National Information Assurance Partnership
Common Criteria Evaluation and Validation Scheme

Common Criteria Evaluation and Validation Scheme
Validation Report

McAfee Corporation's
Vulnerability Manager Version 6.8

Report Number: CCEVS-VR-VID10322-2011

Dated: 31 January 2011

National Institute of Standards and Technology
Information Technology Laboratory
100 Bureau Drive
Gaithersburg, MD 20899

National Security Agency
Information Assurance Directorate
9800 Savage Road STE 6940
Fort George G. Meade, MD 20755-6940

ACKNOWLEDGEMENTS

Validation Team

Jerome F. Myers
James Brosey

Common Criteria Testing Laboratory

COACT CAFÉ Laboratory
Columbia, Maryland 21046-2587

Table of Contents

List of Figures

List of Tables

1 Executive Summary

This report documents the NIAP Validators' assessment of the CCEVS evaluation of the McAfee Corporation's Vulnerability Manager Version 6.8 at EAL2 augmented with ALC_FLR.2. It presents the evaluation results, their justifications, and the conformance result.

The evaluation was performed by the CAFE Laboratory of COACT Incorporated, located in Columbia, Maryland. The evaluation was completed on 6 December 2010. The information in this report is largely derived from the Evaluation Technical Report (ETR) written by COACT and submitted to the Validators. The evaluation determined the product conforms to the CC Version 3.1, Revision 3, Part 2 and Part 3 to meet the requirements of Evaluation Assurance Level (EAL) 2 augmented with ALC_FLR.2 resulting in a "pass" in accordance with CC Part 1 paragraph 175.

The TOE is the McAfee Corporation's Vulnerability Manager Version 6.8.

The TOE is a Vulnerability Management System that scans specified targets for vulnerabilities and mis-configurations. It provides a management interface to configure the system and generate reports regarding the results of the scans.

The TOE consists of the following components:

1. The Enterprise Manager provides authorized users with access to the TOE through their Web browsers. It allows them to manage and run the TOE from anywhere on the network. Access is protected by user identification and authentication.

2. One or more Scan Engines scan the network environment. Depending on the logistics and size of your network, you may need more than one Scan Engine to scan the network. The Scan Engine performs identification, interrogation, and vulnerability assessment of remote computer systems.

3. The API Service provides an interface for Enterprise Manager to store data into and retrieve data from the Foundstone Database. This interaction uses SOAP over SSL.

4. The Data Sync Service enables Vulnerability Manager to import asset information from McAfee's ePolicy Orchestrator (ePO) enterprise management system or an LDAP directory such as Microsoft Active Directory. "The TOE may also be configured to import data about assets from external Data Sources, such as LDAP servers or ePO servers in the IT environment. Both LDAP and ePO databases contain detailed information about computer assets that may be of interest to administrators. This information may be imported from these Data Sources to be used by the TOE. The value of this functionality is that the information about the assets may be more accurate or complete than the information obtained from scans. Note that the integration of the TOE with ePO is for data import only; ePO does not provide any management functionality of the TOE." This integration permits Vulnerability Manager to learn about assets through a mechanism other than discovery scans.

5. The Foundstone Database is the data repository for the Vulnerability Manager system. It uses Microsoft SQL Server to store everything from scan settings and results to user

accounts and Scan Engine settings. It contains all of the information needed to track organizations and workgroups, manage users and groups, run scans, and generate reports.

6. The Report Server is responsible for generating reports requested by authorized users. It retrieves scan results from the Foundstone Database, prepares the report, and saves it for future review.

All communication between distributed components uses a trusted channel to protect the integrity and confidentiality of the data during transit. The TOE depends on cryptographic and protocol functionality provided by the IT environment for these secure channels.

2 Identification

The CCEVS is a joint National Security Agency (NSA) and National Institute of Standards and Technology (NIST) effort to establish commercial facilities to perform trusted product evaluations. Under this program, security evaluations are conducted by commercial testing laboratories called Common Criteria Testing Laboratories (CCTLs) using the Common Evaluation Methodology (CEM) for Evaluation Assurance Level (EAL) 1 through EAL 4 in accordance with National Voluntary Laboratory Assessment Program (NVLAP) accreditation.

