions available from within that console. The architecture stresses device-independent protocols and data.

A **MetaConsole client** integrates with consoles and sends device-management requests in the form of XML queries. The use of XML allows for abstraction of a device’s management characteristics and for rapid development when adding new device classes or types.

Your application is contained in a **MetaConsole service provider**, which communicates with the devices/services. Device- or service-specific knowledge is in the service provider.

The **MetaConsole server** provides the bridge between MetaConsole clients and your application and communicates with both the clients and the service providers. The HTTP interface implemented by the MetaConsole server provides a mechanism to access MetaConsole functions across firewalls.



Supported platforms

	Windows	Unix	Notes
MetaConsole Server	NT/2000/XP	HP-UX, Sun Solaris, Linux	
MetaConsole for CA Unicenter (CA Smart™ Certified)	Win NT/2000/XP	Sun Solaris	CA Unicenter NSM 3.0 IE 5.0 or later Netscape 4.7, 6.0
MetaConsole for HP OpenView	Win NT/2000/XP	HP-UX, Sun Solaris	HP OV NNM 6.1/6.2 IE 5.0 or later Netscape 4.7, 6.0
MetaConsole for MMC	Win ME/NT/2000 /XP	None	MMC 1.1/1.2/1.3 IE 5.0 or later
MetaConsole for Tivoli NetView	Win NT/2000	Sun Solaris	Tivoli Enterprise 6 IE 5.0 or later Netscape 4.7, 6.0
MetaConsole for Web browsers (MetaConsole J)	Win ME/NT/2000 /XP	HP-UX, Sun Solaris, Linux	IE 5.0 or later Netscape 4.7, 6.0

Feature comparison

	MetaConsole	Developer tools with HP OpenView NNM and NetView Enterprise	Third-party NMS tools
Device management	Built-in support for printers, network devices, servers, UPS devices, and several enterprise MIBs	Most standard MIBs supported via MIB browser interface	Ability to load and compile MIBs; significant work must be done by developer
Network management	Requires RMON support	Requires specific tools	Must be built by developer
Consoles supported	<ul style="list-style-type: none"> ▪ CA Unicenter NSM ▪ HP OpenView NNM ▪ NetView Enterprise ▪ MMC ▪ Browser clients Additional consoles require no new work with service providers	Supports own console (for example, HP OpenView supports NNM)	Must be built by developer
Expandability	Support for new devices can be added at any time	Support for new devices can be added via a client or if a MIB can be loaded for the device	Typically, closed systems with each implementation separate
Protocol support	<ul style="list-style-type: none"> ▪ SNMP v1/v2c/v3 ▪ LDAP, Active Directory ▪ DDE (for factory floor devices) 	<ul style="list-style-type: none"> ▪ SNMP v1/v2c, SNMP v3 requires third-party client ▪ ICMP (for PING) 	<ul style="list-style-type: none"> ▪ SNMP v1/v2c, some toolkits with SNMPv3
Addition of new protocol	Isolated to device-dependant code; automatic integration with all MetaConsole clients	Requires user-developed client	Limited to protocols supported by toolkit
Scalability	Multiple servers for load sharing	Support for large networks	Must be built by developer
Alarm management	<ul style="list-style-type: none"> ▪ Support on all clients, including browser-based versions ▪ Email/pager notification ▪ Alarms from devices with protocols not supported by HP OpenView and IBM NetView are integrated into those consoles ▪ Support for hand-held, wireless devices 	Alarms support for SNMP enabled devices and devices that support ICMP	Must be built by developer
Security	<ul style="list-style-type: none"> ▪ SNMPv3 ▪ User-defined permissions via Directory 	Limited to platform security	Must be built by developer
Remote management	HTTP support	HTTP support	Some toolkits with HTTP support, most must be built by developer
Installation	GUI-based installers on all platforms	GUI installer for Windows only	Must be built by developer



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Licensing

To create a management solution using MetaConsole, you must license the MetaConsole SDK. Netaphor charges licensing fees for the Metaconsole server and client components that are distributed as part of solutions built with the MetaConsole SDK. Fees can be under a dollar, depending on quantity. An evaluation version of the MetaConsole SDK is available for download.

Measurable ROI

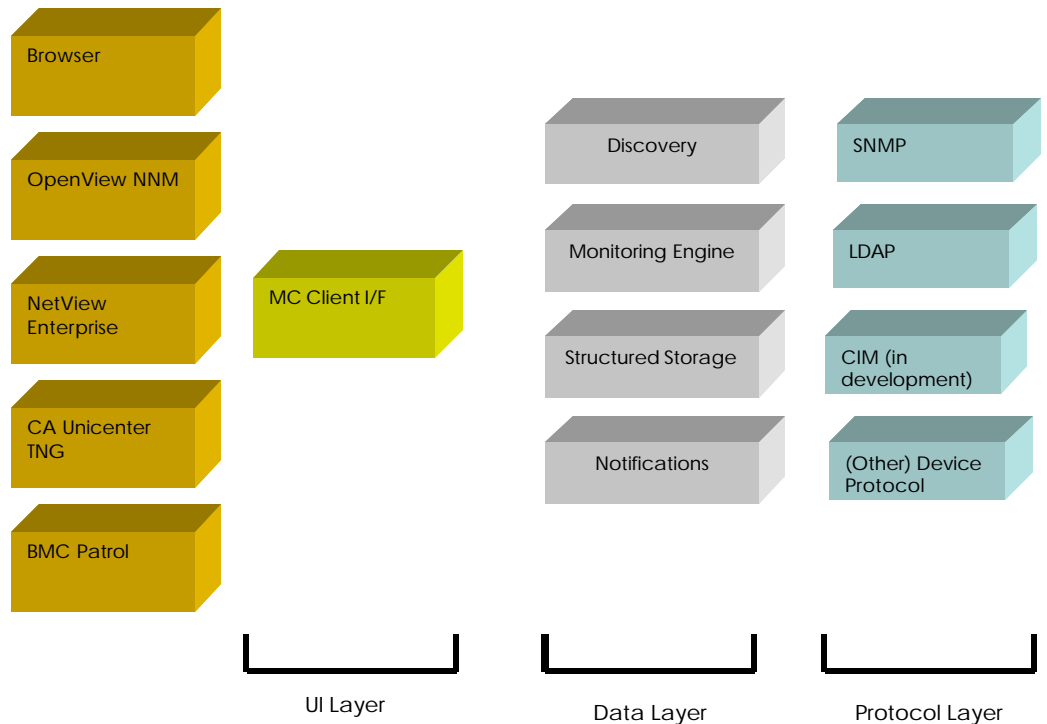
Whether you are a small company creating your first product or a large corporation consolidating diverse management solutions, MetaConsole will provide you with a quick and measurable ROI. Instead of spending years creating your application, you will be ready to demonstrate a proto type in a few weeks and have an application ready to deploy in a few months.



MetaConsole components

MetaConsole is built using a number of reusable components that are packaged for easy customization.

In addition to the components for discovery, monitoring and storage, MetaConsole includes Netaphor's widely-used Cyberons for Java NMS Toolkit and UI components for customizing your application.



Complete Solution

Netaphor addresses all aspects of development while you create your management solution. Our highly experienced professional services team provides special consulting based on our core competencies. MIB design, agent design and implementation, and even building the management application are services that Netaphor has provided to our Fortune 1000 clients.

Netaphor holds training classes that are specific to your needs. Our instructors talk to your developers about their needs and tailor the contents of the instruction to meet those needs.

Once your solution is deployed, we even provide field support to help in beta tests and custom integration at your client's site.