VBI Vulnerabilities
Portfolio

February 24, 2014

<**dtrammell@vulnbroker.com**>
http://www.vulnbroker.com/

Contents

Chapter 1

Foreword

The technical information and intellectual property rights for the vulnerabilities summarized within this portfolio are available for purchase under the terms of your contract with VBI. This portfolio is intended to provide a current listing of available vulnerabilities with enough information to be able to make an initial determination of interest for any particular vulnerability. If there is a piece of information regarding any vulnerability that you feel would assist in making such a determination, please engage in a direct dialog with a VBI representative.

1.1 Document Formatting

The format of this document provides structured content for convenient navigation. Each Vendor has it's own "chapter", each target system or product has it's own "section", and each individual vulnerability has it's own "subsection". By perusing the vulnerability listing provided by the Table of Contents at the beginning of this document, any vulnerability of interest should be easily identifiable. Your PDF document reader should then allow you to click directly on the vulnerability ID or name in the Table of Contents listing and navigate directly to the summary information for that vulnerability.

1.2 Properties and Definitions

1.2.1 Vulnerability Properties

- Expiration Date

  This is the date that availability of the vulnerability listed through this channel will expire and it will be marketed or sold through other channels. This may include outside exclusive sale, sale to a vulnerability purchasing program or bug bounty, or direct disclosure to the affected vendor.

- Listing Date

  This is the date that the vulnerability was originally listed in our portfolio. This date can be used to gage the relative maturity of a vulnerability.

- Platforms

  Some software products are cross-platform or available for multiple platforms. This collection of properties describes the platforms tested and assumed to be affected by the vulnerability as well as tested unaffected platforms.

    – The "Affected Platforms Tested" property identifies platforms that have been tested and verified vulnerable.
    – The "Affected Platforms Assumed" property describes platforms that are assumed to be vulnerable but have not been explicitly tested.
    – The "Unaffected Platforms" property describes versions that have been tested and verified unaffected.

  Examples include values such as:

    – *All Microsoft Windows*
    – *x86-32 Microsoft Windows XP*
    – *x86-32 Microsoft Windows XP SP3*
    – *x86-64 Microsoft Windows Vista SP2 FP(2012.05.01)*
    – *Linux Kernel 2.6.23*
    – *Apple Mac OS X 10.6.1*
    – *Solaris 9*

  The indicator *FP()* indicates that a platform has been fully patched to the indicated date.

  Note that Platforms are listed with reference numbers that are used in the Vulnerability Test Matrix.

- Reliability Rating

  This property describes how reliable triggering the vulnerability is, and is rated anywhere from *Completely Reliable* (100%) to *Cross Your Fingers and Pray* (<10%)

- Target

  This property describes the vulnerable target. This may include software such as an application, library, or firmware, or hardware such as an integrated circuit, logic board, or hardware system such as a hardware radio or mobile cellular device.

- Versions

  This collection of properties describe what version or versions of the affected software or hardware has been tested or is assumed vulnerable, as well as versions tested and verified unaffected.

    – The "Affected Versions Tested" property identifies versions that have been tested and verified vulnerable.
    – The "Affected Versions Assumed" property describes versions that are assumed to be vulnerable but have not been explicitly tested.
    – The "Unaffected Versions" property describes versions that have been tested and verified unaffected.

- Vulnerability Class

  This property describes the type of vulnerability. Example values include the following:

- Design/Logic Flaw
- Memory Corruption
- Input Validation Error or Omission
- Misconfiguration
- Information Disclosure
- Cryptographic Flaw
- Denial-of-Service

- VBI Asset Availability

  This property describes the methods of purchase that the asset is available to be purchased as. Methods include:

  - Exclusive Sale - The asset is available for one-time, exclusive sale.
  - Non-exclusive Sale - The asset is available for non-exclusive sale, indicating that it may be sold multiple times to different Customers.
  - Monthly License - The asset is available to be licensed for use on a month-by-month basis.

- VBI Asset Type

  This property describes the type of asset that is listed, which will either be *Brokered* or *Internal*. *Brokered* assets are assets that VBI is marketing on behalf of a Client whereas *Internal* are internally developed assets from VBI R&D. *Brokered* assets will be further denoted whether they are available for *Immediate Delivery* or if we will perform testing and validation after receiving a Purchase Order and before delivery (*Delayed Delivery*).

1.2.2 Vulnerability Test Matrix

The Vulnerability Test Matrix is intended to provide an exact listing of which vulnerable versions have been tested in combination with which platforms. The matrix lists vulnerable versions down the left side of the matrix (rows) and platforms across the top of the matrix (columns). Platforms are listed as numbers corresponding to their place in the Vulnerability Information's Platforms list. Individual combination cell values are as follows:

- **"V"** - Combination has been tested as Vulnerable

- **"N"** - Combination has been tested as Not Vulnerable

- **blank** - Combination is untested

1.2.3 Asset Deliverables

- Documentation

  This property describes the documentation deliverables of the asset.

- Exploits

  This property describes the exploit and proof-of-concept deliverables of the asset.

1.2.4   Exploit Properties

The Exploit Properties section may be duplicated any number of times to describe all of the exploit and proof-of-concept deliverables that the asset includes.

- Attack Vector

  This property describes the implemented or most effective perceived attack vector for exploitation of the vulnerability. Values include:

  - **Local** - The vulnerability requires local access to the target for exploitation.
  - **Remote** - The vulnerability can be exploited remotely across a network.
  - **Client-Side** - The vulnerability resides in client software such as a web browser, email application, media player, etc.
  - **File Format** - The vulnerability is exploited via a malicious file.

  This property may also be augmented by a qualifier. Qualifiers include:

  - Post-auth - The attack vector requires authentication of some form prior to exploitation.
  - Passive - The attack is passive in that it requires action on the part of the target to trigger the payload.

- Development Goal

  This property describes our Client's development goal and indicates the development target should our Client be actively developing the vulnerability. Values include:

  - **Information** - A dossier of information about the vulnerability that does not include an exploit.
  - **Instructions** - A written instruction set describing how to exploit the vulnerability.
  - **Proof-of-Concept** - An executable, malicious file, malicious web page, or other material that triggers or otherwise demonstrates the existence of the vulnerability.
  - **Exploit** - An executable, malicious file, malicious web page, or other material that leverages the vulnerability to accomplish something benign such as execute a harmless application, spawn a dialog box, etc.
  - **Professional Exploit** - An exploit that contains an operational payload that accomplishes a task such as the addition of an administrative user on the system, opens a backdoor port on the network interface, spawns a command shell and connects it to a remote host, etc. This also includes exploits written to integrate with an attack or exploitation framework that can provide the exploit with an operational payload such as Metasploit, CORE IMPACT, or Immunity Canvas.
  - **Utility** - An executable that does not exploit the vulnerability itself but otherwise assists in the exploitation of the vulnerability. Utilities would include applications such as malicious file exploit generators, network scanners, etc.

- Development Status

  This property indicates whether our Client is actively developing the vulnerability. Values are either *Active*, *Inactive*, or *Complete*.

- Exploit Features

  This property lists any additional features that the Proof-of-Concept or exploit provides that are not covered by the other listing properties. Examples of such items are:

  - Metasploit Exploit Module
  - ASLR Handled
  - DEP Bypass
  - ROP Payload
  - Encoding-based Evasions

- Exploitation Context

  This property describes the context within which the successful result of exploitation will operate; usually, the level of access to the target that is obtained. Values include:

  - **User** - The user running the software or application.
  - **SuperUser** - Some elevated level of access beyond a regular user.
  - **Root** - The root account on a UNIX or UNIX-like operating system.
  - **Administrator** - Administrator access on a Microsoft operating system.
  - **Kernel** - Within the context of the running kernel.
  - **File** - Access to or the contents of a particular file.

- Exploitation Impact

  This property describes the result from exploitation of the vulnerability. Values include:

  - **Code Execution** - Arbitrary machine code execution can be achieved.
  - **Command Execution** - Arbitrary shell commands are able to be executed.
  - **Denial of Service** - The target becomes unavailable or unresponsive.

- Exploitation Indicators

  This property describes indicators left on a target system or within target data that may indicate that the target had been attacked. This includes objects left in the filesystem, event or system logs, crashing processes, etc.

- Prerequisites

  This property describes any components or software other than the vulnerable software that must be present on the target system for the exploit or Proof-of-Concept to function as expected.

- Reliability Rating

  This property describes how reliable the developed exploitation method is, and is rated anywhere from *Completely Reliable* (100%) to *Cross Your Fingers and Pray* (<10%)

- Supported Targets

  This property explicitly lists the targets supported by the Proof-of-Concept or exploit. Targets are combinations of vulnerable versions and platforms. Examples of targets are as follows:

  - Java 1.6.24 on Internet Explorer 8 on Windows XP SP3

- – 2.3.x on Windows 7 SP1
- – 2.3.14 on All Microsoft Windows

- VBI Exploit ID

  This property is an identifier for when referring to the specific exploit or proof-of-concept deliverable described.

- Windows Integrity Level

  This property describes the Windows integrity level[1] achieved by exploitation on Windows platforms that have User Access Controls implemented. On Windows platforms with UAC, processes execute at a given integrity level which may or may not limit that process's access to certain system resources. Integrity levels are listed below:

  - – Low (IE Protected Mode)
  - – Medium (User)
  - – High
  - – System

Chapter 2

Adobe Systems Incorporated

"Adobe[2] revolutionizes how the world engages with ideas and information. Our award-winning software and technologies have set the standard for communication and collaboration for more than 25 years, bringing vital and engaging experiences to people across media and to every screen in their lives, at work and at play.

The impact of Adobe software is evident almost everywhere you look. Whether people are collaborating at work, transacting online, or socializing with friends, businesses use Adobe software and technologies to turn digital interactions into richer, high-value experiences that reach across computing platforms and devices to engage people anywhere, anytime.

With a reputation for excellence and a portfolio of many of the most respected and recognizable software brands, Adobe is one of the world's largest and most diversified software companies."

2.1 Flash Player

"Adobe® Flash® Player[3] is a cross-platform browser-based application runtime that delivers uncompromised viewing of expressive applications, content, and videos across screens and browsers. Flash Player 10.1 is optimized for high performance on mobile screens and designed to take advantage of native device capabilities, enabling richer and more immersive user experiences."

VBI-12-033   Adobe Flash Player Client-side Remote Code Execution

Vulnerability Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2012.07.15

Vulnerability Class	Memory Corruption
Affected Versions Tested	11.3.300.265 11.2.202.228
Affected Versions Assumed	Versions between 11.2.202.228 and 11.3.300.265
Unaffected Versions	
Affected Platforms Tested	1: Internet Explorer 9.0.8112 on x86-32 Microsoft Windows 7 SP1 FP(2012.07.15) 2: Mozilla Firefox 13.0.1 on x86-32 Microsoft Windows 7 SP1 FP(2012.07.15) 3: Google Chrome 20.0.1132.57 m on x86-32 Microsoft Windows 7 SP1 FP(2012.07.15) 4: Internet Explorer 9.0.8112 on x86-64 Microsoft Windows 7 SP1 FP(2012.07.15) 5: Mozilla Firefox 13.0.1 on x86-64 Microsoft Windows 7 SP1 FP(2012.07.15) 6: Google Chrome 20.0.1132.57 m on x86-64 Microsoft Windows 7 SP1 FP(2012.07.15) 7: Internet Explorer 9.0.8112 on x86-64 Microsoft Windows Vista SP2 FP(2012.07.15) 8: Mozilla Firefox 13.0.1 on x86-64 Microsoft Windows Vista SP2 FP(2012.07.15) 9: Google Chrome 20.0.1132.57 m on x86-64 Microsoft Windows Vista SP2 FP(2012.07.15) 10: Internet Explorer 9.0.8112 on x86-32 Microsoft Windows Vista SP2 FP(2012.07.15) 11: Mozilla Firefox 13.0.1 on x86-32 Microsoft Windows Vista SP2 FP(2012.07.15) 12: Google Chrome 20.0.1132.57 m on x86-32 Microsoft Windows Vista SP2 FP(2012.07.15) 13: Internet Explorer 8.0.6001 on x86-32 Microsoft Windows XP SP3 FP(2012.07.15) 14: Mozilla Firefox 13.0.1 on x86-32 Microsoft Windows XP SP3 FP(2012.07.15) 15: Google Chrome 20.0.1132.57 m on x86-32 Microsoft Windows XP SP3 FP(2012.07.15) 16: Mozilla Firefox 13.0.1 on x86-64 Ubuntu Linux 12.04 FP(2012.07.15)
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
11.3.300.265	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
11.2.202.228	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V

Exploit / Proof-of-Concept Information

Supported Targets	Internet Explorer 9.0.8112 on x86-32 Microsoft Windows 7 SP1 FP(2012.07.15)
	Mozilla Firefox 13.0.1 on x86-32 Microsoft Windows 7 SP1 FP(2012.07.15)
	Google Chrome 20.0.1132.57 m on x86-32 Microsoft Windows 7 SP1 FP(2012.07.15)
	Internet Explorer 9.0.8112 on x86-64 Microsoft Windows 7 SP1 FP(2012.07.15)
	Mozilla Firefox 13.0.1 on x86-64 Microsoft Windows 7 SP1 FP(2012.07.15)
	Google Chrome 20.0.1132.57 m on x86-64 Microsoft Windows 7 SP1 FP(2012.07.15)
	Internet Explorer 9.0.8112 on x86-64 Microsoft Windows Vista SP2 FP(2012.07.15)
	Mozilla Firefox 13.0.1 on x86-64 Microsoft Windows Vista SP2 FP(2012.07.15)
	Google Chrome 20.0.1132.57 m on x86-64 Microsoft Windows Vista SP2 FP(2012.07.15)
	Internet Explorer 9.0.8112 on x86-32 Microsoft Windows Vista SP2 FP(2012.07.15)
	Mozilla Firefox 13.0.1 on x86-32 Microsoft Windows Vista SP2 FP(2012.07.15)
	Google Chrome 20.0.1132.57 m on x86-32 Microsoft Windows Vista SP2 FP(2012.07.15)
	Internet Explorer 8.0.6001 on x86-32 Microsoft Windows XP SP3 FP(2012.07.15)
	Mozilla Firefox 13.0.1 on x86-32 Microsoft Windows XP SP3 FP(2012.07.15)
	Google Chrome 20.0.1132.57 m on x86-32 Microsoft Windows XP SP3 FP(2012.07.15)
Attack Vector	Client-side
Exploitation Impact	Code Execution
Exploitation Context	Sandboxed on Mozilla Firefox 13.0.1 on Windows 7 and Vista targets
	User on Internet Explorer and Windows XP targets
Windows Integrity Level	Low on Internet Explorer targets
	Low (sandboxed) on Mozilla Firefox targets
Exploitation Indicators	Target process crashes after successful exploitation*
Prerequisites	
Reliability Rating	High (90%) for Windows XP SP3 targets (DEP)
	Medium (50%) for Internet Explorer on Windows 7 SP1 and Vista SP2 targets (ASLR+DEP)
	Medium (50%) for Firefox on Windows 7 and Vista targets
	Medium (50%) for Chrome on Windows targets
Development Status	Active*
Development Phase	Exploit
Development Goal	Exploit

Table continued on next page...

Exploit Features	ASLR bypass via memory disclosure
	DEP handling via ROP

* Ongoing development to improve reliability to 100%, provide a sandbox bypass for Firefox targets, and provide process continuation for the target browser processes.

2.2 Photoshop CS6

"Adobe Photoshop CS6[4] delivers magic that helps you bring your creative vision to life. Edit raw image files and other photos with state-of-the-art photo editing. Create compelling HDR images, black-and-whites, and panoramas. Retouch images with astonishing ease and control. Design anything you can imagineat amazing speed. Paint and draw naturally and expressively. Even put your ideas in motion by intuitively creating stunning videos.

- Experience imaging magicCorrect, refine, and composite images with remarkable ease and control. New Content-Aware features take image retouching to a new level. Get superior results when you crop, correct wide-angle lens curvatures, auto-correct, and more.

- Maximize your creativityExperience creative breakthroughs with features that expand your visual language. Intuitively create videos within the familiar Photoshop environment. Work more fluidly with new and reengineered design tools. Create custom photographic blurs, and paint and draw more expressively.

- Achieve peak performanceTake full advantage of your hardwares power and save significant time. Edit at blazingly fast speeds with the new Mercury Graphics Engine. Boost your productivity with new preset migration and sharing, new auto-recovery and background save options, and a modern user interface.

"

VBI-13-011   Adobe Photoshop CS6 Client-side Remote Code Execution

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013.06.22
Expiration Date	

Vulnerability Information

Target	Adobe Photoshop CS6
Vulnerability Class	Memory Corruption
Affected Versions Tested	13.1.2 x64
	13.1.2 x32
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x64 Microsoft Windows 7 SP1 (FP:2013-06-22)
	2: x32 Microsoft Windows 7 SP1 (FP:2013-06-22)
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2
13.1.2 x64	V	
13.1.2 x32	V	V

Exploit / Proof-of-Concept Information

Supported Targets	13.1.2 x64 on x64 Microsoft Windows 7
	13.1.2 x32 on x64 Microsoft Windows 7
	13.1.2 x32 on x32 Microsoft Windows 7
Attack Vector	Client-side File Format
Exploitation Impact	Code Execution
Exploitation Context	User
Windows Integrity Level	Medium
Exploitation Indicators	
Prerequisites	Network connectivity*
Reliability Rating	Very High (99%)**
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	ASLR handled
	DEP bypassed
	Process continuation

* Exploitation makes use of a two-stage payload. The second stage is downloaded from an attacker-controlled webdav server.
** Each target was tested 30 times, with 1 failure out of all 90.

Chapter 3

ASUS

"ASUS[5] takes its name from Pegasus, the winged horse in Greek mythology that symbolises wisdom and knowledge. ASUS embodies the strength, purity, and adventurous spirit of this fantastic creature, and soars to new heights with each new product it creates.

The Taiwanese information technology industry has grown enormously over the last few decades and the country is now a dominant player in the global market. ASUS has long been at the forefront of this growth and although the company started life as a humble motherboard manufacturer with a handful of employees, it is now the leading technology company in Taiwan and employs over 11,000 people around the world. ASUS makes products in almost every conceivable category of information technology too, including PC components and peripherals, notebooks, tablets, servers and smartphones.

Innovation is key to the success of ASUS. Having unveiled the PadFone to a rapturous audience at Computex 2011, this year ASUS chairman Jonney Shih raised the bar once more with the announcement of the TAICHI and Transformer Book dual-purpose mobile devices.