The NIAP Validation Body assigns Validators to monitor the CCTLs to ensure quality and consistency across evaluations. Developers of information technology products desire a security evaluation contract with a CCTL and pay a fee for their product's evaluation. Upon successful completion of the evaluation, the product is added to NIAP CCEVS' Validated Products List. Table 1 provides information needed to completely identify the product, including:

- The Target of Evaluation (TOE): the fully qualified identifier of the product as evaluated.
- The Security Target (ST), describing the security features, claims, and assurances of the product.
- The conformance result of the evaluation.
- The organizations and individuals participating in the evaluation.

Table 1 - Evaluation Identifier

McAfee Vulnerability Manager Version 6.8	
Evaluation Scheme	United States NIAP Common Criteria Evaluation and Validation Scheme
TOE	McAfee Vulnerability Manager Version 6.8
Protection Profile	N/A
Security Target	McAfee Corporation's Vulnerability Manager Version 6.8 Security Target, version 2.4, dated January 11, 2011.
Evaluation Technical Report	Evaluation Technical Report for the McAfee Vulnerability Manager Version 6.8, Document No. F2-0111-007, Dated January 28, 2011
Conformance Result	Part 2 conformant and EAL2 Part 3 Augmented with ALC_FLR.2
Version of CC	CC Version 3.1, Revision 3 and all applicable NIAP and International Interpretations effective on December 19, 2008.
Version of CEM	CEM Version 3.1 and all applicable NIAP and International Interpretations effective on December 19, 2008.
Sponsor	McAfee, Inc. 2821 Mission College Blvd. Santa Clara, CA 95054
Developer	McAfee, Inc. 2821 Mission College Blvd. Santa Clara, CA 95054
Evaluator(s)	**COACT Incorporated** Bob Roland Greg Beaver Pascal Patin

McAfee Vulnerability Manager Version 6.8	
	Brian Pleffner
Validator(s)	**NIAP CCEVS** Jerome F. Myers James Brosey

2.1 Applicable Interpretations

The following NIAP and International Interpretations were determined to be applicable when the evaluation started.

NIAP Interpretations

I-0418 – Evaluation of the TOE Summary Specification: Part 1 Vs Part 3
I-0426 – Content of PP Claims Rationale
I-0427 – Identification of Standards

International Interpretations

None

3 TOE Description

McAfee Vulnerability Manager helps organizations identify and protect their assets by detecting vulnerabilities on those assets. This solution allows managers to continuously monitor, respond to, and adjust to a changing risk environment.

Administrators configure the system, including user accounts. Users schedule discovery scans to identify the systems on the network, followed by assessment scans to determine the vulnerabilities.

4 Assumptions

The assumptions listed below are assumed to be met by the environment and operating conditions of the system.

Table 2 - Assumptions

A.ACCESS	The TOE has access to all the IT System data it needs to perform its functions
A.DYNMIC	The TOE will be managed in a manner that allows it to appropriately address changes in the IT System the TOE monitors.
A.ASCOPE	The TOE is appropriately scalable to the IT System the TOE monitors.
A.PROTCT	The TOE hardware and software critical to security policy enforcement will be protected from unauthorized physical modification.
A.LOCATE	The processing resources of the TOE will be located within controlled access facilities, which will prevent unauthorized physical access.
A.MANAGE	There will be one or more competent individuals assigned to manage the TOE and the security of the information it contains.
A.NOEVIL	The authorized administrators are not careless, wilfully negligent or hostile, and will follow and abide by the instructions provided by the TOE documentation.
A.ALARM	The DBMS will generate an alarm if storage space in the database is exhausted.
A.DATABASE	Access to the database used by the TOE via mechanisms outside the TOE boundary is restricted to use by authorized users.

5 Threats

The threats identified in the following table sections are addressed by the TOE and/or Operating Environment. The following threats are addressed by the TOE and IT environment, respectively.

Table 3 - Threats

T.COMDIS	An unauthorized user may attempt to disclose the data collected and produced by the TOE by bypassing a security mechanism.
T.LOSSOF	An unauthorized user may attempt to remove or destroy data collected and produced by the TOE.
T.COMINT	An unauthorized user may attempt to compromise the integrity of the data collected and produced by the TOE by bypassing a security mechanism.
T.NOHALT	An unauthorized user may attempt to compromise the continuity of the System's collection and analysis functions by halting execution of the TOE.
T.PRIVIL	An unauthorized user may gain access to the TOE and exploit system privileges to gain access to TOE security functions and data.
T.IMPCON	An unauthorized user may inappropriately change the configuration of the TOE causing potential intrusions to go undetected.
T.SCNCFG	Improper security configuration settings may exist in the IT System the TOE monitors.
T.SCNMLC	Users could execute malicious code on an IT System that the TOE monitors which causes modification of the IT System protected data or undermines the IT System security functions.
T.SCNVUL	Vulnerabilities may exist in the IT System the TOE monitors.
T.FALREC	The TOE may fail to recognize vulnerabilities or inappropriate activity based on data received from each data source.
T.FALASC	The TOE may fail to identify vulnerabilities or inappropriate activity based on association of data received from all data sources.
T.FACCNT	Unauthorized attempts to access TOE data or security functions may go undetected.
T.FALACT	Issues resulting from scans of monitored systems may fail to be acted upon because the information is not disseminated from the TOE to other IT systems that are responsible for tracking or correcting the issues.

