ravynos-2 Scan Report

Project Name	ravynos-2
Scan Start	Saturday, June 22, 2024 9:08:41 AM
Preset	Checkmarx Default
Scan Time	01h:44m:28s
Lines Of Code Scanned	298767
Files Scanned	153
Report Creation Time	Saturday, June 22, 2024 10:24:11 AM
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086
Team	CxServer
Checkmarx Version	8.7.0
Scan Type	Full
Source Origin	LocalPath
Density	5/1000 (Vulnerabilities/LOC)
Visibility	Public

Filter Settings

Severity

Included: High, Medium, Low, Information

Excluded: None

Result State

Included: Confirmed, Not Exploitable, To Verify, Urgent, Proposed Not Exploitable

Excluded: None

Assigned to

Included: All

Categories

Included:

Uncategorized	All
Custom	All
PCI DSS v3.2	All
OWASP Top 10 2013	All
FISMA 2014	All
NIST SP 800-53	All
OWASP Top 10 2017	All
OWASP Mobile Top 10 2016	All

Excluded:

Uncategorized	None
Custom	None
PCI DSS v3.2	None
OWASP Top 10 2013	None
FISMA 2014	None

NIST SP 800-53	None
OWASP Top 10 2017	None
OWASP Mobile Top 10 2016	None

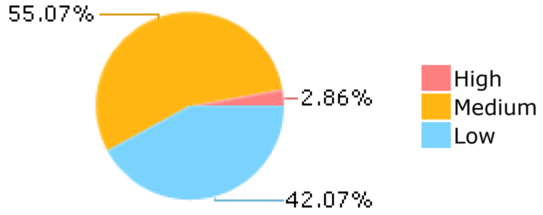
Results Limit

Results limit per query was set to 50

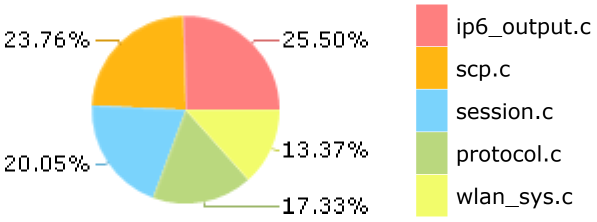
Selected Queries

Selected queries are listed in Result Summary

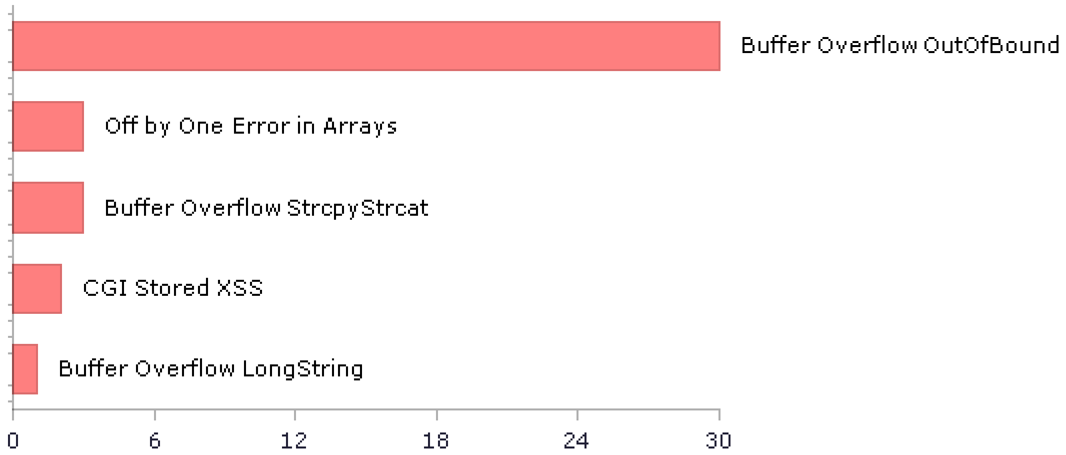
Result Summary



Most Vulnerable Files



Top 5 Vulnerabilities



Scan Summary - OWASP Top 10 2017

Further details and elaboration about vulnerabilities and risks can be found at: OWASP Top 10 2017

Category	Threat Agent	Exploitability	Weakness Prevalence	Weakness Detectability	Technical Impact	Business Impact	Issues Found	Best Fix Locations
A1-Injection	App. Specific	EASY	COMMON	EASY	SEVERE	App. Specific	348	209
A2-Broken Authentication	App. Specific	EASY	COMMON	AVERAGE	SEVERE	App. Specific	135	135
A3-Sensitive Data Exposure	App. Specific	AVERAGE	WIDESPREAD	AVERAGE	SEVERE	App. Specific	2	2
A4-XML External Entities (XXE)	App. Specific	AVERAGE	COMMON	EASY	SEVERE	App. Specific	0	0
A5-Broken Access Control*	App. Specific	AVERAGE	COMMON	AVERAGE	SEVERE	App. Specific	3	2
A6-Security Misconfiguration	App. Specific	EASY	WIDESPREAD	EASY	MODERATE	App. Specific	0	0
A7-Cross-Site Scripting (XSS)	App. Specific	EASY	WIDESPREAD	EASY	MODERATE	App. Specific	2	1
A8-Insecure Deserialization	App. Specific	DIFFICULT	COMMON	AVERAGE	SEVERE	App. Specific	0	0
A9-Using Components with Known Vulnerabilities*	App. Specific	AVERAGE	WIDESPREAD	AVERAGE	MODERATE	App. Specific	265	265
A10-Insufficient Logging & Monitoring	App. Specific	AVERAGE	WIDESPREAD	DIFFICULT	MODERATE	App. Specific	0	0

* Project scan results do not include all relevant queries. Presets and\or Filters should be changed to include all relevant standard queries.

Scan Summary - OWASP Top 10 2013

Further details and elaboration about vulnerabilities and risks can be found at: OWASP Top 10 2013

Category	Threat Agent	Attack Vectors	Weakness Prevalence	Weakness Detectability	Technical Impact	Business Impact	Issues Found	Best Fix Locations
A1-Injection	EXTERNAL, INTERNAL, ADMIN USERS	EASY	COMMON	AVERAGE	SEVERE	ALL DATA	0	0
A2-Broken Authentication and Session Management	EXTERNAL, INTERNAL USERS	AVERAGE	WIDESPREAD	AVERAGE	SEVERE	AFFECTED DATA AND FUNCTIONS	0	0
A3-Cross-Site Scripting (XSS)	EXTERNAL, INTERNAL, ADMIN USERS	AVERAGE	VERY WIDESPREAD	EASY	MODERATE	AFFECTED DATA AND SYSTEM	2	1
A4-Insecure Direct Object References	SYSTEM USERS	EASY	COMMON	EASY	MODERATE	EXPOSED DATA	3	2
A5-Security Misconfiguration	EXTERNAL, INTERNAL, ADMIN USERS	EASY	COMMON	EASY	MODERATE	ALL DATA AND SYSTEM	0	0
A6-Sensitive Data Exposure	EXTERNAL, INTERNAL, ADMIN USERS, USERS BROWSERS	DIFFICULT	UNCOMMON	AVERAGE	SEVERE	EXPOSED DATA	1	1
A7-Missing Function Level Access Control*	EXTERNAL, INTERNAL USERS	EASY	COMMON	AVERAGE	MODERATE	EXPOSED DATA AND FUNCTIONS	0	0
A8-Cross-Site Request Forgery (CSRF)	USERS BROWSERS	AVERAGE	COMMON	EASY	MODERATE	AFFECTED DATA AND FUNCTIONS	0	0
A9-Using Components with Known Vulnerabilities*	EXTERNAL USERS, AUTOMATED TOOLS	AVERAGE	WIDESPREAD	DIFFICULT	MODERATE	AFFECTED DATA AND FUNCTIONS	265	265
A10-Unvalidated Redirects and Forwards	USERS BROWSERS	AVERAGE	WIDESPREAD	DIFFICULT	MODERATE	AFFECTED DATA AND FUNCTIONS	0	0

***** Project scan results do not include all relevant queries. Presets and\or Filters should be changed to include all relevant standard queries.

Scan Summary - PCI DSS v3.2

Category	Issues Found	Best Fix Locations
PCI DSS (3.2) - 6.5.1 - Injection flaws - particularly SQL injection	5	5
PCI DSS (3.2) - 6.5.2 - Buffer overflows	210	188
PCI DSS (3.2) - 6.5.3 - Insecure cryptographic storage	0	0
PCI DSS (3.2) - 6.5.4 - Insecure communications	0	0
PCI DSS (3.2) - 6.5.5 - Improper error handling*****	0	0
PCI DSS (3.2) - 6.5.7 - Cross-site scripting (XSS)	2	1
PCI DSS (3.2) - 6.5.8 - Improper access control	0	0
PCI DSS (3.2) - 6.5.9 - Cross-site request forgery	0	0
PCI DSS (3.2) - 6.5.10 - Broken authentication and session management	0	0

***** Project scan results do not include all relevant queries. Presets and\or Filters should be changed to include all relevant standard queries.

Scan Summary - FISMA 2014

Category	Description	Issues Found	Best Fix Locations
Access Control	Organizations must limit information system access to authorized users, processes acting on behalf of authorized users, or devices (including other information systems) and to the types of transactions and functions that authorized users are permitted to exercise.	12	12
Audit And Accountability*	Organizations must: (i) create, protect, and retain information system audit records to the extent needed to enable the monitoring, analysis, investigation, and reporting of unlawful, unauthorized, or inappropriate information system activity; and (ii) ensure that the actions of individual information system users can be uniquely traced to those users so they can be held accountable for their actions.	4	4
Configuration Management	Organizations must: (i) establish and maintain baseline configurations and inventories of organizational information systems (including hardware, software, firmware, and documentation) throughout the respective system development life cycles; and (ii) establish and enforce security configuration settings for information technology products employed in organizational information systems.	39	39
Identification And Authentication*	Organizations must identify information system users, processes acting on behalf of users, or devices and authenticate (or verify) the identities of those users, processes, or devices, as a prerequisite to allowing access to organizational information systems.	125	125
Media Protection	Organizations must: (i) protect information system media, both paper and digital; (ii) limit access to information on information system media to authorized users; and (iii) sanitize or destroy information system media before disposal or release for reuse.	1	1
System And Communications Protection	Organizations must: (i) monitor, control, and protect organizational communications (i.e., information transmitted or received by organizational information systems) at the external boundaries and key internal boundaries of the information systems; and (ii) employ architectural designs, software development techniques, and systems engineering principles that promote effective information security within organizational information systems.	0	0
System And Information Integrity	Organizations must: (i) identify, report, and correct information and information system flaws in a timely manner; (ii) provide protection from malicious code at appropriate locations within organizational information systems; and (iii) monitor information system security alerts and advisories and take appropriate actions in response.	22	21

***** Project scan results do not include all relevant queries. Presets and\or Filters should be changed to include all relevant standard queries.

Scan Summary - NIST SP 800-53

Category	Issues Found	Best Fix Locations
AC-12 Session Termination (P2)	0	0
AC-3 Access Enforcement (P1)	174	174
AC-4 Information Flow Enforcement (P1)	0	0
AC-6 Least Privilege (P1)	0	0
AU-9 Protection of Audit Information (P1)	0	0
CM-6 Configuration Settings (P2)	0	0
IA-5 Authenticator Management (P1)	0	0
IA-6 Authenticator Feedback (P2)	0	0
IA-8 Identification and Authentication (Non-Organizational Users) (P1)	0	0
SC-12 Cryptographic Key Establishment and Management (P1)	0	0
SC-13 Cryptographic Protection (P1)	0	0
SC-17 Public Key Infrastructure Certificates (P1)	0	0
SC-18 Mobile Code (P2)	0	0
SC-23 Session Authenticity (P1)*****	1	1
SC-28 Protection of Information at Rest (P1)	1	1
SC-4 Information in Shared Resources (P1)	2	2
SC-5 Denial of Service Protection (P1)*****	315	140
SC-8 Transmission Confidentiality and Integrity (P1)	0	0
SI-10 Information Input Validation (P1)*****	79	56
SI-11 Error Handling (P2)*****	85	85
SI-15 Information Output Filtering (P0)	2	1
SI-16 Memory Protection (P1)	29	21

***** Project scan results do not include all relevant queries. Presets and\or Filters should be changed to include all relevant standard queries.

Scan Summary - OWASP Mobile Top 10 2016

Category	Description	Issues Found	Best Fix Locations
M1-Improper Platform Usage	This category covers misuse of a platform feature or failure to use platform security controls. It might include Android intents, platform permissions, misuse of TouchID, the Keychain, or some other security control that is part of the mobile operating system. There are several ways that mobile apps can experience this risk.	0	0
M2-Insecure Data Storage	This category covers insecure data storage and unintended data leakage.	0	0
M3-Insecure Communication	This category covers poor handshaking, incorrect SSL versions, weak negotiation, cleartext communication of sensitive assets, etc.	0	0
M4-Insecure Authentication	This category captures notions of authenticating the end user or bad session management. This can include: -Failing to identify the user at all when that should be required -Failure to maintain the user's identity when it is required -Weaknesses in session management	0	0
M5-Insufficient Cryptography	The code applies cryptography to a sensitive information asset. However, the cryptography is insufficient in some way. Note that anything and everything related to TLS or SSL goes in M3. Also, if the app fails to use cryptography at all when it should, that probably belongs in M2. This category is for issues where cryptography was attempted, but it wasnt done correctly.	0	0
M6-Insecure Authorization	This is a category to capture any failures in authorization (e.g., authorization decisions in the client side, forced browsing, etc.). It is distinct from authentication issues (e.g., device enrolment, user identification, etc.). If the app does not authenticate users at all in a situation where it should (e.g., granting anonymous access to some resource or service when authenticated and authorized access is required), then that is an authentication failure not an authorization failure.	0	0
M7-Client Code Quality	This category is the catch-all for code-level implementation problems in the mobile client. That's distinct from server-side coding mistakes. This would capture things like buffer overflows, format string vulnerabilities, and various other code-level mistakes where the solution is to rewrite some code that's running on the mobile device.	0	0
M8-Code Tampering	This category covers binary patching, local resource modification, method hooking, method swizzling, and dynamic memory modification. Once the application is delivered to the mobile device, the code and data resources are resident there. An attacker can either directly modify the code, change the contents of memory dynamically, change or replace the system APIs that the application uses, or	0	0

	modify the application's data and resources. This can provide the attacker a direct method of subverting the intended use of the software for personal or monetary gain.		
M9-Reverse Engineering	This category includes analysis of the final core binary to determine its source code, libraries, algorithms, and other assets. Software such as IDA Pro, Hopper, otool, and other binary inspection tools give the attacker insight into the inner workings of the application. This may be used to exploit other nascent vulnerabilities in the application, as well as revealing information about back end servers, cryptographic constants and ciphers, and intellectual property.	0	0
M10-Extraneous Functionality	Often, developers include hidden backdoor functionality or other internal development security controls that are not intended to be released into a production environment. For example, a developer may accidentally include a password as a comment in a hybrid app. Another example includes disabling of 2-factor authentication during testing.	0	0

Scan Summary - Custom

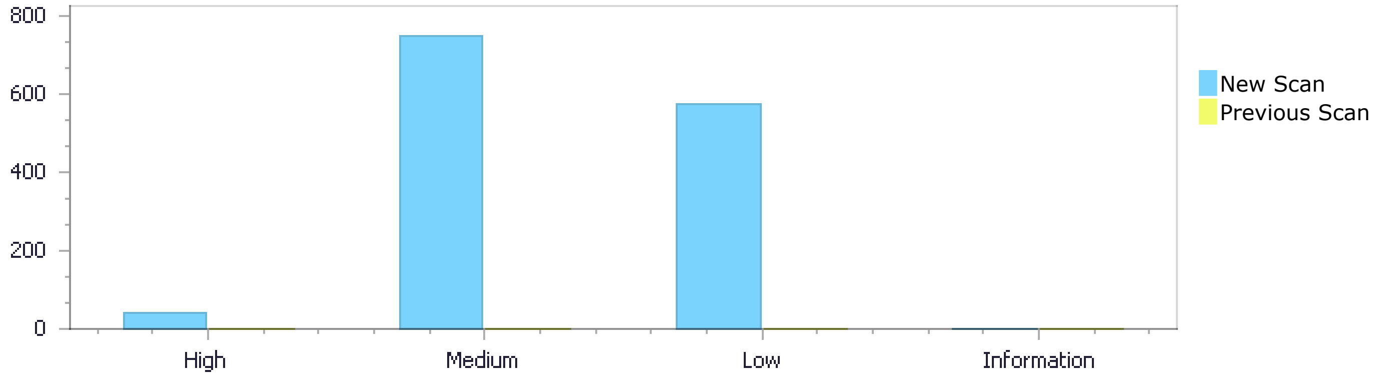
Category	Issues Found	Best Fix Locations
Must audit	0	0
Check	0	0
Optional	0	0

Results Distribution By Status

First scan of the project

	High	Medium	Low	Information	Total
New Issues	39	750	573	0	1,362
Recurrent Issues	0	0	0	0	0
Total	39	750	573	0	1,362

Fixed Issues	0	0	0	0	0



Results Distribution By State

	High	Medium	Low	Information	Total
Confirmed	0	0	0	0	0
Not Exploitable	0	0	0	0	0
To Verify	39	750	573	0	1,362
Urgent	0	0	0	0	0
Proposed Not Exploitable	0	0	0	0	0
Total	39	750	573	0	1,362

Result Summary

Vulnerability Type	Occurrences	Severity
Buffer Overflow OutOfBound	30	High
Buffer Overflow StrcpyStrcat	3	High
Off by One Error in Arrays	3	High
CGI Stored XSS	2	High
Buffer Overflow LongString	1	High

Dangerous Functions	229	Medium
Buffer Overflow boundcpy WrongSizeParam	147	Medium
MemoryFree on StackVariable	139	Medium
Use of Zero Initialized Pointer	71	Medium
Memory Leak	45	Medium
Wrong Size t Allocation	22	Medium
Double Free	21	Medium
Use of Uninitialized Variable	21	Medium
Integer Overflow	20	Medium
Use of Uninitialized Pointer	19	Medium
Divide By Zero	4	Medium
Buffer Overflow AddressOfLocalVarReturned	3	Medium
Char Overflow	3	Medium
Path Traversal	3	Medium
Stored Buffer Overflow boundcpy	2	Medium
Heap Inspection	1	Medium
NULL Pointer Dereference	152	Low
Improper Resource Access Authorization	123	Low
Unchecked Return Value	85	Low
Use of Sizeof On a Pointer Type	49	Low
Exposure of System Data to Unauthorized Control Sphere	39	Low
Use of Obsolete Functions	36	Low
Sizeof Pointer Argument	23	Low
Unchecked Array Index	18	Low
TOCTOU	15	Low
Incorrect Permission Assignment For Critical Resources	12	Low
Inconsistent Implementations	7	Low
Potential Off by One Error in Loops	5	Low
Arithmenic Operation On Boolean	4	Low
Potential Precision Problem	2	Low
Information Exposure Through Comments	1	Low
Insecure Temporary File	1	Low
Reliance on DNS Lookups in a Decision	1	Low

10 Most Vulnerable Files

High and Medium Vulnerabilities

File Name	Issues Found
ravynos-2/protocol.c	68
ravynos-2/scp.c	67
ravynos-2/wlan_sys.c	49
ravynos-2/rtsol.c	31
ravynos-2/X86_64.cpp	31
ravynos-2/cachedump.c	30
ravynos-2/rec_layer_d1.c	29
ravynos-2/ext2_extents.c	28
ravynos-2/session.c	26
ravynos-2/telnet.c	25

Scan Results Details

Buffer Overflow OutOfBound

Query Path:
CPP\Cx\CPP Buffer Overflow\Buffer Overflow OutOfBound Version:1

Categories

PCI DSS v3.2: PCI DSS (3.2) - 6.5.2 - Buffer overflows
NIST SP 800-53: SI-10 Information Input Validation (P1)
OWASP Top 10 2017: A1-Injection

Description

Buffer Overflow OutOfBound\Path 1:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=8
Status	New

The size of the buffer used by response in cp, at line 2057 of ravynos-2/scp.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that response passes to cp, at line 2057 of ravynos-2/scp.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	2080	2080
Object	cp	cp

Code Snippet
File Name	ravynos-2/scp.c
Method	response(void)

```
....
2080.			cp[-1] = '\0';
```

Buffer Overflow OutOfBound\Path 2:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=9
Status	New

The size of the buffer used by determine_days in m, at line 48 of ravynos-2/a_time.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that determine_days passes to ydays, at line 48 of ravynos-2/a_time.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/a_time.c	ravynos-2/a_time.c

Line	50	58
Object	ydays	m

Code Snippet
File Name ravynos-2/a_time.c
Method static void determine_days(struct tm *tm)

```
....
50.      static const int ydays[12] = {
....
58.      tm->tm_yday = ydays[m] + d - 1;
```

Buffer Overflow OutOfBound\Path 3:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=10
Status	New

The size of the buffer used by bwi_rf_get_gains in i, at line 373 of ravynos-2/bwirf.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that bwi_rf_get_gains passes to save_rf, at line 373 of ravynos-2/bwirf.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	391	505
Object	save_rf	i

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_get_gains(struct bwi_mac *mac)

```
....
391.        uint16_t save_rf[SAVE_RF_MAX];
....
505.              RF_WRITE(mac, save_rf_regs[i], save_rf[i]);
```

Buffer Overflow OutOfBound\Path 4:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=11
Status	New

The size of the buffer used by bwi_rf_get_gains in i, at line 373 of ravynos-2/bwirf.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that bwi_rf_get_gains passes to save_rf, at line 373 of ravynos-2/bwirf.c, to overwrite the target buffer.

	Source	Destination

File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	391	403
Object	save_rf	i

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_get_gains(struct bwi_mac *mac)

```
....
391.        uint16_t save_rf[SAVE_RF_MAX];
....
403.                save_rf[i] = RF_READ(mac, save_rf_regs[i]);
```

Buffer Overflow OutOfBound\Path 5:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=12
Status	New

The size of the buffer used by bwi_rf_get_gains in i, at line 373 of ravynos-2/bwirf.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that bwi_rf_get_gains passes to save_rf_regs, at line 373 of ravynos-2/bwirf.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	378	505
Object	save_rf_regs	i

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_get_gains(struct bwi_mac *mac)

```
....
378.        static const uint16_t save_rf_regs[SAVE_RF_MAX] =
....
505.                RF_WRITE(mac, save_rf_regs[i], save_rf[i]);
```

Buffer Overflow OutOfBound\Path 6:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=13
Status	New

The size of the buffer used by bwi_rf_get_gains in i, at line 373 of ravynos-2/bwirf.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that bwi_rf_get_gains passes to save_rf_regs, at line 373 of ravynos-2/bwirf.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	378	403
Object	save_rf_regs	i

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_get_gains(struct bwi_mac *mac)

```
....
378.         static const uint16_t save_rf_regs[SAVE_RF_MAX] =
....
403.                 save_rf[i] = RF_READ(mac, save_rf_regs[i]);
```

Buffer Overflow OutOfBound\Path 7:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=14
Status	New

The size of the buffer used by bwi_rf_get_gains in i, at line 373 of ravynos-2/bwirf.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that bwi_rf_get_gains passes to save_rf_regs, at line 373 of ravynos-2/bwirf.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	378	403
Object	save_rf_regs	i

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_get_gains(struct bwi_mac *mac)

```
....
378.         static const uint16_t save_rf_regs[SAVE_RF_MAX] =
....
403.                 save_rf[i] = RF_READ(mac, save_rf_regs[i]);
```

Buffer Overflow OutOfBound\Path 8:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=15
Status	New

The size of the buffer used by bwi_rf_get_gains in i, at line 373 of ravynos-2/bwirf.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that bwi_rf_get_gains passes to save_rf_regs, at line 373 of ravynos-2/bwirf.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	378	505
Object	save_rf_regs	i

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_get_gains(struct bwi_mac *mac)

```
....
378.        static const uint16_t save_rf_regs[SAVE_RF_MAX] =
....
505.                RF_WRITE(mac, save_rf_regs[i], save_rf[i]);
```

Buffer Overflow OutOfBound\Path 9:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=16
Status	New

The size of the buffer used by bwi_rf_set_nrssi_ofs_11g in i, at line 1750 of ravynos-2/bwirf.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that bwi_rf_set_nrssi_ofs_11g passes to save_rf, at line 1750 of ravynos-2/bwirf.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	1769	1881
Object	save_rf	i

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_set_nrssi_ofs_11g(struct bwi_mac *mac)

```
....
1769.       uint16_t save_rf[SAVE_RF_MAX];
....
1881.               RF_WRITE(mac, save_rf_regs[i], save_rf[i]);
```

Buffer Overflow OutOfBound\Path 10:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=17
Status	New

The size of the buffer used by bwi_rf_set_nrssi_ofs_11g in i, at line 1750 of ravynos-2/bwirf.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that bwi_rf_set_nrssi_ofs_11g passes to save_rf, at line 1750 of ravynos-2/bwirf.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	1769	1779
Object	save_rf	i

Code Snippet

File Name	ravynos-2/bwirf.c
Method	bwi_rf_set_nrssi_ofs_11g(struct bwi_mac *mac)

```
....
1769.       uint16_t save_rf[SAVE_RF_MAX];
....
1779.               save_rf[i] = RF_READ(mac, save_rf_regs[i]);
```

Buffer Overflow OutOfBound\Path 11:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=18
Status	New

The size of the buffer used by bwi_rf_set_nrssi_ofs_11g in i, at line 1750 of ravynos-2/bwirf.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that bwi_rf_set_nrssi_ofs_11g passes to save_rf_regs, at line 1750 of ravynos-2/bwirf.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	1756	1881
Object	save_rf_regs	i

Code Snippet

File Name	ravynos-2/bwirf.c
Method	bwi_rf_set_nrssi_ofs_11g(struct bwi_mac *mac)

```
....
1756.       static const uint16_t save_rf_regs[SAVE_RF_MAX] =
....
1881.               RF_WRITE(mac, save_rf_regs[i], save_rf[i]);
```

Buffer Overflow OutOfBound\Path 12:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=700

	86&pathid=19
Status	New

The size of the buffer used by bwi_rf_set_nrssi_ofs_11g in i, at line 1750 of ravynos-2/bwirf.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that bwi_rf_set_nrssi_ofs_11g passes to save_rf_regs, at line 1750 of ravynos-2/bwirf.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	1756	1779
Object	save_rf_regs	i

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_set_nrssi_ofs_11g(struct bwi_mac *mac)

```
....
1756.        static const uint16_t save_rf_regs[SAVE_RF_MAX] =
....
1779.              save_rf[i] = RF_READ(mac, save_rf_regs[i]);
```

Buffer Overflow OutOfBound\Path 13:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=20
Status	New

The size of the buffer used by bwi_rf_set_nrssi_ofs_11g in i, at line 1750 of ravynos-2/bwirf.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that bwi_rf_set_nrssi_ofs_11g passes to save_rf_regs, at line 1750 of ravynos-2/bwirf.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	1756	1779
Object	save_rf_regs	i

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_set_nrssi_ofs_11g(struct bwi_mac *mac)

```
....
1756.        static const uint16_t save_rf_regs[SAVE_RF_MAX] =
....
1779.              save_rf[i] = RF_READ(mac, save_rf_regs[i]);
```

Buffer Overflow OutOfBound\Path 14:

Severity	High

Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=21
Status	New

The size of the buffer used by bwi_rf_set_nrssi_ofs_11g in i, at line 1750 of ravynos-2/bwirf.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that bwi_rf_set_nrssi_ofs_11g passes to save_rf_regs, at line 1750 of ravynos-2/bwirf.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	1756	1881
Object	save_rf_regs	i

Code Snippet

File Name	ravynos-2/bwirf.c
Method	bwi_rf_set_nrssi_ofs_11g(struct bwi_mac *mac)

```
....
1756.       static const uint16_t save_rf_regs[SAVE_RF_MAX] =
....
1881.            RF_WRITE(mac, save_rf_regs[i], save_rf[i]);
```

Buffer Overflow OutOfBound\Path 15:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=22
Status	New

The size of the buffer used by fcntl_getlock_pids in l_pid, at line 854 of ravynos-2/t_vnops.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that fcntl_getlock_pids passes to pid, at line 854 of ravynos-2/t_vnops.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	870	927
Object	pid	l_pid

Code Snippet

File Name	ravynos-2/t_vnops.c
Method	fcntl_getlock_pids(const atf_tc_t *tc, const char *mp)

```
....
870.        pid_t pid[5];
....
927.                  result[nlocks].l_pid = pid[i];
```

Buffer Overflow OutOfBound\Path 16:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=23
Status	New

The size of the buffer used by fcntl_getlock_pids in nlocks, at line 854 of ravynos-2/t_vnops.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that fcntl_getlock_pids passes to pid, at line 854 of ravynos-2/t_vnops.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	870	926
Object	pid	nlocks

Code Snippet

File Name	ravynos-2/t_vnops.c
Method	fcntl_getlock_pids(const atf_tc_t *tc, const char *mp)

```
....
870.        pid_t pid[5];
....
926.                    result[nlocks] = lock[i];
```

Buffer Overflow OutOfBound\Path 17:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=24
Status	New

The size of the buffer used by fcntl_getlock_pids in l_pid, at line 854 of ravynos-2/t_vnops.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that fcntl_getlock_pids passes to fd, at line 854 of ravynos-2/t_vnops.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	869	927
Object	fd	l_pid

Code Snippet

File Name	ravynos-2/t_vnops.c
Method	fcntl_getlock_pids(const atf_tc_t *tc, const char *mp)

```
....
869.        int fd[5];
....
927.                    result[nlocks].l_pid = pid[i];
```

Buffer Overflow OutOfBound\Path 18:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=25
Status	New

The size of the buffer used by fcntl_getlock_pids in nlocks, at line 854 of ravynos-2/t_vnops.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that fcntl_getlock_pids passes to fd, at line 854 of ravynos-2/t_vnops.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	869	926
Object	fd	nlocks

Code Snippet
File Name ravynos-2/t_vnops.c
Method fcntl_getlock_pids(const atf_tc_t *tc, const char *mp)

```
....
869.        int fd[5];
....
926.                        result[nlocks] = lock[i];
```

Buffer Overflow OutOfBound\Path 19:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=26
Status	New

The size of the buffer used by fcntl_getlock_pids in l_pid, at line 854 of ravynos-2/t_vnops.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that fcntl_getlock_pids passes to lock, at line 854 of ravynos-2/t_vnops.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	858	927
Object	lock	l_pid

Code Snippet
File Name ravynos-2/t_vnops.c
Method fcntl_getlock_pids(const atf_tc_t *tc, const char *mp)

```
....
858.        const struct flock lock[4] = {
....
927.                    result[nlocks].l_pid = pid[i];
```

Buffer Overflow OutOfBound\Path 20:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=27
Status	New

The size of the buffer used by fcntl_getlock_pids in nlocks, at line 854 of ravynos-2/t_vnops.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that fcntl_getlock_pids passes to lock, at line 854 of ravynos-2/t_vnops.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	858	926
Object	lock	nlocks

Code Snippet

File Name ravynos-2/t_vnops.c

Method fcntl_getlock_pids(const atf_tc_t *tc, const char *mp)

```
....
858.        const struct flock lock[4] = {
....
926.                    result[nlocks] = lock[i];
```

Buffer Overflow OutOfBound\Path 21:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=28
Status	New

The size of the buffer used by fcntl_getlock_pids in l_pid, at line 854 of ravynos-2/t_vnops.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that fcntl_getlock_pids passes to result, at line 854 of ravynos-2/t_vnops.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	866	927
Object	result	l_pid

Code Snippet

File Name ravynos-2/t_vnops.c

Method	fcntl_getlock_pids(const atf_tc_t *tc, const char *mp)

```
....
866.    struct flock result[5];
....
927.            result[nlocks].l_pid = pid[i];
```

Buffer Overflow OutOfBound\Path 22:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=29
Status	New

The size of the buffer used by fcntl_getlock_pids in nlocks, at line 854 of ravynos-2/t_vnops.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that fcntl_getlock_pids passes to result, at line 854 of ravynos-2/t_vnops.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	866	926
Object	result	nlocks

Code Snippet	
File Name	ravynos-2/t_vnops.c
Method	fcntl_getlock_pids(const atf_tc_t *tc, const char *mp)

```
....
866.    struct flock result[5];
....
926.            result[nlocks] = lock[i];
```

Buffer Overflow OutOfBound\Path 23:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=30
Status	New

The size of the buffer used by probe_adapters in i, at line 891 of ravynos-2/vga.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that video_adapter_t biosadapter[2]; passes to biosadapter, at line 192 of ravynos-2/vga.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	192	1167
Object	biosadapter	i

Code Snippet

File Name	ravynos-2/vga.c
Method	static video_adapter_t biosadapter[2];

```
....
192.  static video_adapter_t  biosadapter[2];
```

File Name	ravynos-2/vga.c
Method	probe_adapters(void)

```
....
1167.           clear_mode_map(&biosadapter[i], mode_map, M_VGA_CG320 +
1,
```

Buffer Overflow OutOfBound\Path 24:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=31
Status	New

The size of the buffer used by probe_adapters in i, at line 891 of ravynos-2/vga.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that video_adapter_t biosadapter[2]; passes to biosadapter, at line 192 of ravynos-2/vga.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	192	1165
Object	biosadapter	i

Code Snippet

File Name	ravynos-2/vga.c
Method	static video_adapter_t biosadapter[2];

```
....
192.  static video_adapter_t  biosadapter[2];
```

File Name	ravynos-2/vga.c
Method	probe_adapters(void)

```
....
1165.           if (!(biosadapter[i].va_flags & V_ADP_MODECHANGE))
```

Buffer Overflow OutOfBound\Path 25:

Severity	High
Result State	To Verify

Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=32
Status	New

The size of the buffer used by probe_adapters in biosadapter, at line 891 of ravynos-2/vga.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that video_adapter_t biosadapter[2]; passes to biosadapter, at line 192 of ravynos-2/vga.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	192	1168
Object	biosadapter	biosadapter

Code Snippet

File Name	ravynos-2/vga.c
Method	static video_adapter_t biosadapter[2];

```
....
192.   static video_adapter_t  biosadapter[2];
```

File Name	ravynos-2/vga.c
Method	probe_adapters(void)

```
....
1168.                            (biosadapter[i].va_flags & V_ADP_COLOR) ?
```

Buffer Overflow OutOfBound\Path 26:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=33
Status	New

The size of the buffer used by probe_adapters in i, at line 891 of ravynos-2/vga.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that video_adapter_t biosadapter[2]; passes to biosadapter, at line 192 of ravynos-2/vga.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	192	1170
Object	biosadapter	i

Code Snippet

File Name	ravynos-2/vga.c
Method	static video_adapter_t biosadapter[2];

```
....
192.  static video_adapter_t  biosadapter[2];
```

▼

File Name ravynos-2/vga.c

Method probe_adapters(void)

```
....
1170.           if ((biosadapter[i].va_type == KD_VGA)
```

Buffer Overflow OutOfBound\Path 27:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=34
Status	New

The size of the buffer used by probe_adapters in i, at line 891 of ravynos-2/vga.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that video_adapter_t biosadapter[2]; passes to biosadapter, at line 192 of ravynos-2/vga.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	192	1171
Object	biosadapter	i

Code Snippet

File Name ravynos-2/vga.c

Method static video_adapter_t biosadapter[2];

```
....
192.  static video_adapter_t  biosadapter[2];
```

▼

File Name ravynos-2/vga.c

Method probe_adapters(void)

```
....
1171.             || (biosadapter[i].va_type == KD_EGA)) {
```

Buffer Overflow OutOfBound\Path 28:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=35
Status	New

The size of the buffer used by probe_adapters in va_io_base, at line 891 of ravynos-2/vga.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that video_adapter_t biosadapter[2]; passes to biosadapter, at line 192 of ravynos-2/vga.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	192	1172
Object	biosadapter	va_io_base

Code Snippet
File Name ravynos-2/vga.c
Method static video_adapter_t biosadapter[2];

```
....
192.  static video_adapter_t  biosadapter[2];
```

File Name ravynos-2/vga.c

Method probe_adapters(void)

```
....
1172.           biosadapter[i].va_io_base =
```

Buffer Overflow OutOfBound\Path 29:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=36
Status	New

The size of the buffer used by probe_adapters in i, at line 891 of ravynos-2/vga.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that video_adapter_t biosadapter[2]; passes to biosadapter, at line 192 of ravynos-2/vga.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	192	1173
Object	biosadapter	i

Code Snippet
File Name ravynos-2/vga.c
Method static video_adapter_t biosadapter[2];

```
....
192.  static video_adapter_t  biosadapter[2];
```

▼

File Name ravynos-2/vga.c

Method probe_adapters(void)

```
....
1173.                  (biosadapter[i].va_flags & V_ADP_COLOR) ?
```

Buffer Overflow OutOfBound\Path 30:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=37
Status	New

The size of the buffer used by probe_adapters in va_io_size, at line 891 of ravynos-2/vga.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that video_adapter_t biosadapter[2]; passes to biosadapter, at line 192 of ravynos-2/vga.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	192	1175
Object	biosadapter	va_io_size

Code Snippet

File Name ravynos-2/vga.c

Method static video_adapter_t biosadapter[2];

```
....
192.   static video_adapter_t  biosadapter[2];
```

▼

File Name ravynos-2/vga.c

Method probe_adapters(void)

```
....
1175.              biosadapter[i].va_io_size = 32;
```

Off by One Error in Arrays

Query Path:

CPP\Cx\CPP Buffer Overflow\Off by One Error in Arrays Version:0

Categories

PCI DSS v3.2: PCI DSS (3.2) - 6.5.2 - Buffer overflows
NIST SP 800-53: SI-16 Memory Protection (P1)
OWASP Top 10 2017: A1-Injection

Description

Off by One Error in Arrays\Path 1:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=2
Status	New

The buffer allocated by sizeof in ravynos-2/telnet.c at line 1295 does not correctly account for the actual size of the value, resulting in an incorrect allocation that is off by one.