The ASUS TAICHI is an Ultrabook with a double-sided display that allows it to be used as a tablet when the lid is closed, while the Transformer Book is a tablet that can be docked to a keyboard for instant transformation into an Ultrabook.

Together with the Tablet 810 with Windows 8 and Tablet 600 with Windows RT, ASUS has an array of products that will surpass its users imaginations as the world enters a new era of cloud computing.

This visionary approach is why ASUS is a major proponent in bringing quality innovation and design into its users lives. ASUS products won 3,886 international awards and accolades in 2011, and company revenue was over US$11.9 billion."

3.1   BIOS Device Driver

"The device driver for ASUS motherboard BIOS chips."

VBI-13-015   ASUS BIOS Device Driver Local Privilege Escalation

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013.08.12
Expiration Date	

Vulnerability Information

Target	ASUS BIOS Device Driver
Vulnerability Class	Design or Logic Flaw
Affected Versions Tested	V71803
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x64 Microsoft Windows 7 SP1
Affected Platforms Assumed	All Windows supported by driver
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
V71803	V

Exploit / Proof-of-Concept Information

Supported Targets	V71803 on x64 Microsoft Windows 7 SP1
Attack Vector	Local
Exploitation Impact	Unsigned Code Execution
Exploitation Context	Kernel
Windows Integrity Level	n/a
Exploitation Indicators	Log entries indicating driver load and unload
Prerequisites	Administrator*
Reliability Rating	Completely (100%)
Development Status	Active
Development Phase	Proof-of-Concept allowing arbitrary code execution
Development Goal	Custom Exploit**
Exploit Features	Evades Signed driver check
	Bypasees KASLR
	Evades DEP

* Administrator access to the system is required as the vulnerable driver, which is delivered by the exploit, must be loaded prior to exploitation.
** Exploit payload and impact can be customized upon request.

Chapter 4

AVAST Software a.s.

"AVASTs[6] roots go back to 1988, when Czech researchers Eduard Kuera and Pavel Baudi encountered the Vienna Virus and began their quest to save the worlds computers from it and others like it.

Today, AVAST has over professionals headquartered in Prague, Czech Republic, additional offices in Austria, Germany, and the USA, distribution partners in all markets, and a global community of avast! enthusiasts."

4.1   avast! Anti-Virus

"avast![7] is, both freeware and commercial, an antivirus computer program with user interface that includes 41 languages, available for Microsoft Windows, Mac OS X and Linux platforms. The name Avast is an acronym of 'Anti-Virus Advanced Set'.

avast! has been awarded the VB100 Award by Virus Bulletin multiple times for 100% detection of "in-the-wild" viruses and also won the Secure Computing Readers' Trust Award. The central scanning engine has been certified by ICSA Labs and West Coast Labs' Checkmark process."

VBI-13-005   avast! Local Information Disclosure

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013.04.26
Expiration Date	

Vulnerability Information

Target	avast! Anti-Virus
Vulnerability Class	Information Disclosure
Affected Versions Tested	8.0.1485 8.0.1484 8.0.1483
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32 Microsoft Windows 7 SP1 FP(2013.04.26) 2: x86-32 Microsoft Windows XP SP3 FP(2013.04.26)
Affected Platforms Assumed	All Microsoft Windows 7 All Microsoft Windows XP
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2
8.0.1485	V	V
8.0.1484		V
8.0.1483		V

Exploit / Proof-of-Concept Information

Supported Targets	8.0.1485 on x86-32 Microsoft Windows 7 SP1 8.0.1485 on x86-32 Microsoft Windows XP SP3 8.0.1484 on x86-32 Microsoft Windows XP SP3 8.0.1483 on x86-32 Microsoft Windows XP SP3
Attack Vector	Local
Exploitation Impact	Information Disclosure: Kernel Memory
Exploitation Context	User
Windows Integrity Level	Current
Exploitation Indicators	Leaked memory data is written to file (erased upon reboot) Access Violation system crash if invalid address is targetted for disclosure If the avast! AutoSandbox is enabled, each executable will be analyzed and an alert window is shown to the user however the exploit still succeeds.
Prerequisites	
Reliability Rating	Completely (100%)
Development Status	Active
Development Phase	Exploit
Development Goal	Metasploit Exploit with post-exploitation cleanup
Exploit Features	Process continuation

VBI-13-010   avast! Anti-Virus Local Privilege Escalation

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013-06-03
Expiration Date	

Vulnerability Information

Target	avast! Anti-Virus
Vulnerability Class	Race Condition
	Memory Corruption
Affected Versions Tested	Free 8.0.1489
	Free 8.0.1488
	Free 8.0.1487
	Free 8.0.1486
	Free 8.0.1485
	Free 8.0.1484
	Free 8.0.1483
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32 Microsoft Windows 7 SP1 (FP:2013-06-05) English
	2: x86-32 Microsoft Windows XP SP3 Spanish
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2
Free 8.0.1489	V	V
Free 8.0.1488	V	V
Free 8.0.1487	V	V
Free 8.0.1486	V	V
Free 8.0.1485	V	V
Free 8.0.1484	V	V
Free 8.0.1483	V	V

Exploit / Proof-of-Concept Information

Supported Targets	Free 8.0.1489 on x86-32 Microsoft Windows 7 SP1 (FP:2013-06-05) English
	Free 8.0.1489 on x86-32 Microsoft Windows XP SP3 Spanish
	Free 8.0.1488 on x86-32 Microsoft Windows 7 SP1 (FP:2013-06-05) English
	Free 8.0.1488 on x86-32 Microsoft Windows XP SP3 Spanish
Attack Vector	Local
Exploitation Impact	Code Execution
Exploitation Context	SYSTEM
Windows Integrity Level	High
Exploitation Indicators	Data remains in configuration file which is erased upon reboot. If the avast! AutoSandbox is enabled, each executable will be analyzed and an alert window is shown to the user however the exploit still succeeds.
Prerequisites	
Reliability Rating	High (95%)
Development Status	Active
Development Phase	Exploit for Windows XP SP3
Development Goal	Professional Exploit for Multiple Windows platforms including Windows 7
Exploit Features	Process continuation

Chapter 5

Barracuda Networks, Inc.

"Barracuda Networks, Inc.[8] offers industry-leading solutions designed to solve mainstream IT problems efficiently and cost effectively while maintaining a level of customer support and satisfaction second to none. Our products span three distinct markets, including: 1) content security, 2) networking and application delivery, as well as 3) data storage, protection and disaster recovery.

While we maintain a strong heritage in email and web security appliances, our award-winning portfolio includes more than a dozen purpose-built solutions that support literally every aspect of the network providing organizations of all sizes with true end-to-end protection that can be deployed in hardware, virtual, cloud and mixed form factors.

CitiBank, Coca-Cola, Delta Dental, FedEx, Harvard University, IBM, L'Oreal, Liberty Tax Service, Mythbusters and Spokane Public Schools are amongst the more than 150,000 organizations worldwide confidently protecting their users, applications and data with Barracuda Networks solutions. The company is privately held with its international headquarters and manufacturing facility based in Campbell, California. Barracuda Networks has offices in eight international locations and distributors in more than 80 countries worldwide."

5.1   Web Filter

"The Barracuda Web Filter[9] is an integrated content filtering, application blocking and malware protection solution that is powerful, easy to use and affordable for businesses of all sizes. It enforces Internet usage policies by blocking access to Web sites and Internet applications that are not related to business, and it easily and completely eliminates spyware and other forms of malware from your organization. No more costly staff time lost repairing infected computers."

VBI-13-000   Barracuda Web Filter Remote Privileged Code Execution

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2012.01.07
Expiration Date	

Vulnerability Information

Target	Barracuda Web Filter Firmware
Vulnerability Class	Input Validation
Affected Versions Tested	5.1.1.004
	5.1.0.013
	5.0.0.016
	5.0.0.014
	5.0.0.012
	5.0.0.011
	5.0.0.010
	5.0.0.006
	5.0.0.004
	5.0.0.003
	5.0.0.002
	4.5.0.001
	4.4.0.015
	4.4.0.012
	4.4.0.011
	4.4.0.010
	4.4.0.006
	4.4.0.004
	4.4.0.003
	4.4.0.002
	4.3.0.015
	4.3.0.014
	4.3.0.013
	4.3.0.011
	4.3.0.010
	4.3.0.009
	4.3.0.008
	4.2.0.014
	4.2.0.013
	4.2.0.011
	4.2.0.007
	4.2.0.006
	4.2.0.005
	4.1.0.015
	4.1.0.011

	4.1.0.007
	4.1.0.006
	4.1.0.005
	3.0.1.18
Affected Versions Assumed	5.x*
	4.x*
	3.x*
Unaffected Versions	6.0.0.013
	6.0.0.012
	6.0.0.011
	6.0.0.010
Affected Platforms Tested	1: Web Filter 210
	2: Web Filter 310
	3: Web Filter 410
	4: Web Filter 610
	5: Web Filter 810
	6: Web Filter 1010
	7: Web Filter 310 Vx
Affected Platforms Assumed	Web Filter 410 Vx
	Web Filter 610 Vx
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2	3	4	5	6	7
5.1.1.004				V	V		
5.1.0.013		V					
5.0.0.016							V
4.5.0.001		V					
4.4.0.012		V					V
3.0.1.018		V					

Exploit / Proof-of-Concept Information

Supported Targets	5.1.1.004 on Web Filter 810
	5.1.1.004 on Web Filter 610
	5.1.0.013 on Web Filter 310
	4.5.0.001 on Web Filter 310
	4.4.0.012 on Web Filter 310
	3.0.1.018 on Web Filter 310
Attack Vector	Remote
Exploitation Impact	Code Execution
	Command Execution
	Proxy Zone Bypass

Exploitation Context	root
Exploitation Indicators	Web server log entries
Prerequisites	Network connectivity to proxy port (default 8080) or Web Admin port (default 8000, sometimes 80 or 443) on the target
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	2 Professional Metasploit Exploits
Development Goal	2 Professional Metasploit Exploits
Exploit Features	Post-exploitation cleanup IDS/IPS evasion Combined/minimal protocol requests Multiple Payloads: remote shell, command execution Optional Actions: retrieve admin password, file upload

* The vulnerability is located in code that is universal and identical in all 3.x, 4.x, and 5.x firmware.

VBI-13-002   Barracuda Web Filter Remote Privileged Code Execution

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase Non-Exclusive Purchase Monthly License
Listing Date	2012.02.22
Expiration Date	

Vulnerability Information

Target	Barracuda Web Filter Firmware
Vulnerability Class	Input Validation
Affected Versions Tested	5.1.1.004 5.1.0.013 5.0.0.016 5.0.0.014 5.0.0.012 5.0.0.011 5.0.0.010 5.0.0.006 5.0.0.004 5.0.0.003 5.0.0.002 4.5.0.001

	4.4.0.015
	4.4.0.012
	4.4.0.011
	4.4.0.010
	4.4.0.006
	4.4.0.004
	4.4.0.003
	4.4.0.002
	4.3.0.015
	4.3.0.014
	4.3.0.013
	4.3.0.011
	4.3.0.010
	4.3.0.009
	4.3.0.008
	4.2.0.014
	4.2.0.013
	4.2.0.011
	4.2.0.007
	4.2.0.006
	4.2.0.005
	4.1.0.015
	4.1.0.011
	4.1.0.007
	4.1.0.006
	4.1.0.005
	3.0.1.18
Affected Versions Assumed	5.x*
	4.x*
	3.x*
Unaffected Versions	6.0.0.013
	6.0.0.012
	6.0.0.011
	6.0.0.010
Affected Platforms Tested	1: Web Filter 210
	2: Web Filter 310
	3: Web Filter 410
	4: Web Filter 610
	5: Web Filter 810
	6: Web Filter 1010
	7: Web Filter 310 Vx
Affected Platforms Assumed	Web Filter 410 Vx
	Web Filter 610 Vx
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2	3	4	5	6	7
5.1.1.004				V	V		
5.1.0.013		V					
5.0.0.016							V
4.5.0.001		V					
4.4.0.012		V					V
3.0.1.018		V					

Exploit / Proof-of-Concept Information

Supported Targets	5.1.1.004 on Web Filter 810
	5.1.1.004 on Web Filter 610
	5.1.0.013 on Web Filter 310
	5.0.0.016 on Web Filter 310 Vx
	4.5.0.001 on Web Filter 310
	4.4.0.012 on Web Filter 310
	4.4.0.012 on Web Filter 310 Vx
	3.0.1.018 on Web Filter 310
Attack Vector	Post-Auth Remote
Exploitation Impact	Code Execution
	Command Execution
	Proxy Zone Bypass
Exploitation Context	root
Exploitation Indicators	Web server log entries
Prerequisites	Network connectivity to proxy port (default 8080) or Web Admin port (default 8000, sometimes 80 or 443) on the target
	Successful Authentication
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	2 Professional Metasploit Exploits
Development Goal	2 Professional Metasploit Exploits
Exploit Features	Post-exploitation cleanup
	IDS/IPS evasion
	Combined/minimal protocol requests
	Multiple Payloads: remote shell, command execution
	Optional Actions: retrieve admin password, file upload

* The vulnerability is located in code that is universal and identical in all 3.x, 4.x, and 5.x firmware.

Chapter 6

Dell, Inc.

"For more than 28 years, Dell[10] has empowered countries, communities, customers and people everywhere to use technology to realize their dreams. Customers trust us to deliver technology solutions that help them do and achieve more, whether they're at home, work, school or anywhere in their world."

6.1 SonicWALL

"Dell SonicWALL[11] solutions are available for small and mid-sized business customers through large enterprise customers. They are deployed in large campus environments, distributed enterprise settings, government, retail point-of-sale and healthcare segments. Due to the constantly evolving landscape of threats, organizations need to deploy more comprehensive, dynamic security solutions. Dell SonicWALLs dynamic network security and data protection enable Dell to offer comprehensive Next-Generation Firewall and Unified Threat Management solutions. In addition, Dell SonicWALL also provides Secure Remote Access, Email Security, Backup and Recovery, and Management and Reporting to organizations of all sizes. Its Global Management System allows network administrators to centrally manage and provision thousands of security appliances across a widely distributed network."

VBI-12-031   Dell SonicWALL Multiple Products Remote Command Execution

Vulnerability Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2012.07.04
Expiration Date	
Vulnerability Class	Logic Flaw

Affected Versions Tested	Analyzer 7.0
	GMS 6.0.2 SP2*
	GMS 6.0 SP2*
	GMS 6.0*
	GMS 5.1.1*
	ViewPoint 6.0.2 SP2*
	ViewPoint 6.0 SP2*
	ViewPoint 6.0*
	ViewPoint 5.1.1*
Affected Versions Assumed	GMS 6.0 SP1*
	ViewPoint 6.0 SP1*
Unaffected Versions	
Affected Platforms Tested	1: x86-64 Microsoft Windows 2008 R2 FP(2012.06.25)
	2: Vendor-provided Virtual Appliance
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2
Analyzer 7.0		V
GMS 6.0.2 SP2	V	V
GMS 6.0.2	V	V
GMS 6.0 SP2	V	V
GMS 6.0	V	V
GMS 5.1.1	V	
ViewPoint 6.0.2 SP2	V	V
ViewPoint 6.0.2	V	V
ViewPoint 6.0 SP2	V	V
ViewPoint 6.0	V	V
ViewPoint 5.1.1	V	

Exploit / Proof-of-Concept Information

Supported Targets	Analyzer 7.0 on Virtual Appliance
	GMS 6.x on Virtual Appliance
	ViewPoint 6.x on x86-64 Microsoft Windows 2008 R2 FP(2012.06.25)
	ViewPoint 6.x on Virtual Appliance
Attack Vector	Remote Post-auth
Exploitation Impact	Command Execution
Exploitation Context	Webinterface Administrator
Windows Integrity Level	None

Exploitation Indicators	Single log entry indicating that the admin user could not be authenticated.
Prerequisites	The web interface must be acceesible to the attacker.
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Instructional**
Development Goal	Instructional**
Exploit Features	

* Hotfixes 90982, 104767, and 108886 can be applied to all versions noted, however none of these affect the vulnerability.

** No exploit is required; the vulnerability can be leveraged using any standard web browser.

Chapter 7

Dell SonicWALL

"Dell^{TM} SonicWALL®[12] provides intelligent network security and data protection solutions that enable customers and partners to dynamically secure, control, and scale their global networks. Using input from millions of shared touch points in the SonicWALL Global Response Intelligent Defense (GRID) Network, the SonicWALL Threat Center provides continuous communication, feedback, and analysis on the nature and changing behavior of threats. SonicWALL Research Labs continuously processes this information, proactively delivering countermeasures and dynamic updates that defeat the latest threats. Patented1 Reassembly-Free Deep Packet Inspection technology, combined with multi-core parallel architecture, enables simultaneous multi-threat scanning and analysis at wire speed and provides the technical framework that allows the entire solution to scale for deployment in high bandwidth networks. Dell SonicWALL network security and data protection solutions, available for the SMB through the Enterprise, are deployed in large campus environments, distributed enterprise settings, government, retail point-of-sale and healthcare segments, as well as through service providers.

Dell SonicWALL has been hailed by industry publications such as Network World, InfoWorld, PC Magazine, and SC Magazine for easy to use, high quality, and high performance appliances and services. Gartner named SonicWALL in the Visionaries Quadrant in the SSL VPN Magic Quadrant 2011, and most recently named SonicWALL in the Leaders Quadrant in their 2012 Unified Threat Management Magic Quadrant. In the NSS Labs 2012 Next-Generation Firewall Security Value Map, the Dell SonicWALL SuperMassive E10800 running SonicOS earned recognition as the Highest Overall Protection Next-Generation Firewall Recommended by NSS Labs. This proven SonicOS architecture is at the core of every Dell SonicWALL firewall.

Dell SonicWALL offers a comprehensive lineup of industry-leading network security and data protection solutions, including firewall, secure remote access/ SSL VPN, anti-spam/email security, and continuous backup and recovery, plus centralized management and reporting, and 24x7 technical support.

Originally founded in 1991, SonicWALL was acquired by Dell in 2012."

7.1 Scrutinizer

"Dell$^{\text{TM}}$ SonicWALL® Scrutinizer[13] is a multi-vendor, flow-based application traffic analytics, visualization and reporting tool to measure and troubleshoot network performance and utilization while increasing productivity for enterprises and service providers. Scrutinizer supports a wide range of routers, switches, firewalls, and data-flow reporting protocols, providing unparalleled insight into application traffic analysis from IPFIX/NetFlow data exported by Dell SonicWALL firewalls, as well as support for a wide range of routers, switches, firewalls, and data-flow reporting protocols. IT administrators in charge of high throughput networks can deploy Scrutinizer as a virtual appliance for high performance environments."