6 Security Policies

An organizational security policy is a set of rules, practices, and procedures imposed by an organization to address its security needs.

Table 4 - Organizational Security Policies

P.DETECT	Static configuration information that might be indicative of the potential for a future intrusion or the occurrence of a past intrusion of an IT System or events that are indicative of inappropriate activity that may have resulted from misuse, access, or malicious activity of IT System assets must be collected.
P.ANALYZ	Analytical processes and information to derive conclusions about intrusions (past, present, or future) must be applied to data received from data sources and appropriate response actions taken.
P.MANAGE	The TOE shall only be managed by authorized users.
P.ACCESS	All data collected and produced by the TOE shall only be used for authorized purposes.
P.INTGTY	Data collected and produced by the TOE shall be protected from modification.
P. PROTCT	The TOE shall be protected from unauthorized accesses and disruptions of TOE data and functions.
P.ACCACT	Users of the TOE shall be accountable for their actions within the TOE.

7 Clarification of Scope

The McAfee Vulnerability Manager Version 6.8 TOE components are described in the following sections:

The TOE is a Vulnerability Management System that scans specified targets for vulnerabilities and mis-configurations. It provides a management interface to configure the system and generate reports regarding the results of the scans.

The TOE consists of the following components:

1. The Enterprise Manager provides authorized users with access to the TOE through their Web browsers. It allows them to manage and run the TOE from anywhere on the network. Access is protected by user identification and authentication.
2. One or more Scan Engines scan the network environment. Depending on the logistics and size of your network, you may need more than one Scan Engine to scan the network. The Scan Engine performs identification, interrogation, and vulnerability assessment of remote computer systems.
3. The API Service provides an interface for Enterprise Manager to store data into and retrieve data from the Foundstone Database. This interaction uses SOAP over SSL.
4. The Data Sync Service enables Vulnerability Manager to import asset information from McAfee's ePolicy Orchestrator (ePO) enterprise management system or an LDAP directory such as Microsoft Active Directory. "The TOE may also be configured to import data about assets from external Data Sources, such as LDAP servers or ePO servers in the IT environment. Both LDAP and ePO databases contain detailed information about computer assets that may be of interest to administrators. This information may be imported from

these Data Sources to be used by the TOE. The value of this functionality is that the information about the assets may be more accurate or complete than the information obtained from scans. Note that the integration of the TOE with ePO is for data import only; ePO does not provide any management functionality of the TOE." This integration permits Vulnerability Manager to learn about assets through a mechanism other than discovery scans.

5. The Foundstone Database is the data repository for the Vulnerability Manager system. It uses Microsoft SQL Server to store everything from scan settings and results to user accounts and Scan Engine settings. It contains all of the information needed to track organizations and workgroups, manage users and groups, run scans, and generate reports.
6. The Report Server is responsible for generating reports requested by authorized users. It retrieves scan results from the Foundstone Database, prepares the report, and saves it for future review.

All communication between distributed components uses a trusted channel to protect the integrity and confidentiality of the data during transit. The TOE depends on cryptographic and protocol functionality provided by the IT environment for these secure channels.

The following items are excluded from the evaluation:

1. Remediation management and tickets – this is optional functionality requiring the purchase of an additional license. Not evaluated in the evaluated configuration.
2. Notification service - this is optional functionality requiring the purchase of an additional license. Not evaluated in the evaluated configuration.

8 Architecture Information

The TOE consists of a set of software applications. The hardware, operating systems and all third party support software (e.g., DBMS) on the systems on which the TOE executes are excluded from the TOE boundary.

The platform on which the Enterprise Manager software is installed must be dedicated to functioning as the Enterprise Manager. The TOE requires the following hardware and software configuration on this platform.

