# System Management Hub

## Glossary of Terms

Version 9.5 SP1

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Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.



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# Glossary of Terms

Glossary entries exist for the following starting letters:

## A

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| Agent | In SMH context, agents are console-based executable files for product analysis on all supported platforms. The agents' output format is XML. They make use of internal product API for management purposes and have no GUI or other communication functions for direct interaction with the client. Each agent concentrates strictly on analysis of the product or operating system function it has been written for. The agents reside on the target systems and are invoked by the SMH Server, which is the only component that can operate an agent. Communication on this level is transparent for the user. |
| Apache | Apache is a freely available HTTP server that is distributed under an "open source" license. Version 1.3 runs on most UNIX-based operating systems (such as Linux, Solaris, Tru64 UNIX, HP-UX and AIX), on other UNIX/POSIX-derived systems (such as Rhapsody, BeOS, and BS2000/OSD), on AmigaOS, and on Windows operating systems. It is popular where UNIX-based systems are prevalent. Apache complies with the Hypertext Transport Protocol. |
| API = Application Programming Interface | An API is a formally-defined programming language interface between a program product and its user. |

## B

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| Batch | SMH documentation uses the term "batch" specifically to refer to one operating mode available where the administrator can launch actions, commands in console mode, with the command-line tool provided. |
| Batch interface | The Batch interface is one of SMH interface and is used to perform management tasks. This interface provides local or remote console-based administration. |

# C

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| C | C is a structured, procedural programming language. Many versions of UNIX-based operating systems are written in C. C has been standardized as part of **POSIX** .<br><br>See also **C++** and **Java** . |
| C++ | C++ is an object-oriented programming language, generally viewed as one of the best languages for creating large-scale application programs. C++ is a superset of the **C** language.<br><br>See also **Java** . |
| CGI = Common Gateway Interface | The Common Gateway Interface (CGI) is a standard way for a web server to pass a web user's request to an application program and to receive data back to forward it to the user. When a web page is requested, the server returns the requested page to the user. When a form is filled in and submitted, however, it must often be processed by an application program. A web server passes the information in the form to a small application program that processes the data and may send back a confirmation message. This method or convention for passing data back and forth between the server and the application is called the Common Gateway Interface (CGI). It is part of the Web's **HTTP** protocol. The common gateway interface provides a consistent way for data to be passed from a user's request to an application program and back to the user. It is simply a basic way for information about a user's request to be passed from the web server to the application program and back again. Because the interface is consistent, a programmer can write a CGI application in a number of different languages. The most popular languages for CGI applications are: **C** , **C++** and **Java** . |
| COM = Component Object Model | The Component Object Model is Microsoft's framework for developing and supporting program component objects. COM provides a set of interfaces allowing clients and servers to communicate within the same computer. See also **DCOM** . |

# D

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| DCOM = Distributed Component Object Model | DCOM is a set of Microsoft concepts and program interfaces in which client-program objects can request services from server-program objects on other computers in a network. DCOM can also work on a network within an enterprise or on other networks besides the public Internet. It uses **TCP/IP** and **HTTP** . See also **COM** . |

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| DOM = Document Object Model | The Document Object Model is a World Wide Web Consortium ( **W3C** ) recommendation. It defines a standard set of interfaces and objects for managing **HTML** and **XML** documents. |
| DTD = Document Type Definition | A DTD is a specific definition of document markup (format) that follows the rules of the Standard Generalized Markup Language (SGML). |

## F

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| FTP Security | SMH Server checks user rights via the local FTP daemon running on the **Target system**. Communication runs via TCP/IP on the FTP default port.<br><br>See also **Native Security** . |

## G

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| GUID = Global Unique Identifier. | A Global Unique Identifier is a 128-bit identifier created by using the current date/time, a clock sequence, an incremented counter, and the IEEE machine identifier, usually acquired from a network card. |

## H

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| HTML = Hypertext Markup Language | HTML is the set of "markup" symbols or codes inserted in a file intended for display on a World Wide Web browser. The markup tells the Web browser how to display a Web page's text and images for the user. See also **XML** . |
| HTTP = Hypertext Transfer Protocol | HTTP is the set of rules for exchanging files (text, graphic images, sound, video and other multimedia files) on the World Wide Web. Relative to the **TCP/IP** suite of protocols, the basis for information exchange on the Internet, HTTP is an application protocol. |

## I

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| Internationalization | Internationalization fulfills the language, cultural and character data encoding requirements of many types of users. Software internationalization is a methodology for designing software that is neutral in its language, culture and character data encodings. The processing results of adequately internationalized software can be modified at runtime in accordance with the language, culture and character data encoding needs of its users. |

## J

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| Java | Java is a programming language expressly designed for use in the distributed environment of the Internet. It is based on the C++ language, but it enforces a completely object-oriented view of programming.<br><br>See also **C** . |
| JavaScript | JavaScript is Netscape's cross-platform, object-based scripting language for client and server applications. JavaScript lets you create applications that run over the Internet. Client applications run in a browser, and server applications run on a server such as Netscape Enterprise Server. Using JavaScript, you can create dynamic HTML pages that process user input and maintain persistent data using special objects, files, and relational databases. There are JavaScript components that allow your applications to access Java and CORBA distributed-object applications. Server-side and client-side JavaScript share the same core language. This core language corresponds to ECMA-262, the scripting language standardized by the European standards body, with some additions. The core language contains a set of core objects, such as the Array and Date objects. It also defines other language features such as its expressions, statements and operators. |
| JVM = Java Virtual Machine | |

## M

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| Managed Host | This is the name of the machine that is managed in the distributed network where the SMH Server package runs. This software is responsible for executing the client requests and transports the response XML documents to the Proxy system. The Managed Host is also called Managed System or Target system. |
| Managed System | See **Managed Host** . |
| MIB = Management Information Base | MIB is the formal description of the network objects that can be managed using the **Simple Network Management Protocol** . |
| MIL = Management Independent Layer Server | The Management Independent Layer server is the central component of SMH that runs on at least one machine in the intranet that is being managed. This dedicated machine is called Proxy system. This part of SMH also provides a set of components that export a wide variety of interfaces for different kinds of data consumers. |

MMC = Microsoft Management Console

MVS = Multiple Virtual Storage

MVS is the IBM operating system that is installed on most of its mainframe and large server computers. MVS has been referred to as the operating system that keeps the world going.