VBI-14-000   Dell SonicWALL Scrutinizer Remote Code Execution

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2014-02-24
Expiration Date	

Vulnerability Information

Target	Dell SonicWALL Scrutinizer
Vulnerability Class	Input Validation
Affected Versions Tested	11.01
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-64 CentOS 6.4 on Scrutinizer Virtual Appliance 184-003186-00 Rev A
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
11.01	V

Asset Deliverables

Documentation	VBI Asset Dossier including technical vulnerability and exploit documentation
Exploits	VBI-14-000-0

Exploit / Proof-of-Concept Information

VBI Exploit ID	VBI-14-000-0
Supported Targets	1: 11.01 on x86-64 CentOS 6.4 on Scrutinizer Virtual Appliance 184-003186-00 Rev A
Attack Vector	Remote
Exploitation Impact	Code Execution
Exploitation Context	Webserver User
Exploitation Indicators	Webserver logs SQL database logs
Prerequisites	Authenticated user session
Reliability Rating	Target 1: Completely (100%)
Exploit Failure Behavior	
Exploit Features	Post-exploitation cleanup
Development Status	Complete
Deliverables	VBI Asset Dossier including technical vulnerability and exploit documentation Metasploit Exploit Module

VBI-14-002   Dell SonicWALL Scrutinizer Remote Information Disclosure

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase Non-Exclusive Purchase Monthly License
Listing Date	2014-02-24
Expiration Date	

Vulnerability Information

Target	Dell SonicWALL Scrutinizer
Vulnerability Class	Input Validation
Affected Versions Tested	11.01
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-64 CentOS 6.4 on Scrutinizer Virtual Appliance 184-003186-00 Rev A
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
11.01	V

Asset Deliverables

Documentation	VBI Asset Dossier including technical vulnerability and exploit documentation
Exploits	VBI-14-002-0

Exploit / Proof-of-Concept Information

VBI Exploit ID	VBI-14-002-0
Supported Targets	1: 11.01 on x86-64 CentOS 6.4 on Scrutinizer Virtual Appliance 184-003186-00 Rev A
Attack Vector	Remote
Exploitation Impact	File Read
Exploitation Context	MySQL User (defualt 'mysql')
Exploitation Indicators	User password change
	Webserver logs
	SQL database logs
Prerequisites	Authenticated user session
Reliability Rating	Target 1: Completely (100%)
Exploit Failure Behavior	Validation Error
Exploit Features	User password change
Development Status	Complete
Deliverables	VBI Asset Dossier including technical vulnerability and exploit documentation
	Metasploit Auxiliary Module

Chapter 8

F5 Networks

"As the global leader in Application Delivery Networking, F5[14] makes the connected world run better. In fact, youve probably relied on F5 products dozens of times today and didnt even know it. F5 helps organizations meet the demands that come with the relentless growth of voice, data, and video traffic, mobile workers, and applicationsin the data center and the cloud."

8.1   BIG-IQ

"F5 BIG-IQ[15] provides an intelligent management framework that simplifies the process of deploying and optimizing application delivery services. BIG-IQ provides organizations with intelligence in the management planeoffering intuitive, flexible, and scalable management of industry-leading BIG-IP solutions."

VBI-13-027   F5 Networks BIG-IQ Post-auth Remote Privileged Command Execution

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013-12-30
Expiration Date	

Vulnerability Information

Target	F5 Networks BIG-IQ
Vulnerability Class	Input Validation
Affected Versions Tested	4.1.0.2013

Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-64 GNU/Linux 2.6.32 on BIG-IQ Virtual Appliance
Affected Platforms Assumed	BIG-IQ Hardware Appliance
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
4.1.0.2013	V

Exploit / Proof-of-Concept Information

Supported Targets	1: 4.1.0.2013 on x86-64 GNU/Linux 2.6.32 on BIG-IQ Virtual Appliance
Attack Vector	Remote
Exploitation Impact	Privilege Escalation Command Execution
Exploitation Context	root
Exploitation Indicators	root password is changed SSH log of connection and root authentication
Prerequisites	Authenticated session for any user
Reliability Rating	Target 1: Completely (100%)
Exploit Failure Behavior	Permission Denied / Java Exception appears in HTTP response Permission Denied appears in Apache log
Exploit Features	Change root password Establishes authenticated Meterpreter session as root via SSH
Development Status	Complete
Deliverables	VBI Asset Dossier including technical vulnerability and exploit documentation Professional Exploit: Metasploit Exploit Module

Chapter 9

Fulvio Ricciardi

"Fulvio Ricciardi[16] is the author of ZeroShell, a a Linux distribution for servers and embedded devices aimed at providing the main network services a LAN requires."

9.1 ZeroShell

"Zeroshell[17] is a Linux distribution for servers and embedded devices aimed at providing the main network services a LAN requires. It is available in the form of Live CD or Compact Flash image and you can configure and administer it using your web browser."

VBI-13-014 ZeroShell Remote Privileged Command Execution

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013-07-22
Expiration Date	

Vulnerability Information

Target	ZeroShell
Vulnerability Class	Logic Flaw
Affected Versions Tested	2.0.RC2*
Affected Versions Assumed	All
Unaffected Versions	
Affected Platforms Tested	1: ZeroShell Linux Kernel 3.4.19-ZS

Table continued on next page...

Affected Platforms Assumed	All
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
2.0.RC2	V

Exploit / Proof-of-Concept Information

Supported Targets	ZeroShell 2.0.RC2
Attack Vector	Remote
Exploitation Impact	Command Execution
Exploitation Context	root
Exploitation Indicators	
Prerequisites	Network connectivity to the target
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	

* Tested against Zeroshell VM (ZeroShell-2.0.RC2.iso) as provided by the vendor.

Chapter 10

Google

"Googles[18] mission: Organize the worlds information and make it universally accessible and useful.

Beginning in 1996, Stanford University graduate students Larry Page and Sergey Brin built a search engine called BackRub that used links to determine the importance of individual web pages. By 1998 they had formalized their work, creating the company you know today as Google.

Since then, Google has grown by leaps and bounds. From offering search in a single language we now offer dozens of products and servicesincluding various forms of advertising and web applications for all kinds of tasksin scores of languages. And starting from two computer science students in a university dorm room, we now have thousands of employees and offices around the world. "

10.1   Android

"Android[19] is an open-source software stack for a wide range of mobile devices and a corresponding open-source project led by Google. Here you can find the information and source code you need to learn more about the Android platform. From there you can create custom variants of the Android software stack, port devices and accessories to the Android platform, and ensure your devices are compatible with the Android compatibility definition."

VBI-13-022   Google Android Local Application Permissions Evasion

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013-10-28
Expiration Date	

Vulnerability Information

Target	Google Android
Vulnerability Class	Design Flaw
Affected Versions Tested	2.3.7 2.3.6 2.2.2 2.2.1
Affected Versions Assumed	2.x 1.6.x 1.5.x
Unaffected Versions	4.x 3.x
Affected Platforms Tested	1: Android SDK Emulator 22.0.1.0 2: Samsung Galaxy Y (GT-S5360) 3: HTC Tatoo 4: HTC Magic
Affected Platforms Assumed	
Unaffected Platforms	Nexus 4
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2	3	4
4.3	N			
3.0	N	N	N	N
2.3.7	V		V	
2.3.6	V	V		
2.2.2	V			
2.2.1	V			V

Exploit / Proof-of-Concept Information

Supported Targets	1: 2.3.7 on Android SDK Emulator 22.0.1.0 2: 2.3.7 on HTC Tatoo 3: 2.3.6 on Android SDK Emulator 22.0.1.0 4: 2.3.6 on Samsung Galaxy Y (GT-S5360) 5: 2.2.2 on Android SDK Emulator 22.0.1.0 6: 2.2.1 on Android SDK Emulator 22.0.1.0 7: 2.2.1 on HTC Magic
Attack Vector	Local
Exploitation Impact	App Controls/Permissions Bypass*
Exploitation Context	User
Exploitation Indicators	Call in progress can be noticed Outgoing call log registers calls USSD/SS command results can be seen in a message

Prerequisites	Code execution
Reliability Rating	All Targets: Completely (100%)
Exploit Failure Behavior	
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Place call in background

* App Controls/Permissions bypass allows unauthorized access to perform outgoing calls as well as USSD and SS commands. Manufacturer defined MMI or SIM control codes will not work.

Chapter 11

Gustavo Noronha

Gustavo Noronha[20] is "A Brazilian guy."

11.1 GKSu

"GKSu[21] is a library that provides a Gtk+ frontend to su and sudo. It supports login shells and preserving environment when acting as a su frontend. It is useful to menu items or other graphical programs that need to ask a user's password to run another program as another user."

VBI-13-026   GKSu + Oracle VirtualBox Client-side Remote Privileged Command Execution

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013-12-30
Expiration Date	

Vulnerability Information

Target	GKSu + VirtualBox*
Vulnerability Class	Input Validation
Affected Versions Tested	2.0.2
	2.0.0
Affected Versions Assumed	
Unaffected Versions	

Table continued on next page...

Affected Platforms Tested	1: VirtualBox 4.3.6 on x86-32 Ubuntu 12.04.3 LTS
	2: VirtualBox 4.3.6 on x86-64 Xubuntu 13.10
	3: VirtualBox 4.3.6 on x86-64 CentOS 6.5
	4: VirtualBox 4.3.4 on x86-32 Ubuntu 12.04.3 LTS
	5: VirtualBox 4.3.4 on x86-64 Xubuntu 13.10
	6: VirtualBox 4.3.4 on x86-64 CentOS 6.5
	7: VirtualBox 4.2.20 on x86-32 Ubuntu 12.04.3 LTS
	8: VirtualBox 4.2.20 on x86-64 Xubuntu 13.10
	9: VirtualBox 4.2.20 on x86-64 CentOS 6.5
	10: VirtualBox 4.1.28 on x86-32 Ubuntu 12.04.3 LTS
	11: VirtualBox 4.1.28 on x86-64 Xubuntu 13.10
	12: VirtualBox 4.1.28 on x86-64 CentOS 6.5
	13: VirtualBox 4.0.20 on x86-32 Ubuntu 12.04.3 LTS
	14: VirtualBox 4.0.20 on x86-64 Xubuntu 13.10
	15: VirtualBox 4.0.20 on x86-64 CentOS 6.5
Affected Platforms Assumed	VirtualBox 4.x
Unaffected Platforms	VirtualBox 3.x and prior
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2.0.2	V	V		V	V		V	V		V	V		V	V	
2.0.0			V			V			V			V			V

Exploit / Proof-of-Concept Information

Supported Targets	1: 2.0.2 on VirtualBox 4.3.6 on x86-32 Ubuntu 12.04.3 LTS
	2: 2.0.2 on VirtualBox 4.3.6 on x86-64 Xubuntu 13.10
	3: 2.0.2 on VirtualBox 4.3.4 on x86-32 Ubuntu 12.04.3 LTS
	4: 2.0.2 on VirtualBox 4.3.4 on x86-64 Xubuntu 13.10
	5: 2.0.2 on VirtualBox 4.2.20 on x86-32 Ubuntu 12.04.3 LTS
	6: 2.0.2 on VirtualBox 4.2.20 on x86-64 Xubuntu 13.10
	7: 2.0.2 on VirtualBox 4.1.28 on x86-32 Ubuntu 12.04.3 LTS
	8: 2.0.2 on VirtualBox 4.1.28 on x86-64 Xubuntu 13.10
	9: 2.0.2 on VirtualBox 4.0.20 on x86-32 Ubuntu 12.04.3 LTS
	10: 2.0.2 on VirtualBox 4.0.20 on x86-64 Xubuntu 13.10
	11: 2.0.0 on VirtualBox 4.3.6 on x86-64 CentOS 6.5
	12: 2.0.0 on VirtualBox 4.3.4 on x86-64 CentOS 6.5
	13: 2.0.0 on VirtualBox 4.2.20 on x86-64 CentOS 6.5
	14: 2.0.0 on VirtualBox 4.1.28 on x86-64 CentOS 6.5
	15: 2.0.0 on VirtualBox 4.0.20 on x86-64 CentOS 6.5
Attack Vector	Client-side Remote
Exploitation Impact	Command Execution
Exploitation Context	root

Exploitation Indicators	File-related action fails
Prerequisites	Ubuntu platforms require a gconf configuration change by the victim to non-default behavior
	kdesu must not be installed
	netcat (nc) must be installed
Reliability Rating	All Targets: Completely (100%)
Exploit Failure Behavior	File-related action succeeds with no issues
Exploit Features	Reverse-connect shell via netcat
Development Status	Complete
Deliverables	VBI Asset Dossier including technical vulnerability and exploit documentation
	Exploit File

* The vulnerability lies in GKSu, however VirtualBox is required to properly trigger the vulnerability. It is likely that additional software applications other than VirtualBox can also be used to trigger the vulnerability in a similar manner.

Chapter 12

Juniper Networks

"At Juniper Networks[22], we are leading the charge to architecting the new network. At the heart of the new network is our promise to transform the economics and experience of networking for our customers. We offer a high-performance network infrastructure built on simplicity, security, openness, and scale. We are innovating in ways that empower our customers, our partners, and ultimately everyone in a connected world.

Our products and technologies run the worlds largest and most demanding networks today, enabling our customers to create value and accelerate business success within the new, rapidly changing global marketplace. Our customers include the top 130 global service providers, the Fortune Global 100, as well as hundreds of federal, state and local government agencies and higher education organizations throughout the world.

As a pure play, high-performance networking company, we offer a broad product portfolio that spans routing, switching, security, application acceleration, identity policy and control, and management designed to provide unmatched performance, greater choice, and true flexibility, while reducing overall total cost of ownership. In addition, through strong industry partnerships, Juniper Networks is fostering a broad ecosystem of innovation across the network."

12.1 Network Connect Server

"Network Connect Server is the Linux daemon software providing SSL VPN client connection services for connecting to Juniper's SA Series[23] devices."

VBI-12-034 Juniper Network Connect Server Local Privilege Escalation

Vulnerability Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase

Table continued on next page...

	Non-Exclusive Purchase
	Monthly License
Listing Date	2012.07.14
Vulnerability Class	Logic Flaw
Affected Versions Tested	7.2-0-Build20761
	7.0-0-Build16899
	7.0-0-Build16499
Affected Versions Assumed	7.1
Unaffected Versions	
Affected Platforms Tested	1: x86-32 Debian Linux 6.0.5
	2: x86-32 Debian Linux unstable(2012.07.14)
	3: x86-64 Debian Linux unstable(2012.07.14)
	4: x86-64 CentOS 6.2
Affected Platforms Assumed	All Linux*
Unaffected Platforms	Mac OS X
	Microsoft Windows
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2	3	4
7.2-0-Build20761	V	V	V	V
7.0-0-Build16899	V	V	V	V
7.0-0-Build16499	V	V	V	V

Exploit / Proof-of-Concept Information

Supported Targets	7.2-0-Build20761 on x86-32 Debian Linux 6.0.5
	7.2-0-Build20761 on x86-32 Debian Linux unstable(2012.07.14)
	7.2-0-Build20761 on x86-64 Debian Linux unstable(2012.07.14)
	7.2-0-Build20761 on x86-64 CentOS 6.2
	7.0-0-Build16899 on x86-32 Debian Linux 6.0.5
	7.0-0-Build16899 on x86-32 Debian Linux unstable(2012.07.14)
	7.0-0-Build16899 on x86-64 Debian Linux unstable(2012.07.14)
	7.0-0-Build16899 on x86-64 CentOS 6.2
	7.0-0-Build16499 on x86-32 Debian Linux 6.0.5
	7.0-0-Build16499 on x86-32 Debian Linux unstable(2012.07.14)
	7.0-0-Build16499 on x86-64 Debian Linux unstable(2012.07.14)
	7.0-0-Build16499 on x86-64 CentOS 6.2
Attack Vector	Local
Exploitation Impact	Command Execution
Exploitation Context	root
Exploitation Indicators	Client log entries
Prerequisites	User privileges on the target system

	Target system must have target software "Juniper Network Connect" installed
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Cross-platform (Linux) without modification*

* Due to the vulnerability being a logic flaw, underlying Linux distribution and architecture is irrelevant to triggering the vulnerability and exploitation.

Chapter 13

Kingsoft Office Software

"Kingsoft Office[24] is a software development company headquartered in Hong Kong, which focus on office software containing the three essential office applications: Kingsoft Writer, Kingsoft Presentation and Kingsoft Spreadsheets. Established in 1989, Kingsoft Office has devoted over two decades to the development of user-friendly office software. It has maintained a similar user interface to Microsoft Office meaning that new users require no retraining, and there is a high degree of compatibility between the two products.

The composition of our team is diverse and complete. Kingsoft Office's team is integrally formed by industry experts from various industries. This wide range of experience has been drawn upon to create a fully fledged, robust office suite.

Kingsoft Office is one of the earliest companies to engage in the research and development of word processors and other office applications, and was the market leader in the late 1980's and early 1990's. Today Kingsoft Office is viewed as an inexpensive alternative to Microsoft Office. And it has made relationship with Dell and collaborations with Intel and IBM, and will continue to do so in the future, in order to consistently provide innovative, high quality products and services.

Kingsoft Office Corporation future will be aimed at breaking into all over the world, now it has published four sets of office suite: Kingsoft Office Professional, Kingsoft Office Standard, Kingsoft Office Free and Kingsoft Office Student and Home. These four versions almost cover all target clients that could meet various requirements including professional and business, home and students, and common daily needs. Of course, it will make a sustained effort to develop more brilliant office software to attract much wider users.

Kingsoft Office is committed to offering best quality and user-friendly office software to further expand to international markets and become a first class office software developer."

13.1   Kingsoft Office

"As an office suite of desktop applications, Kingsoft Office[25] consists of a word processorWriter, a spreadsheet programSpreadsheets and a presentation programPresentation. Compared with other office suites, Kingsoft Office is regarded as one of the best office applications with user-friendly interfaces and

excellent performance.

In addition to innovative features in the last version such as a built-in PDF creator, the latest version has added various new features, allowing you to switch between the 2013 and classical interfaces, adjust your paragraph formatting and table dimensions with drag and drop, save files as more formats (such as .docx, .docm, .xlsx and .xlsm) and insert a movie or background sound into a PPT slide. Kingsoft Office Suite Professional 2013 will not only enable you to fulfill data analyzing needs in business, but to turn your innovative ideas into illustrative documents or presentations."