- Processor Dual Xeon 2Ghz, Dual Core Xeon 2.33Ghz, or better
- Memory 2 GB RAM
- Disk Space 80GB Partition
- Operating System Windows Server 2003 SP2 (minimum)
- Current security updates, including the JScript update provided in
- Microsoft Security Bulletin MS06-023
- Additional Software IIS 6.0
- Current IIS security patches
- World Wide Web Publishing must be running
- OpenSSL v1.2
- PHP v5.2.1
- Network Card Ethernet
- Disk Partition Formats NTFS

The platform on which the Scan Engine software is installed must be dedicated to functioning as a Scan Engine, with the exception of the Primary Scan Engine also providing the API Service and Data Sync Service. The TOE requires the following hardware and software configuration on this platform.

- Processor Dual Xeon 2Ghz, Dual Core Xeon 2.33Ghz, or better
- Memory 2 GB RAM
- Disk Space 80GB Partition
- Operating System Windows Server 2003 SP2 (minimum)
- Current security updates, including the JScript update provided in
- Microsoft Security Bulletin MS06-023
- Additional Software MDAC 2.8
- SQL Client Tools (for Microsoft SQL Server 2005)
- OpenSSL v1.2
- PuTTY SSH Client v0.60jo
- Microsoft Windows Script 5.6
- Network Card Ethernet
- Virtual Memory 2.0 GB
- Disk Partition Formats NTFS
- Required Services NetBIOS over TCP/IP
- Print Spooler

The platform on which the Foundstone Database and Report Server are installed must be dedicated to functioning as the servers for these functions of the TOE. The DBMS is installed on this same platform. The TOE requires the following hardware and software configuration on this platform.

- Processor Dual Xeon 2Ghz, Dual Core Xeon 2.33Ghz, or better
- Memory 2 GB RAM
- Disk Space 80GB Partition
- Operating System Windows Server 2003 SP2 (minimum)
- Current security updates, including the JScript update provided in
- Microsoft Security Bulletin MS06-023
- Additional Software Microsoft SQL Server 2005 SP1and all SQL hotfixes/patches
- Network Card Ethernet
- Virtual Memory 2.0 GB
- Disk Partition Formats NTFS
- SQL Server Memory
- Settings
- 900MB
- Required Services n/a

Authorized users can access the Enterprise Manager through their Web browser software. The TOE supports Microsoft Internet Explorer 6.0 and higher, running on a Windows operating system. Latest service packs should be applied to both your browser and operating system. The security updates in Microsoft Knowledge Base MS06-013 must be applied to the client browser. Recommended minimum screen resolution is 1024 x 768.

9 Product Delivery

Software Delivery Description
McAfee software products are delivered to customers through an electronic download process. Once the purchase of a software product has been processed through the McAfee order fulfillment system, a Grant Code and download instructions are sent to the customer via email.

A URL hyperlink to the download server is communicated to the customer as part of the download instructions. The Grant Code provides access (for up to one month) to the relevant downloadable files on a McAfee download server.

The final release version of the product is tested, authorized for release, and posted to a McAfee download server as shown in Figure 1. Multiple versions of the product may be available on the server. The customer shall download the Common Criteria certified version (as specified in the TOE Security Target) and documentation from the McAfee download server. The documentation package includes installation and supplemental configuration instructions.

Software Delivery Security Mechanisms

General Security Mechanisms

All software released to customers are developed by McAfee software engineers and tested by a dedicated Quality Assurance (QA) organization. When QA considers a release candidate package to be ready for customer release, the results of QA testing are presented to a Management Team for a final authorization to release to web (RTW). If the Management Team gives approval to release the final release candidate package, QA uploads the final product (software and documentation) to the McAfee download server.

QA posts the final, validated files on an internal secured server where the files are scanned for malware and stored. Access controls to this sever are management by McAfee Information Technology group and audited by McAfee Risk Management. QA verifies the integrity of the package prior to posting. QA then uses a proprietary Posting Tool to post the product and documentation files from the internal secured server onto the McAfee download server. The download server is accessible from the Internet by customers who have been explicitly granted access via the Grant Code process. Each Grant Code is unique and only provides access to the products the customer is entitled to. Checksums are saved for all files posted to the download server so that unauthorized modifications may be detected. After posting new files, QA performs a test download and verifies that the checksums are correct.