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	1295	1295
Object	sizeof	sizeof

Code Snippet

File Name	ravynos-2/telnet.c
Method	unsigned char const * const slc_reply_eom = &slc_reply[sizeof(slc_reply)];

```
....
1295.  unsigned char const * const slc_reply_eom =
&slc_reply[sizeof(slc_reply)];
```

Off by One Error in Arrays\Path 2:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=3
Status	New

The buffer allocated by sizeof in ravynos-2/respip.c at line 567 does not correctly account for the actual size of the value, resulting in an incorrect allocation that is off by one.

	Source	Destination
File	ravynos-2/respip.c	ravynos-2/respip.c
Line	579	579
Object	sizeof	sizeof

Code Snippet

File Name	ravynos-2/respip.c
Method	rdata2sockaddr(const struct packed_rrset_data* rd, uint16_t rtype, size_t i,

```
....
579.                  *addrlenp = sizeof(*sa4);
```

Off by One Error in Arrays\Path 3:

Severity	High
Result State	To Verify

Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=4
Status	New

The buffer allocated by sizeof in ravynos-2/respip.c at line 567 does not correctly account for the actual size of the value, resulting in an incorrect allocation that is off by one.

	Source	Destination
File	ravynos-2/respip.c	ravynos-2/respip.c
Line	588	588
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/respip.c
Method rdata2sockaddr(const struct packed_rrset_data* rd, uint16_t rtype, size_t i,

```
....
588.            *addrlenp = sizeof(*sa6);
```

Buffer Overflow StrcpyStrcat

Query Path:
CPP\Cx\CPP Buffer Overflow\Buffer Overflow StrcpyStrcat Version:1

Categories

PCI DSS v3.2: PCI DSS (3.2) - 6.5.2 - Buffer overflows
NIST SP 800-53: SI-10 Information Input Validation (P1)
OWASP Top 10 2017: A1-Injection

Description

Buffer Overflow StrcpyStrcat\Path 1:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=5
Status	New

The size of the buffer used by realloc_strcat in new_str, at line 189 of ravynos-2/subst.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that realloc_strcat passes to str, at line 189 of ravynos-2/subst.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/subst.c	ravynos-2/subst.c
Line	189	204
Object	str	new_str

Code Snippet
File Name ravynos-2/subst.c
Method realloc_strcat(char **str, const char *append)

```
....
189.  realloc_strcat(char **str, const char *append)
....
204.        strcpy(new_str + old_len, append);
```

Buffer Overflow StrcpyStrcat\Path 2:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=6
Status	New

The size of the buffer used by realloc_strcat in BinaryExpr, at line 189 of ravynos-2/subst.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that realloc_strcat passes to str, at line 189 of ravynos-2/subst.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/subst.c	ravynos-2/subst.c
Line	189	204
Object	str	BinaryExpr

Code Snippet

File Name	ravynos-2/subst.c
Method	realloc_strcat(char **str, const char *append)

```
....
189.  realloc_strcat(char **str, const char *append)
....
204.        strcpy(new_str + old_len, append);
```

Buffer Overflow StrcpyStrcat\Path 3:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=7
Status	New

The size of the buffer used by lookup_simple in mountpath, at line 67 of ravynos-2/t_vnops.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that lookup_simple passes to mountpath, at line 67 of ravynos-2/t_vnops.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	67	72
Object	mountpath	mountpath

Code Snippet

File Name ravynos-2/t_vnops.c

Method lookup_simple(const atf_tc_t *tc, const char *mountpath)

```
....
67.  lookup_simple(const atf_tc_t *tc, const char *mountpath)
....
72.   strcpy(final, mountpath);
```

CGI Stored XSS

Query Path:
CPP\Cx\CPP High Risk\CGI Stored XSS Version:0

Categories

PCI DSS v3.2: PCI DSS (3.2) - 6.5.7 - Cross-site scripting (XSS)
OWASP Top 10 2013: A3-Cross-Site Scripting (XSS)
FISMA 2014: System And Information Integrity
NIST SP 800-53: SI-15 Information Output Filtering (P0)
OWASP Top 10 2017: A7-Cross-Site Scripting (XSS)

Description

CGI Stored XSS\Path 1:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=353
Status	New

Unvalidated DB output was found in line number 115 in ravynos-2/maketab.c file. A possible XSS exploitation was found in printf at line number 115.

	Source	Destination
File	ravynos-2/maketab.c	ravynos-2/maketab.c
Line	138	170
Object	buf	printf

Code Snippet
File Name ravynos-2/maketab.c
Method int main(int argc, char *argv[])

```
....
138.        while (fgets(buf, sizeof buf, fp) != NULL) {
....
170.                printf("\t\"%s\",\t/* %d */\n", name, tok);
```

CGI Stored XSS\Path 2:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=354
Status	New

Unvalidated DB output was found in line number 115 in ravynos-2/maketab.c file. A possible XSS exploitation was found in printf at line number 115.

	Source	Destination
File	ravynos-2/maketab.c	ravynos-2/maketab.c
Line	138	179
Object	buf	printf

Code Snippet
File Name ravynos-2/maketab.c
Method int main(int argc, char *argv[])

```
....
138.        while (fgets(buf, sizeof buf, fp) != NULL) {
....
179.                printf("\t%s,\t/* %s */\n",
```

Buffer Overflow LongString

Query Path:
CPP\Cx\CPP Buffer Overflow\Buffer Overflow LongString Version:1

Categories

PCI DSS v3.2: PCI DSS (3.2) - 6.5.2 - Buffer overflows
NIST SP 800-53: SI-10 Information Input Validation (P1)
OWASP Top 10 2017: A1-Injection

Description

Buffer Overflow LongString\Path 1:

Severity	High
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1
Status	New

The size of the buffer used by rsource in vect, at line 1490 of ravynos-2/scp.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that rsource passes to "%s/%s", at line 1490 of ravynos-2/scp.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1529	1530
Object	"%s/%s"	vect

Code Snippet
File Name ravynos-2/scp.c
Method rsource(char *name, struct stat *statp)

```
....
1529.           (void) snprintf(path, sizeof path, "%s/%s", name, dp-
>d_name);
1530.           vect[0] = path;
```

Dangerous Functions

Query Path:
CPP\Cx\CPP Medium Threat\Dangerous Functions Version:1

Categories

OWASP Top 10 2013: A9-Using Components with Known Vulnerabilities
OWASP Top 10 2017: A9-Using Components with Known Vulnerabilities

Description

Dangerous Functions\Path 1:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=378
Status	New

The dangerous function, memcpy, was found in use at line 387 in ravynos-2/a_int.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/a_int.c	ravynos-2/a_int.c
Line	431	431
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/a_int.c
Method ASN1_INTEGER *d2i_ASN1_UINTEGER(ASN1_INTEGER **a, const unsigned char **pp,

```
....
431.         memcpy(s, p, (int)len);
```

Dangerous Functions\Path 2:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=379
Status	New

The dangerous function, memcpy, was found in use at line 21 in ravynos-2/a_object.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination

File	ravynos-2/a_object.c	ravynos-2/a_object.c
Line	43	43
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/a_object.c
Method int i2d_ASN1_OBJECT(const ASN1_OBJECT *a, unsigned char **pp)

```
....
43.        memcpy(p, a->data, a->length);
```

Dangerous Functions\Path 3:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=380
Status	New

The dangerous function, memcpy, was found in use at line 239 in ravynos-2/a_object.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/a_object.c	ravynos-2/a_object.c
Line	312	312
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/a_object.c
Method ASN1_OBJECT *c2i_ASN1_OBJECT(ASN1_OBJECT **a, const unsigned char **pp,

```
....
312.        memcpy(data, p, length);
```

Dangerous Functions\Path 4:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=381
Status	New

The dangerous function, memcpy, was found in use at line 378 in ravynos-2/a_time.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/a_time.c	ravynos-2/a_time.c

Line	423	423
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/a_time.c
Method int ASN1_TIME_set_string_X509(ASN1_TIME *s, const char *str)

```
....
423.                memcpy(t.data, str + 2, t.length);
```

Dangerous Functions\Path 5:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=382
Status	New

The dangerous function, memcpy, was found in use at line 58 in ravynos-2/buffer.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/buffer.c	ravynos-2/buffer.c
Line	65	65
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/buffer.c
Method static char *sec_alloc_realloc(BUF_MEM *str, size_t len)

```
....
65.                memcpy(ret, str->data, str->length);
```

Dangerous Functions\Path 6:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=383
Status	New

The dangerous function, memcpy, was found in use at line 388 in ravynos-2/cut.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/cut.c	ravynos-2/cut.c
Line	406	406
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/cut.c
Method	f_cut(FILE *fp, const char *fname)

```
....
406.                    memcpy(mlbuf, lbuf, lbuflen);
```

Dangerous Functions\Path 7:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=384
Status	New

The dangerous function, memcpy, was found in use at line 287 in ravynos-2/d1_lib.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/d1_lib.c	ravynos-2/d1_lib.c
Line	308	308
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/d1_lib.c
Method	struct timeval *dtls1_get_timeout(SSL *s, struct timeval *timeleft)

```
....
308.        memcpy(timeleft, &(s->d1->next_timeout), sizeof(struct
timeval));
```

Dangerous Functions\Path 8:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=385
Status	New

The dangerous function, memcpy, was found in use at line 446 in ravynos-2/d1_lib.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/d1_lib.c	ravynos-2/d1_lib.c
Line	776	776
Object	memcpy	memcpy

Code Snippet

File Name ravynos-2/d1_lib.c
Method int DTLSv1_listen(SSL *s, BIO_ADDR *client)

```
....
776.              memcpy(&wbuf[DTLS1_RT_HEADER_LENGTH + 1],
```

Dangerous Functions\Path 9:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=386
Status	New

The dangerous function, memcpy, was found in use at line 207 in ravynos-2/e_aria.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	240	240
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/e_aria.c
Method static int aria_gcm_init_key(EVP_CIPHER_CTX *ctx, const unsigned char *key,

```
....
240.              memcpy(gctx->iv, iv, gctx->ivlen);
```

Dangerous Functions\Path 10:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=387
Status	New

The dangerous function, memcpy, was found in use at line 247 in ravynos-2/e_aria.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	284	284
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/e_aria.c
Method static int aria_gcm_ctrl(EVP_CIPHER_CTX *c, int type, int arg, void *ptr)

```
....
284.          memcpy(EVP_CIPHER_CTX_buf_noconst(c), ptr, arg);
```

Dangerous Functions\Path 11:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=388
Status	New

The dangerous function, memcpy, was found in use at line 247 in ravynos-2/e_aria.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	292	292
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/e_aria.c
Method static int aria_gcm_ctrl(EVP_CIPHER_CTX *c, int type, int arg, void *ptr)

```
....
292.          memcpy(ptr, EVP_CIPHER_CTX_buf_noconst(c), arg);
```

Dangerous Functions\Path 12:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=389
Status	New

The dangerous function, memcpy, was found in use at line 247 in ravynos-2/e_aria.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	298	298
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/e_aria.c
Method static int aria_gcm_ctrl(EVP_CIPHER_CTX *c, int type, int arg, void *ptr)

```
....
298.                memcpy(gctx->iv, ptr, gctx->ivlen);
```

Dangerous Functions\Path 13:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=390
Status	New

The dangerous function, memcpy, was found in use at line 247 in ravynos-2/e_aria.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	309	309
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/e_aria.c
Method static int aria_gcm_ctrl(EVP_CIPHER_CTX *c, int type, int arg, void *ptr)

```
....
309.                memcpy(gctx->iv, ptr, arg);
```

Dangerous Functions\Path 14:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=391
Status	New

The dangerous function, memcpy, was found in use at line 247 in ravynos-2/e_aria.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	322	322
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/e_aria.c
Method static int aria_gcm_ctrl(EVP_CIPHER_CTX *c, int type, int arg, void *ptr)

```
....
322.        memcpy(ptr, gctx->iv + gctx->ivlen - arg, arg);
```

Dangerous Functions\Path 15:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=392
Status	New

The dangerous function, memcpy, was found in use at line 247 in ravynos-2/e_aria.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	335	335
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/e_aria.c
Method	static int aria_gcm_ctrl(EVP_CIPHER_CTX *c, int type, int arg, void *ptr)

```
....
335.        memcpy(gctx->iv + gctx->ivlen - arg, ptr, arg);
```

Dangerous Functions\Path 16:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=393
Status	New

The dangerous function, memcpy, was found in use at line 247 in ravynos-2/e_aria.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	344	344
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/e_aria.c
Method	static int aria_gcm_ctrl(EVP_CIPHER_CTX *c, int type, int arg, void *ptr)

```
....
344.          memcpy(EVP_CIPHER_CTX_buf_noconst(c), ptr, arg);
```

Dangerous Functions\Path 17:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=394
Status	New

The dangerous function, memcpy, was found in use at line 247 in ravynos-2/e_aria.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	382	382
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/e_aria.c
Method	static int aria_gcm_ctrl(EVP_CIPHER_CTX *c, int type, int arg, void *ptr)

```
....
382.                memcpy(gctx_out->iv, gctx->iv, gctx->ivlen);
```

Dangerous Functions\Path 18:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=395
Status	New

The dangerous function, memcpy, was found in use at line 503 in ravynos-2/e_aria.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	525	525
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/e_aria.c
Method	static int aria_ccm_init_key(EVP_CIPHER_CTX *ctx, const unsigned char *key,

```
....
525.          memcpy(EVP_CIPHER_CTX_iv_noconst(ctx), iv, 15 - cctx->L);
```

Dangerous Functions\Path 19:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=396
Status	New

The dangerous function, memcpy, was found in use at line 531 in ravynos-2/e_aria.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	550	550
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/e_aria.c
Method static int aria_ccm_ctrl(EVP_CIPHER_CTX *c, int type, int arg, void *ptr)

```
....
550.          memcpy(EVP_CIPHER_CTX_buf_noconst(c), ptr, arg);
```

Dangerous Functions\Path 20:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=397
Status	New

The dangerous function, memcpy, was found in use at line 531 in ravynos-2/e_aria.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	577	577
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/e_aria.c
Method static int aria_ccm_ctrl(EVP_CIPHER_CTX *c, int type, int arg, void *ptr)

```
....
577.            memcpy(EVP_CIPHER_CTX_iv_noconst(c), ptr, arg);
```

Dangerous Functions\Path 21:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=398
Status	New

The dangerous function, memcpy, was found in use at line 531 in ravynos-2/e_aria.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	599	599
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/e_aria.c
Method	static int aria_ccm_ctrl(EVP_CIPHER_CTX *c, int type, int arg, void *ptr)

```
....
599.                memcpy(EVP_CIPHER_CTX_buf_noconst(c), ptr, arg);
```

Dangerous Functions\Path 22:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=399
Status	New

The dangerous function, memcpy, was found in use at line 631 in ravynos-2/e_aria.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	642	642
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/e_aria.c
Method	static int aria_ccm_tls_cipher(EVP_CIPHER_CTX *ctx, unsigned char *out,

```
....
642.            memcpy(out, EVP_CIPHER_CTX_buf_noconst(ctx),
```

Dangerous Functions\Path 23:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=400
Status	New

The dangerous function, memcpy, was found in use at line 631 in ravynos-2/e_aria.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	645	645
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/e_aria.c
Method static int aria_ccm_tls_cipher(EVP_CIPHER_CTX *ctx, unsigned char *out,

```
....
645.        memcpy(EVP_CIPHER_CTX_iv_noconst(ctx) +
EVP_CCM_TLS_FIXED_IV_LEN, in,
```

Dangerous Functions\Path 24:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=401
Status	New

The dangerous function, memcpy, was found in use at line 65 in ravynos-2/e_rc4_hmac_md5.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_rc4_hmac_md5.c	ravynos-2/e_rc4_hmac_md5.c
Line	112	112
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/e_rc4_hmac_md5.c
Method static int rc4_hmac_md5_cipher(EVP_CIPHER_CTX *ctx, unsigned char *out,

```
....
112.                    memcpy(out + rc4_off, in + rc4_off, plen -
rc4_off);
```

Dangerous Functions\Path 25:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=402
Status	New

The dangerous function, memcpy, was found in use at line 176 in ravynos-2/e_rc4_hmac_md5.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/e_rc4_hmac_md5.c	ravynos-2/e_rc4_hmac_md5.c
Line	194	194
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/e_rc4_hmac_md5.c
Method static int rc4_hmac_md5_ctrl(EVP_CIPHER_CTX *ctx, int type, int arg,

```
....
194.                    memcpy(hmac_key, ptr, arg);
```

Dangerous Functions\Path 26:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=403
Status	New

The dangerous function, memcpy, was found in use at line 550 in ravynos-2/ext2_extents.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	558	558
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/ext2_extents.c
Method ext4_ext_fill_path_bdata(struct ext4_extent_path *path,

```
....
558.        memcpy(path->ep_data, bp->b_data, bp->b_bufsize);
```

Dangerous Functions\Path 27:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=404
Status	New

The dangerous function, memcpy, was found in use at line 565 in ravynos-2/ext2_extents.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	571	571
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/ext2_extents.c
Method ext4_ext_fill_path_buf(struct ext4_extent_path *path, struct buf *bp)

```
....
571.        memcpy(bp->b_data, path->ep_data, bp->b_bufsize);
```

Dangerous Functions\Path 28:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=405
Status	New

The dangerous function, memcpy, was found in use at line 159 in ravynos-2/http-server.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/http-server.c	ravynos-2/http-server.c
Line	236	236
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/http-server.c
Method send_document_cb(struct evhttp_request *req, void *arg)

```
....
236.                memcpy(pattern, whole_path, dirlen);
```

Dangerous Functions\Path 29:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=406
Status	New

The dangerous function, memcpy, was found in use at line 331 in ravynos-2/init.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/init.c	ravynos-2/init.c
Line	340	340
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/init.c
Method mt7615_regd_notifier(struct wiphy *wiphy,

```
....
340.          memcpy(dev->mt76.alpha2, request->alpha2, sizeof(dev->mt76.alpha2));
```

Dangerous Functions\Path 30:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=407
Status	New

The dangerous function, memcpy, was found in use at line 446 in ravynos-2/init.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/init.c	ravynos-2/init.c
Line	487	487
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/init.c
Method int mt7615_register_ext_phy(struct mt7615_dev *dev)

```
....
487.        memcpy(mphy->macaddr, dev->mt76.eeprom.data +
MT_EE_MAC_ADDR,
```

Dangerous Functions\Path 31:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=408
Status	New

The dangerous function, memcpy, was found in use at line 174 in ravynos-2/ips_commands.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/ips_commands.c	ravynos-2/ips_commands.c
Line	202	202
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/ips_commands.c
Method static void ips_adapter_info_callback(void *cmdptr, bus_dma_segment_t *segments,int segnum, int error)

```
....
202.        memcpy(&(sc->adapter_info), command->data_buffer,
IPS_ADAPTER_INFO_LEN);
```

Dangerous Functions\Path 32:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=409
Status	New

The dangerous function, memcpy, was found in use at line 273 in ravynos-2/ips_commands.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/ips_commands.c	ravynos-2/ips_commands.c
Line	304	304
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/ips_commands.c

Method	static void ips_drive_info_callback(void *cmdptr, bus_dma_segment_t *segments,int segnum, int error)

```
....
304.        memcpy(sc->drives, driveinfo->drives, sizeof(ips_drive_t) *
8);
```

Dangerous Functions\Path 33:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=410
Status	New

The dangerous function, memcpy, was found in use at line 455 in ravynos-2/mem_dbg.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/mem_dbg.c	ravynos-2/mem_dbg.c
Line	535	535
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/mem_dbg.c
Method	static void print_leak(const MEM *m, MEM_LEAK *l)

```
....
535.                    memcpy(buf + buf_len, amip->info, 128 - buf_len -
3);
```

Dangerous Functions\Path 34:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=411
Status	New

The dangerous function, memcpy, was found in use at line 85 in ravynos-2/parsenfsfh.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/parsenfsfh.c	ravynos-2/parsenfsfh.c
Line	348	348
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/parsenfsfh.c

Method	Parse_fh(netdissect_options *ndo, const unsigned char *fh, u_int len,

```
....
348.                memcpy((char *)fsidp, (const char *)fh, 14);
```

Dangerous Functions\Path 35:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=412
Status	New

The dangerous function, memcpy, was found in use at line 85 in ravynos-2/parsenfsfh.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/parsenfsfh.c	ravynos-2/parsenfsfh.c
Line	354	354
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/parsenfsfh.c

Method	Parse_fh(netdissect_options *ndo, const unsigned char *fh, u_int len,

```
....
354.                memcpy((char *)tempa, (const char *)fh, 14); /* ensure
alignment */
```

Dangerous Functions\Path 36:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=413
Status	New

The dangerous function, memcpy, was found in use at line 232 in ravynos-2/qmi.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/qmi.c	ravynos-2/qmi.c
Line	266	266
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/qmi.c

Method	static int ath10k_qmi_bdf_dnld_send_sync(struct ath10k_qmi *qmi)

```
....
266.            memcpy(req->data, temp, req->data_len);
```

Dangerous Functions\Path 37:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=414
Status	New

The dangerous function, memcpy, was found in use at line 422 in ravynos-2/qmi.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/qmi.c	ravynos-2/qmi.c
Line	477	477
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/qmi.c
Method ath10k_qmi_cfg_send_sync_msg(struct ath10k *ar,

```
....
477.        memcpy(req->shadow_reg, config->shadow_reg_cfg,
```

Dangerous Functions\Path 38:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=415
Status	New

The dangerous function, memcpy, was found in use at line 1037 in ravynos-2/rec_layer_d1.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	1045	1045
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/rec_layer_d1.c
Method void dtls1_reset_seq_numbers(SSL *s, int rw)

```
....
1045.          memcpy(&s->rlayer.d->bitmap, &s->rlayer.d->next_bitmap,
```

Dangerous Functions\Path 39:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=416
Status	New

The dangerous function, memcpy, was found in use at line 1037 in ravynos-2/rec_layer_d1.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	1056	1056
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/rec_layer_d1.c
Method	void dtls1_reset_seq_numbers(SSL *s, int rw)

```
....
1056.          memcpy(s->rlayer.d->last_write_sequence, seq,
```

Dangerous Functions\Path 40:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=417
Status	New

The dangerous function, memcpy, was found in use at line 101 in ravynos-2/rec_layer_d1.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	104	104
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/rec_layer_d1.c
Method	void DTLS_RECORD_LAYER_set_saved_w_epoch(RECORD_LAYER *rl, unsigned short e)

```
....
104.          memcpy(rl->d->curr_write_sequence,
```

Dangerous Functions\Path 41:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=418
Status	New

The dangerous function, memcpy, was found in use at line 101 in ravynos-2/rec_layer_d1.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	106	106
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/rec_layer_d1.c
Method	void DTLS_RECORD_LAYER_set_saved_w_epoch(RECORD_LAYER *rl, unsigned short e)

```
....
106.          memcpy(rl->write_sequence,
```

Dangerous Functions\Path 42:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=419
Status	New

The dangerous function, memcpy, was found in use at line 101 in ravynos-2/rec_layer_d1.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	111	111
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/rec_layer_d1.c
Method	void DTLS_RECORD_LAYER_set_saved_w_epoch(RECORD_LAYER *rl, unsigned short e)

```
....
111.          memcpy(rl->write_sequence,
```

Dangerous Functions\Path 43:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=420
Status	New

The dangerous function, memcpy, was found in use at line 117 in ravynos-2/rec_layer_d1.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	119	119
Object	memcpy	memcpy

Code Snippet	
File Name	ravynos-2/rec_layer_d1.c
Method	void DTLS_RECORD_LAYER_set_write_sequence(RECORD_LAYER *rl, unsigned char *seq)

```
....
119.      memcpy(rl->write_sequence, seq, SEQ_NUM_SIZE);
```

Dangerous Functions\Path 44:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=421
Status	New

The dangerous function, memcpy, was found in use at line 123 in ravynos-2/rec_layer_d1.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	133	133
Object	memcpy	memcpy

Code Snippet	
File Name	ravynos-2/rec_layer_d1.c
Method	static int dtls1_copy_record(SSL *s, pitem *item)

```
....
133.       memcpy(&s->rlayer.rbuf, &(rdata->rbuf), sizeof(SSL3_BUFFER));
```

Dangerous Functions\Path 45:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=422
Status	New

The dangerous function, memcpy, was found in use at line 123 in ravynos-2/rec_layer_d1.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	134	134
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/rec_layer_d1.c
Method	static int dtls1_copy_record(SSL *s, pitem *item)

```
....
134.       memcpy(&s->rlayer.rrec, &(rdata->rrec), sizeof(SSL3_RECORD));
```

Dangerous Functions\Path 46:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=423
Status	New

The dangerous function, memcpy, was found in use at line 123 in ravynos-2/rec_layer_d1.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	137	137
Object	memcpy	memcpy

Code Snippet

File Name	ravynos-2/rec_layer_d1.c
Method	static int dtls1_copy_record(SSL *s, pitem *item)

```
....
137.      memcpy(&(s->rlayer.read_sequence[2]), &(rdata->packet[5]), 6);
```

Dangerous Functions\Path 47:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=424
Status	New

The dangerous function, memcpy, was found in use at line 142 in ravynos-2/rec_layer_d1.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	163	163
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/rec_layer_d1.c
Method int dtls1_buffer_record(SSL *s, record_pqueue *queue, unsigned char *priority)

```
....
163.      memcpy(&(rdata->rbuf), &s->rlayer.rbuf, sizeof(SSL3_BUFFER));
```

Dangerous Functions\Path 48:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=425
Status	New

The dangerous function, memcpy, was found in use at line 142 in ravynos-2/rec_layer_d1.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	164	164
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/rec_layer_d1.c
Method int dtls1_buffer_record(SSL *s, record_pqueue *queue, unsigned char *priority)

```
....
164.      memcpy(&(rdata->rrec), &s->rlayer.rrec, sizeof(SSL3_RECORD));
```

Dangerous Functions\Path 49:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=426
Status	New

The dangerous function, memcpy, was found in use at line 342 in ravynos-2/rec_layer_d1.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	515	515
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/rec_layer_d1.c
Method int dtls1_read_bytes(SSL *s, int type, int *recvd_type, unsigned char *buf,

```
....
515.            memcpy(buf,
&(SSL3_RECORD_get_data(rr)[SSL3_RECORD_get_off(rr)]), n);
```

Dangerous Functions\Path 50:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=427
Status	New

The dangerous function, memcpy, was found in use at line 800 in ravynos-2/rec_layer_d1.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	916	916
Object	memcpy	memcpy

Code Snippet
File Name ravynos-2/rec_layer_d1.c
Method int do_dtls1_write(SSL *s, int type, const unsigned char *buf,

```
....
916.          memcpy(SSL3_RECORD_get_data(&wr),
SSL3_RECORD_get_input(&wr),
```

Buffer Overflow boundcpy WrongSizeParam

Query Path:
CPP\Cx\CPP Buffer Overflow\Buffer Overflow boundcpy WrongSizeParam Version:1

Categories

PCI DSS v3.2: PCI DSS (3.2) - 6.5.2 - Buffer overflows
OWASP Top 10 2017: A1-Injection

Description

Buffer Overflow boundcpy WrongSizeParam\Path 1:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=45
Status	New

The size of the buffer used by *dtls1_get_timeout in timeval, at line 287 of ravynos-2/d1_lib.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that *dtls1_get_timeout passes to timeval, at line 287 of ravynos-2/d1_lib.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/d1_lib.c	ravynos-2/d1_lib.c
Line	308	308
Object	timeval	timeval

Code Snippet
File Name ravynos-2/d1_lib.c
Method struct timeval *dtls1_get_timeout(SSL *s, struct timeval *timeleft)

```
....
308.      memcpy(timeleft, &(s->d1->next_timeout), sizeof(struct
timeval));
```

Buffer Overflow boundcpy WrongSizeParam\Path 2:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=46
Status	New

The size of the buffer used by mt7615_regd_notifier in Namespace419387430, at line 331 of ravynos-2/init.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that mt7615_regd_notifier passes to Namespace419387430, at line 331 of ravynos-2/init.c, to overwrite the target buffer.

	Source	Destination

File	ravynos-2/init.c	ravynos-2/init.c
Line	340	340
Object	Namespace419387430	Namespace419387430

Code Snippet
File Name ravynos-2/init.c
Method mt7615_regd_notifier(struct wiphy *wiphy,

```
....
340.        memcpy(dev->mt76.alpha2, request->alpha2, sizeof(dev-
>mt76.alpha2));
```

Buffer Overflow boundcpy WrongSizeParam\Path 3:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=47
Status	New

The size of the buffer used by dtls1_reset_seq_numbers in ->, at line 1037 of ravynos-2/rec_layer_d1.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that dtls1_reset_seq_numbers passes to ->, at line 1037 of ravynos-2/rec_layer_d1.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	1046	1046
Object	->	->

Code Snippet
File Name ravynos-2/rec_layer_d1.c
Method void dtls1_reset_seq_numbers(SSL *s, int rw)

```
....
1046.                   sizeof(s->rlayer.d->bitmap));
```

Buffer Overflow boundcpy WrongSizeParam\Path 4:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=48
Status	New

The size of the buffer used by dtls1_reset_seq_numbers in Namespace40800250, at line 1037 of ravynos-2/rec_layer_d1.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that dtls1_reset_seq_numbers passes to Namespace40800250, at line 1037 of ravynos-2/rec_layer_d1.c, to overwrite the target buffer.

	Source	Destination

File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	1057	1057
Object	Namespace40800250	Namespace40800250

Code Snippet
File Name ravynos-2/rec_layer_d1.c
Method void dtls1_reset_seq_numbers(SSL *s, int rw)

```
....
1057.                    sizeof(s->rlayer.write_sequence));
```

Buffer Overflow boundcpy WrongSizeParam\Path 5:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=49
Status	New

The size of the buffer used by DTLS_RECORD_LAYER_set_saved_w_epoch in ->, at line 101 of ravynos-2/rec_layer_d1.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that DTLS_RECORD_LAYER_set_saved_w_epoch passes to ->, at line 101 of ravynos-2/rec_layer_d1.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	105	105
Object	->	->

Code Snippet
File Name ravynos-2/rec_layer_d1.c
Method void DTLS_RECORD_LAYER_set_saved_w_epoch(RECORD_LAYER *rl, unsigned short e)

```
....
105.                   rl->write_sequence, sizeof(rl->write_sequence));
```

Buffer Overflow boundcpy WrongSizeParam\Path 6:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=50
Status	New

The size of the buffer used by DTLS_RECORD_LAYER_set_saved_w_epoch in ->, at line 101 of ravynos-2/rec_layer_d1.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that DTLS_RECORD_LAYER_set_saved_w_epoch passes to ->, at line 101 of ravynos-2/rec_layer_d1.c, to overwrite the target buffer.