VBI-13-016 Kingsoft Office Client-side Remote Code Execution

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013-08-26
Expiration Date	

Vulnerability Information

Target	Kingsoft Office 2012
Vulnerability Class	Memory Corruption
Affected Versions Tested	8.1.0.3387
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x64 Microsoft Windows 7
	2: x32 Microsoft Windows 7
	3: x64 Microsoft Windows XP
	4: x32 Microsoft Windows XP
Affected Platforms Assumed	Microsoft Vista
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2	3	4
8.1.0.3387	V	V	V	V

Exploit / Proof-of-Concept Information

Supported Targets	8.1.0.3387 on Microsoft Windows 7
	8.1.0.3387 on Microsoft Windows XP
Attack Vector	Client-side Remote

Table continued on next page...

Exploitation Impact	Code Execution
Exploitation Context	User
Windows Integrity Level	Medium
Exploitation Indicators	Process crash
Prerequisites	
Reliability Rating	Completely (100%)
Development Status	Complete*
Development Phase	Exploit
Development Goal	Professional Exploit
Exploit Features	ASLR handled

* Professional exploit(s) can be developed upon request.

Chapter 14

Korea Computer Center

"The Korea Computer Center (KCC)[26] is the leading North Korean government information technology research center. It was founded on October 24, 1990.

KCC operates eight development and production centers, and 11 regional information centers. It runs the KCC Information Technology College and its Information Technology Institute. The KCC has branch offices in China, Germany, Syria and the United Arab Emirates. It has an interest in Linux research, and started the development of the Red Star OS distribution localised for North Korea.

While KCCs main focus is on North Korean work, as of 2011 it also works for clients in Europe, China, South Korea, Japan and the Middle East."

14.1 Red Star OS

"Red Star OS[27] is a North Korean Linux-based operating system. Development started in 2002 at the Korea Computer Center. Prior to its development, computers in North Korea typically used English versions of Microsoft Windows. As of 2010, it is on version 2.0. It is only offered in a Korean language edition, localised with North Korean terminology and spelling."

VBI-12-008   Red Star OS Sat Privileged Remote and Client-Side Command Execution

Vulnerability Information

VBI Asset Type	Internal
Vulnerability Class	Input Validation
Affected Versions Tested	2.0
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32 Red Star OS 2.0

Table continued on next page...

Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
2.0	V

Exploit / Proof-of-Concept Information

Supported Targets	Sat 2.0 on x86-32 Red Star OS 2.0
Attack Vector	Remote
	Client-Side via CSRF
Exploitation Impact	Command Execution
Exploitation Context	root
Exploitation Indicators	Log entries*
Prerequisites	Successful Authentication or Established Session
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Metasploit Exploit
Development Goal	Metasploit Exploit
Exploit Features	HTTP request attack vector
	CSRF capable
	Trigger and payload is embeddable within HTML

* Log entries in some cases based on attack vector.

VBI-12-011 Red Star OS Local Privilege Escalation

Vulnerability Information

VBI Asset Type	Internal
Vulnerability Class	Misconfiguration
Affected Versions Tested	2.0
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

2.0	1
	V

Exploit / Proof-of-Concept Information

Supported Targets	x86-32 Red Star OS 2.0
Attack Vector	Local (Passive)
Exploitation Impact	Privilege Escalation
Exploitation Context	root
Exploitation Indicators	none
Prerequisites	Local Command Execution
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Replacement of system command

VBI-12-012   Red Star OS Local Privilege Escalation

Vulnerability Information

VBI Asset Type	Internal
Vulnerability Class	Misconfiguration
Affected Versions Tested	2.0
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

2.0	1
	V

Exploit / Proof-of-Concept Information

Supported Targets	x86-32 Red Star OS 2.0
Attack Vector	Local
Exploitation Impact	Privilege Escalation
Exploitation Context	root
Exploitation Indicators	System Reboot*
Prerequisites	Local Command Execution

Table continued on next page...

Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Replacement of critical library

* An attacker initiated system reboot is required in the case of active exploitation; however it is possible for unprivileged users to reboot the system by default. Passive exploitation may also be employed which does not require a system reboot.

VBI-12-013   Red Star OS Local Privilege Escalation

Vulnerability Information

VBI Asset Type	Internal
Vulnerability Class	Misconfiguration
Affected Versions Tested	2.0
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
2.0	V

Exploit / Proof-of-Concept Information

Supported Targets	x86-32 Red Star OS 2.0
Attack Vector	Local (Passive)
Exploitation Impact	Privilege Escalation (Code Execution)
Exploitation Context	root
Exploitation Indicators	none
Prerequisites	Local Command Execution
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Replacement of critical application library

VBI-12-014   Red Star OS Local Privilege Escalation

Vulnerability Information

VBI Asset Type	Internal
Vulnerability Class	Misconfiguration
Affected Versions Tested	2.0
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
2.0	V

Exploit / Proof-of-Concept Information

Supported Targets	x86-32 Red Star OS 2.0
Attack Vector	Local
Exploitation Impact	Privilege Escalation (Code Execution)
Exploitation Context	root
Exploitation Indicators	System Reboot*
Prerequisites	Local Command Execution
	Ability to reboot system*
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Replacement of critical system commands

* An attacker initiated system reboot is required in the case of active exploitation; however it is possible for unprivileged users to reboot the system by default. Passive exploitation may also be employed which will trigger the payload upon the next and subsequent regularly-scheduled system reboots.

VBI-12-015   Red Star OS Local Privilege Escalation

Vulnerability Information

VBI Asset Type	Internal
Vulnerability Class	Misconfiguration

<div align="right">Table continued on next page...</div>

Affected Versions Tested	2.0
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
2.0	V

Exploit / Proof-of-Concept Information

Supported Targets	x86-32 Red Star OS 2.0
Attack Vector	Local (Passive)
Exploitation Impact	Privilege Escalation
Exploitation Context	root
Exploitation Indicators	none
Prerequisites	Local Command Execution
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Replacement of system command

VBI-12-016   Red Star OS Local Privilege Escalation

Vulnerability Information

VBI Asset Type	Internal
Vulnerability Class	Misconfiguration
Affected Versions Tested	2.0
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

2.0	1
	V

Exploit / Proof-of-Concept Information

Supported Targets	x86-32 Red Star OS 2.0
Attack Vector	Local (Passive)
Exploitation Impact	Privilege Escalation
Exploitation Context	root
Exploitation Indicators	none
Prerequisites	Local Command Execution
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Replacement of critical system command

VBI-12-017   Red Star OS Local Privilege Escalation

Vulnerability Information

VBI Asset Type	Internal
Vulnerability Class	Misconfiguration
Affected Versions Tested	2.0
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

2.0	1
	V

Exploit / Proof-of-Concept Information

Supported Targets	x86-32 Red Star OS 2.0
Attack Vector	Local (Passive)
Exploitation Impact	Privilege Escalation
Exploitation Context	root
Exploitation Indicators	none
Prerequisites	Local Command Execution

Table continued on next page...

Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Replacement of critical system command

VBI-12-018   Red Star OS Local Privilege Escalation

Vulnerability Information

VBI Asset Type	Internal
Vulnerability Class	Misconfiguration
Affected Versions Tested	2.0
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
2.0	V

Exploit / Proof-of-Concept Information

Supported Targets	x86-32 Red Star OS 2.0
Attack Vector	Local (Passive)
Exploitation Impact	Privilege Escalation
Exploitation Context	root
Exploitation Indicators	none
Prerequisites	Local Command Execution
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Replacement of critical system command

VBI-12-019   Red Star OS Local Privilege Escalation

Vulnerability Information

VBI Asset Type	Internal
Vulnerability Class	Misconfiguration
Affected Versions Tested	2.0
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
2.0	V

Exploit / Proof-of-Concept Information

Supported Targets	x86-32 Red Star OS 2.0
Attack Vector	Local (Passive)
Exploitation Impact	Privilege Escalation
Exploitation Context	root
Exploitation Indicators	none
Prerequisites	Local Command Execution
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Replacement of system command

VBI-12-020   Red Star OS Local Privilege Escalation

Vulnerability Information

VBI Asset Type	Internal
Vulnerability Class	Misconfiguration
Affected Versions Tested	2.0
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
2.0	V

Exploit / Proof-of-Concept Information

Supported Targets	x86-32 Red Star OS 2.0
Attack Vector	Local
Exploitation Impact	Privilege Escalation (Code Execution)
Exploitation Context	root
Exploitation Indicators	System Reboot*
Prerequisites	Local Command Execution
	Ability to reboot system*
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Replacement of critical system command

* An attacker initiated system reboot is required in the case of active exploitation; however it is possible for unprivileged users to reboot the system by default. Passive exploitation may also be employed which does not require a system reboot.

VBI-12-021   Red Star OS Local Privilege Escalation

Vulnerability Information

VBI Asset Type	Internal
Vulnerability Class	Misconfiguration
Affected Versions Tested	2.0
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
2.0	V

Exploit / Proof-of-Concept Information

Supported Targets	x86-32 Red Star OS 2.0
Attack Vector	Local (Passive)
Exploitation Impact	Privilege Escalation
Exploitation Context	root
Exploitation Indicators	none
Prerequisites	Local Command Execution
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Replacement of system command

VBI-12-022   Red Star OS Local Privilege Escalation

Vulnerability Information

VBI Asset Type	Internal
Vulnerability Class	Misconfiguration
Affected Versions Tested	2.0
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
2.0	V

Exploit / Proof-of-Concept Information

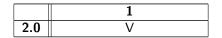| Supported Targets	x86-32 Red Star OS 2.0
Attack Vector	Local (Passive)
Exploitation Impact	Privilege Escalation (Command Execution)
Exploitation Context	root
Exploitation Indicators	none
Prerequisites	Local Command Execution
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Replacement of critical system command

VBI-12-023   Red Star OS Local Privilege Escalation

Vulnerability Information

VBI Asset Type	Internal
Vulnerability Class	Misconfiguration
Affected Versions Tested	2.0
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
2.0	V

Exploit / Proof-of-Concept Information

Supported Targets	x86-32 Red Star OS 2.0
Attack Vector	Local
Exploitation Impact	Privilege Escalation (Code Execution)
Exploitation Context	root
Exploitation Indicators	System Reboot*
Prerequisites	Local Command Execution
	Ability to reboot system*
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Replacement of critical system command

* An attacker initiated system reboot is required in the case of active exploitation; however it is possible for unprivileged users to reboot the system by default. Passive exploitation may also be employed which will trigger the payload upon the next and subsequent regularly-scheduled system reboots.

VBI-12-024   Red Star OS Local System Reboot Privilege Escalation

Vulnerability Information

VBI Asset Type	Internal
Vulnerability Class	Misconfiguration

Table continued on next page...

Affected Versions Tested	2.0
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
2.0	V

Exploit / Proof-of-Concept Information

Supported Targets	x86-32 Red Star OS 2.0
Attack Vector	Local
Exploitation Impact	Privilege Escalation*
Exploitation Context	root
Exploitation Indicators	System Reboot
Prerequisites	Local Command Execution
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Reboot via non-system command

* The privilege escalation performed via this vulnerability only allows for execution of a system reboot without root privileges.

Chapter 15

McAfee, Inc.

"McAfee for Consumers[28] delivers world-class retail and online solutions designed to secure, protect, and optimize the computers of consumers and home office users.

McAfee's advanced retail desktop solutions include premier anti-virus, security, encryption, and desktop optimization software. McAfee's managed Web security services employ a patented system and process of delivering software through an Internet browser to provide these services to users online through its Web site, home.mcafee.com. This Web site is one of the largest paid subscription sites on the Internet with over two million active paid subscribers.

With headquarters in Santa Clara, California, McAfee, Inc., is a leading supplier of network security and availability solutions. McAfee creates best-of-breed computer security solutions that prevent intrusions on networks and protect computer systems from the next generation of blended attacks and threats. More information on McAfee is available at www.mcafee.com.

All McAfee products are backed with the respected anti-virus research organization such as McAfee AVERT, which protects McAfee customers against the latest and most complex virus attacks. Quick Facts"

15.1 ePolicy Orchestrator

"McAfee ePolicy Orchestrator (McAfee ePO)[29] is the most advanced, extensible, and scalable centralized security management software in the industry. Unifying security management through an open platform, McAfee ePO makes risk and compliance management simpler and more successful for organizations of all sizes. As the foundation of McAfee Security Management Platform, McAfee ePO enables customers to connect industry-leading security solutions to their enterprise infrastructure to increase visibility, gain efficiencies, and strengthen protection. And now with Real Time for McAfee ePO, administrators can see critical product details in seconds and remediate security issues directly on endpoints as events are happening.

Customers use McAfee ePOs flexible automation capabilities to streamline workflows, dramatically reducing the cost and complexity of security and compliance administration.

Security providers and system integrators can extend the reach of their offerings by incorporating their expertise and best practices with the McAfee ePO platform to deliver differentiated solutions."

VBI-13-019   McAfee ePolicy Orchestrator Privileged Remote Code Execution

VBI Information

VBI Asset Type	Internal
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013-09-23
Expiration Date	

Vulnerability Information

Target	McAfee ePolicy Orchestrator
Vulnerability Class	Input Validation
Affected Versions Tested	5.0.1
	5.0.0
Affected Versions Assumed	
Unaffected Versions	4.6.5
Affected Platforms Tested	1: Microsoft Windows Server 2012
	2: Microsoft Windows Server 2008 R2
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2
5.0.1	V	V
5.0.0	V	V

Exploit / Proof-of-Concept Information

Supported Targets	1: 5.0.1 on Microsoft Windows Server 2012
	2: 5.0.1 on Microsoft Windows Server 2012
	3: 5.0.0 on Microsoft Windows Server 2008 R2
	4: 5.0.0 on Microsoft Windows Server 2008 R2
Attack Vector	Remote
Exploitation Impact	Code Execution
Exploitation Context	NT-Authority\system

Table continued on next page...

Windows Integrity Level	System
Exploitation Indicators	Exploit stager script stored temporarily on the target system
	Log entries in database and web server log files
Prerequisites	
Reliability Rating	Target 1: Completely (100%)
	Target 2: Completely (100%)
	Target 3: Completely (100%)
	Target 4: Completely (100%)
Exploit Failure Behavior	
Development Status	Complete
Development Phase	Professional Exploit: Metasploit Exploit Module
	Post-exploitation Client Compromise Instructional
	Database user password decryption tool
Development Goal	Professional Exploit: Metasploit Exploit Module
	Post-exploitation Client Compromise Instructional
	Database user password decryption tool
Exploit Features	Post-exploitation cleanup (removal of stager)
	Vulnerability can be further leveraged to deliver a privileged payload to all systems executing the ePolicy Agent software which are managed by the ePolicy server, effectively allowing the compromise of an entire enterprise.*

* Metasploit post-exploitation module can be developed upon request to implement Agent systems compromise.

VBI-13-023   McAfee ePolicy Orchestrator Post-Auth Privileged Remote Code Execution

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013-11-25
Expiration Date	

Vulnerability Information

Target	McAfee ePolicy Orchestrator
Vulnerability Class	Input Validation
Affected Versions Tested	5.1.0
	5.0.1

	5.0.0
	4.6.6
	4.6.5
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: Microsoft Windows Server 2012
	2: Microsoft Windows Server 2008 R2
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2
5.1.0	V	
5.0.1	V	V
5.0.0	V	V
4.6.6		V
4.6.5		V

Exploit / Proof-of-Concept Information

Supported Targets	1: 5.1.0 on Microsoft Windows Server 2012
	2: 5.0.1 on Microsoft Windows Server 2012
	3: 5.0.1 on Microsoft Windows Server 2008 R2
	4: 5.0.0 on Microsoft Windows Server 2012
	5: 5.0.0 on Microsoft Windows Server 2008 R2
	6: 4.6.6 on Microsoft Windows Server 2008 R2
	7: 4.6.5 on Microsoft Windows Server 2008 R2
Attack Vector	Remote
Exploitation Impact	Code Execution
Exploitation Context	NT-Authority\system
Windows Integrity Level	System
Exploitation Indicators	Exploit stager script stored temporarily on the target system
	Log entries in database and web server log files
Prerequisites	Authenticated session as any valid user
Reliability Rating	Target 1: Completely (100%)
	Target 2: Completely (100%)
	Target 3: Completely (100%)
	Target 4: Completely (100%)
	Target 5: Completely (100%)
	Target 6: Completely (100%)
	Target 7: Completely (100%)
Exploit Failure Behavior	
Exploit Features	Post-exploitation cleanup (removal of stager)

– continued from previous page.

	Vulnerability can be further leveraged to deliver a privileged payload to all systems executing the ePolicy Agent software which are managed by the ePolicy server, effectively allowing the compromise of an entire enterprise.*
Development Status	Complete
Deliverables	Professional Exploit: Metasploit Exploit Module
	Post-exploitation Client Compromise Instructional
	Database user password decryption tool

* Metasploit post-exploitation module can be developed upon request to implement Agent systems compromise.

VBI-13-024   McAfee ePolicy Orchestrator Post-Auth Privileged Remote Code Execution

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013-11-25
Expiration Date	

Vulnerability Information

Target	McAfee ePolicy Orchestrator
Vulnerability Class	Input Validation
Affected Versions Tested	5.1.0
	5.0.1
	5.0.0
	4.6.6
	4.6.5
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: Microsoft Windows Server 2012
	2: Microsoft Windows Server 2008 R2
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2
5.1.0	V	
5.0.1	V	V
5.0.0	V	V
4.6.6		V
4.6.5		V

Exploit / Proof-of-Concept Information

Supported Targets	1: 5.1.0 on Microsoft Windows Server 2012
	2: 5.0.1 on Microsoft Windows Server 2012
	3: 5.0.1 on Microsoft Windows Server 2008 R2
	4: 5.0.0 on Microsoft Windows Server 2012
	5: 5.0.0 on Microsoft Windows Server 2008 R2
	6: 4.6.6 on Microsoft Windows Server 2008 R2
	7: 4.6.5 on Microsoft Windows Server 2008 R2
Attack Vector	Remote
Exploitation Impact	Code Execution
Exploitation Context	NT-Authority\system
Windows Integrity Level	System
Exploitation Indicators	Exploit stager script stored temporarily on the target system
	Log entries in database and web server log files
Prerequisites	Authenticated session as any valid user
Reliability Rating	Target 1: Completely (100%)
	Target 2: Completely (100%)
	Target 3: Completely (100%)
	Target 4: Completely (100%)
	Target 5: Completely (100%)
	Target 6: Completely (100%)
	Target 7: Completely (100%)
Exploit Failure Behavior	
Exploit Features	Post-exploitation cleanup (removal of stager)
	Vulnerability can be further leveraged to deliver a privileged payload to all systems executing the ePolicy Agent software which are managed by the ePolicy server, effectively allowing the compromise of an entire enterprise.*
Development Status	Complete
Deliverables	Professional Exploit: Metasploit Exploit Module
	Post-exploitation Client Compromise Instructional
	Database user password decryption tool

* Metasploit post-exploitation module can be developed upon request to implement Agent systems compromise.