Download Security Mechanisms

As described above, Grant Codes are unique per customer and provide access to the software the customer has purchased. Grant Codes are sent directly to the named contact on the customer's order and are valid for 30 days before they expire. The McAfee download server uses HTTPS (or SSL encryption) to secure the link between the customer and the download server. After entering the appropriate Grant Code, the customer is presented with a page permitting them to select the available versions of the product they are entitled to download. The customer shall select the appropriate product version (as specified in the TOE Security Target) and associated documentation to download the Common Criteria evaluated product.

The McAfee download server is located at a secure corporate data center behind a series of firewalls within a controlled and monitored DMZ. Download files may only be placed onto the download server by authorized users located within the McAfee corporate intranet. The ability to upload and update the files on the download server is restricted to authorized personal with valid credentials and is subject to explicit approval by management.

The following documents may be down loaded from the McAfee website:

A) McAfee Vulnerability Manager Configuration Manager, 9/18/2009, Foundstone Publication 700-27201--00 / Document Build 1.0

B) Foundstone 6.8 Database Maintenance Guide, 9/18/2009, 700-1625-00 / Document Build 1.0

C) Foundstone Enterprise Install Guide, 9/21/2009, Foundstone Publication 700-1614- / Document Build 1.0

D) 6.8 Enterprise Manager Administrator Guide, Issued 9/18/2009, Foundstone Publication 700-1618-00 / Document Build 1.0

E) Foundstone Enterprise Manager User Guide, Issued 9/18/2009, 27201-4105-00 / Document Build 1.0

F) McAfee 6_8_Technote_FS_System_Requirements.pdf

G) MVM_SCAP_Implementation.pdf

H) McAfee Vulnerability Manager Version 6.8 Installation Supplement, Version 1.0, August 12, 2010

The following documents may be down loaded from the McAfee website, but were not evaluated in the present evaluation:

A) McAfee Vulnerability Manager Configuration Manager, 9/18/2009, Foundstone Publication 700-27201--00 / Document Build 1.0