	Source	Destination

File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	107	107
Object	->	->

Code Snippet
File Name ravynos-2/rec_layer_d1.c
Method void DTLS_RECORD_LAYER_set_saved_w_epoch(RECORD_LAYER *rl, unsigned short e)

```
....
107.                    rl->d->last_write_sequence, sizeof(rl-
>write_sequence));
```

Buffer Overflow boundcpy WrongSizeParam\Path 7:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=51
Status	New

The size of the buffer used by DTLS_RECORD_LAYER_set_saved_w_epoch in ->, at line 101 of ravynos-2/rec_layer_d1.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that DTLS_RECORD_LAYER_set_saved_w_epoch passes to ->, at line 101 of ravynos-2/rec_layer_d1.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	112	112
Object	->	->

Code Snippet
File Name ravynos-2/rec_layer_d1.c
Method void DTLS_RECORD_LAYER_set_saved_w_epoch(RECORD_LAYER *rl, unsigned short e)

```
....
112.                    rl->d->curr_write_sequence, sizeof(rl-
>write_sequence));
```

Buffer Overflow boundcpy WrongSizeParam\Path 8:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=52
Status	New

The size of the buffer used by dtls1_copy_record in SSL3_BUFFER, at line 123 of ravynos-2/rec_layer_d1.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that dtls1_copy_record passes to SSL3_BUFFER, at line 123 of ravynos-2/rec_layer_d1.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	133	133
Object	SSL3_BUFFER	SSL3_BUFFER

Code Snippet
File Name ravynos-2/rec_layer_d1.c
Method static int dtls1_copy_record(SSL *s, pitem *item)

```
....
133.        memcpy(&s->rlayer.rbuf, &(rdata->rbuf), sizeof(SSL3_BUFFER));
```

Buffer Overflow boundcpy WrongSizeParam\Path 9:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=53
Status	New

The size of the buffer used by dtls1_copy_record in SSL3_RECORD, at line 123 of ravynos-2/rec_layer_d1.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that dtls1_copy_record passes to SSL3_RECORD, at line 123 of ravynos-2/rec_layer_d1.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	134	134
Object	SSL3_RECORD	SSL3_RECORD

Code Snippet
File Name ravynos-2/rec_layer_d1.c
Method static int dtls1_copy_record(SSL *s, pitem *item)

```
....
134.        memcpy(&s->rlayer.rrec, &(rdata->rrec), sizeof(SSL3_RECORD));
```

Buffer Overflow boundcpy WrongSizeParam\Path 10:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=54
Status	New

The size of the buffer used by dtls1_buffer_record in SSL3_BUFFER, at line 142 of ravynos-2/rec_layer_d1.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that dtls1_buffer_record passes to SSL3_BUFFER, at line 142 of ravynos-2/rec_layer_d1.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	163	163
Object	SSL3_BUFFER	SSL3_BUFFER

Code Snippet
File Name ravynos-2/rec_layer_d1.c
Method int dtls1_buffer_record(SSL *s, record_pqueue *queue, unsigned char *priority)

```
....
163.        memcpy(&(rdata->rbuf), &s->rlayer.rbuf, sizeof(SSL3_BUFFER));
```

Buffer Overflow boundcpy WrongSizeParam\Path 11:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=55
Status	New

The size of the buffer used by dtls1_buffer_record in SSL3_RECORD, at line 142 of ravynos-2/rec_layer_d1.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that dtls1_buffer_record passes to SSL3_RECORD, at line 142 of ravynos-2/rec_layer_d1.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/rec_layer_d1.c	ravynos-2/rec_layer_d1.c
Line	164	164
Object	SSL3_RECORD	SSL3_RECORD

Code Snippet
File Name ravynos-2/rec_layer_d1.c
Method int dtls1_buffer_record(SSL *s, record_pqueue *queue, unsigned char *priority)

```
....
164.        memcpy(&(rdata->rrec), &s->rlayer.rrec, sizeof(SSL3_RECORD));
```

Buffer Overflow boundcpy WrongSizeParam\Path 12:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=56
Status	New

The size of the buffer used by rdata2sockaddr in ->, at line 567 of ravynos-2/respip.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that rdata2sockaddr passes to ->, at line 567 of ravynos-2/respip.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/respip.c	ravynos-2/respip.c
Line	578	578
Object	->	->

Code Snippet

File Name	ravynos-2/respip.c
Method	rdata2sockaddr(const struct packed_rrset_data* rd, uint16_t rtype, size_t i,

```
....
578.                    sizeof(sa4->sin_addr));
```

Buffer Overflow boundcpy WrongSizeParam\Path 13:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=57
Status	New

The size of the buffer used by rdata2sockaddr in ->, at line 567 of ravynos-2/respip.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that rdata2sockaddr passes to ->, at line 567 of ravynos-2/respip.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/respip.c	ravynos-2/respip.c
Line	587	587
Object	->	->

Code Snippet

File Name	ravynos-2/respip.c
Method	rdata2sockaddr(const struct packed_rrset_data* rd, uint16_t rtype, size_t i,

```
....
587.                    sizeof(sa6->sin6_addr));
```

Buffer Overflow boundcpy WrongSizeParam\Path 14:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=58
Status	New

The size of the buffer used by rtsol_input in Namespace299099082, at line 159 of ravynos-2/rtsol.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that rtsol_input passes to Namespace299099082, at line 159 of ravynos-2/rtsol.c, to overwrite the target buffer.

	Source	Destination

File	ravynos-2/rtsol.c	ravynos-2/rtsol.c
Line	352	352
Object	Namespace299099082	Namespace299099082

Code Snippet
File Name ravynos-2/rtsol.c
Method rtsol_input(int sock)

```
....
352.                    sizeof(rai->rai_saddr.sin6_addr));
```

Buffer Overflow boundcpy WrongSizeParam\Path 15:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=59
Status	New

The size of the buffer used by session_setup_x11fwd in in_addr, at line 2589 of ravynos-2/session.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that session_setup_x11fwd passes to in_addr, at line 2589 of ravynos-2/session.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	2650	2650
Object	in_addr	in_addr

Code Snippet
File Name ravynos-2/session.c
Method session_setup_x11fwd(struct ssh *ssh, Session *s)

```
....
2650.               memcpy(&my_addr, he->h_addr_list[0], sizeof(struct
in_addr));
```

Buffer Overflow boundcpy WrongSizeParam\Path 16:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=60
Status	New

The size of the buffer used by dtls1_reassemble_fragment in msg_hdr, at line 531 of ravynos-2/statem_dtls.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that dtls1_reassemble_fragment passes to msg_hdr, at line 531 of ravynos-2/statem_dtls.c, to overwrite the target buffer.

	Source	Destination

File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	558	558
Object	msg_hdr	msg_hdr

Code Snippet
File Name ravynos-2/statem_dtls.c
Method dtls1_reassemble_fragment(SSL *s, const struct hm_header_st *msg_hdr)

```
....
558.            memcpy(&(frag->msg_header), msg_hdr, sizeof(*msg_hdr));
```

Buffer Overflow boundcpy WrongSizeParam\Path 17:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=61
Status	New

The size of the buffer used by dtls1_process_out_of_seq_message in msg_hdr, at line 640 of ravynos-2/statem_dtls.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that dtls1_process_out_of_seq_message passes to msg_hdr, at line 640 of ravynos-2/statem_dtls.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	697	697
Object	msg_hdr	msg_hdr

Code Snippet
File Name ravynos-2/statem_dtls.c
Method dtls1_process_out_of_seq_message(SSL *s, const struct hm_header_st *msg_hdr)

```
....
697.            memcpy(&(frag->msg_header), msg_hdr, sizeof(*msg_hdr));
```

Buffer Overflow boundcpy WrongSizeParam\Path 18:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=62
Status	New

The size of the buffer used by ossl_statem_server_post_work in DTLS1_SCTP_AUTH_LABEL, at line 808 of ravynos-2/statem_srvr.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that ossl_statem_server_post_work passes to DTLS1_SCTP_AUTH_LABEL, at line 808 of ravynos-2/statem_srvr.c, to overwrite the target buffer.

	Source	Destination

File	ravynos-2/statem_srvr.c	ravynos-2/statem_srvr.c
Line	861	861
Object	DTLS1_SCTP_AUTH_LABEL	DTLS1_SCTP_AUTH_LABEL

Code Snippet
File Name ravynos-2/statem_srvr.c
Method WORK_STATE ossl_statem_server_post_work(SSL *s, WORK_STATE wst)

```
....
861.                          sizeof(DTLS1_SCTP_AUTH_LABEL));
```

Buffer Overflow boundcpy WrongSizeParam\Path 19:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=63
Status	New

The size of the buffer used by tls_post_process_client_key_exchange in DTLS1_SCTP_AUTH_LABEL, at line 3525 of ravynos-2/statem_srvr.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that tls_post_process_client_key_exchange passes to DTLS1_SCTP_AUTH_LABEL, at line 3525 of ravynos-2/statem_srvr.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/statem_srvr.c	ravynos-2/statem_srvr.c
Line	3538	3538
Object	DTLS1_SCTP_AUTH_LABEL	DTLS1_SCTP_AUTH_LABEL

Code Snippet
File Name ravynos-2/statem_srvr.c
Method WORK_STATE tls_post_process_client_key_exchange(SSL *s, WORK_STATE wst)

```
....
3538.                          sizeof(DTLS1_SCTP_AUTH_LABEL));
```

Buffer Overflow boundcpy WrongSizeParam\Path 20:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=64
Status	New

The size of the buffer used by construct_stateless_ticket in Namespace1968257454, at line 3865 of ravynos-2/statem_srvr.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that construct_stateless_ticket passes to Namespace1968257454, at line 3865 of ravynos-2/statem_srvr.c, to overwrite the target buffer.

	Source	Destination

File	ravynos-2/statem_srvr.c	ravynos-2/statem_srvr.c
Line	3988	3988
Object	Namespace1968257454	Namespace1968257454

Code Snippet
File Name	ravynos-2/statem_srvr.c
Method	static int construct_stateless_ticket(SSL *s, WPACKET *pkt, uint32_t age_add,

```
....
3988.                      sizeof(tctx->ext.tick_key_name));
```

Buffer Overflow boundcpy WrongSizeParam\Path 21:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=65
Status	New

The size of the buffer used by fcntl_getlock_pids in lock, at line 854 of ravynos-2/t_vnops.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that fcntl_getlock_pids passes to lock, at line 854 of ravynos-2/t_vnops.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	878	878
Object	lock	lock

Code Snippet
File Name	ravynos-2/t_vnops.c
Method	fcntl_getlock_pids(const atf_tc_t *tc, const char *mp)

```
....
878.          memcpy(expect, lock, sizeof(lock));
```

Buffer Overflow boundcpy WrongSizeParam\Path 22:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=66
Status	New

The size of the buffer used by tcp_set_cc_mod in cc_var, at line 1925 of ravynos-2/tcp_usrreq.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that tcp_set_cc_mod passes to cc_var, at line 1925 of ravynos-2/tcp_usrreq.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/tcp_usrreq.c	ravynos-2/tcp_usrreq.c

Line	2019	2019
Object	cc_var	cc_var

Code Snippet
File Name ravynos-2/tcp_usrreq.c
Method tcp_set_cc_mod(struct inpcb *inp, struct sockopt *sopt)

```
....
2019.              memcpy(&tp->t_ccv, &cc_mem, sizeof(struct cc_var));
```

Buffer Overflow boundcpy WrongSizeParam\Path 23:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=67
Status	New

The size of the buffer used by wlan_get_local_addr in sockaddr_dl, at line 286 of ravynos-2/wlan_sys.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that wlan_get_local_addr passes to sockaddr_dl, at line 286 of ravynos-2/wlan_sys.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c
Line	302	302
Object	sockaddr_dl	sockaddr_dl

Code Snippet
File Name ravynos-2/wlan_sys.c
Method wlan_get_local_addr(struct wlan_iface *wif)

```
....
302.              memcpy(&sdl, ifa->ifa_addr, sizeof(struct
sockaddr_dl));
```

Buffer Overflow boundcpy WrongSizeParam\Path 24:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=68
Status	New

The size of the buffer used by wlan_get_channel_list in c, at line 587 of ravynos-2/wlan_sys.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that wlan_get_channel_list passes to c, at line 587 of ravynos-2/wlan_sys.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c

Line	626	626
Object	c	c

Code Snippet
File Name ravynos-2/wlan_sys.c
Method wlan_get_channel_list(struct wlan_iface *wif)

```
....
626.                memcpy(wif->chanlist + nchans, c, sizeof (*c));
```

Buffer Overflow boundcpy WrongSizeParam\Path 25:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=69
Status	New

The size of the buffer used by wlan_get_scan_results in ieee80211req_scan_result, at line 2187 of ravynos-2/wlan_sys.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that wlan_get_scan_results passes to ieee80211req_scan_result, at line 2187 of ravynos-2/wlan_sys.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c
Line	2206	2206
Object	ieee80211req_scan_result	ieee80211req_scan_result

Code Snippet
File Name ravynos-2/wlan_sys.c
Method wlan_get_scan_results(struct wlan_iface *wif)

```
....
2206.               memcpy(&isr, cp, sizeof(struct
ieee80211req_scan_result));
```

Buffer Overflow boundcpy WrongSizeParam\Path 26:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=70
Status	New

The size of the buffer used by wlan_get_peerinfo in ieee80211req_sta_info, at line 2714 of ravynos-2/wlan_sys.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that wlan_get_peerinfo passes to ieee80211req_sta_info, at line 2714 of ravynos-2/wlan_sys.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c

Line	2739	2739
Object	ieee80211req_sta_info	ieee80211req_sta_info

Code Snippet
File Name ravynos-2/wlan_sys.c
Method wlan_get_peerinfo(struct wlan_iface *wif)

```
....
2739.            memcpy(&si, cp, sizeof(struct ieee80211req_sta_info));
```

Buffer Overflow boundcpy WrongSizeParam\Path 27:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=71
Status	New

The size of the buffer used by wlan_mesh_get_routelist in rt, at line 3036 of ravynos-2/wlan_sys.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that wlan_mesh_get_routelist passes to rt, at line 3036 of ravynos-2/wlan_sys.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c
Line	3054	3054
Object	rt	rt

Code Snippet
File Name ravynos-2/wlan_sys.c
Method wlan_mesh_get_routelist(struct wlan_iface *wif)

```
....
3054.            memcpy(&wmr->imroute, rt, sizeof(*rt));
```

Buffer Overflow boundcpy WrongSizeParam\Path 28:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=72
Status	New

The size of the buffer used by X86_64::writePltHeader in pltData, at line 396 of ravynos-2/X86_64.cpp, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that X86_64::writePltHeader passes to pltData, at line 396 of ravynos-2/X86_64.cpp, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/X86_64.cpp	ravynos-2/X86_64.cpp

Line	402	402
Object	pltData	pltData

Code Snippet
File Name ravynos-2/X86_64.cpp
Method void X86_64::writePltHeader(uint8_t *buf) const {

```
....
402.    memcpy(buf, pltData, sizeof(pltData));
```

Buffer Overflow boundcpy WrongSizeParam\Path 29:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=73
Status	New

The size of the buffer used by X86_64::writePlt in inst, at line 409 of ravynos-2/X86_64.cpp, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that X86_64::writePlt passes to inst, at line 409 of ravynos-2/X86_64.cpp, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/X86_64.cpp	ravynos-2/X86_64.cpp
Line	416	416
Object	inst	inst

Code Snippet
File Name ravynos-2/X86_64.cpp
Method void X86_64::writePlt(uint8_t *buf, const Symbol &sym,

```
....
416.    memcpy(buf, inst, sizeof(inst));
```

Buffer Overflow boundcpy WrongSizeParam\Path 30:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=74
Status	New

The size of the buffer used by X86_64::relaxTlsGdToLe in inst, at line 430 of ravynos-2/X86_64.cpp, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that X86_64::relaxTlsGdToLe passes to inst, at line 430 of ravynos-2/X86_64.cpp, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/X86_64.cpp	ravynos-2/X86_64.cpp
Line	445	445

Object	inst	inst

Code Snippet
File Name ravynos-2/X86_64.cpp
Method void X86_64::relaxTlsGdToLe(uint8_t *loc, const Relocation &rel,

```
....
445.      memcpy(loc - 4, inst, sizeof(inst));
```

Buffer Overflow boundcpy WrongSizeParam\Path 31:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=75
Status	New

The size of the buffer used by X86_64::relaxTlsGdToIe in inst, at line 471 of ravynos-2/X86_64.cpp, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that X86_64::relaxTlsGdToIe passes to inst, at line 471 of ravynos-2/X86_64.cpp, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/X86_64.cpp	ravynos-2/X86_64.cpp
Line	486	486
Object	inst	inst

Code Snippet
File Name ravynos-2/X86_64.cpp
Method void X86_64::relaxTlsGdToIe(uint8_t *loc, const Relocation &rel,

```
....
486.      memcpy(loc - 4, inst, sizeof(inst));
```

Buffer Overflow boundcpy WrongSizeParam\Path 32:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=76
Status	New

The size of the buffer used by X86_64::relaxTlsLdToLe in inst, at line 555 of ravynos-2/X86_64.cpp, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that X86_64::relaxTlsLdToLe passes to inst, at line 555 of ravynos-2/X86_64.cpp, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/X86_64.cpp	ravynos-2/X86_64.cpp
Line	582	582

Object	inst	inst

Code Snippet
File Name ravynos-2/X86_64.cpp
Method void X86_64::relaxTlsLdToLe(uint8_t *loc, const Relocation &rel,

```
....
582.       memcpy(loc - 3, inst, sizeof(inst));
```

Buffer Overflow boundcpy WrongSizeParam\Path 33:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=77
Status	New

The size of the buffer used by X86_64::relaxTlsLdToLe in inst, at line 555 of ravynos-2/X86_64.cpp, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that X86_64::relaxTlsLdToLe passes to inst, at line 555 of ravynos-2/X86_64.cpp, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/X86_64.cpp	ravynos-2/X86_64.cpp
Line	596	596
Object	inst	inst

Code Snippet
File Name ravynos-2/X86_64.cpp
Method void X86_64::relaxTlsLdToLe(uint8_t *loc, const Relocation &rel,

```
....
596.       memcpy(loc - 2, inst, sizeof(inst));
```

Buffer Overflow boundcpy WrongSizeParam\Path 34:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=78
Status	New

The size of the buffer used by IntelIBT::writeIBTPlt in inst, at line 1012 of ravynos-2/X86_64.cpp, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that IntelIBT::writeIBTPlt passes to inst, at line 1012 of ravynos-2/X86_64.cpp, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/X86_64.cpp	ravynos-2/X86_64.cpp
Line	1024	1024

Object	inst	inst

Code Snippet

File Name	ravynos-2/X86_64.cpp
Method	void IntelIBT::writeIBTPlt(uint8_t *buf, size_t numEntries) const {

```
....
1024.       memcpy(buf, inst, sizeof(inst));
```

Buffer Overflow boundcpy WrongSizeParam\Path 35:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=79
Status	New

The size of the buffer used by IntelIBT::writePlt in Inst, at line 1001 of ravynos-2/X86_64.cpp, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that IntelIBT::writePlt passes to Inst, at line 1001 of ravynos-2/X86_64.cpp, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/X86_64.cpp	ravynos-2/X86_64.cpp
Line	1008	1008
Object	Inst	Inst

Code Snippet

File Name	ravynos-2/X86_64.cpp
Method	void IntelIBT::writePlt(uint8_t *buf, const Symbol &sym,

```
....
1008.     memcpy(buf, Inst, sizeof(Inst));
```

Buffer Overflow boundcpy WrongSizeParam\Path 36:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=80
Status	New

The size of the buffer used by Retpoline::writePlt in insn, at line 1092 of ravynos-2/X86_64.cpp, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that Retpoline::writePlt passes to insn, at line 1092 of ravynos-2/X86_64.cpp, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/X86_64.cpp	ravynos-2/X86_64.cpp
Line	1102	1102
Object	insn	insn

Code Snippet
File Name ravynos-2/X86_64.cpp
Method void Retpoline::writePlt(uint8_t *buf, const Symbol &sym,

```
....
1102.    memcpy(buf, insn, sizeof(insn));
```

Buffer Overflow boundcpy WrongSizeParam\Path 37:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=81
Status	New

The size of the buffer used by Retpoline::writePltHeader in insn, at line 1070 of ravynos-2/X86_64.cpp, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that Retpoline::writePltHeader passes to insn, at line 1070 of ravynos-2/X86_64.cpp, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/X86_64.cpp	ravynos-2/X86_64.cpp
Line	1084	1084
Object	insn	insn

Code Snippet
File Name ravynos-2/X86_64.cpp
Method void Retpoline::writePltHeader(uint8_t *buf) const {

```
....
1084.    memcpy(buf, insn, sizeof(insn));
```

Buffer Overflow boundcpy WrongSizeParam\Path 38:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=82
Status	New

The size of the buffer used by RetpolineZNow::writePlt in insn, at line 1135 of ravynos-2/X86_64.cpp, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that RetpolineZNow::writePlt passes to insn, at line 1135 of ravynos-2/X86_64.cpp, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/X86_64.cpp	ravynos-2/X86_64.cpp
Line	1142	1142
Object	insn	insn

Code Snippet	
File Name	ravynos-2/X86_64.cpp
Method	void RetpolineZNow::writePlt(uint8_t *buf, const Symbol &sym,

```
....
1142.     memcpy(buf, insn, sizeof(insn));
```

Buffer Overflow boundcpy WrongSizeParam\Path 39:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=83
Status	New

The size of the buffer used by RetpolineZNow::writePltHeader in insn, at line 1119 of ravynos-2/X86_64.cpp, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that RetpolineZNow::writePltHeader passes to insn, at line 1119 of ravynos-2/X86_64.cpp, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/X86_64.cpp	ravynos-2/X86_64.cpp
Line	1132	1132
Object	insn	insn

Code Snippet	
File Name	ravynos-2/X86_64.cpp
Method	void RetpolineZNow::writePltHeader(uint8_t *buf) const {

```
....
1132.     memcpy(buf, insn, sizeof(insn));
```

Buffer Overflow boundcpy WrongSizeParam\Path 40:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=84
Status	New

The size of the buffer used by ext4_ext_grow_indepth in ->, at line 1084 of ravynos-2/ext2_extents.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that ext4_ext_grow_indepth passes to ->, at line 1084 of ravynos-2/ext2_extents.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1108	1108
Object	->	->

Code Snippet

File Name	ravynos-2/ext2_extents.c
Method	ext4_ext_grow_indepth(struct inode *ip, struct ext4_extent_path *path,

```
....
1108.       memmove(bp->b_data, curpath->ep_header, sizeof(ip->i_data));
```

Buffer Overflow boundcpy WrongSizeParam\Path 41:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=85
Status	New

The size of the buffer used by dtls1_clear in s, at line 155 of ravynos-2/d1_lib.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that dtls1_clear passes to s, at line 155 of ravynos-2/d1_lib.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/d1_lib.c	ravynos-2/d1_lib.c
Line	174	174
Object	s	s

Code Snippet

File Name	ravynos-2/d1_lib.c
Method	int dtls1_clear(SSL *s)

```
....
174.            memset(s->d1, 0, sizeof(*s->d1));
```

Buffer Overflow boundcpy WrongSizeParam\Path 42:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=86
Status	New

The size of the buffer used by dtls1_start_timer in ->, at line 243 of ravynos-2/d1_lib.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that dtls1_start_timer passes to ->, at line 243 of ravynos-2/d1_lib.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/d1_lib.c	ravynos-2/d1_lib.c
Line	250	250
Object	->	->

Code Snippet

File Name	ravynos-2/d1_lib.c
Method	void dtls1_start_timer(SSL *s)

```
....
250.            memset(&s->d1->next_timeout, 0, sizeof(s->d1-
>next_timeout));
```

Buffer Overflow boundcpy WrongSizeParam\Path 43:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=87
Status	New

The size of the buffer used by dtls1_stop_timer in ->, at line 352 of ravynos-2/d1_lib.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that dtls1_stop_timer passes to ->, at line 352 of ravynos-2/d1_lib.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/d1_lib.c	ravynos-2/d1_lib.c
Line	355	355
Object	->	->

Code Snippet
File Name ravynos-2/d1_lib.c
Method void dtls1_stop_timer(SSL *s)

```
....
355.        memset(&s->d1->timeout, 0, sizeof(s->d1->timeout));
```

Buffer Overflow boundcpy WrongSizeParam\Path 44:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=88
Status	New

The size of the buffer used by dtls1_stop_timer in ->, at line 352 of ravynos-2/d1_lib.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that dtls1_stop_timer passes to ->, at line 352 of ravynos-2/d1_lib.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/d1_lib.c	ravynos-2/d1_lib.c
Line	356	356
Object	->	->

Code Snippet
File Name ravynos-2/d1_lib.c
Method void dtls1_stop_timer(SSL *s)

```
....
356.      memset(&s->d1->next_timeout, 0, sizeof(s->d1->next_timeout));
```

Buffer Overflow boundcpy WrongSizeParam\Path 45:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=89
Status	New

The size of the buffer used by daemon_eventloop in kevent, at line 364 of ravynos-2/daemon.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that daemon_eventloop passes to kevent, at line 364 of ravynos-2/daemon.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/daemon.c	ravynos-2/daemon.c
Line	402	402
Object	kevent	kevent

Code Snippet
File Name ravynos-2/daemon.c
Method daemon_eventloop(struct daemon_state *state)

```
....
402.          memset(&event, 0, sizeof(struct kevent));
```

Buffer Overflow boundcpy WrongSizeParam\Path 46:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=90
Status	New

The size of the buffer used by main in stat, at line 129 of ravynos-2/diff.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that main passes to stat, at line 129 of ravynos-2/diff.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/diff.c	ravynos-2/diff.c
Line	402	402
Object	stat	stat

Code Snippet
File Name ravynos-2/diff.c
Method main(int argc, char **argv)

```
....
402.                memset(&stbl, 0, sizeof(struct stat));
```

Buffer Overflow boundcpy WrongSizeParam\Path 47:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=91
Status	New

The size of the buffer used by ext4_ext_remove_space in path, at line 1692 of ravynos-2/ext2_extents.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that ext4_ext_remove_space passes to path, at line 1692 of ravynos-2/ext2_extents.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1741	1741
Object	path	path

Code Snippet

File Name	ravynos-2/ext2_extents.c
Method	ext4_ext_remove_space(struct inode *ip, off_t length, int flags,

```
....
1741.                   memset(path + i + 1, 0, sizeof(*path));
```

Buffer Overflow boundcpy WrongSizeParam\Path 48:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=92
Status	New

The size of the buffer used by main in ns, at line 92 of ravynos-2/ipnat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that main passes to ns, at line 92 of ravynos-2/ipnat.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	190	190
Object	ns	ns

Code Snippet

File Name	ravynos-2/ipnat.c
Method	main(int argc, char *argv[])

```
....
190.        bzero((char *)&ns, sizeof(ns));
```

Buffer Overflow boundcpy WrongSizeParam\Path 49:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=93
Status	New

The size of the buffer used by main in obj, at line 92 of ravynos-2/ipnat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that main passes to obj, at line 92 of ravynos-2/ipnat.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	200	200
Object	obj	obj

Code Snippet

File Name	ravynos-2/ipnat.c
Method	main(int argc, char *argv[])

```
....
200.            bzero((char *)&obj, sizeof(obj));
```

Buffer Overflow boundcpy WrongSizeParam\Path 50:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=94
Status	New

The size of the buffer used by dostats_live in obj, at line 519 of ravynos-2/ipnat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that dostats_live passes to obj, at line 519 of ravynos-2/ipnat.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	528	528
Object	obj	obj

Code Snippet

File Name	ravynos-2/ipnat.c
Method	dostats_live(int fd, natstat_t *nsp, int opts, int *filter)

```
....
528.        bzero((char *)&obj, sizeof(obj));
```

MemoryFree on StackVariable

Query Path:
CPP\Cx\CPP Medium Threat\MemoryFree on StackVariable Version:0

Description

MemoryFree on StackVariable\Path 1:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=192
Status	New

Calling free() (line 965) on a variable that was not dynamically allocated (line 965) in file ravynos-2/acpi_thermal.c may result with a crash.

	Source	Destination
File	ravynos-2/acpi_thermal.c	ravynos-2/acpi_thermal.c
Line	984	984
Object	devs	devs

Code Snippet

File Name	ravynos-2/acpi_thermal.c
Method	acpi_tz_thread(void *arg)

```
....
984.            free(devs, M_TEMP);
```

MemoryFree on StackVariable\Path 2:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=193
Status	New

Calling free() (line 142) on a variable that was not dynamically allocated (line 142) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	149	149
Object	nm	nm

Code Snippet

File Name	ravynos-2/cachedump.c

Method	dump_msg_ref(RES* ssl, struct ub_packed_rrset_key* k)

```
....
149.                    free(nm);
```

MemoryFree on StackVariable\Path 3:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=194
Status	New

Calling free() (line 142) on a variable that was not dynamically allocated (line 142) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	150	150
Object	tp	tp

Code Snippet

File Name	ravynos-2/cachedump.c
Method	dump_msg_ref(RES* ssl, struct ub_packed_rrset_key* k)

```
....
150.                    free(tp);
```

MemoryFree on StackVariable\Path 4:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=195
Status	New

Calling free() (line 142) on a variable that was not dynamically allocated (line 142) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	151	151
Object	cl	cl

Code Snippet

File Name	ravynos-2/cachedump.c
Method	dump_msg_ref(RES* ssl, struct ub_packed_rrset_key* k)

```
....
151.                  free(cl);
```

MemoryFree on StackVariable\Path 5:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=196
Status	New

Calling free() (line 142) on a variable that was not dynamically allocated (line 142) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	155	155
Object	nm	nm

Code Snippet
File Name ravynos-2/cachedump.c
Method dump_msg_ref(RES* ssl, struct ub_packed_rrset_key* k)

```
....
155.                  free(nm);
```

MemoryFree on StackVariable\Path 6:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=197
Status	New

Calling free() (line 142) on a variable that was not dynamically allocated (line 142) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	156	156
Object	tp	tp

Code Snippet
File Name ravynos-2/cachedump.c
Method dump_msg_ref(RES* ssl, struct ub_packed_rrset_key* k)

```
....
156.                free(tp);
```

MemoryFree on StackVariable\Path 7:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=198
Status	New

Calling free() (line 142) on a variable that was not dynamically allocated (line 142) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	157	157
Object	cl	cl

Code Snippet

File Name	ravynos-2/cachedump.c
Method	dump_msg_ref(RES* ssl, struct ub_packed_rrset_key* k)

```
....
157.                free(cl);
```

MemoryFree on StackVariable\Path 8:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=199
Status	New

Calling free() (line 142) on a variable that was not dynamically allocated (line 142) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	160	160
Object	nm	nm

Code Snippet

File Name	ravynos-2/cachedump.c
Method	dump_msg_ref(RES* ssl, struct ub_packed_rrset_key* k)

```
....
160.        free(nm);
```

MemoryFree on StackVariable\Path 9:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=200
Status	New

Calling free() (line 142) on a variable that was not dynamically allocated (line 142) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	161	161
Object	tp	tp

Code Snippet

File Name	ravynos-2/cachedump.c
Method	dump_msg_ref(RES* ssl, struct ub_packed_rrset_key* k)

```
....
161.        free(tp);
```

MemoryFree on StackVariable\Path 10:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=201
Status	New

Calling free() (line 142) on a variable that was not dynamically allocated (line 142) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	162	162
Object	cl	cl

Code Snippet

File Name	ravynos-2/cachedump.c
Method	dump_msg_ref(RES* ssl, struct ub_packed_rrset_key* k)

```
....
162.        free(cl);
```

MemoryFree on StackVariable\Path 11:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=202
Status	New

Calling free() (line 169) on a variable that was not dynamically allocated (line 169) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	181	181
Object	nm	nm

Code Snippet
File Name ravynos-2/cachedump.c
Method dump_msg(RES* ssl, struct query_info* k, struct reply_info* d,

```
....
181.            free(nm);
```

MemoryFree on StackVariable\Path 12:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=203
Status	New

Calling free() (line 169) on a variable that was not dynamically allocated (line 169) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	182	182
Object	tp	tp

Code Snippet
File Name ravynos-2/cachedump.c
Method dump_msg(RES* ssl, struct query_info* k, struct reply_info* d,

```
....
182.                free(tp);
```

MemoryFree on StackVariable\Path 13:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=204
Status	New

Calling free() (line 169) on a variable that was not dynamically allocated (line 169) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	183	183
Object	cl	cl

Code Snippet

File Name	ravynos-2/cachedump.c
Method	dump_msg(RES* ssl, struct query_info* k, struct reply_info* d,

```
....
183.                free(cl);
```

MemoryFree on StackVariable\Path 14:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=205
Status	New

Calling free() (line 169) on a variable that was not dynamically allocated (line 169) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	188	188
Object	nm	nm

Code Snippet

File Name	ravynos-2/cachedump.c
Method	dump_msg(RES* ssl, struct query_info* k, struct reply_info* d,

```
....
188.                    free(nm);
```

MemoryFree on StackVariable\Path 15:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=206
Status	New

Calling free() (line 169) on a variable that was not dynamically allocated (line 169) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	189	189
Object	tp	tp

Code Snippet
File Name ravynos-2/cachedump.c
Method dump_msg(RES* ssl, struct query_info* k, struct reply_info* d,

```
....
189.                    free(tp);
```

MemoryFree on StackVariable\Path 16:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=207
Status	New

Calling free() (line 169) on a variable that was not dynamically allocated (line 169) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	190	190
Object	cl	cl

Code Snippet
File Name ravynos-2/cachedump.c
Method dump_msg(RES* ssl, struct query_info* k, struct reply_info* d,

```
....
190.                free(cl);
```

MemoryFree on StackVariable\Path 17:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=208
Status	New

Calling free() (line 169) on a variable that was not dynamically allocated (line 169) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	202	202
Object	nm	nm

Code Snippet

File Name	ravynos-2/cachedump.c
Method	dump_msg(RES* ssl, struct query_info* k, struct reply_info* d,

```
....
202.                free(nm);
```

MemoryFree on StackVariable\Path 18:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=209
Status	New

Calling free() (line 169) on a variable that was not dynamically allocated (line 169) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	203	203
Object	tp	tp

Code Snippet

File Name	ravynos-2/cachedump.c
Method	dump_msg(RES* ssl, struct query_info* k, struct reply_info* d,

```
....
203.                    free(tp);
```

MemoryFree on StackVariable\Path 19:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=210
Status	New

Calling free() (line 169) on a variable that was not dynamically allocated (line 169) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	204	204
Object	cl	cl

Code Snippet

File Name	ravynos-2/cachedump.c
Method	dump_msg(RES* ssl, struct query_info* k, struct reply_info* d,

```
....
204.                    free(cl);
```

MemoryFree on StackVariable\Path 20:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=211
Status	New

Calling free() (line 169) on a variable that was not dynamically allocated (line 169) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	208	208
Object	nm	nm

Code Snippet

File Name	ravynos-2/cachedump.c
Method	dump_msg(RES* ssl, struct query_info* k, struct reply_info* d,

```
....
208.        free(nm);
```

MemoryFree on StackVariable\Path 21:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=212
Status	New

Calling free() (line 169) on a variable that was not dynamically allocated (line 169) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	209	209
Object	tp	tp

Code Snippet
File Name ravynos-2/cachedump.c
Method dump_msg(RES* ssl, struct query_info* k, struct reply_info* d,

```
....
209.        free(tp);
```

MemoryFree on StackVariable\Path 22:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=213
Status	New

Calling free() (line 169) on a variable that was not dynamically allocated (line 169) in file ravynos-2/cachedump.c may result with a crash.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	210	210
Object	cl	cl

Code Snippet
File Name ravynos-2/cachedump.c
Method dump_msg(RES* ssl, struct query_info* k, struct reply_info* d,

```
....
210.        free(cl);
```

MemoryFree on StackVariable\Path 23:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=214
Status	New

Calling free() (line 136) on a variable that was not dynamically allocated (line 136) in file ravynos-2/drm_stub.c may result with a crash.

	Source	Destination
File	ravynos-2/drm_stub.c	ravynos-2/drm_stub.c
Line	163	163
Object	pt	pt

Code Snippet
File Name ravynos-2/drm_stub.c
Method struct drm_map_list *r_list, *list_temp;

```
....
163.
```

MemoryFree on StackVariable\Path 24:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=215
Status	New

Calling free() (line 417) on a variable that was not dynamically allocated (line 417) in file ravynos-2/drm_stub.c may result with a crash.

	Source	Destination
File	ravynos-2/drm_stub.c	ravynos-2/drm_stub.c
Line	427	427
Object	minor	minor

Code Snippet
File Name ravynos-2/drm_stub.c
Method DRM_DEBUG("release secondary minor %d\n", minor->index);

```
....
427.   EXPORT_SYMBOL(drm_put_minor);
```

MemoryFree on StackVariable\Path 25:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=216
Status	New

Calling free() (line 123) on a variable that was not dynamically allocated (line 123) in file ravynos-2/dtstream.c may result with a crash.

	Source	Destination
File	ravynos-2/dtstream.c	ravynos-2/dtstream.c
Line	129	129
Object	e	e

Code Snippet	
File Name	ravynos-2/dtstream.c
Method	dt_msg_queue_clear(struct dt_msg_queue* mq)

```
....
129.                 free(e);
```

MemoryFree on StackVariable\Path 26:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=217
Status	New

Calling free() (line 307) on a variable that was not dynamically allocated (line 307) in file ravynos-2/dtstream.c may result with a crash.

	Source	Destination
File	ravynos-2/dtstream.c	ravynos-2/dtstream.c
Line	315	315
Object	item	item

Code Snippet	
File Name	ravynos-2/dtstream.c
Method	void dt_io_thread_delete(struct dt_io_thread* dtio)

```
....
315.                free(item);
```

MemoryFree on StackVariable\Path 27:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=218
Status	New

Calling free() (line 463) on a variable that was not dynamically allocated (line 463) in file ravynos-2/dtstream.c may result with a crash.