Chapter 16

Microsoft Corporation

"At Microsoft[30], we're motivated and inspired every day by how our customers use our software to find creative solutions to business problems, develop breakthrough ideas, and stay connected to what's most important to them.

We run our business in much the same way, and believe our five business divisions offer the greatest potential to serve our customers. They are:

- Windows Windows Live Division : Includes the Windows product family and is responsible for our relationships with personal computer manufacturers as well as online software and services through Windows Live.

- Server and Tools : Software server products, services and solutions, including: Windows Server operating system, Microsoft SQL Server, Visual Studio, Silverlight, System Center products, Forefront security products, Biz Talk Server, and Microsoft Consulting Services.

- Online Services Division : Consists of an online advertising platform with offerings for publishers and advertisers, and online information offerings such as Bing and the MSN portals and channels.

- Microsoft Business Division : Includes the Microsoft Office suites, desktop programs, servers, and services and solutions; Microsoft Dynamics; and Unified Communications business solutions.

- Entertainment and Devices Division : Consists of the Xbox video game system, including consoles and accessories, Xbox Live operations, Zune digital music and entertainment device; Mediaroom, mobile and embedded device platforms, Surface computing platform, and Windows Automotive.

We are committed long term to the mission of helping our customers realize their full potential. Just as we constantly update and improve our products, we want to continually evolve our company to be in the best position to accelerate new technologies as they emerge and to better serve our customers."

16.1   Internet Explorer

"Fast, safe, and easy. Internet Explorer[31] takes the web experience beyond the page for quicker and more reliable browsing with peace of mind."

VBI-12-026   Internet Explorer 8 Remote Code Execution

Vulnerability Information

VBI Asset Type	Brokered
Listing Date	2012.05.17
Vulnerability Class	Memory Corruption
Affected Versions Tested	8.0.7601.17514 8.0.6001.18702*
Affected Versions Assumed	
Unaffected Versions	9 7 6
Affected Platforms Tested	1: Microsoft Windows 7 SP1 FP(2012.05.17) 2: Microsoft Windows Vista SP2 FP(2012.05.17) 3: Microsoft Windows XP SP3 FP(2012.05.17)
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2	3
8.0.7601.17514	V	V	V
8.0.6001.18702	V	V	V

Exploit / Proof-of-Concept Information

Supported Targets	8 on Microsoft Windows 7 SP1 FP 8 on Microsoft Windows Vista SP2 FP 8 on Microsoft Windows XP SP3 FP
Attack Vector	Remote
Exploitation Impact	Code Execution
Exploitation Context	User
Windows Integrity Level	Low
Exploitation Indicators	Execution of payload
Prerequisites	Javascript
Reliability Rating	High (95%)**
Development Status	In Development

Table continued on next page...

Development Phase	Proof-of-Concept***
Development Goal	Exploit
Exploit Features	Process continuation****

* With different patches: From never updated to fully updated (passing by updated to 2011, Jan).

** The provided exploit may not work well against systems with low mememory, as a large heap spray is required in order to achieve exploitation. Systems with low memory may not have the required large address space to spray.

*** Proof-of-Concept currently requires DEP to be disabled on the ASLR-based target platforms.

**** Process continuation improved on target platforms with DEP turned on.

VBI-13-009 Microsoft Internet Explorer Client-side Remote Code Execution

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013.05.07
Expiration Date	

Vulnerability Information

Target	Microsoft Internet Explorer
Vulnerability Class	Memory Corruption
Affected Versions Tested	9.0.16 (9.0.8112.16421)
	9.0.15 (9.0.8112.16421)
	9.0.14 (9.0.8112.16421)
	9.0.13 (9.0.8112.16421)
	9.0.12 (9.0.8112.16421)
	9.0.10 (9.0.8112.16421)
	9.0.9 (9.0.8112.16421)
	9.0.7 (9.0.8112.16421)
	9.0.6 (9.0.8112.16421)
	8.00.7601.18106 (8.0.7601.17514)*
	8.00.7601.18094 (8.0.7601.17514)*
	8.00.7601.18035 (8.0.7601.17514)*
	8.00.7601.17940 (8.0.7601.17514)*
	8.00.7601.17874 (8.0.7601.17514)*
	8.00.7601.17824 (8.0.7601.17514)*

	8.00.7601.17785 (8.0.7601.17514)*
Affected Versions Assumed	9.x
	8.x
Unaffected Versions	10.x
Affected Platforms Tested	1: x86-64 Microsoft Windows 7 SP1**
	2: x86-32 Microsoft Windows 7 SP1
	3: x86-32 Microsoft Windows XP SP3
Affected Platforms Assumed	Microsoft Windows 7 SP0***
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2	3
9.0.16	V	V	
9.0.15	V	V	
9.0.14	V	V	
9.0.13	V	V	
9.0.12	V	V	
9.0.10	V	V	
9.0.9	V	V	
9.0.7	V	V	
9.0.6	V	V	
8.00.7601.18106	V	V	V
8.00.7601.18094	V	V	
8.00.7601.18035	V	V	
8.00.7601.17940	V	V	
8.00.7601.17874	V	V	
8.00.7601.17824	V	V	
8.00.7601.17785	V	V	

Exploit / Proof-of-Concept Information

Supported Targets	9.0.16 on Microsoft Windows 7 SP1
	9.0.15 on Microsoft Windows 7 SP1
	9.0.14 on Microsoft Windows 7 SP1
	9.0.13 on Microsoft Windows 7 SP1
	9.0.12 on Microsoft Windows 7 SP1
	9.0.10 on Microsoft Windows 7 SP1
	9.0.9 on Microsoft Windows 7 SP1
	9.0.7 on Microsoft Windows 7 SP1
	9.0.6 on Microsoft Windows 7 SP1
	8.00.7601.18106 on Microsoft Windows 7 SP1
	8.00.7601.18106 on x86-32 Microsoft Windows XP SP3

– continued from previous page.

	8.00.7601.18094 on Microsoft Windows 7 SP1
	8.00.7601.18035 on Microsoft Windows 7 SP1
	8.00.7601.17940 on Microsoft Windows 7 SP1
	8.00.7601.17874 on Microsoft Windows 7 SP1
	8.00.7601.17824 on Microsoft Windows 7 SP1
	8.00.7601.17785 on Microsoft Windows 7 SP1
Attack Vector	Client-side Remote
Exploitation Impact	Code Execution
Exploitation Context	Windows 7: User
	Windows XP: Admin
Windows Integrity Level	Windows 7: Low
Exploitation Indicators	
Prerequisites	Javascript
Reliability Rating	High (>90%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Handles ASLR dynamically via version detection
	Avoids DEP
	Target platform agnostic
	Process continuation
	Post-exploitation process cleanup
	No shellcode character or size limitations
	Full error condition handling with clean exits

* Internet Explorer 8 uses the same version string across all patchlevels (8.0.7601.17514 update version 0) so version is identified by mshtml-version string.
** Internet Explorer processes tested on x86-64 Microsoft Windows 7 were WOW64 processes; True 64-bit target processes are not supported.
*** The exploit for this vulnerability is independent of platform patchlevel and should work across all service packs and patchlevels of the indicated platforms.

16.2 Microsoft Office

"Microsoft Office [32] is the essential software suite for homes and small businesses that enables you to quickly and easily create great-looking documents, spreadsheets, and presentations, and manage e-mail."

VBI-12-035   Microsoft Office Client-Side Remote Code Execution

Vulnerability Information

VBI Asset Type	Brokered

Table continued on next page...

VBI Asset Availability	Non-Exclusive Purchase Monthly License
Listing Date	2012.07.23
Expiration Date	
Vulnerability Class	Design Flaw
Affected Versions Tested	Word 2007 SP2 FP(2012.07.17) Excel 2007 SP2 FP(2012.07.17) Powerpoint 2007 SP2 FP(2012.07.17)
Affected Versions Assumed	
Unaffected Versions	2013 2010 2003
Affected Platforms Tested	1: x86-32 Microsoft Windows 2003 SP2 2: x86-32 Microsoft Windows XP SP3
Affected Platforms Assumed	Microsoft Windows 2003 Microsoft Windows XP
Unaffected Platforms	Microsoft Windows Server 2012 Microsoft Windows Server 2008 R2 Microsoft Windows Server 2008 Microsoft Windows 8 Release Preview Microsoft Windows 7 Microsoft Windows Vista
Reliability Rating	Completely (100%)

Vulnerability Test Matrix*

	1	2
Word 2007	V	V
Excel 2007	V	V
Powerpoint 2007	V	V

Exploit / Proof-of-Concept Information

Supported Targets	Word 2007 SP2 FP(2012.07.17) on x86-32 Microsoft Windows 2003 SP2 Word 2007 SP2 FP(2012.07.17) on x86-32 Microsoft Windows XP SP3 Excel 2007 SP2 FP(2012.07.17) on x86-32 Microsoft Windows 2003 SP2 Excel 2007 SP2 FP(2012.07.17) on x86-32 Microsoft Windows XP SP3 Powerpoint 2007 SP2 FP(2012.07.17) on x86-32 Microsoft Windows 2003 SP2 Powerpoint 2007 SP2 FP(2012.07.17) on x86-32 Microsoft Windows XP SP3

Attack Vector	Client-Side
Exploitation Impact	Code Execution
Exploitation Context	User
Windows Integrity Level	
Exploitation Indicators	
Prerequisites	
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	

* Vulnerability testing involves two scenarios; double-clicking on the malicious file and opening the malicious file through the "Open File" menu within the application. Word and Powerpoint versions are vulnerable to the former while Excel is vulnerable to the latter.

16.3   Windows

"The Windows product family[33] comprises Microsoft's flagship operating system."

VBI-10-019   Windows Core Component Client-Side Remote Code Execution

Vulnerability Information

VBI Asset Type	Brokered
Affected Platforms Tested	Internet Explorer 6 on 32-bit x86 Microsoft Windows XP
Affected Platforms Assumed	
Unaffected Platforms	
Affected Versions Tested	SP3
Affected Versions Assumed	SP0-SP2
Unaffected Versions	
Reliability Rating	Completely (100%)

Exploit / Proof-of-Concept Information

Supported Platforms	Internet Explorer 6 on 32-bit x86 Microsoft Windows XP
Supported Versions	SP3
Attack Vector	Client-Side
Exploitation Impact	Code Execution

Exploitation Context	User
Exploitation Indicators	
Prerequisites	Internet Explorer
Reliability Rating	Partial (50%)
Development Status	Multiple Proof-of-Concepts and one Exploit*
Development Phase	Active
Development Goal	Reliable Exploit

* The multiple Proof-of-Concepts provided with this vulnerability's materials demonstrate multiple vectors available to trigger the vulnerability. The Exploit provided uses one of these vectors to achieve code execution, although execution is currently only partially reliable.

VBI-12-002   Microsoft Windows XP Kernel Local Privilege Escalation

Vulnerability Information

VBI Asset Type	Brokered
Vulnerability Class	Memory Corruption
Affected Versions Tested	XP SP0-SP3
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32
Affected Platforms Assumed	
Unaffected Platforms	x86-64
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
XP SP0-SP3	V

Exploit / Proof-of-Concept Information

Supported Targets	x86-32 Microsoft Windows XP SP0-SP3
Attack Vector	Local
Exploitation Impact	Privilege Escalation
Exploitation Context	SYSTEM
Windows Integrity Level	n/a
Exploitation Indicators	
Prerequisites	
Reliability Rating	Completely (100%)
Development Status	Active
Development Phase	Debugging

Development Goal	Exploit
Exploit Features	

VBI-12-003   Microsoft Windows Local Privilege Escalation

Vulnerability Information

VBI Asset Type	Brokered
VBI Asset Availability	Non-exclusive Sale Monthly License
Vulnerability Class	Design Flaw
Affected Versions Tested	XP SP0-SP3 (FP 2013.01.14) 2003 SP0-SP2 (FP 2013.01.14)
Affected Versions Assumed	
Unaffected Versions	Vista Windows 7 2008
Affected Platforms Tested	1: x86-32 2: x86-64
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2
XP SP0-SP3	V	V
2003 SP0-SP2	V	V

Exploit / Proof-of-Concept Information

Supported Targets	x86-32 Windows XP SP0-SP3 (FP 2013.01.14) x86-64 Windows XP SP0-SP3 (FP 2013.01.14) x86-32 Windows 2003 SP0-SP2 (FP 2013.01.14) x86-64 Windows 2003 SP0-SP2 (FP 2013.01.14)
Attack Vector	Local
Exploitation Impact	Code Execution Command Execution
Exploitation Context	Ring0 (code execution) NT AUTHORITY\SYSTEM (command execution)
Windows Integrity Level	
Exploitation Indicators	
Prerequisites	
Reliability Rating	Completely (100%)

Development Status	Complete
Development Phase	Exploit
	Metasploit post-exploitation module
Development Goal	Exploit
	Metasploit post-exploitation module
Exploit Features	Automatic Architecture/OS detection and target selection at run-time
	Allows execution of an arbitrary command such as cmd.exe
	Metasploit post-exploitaion module version can be executed from Meterpreter to elevate privileges
	Ring0 shellcode that replaces the token of the process of your choice with an NT AUTHORITY\SYSTEM token

VBI-12-004   Microsoft Windows Local Protection Bypass

Vulnerability Information

VBI Asset Type	Brokered
Vulnerability Class	Input Validation
Affected Versions Tested	Vista SP0-SP2
	7 SP0-SP1
	Server 2008
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32
Affected Platforms Assumed	
Unaffected Platforms	x86-64
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
Vista SP0-SP2	V
7 SP0-SP1	V
Server 2008	V

Exploit / Proof-of-Concept Information

Supported Targets	x86-32 Microsoft Windows Vista SP0-SP2
	x86-32 Microsoft Windows 7 SP0-SP1
	x86-32 Microsoft Windows Server 2008
Attack Vector	Local
Exploitation Impact	Protection Bypass*
Exploitation Context	SYSTEM

Windows Integrity Level	High
Exploitation Indicators	Exploit Executable Present**
Prerequisites	Administrator Access
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	

* Bypass provides Administrator to Ring0 access.

** Post-exploitation cleanup can be added at Customer's request.

VBI-13-013   Microsoft Windows Kernel Local Privilege Escalation

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013.06.22
Expiration Date	

Vulnerability Information

Target	Microsoft Windows Kernel
Vulnerability Class	Memory Corruption
Affected Versions Tested	8 SP0 (FP:2013-08-10)
	7 SP1 (FP:2013-08-10)
	Vista SP2 (FP:2013-08-10)
	XP SP3 (FP:2013-08-10)
	Server 2012
	Server 2008 SP1
	Server 2008 SP2
	Server 2008 R2
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-64
	2: x86-32
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2
8 SP0	V	V
7 SP1	V	V
Vista SP2	V	V
XP SP3		V
Server 2012	V	V
Server 2008 SP1	V	V
Server 2008 SP2	V	V
Server 2008 R2	V	V

Exploit / Proof-of-Concept Information

Supported Targets*	x86-32 Microsoft Windows 8 x86-64 Microsoft Windows 7 SP1 x86-32 Microsoft Windows 7 SP1 x86-64 Microsoft Windows Vista SP2 x86-32 Microsoft Windows Vista SP2 x86-64 Microsoft Windows Server 2008 SP2 x86-32 Microsoft Windows Server 2008 SP2
Attack Vector	Local
Exploitation Impact	Code Execution
Exploitation Context	SYSTEM
Windows Integrity Level	High
Exploitation Indicators	Denial of service (BSOD) on exploitation failure of single-core targets
Prerequisites	
Reliability Rating	x86-32 Microsoft Windows 8 SP0: Complete (100%)** x86-64 Microsoft Windows 7 SP1 Professional: Complete (100%)** x86-64 Microsoft Windows 7 SP1 Ultimate: Complete (100%)** x86-32 Microsoft Windows 7 SP1 Professional: Very High (99.93%)** x86-32 Microsoft Windows 7 SP1 Ultimate: Very High (99.79%)** x86-64 Microsoft Windows Vista SP2 Starter: Complete (100%)** x86-64 Microsoft Windows Vista SP2 Home Basic: Very High (99.89%)** x86-64 Microsoft Windows Vista SP2 Home Premium: Very High (99.75%)** x86-64 Microsoft Windows Vista SP2 Business: Complete (100%)** x86-64 Microsoft Windows Vista SP2 Ultimate: Complete (100%)** x86-32 Microsoft Windows Vista SP2 Starter: Complete (100%)** x86-32 Microsoft Windows Vista SP2 Home Basic: Complete (100%)** x86-32 Microsoft Windows Vista SP2 Home Premium: Very High (99.85%)** x86-32 Microsoft Windows Vista SP2 Business: Very High (99.85%)**

– continued from previous page.

	x86-32 Microsoft Windows Vista SP2 Ultimate: Complete (100%)**
	x86-64 Microsoft Windows Server 2008 SP2 Standard: Complete (100%)**
	x86-64 Microsoft Windows Server 2008 SP2 Enterprise: Complete (100%)**
	x86-64 Microsoft Windows Server 2008 SP2 Datacenter: Very High (99.72%)**
	x86-32 Microsoft Windows Server 2008 SP2 Standard: Complete (100%)**
	x86-32 Microsoft Windows Server 2008 SP2 Enterprise: Very High (99.95%)**
	x86-32 Microsoft Windows Server 2008 SP2 Datacenter: Compete (100%)**
Development Status	Active
Development Phase	Exploit
Development Goal	Exploit with 95% reliability or better
Exploit Features	Process continuation

* Exploit support for other Affected Versions (8, XP SP3) available upon request.
** The exploitation method uses a memory spray type technique. As with all such techniques there is a margin for error resulting in less than 100% reliability.

VBI-13-020   Microsoft Windows Kernel Local Privilege Escalation

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013-10-14
Expiration Date	

Vulnerability Information

Target	Microsoft Windows Kernel
Vulnerability Class	Logic Flaw
Affected Versions Tested	8.1 SP0 FP(2013-10-10)*
	7 SP1 FP(2013-10-10)
Affected Versions Assumed	Vista
Unaffected Versions	XP and older
Affected Platforms Tested	1: x86-32*
Affected Platforms Assumed	x86-64

Table continued on next page...

Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
8.1 SP0 FP(2013.10.10)	V
7 SP1 FP(2013.10.10)	V

Exploit / Proof-of-Concept Information

Supported Targets	1: x86-32 Microsoft Windows 7 SP1 FP(2013-10-10)
Attack Vector	Local
Exploitation Impact	Privilege Escalation
Exploitation Context	SYSTEM
Windows Integrity Level	System
Exploitation Indicators	Minor memory leak
Prerequisites	
Reliability Rating	Target 1: Completely (100%)
Exploit Failure Behavior	
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	

* While the vulnerability is present in Windows 8 and x86-64 Windows 7, the vulnerability is only exploitable on x86-32 versions of Windows prior to Windows 8 due to NULL pointer dereference exploitation mitigation introduced in Windows 8 which was back-ported to x86-64 Windows 7.

Chapter 17

Multiple Vendors

"This section is for vulnerability listings that affect multiple vendors. Specific vendor information will be included in the subsections."

17.1   Multiple BSD Jails

Jails, or virtualized root systems, for BSD-based operating systems enforce a virtualized system environment for a user or process to operate within.

VBI-13-006   Multiple BSD Jail Local Jail Escape and Privileged Command Execution

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013.05.06
Expiration Date	

Vulnerability Information

Target	Dirk Engling's ezjail on PC-BSD*
	FreeBSD Warden on FreeBSD*
Vulnerability Class	Design Flaw
Affected Versions Tested	ezjail 3.2.3
	Warden 1.1.2
Affected Versions Assumed	

Table continued on next page...

Unaffected Versions	
Affected Platforms Tested	1: FreeBSD 9.0-1 2: FreeBSD 8.x 3: PC-BSD 9.1
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	High (95%) when targeting Warden Ports Jail Configuration Medium (40%) when targeting Warden Traditional Jail Configuration Medium (40%) when targeting ezjail

Vulnerability Test Matrix

	1	2	3
ezjail 3.2.3	V	V	
Warden 1.1.2			V

Exploit / Proof-of-Concept Information

Supported Targets	ezjail 3.2.3 on FreeBSD 9.0-1 ezjail 3.2.3 on FreeBSD 8.x Warden 1.1.2 on PC-BSD 9.1
Attack Vector	Local
Exploitation Impact	Jail Escape Command Execution
Exploitation Context	root Targeted User
Exploitation Indicators	Miscellaneous files used in exploitation
Prerequisites	User write permissions to target file or directory ezjail: External system user must perform file write action Warden: Shared Filesystem
Reliability Rating	High (95%) when targeting non-syslog file writes High (80%) when targeting syslog file writes
Development Status	Complete
Development Phase	Proof-of-Concept Instructable
Development Goal	
Exploit Features	

* The vulnerability exists due to a design flaw in the interaction of the jail software and the operating system rather than in either the jail software or operating system themselves.

Chapter 18

Multiple Anti-Virus and Anti-Malware Vendors

18.1 Multiple Anti-Virus and Anti-Malware Products

VBI-10-014 Malicious Portable Executable Detection Bypass

Vulnerability Information

VBI Asset Type	Brokered
Affected Platforms Tested	Windows 2000 SP4
	Windows XP SP2
	Windows XP x64
	Windows 7 x86
Affected Platforms Assumed	All Microsoft Windows
Unaffected Platforms	
Affected Versions Tested	AhnLab-V3 2010.06.15.01
	Avira AntiVir 7.11.0.73, 8.2.2.6
	Antiy-AVL 2.0.3.7
	Avast 4.8.1351.0, 5.0.332.0, 5.0.677.0
	AVG 9.0.0.787, 9.0.0.851
	BitDefender 7.2
	CAT-QuickHeal 10.00, 11.00
	ClamAV 0.96.0.3-git, 0.96.4.0
	Command 5.2.11.5, Authentium 5.2.0.5
	Comodo 5113, 7088
	DrWeb 5.0.2.03300
	Emsisoft 5.1.0.1, a-squared 5.0.0.26
	eSafe 7.0.17.0
	CA eTrust-Vet 36.1.7636, 36.1.8046

	F-Prot 4.6.0.103, 4.6.2.117
	F-Secure 9.0.15370.0, 9.0.16160.0
	Fortinet 4.1.133.0, 4.2.254.0
	GData 2010 (21)
	Ikarus T3.1.1.84.0, T3.1.1.90.0
	Jiangmin 13.0.900
	K7 AntiVirus 9.73.3267
	Kaspersky 7.0.0.125, 11.0.1.400, and latest suite in full install mode
	McAfee 5.400.0.1158 and GW-Edition
	Microsoft Forefront 1.5802, 1.6402
	ESet NOD32 5199, 5701
	Norman 6.04.12, 6.06.12
	nProtect 2010-06-15.02
	Panda 10.0.2.7 and latest suite in full install mode
	PCTools 7.0.3.5
	Prevx 3.0
	Rising AV 22.51.06.01, 22.78.03.06
	Sophos AV 4.54.0, 4.60.0
	SUPERAntiSpyware 4.40.0.1006
	Symantec 20101.1.0.89, 20101.3.0.103, and Norton 360 (latest, full install mode)
	TheHacker 6.5.2.0.299
	TrendMicro Titanium 9.120.0.1004 and HouseCall 9.120.0.1004
	GFI VIPRE 7684, Sunbelt 6451
	VirusBlokada VBA32 3.12.12.5, 3.12.14.2
	ViRobot 2010.6.14.3884, 2010.12.17.4205
	VirusBuster 5.0.27.0, 13.6.98.1
Affected Versions Assumed	Other versions of Affected Versions Tested
Reliability Rating	Complete (100%)

Exploit / Proof-of-Concept Information

Supported Platforms	Windows 2000 SP4
	Windows XP SP2
	Windows XP x64
	Windows 7 x86
Supported Versions	AhnLab-V3 2010.06.15.01
	Avira AntiVir 7.11.0.73, 8.2.2.6
	Antiy-AVL 2.0.3.7
	Avast 4.8.1351.0, 5.0.332.0, 5.0.677.0
	AVG 9.0.0.787, 9.0.0.851
	BitDefender 7.2
	CAT-QuickHeal 10.00, 11.00
	ClamAV 0.96.0.3-git, 0.96.4.0
	Command 5.2.11.5, Authentium 5.2.0.5
	Comodo 5113, 7088

	DrWeb 5.0.2.03300
	Emsisoft 5.1.0.1, a-squared 5.0.0.26
	eSafe 7.0.17.0
	CA eTrust-Vet 36.1.7636, 36.1.8046
	F-Prot 4.6.0.103, 4.6.2.117
	F-Secure 9.0.15370.0, 9.0.16160.0
	Fortinet 4.1.133.0, 4.2.254.0
	GData 2010 (21)
	Ikarus T3.1.1.84.0, T3.1.1.90.0
	Jiangmin 13.0.900
	K7 AntiVirus 9.73.3267
	Kaspersky 7.0.0.125, 11.0.1.400, and latest suite in full install mode
	McAfee 5.400.0.1158 and GW-Edition
	Microsoft Forefront 1.5802, 1.6402
	ESet NOD32 5199, 5701
	Norman 6.04.12, 6.06.12
	nProtect 2010-06-15.02
	Panda 10.0.2.7 and latest suite in full install mode
	PCTools 7.0.3.5
	Prevx 3.0
	Rising AV 22.51.06.01, 22.78.03.06
	Sophos AV 4.54.0, 4.60.0
	SUPERAntiSpyware 4.40.0.1006
	Symantec 20101.1.0.89, 20101.3.0.103, and Norton 360 (latest, full install mode)
	TheHacker 6.5.2.0.299
	TrendMicro Titanium 9.120.0.1004 and HouseCall 9.120.0.1004
	GFI VIPRE 7684, Sunbelt 6451
	VirusBlokada VBA32 3.12.12.5, 3.12.14.2
	ViRobot 2010.6.14.3884, 2010.12.17.4205
	VirusBuster 5.0.27.0, 13.6.98.1
Attack Vector	File Format / Client-Side
Exploitation Impact	Detection Bypass
Exploitation Context	Not Applicable
Exploitation Indicators	Malformed Portable Executable (PE) files on filesystem
Reliability Rating	Complete (100%)
Development Status	Complete
Development Phase	Utility
Development Goal	Utility

This vulnerability is a logic flaw in the way that the vulnerable products handle Portable Executable files. Due to the underlying reason that the products behave in the way that they do, this flaw is thought to be fairly ubiquitous among these types of products.

The utility provided with the vulnerability materials can modify any known-malicious Portable Executable (PE) file into a format that will bypass anti-virus and anti-malware detection while retaining it's executable capability.

Chapter 19

Novell

"Novell[34] is a leading provider of infrastructure software. Our vision is helping people and technology to work as one. Our mission is to help customers reduce the cost, complexity and risk of computing on any platform."

19.1 Novell Clients

"The Novell Client workstation software[35] extends the capabilities of Linux and Windows desktops by providing access to NetWare and Open Enterprise Server (OES). Once installed on workstations, Novell Clients enable users to enjoy the full range of Novell services such as authentication via Novell eDirectory, network browsing and service resolution, and secure and reliable file system access–all delivered through industry-standard protocols. The Client supports Novell's traditional NCP protocol."

VBI-10-004 Novell Client Remote Code Execution

Vulnerability Information

VBI Asset Type	Brokered
Affected Platforms Tested	32-bit x86 Windows 2000 SP4
	32-bit x86 Windows XP SP3
	32-bit x86 Windows 2003 SP2
Affected Platforms Assumed	All 32-bit x86 Windows, all language packs
Unaffected Platforms	
Affected Versions Tested	4.28
	4.30
	4.32
	4.34
	4.36
	4.38

Table continued on next page...

	5.12*
	5.20*
	5.30*
	5.32*
	5.40*
	5.42*
	5.44*
Affected Versions Assumed	None
Unaffected Versions	
Reliability Rating	Completely (100%)
Reserve Price	None

Exploit / Proof-of-Concept Information

Supported Platforms	32-bit x86 Windows 2000 SP4
	32-bit x86 Windows XP SP3
	32-bit x86 Windows 2003 SP2
Supported Versions	4.28
	4.30
	4.32
	4.34
	4.36
	4.38
	5.12*
	5.20*
	5.30*
	5.32*
	5.40*
	5.42*
	5.44*
Attack Vector	Local, Man-in-the-Middle, and Client-Side**
Exploitation Impact	Code Execution
Exploitation Context	SYSTEM (locally, some remote cases), Current User (remotely)
Exploitation Indicators	Browser crash when using Client-Side vector
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Professional Exploit
Development Goal	Professional Exploit

The exploit for this vulnerability is a universal platform and vector independent multi-stage exploit which handles DEP. Note that some platforms identified or assumed as vulnerable are not supported by the exploit as the exploit does not handle GuardStack protection, which is enabled in platforms such as Windows Vista, 7, and 2008.

* The 5.x version branch is not supported by the Vendor for the Windows 2000 platform.

** Attack vectors include targeting a local executable, remotely targeting a Windows service, or targeting a web browser.

Chapter 20

Open Source

Open Source[36] refers to software or projects that are not backed by any particular vendor but are provided under various open source or free software licenses by the community or an individual.

20.1 OpenPAM

"OpenPAM[37] is an open source PAM library that focuses on simplicity, correctness, and cleanliness. Its aim is to gather the best features of Solaris PAM, XSSO and Linux-PAM, plus some innovations of its own. In areas where these implementations disagree, OpenPAM tries to remain compatible with Solaris, at the expense of XSSO conformance and Linux-PAM compatibility."

VBI-14-001 OpenPAM Local Privilege Escalation and Remote Authentication Bypass

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2014-02-24
Expiration Date	

Vulnerability Information

Target	OpenPAM
Vulnerability Class	Logic Flaw
Affected Versions Tested	Nummularia (20130907)

Table continued on next page...

Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-64 FreeBSD 10
Affected Platforms Assumed	x86-32 FreeBSD 10
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
Nummularia (20130907)	V

Asset Deliverables

Documentation	VBI Asset Dossier including technical vulnerability and exploit documentation
Exploits	VBI-14-001-0
	VBI-14-001-1

Exploit / Proof-of-Concept Information

VBI Exploit ID	VBI-14-001-0
Supported Targets	1: Nummularia (20130907) on x86-64 FreeBSD 10
Attack Vector	Local
Exploitation Impact	Privilege Escalation
Exploitation Context	root
	Any user
Exploitation Indicators	Log entries in /var/log/messages
	Log entries in /var/log/auth.log
Prerequisites	Attacking user must be in the wheel group to escalate to root*
Reliability Rating	Target 1: Completely (100%)
Exploit Failure Behavior	
Exploit Features	
Development Status	Complete
Deliverables	Exploit

VBI Exploit ID	VBI-14-001-1
Supported Targets	1: Nummularia (20130907) on x86-64 FreeBSD 10
Attack Vector	Remote
Exploitation Impact	Authentication Bypass
Exploitation Context	root
	Any user
Exploitation Indicators	Log entries in /var/log/messages

	Log entries in /var/log/auth.log
Prerequisites	
Reliability Rating	Target 1: Completely (100%)
Exploit Failure Behavior	
Exploit Features	
Development Status	In Development
Development Goal	Developing remote exploitation scenario
Deliverables	Instructional
	Supporting shell script

* However, the attacker can first escalate to any user who is in the wheel group, then escalate to root, so this is not much of a limitation as long as there is at least one user on the system who is in the wheel group.

20.2   tcpdump

"tcpdump[38] prints out a description of the contents of packets on a network interface that match the boolean expression. It can also be run with the -w flag, which causes it to save the packet data to a file for later analysis, and/or with the -r flag, which causes it to read from a saved packet file rather than to read packets from a network interface. In all cases, only packets that match expression will be processed by tcpdump."

VBI-12-028   tcpdump Local Privilege Escalation and Backdoor with Firewall Evasion

Vulnerability Information

VBI Asset Type	Internal
Listing Date	2012.05.21
Expiration Date	2012.09.01
Vulnerability Class	Design Flaw
Affected Versions Tested	4.2.1
	4.1.1
	4.1.0
	4.0.0
Affected Versions Assumed	4.0.0 through 4.2.1
Unaffected Versions	Versions prior to 4.0.0
Affected Platforms Tested	1: x86-64 Ubuntu Linux 11.10
	2: x86-32 Solaris 11
	3: x86-32 FreeBSD 9
	4: x86-64 Apple Mac OS X 10.7 (Lion)
Affected Platforms Assumed	All Linux
	All Solaris

Table continued on next page...

	All BSD
	All Apple Mac OS X
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2	3	4
4.2.1	V		V	
4.1.1	V	V	V	V
4.1.0	V			
4.0.0	V		V	

Exploit / Proof-of-Concept Information

Supported Targets	4.2.1 on x86-64 Ubuntu Linux 11.10
	4.2.1 on x86-32 FreeBSD 9
	4.1.1 on x86-64 Ubuntu Linux 11.10
	4.1.1 on x86-32 Solaris 11
	4.1.1 on x86-32 FreeBSD 9
	4.1.1 on x86-64 Apple Mac OS X 10.7 (Lion)
	4.1.0 on x86-64 Ubuntu Linux 11.10
	4.0.0 on x86-64 Ubuntu Linux 11.10
	4.0.0 on x86-32 FreeBSD 9
Attack Vector	Local
Exploitation Impact	Command Execution
Exploitation Context	root
Exploitation Indicators	Process Execution
Prerequisites	Must be able to execute tcpdump with the required elevated privileges (suid/sudo)
Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Backdoor mode with Firewall Evasion*
	Timed/Delayed execution
	Backdoor can be opened via similar technique to port knocking

* This exploit is capable of being launched with a set of commandline parameters that allow it to function as a backdoor which can evade some firewalls.

Chapter 21

Opera Software ASA

"Opera[39] started in 1994 as a research project inside Norways largest telecom company, Telenor. Within a year, it branched out into an independent development company named Opera Software ASA.

Today, Opera Software develops the Opera Web browser, a high-quality, multi-platform product for a wide range of platforms, operating systems and embedded Internet products including Mac, PC and Linux computers, mobile phones and PDAs, game consoles, and other devices like the Nintendo Wii, DS, Sony Mylo, and more.

Operas vision is to deliver the best Internet experience on any device. Operas key business objective is to earn global leadership in the market for PC/desktops and embedded products. Operas main business strategy is to provide a browser that operates across devices, platforms and operating systems, and can deliver a faster, more stable and flexible Internet experience than its competitors."

21.1   Opera Web Browser

"The Opera Web Browser[40] is a high-quality, multi-platform product for a wide range of platforms, operating systems and embedded Internet products including Mac, PC and Linux computers, mobile phones and PDAs, game consoles, and other devices like the Nintendo Wii, DS, Sony Mylo, and more."

VBI-13-018   Opera Web Browser Universal Client-side Remote Code Execution

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013-10-09

Table continued on next page...

Expiration Date	

Vulnerability Information

Target	Opera Web Browser
	Opera Mini Web Browser
Vulnerability Class	Logic or Design Flaw
Affected Versions Tested	Opera 12.15
	Opera 12.14
	Opera 12.13
	Opera 12.12
	Opera 12.11
	Opera 12.10
	Opera 12.02
	Opera 12.01
	Opera 12.00
	Opera Mini 17.0
	Opera Mini 12.15
	Opera Mini 12.14
	Opera Mini 12.13
	Opera Mini 12.12
	Opera Mini 12.11
	Opera Mini 12.10
	Opera Mini 12.02
	Opera Mini 12.01
	Opera Mini 12.00
Affected Versions Assumed	Opera 14.x
	Opera 13.x
	Opera 12.x
	Opera Mini 16.x
	Opera Mini 15.x
	Opera Mini 14.x
	Opera Mini 13.x
	Opera Mini 12.x
Unaffected Versions	Opera 17.0
	Opera 16.x
	Opera 15.x
Affected Platforms Tested	1: Microsoft Windows 7 SP1 (FP:2013-10-09)
	2: Microsoft Windows Vista Ultimate SP2 (FP:2013-10-09)
	3: Microsoft Windows XP SP3 (FP:2013-10-09)
	4: x86-32 Ubuntu Linux 13.04 (FP:2013-10-09)
	5: Mac OSX 10.8 (FP:2013-10-09)
	6: iPhone IOS 6 (FP:2013-10-09)
	7: Android 4.3 (FP:2013-10-09)
Affected Platforms Assumed	All Microsoft Windows
	All Linux
	All Mac OSX

	iPad IOS 6	
	Sybian / Nokia mobile devices	
	Nintendo Wii	
	Blackberry mobile devices	
Unaffected Platforms		
Reliability Rating	Completely (100%)	

Vulnerability Test Matrix

	1	2	3	4	5	6	7
17.0	N	N	N	N			
12.15	V	V	V	V			
12.14	V	V	V	V			
12.13	V	V	V	V			
12.12	V	V	V	V			
12.11	V	V	V	V			
12.10	V	V	V	V			
12.02	V	V	V	V			
12.01	V	V	V	V			
12.00	V	V	V	V			
Mini 17.0					V	V	V
Mini 12.15					V	V	V
Mini 12.14					V	V	V
Mini 12.13					V	V	V
Mini 12.12					V	V	V
Mini 12.11					V	V	V
Mini 12.10					V	V	V
Mini 12.02					V	V	V
Mini 12.01					V	V	V
Mini 12.00					V	V	V

Exploit / Proof-of-Concept Information

Supported Targets	1: 12.x on all Microsoft Windows
	2: 12.x on all Linux
	3: 12.x on all Mac OSX
Attack Vector	Client-side Remote
Exploitation Impact	Code Execution (Windows, Linux, OSX)*
Exploitation Context	User
Windows Integrity Level	Medium
Exploitation Indicators	
Prerequisites	Javascript
Reliability Rating	Target 1: Completely (100%)
	Target 2: Completely (100%)
	Target 3: Completely (100%)

Exploit Failure Behavior	n/a
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	Target Environment Cleanup

* Additional impacts possible by leveraging this vulnerability include hijacking browser traffic, UXSS, browser configuration disclosure, and local file disclosure. Mobile platform targets are restricted to browser configuration disclosure.