## N

Native security

The SMH server uses the OS specific security service provider of the target system. See also **FTP Security** .

Netscape Communicator

A popular Internet browser from Netscape Communications Corporation.

## P

POSIX = Portable Operating System Interface

POSIX is a set of standard operating system interfaces based on the UNIX operating system. It was developed under the auspices of the Institute of Electrical and Electronics Engineers (IEEE).

Product Agent

See **Agent** .

Proxy System

Dedicated machine in an intranet where the **Management Independent Layer Server** is installed. This machine is the central collector of all management information on all **Managed Hosts** .

## S

Security

Security in SMH context refers to the authentication of the user that makes a request with the involved target system. This authentication process is done by the SMH Server. Different methods can be used, depending on the settings:

- Primary Domain Controller (PDC) via SSPI on Windows95/98
- **Native Security** on WindowsNT or UNIX
- **FTP Security**

SMI = Structured Management Information

SNMP = Simple Network Management Protocol

SNMP is the protocol governing network management and the monitoring of network devices and their functions.

SSL = Secure Sockets Layer

Secure Sockets Layer (SSL) is a program layer created by Netscape for managing the security of message transmissions in a network. The idea is to contain the programming required to keep messages confidential in a program layer between an application (such as your Web browser or **HTTP** ) and the Internet's **TCP/IP** layers. "Sockets" refers to the method of passing data back and forth between a client and a server program in a network or between program layers in the same computer. Netscape's Secure Sockets Layer (SSL) uses the public-and-private key encryption system from RSA, which also includes the use of a digital certificate. Secure Sockets Layer is an integral part of each Netscape browser. If a Web site is on a Netscape server, Secure Sockets Layer can be enabled and specific Web pages can be identified as requiring Secure Sockets Layer access. Other servers can be enabled by using Netscape's SSLRef program library which can be downloaded for noncommercial use or licensed for commercial use. Netscape has offered Secure Sockets Layer as a proposed standard protocol to the World Wide Web Consortium (W3C) and the Internet Engineering Task Force (IETF) as a standard security approach for Web browsers and servers.

SSO = Single Sign-On

Single sign-on is a property of access control of multiple, related, but independent software systems. With this property a user logs in once and gains access to all systems without being prompted to log in again at each of them.

As different applications and resources support different authentication mechanisms, single sign-on has to internally translate to and store different credentials compared to what is used for initial authentication.

In SMH, SSO manages centrally user authentication. Once the user is authenticated, the applications pass a token and / or artifact that is used by the IAF server.

## T

Target System

See **Managed Host** .

TCP/IP = Transmission Control Protocol / Internet Protocol

TCP/IP is the basic communication protocol of the Internet, in private networks (intranets) and in extranets. TCP/IP is a two-layered program. The higher layer, Transmission Control Protocol, assembles a message or file into smaller packets that are transmitted over the Internet and received by a TCP layer that reassembles the packets into the original message. The lower layer, Internet Protocol, manages

the address part of each packet so that it arrives at the proper destination.

## U

URL = Uniform Resource Locator

The standard notation for identifying resources in the Internet. This notation expresses the location of a document on the Internet in the format:

```
protocol://machine+Internet domain/directory/file name
```

The URL *http://www.mydomain.com/home/index.html* would locate a web page with the file name "index.html" in the "home" directory on a computer called "www" on the Internet domain "mydomain.com" using the HTTP protocol.

## V

VBScript

VBScript is a member of the Visual Basic programming languages family, the Microsoft Visual Basic Scripting Edition. It provides active automation in a wide variety of environments, including the command sequences of the Microsoft Internet Explorer and the Microsoft Internet Information Server (IIS).

## W

W3C = World Wide Web Consortium

The World Wide Web Consortium was created in October 1994 to lead the World Wide Web to its full potential by developing common protocols that promote its evolution and ensure its interoperability. Software AG is currently a member organization of W3C.

WAP = Wireless Application Protocol

The Wireless Application Protocol (WAP) is the set of instructions which define the way in which wireless devices access the Internet. It was conceived by Ericsson, Motorola, Nokia and Phone.com (formerly Unwired Planet). The WAP layers are

- WAE: Wireless Application Environment
- WSL: Wireless Session Layer
- WTLS: Wireless Transport Layer Security
- WTP: Wireless Transport Layer

WML = Wireless Markup Language

# X

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|---|---|
| XML = Extensible Markup Language | XML is "extensible" because, unlike **HTML** , the markup symbols are unlimited and self-defining. XML is actually a simpler and easier-to-use subset of the Standard Generalized Markup Language (SGML), the standard for how to create a document structure. It is expected that HTML and XML will be used together in many Web applications. Whereas HTML describes the content of a Web page (mainly text and graphic images) only in terms of how it is to be displayed and interacted with, XML describes the content in terms of what *data* is being described. Thus an XML file can be processed purely as data by a program or it can be stored with similar data on another computer or, like an HTML file, it can be displayed. |