	Source	Destination
File	ravynos-2/dtstream.c	ravynos-2/dtstream.c
Line	478	478
Object	item	item

Code Snippet

File Name ravynos-2/dtstream.c

Method void dt_io_thread_unregister_queue(struct dt_io_thread* dtio,

```
....
478.                      free(item);
```

MemoryFree on StackVariable\Path 28:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=219
Status	New

Calling free() (line 489) on a variable that was not dynamically allocated (line 489) in file ravynos-2/dtstream.c may result with a crash.

	Source	Destination
File	ravynos-2/dtstream.c	ravynos-2/dtstream.c
Line	503	503
Object	entry	entry

Code Snippet

File Name ravynos-2/dtstream.c

Method static int dt_msg_queue_pop(struct dt_msg_queue* mq, void** buf,

```
....
503.                free(entry);
```

MemoryFree on StackVariable\Path 29:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=220
Status	New

Calling free() (line 159) on a variable that was not dynamically allocated (line 159) in file ravynos-2/http-server.c may result with a crash.

	Source	Destination
File	ravynos-2/http-server.c	ravynos-2/http-server.c
Line	316	316
Object	decoded_path	decoded_path

Code Snippet

File Name	ravynos-2/http-server.c
Method	send_document_cb(struct evhttp_request *req, void *arg)

```
....
316.                free(decoded_path);
```

MemoryFree on StackVariable\Path 30:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=221
Status	New

Calling free() (line 455) on a variable that was not dynamically allocated (line 455) in file ravynos-2/mem_dbg.c may result with a crash.

	Source	Destination
File	ravynos-2/mem_dbg.c	ravynos-2/mem_dbg.c
Line	562	562
Object	strings	strings

Code Snippet

File Name	ravynos-2/mem_dbg.c
Method	static void print_leak(const MEM *m, MEM_LEAK *l)

```
....
562.          free(strings);
```

MemoryFree on StackVariable\Path 31:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=222
Status	New

Calling free() (line 73) on a variable that was not dynamically allocated (line 73) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	93	93
Object	name	name

Code Snippet

File Name	ravynos-2/protocol.c
Method	kcm_op_get_name(krb5_context context,

```
....
93.    free(name);
```

MemoryFree on StackVariable\Path 32:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=223
Status	New

Calling free() (line 73) on a variable that was not dynamically allocated (line 73) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	100	100
Object	name	name

Code Snippet

File Name	ravynos-2/protocol.c
Method	kcm_op_get_name(krb5_context context,

```
....
100.        free(name);
```

MemoryFree on StackVariable\Path 33:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=224
Status	New

Calling free() (line 73) on a variable that was not dynamically allocated (line 73) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	104	104
Object	name	name

Code Snippet

File Name	ravynos-2/protocol.c
Method	kcm_op_get_name(krb5_context context,

```
....
104.       free(name);
```

MemoryFree on StackVariable\Path 34:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=225
Status	New

Calling free() (line 116) on a variable that was not dynamically allocated (line 116) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	133	133
Object	name	name

Code Snippet

File Name	ravynos-2/protocol.c
Method	kcm_op_gen_new(krb5_context context,

```
....
133.        free(name);
```

MemoryFree on StackVariable\Path 35:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=226
Status	New

Calling free() (line 147) on a variable that was not dynamically allocated (line 147) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	169	169
Object	name	name

Code Snippet
File Name ravynos-2/protocol.c
Method kcm_op_initialize(krb5_context context,

```
....
169.            free(name);
```

MemoryFree on StackVariable\Path 36:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=227
Status	New

Calling free() (line 147) on a variable that was not dynamically allocated (line 147) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	175	175
Object	name	name

Code Snippet
File Name ravynos-2/protocol.c
Method kcm_op_initialize(krb5_context context,

```
....
175.          free(name);
```

MemoryFree on StackVariable\Path 37:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=228
Status	New

Calling free() (line 147) on a variable that was not dynamically allocated (line 147) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	182	182
Object	name	name

Code Snippet
File Name ravynos-2/protocol.c
Method kcm_op_initialize(krb5_context context,

```
....
182.        free(name);
```

MemoryFree on StackVariable\Path 38:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=229
Status	New

Calling free() (line 213) on a variable that was not dynamically allocated (line 213) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	232	232
Object	name	name

Code Snippet
File Name ravynos-2/protocol.c
Method kcm_op_destroy(krb5_context context,

```
....
232.        free(name);
```

MemoryFree on StackVariable\Path 39:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=230
Status	New

Calling free() (line 246) on a variable that was not dynamically allocated (line 246) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	265	265
Object	name	name

Code Snippet
File Name ravynos-2/protocol.c
Method kcm_op_store(krb5_context context,

```
....
265.          free(name);
```

MemoryFree on StackVariable\Path 40:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=231
Status	New

Calling free() (line 246) on a variable that was not dynamically allocated (line 246) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	272	272
Object	name	name

Code Snippet
File Name ravynos-2/protocol.c
Method kcm_op_store(krb5_context context,

```
....
272.        free(name);
```

MemoryFree on StackVariable\Path 41:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=232
Status	New

Calling free() (line 246) on a variable that was not dynamically allocated (line 246) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	279	279
Object	name	name

Code Snippet

File Name	ravynos-2/protocol.c
Method	kcm_op_store(krb5_context context,

```
....
279.        free(name);
```

MemoryFree on StackVariable\Path 42:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=233
Status	New

Calling free() (line 246) on a variable that was not dynamically allocated (line 246) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	287	287
Object	name	name

Code Snippet

File Name	ravynos-2/protocol.c
Method	kcm_op_store(krb5_context context,

```
....
287.        free(name);
```

MemoryFree on StackVariable\Path 43:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=234
Status	New

Calling free() (line 304) on a variable that was not dynamically allocated (line 304) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	326	326
Object	name	name

Code Snippet
File Name ravynos-2/protocol.c
Method kcm_op_retrieve(krb5_context context,

```
....
326.          free(name);
```

MemoryFree on StackVariable\Path 44:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=235
Status	New

Calling free() (line 304) on a variable that was not dynamically allocated (line 304) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	332	332
Object	name	name

Code Snippet
File Name ravynos-2/protocol.c
Method kcm_op_retrieve(krb5_context context,

```
....
332.        free(name);
```

MemoryFree on StackVariable\Path 45:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=236
Status	New

Calling free() (line 304) on a variable that was not dynamically allocated (line 304) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	340	340
Object	name	name

Code Snippet

File Name	ravynos-2/protocol.c
Method	kcm_op_retrieve(krb5_context context,

```
....
340.        free(name);
```

MemoryFree on StackVariable\Path 46:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=237
Status	New

Calling free() (line 304) on a variable that was not dynamically allocated (line 304) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	348	348
Object	name	name

Code Snippet

File Name	ravynos-2/protocol.c
Method	kcm_op_retrieve(krb5_context context,

```
....
348.         free(name);
```

MemoryFree on StackVariable\Path 47:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=238
Status	New

Calling free() (line 304) on a variable that was not dynamically allocated (line 304) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	377	377
Object	name	name

Code Snippet
File Name ravynos-2/protocol.c
Method kcm_op_retrieve(krb5_context context,

```
....
377.       free(name);
```

MemoryFree on StackVariable\Path 48:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=239
Status	New

Calling free() (line 395) on a variable that was not dynamically allocated (line 395) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	414	414
Object	name	name

Code Snippet
File Name ravynos-2/protocol.c
Method kcm_op_get_principal(krb5_context context,

```
....
414.          free(name);
```

MemoryFree on StackVariable\Path 49:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=240
Status	New

Calling free() (line 395) on a variable that was not dynamically allocated (line 395) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	423	423
Object	name	name

Code Snippet

File Name	ravynos-2/protocol.c
Method	kcm_op_get_principal(krb5_context context,

```
....
423.        free(name);
```

MemoryFree on StackVariable\Path 50:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=241
Status	New

Calling free() (line 438) on a variable that was not dynamically allocated (line 438) in file ravynos-2/protocol.c may result with a crash.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	457	457
Object	name	name

Code Snippet

File Name	ravynos-2/protocol.c
Method	kcm_op_get_cred_uuid_list(krb5_context context,

```
....
457.        free(name);
```

Use of Zero Initialized Pointer

Query Path:
CPP\Cx\CPP Medium Threat\Use of Zero Initialized Pointer Version:1

Categories

NIST SP 800-53: SC-5 Denial of Service Protection (P1)

Description

Use of Zero Initialized Pointer\Path 1:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1082
Status	New

The variable declared in ret at ravynos-2/a_time.c in line 350 is not initialized when it is used by tmps at ravynos-2/a_time.c in line 265.

	Source	Destination
File	ravynos-2/a_time.c	ravynos-2/a_time.c
Line	353	286
Object	ret	tmps

Code Snippet
File Name ravynos-2/a_time.c
Method ASN1_GENERALIZEDTIME *ASN1_TIME_to_generalizedtime(const ASN1_TIME *t,

```
....
353.        ASN1_GENERALIZEDTIME *ret = NULL;
```

File Name ravynos-2/a_time.c

Method ASN1_TIME *asn1_time_from_tm(ASN1_TIME *s, struct tm *ts, int type)

```
....
286.            tmps = s;
```

Use of Zero Initialized Pointer\Path 2:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1083
Status	New

The variable declared in ecdh at ravynos-2/crypto_wolfssl.c in line 1699 is not initialized when it is used by ecdh at ravynos-2/crypto_wolfssl.c in line 1699.

	Source	Destination
File	ravynos-2/crypto_wolfssl.c	ravynos-2/crypto_wolfssl.c
Line	1701	1708
Object	ecdh	ecdh

Code Snippet
File Name ravynos-2/crypto_wolfssl.c
Method struct crypto_ecdh * crypto_ecdh_init(int group)

```
....
1701.        struct crypto_ecdh *ecdh = NULL;
....
1708.        ecdh = os_zalloc(sizeof(*ecdh));
```

Use of Zero Initialized Pointer\Path 3:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1084
Status	New

The variable declared in additional at ravynos-2/drbg_lib.c in line 646 is not initialized when it is used by adin at ravynos-2/drbg_lib.c in line 566.

	Source	Destination
File	ravynos-2/drbg_lib.c	ravynos-2/drbg_lib.c
Line	648	568
Object	additional	adin

Code Snippet
File Name ravynos-2/drbg_lib.c
Method int RAND_DRBG_bytes(RAND_DRBG *drbg, unsigned char *out, size_t outlen)

```
....
648.       unsigned char *additional = NULL;
```

File Name ravynos-2/drbg_lib.c
Method int RAND_DRBG_generate(RAND_DRBG *drbg, unsigned char *out, size_t outlen,

```
....
568.                           const unsigned char *adin, size_t adinlen)
```

Use of Zero Initialized Pointer\Path 4:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1085
Status	New

The variable declared in qp at ravynos-2/fbsd_kcompat.c in line 773 is not initialized when it is used by qp at ravynos-2/fbsd_kcompat.c in line 773.

	Source	Destination
File	ravynos-2/fbsd_kcompat.c	ravynos-2/fbsd_kcompat.c
Line	775	781
Object	qp	qp

Code Snippet

File Name	ravynos-2/fbsd_kcompat.c
Method	irdma_cleanup_dead_qps(struct irdma_sc_vsi *vsi)

```
....
775.        struct irdma_sc_qp *qp = NULL;
....
781.              qp = irdma_get_qp_from_list(&vsi->qos[i].qplist, qp);
```

Use of Zero Initialized Pointer\Path 5:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1086
Status	New

The variable declared in cm at ravynos-2/ip6_output.c in line 2800 is not initialized when it is used by cm at ravynos-2/ip6_output.c in line 2800.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2803	2852
Object	cm	cm

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	ip6_setpktopts(struct mbuf *control, struct ip6_pktopts *opt,

```
....
2803.       struct cmsghdr *cm = NULL;
....
2852.                   cm->cmsg_len - CMSG_LEN(0), opt, cred, 0, 1,
uproto);
```

Use of Zero Initialized Pointer\Path 6:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1087
Status	New

The variable declared in cm at ravynos-2/ip6_output.c in line 2800 is not initialized when it is used by cm at ravynos-2/ip6_output.c in line 2800.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2803	2851
Object	cm	cm

Code Snippet
File Name ravynos-2/ip6_output.c
Method ip6_setpktopts(struct mbuf *control, struct ip6_pktopts *opt,

```
....
2803.       struct cmsghdr *cm = NULL;
....
2851.             error = ip6_setpktopt(cm->cmsg_type, CMSG_DATA(cm),
```

Use of Zero Initialized Pointer\Path 7:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1088
Status	New

The variable declared in server at ravynos-2/protocol.c in line 754 is not initialized when it is used by server at ravynos-2/protocol.c in line 754.

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	764	809
Object	server	server

Code Snippet
File Name ravynos-2/protocol.c
Method kcm_op_get_initial_ticket(krb5_context context,

```
....
764.       krb5_principal server = NULL;
....
809.         ccache->server = server;
```

Use of Zero Initialized Pointer\Path 8:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1089
Status	New

The variable declared in pi at ravynos-2/rtsol.c in line 159 is not initialized when it is used by pi at ravynos-2/rtsol.c in line 159.

	Source	Destination
File	ravynos-2/rtsol.c	ravynos-2/rtsol.c
Line	169	245
Object	pi	pi

Code Snippet
File Name ravynos-2/rtsol.c
Method rtsol_input(int sock)

```
....
169.        struct in6_pktinfo *pi = NULL;
....
245.                    if_indextoname(pi->ipi6_ifindex, ifnamebuf));
```

Use of Zero Initialized Pointer\Path 9:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1090
Status	New

The variable declared in pi at ravynos-2/rtsol.c in line 159 is not initialized when it is used by pi at ravynos-2/rtsol.c in line 159.

	Source	Destination
File	ravynos-2/rtsol.c	ravynos-2/rtsol.c
Line	169	254
Object	pi	pi

Code Snippet
File Name ravynos-2/rtsol.c
Method rtsol_input(int sock)

```
....
169.        struct in6_pktinfo *pi = NULL;
....
254.                    if_indextoname(pi->ipi6_ifindex, ifnamebuf));
```

Use of Zero Initialized Pointer\Path 10:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1091
Status	New

The variable declared in pi at ravynos-2/rtsol.c in line 159 is not initialized when it is used by pi at ravynos-2/rtsol.c in line 159.

	Source	Destination
File	ravynos-2/rtsol.c	ravynos-2/rtsol.c
Line	169	264
Object	pi	pi

Code Snippet
File Name ravynos-2/rtsol.c
Method rtsol_input(int sock)

```
....
169.        struct in6_pktinfo *pi = NULL;
....
264.                if_indextoname(pi->ipi6_ifindex, ifnamebuf));
```

Use of Zero Initialized Pointer\Path 11:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1092
Status	New

The variable declared in patterns at ravynos-2/scp.c in line 1648 is not initialized when it is used by patterns at ravynos-2/scp.c in line 1648.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1661	1957
Object	patterns	patterns

Code Snippet
File Name ravynos-2/scp.c
Method sink(int argc, char **argv, const char *src)

```
....
1661.       char **patterns = NULL;
....
1957.               free(patterns[n]);
```

Use of Zero Initialized Pointer\Path 12:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1093
Status	New

The variable declared in Pointer at ravynos-2/scp.c in line 946 is not initialized when it is used by patterns at ravynos-2/scp.c in line 1648.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	952	1957
Object	Pointer	patterns

Code Snippet

File Name ravynos-2/scp.c

Method brace_expand(const char *pattern, char ***patternsp, size_t *npatternsp)

```
....
952.         *patternsp = NULL;
```

File Name ravynos-2/scp.c

Method sink(int argc, char **argv, const char *src)

```
....
1957.              free(patterns[n]);
```

Use of Zero Initialized Pointer\Path 13:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1094
Status	New

The variable declared in done at ravynos-2/scp.c in line 946 is not initialized when it is used by patterns at ravynos-2/scp.c in line 1648.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	997	1957
Object	done	patterns

Code Snippet

File Name ravynos-2/scp.c

Method brace_expand(const char *pattern, char ***patternsp, size_t *npatternsp)

```
....
997.        done = NULL;
```

File Name	ravynos-2/scp.c
Method	sink(int argc, char **argv, const char *src)

```
....
1957.               free(patterns[n]);
```

Use of Zero Initialized Pointer\Path 14:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1095
Status	New

The variable declared in cmd at ravynos-2/session.c in line 1218 is not initialized when it is used by f at ravynos-2/session.c in line 1218.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1221	1238
Object	cmd	f

Code Snippet	
File Name	ravynos-2/session.c
Method	do_rc_files(struct ssh *ssh, Session *s, const char *shell)

```
....
1221.        char *cmd = NULL, *user_rc = NULL;
....
1238.               f = popen(cmd, "w");
```

Use of Zero Initialized Pointer\Path 15:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1096
Status	New

The variable declared in cmd at ravynos-2/session.c in line 1218 is not initialized when it is used by f at ravynos-2/session.c in line 1218.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c

Line	1221	1273
Object	cmd	f

Code Snippet
File Name ravynos-2/session.c
Method do_rc_files(struct ssh *ssh, Session *s, const char *shell)

```
....
1221.        char *cmd = NULL, *user_rc = NULL;
....
1273.              f = popen(cmd, "w");
```

Use of Zero Initialized Pointer\Path 16:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1097
Status	New

The variable declared in buf at ravynos-2/statem_dtls.c in line 56 is not initialized when it is used by frag at ravynos-2/statem_dtls.c in line 56.

	Source	Destination
File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	59	76
Object	buf	frag

Code Snippet
File Name ravynos-2/statem_dtls.c
Method static hm_fragment *dtls1_hm_fragment_new(size_t frag_len, int reassembly)

```
....
59.      unsigned char *buf = NULL;
....
76.      frag->fragment = buf;
```

Use of Zero Initialized Pointer\Path 17:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1098
Status	New

The variable declared in frag at ravynos-2/statem_dtls.c in line 531 is not initialized when it is used by reassembly at ravynos-2/statem_dtls.c in line 531.

	Source	Destination

File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	565	600
Object	frag	reassembly

Code Snippet
File Name ravynos-2/statem_dtls.c
Method dtls1_reassemble_fragment(SSL *s, const struct hm_header_st *msg_hdr)

```
....
565.                frag = NULL;
....
600.         RSMBLY_BITMASK_MARK(frag->reassembly, (long)msg_hdr->frag_off,
```

Use of Zero Initialized Pointer\Path 18:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1099
Status	New

The variable declared in frag at ravynos-2/statem_dtls.c in line 531 is not initialized when it is used by frag at ravynos-2/statem_dtls.c in line 531.

	Source	Destination
File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	565	609
Object	frag	frag

Code Snippet
File Name ravynos-2/statem_dtls.c
Method dtls1_reassemble_fragment(SSL *s, const struct hm_header_st *msg_hdr)

```
....
565.                frag = NULL;
....
609.             OPENSSL_free(frag->reassembly);
```

Use of Zero Initialized Pointer\Path 19:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1100
Status	New

The variable declared in reassembly at ravynos-2/statem_dtls.c in line 531 is not initialized when it is used by frag at ravynos-2/statem_dtls.c in line 531.

	Source	Destination
File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	610	609
Object	reassembly	frag

Code Snippet
File Name   ravynos-2/statem_dtls.c
Method   dtls1_reassemble_fragment(SSL *s, const struct hm_header_st *msg_hdr)

```
....
610.            frag->reassembly = NULL;
....
609.            OPENSSL_free(frag->reassembly);
```

Use of Zero Initialized Pointer\Path 20:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1101
Status	New

The variable declared in frag at ravynos-2/statem_dtls.c in line 531 is not initialized when it is used by reassembly at ravynos-2/statem_dtls.c in line 531.

	Source	Destination
File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	565	600
Object	frag	reassembly

Code Snippet
File Name   ravynos-2/statem_dtls.c
Method   dtls1_reassemble_fragment(SSL *s, const struct hm_header_st *msg_hdr)

```
....
565.                frag = NULL;
....
600.          RSMBLY_BITMASK_MARK(frag->reassembly, (long)msg_hdr->frag_off,
```

Use of Zero Initialized Pointer\Path 21:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1102
Status	New

The variable declared in frag at ravynos-2/statem_dtls.c in line 531 is not initialized when it is used by reassembly at ravynos-2/statem_dtls.c in line 531.

	Source	Destination
File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	565	600
Object	frag	reassembly

Code Snippet
File Name ravynos-2/statem_dtls.c
Method dtls1_reassemble_fragment(SSL *s, const struct hm_header_st *msg_hdr)

```
....
565.                frag = NULL;
....
600.        RSMBLY_BITMASK_MARK(frag->reassembly, (long)msg_hdr->frag_off,
```

Use of Zero Initialized Pointer\Path 22:

Severity Medium
Result State To Verify
Online Results http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1103
Status New

The variable declared in frag at ravynos-2/statem_dtls.c in line 531 is not initialized when it is used by frag at ravynos-2/statem_dtls.c in line 531.

	Source	Destination
File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	565	593
Object	frag	frag

Code Snippet
File Name ravynos-2/statem_dtls.c
Method dtls1_reassemble_fragment(SSL *s, const struct hm_header_st *msg_hdr)

```
....
565.                frag = NULL;
....
593.                                        frag->fragment + msg_hdr-
>frag_off,
```

Use of Zero Initialized Pointer\Path 23:

Severity Medium
Result State To Verify
Online Results http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1104
Status New

The variable declared in bitmask at ravynos-2/statem_dtls.c in line 56 is not initialized when it is used by reassembly at ravynos-2/statem_dtls.c in line 56.

	Source	Destination
File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	60	89
Object	bitmask	reassembly

Code Snippet
File Name ravynos-2/statem_dtls.c
Method static hm_fragment *dtls1_hm_fragment_new(size_t frag_len, int reassembly)

```
....
60.      unsigned char *bitmask = NULL;
....
89.      frag->reassembly = bitmask;
```

Use of Zero Initialized Pointer\Path 24:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1105
Status	New

The variable declared in clienthello at ravynos-2/statem_srvr.c in line 1383 is not initialized when it is used by clienthello at ravynos-2/statem_srvr.c in line 1383.

	Source	Destination
File	ravynos-2/statem_srvr.c	ravynos-2/statem_srvr.c
Line	1388	1408
Object	clienthello	clienthello

Code Snippet
File Name ravynos-2/statem_srvr.c
Method MSG_PROCESS_RETURN tls_process_client_hello(SSL *s, PACKET *pkt)

```
....
1388.      CLIENTHELLO_MSG *clienthello = NULL;
....
1408.      clienthello = OPENSSL_zalloc(sizeof(*clienthello));
```

Use of Zero Initialized Pointer\Path 25:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1106
Status	New

The variable declared in comp at ravynos-2/statem_srvr.c in line 1611 is not initialized when it is used by new_compression at ravynos-2/statem_srvr.c in line 1611.

	Source	Destination
File	ravynos-2/statem_srvr.c	ravynos-2/statem_srvr.c
Line	1619	2051
Object	comp	new_compression

Code Snippet
File Name ravynos-2/statem_srvr.c
Method static int tls_early_post_process_client_hello(SSL *s)

```
....
1619.       SSL_COMP *comp = NULL;
....
2051.               s->s3->tmp.new_compression = comp;
```

Use of Zero Initialized Pointer\Path 26:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1107
Status	New

The variable declared in notify_addr at ravynos-2/vnic_dev.c in line 733 is not initialized when it is used by notify at ravynos-2/vnic_dev.c in line 703.

	Source	Destination
File	ravynos-2/vnic_dev.c	ravynos-2/vnic_dev.c
Line	735	718
Object	notify_addr	notify

Code Snippet
File Name ravynos-2/vnic_dev.c
Method int vnic_dev_notify_set(struct vnic_dev *vdev, u16 intr)

```
....
735.        void *notify_addr = NULL;
```

File Name ravynos-2/vnic_dev.c
Method int vnic_dev_notify_setcmd(struct vnic_dev *vdev,

```
....
718.              vdev->notify = notify_addr;
```

Use of Zero Initialized Pointer\Path 27:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-

	BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1108
Status	New

The variable declared in data at ravynos-2/a_object.c in line 239 is not initialized when it is used by data at ravynos-2/a_object.c in line 239.

	Source	Destination
File	ravynos-2/a_object.c	ravynos-2/a_object.c
Line	300	299
Object	data	data

Code Snippet

File Name ravynos-2/a_object.c

Method ASN1_OBJECT *c2i_ASN1_OBJECT(ASN1_OBJECT **a, const unsigned char **pp,

```
....
300.       ret->data = NULL;
....
299.       data = (unsigned char *)ret->data;
```

Use of Zero Initialized Pointer\Path 28:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1109
Status	New

The variable declared in ln at ravynos-2/a_object.c in line 239 is not initialized when it is used by ret at ravynos-2/a_object.c in line 211.

	Source	Destination
File	ravynos-2/a_object.c	ravynos-2/a_object.c
Line	323	230
Object	ln	ret

Code Snippet

File Name ravynos-2/a_object.c

Method ASN1_OBJECT *c2i_ASN1_OBJECT(ASN1_OBJECT **a, const unsigned char **pp,

```
....
323.       ret->ln = NULL;
```

▼

File Name ravynos-2/a_object.c

Method	ASN1_OBJECT *d2i_ASN1_OBJECT(ASN1_OBJECT **a, const unsigned char **pp,

```
....
230.       ret = c2i_ASN1_OBJECT(a, &p, len);
```

Use of Zero Initialized Pointer\Path 29:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1110
Status	New

The variable declared in sn at ravynos-2/a_object.c in line 239 is not initialized when it is used by ret at ravynos-2/a_object.c in line 211.

	Source	Destination
File	ravynos-2/a_object.c	ravynos-2/a_object.c
Line	322	230
Object	sn	ret

Code Snippet

File Name	ravynos-2/a_object.c
Method	ASN1_OBJECT *c2i_ASN1_OBJECT(ASN1_OBJECT **a, const unsigned char **pp,

```
....
322.       ret->sn = NULL;
```

File Name	ravynos-2/a_object.c
Method	ASN1_OBJECT *d2i_ASN1_OBJECT(ASN1_OBJECT **a, const unsigned char **pp,

```
....
230.       ret = c2i_ASN1_OBJECT(a, &p, len);
```

Use of Zero Initialized Pointer\Path 30:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1111
Status	New

The variable declared in a at ravynos-2/crypto_wolfssl.c in line 1012 is not initialized when it is used by y2 at ravynos-2/crypto_wolfssl.c in line 1634.

	Source	Destination
File	ravynos-2/crypto_wolfssl.c	ravynos-2/crypto_wolfssl.c
Line	1022	1647
Object	a	y2

Code Snippet
File Name ravynos-2/crypto_wolfssl.c
Method struct crypto_bignum * crypto_bignum_init(void)

```
....
1022.               a = NULL;
```

File Name ravynos-2/crypto_wolfssl.c

Method crypto_ec_point_compute_y_sqr(struct crypto_ec *e,

```
....
1647.        y2 = (mp_int *) crypto_bignum_init();
```

Use of Zero Initialized Pointer\Path 31:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1112
Status	New

The variable declared in e at ravynos-2/crypto_wolfssl.c in line 1318 is not initialized when it is used by ecdh at ravynos-2/crypto_wolfssl.c in line 1699.

	Source	Destination
File	ravynos-2/crypto_wolfssl.c	ravynos-2/crypto_wolfssl.c
Line	1380	1712
Object	e	ecdh

Code Snippet
File Name ravynos-2/crypto_wolfssl.c
Method struct crypto_ec * crypto_ec_init(int group)

```
....
1380.               e = NULL;
```

File Name ravynos-2/crypto_wolfssl.c

Method struct crypto_ecdh * crypto_ecdh_init(int group)

```
....
1712.       ecdh->ec = crypto_ec_init(group);
```

Use of Zero Initialized Pointer\Path 32:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1113
Status	New

The variable declared in meth at ravynos-2/drbg_lib.c in line 103 is not initialized when it is used by meth at ravynos-2/drbg_lib.c in line 470.

	Source	Destination
File	ravynos-2/drbg_lib.c	ravynos-2/drbg_lib.c
Line	127	541
Object	meth	meth

Code Snippet

File Name	ravynos-2/drbg_lib.c
Method	int RAND_DRBG_set(RAND_DRBG *drbg, int type, unsigned int flags)

```
....
127.        drbg->meth = NULL;
```

File Name	ravynos-2/drbg_lib.c
Method	int rand_drbg_restart(RAND_DRBG *drbg,

```
....
541.            drbg->meth->reseed(drbg, adin, adinlen, NULL, 0);
```

Use of Zero Initialized Pointer\Path 33:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1114
Status	New

The variable declared in meth at ravynos-2/drbg_lib.c in line 103 is not initialized when it is used by meth at ravynos-2/drbg_lib.c in line 470.

	Source	Destination
File	ravynos-2/drbg_lib.c	ravynos-2/drbg_lib.c
Line	132	541

Object	meth	meth

Code Snippet
File Name ravynos-2/drbg_lib.c
Method int RAND_DRBG_set(RAND_DRBG *drbg, int type, unsigned int flags)

```
....
132.          drbg->meth = NULL;
```

File Name ravynos-2/drbg_lib.c
Method int rand_drbg_restart(RAND_DRBG *drbg,

```
....
541.              drbg->meth->reseed(drbg, adin, adinlen, NULL, 0);
```

Use of Zero Initialized Pointer\Path 34:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1115
Status	New

The variable declared in meth at ravynos-2/drbg_lib.c in line 103 is not initialized when it is used by meth at ravynos-2/drbg_lib.c in line 103.

	Source	Destination
File	ravynos-2/drbg_lib.c	ravynos-2/drbg_lib.c
Line	132	114
Object	meth	meth

Code Snippet
File Name ravynos-2/drbg_lib.c
Method int RAND_DRBG_set(RAND_DRBG *drbg, int type, unsigned int flags)

```
....
132.          drbg->meth = NULL;
....
114.          drbg->meth->uninstantiate(drbg);
```

Use of Zero Initialized Pointer\Path 35:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1116
Status	New

The variable declared in meth at ravynos-2/drbg_lib.c in line 103 is not initialized when it is used by meth at ravynos-2/drbg_lib.c in line 103.

	Source	Destination
File	ravynos-2/drbg_lib.c	ravynos-2/drbg_lib.c
Line	127	114
Object	meth	meth

Code Snippet
File Name ravynos-2/drbg_lib.c
Method int RAND_DRBG_set(RAND_DRBG *drbg, int type, unsigned int flags)

```
....
127.          drbg->meth = NULL;
....
114.          drbg->meth->uninstantiate(drbg);
```

Use of Zero Initialized Pointer\Path 36:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1117
Status	New

The variable declared in meth at ravynos-2/drbg_lib.c in line 103 is not initialized when it is used by meth at ravynos-2/drbg_lib.c in line 377.

	Source	Destination
File	ravynos-2/drbg_lib.c	ravynos-2/drbg_lib.c
Line	132	390
Object	meth	meth

Code Snippet
File Name ravynos-2/drbg_lib.c
Method int RAND_DRBG_set(RAND_DRBG *drbg, int type, unsigned int flags)

```
....
132.          drbg->meth = NULL;
```

File Name ravynos-2/drbg_lib.c

Method int RAND_DRBG_uninstantiate(RAND_DRBG *drbg)

```
....
390.      drbg->meth->uninstantiate(drbg);
```

Use of Zero Initialized Pointer\Path 37:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1118
Status	New

The variable declared in meth at ravynos-2/drbg_lib.c in line 103 is not initialized when it is used by meth at ravynos-2/drbg_lib.c in line 377.

	Source	Destination
File	ravynos-2/drbg_lib.c	ravynos-2/drbg_lib.c
Line	127	390
Object	meth	meth

Code Snippet

File Name ravynos-2/drbg_lib.c

Method int RAND_DRBG_set(RAND_DRBG *drbg, int type, unsigned int flags)

```
....
127.            drbg->meth = NULL;
```

File Name ravynos-2/drbg_lib.c

Method int RAND_DRBG_uninstantiate(RAND_DRBG *drbg)

```
....
390.        drbg->meth->uninstantiate(drbg);
```

Use of Zero Initialized Pointer\Path 38:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1119
Status	New

The variable declared in next at ravynos-2/dtstream.c in line 230 is not initialized when it is used by last at ravynos-2/dtstream.c in line 230.

	Source	Destination
File	ravynos-2/dtstream.c	ravynos-2/dtstream.c
Line	257	289
Object	next	last

Code Snippet

File Name ravynos-2/dtstream.c

Method dt_msg_queue_submit(struct dt_msg_queue* mq, void* buf, size_t len)

```
....
257.          entry->next = NULL;
....
289.          mq->last = entry;
```

Use of Zero Initialized Pointer\Path 39:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1120
Status	New

The variable declared in next at ravynos-2/dtstream.c in line 230 is not initialized when it is used by first at ravynos-2/dtstream.c in line 230.

	Source	Destination
File	ravynos-2/dtstream.c	ravynos-2/dtstream.c
Line	257	287
Object	next	first

Code Snippet
File Name ravynos-2/dtstream.c
Method dt_msg_queue_submit(struct dt_msg_queue* mq, void* buf, size_t len)

```
....
257.          entry->next = NULL;
....
287.                mq->first = entry;
```

Use of Zero Initialized Pointer\Path 40:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1121
Status	New

The variable declared in ep_data at ravynos-2/ext2_extents.c in line 1692 is not initialized when it is used by ep_data at ravynos-2/ext2_extents.c in line 1692.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1720	1728
Object	ep_data	ep_data

Code Snippet
File Name ravynos-2/ext2_extents.c
Method ext4_ext_remove_space(struct inode *ip, off_t length, int flags,

```
....
1720.                    path[i].ep_data = NULL;
....
1728.                        (struct ext4_extent_header
*)path[i].ep_data;
```

Use of Zero Initialized Pointer\Path 41:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1122
Status	New

The variable declared in ep_data at ravynos-2/ext2_extents.c in line 575 is not initialized when it is used by ep_data at ravynos-2/ext2_extents.c in line 565.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	586	568
Object	ep_data	ep_data

Code Snippet

File Name ravynos-2/ext2_extents.c

Method ext4_ext_drop_refs(struct ext4_extent_path *path)

```
....
586.                     path->ep_data = NULL;
```

File Name ravynos-2/ext2_extents.c

Method ext4_ext_fill_path_buf(struct ext4_extent_path *path, struct buf *bp)

```
....
568.         KASSERT(path->ep_data != NULL,
```

Use of Zero Initialized Pointer\Path 42:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1123
Status	New

The variable declared in npath at ravynos-2/ext2_extents.c in line 1237 is not initialized when it is used by ep_data at ravynos-2/ext2_extents.c in line 565.