Chapter 22

Oracle Corporation

"Oracle Corporation[41], an enterprise software company, engages in the development, manufacture, distribution, servicing, and marketing of database, middleware (computer software that connects software components or applications), and application software."

22.1 Java

"Java[42] allows you to play online games, chat with people around the world, calculate your mortgage interest, and view images in 3D, just to name a few. It's also integral to the intranet applications and other e-business solutions that are the foundation of corporate computing."

VBI-10-030 Java Virtual Machine (JRE & JDK) Client-Side Remote Code Execution

Vulnerability Information

VBI Asset Type	Brokered
Affected Platforms Tested	32-bit x86 Microsoft Windows XP SP2 & SP3
	32-bit x86 Microsoft Windows Vista SP1 & SP2
	64-bit x86 Microsoft Windows Vista SP1 & SP2
	32-bit x86 Microsoft Windows 7
	64-bit x86 Microsoft Windows 7
	32-bit x86 Ubuntu Linux 10.10 kernel 2.6.35 i686
Affected Platforms Assumed	
Unaffected Platforms	Mac OS X*
Affected Versions Tested	7.0.4
	6.0.10 - 6.0.24
	6.0.0 - 6.0.7

Table continued on next page...

	5.0.22
	5.0.1
Affected Versions Assumed	
Unaffected Versions	
Reliability Rating	Completely (100%)

Exploit / Proof-of-Concept Information

Supported Platforms	32-bit x86 Microsoft Windows XP SP2 & SP3
	32-bit x86 Microsoft Windows Vista SP2
	64-bit x86 Microsoft Windows Vista SP2
	32-bit x86 Microsoft Windows 7
	64-bit x86 Microsoft Windows 7
Supported Versions	JRE 6.0.20 - 6.0.24
	JRE 6.0.17 - 6.0.18
	JRE 6.0.7
	JRE 6.0.0
	JRE 1.5.11
	JRE 1.5.6
Attack Vector	Client-Side
Exploitation Impact	Remote Code Execution
Exploitation Context	User
Exploitation Indicators	On success there is no indication. On failure the JVM silently crashes resulting in hs_err_<pid>.log crash log file.
Prerequisites	None
Reliability Rating	Very Reliable (95%)**
Development Status	Active
Development Goal	Metasploit Exploit Module supporting all vulnerable platforms and versions listed.
Development Phase	Metasploit Exploit Module

* Testing on Mac OS X was limited and may not represent the vulnerable state of all Mac OS X platforms.

** Because failed attempts at exploiting the vulnerability result in a silent crash, exploitation can be repeatedly attempted until successful.

22.2   WebCenter Content

"Oracle WebCenter Content[43] provides leading-edge solutions for all types of content management needs. From file server consolidation to sophisticated multisite web content management, Oracle WebCenter Content provides a robust, scalable solution, along with a powerful infrastructure that allows you to create content-enabled applications."

VBI-12-038 Oracle WebCenter Content Core Component Remote Authentication Bypass and Code Execution

Vulnerability Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2012.09.04
Expiration Date	2012.10.04
Vulnerability Class	Logic Flaw
Target	Oracle WebCenter Content*
Affected Versions Tested	11gR1
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: Oracle WebLogic Server on Microsoft Windows Server 2003 R2
Affected Platforms Assumed	All supported operating systems**
Unaffected Platforms	
Reliability Rating	High (95%)***

Vulnerability Test Matrix

	1
11gR1	V

Exploit / Proof-of-Concept Information

Supported Targets	Oracle WebCenter Content 11gR1 on Oracle WebLogic Server on Microsoft Windows 2003
Attack Vector	Remote
Exploitation Impact	Authentication Bypass
	Code Execution****
Exploitation Context	Application Administrator
	System User
Windows Integrity Level	N/A on Microsoft Windows Server 2003 R2
Exploitation Indicators	
Prerequisites	
Reliability Rating	Complete (100%)
Development Status	Active*****
Development Phase	Instructional
Development Goal	Professional or Multiple Exploits
Exploit Features	

* Note that Oracle WebCenter Content has achieved Department of Defense (DoD) 5015.2-STD version 3 certification.

** The vulnerability is a logic flaw. As such, the underlying platform and associated mitigations by such are irrelevant to exploitation.

*** Reliability is not 100% due to the location of the vulnerability being in a core component. This core component is employed by multiple other product components, many with complex configuration options which may affect reliability.

**** Code execution is achieved using existing legitimate functionality of the various components that becomes available post-auth.

***** Support for additional target WebCenter Content components may be developed upon request.

Chapter 23

Parallels IP Holdings GmbH

"Parallels[44] is a worldwide leader in virtualization and automation software that optimizes computing for consumers, businesses, and service providers across all major hardware, operating system, and virtualization platforms. Founded in 1999, Parallels is a fast-growing company with 800 employees in North America, Europe, and Asia."

23.1 Plesk Panel

"The most widely used hosting control panel solution. Parallels Plesk Panel[45] is the first step for your business - toward faster sites and faster mobile access for website owners and toward a complete product line as your hosting business grows."

VBI-13-003   Parallels Plesk Panel Remote Code Execution

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013.03.28
Expiration Date	

Vulnerability Information

Target	Parallels Plesk Panel
Vulnerability Class	Logic Flaw
Affected Versions Tested	9.5.4 FP(2013.03.26)
	9.3 FP(2013.03.26)

	9.2 FP(2013.03.26)
	9.0 FP(2013.03.26)
	8.6 FP(2013.03.26)
Affected Versions Assumed	9.x below 9.5.4 inclusive
	8.x above 8.6 inclusive
Unaffected Versions	11.0.9
	10.4.4
Affected Platforms Tested	1: x86-64 Red Hat Enterprise Linux Server 5.9
	2: x86-32 CentOS 5.9
	3: x86-64 CentOS 5.4
	4: amd64 Debian GNU/Linux 5.0.7
	5: x86-32 Debian GNU/Linux 5.0.5
	6: x86-32 Debian GNU/Linux 4.0
	7: x86-32 Fedora Core 6
Affected Platforms Assumed	All CentOS*
	All Linux*
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2	3	4	5	6	7
9.5.4	V	V	V	V	V	V	V
9.3	V	V	V	V	V	V	V
9.2	V	V	V	V	V	V	V
9.0	V	V	V	V	V	V	V
8.6	V	V	V	V	V	V	V

Exploit / Proof-of-Concept Information

Supported Targets	9.5.4 on all tested Linux platforms
	9.5.4 on all tested CentOS platforms
	9.3 on all tested Linux platforms
	9.3 on all tested CentOS platforms
	9.2 on all tested Linux platforms
	9.2 on all tested CentOS platforms
	9.0 on all tested Linux platforms
	9.0 on all tested CentOS platforms
	8.6 on all tested Linux platforms
	8.6 on all tested CentOS platforms
Attack Vector	Remote
Exploitation Impact	Code Execution
Exploitation Context	Apache Webserver User
Exploitation Indicators	Apache log entries
Prerequisites	Default Plesk installation

Reliability Rating	Completely (100%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	

* Due to this vulnerability being a logic flaw, the underlying platform is largely irrelevant and does not affect the viability of the vulnerability.

Chapter 24

PineApp Ltd.

"PineApp[46]^{TM} is a leading security solution provider for Information Technology.

PineApp offers comprehensive email security, email archiving and web filtering solutions that are available as an appliance or software (on a server or VMware platform). PineApps solutions are also available for service providers (ISPs) who wish to offer Cloud-Managed-Services and a DRP (Disaster Recovery Plan) solution to their customers.

Founded in 2002, PineApp is headquartered in Israel, with branch offices in the US, Canada, UK, Spain, Italy, France, Russia and Singapore and has distributors in more than 50 countries."

24.1 Mail-SeCure

"PineApp Mail-SeCure[47] series appliance protects organizational networks from both targeted and non targeted email related threats. Mail-SeCure is equipped with cutting-edge perimeter security engines that focus on stopping the vast majority of threats by looking at the credibility of their sources before they penetrate the customers network.

PineApps perimeter security approach helps save a substantial amount of system resources previously wasted on unnecessary content inspections. Mail-SeCure provides system administrators with the tools to handle both email-borne threats and a variety of email-related administrative tasks."

VBI-11-011   PineApp Mail-SeCure Remote Command Execution

Vulnerability Information

VBI Asset Type	Brokered
Vulnerability Class	Input Validation
Affected Versions Tested	Mail-SeCure 3.70
Affected Versions Assumed	Previous versions employing the same web management code.

Table continued on next page...

Unaffected Versions	
Affected Platforms Tested	2: PHP 5.2.4 on Apache 2.2.6 on Mail-SeCure 1019SJ
	3: PHP 5.2.4 on Apache 2.2.6 on Mail-SeCure 2049SK
	4: PHP 5.2.4 on Apache 2.2.6 on Mail-SeCure 3029SK
	5: PHP 5.2.4 on Apache 2.2.6 on Mail-SeCure 5099SK
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2	3	4
3.70	V	V	V	V

Exploit / Proof-of-Concept Information

Supported Targets	Universal Mail-SeCure Target
Attack Vector	Remote Pre-Auth
Exploitation Impact	Command Execution
Exploitation Context	Root or Privileged User (qmailq)
Exploitation Indicators	Entry in the Apache webserver log.
Prerequisites	
Reliability Rating	Completely (100%)
Development Status	Active
Development Phase	Exploit
Development Goal	Professional Exploit
Exploit Features	Metasploit Exploit Module
	Post-exploitation interactive command shell

Chapter 25

Safenet, Inc.

"SafeNet[48] is the largest company exclusively focused on the protection of high-value information assets.

SafeNet protects:

- The Most Money That Moves - Securing 80% of all electronic banking transfers, the equivalent of $1 Trillion daily

- The Most Digital Identities - Protecting government and Fortune 100 public key infrastructures (PKI's) with industry-leading strong authentication

- The Most High Value Software - Over 80 million hardware keys sold, protecting intellectual property and providing efficient license management solutions

- The Most Government Information - Proven and trusted by governments around the world, providing the largest deployment of government communications security

Today, We Are:

- A Global Success - Over 25,000 customers in 100 countries, with 1,550 employees in 25 countries

- Proven and Stable - Founded in 1983 with revenues in the hundreds of millions of dollars, and under private ownership

- Best-in-class - Security technology products certified to the highest security standards

- Experts - More than 550 security engineers developing cutting-edge technologies and patents

"

25.1   Sentinel HASP

"Sentinel HASP[49], formerly Aladdin HASP SRM, enables the use of either software- or hardware-based protection keys to enforce software protection and licensing.

With Sentinel HASP, you can increase your profits by protecting against losses from software piracy and intellectual property theft and enable innovative business models to increase value and differentiate your products.

Sentinel HASP fully integrates with your existing software product lifecycle to minimize disruptions to development and business processes. Sentinel HASP features role-based tools and processes that allow your entire staff to focus on their core competencies.

Featuring easy-to-use role-based tools for developers, product managers, order processing and production, Sentinel HASP ensures a short learning curve and optimum use of employee time and core competencies, thus ensuring quick time-to-market and the ability to quickly respond to changing market needs.

Sentinel HASP provides the industry's strongest, most robustfk software security solution. For example, Sentinel HASP offers industry-leading support for licensing in virtual environments and is the first and only software licensing and reverse engineering protection tool solution on the market today to support J2EE applications."

VBI-13-007   Safenet Sentinel HASP Local Privilege Escalation

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013-08-10
Expiration Date	

Vulnerability Information

Target	Safenet Sentinel HASP*
Vulnerability Class	Design Flaw
Affected Versions Tested	6.56
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x32 Microsoft Windows 7 SP1 (FP:2013-07-24)
Affected Platforms Assumed	All Microsoft Windows
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1
6.56	V

Exploit / Proof-of-Concept Information

Supported Targets	6.56 on x32 Microsoft Windows 7 SP1 (FP:2013-07-24)
Attack Vector	Local
Exploitation Impact	Privilege Escalation
Exploitation Context	SYSTEM
Windows Integrity Level	High
Exploitation Indicators	
Prerequisites	%PATH% environment variable must contain a directory with R/W privileges for Guest(User)**
Reliability Rating	Completely (100%)
Development Status	Active
Development Phase	Delayed Exploit***
Development Goal	Exploit
Exploit Features	

* Safenet Sentinel HASP comes pre-installed with a number of upmarket commercial software, including but not limited to: iXAM, 1C, Adroit Photo Forensics, SoilVision, Intella, Bohemia Interactive, CodeWare, RockScience, and many others.

** Many common software installations perform an update to %PATH% that meets this requirement, including python, ActiveTCL, GTK+, ActivePerl, etc.

*** Currently the exploit impact will only be achieved after system reboot or at a random time during the exploited system's uptime. Development is currently focused on improving this to immediate impact.

Chapter 26

Tencent

"Founded in November, 1998, Tencent[50] has grown into one of China's largest and most used Internet service portal. Since its establishment over the last decade, Tencent has maintained steady growth under its user-oriented operating strategies. On June 16, 2004, Tencent Holdings Limited (SEHK 700) went public on the main board of the Hong Kong Stock Exchange.

It is Tencent's mission to enhance the quality of human life through Internet services. Presently, Tencent is providing value-added Internet, mobile and telecom services and online advertising under the strategic goal of providing users with "one-stop online lifestyle services". Tencents leading Internet platforms in China QQ[51] (QQ Instant Messenger), QQ.com, QQ Games, Qzone, 3g.QQ.com, SoSo, PaiPai and Tenpay have brought together China's largest Internet community, to meet the various needs of Internet users including communication, information, entertainment, e-commerce and others. As of Sep 30, 2011, the active QQ users accounts for QQ IM amounted to 711.7 million while its peak concurrent users reached 145.4 million. The development of Tencent has profoundly influenced the ways hundreds of millions of Internet users communicate with one another as well as their lifestyles. It also brings possibilities of a wider range of applications to the Chinas Internet industry.

Looking forward, Tencent remains committed to enhancing its development and innovation capabilities while strengthening its nationwide branding for its long term development. More than 50% of Tencent employees are R&D staff. Tencent has obtained patents relating to the technologies in various areas: instant messaging, e-commerce, online payment services, search engine, information security, gaming, and many more. In 2007, Tencent invested more than RMB100 million in setting up the Tencent Research Institute, China's first Internet research institute, with campuses in Beijing, Shanghai, and Shenzhen. The institute focuses on the self-development of core Internet technologies, in pursuing its development and innovation for the industry.

Tencent's long term vision is to become the most respected Internet enterprise. In order to fulfill corporate social responsibilities and to promote civil Internet communities, Tencent has been actively participating in public charity programs. In 2006, Tencent inaugurated the Tencent Charity Fund, the first charity foundation set up by a Chinese Internet enterprise, and the public charity website gongyi.qq.com. The website focuses on youth education, assisting impoverished communities, care for the disadvantaged, and disaster relief. Tencent has currently begun a number of public charity projects across China. It strives to help build a harmonious society and to become a good corporate citizen."

26.1   QQ Player

"Tencent QQ[51] provides total solution for Internet-based instant messaging (IM) platform. It supports comprehensive basic online communication functions, including text messaging, video and voice chat as well as online (offline) file transmission. It also supports cross platform communication between PC and wireless terminals. The new QQ2009 edition is fully compatible with Windows XP, Vista, Linux, Mac and other systems. Meanwhile, the third-generation QQ with "Hummer" as its core has strengthened the integration of various Internet services to build a complete, mature and diversified online life platform for users."

VBI-13-004   Tencent QQ Player Client-side Remote Code Execution

VBI Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License
Listing Date	2013.04.12
Expiration Date	

Vulnerability Information

Target	Tencent QQ Player
Vulnerability Class	Memory Corruption
Affected Versions Tested	3.7 (892)
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: x86-32 Microsoft Windows 7 Ultimate SP1 FP(2013.04.12)
	2: x86-64 Microsoft Windows 7 Ultimate SP1 FP(2013.04.12)
	3: x86-32 Microsoft Windows 7 Enterprise SP1 FP(2013.04.12)
	4: x86-64 Microsoft Windows 7 Enterprise SP1 FP(2013.04.12)
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Completely (100%)

Vulnerability Test Matrix

	1	2	3	4
3.7 (892)	V	V	V	V

Exploit / Proof-of-Concept Information

Supported Targets	3.7 (892) on x86-32 Microsoft Windows 7 Ultimate SP1 FP(2013.04.12)
	3.7 (892) on x86-64 Microsoft Windows 7 Ultimate SP1 FP(2013.04.12)
	3.7 (892) on x86-32 Microsoft Windows 7 Enterprise SP1 FP(2013.04.12)
	3.7 (892) on x86-64 Microsoft Windows 7 Enterprise SP1 FP(2013.04.12)
Attack Vector	Client-side
Exploitation Impact	Code Execution
Exploitation Context	User
Windows Integrity Level	Medium
Exploitation Indicators	Target software crashes
Prerequisites	
Reliability Rating	High (70%)*
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	ASLR Handled
	DEP Bypass
	Arbitrary Payload

* Reliability is not 100% as sometimes various threads crash before exploit success. Multiple process threads access the memory being corrupted, therefore it would be difficult to achieve process continuation as well as 100% reliability.