B) MVM_SCAP_Implementation.pdf

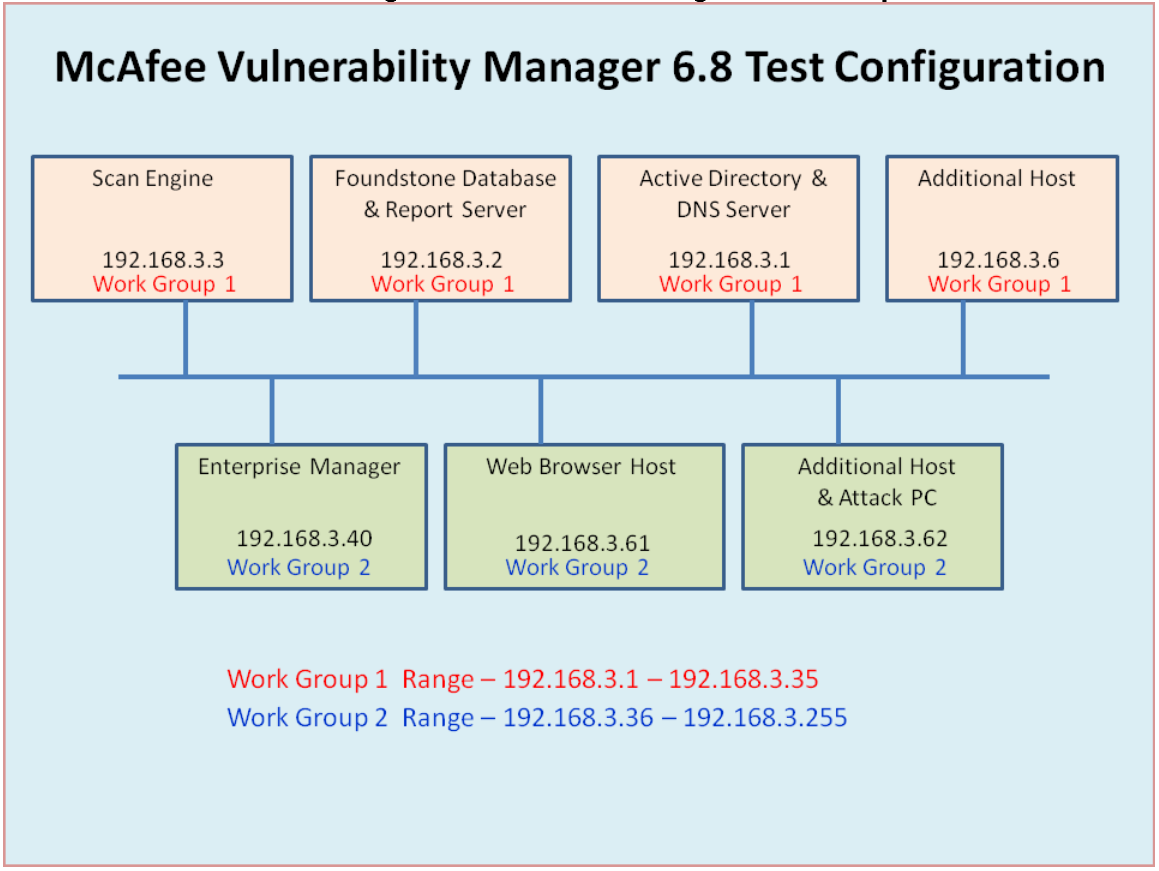
10 IT Product Testing

Testing was completed on November 30, 2010 at the COACT CCTL in Columbia, Maryland. COACT employees performed the tests.

10.1 Evaluator Functional Test Environment

Testing was performed on the following test bed configuration.

Figure 1 - Test Configuration/Setup


McAfee Vulnerability Manager 6.8 Test Configuration
Scan Engine
192.168.3.3
Work Group 1
Foundstone Database & Report Server
192.168.3.2
Work Group 1
Active Directory & DNS Server
192.168.3.1
Work Group 1
Additional Host
192.168.3.6
Work Group 1
Enterprise Manager
192.168.3.40
Work Group 2
Web Browser Host
192.168.3.61
Work Group 2
Additional Host & Attack PC
192.168.3.62
Work Group 2
Work Group 1 Range – 192.168.3.1 – 192.168.3.35
Work Group 2 Range – 192.168.3.36 – 192.168.3.255

An overview of the purpose of each of these systems is provided in the following table.

Table 5 - Test Configuration Overview

System	Purpose
Enterprise Manager	This system provides the Enterprise Manager functionality for the testing.
Scan Engine	This system provides the Scan Engine functionality for the testing. Only one scan engine is used in the testing. The API Service and Data Sync Service are also installed on this platform.
Foundstone Database and Report Server	This system provides the Foundstone Database and report generation functionality for the testing. The DBMS also executes

System	Purpose
	on this platform.
Web Browser Host	This system provides a web browser for accessing the Enterprise Manager.
Active Directory & DNS Server	This system provides the Active Directory and Domain Name System (DNS) infrastructure for the testing.
Additional Host & Attack PC	This is an additional host that will be part of the scanned Work Group 2. This system will also be configured to be used as the Attack PC used for penetration testing.
Additional Host	This is an additional host that will be part of the scanned Work Group 1.
Switch	Not shown in the figure above, but included in the test configuration is a NetGear GS716T switch that will be used to connect the different systems on the network.

Specific configuration details for each of the systems are provided in the tables below.

Table 6 -   Enterprise Manager Details

Enterprise Manager Details	
Processor	Intel Pentium D 2.8G
Memory	2 GB RAM
Disk Space	75GB Partition
Operating System	Windows Server 2003 SP2 Current security updates, including the JScript update provided in Microsoft Security Bulletin MS06-023
Additional Software	IIS 6.0 Current IIS security patches World Wide Web Publishing OpenSSL v1.2 PHP v5.2.1 WireShark 1.0.2 SnagIt 8
Network Card	Ethernet
Disk Partition Formats	NTFS
Configuration	Static IP address 192.168.3.40 FQDN: EM.CoactLab.com

Table 7 - Foundstone Database & Report Server Details

Foundstone Database & Report Server Details	
Processor	Intel P4 3.2 G
Memory	2 GB RAM
Disk Space	40GB Partition
Operating System	Windows Server 2003 SP2 Current security updates, including the JScript update provided in Microsoft Security Bulletin MS06-023
Additional Software	Microsoft SQL Server 2005 SP2and all SQL hotfixes/patches WireShark 1.0.2 SnagIt 8
Network Card	Ethernet
Virtual Memory	2.0 GB
Disk Partition Formats	NTFS
SQL Server Memory Settings	900MB
Required Services	n/a
Configuration	Static IP address 192.168.3.2 FQDN: FDB_RS.CoactLab.com