	Source	Destination

File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1247	568
Object	npath	ep_data

Code Snippet
File Name ravynos-2/ext2_extents.c
Method ext4_ext_insert_extent(struct inode *ip, struct ext4_extent_path *path,

```
....
1247.        npath = NULL;
```

File Name ravynos-2/ext2_extents.c

Method ext4_ext_fill_path_buf(struct ext4_extent_path *path, struct buf *bp)

```
....
568.         KASSERT(path->ep_data != NULL,
```

Use of Zero Initialized Pointer\Path 43:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1124
Status	New

The variable declared in path at ravynos-2/ext2_extents.c in line 1396 is not initialized when it is used by ep_data at ravynos-2/ext2_extents.c in line 565.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1413	568
Object	path	ep_data

Code Snippet
File Name ravynos-2/ext2_extents.c
Method ext4_ext_get_blocks(struct inode *ip, e4fs_daddr_t iblk,

```
....
1413.        path = NULL;
```

File Name ravynos-2/ext2_extents.c

Method ext4_ext_fill_path_buf(struct ext4_extent_path *path, struct buf *bp)

```
....
568.         KASSERT(path->ep_data != NULL,
```

Use of Zero Initialized Pointer\Path 44:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1125
Status	New

The variable declared in path at ravynos-2/ext2_extents.c in line 1396 is not initialized when it is used by ep_data at ravynos-2/ext2_extents.c in line 550.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1413	554
Object	path	ep_data

Code Snippet

File Name ravynos-2/ext2_extents.c

Method ext4_ext_get_blocks(struct inode *ip, e4fs_daddr_t iblk,

```
....
1413.        path = NULL;
```

▼

File Name ravynos-2/ext2_extents.c

Method ext4_ext_fill_path_bdata(struct ext4_extent_path *path,

```
....
554.         KASSERT(path->ep_data == NULL,
```

Use of Zero Initialized Pointer\Path 45:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1126
Status	New

The variable declared in ep_data at ravynos-2/ext2_extents.c in line 575 is not initialized when it is used by ep_data at ravynos-2/ext2_extents.c in line 550.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	586	554
Object	ep_data	ep_data

Code Snippet

File Name ravynos-2/ext2_extents.c

Method ext4_ext_drop_refs(struct ext4_extent_path *path)

```
....
586.                    path->ep_data = NULL;
```

File Name ravynos-2/ext2_extents.c

Method ext4_ext_fill_path_bdata(struct ext4_extent_path *path,

```
....
554.            KASSERT(path->ep_data == NULL,
```

Use of Zero Initialized Pointer\Path 46:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1127
Status	New

The variable declared in npath at ravynos-2/ext2_extents.c in line 1237 is not initialized when it is used by ep_data at ravynos-2/ext2_extents.c in line 550.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1247	554
Object	npath	ep_data

Code Snippet

File Name ravynos-2/ext2_extents.c

Method ext4_ext_insert_extent(struct inode *ip, struct ext4_extent_path *path,

```
....
1247.           npath = NULL;
```

File Name ravynos-2/ext2_extents.c

Method ext4_ext_fill_path_bdata(struct ext4_extent_path *path,

```
....
554.            KASSERT(path->ep_data == NULL,
```

Use of Zero Initialized Pointer\Path 47:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1128
Status	New

The variable declared in gl_pathv at ravynos-2/glob.c in line 294 is not initialized when it is used by gl_pathv at ravynos-2/glob.c in line 294.

	Source	Destination
File	ravynos-2/glob.c	ravynos-2/glob.c
Line	307	459
Object	gl_pathv	gl_pathv

Code Snippet
File Name ravynos-2/glob.c
Method glob(const char *pattern, int flags, int (*errfunc) (const char *, int),

```
....
307.        pglob->gl_pathv = NULL;
....
459.        qsort(pglob->gl_pathv + pglob->gl_offs + oldpathc,
```

Use of Zero Initialized Pointer\Path 48:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1129
Status	New

The variable declared in Pointer at ravynos-2/glob.c in line 675 is not initialized when it is used by gl_pathv at ravynos-2/glob.c in line 675.

	Source	Destination
File	ravynos-2/glob.c	ravynos-2/glob.c
Line	688	690
Object	Pointer	gl_pathv

Code Snippet
File Name ravynos-2/glob.c
Method globextend(const char *path, glob_t *pglob)

```
....
688.                *--pathv = NULL;
....
690.        pglob->gl_pathv = pathv;
```

Use of Zero Initialized Pointer\Path 49:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1130
Status	New

The variable declared in mst at ravynos-2/ip6_output.c in line 309 is not initialized when it is used by m at ravynos-2/ip6_output.c in line 409.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	320	1257
Object	mst	m

Code Snippet

File Name ravynos-2/ip6_output.c

Method ip6_output_send(struct inpcb *inp, struct ifnet *ifp, struct ifnet *origifp,

```
....
320.         mst = NULL;
```

File Name ravynos-2/ip6_output.c

Method ip6_output(struct mbuf *m0, struct ip6_pktopts *opt,

```
....
1257.        m = m0->m_nextpkt;
```

Use of Zero Initialized Pointer\Path 50:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1131
Status	New

The variable declared in rcvif at ravynos-2/ip6_output.c in line 409 is not initialized when it is used by m at ravynos-2/ip6_output.c in line 409.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	910	1219
Object	rcvif	m

Code Snippet

File Name ravynos-2/ip6_output.c

Method ip6_output(struct mbuf *m0, struct ip6_pktopts *opt,

```
....
910.                         m->m_pkthdr.rcvif = NULL;
....
1219.            ip6_output_delayed_csum(m, ifp, m-
>m_pkthdr.csum_flags, plen,
```

Memory Leak

Query Path:
CPP\Cx\CPP Medium Threat\Memory Leak Version:1

Categories

NIST SP 800-53: SC-5 Denial of Service Protection (P1)

Description

Memory Leak\Path 1:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=632
Status	New

	Source	Destination
File	ravynos-2/dtstream.c	ravynos-2/dtstream.c
Line	451	451
Object	item	item

Code Snippet
File Name ravynos-2/dtstream.c
Method int dt_io_thread_register_queue(struct dt_io_thread* dtio,

```
....
451.        struct dt_io_list_item* item = malloc(sizeof(*item));
```

Memory Leak\Path 2:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=633
Status	New

	Source	Destination
File	ravynos-2/val_neg.c	ravynos-2/val_neg.c
Line	88	88
Object	neg	neg

Code Snippet
File Name ravynos-2/val_neg.c
Method struct val_neg_cache* val_neg_create(struct config_file* cfg, size_t maxiter)

```
....
88.   struct val_neg_cache* neg = (struct val_neg_cache*)calloc(1,
```

Memory Leak\Path 3:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=634
Status	New

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	408	408
Object	ad	ad

Code Snippet

File Name ravynos-2/cachedump.c

Method move_into_cache(struct ub_packed_rrset_key* k,

```
....
408.          ad = (struct packed_rrset_data*)malloc(s);
```

Memory Leak\Path 4:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=635
Status	New

	Source	Destination
File	ravynos-2/diff.c	ravynos-2/diff.c
Line	374	374
Object	p	p

Code Snippet

File Name ravynos-2/diff.c

Method main(int argc, char **argv)

```
....
374.                if (env != NULL && *env != '\0' && (p = strdup(env)))
{
```

Memory Leak\Path 5:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=636
Status	New

	Source	Destination
File	ravynos-2/drm_stub.c	ravynos-2/drm_stub.c
Line	112	112
Object	master	master

Code Snippet
File Name ravynos-2/drm_stub.c
Method master = malloc(sizeof(*master), DRM_MEM_KMS, M_NOWAIT | M_ZERO);

```
....
112.        refcount_init(&master->refcount, 1);
```

Memory Leak\Path 6:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=637
Status	New

	Source	Destination
File	ravynos-2/dtstream.c	ravynos-2/dtstream.c
Line	361	361
Object	socket_path	socket_path

Code Snippet
File Name ravynos-2/dtstream.c
Method int dt_io_thread_apply_cfg(struct dt_io_thread* dtio, struct config_file *cfg)

```
....
361.              dtio->socket_path = strdup(nm);
```

Memory Leak\Path 7:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=638
Status	New

	Source	Destination
File	ravynos-2/dtstream.c	ravynos-2/dtstream.c
Line	374	374
Object	ip_str	ip_str

Code Snippet

File Name	ravynos-2/dtstream.c
Method	int dt_io_thread_apply_cfg(struct dt_io_thread* dtio, struct config_file *cfg)

```
....
374.                    dtio->ip_str = strdup(cfg->dnstap_ip);
```

Memory Leak\Path 8:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=639
Status	New

	Source	Destination
File	ravynos-2/dtstream.c	ravynos-2/dtstream.c
Line	386	386
Object	tls_server_name	tls_server_name

Code Snippet

File Name	ravynos-2/dtstream.c
Method	int dt_io_thread_apply_cfg(struct dt_io_thread* dtio, struct config_file *cfg)

```
....
386.                          dtio->tls_server_name = strdup(
```

Memory Leak\Path 9:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=640
Status	New

	Source	Destination
File	ravynos-2/dtstream.c	ravynos-2/dtstream.c
Line	399	399
Object	client_key_file	client_key_file

Code Snippet

File Name	ravynos-2/dtstream.c
Method	int dt_io_thread_apply_cfg(struct dt_io_thread* dtio, struct config_file *cfg)

```
....
399.                          dtio->client_key_file = strdup(
```

Memory Leak\Path 10:

Severity	Medium

Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=641
Status	New

	Source	Destination
File	ravynos-2/dtstream.c	ravynos-2/dtstream.c
Line	415	415
Object	client_cert_file	client_cert_file

Code Snippet
File Name ravynos-2/dtstream.c
Method int dt_io_thread_apply_cfg(struct dt_io_thread* dtio, struct config_file *cfg)

```
....
415.                    dtio->client_cert_file = strdup(
```

Memory Leak\Path 11:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=642
Status	New

	Source	Destination
File	ravynos-2/est.c	ravynos-2/est.c
Line	1202	1202
Object	fp	fp

Code Snippet
File Name ravynos-2/est.c
Method est_msr_info(device_t dev, uint64_t msr, freq_info **freqs, size_t *freqslen)

```
....
1202.       fp = malloc(sizeof(freq_info) * 2, M_DEVBUF, M_WAITOK |
M_ZERO);
```

Memory Leak\Path 12:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=643
Status	New

	Source	Destination

File	ravynos-2/if_cpsw.c	ravynos-2/if_cpsw.c
Line	869	869
Object	nullpad	nullpad

Code Snippet
File Name ravynos-2/if_cpsw.c
Method cpsw_attach(device_t dev)

```
....
869.          sc->nullpad = malloc(ETHER_MIN_LEN, M_DEVBUF, M_WAITOK |
M_ZERO);
```

Memory Leak\Path 13:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=644
Status	New

	Source	Destination
File	ravynos-2/if_fwe.c	ravynos-2/if_fwe.c
Line	309	309
Object	bulkxfer	bulkxfer

Code Snippet
File Name ravynos-2/if_fwe.c
Method fwe_init(void *arg)

```
....
309.              xferq->bulkxfer = (struct fw_bulkxfer *) malloc(
```

Memory Leak\Path 14:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=645
Status	New

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2740	2740
Object	ip6po_pktinfo	ip6po_pktinfo

Code Snippet
File Name ravynos-2/ip6_output.c

Method	copypktopts(struct ip6_pktopts *dst, struct ip6_pktopts *src, int canwait)

```
....
2740.              dst->ip6po_pktinfo = malloc(sizeof(*dst-
>ip6po_pktinfo),
```

Memory Leak\Path 15:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=646
Status	New

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2747	2747
Object	ip6po_nexthop	ip6po_nexthop

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	copypktopts(struct ip6_pktopts *dst, struct ip6_pktopts *src, int canwait)

```
....
2747.              dst->ip6po_nexthop = malloc(src->ip6po_nexthop-
>sa_len,
```

Memory Leak\Path 16:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=647
Status	New

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2754	2754
Object	ip6po_hbh	ip6po_hbh

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	copypktopts(struct ip6_pktopts *dst, struct ip6_pktopts *src, int canwait)

```
....
2754.        PKTOPT_EXTHDRCPY(ip6po_hbh);
```

Memory Leak\Path 17:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=648
Status	New

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2755	2755
Object	ip6po_dest1	ip6po_dest1

Code Snippet

File Name ravynos-2/ip6_output.c

Method copypktopts(struct ip6_pktopts *dst, struct ip6_pktopts *src, int canwait)

```
....
2755.         PKTOPT_EXTHDRCPY(ip6po_dest1);
```

Memory Leak\Path 18:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=649
Status	New

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2756	2756
Object	ip6po_dest2	ip6po_dest2

Code Snippet

File Name ravynos-2/ip6_output.c

Method copypktopts(struct ip6_pktopts *dst, struct ip6_pktopts *src, int canwait)

```
....
2756.         PKTOPT_EXTHDRCPY(ip6po_dest2);
```

Memory Leak\Path 19:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=650
Status	New

	Source	Destination

File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2757	2757
Object	ip6po_rthdr	ip6po_rthdr

Code Snippet
File Name ravynos-2/ip6_output.c
Method copypktopts(struct ip6_pktopts *dst, struct ip6_pktopts *src, int canwait)

```
....
2757.        PKTOPT_EXTHDRCPY(ip6po_rthdr); /* not copy the cached route
*/
```

Memory Leak\Path 20:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=651
Status	New

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2981	2981
Object	ip6po_pktinfo	ip6po_pktinfo

Code Snippet
File Name ravynos-2/ip6_output.c
Method ip6_setpktopt(int optname, u_char *buf, int len, struct ip6_pktopts *opt,

```
....
2981.                   opt->ip6po_pktinfo = malloc(sizeof(*pktinfo),
```

Memory Leak\Path 21:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=652
Status	New

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	3069	3069
Object	ip6po_nexthop	ip6po_nexthop

Code Snippet
File Name ravynos-2/ip6_output.c

Method ip6_setpktopt(int optname, u_char *buf, int len, struct ip6_pktopts *opt,

```
....
3069.             opt->ip6po_nexthop = malloc(*buf, M_IP6OPT, M_NOWAIT);
```

Memory Leak\Path 22:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=653
Status	New

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	3107	3107
Object	ip6po_hbh	ip6po_hbh

Code Snippet

File Name ravynos-2/ip6_output.c

Method ip6_setpktopt(int optname, u_char *buf, int len, struct ip6_pktopts *opt,

```
....
3107.             opt->ip6po_hbh = malloc(hbhlen, M_IP6OPT, M_NOWAIT);
```

Memory Leak\Path 23:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=654
Status	New

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	3216	3216
Object	ip6po_rthdr	ip6po_rthdr

Code Snippet

File Name ravynos-2/ip6_output.c

Method ip6_setpktopt(int optname, u_char *buf, int len, struct ip6_pktopts *opt,

```
....
3216.             opt->ip6po_rthdr = malloc(rthlen, M_IP6OPT, M_NOWAIT);
```

Memory Leak\Path 24:

Severity	Medium
Result State	To Verify

Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=655
Status	New

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	1137	1137
Object	c	c

Code Snippet
File Name ravynos-2/protocol.c
Method kcm_op_set_default_cache(krb5_context context,

```
....
1137.          c = malloc(sizeof(*c));
```

Memory Leak\Path 25:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=656
Status	New

	Source	Destination
File	ravynos-2/protocol.c	ravynos-2/protocol.c
Line	1142	1142
Object	name	name

Code Snippet
File Name ravynos-2/protocol.c
Method kcm_op_set_default_cache(krb5_context context,

```
....
1142.          c->name = strdup(name);
```

Memory Leak\Path 26:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=657
Status	New

	Source	Destination
File	ravynos-2/rt2860.c	ravynos-2/rt2860.c

Line	463	463
Object	rvp	rvp

Code Snippet
File Name ravynos-2/rt2860.c
Method rt2860_vap_create(struct ieee80211com *ic, const char name[IFNAMSIZ], int unit,

```
....
463.         rvp = malloc(sizeof(struct rt2860_vap), M_80211_VAP,
M_WAITOK | M_ZERO);
```

Memory Leak\Path 27:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=658
Status	New

	Source	Destination
File	ravynos-2/rtsol.c	ravynos-2/rtsol.c
Line	346	346
Object	rai	rai

Code Snippet
File Name ravynos-2/rtsol.c
Method rtsol_input(int sock)

```
....
346.                 ELM_MALLOC(rai, exit(1));
```

Memory Leak\Path 28:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=659
Status	New

	Source	Destination
File	ravynos-2/rtsol.c	ravynos-2/rtsol.c
Line	436	436
Object	rao_msg	rao_msg

Code Snippet
File Name ravynos-2/rtsol.c

Method rtsol_input(int sock)

```
....
436.                                     rao->rao_msg = strdup(nsbuf);
```

Memory Leak\Path 29:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=660
Status	New

	Source	Destination
File	ravynos-2/rtsol.c	ravynos-2/rtsol.c
Line	495	495
Object	rao_msg	rao_msg

Code Snippet

File Name ravynos-2/rtsol.c

Method rtsol_input(int sock)

```
....
495.                                     rao->rao_msg = strdup(dname);
```

Memory Leak\Path 30:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=661
Status	New

	Source	Destination
File	ravynos-2/rtsol.c	ravynos-2/rtsol.c
Line	584	584
Object	smp3	smp3

Code Snippet

File Name ravynos-2/rtsol.c

Method ra_opt_handler(struct ifinfo *ifi)

```
....
584.                              ELM_MALLOC(smp3, goto free2);
```

Memory Leak\Path 31:

Severity	Medium
Result State	To Verify

Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=662
Status	New

	Source	Destination
File	ravynos-2/rtsol.c	ravynos-2/rtsol.c
Line	621	621
Object	smp3	smp3

Code Snippet
File Name ravynos-2/rtsol.c
Method ra_opt_handler(struct ifinfo *ifi)

```
....
621.                                    ELM_MALLOC(smp3, goto free2);
```

Memory Leak\Path 32:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=663
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1496	1496
Object	dirp	dirp

Code Snippet
File Name ravynos-2/scp.c
Method rsource(char *name, struct stat *statp)

```
....
1496.        if (!(dirp = opendir(name))) {
```

Memory Leak\Path 33:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=664
Status	New

	Source	Destination
File	ravynos-2/subst.c	ravynos-2/subst.c

Line	63	63
Object	subst	subst

Code Snippet
File Name ravynos-2/subst.c
Method init_substitution(struct bsdtar *bsdtar)

```
....
63.    bsdtar->substitution = subst = malloc(sizeof(*subst));
```

Memory Leak\Path 34:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=665
Status	New

	Source	Destination
File	ravynos-2/subst.c	ravynos-2/subst.c
Line	83	83
Object	rule	rule

Code Snippet
File Name ravynos-2/subst.c
Method add_substitution(struct bsdtar *bsdtar, const char *rule_text)

```
....
83.    rule = malloc(sizeof(*rule));
```

Memory Leak\Path 35:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=666
Status	New

	Source	Destination
File	ravynos-2/subst.c	ravynos-2/subst.c
Line	119	119
Object	result	result

Code Snippet
File Name ravynos-2/subst.c
Method add_substitution(struct bsdtar *bsdtar, const char *rule_text)

```
....
119.         rule->result = malloc(end_pattern - start_subst + 1);
```

Memory Leak\Path 36:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=667
Status	New

	Source	Destination
File	ravynos-2/subst.c	ravynos-2/subst.c
Line	177	177
Object	new_str	new_str

Code Snippet

File Name	ravynos-2/subst.c
Method	realloc_strncat(char **str, const char *append, size_t len)

```
....
177.         new_str = malloc(old_len + len + 1);
```

Memory Leak\Path 37:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=668
Status	New

	Source	Destination
File	ravynos-2/t_recvmmsg.c	ravynos-2/t_recvmmsg.c
Line	82	82
Object	buf	buf

Code Snippet

File Name	ravynos-2/t_recvmmsg.c
Method	ATF_TC_BODY(recvmmsg_basic, tc)

```
....
82.   buf = malloc(BUFSIZE);
```

Memory Leak\Path 38:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-

	BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=669
Status	New

	Source	Destination
File	ravynos-2/t_recvmmsg.c	ravynos-2/t_recvmmsg.c
Line	86	86
Object	mmsghdr	mmsghdr

Code Snippet

File Name ravynos-2/t_recvmmsg.c

Method ATF_TC_BODY(recvmmsg_basic, tc)

```
....
86.    mmsghdr = malloc(sizeof(*mmsghdr) * mmsgcnt);
```

Memory Leak\Path 39:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=670
Status	New

	Source	Destination
File	ravynos-2/t_recvmmsg.c	ravynos-2/t_recvmmsg.c
Line	88	88
Object	iov	iov

Code Snippet

File Name ravynos-2/t_recvmmsg.c

Method ATF_TC_BODY(recvmmsg_basic, tc)

```
....
88.    iov = malloc(sizeof(*iov) * mmsgcnt);
```

Memory Leak\Path 40:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=671
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	537	537

Object	argv	argv

Code Snippet
File Name ravynos-2/telnet.c
Method mklist(char *buf, char *name)

```
....
537.         argv = (char **)malloc((n+3)*sizeof(char *));
```

Memory Leak\Path 41:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=672
Status	New

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c
Line	508	508
Object	chanlist	chanlist

Code Snippet
File Name ravynos-2/wlan_sys.c
Method wlan_get_driver_caps(struct wlan_iface *wif)

```
....
508.         wif->chanlist = (struct ieee80211_channel *)malloc(argsize);
```

Memory Leak\Path 42:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=673
Status	New

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c
Line	2523	2523
Object	data	data

Code Snippet
File Name ravynos-2/wlan_sys.c
Method wlan_get_mac_acl_macs(struct wlan_iface *wif)

```
....
2523.        if ((data = (uint8_t *)malloc(argsize)) == NULL)
```

Memory Leak\Path 43:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=674
Status	New

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2535	2535
Object	pktopt	pktopt

Code Snippet
File Name ravynos-2/ip6_output.c
Method ip6_pcbopt(int optname, u_char *buf, int len, struct ip6_pktopts **pktopt,

```
....
2535.            *pktopt = malloc(sizeof(struct ip6_pktopts), M_IP6OPT,
```

Memory Leak\Path 44:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=675
Status	New

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	3174	3174
Object	newdest	newdest

Code Snippet
File Name ravynos-2/ip6_output.c
Method ip6_setpktopt(int optname, u_char *buf, int len, struct ip6_pktopts *opt,

```
....
3174.            *newdest = malloc(destlen, M_IP6OPT, M_NOWAIT);
```

Memory Leak\Path 45:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-

	BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=676
Status	New

	Source	Destination
File	ravynos-2/maketab.c	ravynos-2/maketab.c
Line	165	165
Object	names	names

Code Snippet

File Name	ravynos-2/maketab.c
Method	int main(int argc, char *argv[])

```
....
165.                names[tok-FIRSTTOKEN] = strdup(name);
```

Wrong Size t Allocation

Query Path:

CPP\Cx\CPP Integer Overflow\Wrong Size t Allocation Version:0

Description

Wrong Size t Allocation\Path 1:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=331
Status	New

The function s in ravynos-2/cachedump.c at line 381 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	408	408
Object	s	s

Code Snippet

File Name	ravynos-2/cachedump.c
Method	move_into_cache(struct ub_packed_rrset_key* k,

```
....
408.          ad = (struct packed_rrset_data*)malloc(s);
```

Wrong Size t Allocation\Path 2:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=332

Status	New

The function mem_sz in ravynos-2/tcp_usrreq.c at line 1925 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/tcp_usrreq.c	ravynos-2/tcp_usrreq.c
Line	1967	1967
Object	mem_sz	mem_sz

Code Snippet
File Name	ravynos-2/tcp_usrreq.c
Method	tcp_set_cc_mod(struct inpcb *inp, struct sockopt *sopt)

```
....
1967.			ptr = malloc(mem_sz, M_CC_MEM, M_WAITOK);
```

Wrong Size t Allocation\Path 3:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=333
Status	New

The function argsize in ravynos-2/wlan_sys.c at line 488 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c
Line	508	508
Object	argsize	argsize

Code Snippet
File Name	ravynos-2/wlan_sys.c
Method	wlan_get_driver_caps(struct wlan_iface *wif)

```
....
508.		wif->chanlist = (struct ieee80211_channel *)malloc(argsize);
```

Wrong Size t Allocation\Path 4:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=334
Status	New

The function argsize in ravynos-2/wlan_sys.c at line 587 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c
Line	598	598
Object	argsize	argsize

Code Snippet
File Name ravynos-2/wlan_sys.c
Method wlan_get_channel_list(struct wlan_iface *wif)

```
....
598.         chaninfo = (struct ieee80211req_chaninfo *)malloc(argsize);
```

Wrong Size t Allocation\Path 5:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=335
Status	New

The function argsize in ravynos-2/wlan_sys.c at line 2489 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c
Line	2523	2523
Object	argsize	argsize

Code Snippet
File Name ravynos-2/wlan_sys.c
Method wlan_get_mac_acl_macs(struct wlan_iface *wif)

```
....
2523.        if ((data = (uint8_t *)malloc(argsize)) == NULL)
```

Wrong Size t Allocation\Path 6:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=336
Status	New

The function npos in ravynos-2/cut.c at line 225 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/cut.c	ravynos-2/cut.c
Line	237	237
Object	npos	npos

Code Snippet
File Name ravynos-2/cut.c
Method needpos(size_t n)

```
....
237.            if ((positions = realloc(positions, npos)) == NULL)
```

Wrong Size t Allocation\Path 7:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=337
Status	New

The function argsize in ravynos-2/diff.c at line 469 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/diff.c	ravynos-2/diff.c
Line	475	475
Object	argsize	argsize

Code Snippet
File Name ravynos-2/diff.c
Method set_argstr(char **av, char **ave)

```
....
475.        diffargs = xmalloc(argsize);
```

Wrong Size t Allocation\Path 8:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=338
Status	New

The function need in ravynos-2/scp.c at line 1648 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c

Line	1816	1816
Object	need	need

Code Snippet
File Name ravynos-2/scp.c
Method sink(int argc, char **argv, const char *src)

```
....
1816.                              namebuf = xmalloc(need);
```

Wrong Size t Allocation\Path 9:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=339
Status	New

The function newsize in ravynos-2/glob.c at line 675 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/glob.c	ravynos-2/glob.c
Line	682	682
Object	newsize	newsize

Code Snippet
File Name ravynos-2/glob.c
Method globextend(const char *path, glob_t *pglob)

```
....
682.       pathv = xrealloc(pglob->gl_pathv, newsize);
```

Wrong Size t Allocation\Path 10:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=340
Status	New

The function lbuflen in ravynos-2/cut.c at line 388 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/cut.c	ravynos-2/cut.c
Line	403	403
Object	lbuflen	lbuflen

Code Snippet
File Name ravynos-2/cut.c
Method f_cut(FILE *fp, const char *fname)

```
....
403.                     mlbuf = malloc(lbuflen + 1);
```

Wrong Size t Allocation\Path 11:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=341
Status	New

The function dirlen in ravynos-2/http-server.c at line 159 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/http-server.c	ravynos-2/http-server.c
Line	235	235
Object	dirlen	dirlen

Code Snippet
File Name ravynos-2/http-server.c
Method send_document_cb(struct evhttp_request *req, void *arg)

```
....
235.                 pattern = malloc(dirlen+3);
```

Wrong Size t Allocation\Path 12:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=342
Status	New

The function len in ravynos-2/t_vnops.c at line 529 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	544	544
Object	len	len

Code Snippet
File Name ravynos-2/t_vnops.c

Method	create_nametoolong(const atf_tc_t *tc, const char *mp)

```
....
544.          name = malloc(len+1);
```

Wrong Size t Allocation\Path 13:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=343
Status	New

The function len in ravynos-2/t_vnops.c at line 590 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	608	608
Object	len	len

Code Snippet

File Name	ravynos-2/t_vnops.c
Method	rename_nametoolong(const atf_tc_t *tc, const char *mp)

```
....
608.          name = malloc(len+1);
```

Wrong Size t Allocation\Path 14:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=344
Status	New

The function len in ravynos-2/t_vnops.c at line 642 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	651	651
Object	len	len

Code Snippet

File Name	ravynos-2/t_vnops.c
Method	symlink_len(const atf_tc_t *tc, const char *mp, size_t len)

```
....
651.        buf = malloc(len + 1);
```

Wrong Size t Allocation\Path 15:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=345
Status	New

The function chars in ravynos-2/sh.glob.c at line 393 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/sh.glob.c	ravynos-2/sh.glob.c
Line	408	408
Object	chars	chars

Code Snippet
File Name ravynos-2/sh.glob.c
Method handleone(Char *str, Char **vl, int action)

```
....
408.        str = xmalloc(chars * sizeof(Char));
```

Wrong Size t Allocation\Path 16:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=346
Status	New

The function nslash in ravynos-2/scp.c at line 1302 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1314	1314
Object	nslash	nslash

Code Snippet
File Name ravynos-2/scp.c
Method prepare_remote_path(struct sftp_conn *conn, const char *path)

```
....
1314.                 return xstrdup(path + 2 + nslash);
```

Wrong Size t Allocation\Path 17:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=347
Status	New

The function i in ravynos-2/session.c at line 294 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	303	303
Object	i	i

Code Snippet
File Name ravynos-2/session.c
Method set_fwdpermit_from_authopts(struct ssh *ssh, const struct sshauthopt *opts)

```
....
303.                        tmp = cp = xstrdup(auth_opts->permitopen[i]);
```

Wrong Size t Allocation\Path 18:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=348
Status	New

The function i in ravynos-2/session.c at line 294 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	318	318
Object	i	i

Code Snippet
File Name ravynos-2/session.c
Method set_fwdpermit_from_authopts(struct ssh *ssh, const struct sshauthopt *opts)

```
....
318.                tmp = cp = xstrdup(auth_opts->permitlisten[i]);
```

Wrong Size t Allocation\Path 19:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=349
Status	New

The function n in ravynos-2/session.c at line 982 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1121	1121
Object	n	n

Code Snippet

File Name	ravynos-2/session.c
Method	do_setup_env(struct ssh *ssh, Session *s, const char *shell)

```
....
1121.               ocp = xstrdup(auth_opts->env[n]);
```

Wrong Size t Allocation\Path 20:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=350
Status	New

The function old_len in ravynos-2/subst.c at line 167 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/subst.c	ravynos-2/subst.c
Line	177	177
Object	old_len	old_len

Code Snippet

File Name	ravynos-2/subst.c
Method	realloc_strncat(char **str, const char *append, size_t len)

```
....
177.         new_str = malloc(old_len + len + 1);
```

Wrong Size t Allocation\Path 21:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=351
Status	New

The function len in ravynos-2/subst.c at line 167 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/subst.c	ravynos-2/subst.c
Line	177	177
Object	len	len

Code Snippet
File Name ravynos-2/subst.c
Method realloc_strncat(char **str, const char *append, size_t len)

```
....
177.         new_str = malloc(old_len + len + 1);
```

Wrong Size t Allocation\Path 22:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=352
Status	New

The function old_len in ravynos-2/subst.c at line 189 assigns an incorrectly calculated size to a buffer, resulting in a mismatch between the value being written and the size of the buffer it is being written into.

	Source	Destination
File	ravynos-2/subst.c	ravynos-2/subst.c
Line	199	199
Object	old_len	old_len

Code Snippet
File Name ravynos-2/subst.c
Method realloc_strcat(char **str, const char *append)

```
....
199.          new_str = malloc(old_len + strlen(append) + 1);
```

Double Free

Query Path:
CPP\Cx\CPP Medium Threat\Double Free Version:1

Categories

NIST SP 800-53: SI-16 Memory Protection (P1)

Description

Double Free\Path 1:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=607
Status	New

	Source	Destination
File	ravynos-2/acpi_thermal.c	ravynos-2/acpi_thermal.c
Line	985	985
Object	sc	sc

Code Snippet
File Name ravynos-2/acpi_thermal.c
Method acpi_tz_thread(void *arg)

```
....
985.                free(sc, M_TEMP);
```

Double Free\Path 2:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=608
Status	New

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1761	1777
Object	M_EXT2EXTENTS	M_EXT2EXTENTS

Code Snippet
File Name ravynos-2/ext2_extents.c
Method ext4_ext_remove_space(struct inode *ip, off_t length, int flags,

```
....
1761.                   free(path[i].ep_data, M_EXT2EXTENTS);
....
1777.       free(path, M_EXT2EXTENTS);
```

Double Free\Path 3:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=609
Status	New

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1719	1777
Object	M_EXT2EXTENTS	M_EXT2EXTENTS

Code Snippet

File Name ravynos-2/ext2_extents.c

Method ext4_ext_remove_space(struct inode *ip, off_t length, int flags,

```
....
1719.                   free(path[i].ep_data, M_EXT2EXTENTS);
....
1777.       free(path, M_EXT2EXTENTS);
```

Double Free\Path 4:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=610
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	967	977
Object	cp	cp

Code Snippet

File Name ravynos-2/scp.c

Method brace_expand(const char *pattern, char ***patternsp, size_t *npatternsp)

```
....
967.                    free(cp);
....
977.                    free(cp);
```

Double Free\Path 5:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=611
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	967	989
Object	cp	cp

Code Snippet

File Name	ravynos-2/scp.c
Method	brace_expand(const char *pattern, char ***patternsp, size_t *npatternsp)

```
....
967.                    free(cp);
....
989.                    free(cp);
```

Double Free\Path 6:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=612
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	977	989
Object	cp	cp

Code Snippet

File Name	ravynos-2/scp.c
Method	brace_expand(const char *pattern, char ***patternsp, size_t *npatternsp)

```
....
977.                    free(cp);
....
989.                    free(cp);
```

Double Free\Path 7:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=700

	86&pathid=613
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	989	992
Object	cp	cp

Code Snippet
File Name ravynos-2/scp.c
Method brace_expand(const char *pattern, char ***patternsp, size_t *npatternsp)

```
....
989.                        free(cp);
....
992.                free(cp);
```

Double Free\Path 8:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=614
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	967	992
Object	cp	cp

Code Snippet
File Name ravynos-2/scp.c
Method brace_expand(const char *pattern, char ***patternsp, size_t *npatternsp)

```
....
967.                        free(cp);
....
992.                free(cp);
```

Double Free\Path 9:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=615
Status	New

	Source	Destination

File	ravynos-2/scp.c	ravynos-2/scp.c
Line	977	992
Object	cp	cp

Code Snippet

File Name	ravynos-2/scp.c
Method	brace_expand(const char *pattern, char ***patternsp, size_t *npatternsp)

```
....
977.                         free(cp);
....
992.                   free(cp);
```

Double Free\Path 10:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=616
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1125	1131
Object	bp	bp

Code Snippet

File Name	ravynos-2/scp.c
Method	toremote(int argc, char **argv, enum scp_mode_e mode, char *sftp_direct)

```
....
1125.                              free(bp);
....
1131.                              free(bp);
```

Double Free\Path 11:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=617
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1205	1205
Object	bp	bp

Code Snippet	
File Name	ravynos-2/scp.c
Method	toremote(int argc, char **argv, enum scp_mode_e mode, char *sftp_direct)

```
....
1205.                               free(bp);
```

Double Free\Path 12:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=618
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1063	1217
Object	host	host

Code Snippet	
File Name	ravynos-2/scp.c
Method	toremote(int argc, char **argv, enum scp_mode_e mode, char *sftp_direct)

```
....
1063.                 free(host);
....
1217.         free(host);
```

Double Free\Path 13:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=619
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1064	1218
Object	src	src

Code Snippet	
File Name	ravynos-2/scp.c
Method	toremote(int argc, char **argv, enum scp_mode_e mode, char *sftp_direct)

```
....
1064.                 free(src);
....
1218.         free(src);
```

Double Free\Path 14:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=620
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1290	1290
Object	bp	bp

Code Snippet

File Name	ravynos-2/scp.c
Method	tolocal(int argc, char **argv, enum scp_mode_e mode, char *sftp_direct)

```
....
1290.                 free(bp);
```

Double Free\Path 15:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=621
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1233	1295
Object	suser	suser

Code Snippet

File Name	ravynos-2/scp.c
Method	tolocal(int argc, char **argv, enum scp_mode_e mode, char *sftp_direct)

```
....
1233.                 free(suser);
....
1295.         free(suser);
```

Double Free\Path 16:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=622
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1234	1296
Object	host	host

Code Snippet
File Name ravynos-2/scp.c
Method tolocal(int argc, char **argv, enum scp_mode_e mode, char *sftp_direct)

```
....
1234.               free(host);
....
1296.         free(host);
```

Double Free\Path 17:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=623
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1235	1297
Object	src	src