Chapter 27

Zabbix SIA

"ZABBIX SIA[52] is based in Riga, Latvia. Its CEO is Alexei Vladishev, the owner and ZABBIX product manager.

The basic work sphere of ZABBIX SIA is development of open source software for monitoring of networks and applications. Apart from that the company offers a wide range of professional services designed to fit every customer's unique business demands including implementation, integration, custom development and consulting services as well as various training programs.

ZABBIX team's mission is to make a superior monitoring solution available and affordable for all.

The company's flagship product is ZABBIX, one of the most popular open source monitoring software in the world. It is already used by a vast number of companies, who have chosen it due to real scalability, high and robust performance, ease of use and extremely low costs of ownership.

ZABBIX SIA is privately held."

27.1   Zabbix

"Zabbix[53] is the ultimate open source availability and performance monitoring solution. Zabbix offers advanced monitoring, alerting, and visualization features today which are missing in other monitoring systems, even some of the best commercial ones."

VBI-12-030   Zabbix Remote Code Execution

Vulnerability Information

VBI Asset Type	Brokered
VBI Asset Availability	Exclusive Purchase
	Non-Exclusive Purchase
	Monthly License

<div align="right">Table continued on next page...</div>

Listing Date	2012.06.21
Expiration Date	
Vulnerability Class	Input Validation
Affected Versions Tested	2.0.0
	1.8.5
Affected Versions Assumed	
Unaffected Versions	
Affected Platforms Tested	1: PHP 5.3.3-7+squeeze12 on Apache 2.2.16-6+squeeze7 on x86-32 Debian 6.0.5
	2: PHP 5.4.4-2 on Apache 2.2.22-9 on x86-32 Debian testing(2012.06.21)
	3: PHP 5.4.4-2 on Apache 2.2.22-9 on x86-32 Debian unstable(2012.06.21)
	4: PHP 5.4.4 on Apache 2.4.2 on x86-64 Microsoft Windows 2008 SP2
	5: PHP 5.3.14 on Apache 2.4.2 on x86-64 Microsoft Windows 2008 SP2
	6: PHP 5.4.4 on Apache 2.4.2 on x86-32 Microsoft Windows 2003 SP2
	7: PHP 5.3.14 on Apache 2.4.2 on x86-32 Microsoft Windows 2003 SP2
	8: PHP 5.4.4 on Apache 2.4.2 on x86-32 Microsoft Windows XP SP3
	9: PHP 5.3.14 on Apache 2.4.2 on x86-32 Microsoft Windows XP SP3
	10: PHP 5.3.3 on Apache 2.2.15-15 on x86-32 CentOS 6.2
	11: PHP 5.1.6 on Apache 2.2.3-63 on x86-32 CentOS 5.8
Affected Platforms Assumed	
Unaffected Platforms	
Reliability Rating	Near-Complete (99%)

Vulnerability Test Matrix

	1	2	3	4	5	6	7	8	9	10	11
2.0.0	V	V	V	V	V	V	V	V	V	V	V
1.8.5	V	V	V	V	V	V	V	V	V	V	V

Exploit / Proof-of-Concept Information

Supported Targets	2.0.0 on all Affected Platforms Tested
	1.8.5 on all Affected Platforms Tested
Attack Vector	Remote Pre-Auth
Exploitation Impact	Code Execution
Exploitation Context	Webserver User
Windows Integrity Level	

Table continued on next page...

Exploitation Indicators	PHP files modifications
Prerequisites	
Reliability Rating	Near-Complete (99%)
Development Status	Complete
Development Phase	Exploit
Development Goal	Exploit
Exploit Features	PHP disabled_functions restrictions bypass (multiple techniques)

Chapter 28

Vulnerability History and Status

VBI ID	Description	Status
VBI-13-027	F5 Networks BIG-IQ Post-auth Remote Privileged Command Execution	Available
VBI-13-026	GKSu + Oracle VirtualBox Client-side Remote Privileged Command Execution	Available
VBI-13-025		Pending
VBI-13-024	McAfee ePolicy Orchestrator Post-Auth Priileged Remote Code Execution	Available
VBI-13-023	McAfee ePolicy Orchestrator Post-Auth Priileged Remote Code Execution	Available
VBI-13-022	Google Android Local Application Permissions Evasion	Available
VBI-13-021	PHP Remote Command Execution	Sold
VBI-13-020	Microsoft Windows Kernel Local Privilege Escalation	Available
VBI-13-019	McAfee ePolicy Orchestrator Privileged Remote Code Execution	Available
VBI-13-018	Opera Web Browser Universal Client-side Remote Code Execution	Available
VBI-13-017	Mozilla Firefox Client-side Remote Code Execution	Sold
VBI-13-016	Kingsoft Office Client-side Remote Code Execution	Available
VBI-13-015	ASUS Device Driver Local Privilege Escalation	Available
VBI-13-014	ZeroShell Remote Privileged Command Execution	Available
VBI-13-013	Microsoft Windows Kernel Local Privilege Escalation	Available
VBI-13-012	Mozilla Firefox Client-side Remote Code Execution	Sold
VBI-13-011	Adobe Photoshop Client-side Remote Code Execution	Available
VBI-13-010	avast! Anti-Virus Local Privilege Escalation	Available
VBI-13-009	Microsoft Internet Explorer Client-side Remote Code Execution	Sold
VBI-13-008		Pending
VBI-13-007	SafeNet Sentinel HASP Local Privilege Escalation	Available
VBI-13-006	Multiple BSD Jail Local Jail Escape and Privileged Command Execution	Available
VBI-13-005	avast! Anti-Virus Local Information Disclosure	Available

Continued on Next Page...

Table 28.1 – Continued

VBI ID	Description	Status
VBI-13-004	Tencent QQ Player Remote Code Execution	Available
VBI-13-003	Parallels Plesk Panel Remote Code Execution	Available
VBI-13-002	Barracuda Web Filter Privileged Remote Code Execution	Available
VBI-13-001	Oracle Solaris SSHD Privileged Remote Command Execution	Sold
VBI-13-000	Barracuda Web Filter Privileged Remote Code Execution	Available
VBI-12-039	Microsoft Internet Explorer Client-side Remote Code Execution and Information Disclosure	Available
VBI-12-038	Oracle WebCenter Content Core Component Remote Authentication Bypass and Code Exeuction	Available
VBI-12-037	Apple iOS Remote Forced Firmware Update Avoidance	Available
VBI-12-036	Apple iOS Remote Forced Access-Point Association	Unavailable
VBI-12-035	Microsoft Office Client-Side Remote Code Execution	Available
VBI-12-034	Juniper Network Connect Server Local Privilege Escalation	Available
VBI-12-033	Adobe Flash Player Client-side Remote Code Execution	Available
VBI-12-032	Mozilla Firefox Client-Side Remote Code Execution	Available
VBI-12-031	Dell SonicWALL Multiple Products Remote Command Execution	Available
VBI-12-030	Zabbix Remote Code Execution	Available
VBI-12-029		Pending
VBI-12-028	tcpdump Local Privilege Escalation and Backdoor with Firewall Evasion	Available
VBI-12-027	Microsoft Windows Kernel Local Privilege Escalation	Sold
VBI-12-026	Internet Explorer 8 Remote Code Execution	Available
VBI-12-025	*** REDACTED ***	Sold
VBI-12-024	Red Star OS Local Privilege Escalation with non-System Command Reboot	Available
VBI-12-023	Red Star OS Local Privilege Escalation	Available
VBI-12-022	Red Star OS Local Privilege Escalation	Available
VBI-12-021	Red Star OS Local Privilege Escalation	Available
VBI-12-020	Red Star OS Local Privilege Escalation	Available
VBI-12-019	Red Star OS Local Privilege Escalation	Available
VBI-12-018	Red Star OS Local Privilege Escalation	Available
VBI-12-017	Red Star OS Local Privilege Escalation	Available
VBI-12-016	Red Star OS Local Privilege Escalation	Available
VBI-12-015	Red Star OS Local Privilege Escalation	Available
VBI-12-014	Red Star OS Local Privilege Escalation	Available
VBI-12-013	Red Star OS Local Privilege Escalation	Available
VBI-12-012	Red Star OS Local Privilege Escalation	Available
VBI-12-011	Red Star OS Local Privilege Escalation	Available
VBI-12-010	Red Star OS Local Privilege Escalation	Expired
VBI-12-009	Red Star OS Local Privilege Escalation	Expired
VBI-12-008	Red Star OS Sat Privileged Remote and Client-Side Command Execution	Available
VBI-12-007	Webmin Privileged Remote Privileged Information Disclosure	Expired
VBI-12-006	Webmin Privileged Remote and Client-Side Command Execution	Expired

Continued on Next Page. . .

Table 28.1 – Continued

VBI ID	Description	Status
VBI-12-005	Webmin Privileged Remote Code Execution	Expired
VBI-12-004	Microsoft Windows Local Protection Bypass	Available
VBI-12-003	Microsoft Windows Local Privilege Escalation	Available
VBI-12-002	Microsoft Windows XP Local Privilege Escalation	Available
VBI-12-001	*** REDACTED ***	Sold
VBI-12-000	*** REDACTED ***	Unavailable
VBI-11-033	Microsoft Windows XP DLL Hijacking Client-Side Remote Code Execution	Unavailable
VBI-11-032	BSD Perimeter pfSense Remote Privileged Command Execution	Available
VBI-11-031	Nagios Enterprises Nagios XI Remote Code Execution	Expired
VBI-11-030	Uptime Systems Up.Time Remote Privileged Code Execution	Available
VBI-11-029	Rhinosoft Serv-U File Server Remote Information Disclosure	Unavailable
VBI-11-028	*** REDACTED ***	Unavailable
VBI-11-027	Multiple FTP Server Remote Privileged Code Execution	Unavailable
VBI-11-026	*** REDACTED ***	Sold
VBI-11-025	*** REDACTED ***	Unavailable
VBI-11-024	Apple Mac OS X Snow Leopard Privilege Escalation	Expired
VBI-11-023	Apple Mac OS X Leopard/Tiger Privilege Escalation	Expired
VBI-11-022	Apple iTunes Device Update Privilege Escalation	Expired
VBI-11-021	NEC Voice Mail Remote Command Execution	Expired
VBI-2011-0020	Microsoft Internet Explorer 7 Client-Side Remote Code Execution	Sold
VBI-2011-0019	Microsoft Internet Explorer 8 Client-Side Remote Code Execution	Sold
VBI-2011-0018	Tectia Server Pre-Auth Remote Code Execution	Sold
VBI-2011-0017	Kresimir Petric FreeFTPd Pre-Auth Remote Authentication Bypass and Code Execution	Sold
VBI-2011-0016	Kresimir Petric FreeSSHd Pre-Auth Remote Authentication Bypass and Code Exeuction	Sold
VBI-2011-0015	FreeBSD and NetBSD telnetd Pre-Auth Remote Code Execution	Sold
VBI-2011-0014	Google SketchUp Client-Side Remote Code Execution	Sold
VBI-2011-0013	Adobe Flash Player Client-Side Remote Code Execution	Sold
VBI-2011-0012	Adobe Illustrator Client-Side Remote Code Execution	Sold
VBI-11-011	PineApp Mail-SeCure Remote Command Execution	Available
VBI-2011-0010	Opera Multiple Products Client-Side Remote Code Execution	Sold
VBI-11-009	*** REDACTED ***	Sold
VBI-11-008	Atmail Multiple Products Input Validation Remote Code and Command Execution	Expired
VBI-11-007	Atmail Multiple Products Input Validation Remote Code and Command Execution	Expired
VBI-11-006	Atmail Multiple Products Input Validation Race Condition Remote Code and Command Execution	Expired
VBI-11-005	Mozilla Firefox Client-Side Remote Code Execution	Patched
VBI-11-004	Java Runtime Environment Client-Side Remote Code Execution	Expired
VBI-11-003	*** REDACTED ***	Sold
VBI-11-002	*** REDACTED ***	Sold

Continued on Next Page...

Table 28.1 – Continued

VBI ID	Description	Status
VBI-11-001	*** REDACTED ***	Sold
VBI-2011-0000	Microsoft Windows Local Ring0 Privilege Escalation	Sold
VBI-2010-0031	Oracle Solaris Default Software Local Privilege Escalation	Sold
VBI-10-030	Java Virtual Machine (JRE & JDK) Client-Side Remote Code Execution	Available
VBI-2010-0029	QNX Neutrino RTOS Default Software Local Privilege Escalation	Sold
VBI-2010-0028	QNX Neutrino RTOS Default Software Local Privilege Escalation	Sold
VBI-2010-0027	QNX Neutrino RTOS Default Software Local Privilege Escalation	Sold
VBI-10-026	*** REDACTED ***	Sold
VBI-2010-0025	Enterasys Network Management Suite Remote Code Execution	Sold
VBI-2010-0024	Adobe Shockwave Player Client-Side Code Execution	Sold
VBI-2010-0023	Java Runtime Environment Auto-Update Remote Code Execution	Sold
VBI-2010-0022	Alcohol 120% Remote Code Execution	Sold
VBI-2010-0021	ESET NOD32 Antivirus and ESET Smart Security Remote Pre-auth Code Execution	Sold
VBI-10-020	*** REDACTED ***	Sold
VBI-10-019	Microsoft Windows Core Component Client-Side Remote Code Execution	Patched
VBI-10-018	Symantec Web Gateway SQL Injection	Unavailable
VBI-2010-0017	Windows Messenger ActiveX Code Execution	Sold
VBI-2010-0016	Java Runtime Environment Auto-Update Code Execution	Sold
VBI-10-015	Flash Client-Side Code Execution	Unavailable
VBI-10-014	Malicious Portable Executable Detection Bypass	Available
VBI-2010-0013	Java Runtime Environment Local Privilege Escalation	Sold
VBI-10-012	Quicktime Code Execution	Unavailable
VBI-2010-0011	Quicktime Client-Side Remote Code Execution	Sold
VBI-2010-0010	Java Runtime Environment Client-Side Remote Code Execution	Sold
VBI-2010-0009	Java Runtime Environment Local Privilege Escalation	Sold
VBI-2010-0008	.NET Client-Side Code Exec	Sold
VBI-2010-0007	Java Runtime Environment Client-Side Remote Command Execution	Patched
VBI-2010-0006	Quicktime Client-Side Remote Code Execution	Patched
VBI-2010-0005	AIX Local Privilege Escalation	Sold
VBI-10-004	Novell Client Remote Code Execution	Available
VBI-10-003	Ventrilo Client Remote Code Execution	Unavailable
VBI-2010-0002	Microsoft Office API Remote Code Execution	Sold
VBI-2010-0001	Adobe Reader Client-Side Remote Code Execution	Sold
VBI-2010-0000	McAfee Anti-Theft Auth Bypass	Sold

Bibliography

[1] What is the windows integrity mechanism? http://msdn.microsoft.com/en-us/library/bb625957.aspx.

[2] Adobe systems incorporated. http://www.adobe.com/.

[3] Adobe flash player. http://www.adobe.com/products/flashplayer/.

[4] Adobe photoshop cs6. http://helpx.adobe.com/illustrator/topics-cs6.html.

[5] Asus. http://www.asus.com/.

[6] Avast software, a.s. http://www.avast.com/.

[7] avast! anti-virus. http://www.avast.com/.

[8] Barracuda networks, inc. http://www.barracudanetworks.com/.

[9] Barracuda web filter. http://www.barracudanetworks.com/products/webfilter.

[10] Dell, inc. http://www.dell.com/.

[11] Sonicwall. http://content.dell.com/us/en/corp/d/secure/acq-sonicwall.

[12] Dell sonicwall. http://www.sonicwall.com/us/en/Company.html.

[13] Scrutinizer. http://www.sonicwall.com/us/en/products/Scrutinizer.html.

[14] F5 networks. http://www.f5.com/.

[15] Big-iq. http://www.f5.com/products/big-iq/.

[16] Fulvio ricciardi. http://www.linkedin.com/profile/view?id=64509760.

[17] Zeroshell. http://www.zeroshell.org/.

[18] Google. http://www.google.com/.

[19] Android. http://www.android.com/.

[20] Gustavo noronha. http://www.advogato.org/person/kov/.

[21] Gksu. http://www.nongnu.org/gksu/.

[22] Juniper networks, inc. http://www.juniper.net/.

[23] Juniper networks sa series. http://www.juniper.net/uk/en/products-services/security/sa-series/.

[24] Kingsoft office software. http://www.kingsoftstore.com/.

[25] Kingsoft office. http://www.kingsoftstore.com/software/professional-office-suite.

[26] Korea computer center. http://en.wikipedia.org/wiki/Korea_Computer_Center.

[27] Red star os. http://en.wikipedia.org/wiki/Red_Star_OS.

[28] Mcafee, inc. http://www.mcafee.com/.

[29] Mcafee epolicy orchestrator. http://www.mcafee.com/us/products/epolicy-orchestrator.aspx.

[30] Microsoft corporation. http://www.microsoft.com/.

[31] Microsoft internet explorer. http://www.microsoft.com/windows/internet-explorer/.

[32] Microsoft office. http://office.microsoft.com/.

[33] Microsoft windows. http://www.microsoft.com/windows/.

[34] Novell. http://www.novell.com/.

[35] Novell clients. http://www.novell.com/products/clients/.

[36] Open source. http://en.wikipedia.org/wiki/Open_source.

[37] Openpam. http://www.openpam.org/.

[38] tcpdump. http://www.tcpdump.org/.

[39] Opera software asa. http://www.opera.com/.

[40] Opera web browser. http://www.opera.com/products/.

[41] Oracle corporation. http://www.oracle.com/.

[42] Java. http://www.java.com/.

[43] Webcenter content. http://www.oracle.com/technetwork/middleware/webcenter/content/overview/index.html.

[44] Parallels ip holdings gmbh. http://www.parallels.com/.

[45] Plesk panel. http://www.parallels.com/products/plesk/.

[46] Pineapp ltd. http://www.pineapp.com/.

[47] Mail-secure. http://www.pineapp.com/products/mail-secure.html.

[48] Safenet, inc. http://www.safenet-inc.com/.

[49] Sentinel hasp. http://www.safenet-inc.com/software-monetization/sentinel-hasp/.

[50] Tencent. http://www.tencent.com/.

[51] Qq player. http://im.qq.com/qq/all.shtml.

[52] Zabbix sia. http://www.zabbix.com/.

[53] Zabbix. http://www.zabbix.com/product.php.