Table 8 - Scan Engine Details

Item	Purpose
Processor	Intel Xeon 2.8Ghz
Memory	2 GB RAM
Disk Space	38GB Partition
Operating System	Windows Server 2003 SP2 Current security updates, including the JScript update provided in Microsoft Security Bulletin MS06-023
Additional Software	MDAC 2.8 SQL Client Tools (for Microsoft SQL Server 2005) OpenSSL v1.2 PuTTY SSH Client v0.60jo Microsoft Windows Script 5.6 WireShark 1.0.2 SnagIt 8
Network Card	Ethernet
Virtual Memory	2.0 GB

Item	Purpose
Disk Partition Formats	NTFS
Required Services	NetBIOS over TCP/IP
Configuration	Static IP address 192.168.3.3 FQDN: SE.CoactLab.com

Table 9 - Web Browser Host Details

Item	Purpose
Hardware	Processor: 1 GHz Pentium 4 Memory: 1 GB Disk Space: 8 GB
Installed software	Windows XP Professional SP3 Internet Explorer 6.0 SP1or later SnagIt 8 WireShark 1.0.2
Configuration	Static IP address 192.168.3.61 FQDN: WBHost.CoactLab.com

Table 10 - Additional Host & Attack PC Details

Item	Purpose
Installed software	Windows XP Professional SP3 Internet Explorer 6.0 SP1or later WinZip 10 ZENMAP GUI 5.21 Nmap 5.21 NEWT 3 SnagIt 8 WireShark 1.0.2 Nessus Version 4.2 Paros Proxy 3.2.13
Configuration	Static IP address 192.168.3.62 FQDN: Attack.CoactLab.com

Table 11 - Active Directory & DNS Server Details

Item	Purpose
Installed software	Microsoft Windows 2000 Server SP4

Item	Purpose
Configuration	Static IP address 10.1.13.254 FQDN: AD-DNS.CoactLab.com Primary Domain Controller for CoactLab.com

Table 12 - Additional Host PC Details

Item	Purpose
Installed software	Windows XP SP1 WireShark 1.0.8
Configuration	Static IP address 192.168.3.6 FQDN: AddHost.CoactLab.com

10.2 Functional Test Results

The repeated developer test suite includes all of the developer functional tests. Additionally, each of the Security Function and developer tested TSFI are included in the CCTL test suite. Results are found in the E2-0810-004(3) McAfee Vulnerability Manager 6.8 Evaluation Test Report, dated December 2, 2010

Functionality Not Tested

The following SFR has not been tested:

> IDS_STG.2.1 The System shall ignore System data if the storage capacity has been reached.

10.3 Evaluator Independent Testing

The tests chosen for independent testing allow the evaluation team to exercise the TOE in a different manner than that of the developer's testing. The intent of the independent tests is to give the evaluation team confidence that the TOE operates correctly in a wider range of conditions than would be possible purely using the developer's own efforts, given a fixed level of resource. The selected independent tests allow for a finer level of granularity of testing compared to the developer's testing, or provide additional testing of functions that were not exhaustively tested by the developer. The tests allow specific functions and functionality to be tested. The tests reflect knowledge of the TOE gained from performing other work units in the evaluation. The test environment used for the evaluation team's independent tests was identical with the test configuration used to execute the vendor tests.

10.4 Evaluator Penetration Tests

The evaluator examined sources of information publicly available to support the identification of possible potential vulnerabilities in the TOE. The evaluator searched the Internet for potential vulnerabilities in the TOE using the web sites listed below.

A) http://cve.mitre.org

B) http://google.com

C) http://osvdb.org/

D) http://www.securityfocus.com/

E) http://secunia.com/

F) http://www.us-cert.gov

G) http://securitytracker.com/

H) http://web.nvd.nist.gov

I) http://www.cvedetails.com/

The evaluator performed the public domain vulnerability searches using the following key words.

A) McAfee

B) McAfee 6.8

C) McAfee Vulnerability

D) Vulnerability Manager

E) McAfee Manager

The evaluator selected the search key words based upon the following criteria.

A) The searches that contained the keywords "McAfee" were selected to further refine the search directly related to the TOE.

B) The product numbers were selected to determine if any identified vulnerability that was identified was applicable to the TOE.

The evaluator performed the public domain vulnerability searches for the following required third party products.

A) OpenSSL v1.2

B) PHP v5.2.1

C) IIS 6.0

D) MDAC 2.8

E) PuTTY SSH Client v0.60jo

F) Microsoft Windows Script 5.6

G) Microsoft SQL Server 2005 SP1

The evaluator used the following keywords to search for vulnerabilities for the required third party products.