Code Snippet
File Name ravynos-2/scp.c
Method tolocal(int argc, char **argv, enum scp_mode_e mode, char *sftp_direct)

```
....
1235.               free(src);
....
1297.         free(src);
```

Double Free\Path 18:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=624

Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	967	1958
Object	cp	patterns

Code Snippet

File Name	ravynos-2/scp.c
Method	brace_expand(const char *pattern, char ***patternsp, size_t *npatternsp)

```
....
967.                    free(cp);
```

▼

File Name	ravynos-2/scp.c
Method	sink(int argc, char **argv, const char *src)

```
....
1958.      free(patterns);
```

Double Free\Path 19:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=625
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	977	1958
Object	cp	patterns

Code Snippet

File Name	ravynos-2/scp.c
Method	brace_expand(const char *pattern, char ***patternsp, size_t *npatternsp)

```
....
977.                    free(cp);
```

▼

File Name	ravynos-2/scp.c
Method	sink(int argc, char **argv, const char *src)

```
....
1958.        free(patterns);
```

Double Free\Path 20:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=626
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	957	968
Object	var_name	var_name

Code Snippet
File Name ravynos-2/session.c
Method copy_environment_denylist(char **source, char ***env, u_int *envsize,

```
....
957.                    free(var_name);
....
968.                free(var_name);
```

Double Free\Path 21:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=627
Status	New

	Source	Destination
File	ravynos-2/subst.c	ravynos-2/subst.c
Line	279	279
Object	Pointer	Pointer

Code Snippet
File Name ravynos-2/subst.c
Method apply_substitution(struct bsdtar *bsdtar, const char *name, char **result,

```
....
279.                                free(*result);
```

Use of Uninitialized Variable

Query Path:

CPP\Cx\CPP Medium Threat\Use of Uninitialized Variable Version:0

Categories

NIST SP 800-53: SC-5 Denial of Service Protection (P1)

Description

Use of Uninitialized Variable\Path 1:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1061
Status	New

	Source	Destination
File	ravynos-2/openpic.c	ravynos-2/openpic.c
Line	249	253
Object	cpu	cpu

Code Snippet
File Name ravynos-2/openpic.c
Method int cpu, ncpu;

```
....
249.                int cpu, ncpu;
```

File Name ravynos-2/openpic.c
Method CPU_FOREACH(cpu) {

```
....
253.                      if (!(mask & (1 << cpu)))
```

Use of Uninitialized Variable\Path 2:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1062
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	66	1663
Object	crmod	crmod

Code Snippet
File Name ravynos-2/telnet.c
Method crmod,

```
....
66.    crmod,
```

▼

File Name ravynos-2/telnet.c

Method telrcv(void)

```
....
1663.                       if (crmod) {
```

Use of Uninitialized Variable\Path 3:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1063
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	66	1623
Object	crmod	crmod

Code Snippet

File Name ravynos-2/telnet.c

Method crmod,

```
....
66.    crmod,
```

▼

File Name ravynos-2/telnet.c

Method telrcv(void)

```
....
1623.              else if ((c == '\n') &&
my_want_state_is_dont(TELOPT_ECHO) && !crmod) {
```

Use of Uninitialized Variable\Path 4:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1064
Status	New

Source	Destination

File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	66	1670
Object	crmod	crmod

Code Snippet
File Name ravynos-2/telnet.c
Method crmod,

```
....
66.    crmod,
```

▼

File Name ravynos-2/telnet.c

Method telrcv(void)

```
....
1670.                   if (crmod) {
```

Use of Uninitialized Variable\Path 5:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1065
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	68	1944
Object	crlf	crlf

Code Snippet
File Name ravynos-2/telnet.c
Method crlf, /* Should '\r' be mapped to <CR><LF> (or <CR><NUL>)? */

```
....
68.    crlf,        /* Should '\r' be mapped to <CR><LF> (or <CR><NUL>)?
*/
```

▼

File Name ravynos-2/telnet.c

Method telsnd()

```
....
1944.               if (!crlf) {
```

Use of Uninitialized Variable\Path 6:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1066
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	69	2084
Object	telnetport	telnetport

Code Snippet

File Name ravynos-2/telnet.c

Method telnetport,

```
....
69.    telnetport,
```

File Name ravynos-2/telnet.c

Method my_telnet(char *user)

```
....
2084.        if (telnetport && wantencryption) {
```

Use of Uninitialized Variable\Path 7:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1067
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	69	2055
Object	telnetport	telnetport

Code Snippet

File Name ravynos-2/telnet.c

Method telnetport,

```
....
69.    telnetport,
```

File Name ravynos-2/telnet.c

Method	my_telnet(char *user)

```
....
2055.       if (telnetport) {
```

Use of Uninitialized Variable\Path 8:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1068
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	74	2320
Object	autosynch	autosynch

Code Snippet

File Name	ravynos-2/telnet.c
Method	autosynch, /* send interrupt characters with SYNCH? */

```
....
74.    autosynch,   /* send interrupt characters with SYNCH? */
```

File Name	ravynos-2/telnet.c
Method	sendbrk(void)

```
....
2320.       if (autosynch) {
```

Use of Uninitialized Variable\Path 9:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1069
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	74	2306
Object	autosynch	autosynch

Code Snippet

File Name	ravynos-2/telnet.c

Method autosynch, /* send interrupt characters with SYNCH? */

```
....
74.    autosynch,   /* send interrupt characters with SYNCH? */
```

▼

File Name ravynos-2/telnet.c

Method intp(void)

```
....
2306.       if (autosynch) {
```

Use of Uninitialized Variable\Path 10:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1070
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	74	2334
Object	autosynch	autosynch

Code Snippet

File Name ravynos-2/telnet.c

Method autosynch, /* send interrupt characters with SYNCH? */

```
....
74.    autosynch,   /* send interrupt characters with SYNCH? */
```

▼

File Name ravynos-2/telnet.c

Method sendabort(void)

```
....
2334.       if (autosynch) {
```

Use of Uninitialized Variable\Path 11:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1071
Status	New

	Source	Destination

File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	74	2348
Object	autosynch	autosynch

Code Snippet
File Name ravynos-2/telnet.c
Method autosynch, /* send interrupt characters with SYNCH? */

```
....
74.    autosynch,   /* send interrupt characters with SYNCH? */
```

File Name ravynos-2/telnet.c

Method sendsusp(void)

```
....
2348.       if (autosynch) {
```

Use of Uninitialized Variable\Path 12:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1072
Status	New

	Source	Destination
File	ravynos-2/valectl.c	ravynos-2/valectl.c
Line	44	309
Object	verbose	verbose

Code Snippet
File Name ravynos-2/valectl.c
Method int verbose;

```
....
44.   int verbose;
```

File Name ravynos-2/valectl.c

Method bdg_ctl(struct args *a)

```
....
309.                if (verbose) {
```

Use of Uninitialized Variable\Path 13:

Severity	Medium

Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1073
Status	New

	Source	Destination
File	ravynos-2/valectl.c	ravynos-2/valectl.c
Line	44	430
Object	verbose	verbose

Code Snippet

File Name	ravynos-2/valectl.c
Method	int verbose;

```
....
44.   int verbose;
```

▼

File Name	ravynos-2/valectl.c
Method	main(int argc, char *argv[])

```
....
430.                        verbose++;
```

Use of Uninitialized Variable\Path 14:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1074
Status	New

	Source	Destination
File	ravynos-2/valectl.c	ravynos-2/valectl.c
Line	44	315
Object	verbose	verbose

Code Snippet

File Name	ravynos-2/valectl.c
Method	int verbose;

```
....
44.   int verbose;
```

▼

File Name	ravynos-2/valectl.c

Method	bdg_ctl(struct args *a)

```
....
315.                 if (verbose) {
```

Use of Uninitialized Variable\Path 15:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1075
Status	New

	Source	Destination
File	ravynos-2/valectl.c	ravynos-2/valectl.c
Line	44	321
Object	verbose	verbose

Code Snippet

File Name	ravynos-2/valectl.c
Method	int verbose;

```
....
44.   int verbose;
```

File Name	ravynos-2/valectl.c
Method	bdg_ctl(struct args *a)

```
....
321.                 if (verbose) {
```

Use of Uninitialized Variable\Path 16:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1076
Status	New

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	197	1396
Object	vga_sub_configure	vga_sub_configure

Code Snippet

File Name	ravynos-2/vga.c

Method int (*vga_sub_configure)(int flags);

```
....
197.         int                 (*vga_sub_configure)(int flags);
```

▼

File Name ravynos-2/vga.c

Method vga_init(int unit, video_adapter_t *adp, int flags)

```
....
1396.       if (vga_sub_configure != NULL)
```

Use of Uninitialized Variable\Path 17:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1077
Status	New

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	197	485
Object	vga_sub_configure	vga_sub_configure

Code Snippet

File Name ravynos-2/vga.c

Method int (*vga_sub_configure)(int flags);

```
....
197.         int                 (*vga_sub_configure)(int flags);
```

▼

File Name ravynos-2/vga.c

Method vga_configure(int flags)

```
....
485.       if (vga_sub_configure != NULL)
```

Use of Uninitialized Variable\Path 18:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1078
Status	New

	Source	Destination

File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	765	960
Object	rfr_78	rfr_78

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_init_bcm2050(struct bwi_mac *mac)

```
....
765.          uint16_t phyr_35, phyr_30 = 0, rfr_78, phyr_80f = 0,
phyr_810 = 0;
....
960.                rf->rf_calib = rfr_78;
```

Use of Uninitialized Variable\Path 19:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1079
Status	New

	Source	Destination
File	ravynos-2/statem_srvr.c	ravynos-2/statem_srvr.c
Line	2771	2829
Object	sigbytes2	sigbytes2

Code Snippet
File Name ravynos-2/statem_srvr.c
Method int tls_construct_server_key_exchange(SSL *s, WPACKET *pkt)

```
....
2771.          unsigned char *sigbytes1, *sigbytes2, *tbs;
....
2829.                || sigbytes1 != sigbytes2) {
```

Use of Uninitialized Variable\Path 20:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1080
Status	New

	Source	Destination
File	ravynos-2/statem_srvr.c	ravynos-2/statem_srvr.c
Line	1298	1302
Object	cookie_leni	cookie_leni

Code Snippet	
File Name	ravynos-2/statem_srvr.c
Method	int dtls_construct_hello_verify_request(SSL *s, WPACKET *pkt)

```
....
1298.       unsigned int cookie_leni;
....
1302.           cookie_leni > 255) {
```

Use of Uninitialized Variable\Path 21:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1081
Status	New

	Source	Destination
File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	1259	1263
Object	msglen	msglen

Code Snippet	
File Name	ravynos-2/statem_dtls.c
Method	int dtls1_close_construct_packet(SSL *s, WPACKET *pkt, int htype)

```
....
1259.       size_t msglen;
....
1263.               || msglen > INT_MAX)
```

Integer Overflow

Query Path:
CPP\Cx\CPP Integer Overflow\Integer Overflow Version:0

Categories

PCI DSS v3.2: PCI DSS (3.2) - 6.5.2 - Buffer overflows
FISMA 2014: System And Information Integrity
NIST SP 800-53: SI-10 Information Input Validation (P1)

Description

Integer Overflow\Path 1:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=358
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 239 of ravynos-2/a_object.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/a_object.c	ravynos-2/a_object.c
Line	258	258
Object	AssignExpr	AssignExpr

Code Snippet
File Name ravynos-2/a_object.c
Method ASN1_OBJECT *c2i_ASN1_OBJECT(ASN1_OBJECT **a, const unsigned char **pp,

```
....
258.        length = (int)len;
```

Integer Overflow\Path 2:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=359
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 1081 of ravynos-2/crypto_wolfssl.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/crypto_wolfssl.c	ravynos-2/crypto_wolfssl.c
Line	1096	1096
Object	AssignExpr	AssignExpr

Code Snippet
File Name ravynos-2/crypto_wolfssl.c
Method int crypto_bignum_to_bin(const struct crypto_bignum *a,

```
....
1096.             offset = padlen - num_bytes;
```

Integer Overflow\Path 3:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=360
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 340 of ravynos-2/cut.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/cut.c	ravynos-2/cut.c

Line	349	349
Object	AssignExpr	AssignExpr

Code Snippet
File Name ravynos-2/cut.c
Method c_cut(FILE *fp, const char *fname)

```
....
349.                for (col = maxval; col; --col) {
```

Integer Overflow\Path 4:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=361
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 388 of ravynos-2/cut.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/cut.c	ravynos-2/cut.c
Line	434	434
Object	AssignExpr	AssignExpr

Code Snippet
File Name ravynos-2/cut.c
Method f_cut(FILE *fp, const char *fname)

```
....
434.                for (field = maxval, p = lbuf; field; --field, ++pos)
{
```

Integer Overflow\Path 5:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=362
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 129 of ravynos-2/diff.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/diff.c	ravynos-2/diff.c
Line	174	174
Object	AssignExpr	AssignExpr

Code Snippet

File Name	ravynos-2/diff.c
Method	main(int argc, char **argv)

```
....
174.                                    diff_context = (int)l;
```

Integer Overflow\Path 6:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=363
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 129 of ravynos-2/diff.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/diff.c	ravynos-2/diff.c
Line	273	273
Object	AssignExpr	AssignExpr

Code Snippet

File Name	ravynos-2/diff.c
Method	main(int argc, char **argv)

```
....
273.                                    diff_context = (int)l;
```

Integer Overflow\Path 7:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=364
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 678 of ravynos-2/e_aria.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	739	739
Object	AssignExpr	AssignExpr

Code Snippet

File Name	ravynos-2/e_aria.c
Method	static int aria_ccm_cipher(EVP_CIPHER_CTX *ctx, unsigned char *out,

```
....
739.                     rv = len;
```

Integer Overflow\Path 8:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=365
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 393 of ravynos-2/e_aria.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	426	426
Object	AssignExpr	AssignExpr

Code Snippet

File Name	ravynos-2/e_aria.c
Method	static int aria_gcm_tls_cipher(EVP_CIPHER_CTX *ctx, unsigned char *out,

```
....
426.          rv = len + EVP_GCM_TLS_EXPLICIT_IV_LEN +
EVP_GCM_TLS_TAG_LEN;
```

Integer Overflow\Path 9:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=366
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 393 of ravynos-2/e_aria.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/e_aria.c	ravynos-2/e_aria.c
Line	440	440
Object	AssignExpr	AssignExpr

Code Snippet

File Name	ravynos-2/e_aria.c
Method	static int aria_gcm_tls_cipher(EVP_CIPHER_CTX *ctx, unsigned char *out,

```
....
440.          rv = len;
```

Integer Overflow\Path 10:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=367
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 65 of ravynos-2/e_rc4_hmac_md5.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/e_rc4_hmac_md5.c	ravynos-2/e_rc4_hmac_md5.c
Line	143	143
Object	AssignExpr	AssignExpr

Code Snippet
File Name ravynos-2/e_rc4_hmac_md5.c
Method static int rc4_hmac_md5_cipher(EVP_CIPHER_CTX *ctx, unsigned char *out,

```
....
143.                l = (key->md.Nl + (blocks << 3)) & 0xffffffffU;
```

Integer Overflow\Path 11:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=368
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 1550 of ravynos-2/ext2_extents.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1584	1584
Object	AssignExpr	AssignExpr

Code Snippet
File Name ravynos-2/ext2_extents.c
Method ext4_ext_rm_leaf(struct inode *ip, struct ext4_extent_path *path,

```
....
1584.               a = ex_blk > start ? ex_blk : start;
```

Integer Overflow\Path 12:

Severity	Medium
Result State	To Verify

Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=369
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 1550 of ravynos-2/ext2_extents.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1585	1585
Object	AssignExpr	AssignExpr

Code Snippet
File Name	ravynos-2/ext2_extents.c
Method	ext4_ext_rm_leaf(struct inode *ip, struct ext4_extent_path *path,

```
....
1585.              b = (uint64_t)ex_blk + ex_len - 1 <
```

Integer Overflow\Path 13:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=370
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 1550 of ravynos-2/ext2_extents.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1592	1592
Object	AssignExpr	AssignExpr

Code Snippet
File Name	ravynos-2/ext2_extents.c
Method	ext4_ext_rm_leaf(struct inode *ip, struct ext4_extent_path *path,

```
....
1592.                    block = ex_blk;
```

Integer Overflow\Path 14:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=371
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 1550 of ravynos-2/ext2_extents.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1599	1599
Object	AssignExpr	AssignExpr

Code Snippet
File Name ravynos-2/ext2_extents.c
Method ext4_ext_rm_leaf(struct inode *ip, struct ext4_extent_path *path,

```
....
1599.                    block = ex_blk;
```

Integer Overflow\Path 15:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=372
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 455 of ravynos-2/mem_dbg.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/mem_dbg.c	ravynos-2/mem_dbg.c
Line	532	532
Object	AssignExpr	AssignExpr

Code Snippet
File Name ravynos-2/mem_dbg.c
Method static void print_leak(const MEM *m, MEM_LEAK *l)

```
....
532.              buf_len = ami_cnt + n;
```

Integer Overflow\Path 16:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=373
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 397 of ravynos-2/obj_dat.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination

File	ravynos-2/obj_dat.c	ravynos-2/obj_dat.c
Line	489	489
Object	AssignExpr	AssignExpr

Code Snippet
File Name	ravynos-2/obj_dat.c
Method	int OBJ_obj2txt(char *buf, int buf_len, const ASN1_OBJECT *a, int no_name)

```
....
489.                    i = (int)(l / 40);
```

Integer Overflow\Path 17:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=374
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 1648 of ravynos-2/scp.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1891	1891
Object	AssignExpr	AssignExpr

Code Snippet
File Name	ravynos-2/scp.c
Method	sink(int argc, char **argv, const char *src)

```
....
1891.                            amt -= j;
```

Integer Overflow\Path 18:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=375
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 227 of ravynos-2/sh.glob.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/sh.glob.c	ravynos-2/sh.glob.c
Line	258	258
Object	AssignExpr	AssignExpr

Code Snippet	
File Name	ravynos-2/sh.glob.c
Method	expbrace(Char ***nvp, Char ***elp, int size)

```
....
258.            size += GLOBSPACE > l ? GLOBSPACE : l;
```

Integer Overflow\Path 19:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=376
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 2489 of ravynos-2/wlan_sys.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c
Line	2530	2530
Object	AssignExpr	AssignExpr

Code Snippet	
File Name	ravynos-2/wlan_sys.c
Method	wlan_get_mac_acl_macs(struct wlan_iface *wif)

```
....
2530.       nacls = argsize / sizeof(*acllist);
```

Integer Overflow\Path 20:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=377
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 3036 of ravynos-2/wlan_sys.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c
Line	3049	3049
Object	AssignExpr	AssignExpr

Code Snippet	
File Name	ravynos-2/wlan_sys.c
Method	wlan_mesh_get_routelist(struct wlan_iface *wif)

```
....
3049.        nroutes = argsize / sizeof(*rt);
```

Use of Uninitialized Pointer

Query Path:
CPP\Cx\CPP Medium Threat\Use of Uninitialized Pointer Version:0

Categories

NIST SP 800-53: SC-5 Denial of Service Protection (P1)

Description

Use of Uninitialized Pointer\Path 1:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=677
Status	New

The variable declared in hbh at ravynos-2/ip6_output.c in line 1322 is not initialized when it is used by ip6h_len at ravynos-2/ip6_output.c in line 1322.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	1345	1390
Object	hbh	ip6h_len

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	ip6_insert_jumboopt(struct ip6_exthdrs *exthdrs, u_int32_t plen)

```
....
1345.            struct ip6_hbh *hbh;
....
1390.            hbh->ip6h_len += (JUMBOOPTLEN >> 3);
```

Use of Uninitialized Pointer\Path 2:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=678
Status	New

The variable declared in strtmp at ravynos-2/tasn_enc.c in line 507 is not initialized when it is used by flags at ravynos-2/tasn_enc.c in line 507.

	Source	Destination
File	ravynos-2/tasn_enc.c	ravynos-2/tasn_enc.c

Line	511	608
Object	strtmp	flags

Code Snippet
File Name ravynos-2/tasn_enc.c
Method static int asn1_ex_i2c(ASN1_VALUE **pval, unsigned char *cout, int *putype,

```
....
511.       ASN1_STRING *strtmp;
....
608.                 && (strtmp->flags & ASN1_STRING_FLAG_NDEF)) {
```

Use of Uninitialized Pointer\Path 3:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=679
Status	New

The variable declared in strtmp at ravynos-2/tasn_enc.c in line 507 is not initialized when it is used by type at ravynos-2/tasn_enc.c in line 507.

	Source	Destination
File	ravynos-2/tasn_enc.c	ravynos-2/tasn_enc.c
Line	511	532
Object	strtmp	type

Code Snippet
File Name ravynos-2/tasn_enc.c
Method static int asn1_ex_i2c(ASN1_VALUE **pval, unsigned char *cout, int *putype,

```
....
511.       ASN1_STRING *strtmp;
....
532.           utype = strtmp->type;
```

Use of Uninitialized Pointer\Path 4:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=680
Status	New

The variable declared in strtmp at ravynos-2/tasn_enc.c in line 507 is not initialized when it is used by data at ravynos-2/tasn_enc.c in line 507.

	Source	Destination

File	ravynos-2/tasn_enc.c	ravynos-2/tasn_enc.c
Line	511	610
Object	strtmp	data

Code Snippet
File Name ravynos-2/tasn_enc.c
Method static int asn1_ex_i2c(ASN1_VALUE **pval, unsigned char *cout, int *putype,

```
....
511.       ASN1_STRING *strtmp;
....
610.                   strtmp->data = cout;
```

Use of Uninitialized Pointer\Path 5:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=681
Status	New

The variable declared in strtmp at ravynos-2/tasn_enc.c in line 507 is not initialized when it is used by length at ravynos-2/tasn_enc.c in line 507.

	Source	Destination
File	ravynos-2/tasn_enc.c	ravynos-2/tasn_enc.c
Line	511	611
Object	strtmp	length

Code Snippet
File Name ravynos-2/tasn_enc.c
Method static int asn1_ex_i2c(ASN1_VALUE **pval, unsigned char *cout, int *putype,

```
....
511.       ASN1_STRING *strtmp;
....
611.                   strtmp->length = 0;
```

Use of Uninitialized Pointer\Path 6:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=682
Status	New

The variable declared in strtmp at ravynos-2/tasn_enc.c in line 507 is not initialized when it is used by data at ravynos-2/tasn_enc.c in line 507.

	Source	Destination
File	ravynos-2/tasn_enc.c	ravynos-2/tasn_enc.c
Line	511	616
Object	strtmp	data

Code Snippet
File Name ravynos-2/tasn_enc.c
Method static int asn1_ex_i2c(ASN1_VALUE **pval, unsigned char *cout, int *putype,

```
....
511.      ASN1_STRING *strtmp;
....
616.          cont = strtmp->data;
```

Use of Uninitialized Pointer\Path 7:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=683
Status	New

The variable declared in strtmp at ravynos-2/tasn_enc.c in line 507 is not initialized when it is used by length at ravynos-2/tasn_enc.c in line 507.

	Source	Destination
File	ravynos-2/tasn_enc.c	ravynos-2/tasn_enc.c
Line	511	617
Object	strtmp	length

Code Snippet
File Name ravynos-2/tasn_enc.c
Method static int asn1_ex_i2c(ASN1_VALUE **pval, unsigned char *cout, int *putype,

```
....
511.      ASN1_STRING *strtmp;
....
617.          len = strtmp->length;
```

Use of Uninitialized Pointer\Path 8:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=684
Status	New

The variable declared in strtmp at ravynos-2/tasn_enc.c in line 507 is not initialized when it is used by flags at ravynos-2/tasn_enc.c in line 507.

	Source	Destination
File	ravynos-2/tasn_enc.c	ravynos-2/tasn_enc.c
Line	511	608
Object	strtmp	flags

Code Snippet
File Name ravynos-2/tasn_enc.c
Method static int asn1_ex_i2c(ASN1_VALUE **pval, unsigned char *cout, int *putype,

```
....
511.       ASN1_STRING *strtmp;
....
608.                 && (strtmp->flags & ASN1_STRING_FLAG_NDEF)) {
```

Use of Uninitialized Pointer\Path 9:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=685
Status	New

The variable declared in strtmp at ravynos-2/tasn_enc.c in line 507 is not initialized when it is used by data at ravynos-2/tasn_enc.c in line 507.

	Source	Destination
File	ravynos-2/tasn_enc.c	ravynos-2/tasn_enc.c
Line	511	610
Object	strtmp	data

Code Snippet
File Name ravynos-2/tasn_enc.c
Method static int asn1_ex_i2c(ASN1_VALUE **pval, unsigned char *cout, int *putype,

```
....
511.       ASN1_STRING *strtmp;
....
610.                    strtmp->data = cout;
```

Use of Uninitialized Pointer\Path 10:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=686
Status	New

The variable declared in strtmp at ravynos-2/tasn_enc.c in line 507 is not initialized when it is used by length at ravynos-2/tasn_enc.c in line 507.

	Source	Destination
File	ravynos-2/tasn_enc.c	ravynos-2/tasn_enc.c
Line	511	611
Object	strtmp	length

Code Snippet
File Name ravynos-2/tasn_enc.c
Method static int asn1_ex_i2c(ASN1_VALUE **pval, unsigned char *cout, int *putype,

```
....
511.        ASN1_STRING *strtmp;
....
611.                    strtmp->length = 0;
```

Use of Uninitialized Pointer\Path 11:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=687
Status	New

The variable declared in strtmp at ravynos-2/tasn_enc.c in line 507 is not initialized when it is used by data at ravynos-2/tasn_enc.c in line 507.

	Source	Destination
File	ravynos-2/tasn_enc.c	ravynos-2/tasn_enc.c
Line	511	616
Object	strtmp	data

Code Snippet
File Name ravynos-2/tasn_enc.c
Method static int asn1_ex_i2c(ASN1_VALUE **pval, unsigned char *cout, int *putype,

```
....
511.        ASN1_STRING *strtmp;
....
616.            cont = strtmp->data;
```

Use of Uninitialized Pointer\Path 12:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=688
Status	New

The variable declared in strtmp at ravynos-2/tasn_enc.c in line 507 is not initialized when it is used by length at ravynos-2/tasn_enc.c in line 507.

	Source	Destination
File	ravynos-2/tasn_enc.c	ravynos-2/tasn_enc.c
Line	511	617
Object	strtmp	length

Code Snippet

File Name	ravynos-2/tasn_enc.c
Method	static int asn1_ex_i2c(ASN1_VALUE **pval, unsigned char *cout, int *putype,

```
....
511.        ASN1_STRING *strtmp;
....
617.            len = strtmp->length;
```

Use of Uninitialized Pointer\Path 13:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=689
Status	New

The variable declared in otmp at ravynos-2/tasn_enc.c in line 507 is not initialized when it is used by length at ravynos-2/tasn_enc.c in line 507.

	Source	Destination
File	ravynos-2/tasn_enc.c	ravynos-2/tasn_enc.c
Line	512	548
Object	otmp	length

Code Snippet

File Name	ravynos-2/tasn_enc.c
Method	static int asn1_ex_i2c(ASN1_VALUE **pval, unsigned char *cout, int *putype,

```
....
512.        ASN1_OBJECT *otmp;
....
548.            len = otmp->length;
```

Use of Uninitialized Pointer\Path 14:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=690
Status	New

The variable declared in otmp at ravynos-2/tasn_enc.c in line 507 is not initialized when it is used by data at ravynos-2/tasn_enc.c in line 507.

	Source	Destination
File	ravynos-2/tasn_enc.c	ravynos-2/tasn_enc.c
Line	512	547
Object	otmp	data

Code Snippet
File Name ravynos-2/tasn_enc.c
Method static int asn1_ex_i2c(ASN1_VALUE **pval, unsigned char *cout, int *putype,

```
....
512.        ASN1_OBJECT *otmp;
....
547.            cont = otmp->data;
```

Use of Uninitialized Pointer\Path 15:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=691
Status	New

The variable declared in sw at ravynos-2/vga.c in line 76 is not initialized when it is used by sw at ravynos-2/vga.c in line 76.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	79	85
Object	sw	sw

Code Snippet
File Name ravynos-2/vga.c
Method vga_probe_unit(int unit, video_adapter_t *buf, int flags)

```
....
79.    video_switch_t *sw;
....
85.    error = (*sw->probe)(unit, &adp, NULL, flags);
```

Use of Uninitialized Pointer\Path 16:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=692
Status	New

The variable declared in sw at ravynos-2/vga.c in line 76 is not initialized when it is used by sw at ravynos-2/vga.c in line 76.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	79	83
Object	sw	sw

Code Snippet
File Name ravynos-2/vga.c
Method vga_probe_unit(int unit, video_adapter_t *buf, int flags)

```
....
79.    video_switch_t *sw;
....
83.    if (sw == NULL)
```

Use of Uninitialized Pointer\Path 17:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=693
Status	New

The variable declared in sw at ravynos-2/vga.c in line 93 is not initialized when it is used by sw at ravynos-2/vga.c in line 93.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	95	102
Object	sw	sw

Code Snippet
File Name ravynos-2/vga.c
Method vga_attach_unit(int unit, vga_softc_t *sc, int flags)

```
....
95.    video_switch_t *sw;
....
102.         error = (*sw->probe)(unit, &sc->adp, NULL, flags);
```

Use of Uninitialized Pointer\Path 18:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=694
Status	New

The variable declared in sw at ravynos-2/vga.c in line 93 is not initialized when it is used by sw at ravynos-2/vga.c in line 93.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	95	99
Object	sw	sw

Code Snippet
File Name ravynos-2/vga.c
Method vga_attach_unit(int unit, vga_softc_t *sc, int flags)

```
....
95.    video_switch_t *sw;
....
99.    if (sw == NULL)
```

Use of Uninitialized Pointer\Path 19:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=695
Status	New

The variable declared in sw at ravynos-2/vga.c in line 93 is not initialized when it is used by sw at ravynos-2/vga.c in line 93.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	95	105
Object	sw	sw

Code Snippet
File Name ravynos-2/vga.c
Method vga_attach_unit(int unit, vga_softc_t *sc, int flags)

```
....
95.    video_switch_t *sw;
....
105.         return (*sw->init)(unit, sc->adp, flags);
```

Divide By Zero

Query Path:
CPP\Cx\CPP Medium Threat\Divide By Zero Version:1

Description

Divide By Zero\Path 1:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=38
Status	New

The application performs an illegal operation in ar9300_aic_cal_post_process, in ravynos-2/ar9300_aic.c. In line 282, the program attempts to divide by BinaryExpr, which might be evaluate to 0 (zero) at time of division. This value could be a hard-coded zero value, or received from external, untrusted input BinaryExpr in ar9300_aic_cal_post_process of ravynos-2/ar9300_aic.c, at line 282.

	Source	Destination
File	ravynos-2/ar9300_aic.c	ravynos-2/ar9300_aic.c
Line	363	363
Object	BinaryExpr	BinaryExpr

Code Snippet
File Name ravynos-2/ar9300_aic.c
Method ar9300_aic_cal_post_process (struct ath_hal *ah)

```
....
363.                            (end_idx - i) +
```

Divide By Zero\Path 2:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=39
Status	New

The application performs an illegal operation in ar9300_aic_cal_post_process, in ravynos-2/ar9300_aic.c. In line 282, the program attempts to divide by BinaryExpr, which might be evaluate to 0 (zero) at time of division. This value could be a hard-coded zero value, or received from external, untrusted input BinaryExpr in ar9300_aic_cal_post_process of ravynos-2/ar9300_aic.c, at line 282.

	Source	Destination
File	ravynos-2/ar9300_aic.c	ravynos-2/ar9300_aic.c
Line	369	369
Object	BinaryExpr	BinaryExpr

Code Snippet
File Name ravynos-2/ar9300_aic.c
Method ar9300_aic_cal_post_process (struct ath_hal *ah)

```
....
369.                            (end_idx - i) +
```

Divide By Zero\Path 3:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=40

Status	New

The application performs an illegal operation in bwi_rf_calc_nrssi_slope_11g, in ravynos-2/bwirf.c. In line 1905, the program attempts to divide by BinaryExpr, which might be evaluate to 0 (zero) at time of division. This value could be a hard-coded zero value, or received from external, untrusted input BinaryExpr in bwi_rf_calc_nrssi_slope_11g of ravynos-2/bwirf.c, at line 1905.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	2033	2033
Object	BinaryExpr	BinaryExpr

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_calc_nrssi_slope_11g(struct bwi_mac *mac)

```
....
2033.           rf->rf_nrssi_slope = 0x400000 / (nrssi[0] - nrssi[1]);
```

Divide By Zero\Path 4:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=41
Status	New

The application performs an illegal operation in server_update, in ravynos-2/server.c. In line 72, the program attempts to divide by server_limit, which might be evaluate to 0 (zero) at time of division. This value could be a hard-coded zero value, or received from external, untrusted input server_limit in server_update of ravynos-2/server.c, at line 72.

	Source	Destination
File	ravynos-2/server.c	ravynos-2/server.c
Line	80	80
Object	server_limit	server_limit

Code Snippet
File Name ravynos-2/server.c
Method server_update(int count)

```
....
80.   server_avail = UINT8_MAX - (count - 1) * UINT8_MAX / server_limit;
```

Buffer Overflow AddressOfLocalVarReturned

Query Path:
CPP\Cx\CPP Buffer Overflow\Buffer Overflow AddressOfLocalVarReturned Version:1

Categories

PCI DSS v3.2: PCI DSS (3.2) - 6.5.2 - Buffer overflows
NIST SP 800-53: SC-5 Denial of Service Protection (P1)
OWASP Top 10 2017: A1-Injection

Description

Buffer Overflow AddressOfLocalVarReturned\Path 1:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=42
Status	New

The pointer d2 at ravynos-2/tasn_enc.c in line 373 is being used after it has been freed.

	Source	Destination
File	ravynos-2/tasn_enc.c	ravynos-2/tasn_enc.c
Line	381	381
Object	d2	d2

Code Snippet
File Name ravynos-2/tasn_enc.c
Method static int der_cmp(const void *a, const void *b)

```
....
381.        return d1->length - d2->length;
```

Buffer Overflow AddressOfLocalVarReturned\Path 2:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=43
Status	New

The pointer ns at ravynos-2/easter.c in line 75 is being used after it has been freed.

	Source	Destination
File	ravynos-2/easter.c	ravynos-2/easter.c
Line	102	102
Object	ns	ns

Code Snippet
File Name ravynos-2/easter.c
Method easterodn(int y)

```
....
102.          return (dn + ns[weekday(dn)]);
```

Buffer Overflow AddressOfLocalVarReturned\Path 3:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=44
Status	New

The pointer masks at ravynos-2/val_nsec.c in line 61 is being used after it has been freed.