A) OpenSSL v1.2

B) PHP v5.2.1

C) PHP 5.2.1

D) IIS 6.0

E) IIS

F) PuTTY SSH Client v0.60jo

G) PuTTy 0.60

H) Microsoft Windows Script 5.6

I) Windows Script 5.6

J) SQL Server 2005

K) SQL Server 2005 SP1

These keywords were chosen to identify the third party products and then narrow it down to the specific product version number.

The evaluator searched other developers for products and compared the products to the TOE. The evaluator identified the IBM/ISS Proventia Network Enterprise Scanner as a comparable technology type product. Vulnerabilities associated with the Proventia Network Enterprise Scanner were analyzed to determine if these vulnerabilities could be related to the TOE and identified as a potential vulnerability. The keywords used for this search included the following:

A) Proventia

B) Network Enterprise Scanner

C) Vulnerability Scanner

This search was conducted in order to search other developer products and determine if any "technology type" product vulnerabilities could be relevant to this TOE type. These products are specified at their respective product websites.

The evaluators conducted a search to verify if any obvious vulnerabilities exist for the TOE. Additionally, the evaluator examined the provided design documentation and procedures to attempt to identify any additional vulnerabilities.

The evaluator examined sources of information publicly available to identify potential vulnerabilities in the TOE. No specific vulnerabilities were identified that could be associated directly with the TOE. Vulnerability searches were conducted on "technology type" related products. No vulnerabilities were identified that could be associated with the McAfee Vulnerability Manager.

11 VALIDATOR COMMENTS

Remediation management and Notification Service are optional functionality, not included in the TOE, requiring the purchase of additional licenses. These functions are not included in the evaluated configuration.

Security functionality is stated in the TOE Summary Specification portion of the ST with no requirement to back it up. The ST claims that the TOE protects the password from visual detection by echoing back asterisks ("*") for the entered passwords. This was functionality was not verified.

The Validator recommends that strong passwords be used and that passwords are changes often.

12 Security Target

McAfee Corporation’s Vulnerability Manager Version 6.8 Security Target, version 2.4, January 11, 2011.

13 List of Acronyms

AD	Active Directory
ADO	ActiveX Data Objects
API	Application Program Interface
CC	Common Criteria
CCE	Common Configuration Enumeration
CM	Configuration Management
CPE	Common Platform Enumeration
CVE	Common Vulnerabilities and Exposures
CVSS	Common Vulnerability Scoring System
DBMS	DataBase Management System
DNS	Domain Name System
EAL	Evaluation Assurance Level
ePO	ePolicy Orchestrator
FDCC	Federal Desktop Core Configuration
GUI	Graphical User Interface
I&A	Identification & Authentication
ICMP	Internet Control Message Protocol
IDS	Intrusion Detection System
IIS	Internet Information Services
IP	Internet Protocol
IPS	Intrusion Prevention System
IT	Information Technology
LDAP	Lightweight Directory Access Protocol
MAC	Media Access Control
MDAC	Microsoft Data Access Components
NTFS	New Technology File System
NTLM	NT LAN Manager
OS	Operating System
OVAL	Open Vulnerability Assessment Language
PP	Protection Profile
RAM	Random Access Memory
SCAP	Security Content Automation Protocol
SF	Security Function
SFR	Security Functional Requirement
SOAP	Simple Object Access Protocol
SP	Service Pack
SQL	Structured Query Language
SSL	Secure Socket Layer
ST	Security Target
TCP	Transmission Control Protocol
TOE	Target of Evaluation
TSF	TOE Security Function

TSFI .... TSF Interface
UDP .... User Datagram Protocol
XCCDF.. eXtensible Configuration Checklist Description Format

14 Bibliography

The following list of standards was used in this evaluation:

- Common Criteria for Information Technology Security Evaluation, Part 1 Introduction and General Model, Version 3.1, Revision 3, dated July 2009
- Common Criteria for Information Technology Security Evaluation, Part 2 Security Functional Requirements, Version 3.1, Revision 3, dated July 2009
- Common Criteria for Information Technology Security Evaluation, Part 3 Security Assurance Requirements, Version 3.1, Revision 3, dated July 2009
- Common Methodology for Information Technology Security Evaluation, Evaluation Methodology, Version 3.1, Revision 3, dated July 2009
- Guide for the Production of PPs and STs, Version 0.9, dated January 2000