	Source	Destination
File	ravynos-2/val_nsec.c	ravynos-2/val_nsec.c
Line	85	85
Object	masks	masks

Code Snippet

File Name	ravynos-2/val_nsec.c
Method	nsecbitmap_has_type_rdata(uint8_t* bitmap, size_t len, uint16_t type)

```
....
85.             return (int)(bitmap[mybyte] & masks[type_low&0x7]);
```

Char Overflow

Query Path:
CPP\Cx\CPP Integer Overflow\Char Overflow Version:1

Categories

PCI DSS v3.2: PCI DSS (3.2) - 6.5.2 - Buffer overflows
NIST SP 800-53: SI-10 Information Input Validation (P1)

Description

Char Overflow\Path 1:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=355
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 2729 of ravynos-2/if_cpsw.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/if_cpsw.c	ravynos-2/if_cpsw.c
Line	2760	2760
Object	AssignExpr	AssignExpr

Code Snippet

File Name	ravynos-2/if_cpsw.c
Method	cpsw_add_sysctls(struct cpsw_softc *sc)

```
....
2760.            port[0] = '0' + i;
```

Char Overflow\Path 2:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=356
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 351 of ravynos-2/telnet.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	397	397
Object	AssignExpr	AssignExpr

Code Snippet
File Name ravynos-2/telnet.c
Method dooption(int option)

```
....
397.            telopt_environ = option;
```

Char Overflow\Path 3:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=357
Status	New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 1043 of ravynos-2/telnet.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	1052	1052
Object	AssignExpr	AssignExpr

Code Snippet
File Name ravynos-2/telnet.c
Method lm_mode(unsigned char *cmd, int len, int init)

```
....
1052.       str_lm_mode[4] = linemode;
```

Path Traversal

Query Path:
CPP\Cx\CPP Medium Threat\Path Traversal Version:0

Categories

OWASP Top 10 2013: A4-Insecure Direct Object References
OWASP Top 10 2017: A5-Broken Access Control

Description

Path Traversal\Path 1:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=628
Status	New

Method main at line 78 of ravynos-2/cut.c gets user input from the argv element. This element’s value then flows through the code and is eventually used in a file path for local disk access in main at line 78 of ravynos-2/cut.c. This may cause a Path Traversal vulnerability.

	Source	Destination
File	ravynos-2/cut.c	ravynos-2/cut.c
Line	78	149
Object	argv	Pointer

Code Snippet
File Name ravynos-2/cut.c
Method main(int argc, char *argv[])

```
....
78.  main(int argc, char *argv[])
....
149.                         if (!(fp = fopen(*argv, "r"))) {
```

Path Traversal\Path 2:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=629
Status	New

Method main at line 78 of ravynos-2/cut.c gets user input from the argv element. This element’s value then flows through the code and is eventually used in a file path for local disk access in main at line 78 of ravynos-2/cut.c. This may cause a Path Traversal vulnerability.

	Source	Destination
File	ravynos-2/cut.c	ravynos-2/cut.c
Line	78	149
Object	argv	argv

Code Snippet

File Name	ravynos-2/cut.c
Method	main(int argc, char *argv[])

```
....
78.  main(int argc, char *argv[])
....
149.                          if (!(fp = fopen(*argv, "r"))) {
```

Path Traversal\Path 3:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=630
Status	New

Method main at line 115 of ravynos-2/maketab.c gets user input from the argv element. This element's value then flows through the code and is eventually used in a file path for local disk access in main at line 115 of ravynos-2/maketab.c. This may cause a Path Traversal vulnerability.

	Source	Destination
File	ravynos-2/maketab.c	ravynos-2/maketab.c
Line	115	132
Object	argv	argv

Code Snippet

File Name	ravynos-2/maketab.c
Method	int main(int argc, char *argv[])

```
....
115.  int main(int argc, char *argv[])
....
132.        if ((fp = fopen(argv[1], "r")) == NULL) {
```

Stored Buffer Overflow boundcpy

Query Path:
CPP\Cx\CPP Stored Vulnerabilities\Stored Buffer Overflow boundcpy Version:1

Categories

NIST SP 800-53: SI-10 Information Input Validation (P1)
OWASP Top 10 2017: A1-Injection

Description

Stored Buffer Overflow boundcpy\Path 1:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1153
Status	New

The size of the buffer used by listen_child in bytes_read, at line 589 of ravynos-2/daemon.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that listen_child passes to BinaryExpr, at line 589 of ravynos-2/daemon.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/daemon.c	ravynos-2/daemon.c
Line	598	610
Object	BinaryExpr	bytes_read

Code Snippet

File Name	ravynos-2/daemon.c
Method	listen_child(int fd, struct daemon_state *state)

```
....
598.        rv = read(fd, buf + bytes_read, LBUF_SIZE - bytes_read - 1);
....
610.                while ((cp = memchr(buf, '\n', bytes_read)) != NULL) {
```

Stored Buffer Overflow boundcpy\Path 2:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1154
Status	New

The size of the buffer used by listen_child in bytes_read, at line 589 of ravynos-2/daemon.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that listen_child passes to BinaryExpr, at line 589 of ravynos-2/daemon.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/daemon.c	ravynos-2/daemon.c
Line	598	615
Object	BinaryExpr	bytes_read

Code Snippet

File Name	ravynos-2/daemon.c
Method	listen_child(int fd, struct daemon_state *state)

```
....
598.        rv = read(fd, buf + bytes_read, LBUF_SIZE - bytes_read - 1);
....
615.                        memmove(buf, cp + 1, bytes_read);
```

Heap Inspection

Query Path:
CPP\Cx\CPP Medium Threat\Heap Inspection Version:1

Categories

OWASP Top 10 2013: A6-Sensitive Data Exposure
FISMA 2014: Media Protection

NIST SP 800-53: SC-4 Information in Shared Resources (P1)
OWASP Top 10 2017: A3-Sensitive Data Exposure

Description

Heap Inspection\Path 1:

Severity	Medium
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=631
Status	New

Method *pwd; at line 443 of ravynos-2/scp.c defines pwd, which is designated to contain user passwords. However, while plaintext passwords are later assigned to pwd, this variable is never cleared from memory.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	443	443
Object	pwd	pwd

Code Snippet

File Name	ravynos-2/scp.c
Method	struct passwd *pwd;

```
....
443.   struct passwd *pwd;
```

NULL Pointer Dereference

Query Path:
CPP\Cx\CPP Low Visibility\NULL Pointer Dereference Version:1

Categories

NIST SP 800-53: SC-5 Denial of Service Protection (P1)
OWASP Top 10 2017: A1-Injection

Description

NULL Pointer Dereference\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=843
Status	New

The variable declared in null at ravynos-2/cachedump.c in line 821 is not initialized when it is used by rep at ravynos-2/cachedump.c in line 793.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	896	799
Object	null	rep

Code Snippet

File Name	ravynos-2/cachedump.c
Method	int print_deleg_lookup(RES* ssl, struct worker* worker, uint8_t* nm,

```
....
896.                    print_dp_main(ssl, stub->dp, NULL);
```

File Name	ravynos-2/cachedump.c
Method	print_dp_main(RES* ssl, struct delegpt* dp, struct dns_msg* msg)

```
....
799.            for(i=0; i<msg->rep->rrset_count; i++) {
```

NULL Pointer Dereference\Path 2:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=844
Status	New

The variable declared in null at ravynos-2/cachedump.c in line 821 is not initialized when it is used by rep at ravynos-2/cachedump.c in line 793.

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	847	799
Object	null	rep

Code Snippet

File Name	ravynos-2/cachedump.c
Method	int print_deleg_lookup(RES* ssl, struct worker* worker, uint8_t* nm,

```
....
847.                  print_dp_main(ssl, dp, NULL);
```

File Name	ravynos-2/cachedump.c
Method	print_dp_main(RES* ssl, struct delegpt* dp, struct dns_msg* msg)

```
....
799.            for(i=0; i<msg->rep->rrset_count; i++) {
```

NULL Pointer Dereference\Path 3:

Severity	Low
Result State	To Verify
Online Results	http://WIN-

BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=845
Status New

The variable declared in null at ravynos-2/ext2_extents.c in line 926 is not initialized when it is used by b_data at ravynos-2/ext2_extents.c in line 926.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1005	1050
Object	null	b_data

Code Snippet
File Name ravynos-2/ext2_extents.c
Method ext4_ext_split(struct inode *ip, struct ext4_extent_path *path,

```
....
1005.       bp = NULL;
....
1050.             ext2_extent_blk_csum_set(ip, bp->b_data);
```

NULL Pointer Dereference\Path 4:

Severity Low
Result State To Verify
Online Results http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=846
Status New

The variable declared in null at ravynos-2/ext2_extents.c in line 926 is not initialized when it is used by b_data at ravynos-2/ext2_extents.c in line 926.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1052	1050
Object	null	b_data

Code Snippet
File Name ravynos-2/ext2_extents.c
Method ext4_ext_split(struct inode *ip, struct ext4_extent_path *path,

```
....
1052.             bp = NULL;
....
1050.             ext2_extent_blk_csum_set(ip, bp->b_data);
```

NULL Pointer Dereference\Path 5:

Severity Low
Result State To Verify
Online Results http://WIN-

	BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=847
Status	New

The variable declared in null at ravynos-2/ext2_extents.c in line 926 is not initialized when it is used by b_data at ravynos-2/ext2_extents.c in line 926.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1005	1003
Object	null	b_data

Code Snippet
File Name ravynos-2/ext2_extents.c
Method ext4_ext_split(struct inode *ip, struct ext4_extent_path *path,

```
....
1005.        bp = NULL;
....
1003.        ext2_extent_blk_csum_set(ip, bp->b_data);
```

NULL Pointer Dereference\Path 6:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=848
Status	New

The variable declared in null at ravynos-2/if_cpsw.c in line 1610 is not initialized when it is used by bd_offset at ravynos-2/if_cpsw.c in line 1610.

	Source	Destination
File	ravynos-2/if_cpsw.c	ravynos-2/if_cpsw.c
Line	1621	1724
Object	null	bd_offset

Code Snippet
File Name ravynos-2/if_cpsw.c
Method cpsw_rx_dequeue(struct cpsw_softc *sc)

```
....
1621.        last = NULL;
....
1724.              cpsw_write_cp_slot(sc, &sc->rx, last);
```

NULL Pointer Dereference\Path 7:

Severity	Low
Result State	To Verify
Online Results	http://WIN-

	BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=849
Status	New

The variable declared in null at ravynos-2/if_cpsw.c in line 1737 is not initialized when it is used by bd_offset at ravynos-2/if_cpsw.c in line 1737.

	Source	Destination
File	ravynos-2/if_cpsw.c	ravynos-2/if_cpsw.c
Line	1745	1804
Object	null	bd_offset

Code Snippet	
File Name	ravynos-2/if_cpsw.c
Method	cpsw_rx_enqueue(struct cpsw_softc *sc)

```
....
1745.       first_new_slot = NULL;
....
1804.             cpsw_write_hdp_slot(sc, &sc->rx, first_new_slot);
```

NULL Pointer Dereference\Path 8:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=850
Status	New

The variable declared in null at ravynos-2/if_cpsw.c in line 1737 is not initialized when it is used by bd_offset at ravynos-2/if_cpsw.c in line 1737.

	Source	Destination
File	ravynos-2/if_cpsw.c	ravynos-2/if_cpsw.c
Line	1745	1807
Object	null	bd_offset

Code Snippet	
File Name	ravynos-2/if_cpsw.c
Method	cpsw_rx_enqueue(struct cpsw_softc *sc)

```
....
1745.       first_new_slot = NULL;
....
1807.             cpsw_cpdma_write_bd_next(sc, last_old_slot,
first_new_slot);
```

NULL Pointer Dereference\Path 9:

Severity	Low
Result State	To Verify

Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=851
Status	New

The variable declared in null at ravynos-2/if_cpsw.c in line 1848 is not initialized when it is used by bd_offset at ravynos-2/if_cpsw.c in line 1848.

	Source	Destination
File	ravynos-2/if_cpsw.c	ravynos-2/if_cpsw.c
Line	1858	1978
Object	null	bd_offset

Code Snippet

File Name	ravynos-2/if_cpsw.c
Method	cpswp_tx_enqueue(struct cpswp_softc *sc)

```
....
1858.       first_new_slot = NULL;
....
1978.               cpsw_cpdma_write_bd_next(sc->swsc, last_old_slot,
```

NULL Pointer Dereference\Path 10:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=852
Status	New

The variable declared in null at ravynos-2/if_cpsw.c in line 1848 is not initialized when it is used by bd_offset at ravynos-2/if_cpsw.c in line 1848.

	Source	Destination
File	ravynos-2/if_cpsw.c	ravynos-2/if_cpsw.c
Line	1858	1982
Object	null	bd_offset

Code Snippet

File Name	ravynos-2/if_cpsw.c
Method	cpswp_tx_enqueue(struct cpswp_softc *sc)

```
....
1858.       first_new_slot = NULL;
....
1982.               cpsw_write_hdp_slot(sc->swsc, &sc->swsc->tx,
first_new_slot);
```

NULL Pointer Dereference\Path 11:

Severity	Low

Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=853
Status	New

The variable declared in null at ravynos-2/ip6_output.c in line 409 is not initialized when it is used by ia_ifa at ravynos-2/ip6_output.c in line 409.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	425	1267
Object	null	ia_ifa

Code Snippet
File Name ravynos-2/ip6_output.c
Method ip6_output(struct mbuf *m0, struct ip6_pktopts *opt,

```
....
425.        struct in6_ifaddr *ia = NULL;
....
1267.                         counter_u64_add(ia->ia_ifa.ifa_obytes,
```

NULL Pointer Dereference\Path 12:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=854
Status	New

The variable declared in null at ravynos-2/ip6_output.c in line 409 is not initialized when it is used by ia_ifa at ravynos-2/ip6_output.c in line 409.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	425	1266
Object	null	ia_ifa

Code Snippet
File Name ravynos-2/ip6_output.c
Method ip6_output(struct mbuf *m0, struct ip6_pktopts *opt,

```
....
425.        struct in6_ifaddr *ia = NULL;
....
1266.                         counter_u64_add(ia->ia_ifa.ifa_opackets,
1);
```

NULL Pointer Dereference\Path 13:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=855
Status	New

The variable declared in null at ravynos-2/ip6_output.c in line 409 is not initialized when it is used by nh_pksent at ravynos-2/ip6_output.c in line 409.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	673	729
Object	null	nh_pksent

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	ip6_output(struct mbuf *m0, struct ip6_pktopts *opt,

```
....
673.          nh = NULL;
....
729.                          counter_u64_add(nh->nh_pksent, 1);
```

NULL Pointer Dereference\Path 14:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=856
Status	New

The variable declared in null at ravynos-2/print-openflow.c in line 144 is not initialized when it is used by mti at ravynos-2/print-openflow.c in line 107.

	Source	Destination
File	ravynos-2/print-openflow.c	ravynos-2/print-openflow.c
Line	167	132
Object	null	mti

Code Snippet

File Name	ravynos-2/print-openflow.c
Method	openflow_print(netdissect_options *ndo, const u_char *cp, u_int len)

```
....
167.                          NULL;
```

▼

File Name ravynos-2/print-openflow.c

Method of_message_print(netdissect_options *ndo,

```
....
132.         mti->decoder(ndo, cp, len);
```

NULL Pointer Dereference\Path 15:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=857
Status	New

The variable declared in null at ravynos-2/print-openflow.c in line 144 is not initialized when it is used by decoder at ravynos-2/print-openflow.c in line 107.

	Source	Destination
File	ravynos-2/print-openflow.c	ravynos-2/print-openflow.c
Line	167	129
Object	null	decoder

Code Snippet

File Name ravynos-2/print-openflow.c

Method openflow_print(netdissect_options *ndo, const u_char *cp, u_int len)

```
....
167.                        NULL;
```

File Name ravynos-2/print-openflow.c

Method of_message_print(netdissect_options *ndo,

```
....
129.         if (!ndo->ndo_vflag || !mti->decoder)
```

NULL Pointer Dereference\Path 16:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=858
Status	New

The variable declared in null at ravynos-2/rtsol.c in line 159 is not initialized when it is used by ipi6_ifindex at ravynos-2/rtsol.c in line 159.

	Source	Destination
File	ravynos-2/rtsol.c	ravynos-2/rtsol.c

Line	169	245
Object	null	ipi6_ifindex

Code Snippet
File Name ravynos-2/rtsol.c
Method rtsol_input(int sock)

```
....
169.        struct in6_pktinfo *pi = NULL;
....
245.                    if_indextoname(pi->ipi6_ifindex, ifnamebuf));
```

NULL Pointer Dereference\Path 17:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=859
Status	New

The variable declared in null at ravynos-2/rtsol.c in line 159 is not initialized when it is used by ipi6_ifindex at ravynos-2/rtsol.c in line 159.

	Source	Destination
File	ravynos-2/rtsol.c	ravynos-2/rtsol.c
Line	169	254
Object	null	ipi6_ifindex

Code Snippet
File Name ravynos-2/rtsol.c
Method rtsol_input(int sock)

```
....
169.        struct in6_pktinfo *pi = NULL;
....
254.                    if_indextoname(pi->ipi6_ifindex, ifnamebuf));
```

NULL Pointer Dereference\Path 18:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=860
Status	New

The variable declared in null at ravynos-2/rtsol.c in line 159 is not initialized when it is used by ipi6_ifindex at ravynos-2/rtsol.c in line 159.

	Source	Destination

File	ravynos-2/rtsol.c	ravynos-2/rtsol.c
Line	169	264
Object	null	ipi6_ifindex

Code Snippet
File Name ravynos-2/rtsol.c
Method rtsol_input(int sock)

```
....
169.        struct in6_pktinfo *pi = NULL;
....
264.                  if_indextoname(pi->ipi6_ifindex, ifnamebuf));
```

NULL Pointer Dereference\Path 19:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=861
Status	New

The variable declared in null at ravynos-2/server.c in line 154 is not initialized when it is used by l2cap_bdaddr at ravynos-2/server.c in line 154.

	Source	Destination
File	ravynos-2/server.c	ravynos-2/server.c
Line	240	252
Object	null	l2cap_bdaddr

Code Snippet
File Name ravynos-2/server.c
Method server_read(int s, short ev, void *arg)

```
....
240.        log_info("Accepted connection from %s",
bt_ntoa(&ra.l2cap_bdaddr, NULL));
....
252.        b2eaddr(chan->raddr, &ra.l2cap_bdaddr);
```

NULL Pointer Dereference\Path 20:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=862
Status	New

The variable declared in null at ravynos-2/statem_dtls.c in line 467 is not initialized when it is used by msg_header at ravynos-2/statem_dtls.c in line 467.

	Source	Destination
File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	492	511
Object	null	msg_header

Code Snippet
File Name ravynos-2/statem_dtls.c
Method static int dtls1_retrieve_buffered_fragment(SSL *s, size_t *len)

```
....
492.                frag = NULL;
....
511.                       frag->msg_header.frag_len);
```

NULL Pointer Dereference\Path 21:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=863
Status	New

The variable declared in null at ravynos-2/statem_dtls.c in line 467 is not initialized when it is used by msg_header at ravynos-2/statem_dtls.c in line 467.

	Source	Destination
File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	492	510
Object	null	msg_header

Code Snippet
File Name ravynos-2/statem_dtls.c
Method static int dtls1_retrieve_buffered_fragment(SSL *s, size_t *len)

```
....
492.                frag = NULL;
....
510.                memcpy(&p[frag->msg_header.frag_off], frag->fragment,
```

NULL Pointer Dereference\Path 22:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=864
Status	New

The variable declared in null at ravynos-2/statem_dtls.c in line 467 is not initialized when it is used by msg_header at ravynos-2/statem_dtls.c in line 467.

	Source	Destination
File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	492	507
Object	null	msg_header

Code Snippet
File Name ravynos-2/statem_dtls.c
Method static int dtls1_retrieve_buffered_fragment(SSL *s, size_t *len)

```
....
492.              frag = NULL;
....
507.          if (ret && frag->msg_header.frag_len > 0) {
```

NULL Pointer Dereference\Path 23:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=865
Status	New

The variable declared in null at ravynos-2/statem_dtls.c in line 467 is not initialized when it is used by msg_header at ravynos-2/statem_dtls.c in line 467.

	Source	Destination
File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	492	501
Object	null	msg_header

Code Snippet
File Name ravynos-2/statem_dtls.c
Method static int dtls1_retrieve_buffered_fragment(SSL *s, size_t *len)

```
....
492.              frag = NULL;
....
501.          size_t frag_len = frag->msg_header.frag_len;
```

NULL Pointer Dereference\Path 24:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=866
Status	New

The variable declared in null at ravynos-2/statem_dtls.c in line 467 is not initialized when it is used by msg_header at ravynos-2/statem_dtls.c in line 467.

	Source	Destination
File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	492	500
Object	null	msg_header

Code Snippet
File Name ravynos-2/statem_dtls.c
Method static int dtls1_retrieve_buffered_fragment(SSL *s, size_t *len)

```
....
492.                frag = NULL;
....
500.        if (s->d1->handshake_read_seq == frag->msg_header.seq) {
```

NULL Pointer Dereference\Path 25:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=867
Status	New

The variable declared in null at ravynos-2/statem_dtls.c in line 531 is not initialized when it is used by reassembly at ravynos-2/statem_dtls.c in line 531.

	Source	Destination
File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	565	609
Object	null	reassembly

Code Snippet
File Name ravynos-2/statem_dtls.c
Method dtls1_reassemble_fragment(SSL *s, const struct hm_header_st *msg_hdr)

```
....
565.                frag = NULL;
....
609.            OPENSSL_free(frag->reassembly);
```

NULL Pointer Dereference\Path 26:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=868
Status	New

The variable declared in null at ravynos-2/statem_dtls.c in line 531 is not initialized when it is used by reassembly at ravynos-2/statem_dtls.c in line 531.

	Source	Destination
File	ravynos-2/statem_dtls.c	ravynos-2/statem_dtls.c
Line	565	575
Object	null	reassembly

Code Snippet
File Name ravynos-2/statem_dtls.c
Method dtls1_reassemble_fragment(SSL *s, const struct hm_header_st *msg_hdr)

```
....
565.            frag = NULL;
....
575.        if (frag->reassembly == NULL) {
```

NULL Pointer Dereference\Path 27:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=869
Status	New

The variable declared in null at ravynos-2/vnic_dev.c in line 929 is not initialized when it is used by res at ravynos-2/vnic_dev.c in line 36.

	Source	Destination
File	ravynos-2/vnic_dev.c	ravynos-2/vnic_dev.c
Line	932	107
Object	null	res

Code Snippet
File Name ravynos-2/vnic_dev.c
Method struct vnic_dev *vnic_dev_register(struct vnic_dev *vdev,

```
....
932.         if (vnic_dev_discover_res(vdev, NULL, num_bars))
```

File Name ravynos-2/vnic_dev.c
Method static int vnic_dev_discover_res(struct vnic_dev *vdev,

```
....
107.              bcopy(&softc->mem, &vdev->res[type].bar, sizeof(softc->mem));
```

NULL Pointer Dereference\Path 28:

Severity	Low
Result State	To Verify

Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=870
Status	New

The variable declared in 0 at ravynos-2/print-udp.c in line 215 is not initialized when it is used by rr_dv at ravynos-2/print-udp.c in line 215.

	Source	Destination
File	ravynos-2/print-udp.c	ravynos-2/print-udp.c
Line	218	289
Object	0	rr_dv

Code Snippet

File Name	ravynos-2/print-udp.c
Method	rtcp_print(netdissect_options *ndo, const u_char *hdr, const u_char *ep)

```
....
218.        const struct rtcp_rr *rr = 0;
....
289.                    GET_BE_U_4(rr->rr_dv), ts, dts);
```

NULL Pointer Dereference\Path 29:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=871
Status	New

The variable declared in 0 at ravynos-2/print-udp.c in line 215 is not initialized when it is used by rr_ls at ravynos-2/print-udp.c in line 215.

	Source	Destination
File	ravynos-2/print-udp.c	ravynos-2/print-udp.c
Line	218	288
Object	0	rr_ls

Code Snippet

File Name	ravynos-2/print-udp.c
Method	rtcp_print(netdissect_options *ndo, const u_char *hdr, const u_char *ep)

```
....
218.        const struct rtcp_rr *rr = 0;
....
288.                    GET_BE_U_4(rr->rr_ls),
```

NULL Pointer Dereference\Path 30:

Severity	Low
Result State	To Verify

Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=872
Status	New

The variable declared in 0 at ravynos-2/print-udp.c in line 215 is not initialized when it is used by rr_nl at ravynos-2/print-udp.c in line 215.

	Source	Destination
File	ravynos-2/print-udp.c	ravynos-2/print-udp.c
Line	218	287
Object	0	rr_nl

Code Snippet
File Name ravynos-2/print-udp.c
Method rtcp_print(netdissect_options *ndo, const u_char *hdr, const u_char *ep)

```
....
218.        const struct rtcp_rr *rr = 0;
....
287.                    GET_BE_U_4(rr->rr_nl) & 0x00ffffff,
```

NULL Pointer Dereference\Path 31:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=873
Status	New

The variable declared in 0 at ravynos-2/print-udp.c in line 215 is not initialized when it is used by rr_srcid at ravynos-2/print-udp.c in line 215.

	Source	Destination
File	ravynos-2/print-udp.c	ravynos-2/print-udp.c
Line	218	283
Object	0	rr_srcid

Code Snippet
File Name ravynos-2/print-udp.c
Method rtcp_print(netdissect_options *ndo, const u_char *hdr, const u_char *ep)

```
....
218.        const struct rtcp_rr *rr = 0;
....
283.                      ND_PRINT(" %u", GET_BE_U_4(rr->rr_srcid));
```

NULL Pointer Dereference\Path 32:

Severity	Low
Result State	To Verify

Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=874
Status	New

The variable declared in 0 at ravynos-2/rt2860.c in line 1455 is not initialized when it is used by xflags at ravynos-2/rt2860.c in line 1455.

	Source	Destination
File	ravynos-2/rt2860.c	ravynos-2/rt2860.c
Line	1521	1521
Object	0	xflags

Code Snippet
File Name ravynos-2/rt2860.c
Method rt2860_tx(struct rt2860_softc *sc, struct mbuf *m, struct ieee80211_node *ni)

```
....
1521.       txwi->xflags = qos ? 0 : RT2860_TX_NSEQ;
```

NULL Pointer Dereference\Path 33:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=875
Status	New

The variable declared in 0 at ravynos-2/rt2860.c in line 1455 is not initialized when it is used by xflags at ravynos-2/rt2860.c in line 1455.

	Source	Destination
File	ravynos-2/rt2860.c	ravynos-2/rt2860.c
Line	1521	1558
Object	0	xflags

Code Snippet
File Name ravynos-2/rt2860.c
Method rt2860_tx(struct rt2860_softc *sc, struct mbuf *m, struct ieee80211_node *ni)

```
....
1521.       txwi->xflags = qos ? 0 : RT2860_TX_NSEQ;
....
1558.             txwi->xflags |= RT2860_TX_ACK;
```

NULL Pointer Dereference\Path 34:

Severity	Low
Result State	To Verify
Online Results	http://WIN-

	BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=876
Status	New

The variable declared in 0 at ravynos-2/rt2860.c in line 1728 is not initialized when it is used by xflags at ravynos-2/rt2860.c in line 1728.

	Source	Destination
File	ravynos-2/rt2860.c	ravynos-2/rt2860.c
Line	1772	1772
Object	0	xflags

Code Snippet
File Name ravynos-2/rt2860.c
Method rt2860_tx_raw(struct rt2860_softc *sc, struct mbuf *m,

```
....
1772.        txwi->xflags = params->ibp_pri & 3 ? 0 : RT2860_TX_NSEQ;
```

NULL Pointer Dereference\Path 35:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=877
Status	New

The variable declared in 0 at ravynos-2/rt2860.c in line 1728 is not initialized when it is used by xflags at ravynos-2/rt2860.c in line 1728.

	Source	Destination
File	ravynos-2/rt2860.c	ravynos-2/rt2860.c
Line	1772	1801
Object	0	xflags

Code Snippet
File Name ravynos-2/rt2860.c
Method rt2860_tx_raw(struct rt2860_softc *sc, struct mbuf *m,

```
....
1772.        txwi->xflags = params->ibp_pri & 3 ? 0 : RT2860_TX_NSEQ;
....
1801.            txwi->xflags |= RT2860_TX_ACK;
```

NULL Pointer Dereference\Path 36:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=700

	[86&pathid=878](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=878)
Status	New

The variable declared in 0 at ravynos-2/rt2860.c in line 3353 is not initialized when it is used by freq at ravynos-2/rt2860.c in line 3353.

	Source	Destination
File	ravynos-2/rt2860.c	ravynos-2/rt2860.c
Line	3412	3412
Object	0	freq

Code Snippet
File Name ravynos-2/rt2860.c
Method rt2860_read_eeprom(struct rt2860_softc *sc, uint8_t macaddr[IEEE80211_ADDR_LEN])

```
....
3412.         sc->freq = ((val & 0xff) != 0xff) ? val & 0xff : 0;
```

NULL Pointer Dereference\Path 37:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=879
Status	New

The variable declared in 0 at ravynos-2/server.c in line 265 is not initialized when it is used by security_description at ravynos-2/server.c in line 265.

	Source	Destination
File	ravynos-2/server.c	ravynos-2/server.c
Line	281	281
Object	0	security_description

Code Snippet
File Name ravynos-2/server.c
Method server_register(void)

```
....
281.         p.security_description = (l2cap_mode == 0 ? 0x0000 :
0x0001);
```

NULL Pointer Dereference\Path 38:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=880

Status	New

The variable declared in 0 at ravynos-2/valectl.c in line 85 is not initialized when it is used by Pointer at ravynos-2/valectl.c in line 85.

	Source	Destination
File	ravynos-2/valectl.c	ravynos-2/valectl.c
Line	94	120
Object	0	Pointer

Code Snippet
File Name ravynos-2/valectl.c
Method parse_ring_config(const char* conf,

```
....
94.    *nr_tx_rings = *nr_rx_rings = 0;
....
120.                   *nr_tx_rings, *nr_tx_slots,
```

NULL Pointer Dereference\Path 39:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=881
Status	New

The variable declared in 0 at ravynos-2/valectl.c in line 85 is not initialized when it is used by Pointer at ravynos-2/valectl.c in line 85.

	Source	Destination
File	ravynos-2/valectl.c	ravynos-2/valectl.c
Line	94	121
Object	0	Pointer

Code Snippet
File Name ravynos-2/valectl.c
Method parse_ring_config(const char* conf,

```
....
94.    *nr_tx_rings = *nr_rx_rings = 0;
....
121.                   *nr_rx_rings, *nr_rx_slots);
```

NULL Pointer Dereference\Path 40:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=882

Status	New

The variable declared in 0 at ravynos-2/valectl.c in line 85 is not initialized when it is used by Pointer at ravynos-2/valectl.c in line 85.

	Source	Destination
File	ravynos-2/valectl.c	ravynos-2/valectl.c
Line	95	120
Object	0	Pointer

Code Snippet
File Name ravynos-2/valectl.c
Method parse_ring_config(const char* conf,

```
....
95.    *nr_tx_slots = *nr_rx_slots = 0;
....
120.                     *nr_tx_rings, *nr_tx_slots,
```

NULL Pointer Dereference\Path 41:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=883
Status	New

The variable declared in 0 at ravynos-2/valectl.c in line 85 is not initialized when it is used by Pointer at ravynos-2/valectl.c in line 85.

	Source	Destination
File	ravynos-2/valectl.c	ravynos-2/valectl.c
Line	95	121
Object	0	Pointer

Code Snippet
File Name ravynos-2/valectl.c
Method parse_ring_config(const char* conf,

```
....
95.    *nr_tx_slots = *nr_rx_slots = 0;
....
121.                     *nr_rx_rings, *nr_rx_slots);
```

NULL Pointer Dereference\Path 42:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=884

Status	New

The variable declared in 0 at ravynos-2/vga.c in line 804 is not initialized when it is used by va_flags at ravynos-2/vga.c in line 804.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	808	807
Object	0	va_flags

Code Snippet
File Name ravynos-2/vga.c
Method update_adapter_info(video_adapter_t *adp, video_info_t *info)

```
....
808.            (info->vi_flags & V_INFO_COLOR) ? V_ADP_COLOR : 0;
....
807.        adp->va_flags |=
```

NULL Pointer Dereference\Path 43:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=885
Status	New

The variable declared in 0 at ravynos-2/vga.c in line 804 is not initialized when it is used by va_flags at ravynos-2/vga.c in line 804.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	808	820
Object	0	va_flags

Code Snippet
File Name ravynos-2/vga.c
Method update_adapter_info(video_adapter_t *adp, video_info_t *info)

```
....
808.            (info->vi_flags & V_INFO_COLOR) ? V_ADP_COLOR : 0;
....
820.            adp->va_flags |= V_ADP_CWIDTH9;
```

NULL Pointer Dereference\Path 44:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=886

Status	New

The variable declared in 0 at ravynos-2/vga.c in line 804 is not initialized when it is used by va_flags at ravynos-2/vga.c in line 804.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	808	818
Object	0	va_flags

Code Snippet
File Name ravynos-2/vga.c
Method update_adapter_info(video_adapter_t *adp, video_info_t *info)

```
....
808.        (info->vi_flags & V_INFO_COLOR) ? V_ADP_COLOR : 0;
....
818.      adp->va_flags &= ~V_ADP_CWIDTH9;
```

NULL Pointer Dereference\Path 45:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=887
Status	New

The variable declared in ecdh at ravynos-2/crypto_wolfssl.c in line 1699 is not initialized when it is used by ec at ravynos-2/crypto_wolfssl.c in line 1699.

	Source	Destination
File	ravynos-2/crypto_wolfssl.c	ravynos-2/crypto_wolfssl.c
Line	1701	1712
Object	ecdh	ec

Code Snippet
File Name ravynos-2/crypto_wolfssl.c
Method struct crypto_ecdh * crypto_ecdh_init(int group)

```
....
1701.       struct crypto_ecdh *ecdh = NULL;
....
1712.       ecdh->ec = crypto_ec_init(group);
```

NULL Pointer Dereference\Path 46:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=888

Status	New

The variable declared in ecdh at ravynos-2/crypto_wolfssl.c in line 1699 is not initialized when it is used by ec at ravynos-2/crypto_wolfssl.c in line 1699.

	Source	Destination
File	ravynos-2/crypto_wolfssl.c	ravynos-2/crypto_wolfssl.c
Line	1701	1716
Object	ecdh	ec

Code Snippet
File Name ravynos-2/crypto_wolfssl.c
Method struct crypto_ecdh * crypto_ecdh_init(int group)

```
....
1701.        struct crypto_ecdh *ecdh = NULL;
....
1716.        ret = wc_ecc_make_key_ex(&rng, ecdh->ec->key.dp->size,
&ecdh->ec->key,
```

NULL Pointer Dereference\Path 47:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=889
Status	New

The variable declared in ecdh at ravynos-2/crypto_wolfssl.c in line 1699 is not initialized when it is used by ec at ravynos-2/crypto_wolfssl.c in line 1699.

	Source	Destination
File	ravynos-2/crypto_wolfssl.c	ravynos-2/crypto_wolfssl.c
Line	1701	1717
Object	ecdh	ec

Code Snippet
File Name ravynos-2/crypto_wolfssl.c
Method struct crypto_ecdh * crypto_ecdh_init(int group)

```
....
1701.        struct crypto_ecdh *ecdh = NULL;
....
1717.                                ecdh->ec->key.dp->id);
```

NULL Pointer Dereference\Path 48:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=700

	86&pathid=890
Status	New

The variable declared in ecdh at ravynos-2/crypto_wolfssl.c in line 1699 is not initialized when it is used by ec at ravynos-2/crypto_wolfssl.c in line 1699.

	Source	Destination
File	ravynos-2/crypto_wolfssl.c	ravynos-2/crypto_wolfssl.c
Line	1701	1713
Object	ecdh	ec

Code Snippet
File Name ravynos-2/crypto_wolfssl.c
Method struct crypto_ecdh * crypto_ecdh_init(int group)

```
....
1701.       struct crypto_ecdh *ecdh = NULL;
....
1713.       if (!ecdh->ec)
```

NULL Pointer Dereference\Path 49:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=891
Status	New

The variable declared in ecdh at ravynos-2/crypto_wolfssl.c in line 1699 is not initialized when it is used by ec at ravynos-2/crypto_wolfssl.c in line 1699.

	Source	Destination
File	ravynos-2/crypto_wolfssl.c	ravynos-2/crypto_wolfssl.c
Line	1701	1716
Object	ecdh	ec

Code Snippet
File Name ravynos-2/crypto_wolfssl.c
Method struct crypto_ecdh * crypto_ecdh_init(int group)

```
....
1701.       struct crypto_ecdh *ecdh = NULL;
....
1716.       ret = wc_ecc_make_key_ex(&rng, ecdh->ec->key.dp->size,
&ecdh->ec->key,
```

NULL Pointer Dereference\Path 50:

Severity	Low
Result State	To Verify
Online Results	http://WIN-

	BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=892
Status	New

The variable declared in ret at ravynos-2/dsa_ossl.c in line 62 is not initialized when it is used by r at ravynos-2/dsa_ossl.c in line 62.

	Source	Destination
File	ravynos-2/dsa_ossl.c	ravynos-2/dsa_ossl.c
Line	68	83
Object	ret	r

Code Snippet
File Name ravynos-2/dsa_ossl.c
Method static DSA_SIG *dsa_do_sign(const unsigned char *dgst, int dlen, DSA *dsa)

```
....
68.       DSA_SIG *ret = NULL;
....
83.       ret->r = BN_new();
```

Improper Resource Access Authorization

Query Path:
CPP\Cx\CPP Low Visibility\Improper Resource Access Authorization Version:1

Categories

FISMA 2014: Identification And Authentication
NIST SP 800-53: AC-3 Access Enforcement (P1)
OWASP Top 10 2017: A2-Broken Authentication

Description

Improper Resource Access Authorization\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1155
Status	New

	Source	Destination
File	ravynos-2/maketab.c	ravynos-2/maketab.c
Line	138	138
Object	fgets	fgets

Code Snippet
File Name ravynos-2/maketab.c
Method int main(int argc, char *argv[])

```
....
138.          while (fgets(buf, sizeof buf, fp) != NULL) {
```

Improper Resource Access Authorization\Path 2:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1156
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	803	803
Object	fgets	fgets

Code Snippet
File Name ravynos-2/session.c
Method do_motd(void)

```
....
803.                    while (fgets(buf, sizeof(buf), f))
```

Improper Resource Access Authorization\Path 3:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1157
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1313	1313
Object	fgets	fgets

Code Snippet
File Name ravynos-2/session.c
Method do_nologin(struct passwd *pw)

```
....
1313.            while (fgets(buf, sizeof(buf), f))
```

Improper Resource Access Authorization\Path 4:

Severity	Low
Result State	To Verify
Online Results	http://WIN-

	BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1158
Status	New

	Source	Destination
File	ravynos-2/gethostid.c	ravynos-2/gethostid.c
Line	50	50
Object	fscanf	fscanf

Code Snippet
File Name ravynos-2/gethostid.c
Method get_spl_hostid(void)

```
....
50.     if (fscanf(f, "%lx", &hostid) != 1)
```

Improper Resource Access Authorization\Path 5:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1159
Status	New

	Source	Destination
File	ravynos-2/maketab.c	ravynos-2/maketab.c
Line	138	138
Object	buf	buf

Code Snippet
File Name ravynos-2/maketab.c
Method int main(int argc, char *argv[])

```
....
138.         while (fgets(buf, sizeof buf, fp) != NULL) {
```

Improper Resource Access Authorization\Path 6:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1160
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	803	803

Object	buf	buf

Code Snippet
File Name ravynos-2/session.c
Method do_motd(void)

```
....
803.                    while (fgets(buf, sizeof(buf), f))
```

Improper Resource Access Authorization\Path 7:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1161
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1313	1313
Object	buf	buf

Code Snippet
File Name ravynos-2/session.c
Method do_nologin(struct passwd *pw)

```
....
1313.           while (fgets(buf, sizeof(buf), f))
```

Improper Resource Access Authorization\Path 8:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1162
Status	New

	Source	Destination
File	ravynos-2/gethostid.c	ravynos-2/gethostid.c
Line	50	50
Object	Address	Address

Code Snippet
File Name ravynos-2/gethostid.c
Method get_spl_hostid(void)

```
....
50.    if (fscanf(f, "%lx", &hostid) != 1)
```

Improper Resource Access Authorization\Path 9:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1163
Status	New

	Source	Destination
File	ravynos-2/daemon.c	ravynos-2/daemon.c
Line	598	598
Object	BinaryExpr	BinaryExpr

Code Snippet
File Name ravynos-2/daemon.c
Method listen_child(int fd, struct daemon_state *state)

```
....
598.            rv = read(fd, buf + bytes_read, LBUF_SIZE - bytes_read - 1);
```

Improper Resource Access Authorization\Path 10:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1164
Status	New

	Source	Destination
File	ravynos-2/dtstream.c	ravynos-2/dtstream.c
Line	1549	1549
Object	Address	Address

Code Snippet
File Name ravynos-2/dtstream.c
Method void dtio_cmd_cb(int fd, short ATTR_UNUSED(bits), void* arg)

```
....
1549.           r = read(fd, &cmd, sizeof(cmd));
```

Improper Resource Access Authorization\Path 11:

Severity	Low
Result State	To Verify
Online Results	http://WIN-

	BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1165
Status	New

	Source	Destination
File	ravynos-2/gethostid.c	ravynos-2/gethostid.c
Line	73	73
Object	Address	Address

Code Snippet
File Name ravynos-2/gethostid.c
Method get_system_hostid(void)

```
....
73.                 if (read(fd, &system_hostid, sizeof (system_hostid))
```

Improper Resource Access Authorization\Path 12:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1166
Status	New

	Source	Destination
File	ravynos-2/cut.c	ravynos-2/cut.c
Line	482	482
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/cut.c
Method usage(void)

```
....
482.          (void)fprintf(stderr, "%s\n%s\n%s\n",
```

Improper Resource Access Authorization\Path 13:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1167
Status	New

	Source	Destination
File	ravynos-2/daemon.c	ravynos-2/daemon.c
Line	135	135

Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/daemon.c
Method usage(int exitcode)

```
....
135.         (void)fprintf(stderr,
```

Improper Resource Access Authorization\Path 14:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1168
Status	New

	Source	Destination
File	ravynos-2/daemon.c	ravynos-2/daemon.c
Line	142	142
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/daemon.c
Method usage(int exitcode)

```
....
142.         (void)fprintf(stderr,
```

Improper Resource Access Authorization\Path 15:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1169
Status	New

	Source	Destination
File	ravynos-2/diff.c	ravynos-2/diff.c
Line	587	587
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/diff.c
Method usage(void)

```
....
587.        (void)fprintf(help ? stdout : stderr,
```

Improper Resource Access Authorization\Path 16:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1170
Status	New

	Source	Destination
File	ravynos-2/diff.c	ravynos-2/diff.c
Line	619	619
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/diff.c
Method conflicting_format(void)

```
....
619.        fprintf(stderr, "error: conflicting output format
options.\n");
```

Improper Resource Access Authorization\Path 17:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1171
Status	New

	Source	Destination
File	ravynos-2/http-server.c	ravynos-2/http-server.c
Line	351	351
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/http-server.c
Method main(int argc, char **argv)

```
....
351.            fprintf(stderr, "Couldn't create an event_base:
exiting\n");
```

Improper Resource Access Authorization\Path 18:

Severity	Low

Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1172
Status	New

	Source	Destination
File	ravynos-2/http-server.c	ravynos-2/http-server.c
Line	358	358
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/http-server.c
Method main(int argc, char **argv)

```
....
358.                fprintf(stderr, "couldn't create evhttp. Exiting.\n");
```

Improper Resource Access Authorization\Path 19:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1173
Status	New

	Source	Destination
File	ravynos-2/http-server.c	ravynos-2/http-server.c
Line	372	372
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/http-server.c
Method main(int argc, char **argv)

```
....
372.                fprintf(stderr, "couldn't bind to port %d.
Exiting.\n",
```

Improper Resource Access Authorization\Path 20:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1174
Status	New

	Source	Destination

File	ravynos-2/http-server.c	ravynos-2/http-server.c
Line	399	399
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/http-server.c
Method main(int argc, char **argv)

```
....
399.                    fprintf(stderr, "Weird address family %d\n",
```

Improper Resource Access Authorization\Path 21:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1175
Status	New

	Source	Destination
File	ravynos-2/http-server.c	ravynos-2/http-server.c
Line	410	410
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/http-server.c
Method main(int argc, char **argv)

```
....
410.                    fprintf(stderr, "evutil_inet_ntop failed\n");
```

Improper Resource Access Authorization\Path 22:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1176
Status	New

	Source	Destination
File	ravynos-2/http-server.c	ravynos-2/http-server.c
Line	326	326
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/http-server.c
Method syntax(void)

```
....
326.        fprintf(stdout, "Syntax: http-server <docroot>\n");
```

Improper Resource Access Authorization\Path 23:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1177
Status	New

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	86	86
Object	fprintf	fprintf

Code Snippet

File Name	ravynos-2/ipnat.c
Method	usage(char *name)

```
....
86.    fprintf(stderr, "Usage: %s [-CFhlnrRsv] [-f filename]\n", name);
```

Improper Resource Access Authorization\Path 24:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1178
Status	New

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	169	169
Object	fprintf	fprintf

Code Snippet

File Name	ravynos-2/ipnat.c
Method	main(int argc, char *argv[])

```
....
169.                (void) fprintf(stderr, "%s: -p must be used with -
r\n",
```

Improper Resource Access Authorization\Path 25:

Severity	Low
Result State	To Verify

Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1179
Status	New

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	184	184
Object	fprintf	fprintf

Code Snippet

File Name	ravynos-2/ipnat.c
Method	main(int argc, char *argv[])

```
....
184.                    (void) fprintf(stderr, "%s: open: %s\n",
IPNAT_NAME,
```

Improper Resource Access Authorization\Path 26:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1180
Status	New

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	194	194
Object	fprintf	fprintf

Code Snippet

File Name	ravynos-2/ipnat.c
Method	main(int argc, char *argv[])

```
....
194.                    fprintf(stderr, "User/kernel version check
failed\n");
```

Improper Resource Access Authorization\Path 27:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1181
Status	New

	Source	Destination

File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	253	253
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/ipnat.c
Method natstat_dead(natstat_t *nsp, char *kernel)

```
....
253.                fprintf(stderr, "nlist error\n");
```

Improper Resource Access Authorization\Path 28:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1182
Status	New

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	406	406
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/ipnat.c
Method dotable(natstat_t *nsp, int fd, int alive, int which, char *side)

```
....
406.                fprintf(stderr,
```

Improper Resource Access Authorization\Path 29:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1183
Status	New

	Source	Destination
File	ravynos-2/maketab.c	ravynos-2/maketab.c
Line	129	129
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/maketab.c
Method int main(int argc, char *argv[])

```
....
129.                  fprintf(stderr, "usage: maketab YTAB_H\n");
```

Improper Resource Access Authorization\Path 30:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1184
Status	New

	Source	Destination
File	ravynos-2/maketab.c	ravynos-2/maketab.c
Line	133	133
Object	fprintf	fprintf

Code Snippet

File Name	ravynos-2/maketab.c
Method	int main(int argc, char *argv[])

```
....
133.                  fprintf(stderr, "maketab can't open %s!\n", argv[1]);
```

Improper Resource Access Authorization\Path 31:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1185
Status	New

	Source	Destination
File	ravynos-2/maketab.c	ravynos-2/maketab.c
Line	167	167
Object	fprintf	fprintf

Code Snippet

File Name	ravynos-2/maketab.c
Method	int main(int argc, char *argv[])

```
....
167.                          fprintf(stderr, "maketab out of space copying
%s", name);
```

Improper Resource Access Authorization\Path 32:

Severity	Low
Result State	To Verify

Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1186
Status	New

	Source	Destination
File	ravynos-2/mem_dbg.c	ravynos-2/mem_dbg.c
Line	561	561
Object	fprintf	fprintf

Code Snippet

File Name ravynos-2/mem_dbg.c

Method static void print_leak(const MEM *m, MEM_LEAK *l)

```
....
561.                fprintf(stderr, "##> %s\n", strings[i]);
```

Improper Resource Access Authorization\Path 33:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1187
Status	New

	Source	Destination
File	ravynos-2/parsenfsfh.c	ravynos-2/parsenfsfh.c
Line	400	400
Object	fprintf	fprintf

Code Snippet

File Name ravynos-2/parsenfsfh.c

Method Parse_fh(netdissect_options *ndo, const unsigned char *fh, u_int len,

```
....
400.                (void)fprintf(stderr, "%x.", GET_U_1(fhp + i));
```

Improper Resource Access Authorization\Path 34:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1188
Status	New

	Source	Destination
File	ravynos-2/parsenfsfh.c	ravynos-2/parsenfsfh.c

Line	401	401
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/parsenfsfh.c
Method Parse_fh(netdissect_options *ndo, const unsigned char *fh, u_int len,

```
....
401.            (void)fprintf(stderr, "\n");
```

Improper Resource Access Authorization\Path 35:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1189
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	241	241
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/scp.c
Method do_local_cmd(arglist *a)

```
....
241.            fprintf(stderr, "Executing:");
```

Improper Resource Access Authorization\Path 36:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1190
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	244	244
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/scp.c
Method do_local_cmd(arglist *a)

```
....
244.                fprintf(stderr, "\n");
```

Improper Resource Access Authorization\Path 37:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1191
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	743	743
Object	fprintf	fprintf

Code Snippet
File Name	ravynos-2/scp.c
Method	do_times(int fd, int verb, const struct stat *sb)

```
....
743.                fprintf(stderr, "File mtime %lld atime %lld\n",
```

Improper Resource Access Authorization\Path 38:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1192
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	745	745
Object	fprintf	fprintf

Code Snippet
File Name	ravynos-2/scp.c
Method	do_times(int fd, int verb, const struct stat *sb)

```
....
745.                fprintf(stderr, "Sending file timestamps: %s", buf);
```

Improper Resource Access Authorization\Path 39:

Severity	Low
Result State	To Verify
Online Results	http://WIN-

	BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1193
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	2097	2097
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/scp.c
Method usage(void)

```
....
2097.         (void) fprintf(stderr,
```

Improper Resource Access Authorization\Path 40:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1194
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	2112	2112
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/scp.c
Method run_err(const char *fmt,...)

```
....
2112.                 (void) fprintf(fp, "%c", 0x01);
```

Improper Resource Access Authorization\Path 41:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1195
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	2113	2113

Object	fprintf	fprintf

Code Snippet

File Name	ravynos-2/scp.c
Method	run_err(const char *fmt,...)

```
....
2113.                 (void) fprintf(fp, "scp: ");
```

Improper Resource Access Authorization\Path 42:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1196
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	2117	2117
Object	fprintf	fprintf

Code Snippet

File Name	ravynos-2/scp.c
Method	run_err(const char *fmt,...)

```
....
2117.                 (void) fprintf(fp, "\n");
```

Improper Resource Access Authorization\Path 43:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1197
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	2125	2125
Object	fprintf	fprintf

Code Snippet

File Name	ravynos-2/scp.c
Method	run_err(const char *fmt,...)

```
....
2125.                fprintf(stderr, "\n");
```

Improper Resource Access Authorization\Path 44:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1198
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	868	868
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/session.c
Method read_environment_file(char ***env, u_int *envsize,

```
....
868.                         fprintf(stderr, "Bad line %u in %.100s\n",
lineno,
```

Improper Resource Access Authorization\Path 45:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1199
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1206	1206
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/session.c
Method do_setup_env(struct ssh *ssh, Session *s, const char *shell)

```
....
1206.                fprintf(stderr, "Environment:\n");
```

Improper Resource Access Authorization\Path 46:

Severity	Low
Result State	To Verify

Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1200
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1208	1208
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/session.c
Method do_setup_env(struct ssh *ssh, Session *s, const char *shell)

```
....
1208.                     fprintf(stderr, "  %.200s\n", env[i]);
```

Improper Resource Access Authorization\Path 47:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1201
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1237	1237
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/session.c
Method do_rc_files(struct ssh *ssh, Session *s, const char *shell)

```
....
1237.                     fprintf(stderr, "Running %s\n", cmd);
```

Improper Resource Access Authorization\Path 48:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1202
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c

Line	1241	1241
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/session.c
Method do_rc_files(struct ssh *ssh, Session *s, const char *shell)

```
....
1241.                        fprintf(f, "%s %s\n", s->auth_proto,
```

Improper Resource Access Authorization\Path 49:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1203
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1245	1245
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/session.c
Method do_rc_files(struct ssh *ssh, Session *s, const char *shell)

```
....
1245.                        fprintf(stderr, "Could not run %s\n",
```

Improper Resource Access Authorization\Path 50:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1204
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1249	1249
Object	fprintf	fprintf

Code Snippet
File Name ravynos-2/session.c
Method do_rc_files(struct ssh *ssh, Session *s, const char *shell)

```
....
1249.                    fprintf(stderr, "Running %s %s\n", _PATH_BSHELL,
```

Unchecked Return Value

Query Path:

CPP\Cx\CPP Low Visibility\Unchecked Return Value Version:1

Categories

NIST SP 800-53: SI-11 Error Handling (P2)

Description

Unchecked Return Value\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=703
Status	New

The acpi_tz_attach method calls the snprintf function, at line 201 of ravynos-2/acpi_thermal.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/acpi_thermal.c	ravynos-2/acpi_thermal.c
Line	262	262
Object	snprintf	snprintf

Code Snippet

File Name ravynos-2/acpi_thermal.c

Method acpi_tz_attach(device_t dev)

```
....
262.        snprintf(oidname, sizeof(oidname), "tz%d",
device_get_unit(dev));
```

Unchecked Return Value\Path 2:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=704
Status	New

The acpi_tz_establish method calls the sprintf function, at line 386 of ravynos-2/acpi_thermal.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination

File	ravynos-2/acpi_thermal.c	ravynos-2/acpi_thermal.c
Line	411	411
Object	sprintf	sprintf

Code Snippet
File Name ravynos-2/acpi_thermal.c
Method acpi_tz_establish(struct acpi_tz_softc *sc)

```
....
411.        sprintf(nbuf, "_AC%d", i);
```

Unchecked Return Value\Path 3:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=705
Status	New

The acpi_tz_establish method calls the sprintf function, at line 386 of ravynos-2/acpi_thermal.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/acpi_thermal.c	ravynos-2/acpi_thermal.c
Line	413	413
Object	sprintf	sprintf

Code Snippet
File Name ravynos-2/acpi_thermal.c
Method acpi_tz_establish(struct acpi_tz_softc *sc)

```
....
413.        sprintf(nbuf, "_AL%d", i);
```

Unchecked Return Value\Path 4:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=706
Status	New

The fwe_ioctl method calls the snprintf function, at line 353 of ravynos-2/if_fwe.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/if_fwe.c	ravynos-2/if_fwe.c

Line	380	380
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/if_fwe.c
Method fwe_ioctl(if_t ifp, u_long cmd, caddr_t data)

```
....
380.                    snprintf(ifs->ascii, sizeof(ifs->ascii),
```

Unchecked Return Value\Path 5:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=707
Status	New

The mt7615_thermal_show_temp method calls the sprintf function, at line 18 of ravynos-2/init.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/init.c	ravynos-2/init.c
Line	36	36
Object	sprintf	sprintf

Code Snippet
File Name ravynos-2/init.c
Method static ssize_t mt7615_thermal_show_temp(struct device *dev,

```
....
36.   return sprintf(buf, "%u\n", temperature * 1000);
```

Unchecked Return Value\Path 6:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=708
Status	New

The Parse_fh method calls the snprintf function, at line 85 of ravynos-2/parsenfsfh.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/parsenfsfh.c	ravynos-2/parsenfsfh.c

Line	405	405
Object	snprintf	snprintf

Code Snippet
File Name	ravynos-2/parsenfsfh.c
Method	Parse_fh(netdissect_options *ndo, const unsigned char *fh, u_int len,

```
....
405.                (void)snprintf(&(fsidp->Opaque_Handle[i*2]), 3,
"%.2X",
```

Unchecked Return Value\Path 7:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=709
Status	New

The isis_print_id method calls the snprintf function, at line 1752 of ravynos-2/print-isoclns.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/print-isoclns.c	ravynos-2/print-isoclns.c
Line	1763	1763
Object	snprintf	snprintf

Code Snippet
File Name	ravynos-2/print-isoclns.c
Method	isis_print_id(netdissect_options *ndo, const uint8_t *cp, u_int id_len)

```
....
1763.           snprintf(pos, sizeof(id) - (pos - id), "%02x",
GET_U_1(cp));
```

Unchecked Return Value\Path 8:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=710
Status	New

The isis_print_id method calls the snprintf function, at line 1752 of ravynos-2/print-isoclns.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination

File	ravynos-2/print-isoclns.c	ravynos-2/print-isoclns.c
Line	1770	1770
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/print-isoclns.c
Method isis_print_id(netdissect_options *ndo, const uint8_t *cp, u_int id_len)

```
....
1770.           snprintf(pos, sizeof(id) - (pos - id), ".%02x",
GET_U_1(cp));
```

Unchecked Return Value\Path 9:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=711
Status	New

The isis_print_id method calls the snprintf function, at line 1752 of ravynos-2/print-isoclns.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/print-isoclns.c	ravynos-2/print-isoclns.c
Line	1775	1775
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/print-isoclns.c
Method isis_print_id(netdissect_options *ndo, const uint8_t *cp, u_int id_len)

```
....
1775.           snprintf(pos, sizeof(id) - (pos - id), "-%02x",
GET_U_1(cp));
```

Unchecked Return Value\Path 10:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=712
Status	New

The isis_print_ext_is_reach method calls the snprintf function, at line 1950 of ravynos-2/print-isoclns.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/print-isoclns.c	ravynos-2/print-isoclns.c
Line	1993	1993
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/print-isoclns.c
Method isis_print_ext_is_reach(netdissect_options *ndo,

```
....
1993.         snprintf(ident_buffer, sizeof(ident_buffer), "%s
",ident);
```

Unchecked Return Value\Path 11:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=713
Status	New

The isis_print_extd_ip_reach method calls the snprintf function, at line 2272 of ravynos-2/print-isoclns.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/print-isoclns.c	ravynos-2/print-isoclns.c
Line	2354	2354
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/print-isoclns.c
Method isis_print_extd_ip_reach(netdissect_options *ndo,

```
....
2354.             snprintf(ident_buffer, sizeof(ident_buffer), "%s
",ident);
```

Unchecked Return Value\Path 12:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=714
Status	New

The nfsreply_print method calls the snprintf function, at line 333 of ravynos-2/print-nfs.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/print-nfs.c	ravynos-2/print-nfs.c
Line	345	345
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/print-nfs.c
Method nfsreply_print(netdissect_options *ndo,

```
....
345.                snprintf(dstid, sizeof(dstid), "%u",
```

Unchecked Return Value\Path 13:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=715
Status	New

The nfsreply_print method calls the snprintf function, at line 333 of ravynos-2/print-nfs.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/print-nfs.c	ravynos-2/print-nfs.c
Line	348	348
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/print-nfs.c
Method nfsreply_print(netdissect_options *ndo,

```
....
348.                snprintf(srcid, sizeof(srcid), "%u", NFS_PORT);
```

Unchecked Return Value\Path 14:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=716
Status	New

The nfsreply_print method calls the snprintf function, at line 333 of ravynos-2/print-nfs.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/print-nfs.c	ravynos-2/print-nfs.c
Line	349	349
Object	snprintf	snprintf

Code Snippet

File Name	ravynos-2/print-nfs.c
Method	nfsreply_print(netdissect_options *ndo,

```
....
349.                snprintf(dstid, sizeof(dstid), "%u",
```

Unchecked Return Value\Path 15:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=717
Status	New

The respip_inform_print method calls the snprintf function, at line 1291 of ravynos-2/respip.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/respip.c	ravynos-2/respip.c
Line	1324	1324
Object	snprintf	snprintf

Code Snippet

File Name	ravynos-2/respip.c
Method	respip_inform_print(struct respip_action_info* respip_actinfo, uint8_t* qname,

```
....
1324.        snprintf(txt+txtlen, sizeof(txt)-txtlen,
```

Unchecked Return Value\Path 16:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=718
Status	New

The respip_rewrite_reply method calls the snprintf function, at line 866 of ravynos-2/respip.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/respip.c	ravynos-2/respip.c
Line	966	966
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/respip.c
Method respip_rewrite_reply(const struct query_info* qinfo,

```
....
966.                                          snprintf(ip, sizeof(ip),
"invalidRRdata");
```

Unchecked Return Value\Path 17:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=719
Status	New

The make_rsid method calls the sprintf function, at line 656 of ravynos-2/rtsol.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/rtsol.c	ravynos-2/rtsol.c
Line	661	661
Object	sprintf	sprintf

Code Snippet
File Name ravynos-2/rtsol.c
Method make_rsid(const char *ifname, const char *origin, struct rainfo *rai)

```
....
661.                sprintf(rsid, "%s:%s", ifname, origin);
```

Unchecked Return Value\Path 18:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=720
Status	New

The make_rsid method calls the sprintf function, at line 656 of ravynos-2/rtsol.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination

File	ravynos-2/rtsol.c	ravynos-2/rtsol.c
Line	669	669
Object	sprintf	sprintf

Code Snippet
File Name ravynos-2/rtsol.c
Method make_rsid(const char *ifname, const char *origin, struct rainfo *rai)

```
....
669.                sprintf(rsid, "%s:%s:[%s]", ifname, origin, hbuf);
```

Unchecked Return Value\Path 19:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=721
Status	New

The main method calls the snprintf function, at line 470 of ravynos-2/scp.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	687	687
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/scp.c
Method main(int argc, char **argv)

```
....
687.          (void) snprintf(cmd, sizeof cmd, "scp%s%s%s%s",
```

Unchecked Return Value\Path 20:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=722
Status	New

The do_times method calls the snprintf function, at line 734 of ravynos-2/scp.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	739	739

Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/scp.c
Method do_times(int fd, int verb, const struct stat *sb)

```
....
739.         (void)snprintf(buf, sizeof(buf), "T%llu 0 %llu 0\n",
```

Unchecked Return Value\Path 21:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=723
Status	New

The source method calls the snprintf function, at line 1378 of ravynos-2/scp.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1433	1433
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/scp.c
Method source(int argc, char **argv)

```
....
1433.              snprintf(buf, sizeof buf, "C%04o %lld %s\n",
```

Unchecked Return Value\Path 22:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=724
Status	New

The rsource method calls the snprintf function, at line 1490 of ravynos-2/scp.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1511	1511
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/scp.c
Method rsource(char *name, struct stat *statp)

```
....
1511.         (void) snprintf(path, sizeof path, "D%04o %d %.1024s\n",
```

Unchecked Return Value\Path 23:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=725
Status	New

The rsource method calls the snprintf function, at line 1490 of ravynos-2/scp.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1529	1529
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/scp.c
Method rsource(char *name, struct stat *statp)

```
....
1529.             (void) snprintf(path, sizeof path, "%s/%s", name, dp-
>d_name);
```

Unchecked Return Value\Path 24:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=726
Status	New

The sink method calls the snprintf function, at line 1648 of ravynos-2/scp.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1819	1819
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/scp.c

Method	sink(int argc, char **argv, const char *src)

```
....
1819.                   (void) snprintf(namebuf, need, "%s%s%s", targ,
```

Unchecked Return Value\Path 25:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=727
Status	New

The do_exec method calls the snprintf function, at line 657 of ravynos-2/session.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	680	680
Object	snprintf	snprintf

Code Snippet

File Name	ravynos-2/session.c
Method	do_exec(struct ssh *ssh, Session *s, const char *command)

```
....
680.                 snprintf(session_type, sizeof(session_type),
```

Unchecked Return Value\Path 26:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=728
Status	New

The do_exec method calls the snprintf function, at line 657 of ravynos-2/session.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	683	683
Object	snprintf	snprintf

Code Snippet

File Name	ravynos-2/session.c
Method	do_exec(struct ssh *ssh, Session *s, const char *command)

```
....
683.                snprintf(session_type, sizeof(session_type),
```

Unchecked Return Value\Path 27:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=729
Status	New

The do_exec method calls the snprintf function, at line 657 of ravynos-2/session.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	686	686
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/session.c
Method do_exec(struct ssh *ssh, Session *s, const char *command)

```
....
686.                snprintf(session_type, sizeof(session_type), "shell");
```

Unchecked Return Value\Path 28:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=730
Status	New

The do_exec method calls the snprintf function, at line 657 of ravynos-2/session.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	689	689
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/session.c
Method do_exec(struct ssh *ssh, Session *s, const char *command)

```
....
689.            snprintf(session_type, sizeof(session_type),
"command");
```

Unchecked Return Value\Path 29:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=731
Status	New

The check_quietlogin method calls the snprintf function, at line 815 of ravynos-2/session.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	824	824
Object	snprintf	snprintf

Code Snippet

File Name	ravynos-2/session.c
Method	check_quietlogin(Session *s, const char *command)

```
....
824.        snprintf(buf, sizeof(buf), "%.200s/.hushlogin", pw->pw_dir);
```

Unchecked Return Value\Path 30:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=732
Status	New

The do_setup_env method calls the snprintf function, at line 982 of ravynos-2/session.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1035	1035
Object	snprintf	snprintf

Code Snippet

File Name	ravynos-2/session.c
Method	do_setup_env(struct ssh *ssh, Session *s, const char *shell)

```
....
1035.       snprintf(buf, sizeof buf, "%.200s/%.50s", _PATH_MAILDIR, pw->pw_name);
```

Unchecked Return Value\Path 31:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=733
Status	New

The do_setup_env method calls the snprintf function, at line 982 of ravynos-2/session.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1138	1138
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/session.c
Method do_setup_env(struct ssh *ssh, Session *s, const char *shell)

```
....
1138.           snprintf(buf, sizeof buf, "%.200s/%s/environment",
```

Unchecked Return Value\Path 32:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=734
Status	New

The do_setup_env method calls the snprintf function, at line 982 of ravynos-2/session.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1182	1182
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/session.c
Method do_setup_env(struct ssh *ssh, Session *s, const char *shell)

```
....
1182.        snprintf(buf, sizeof buf, "%.50s %d %d",
```

Unchecked Return Value\Path 33:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=735
Status	New

The do_setup_env method calls the snprintf function, at line 982 of ravynos-2/session.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1188	1188
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/session.c
Method do_setup_env(struct ssh *ssh, Session *s, const char *shell)

```
....
1188.        snprintf(buf, sizeof buf, "%.50s %d %.50s %d",
```

Unchecked Return Value\Path 34:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=736
Status	New

The do_setusercontext method calls the snprintf function, at line 1376 of ravynos-2/session.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1410	1410
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/session.c
Method do_setusercontext(struct passwd *pw)

```
....
1410.                    snprintf(uidstr, sizeof(uidstr), "%llu",
```

Unchecked Return Value\Path 35:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=737
Status	New

The session_setup_x11fwd method calls the snprintf function, at line 2589 of ravynos-2/session.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	2633	2633
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/session.c
Method session_setup_x11fwd(struct ssh *ssh, Session *s)

```
....
2633.                 snprintf(display, sizeof display, "localhost:%u.%u",
```

Unchecked Return Value\Path 36:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=738
Status	New

The session_setup_x11fwd method calls the snprintf function, at line 2589 of ravynos-2/session.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	2635	2635
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/session.c
Method session_setup_x11fwd(struct ssh *ssh, Session *s)

```
....
2635.           snprintf(auth_display, sizeof auth_display,
"unix:%u.%u",
```

Unchecked Return Value\Path 37:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=739
Status	New

The session_setup_x11fwd method calls the snprintf function, at line 2589 of ravynos-2/session.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	2651	2651
Object	snprintf	snprintf

Code Snippet
File Name   ravynos-2/session.c
Method   session_setup_x11fwd(struct ssh *ssh, Session *s)

```
....
2651.           snprintf(display, sizeof display, "%.50s:%u.%u",
inet_ntoa(my_addr),
```

Unchecked Return Value\Path 38:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=740
Status	New

The md method calls the snprintf function, at line 59 of ravynos-2/t_vnops.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	62	62
Object	snprintf	snprintf

Code Snippet
File Name   ravynos-2/t_vnops.c
Method   md(char *buf, size_t buflen, const char *base, const char *tail)

```
....
62.    snprintf(buf, buflen, "%s/%s", base, tail);
```

Unchecked Return Value\Path 39:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=741
Status	New

The lookup_simple method calls the snprintf function, at line 67 of ravynos-2/t_vnops.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	73	73
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/t_vnops.c
Method lookup_simple(const atf_tc_t *tc, const char *mountpath)

```
....
73.    snprintf(pb, sizeof(pb), "%s/../%s", mountpath, basename(final));
```

Unchecked Return Value\Path 40:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=742
Status	New

The lookup_simple method calls the snprintf function, at line 67 of ravynos-2/t_vnops.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	77	77
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/t_vnops.c
Method lookup_simple(const atf_tc_t *tc, const char *mountpath)

```
....
77.    snprintf(pb, sizeof(pb), "%s/./../%s", mountpath,
basename(final));
```

Unchecked Return Value\Path 41:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=743
Status	New

The lookup_complex method calls the snprintf function, at line 85 of ravynos-2/t_vnops.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	93	93
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/t_vnops.c
Method lookup_complex(const atf_tc_t *tc, const char *mountpath)

```
....
93.    snprintf(pb, sizeof(pb), "%s/dir", mountpath);
```

Unchecked Return Value\Path 42:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=744
Status	New

The lookup_complex method calls the snprintf function, at line 85 of ravynos-2/t_vnops.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	99	99
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/t_vnops.c
Method lookup_complex(const atf_tc_t *tc, const char *mountpath)

```
....
99.    snprintf(pb, sizeof(pb), "%s/./dir/.././../dir/.", mountpath);
```

Unchecked Return Value\Path 43:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=745
Status	New

The dir_simple method calls the snprintf function, at line 156 of ravynos-2/t_vnops.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	164	164
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/t_vnops.c
Method dir_simple(const atf_tc_t *tc, const char *mountpath)

```
....
164.        snprintf(pb, sizeof(pb), "%s/dir", mountpath);
```

Unchecked Return Value\Path 44:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=746
Status	New

The dir_notempty method calls the snprintf function, at line 178 of ravynos-2/t_vnops.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	186	186
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/t_vnops.c
Method dir_notempty(const atf_tc_t *tc, const char *mountpath)

```
....
186.        snprintf(pb, sizeof(pb), "%s/dir", mountpath);
```

Unchecked Return Value\Path 45:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=747
Status	New

The dir_notempty method calls the snprintf function, at line 178 of ravynos-2/t_vnops.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	190	190
Object	snprintf	snprintf

Code Snippet

File Name	ravynos-2/t_vnops.c
Method	dir_notempty(const atf_tc_t *tc, const char *mountpath)

```
....
190.        snprintf(pb2, sizeof(pb2), "%s/dir/file", mountpath);
```

Unchecked Return Value\Path 46:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=748
Status	New

The create_many method calls the snprintf function, at line 458 of ravynos-2/t_vnops.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	484	484
Object	snprintf	snprintf

Code Snippet

File Name	ravynos-2/t_vnops.c
Method	create_many(const atf_tc_t *tc, const char *mp)

```
....
484.                snprintf(buf, sizeof(buf), TESTFN "%d", i);
```

Unchecked Return Value\Path 47:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=749
Status	New

The create_many method calls the snprintf function, at line 458 of ravynos-2/t_vnops.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	491	491
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/t_vnops.c
Method create_many(const atf_tc_t *tc, const char *mp)

```
....
491.                snprintf(buf, sizeof(buf), TESTFN "%d", i);
```

Unchecked Return Value\Path 48:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=750
Status	New

The create_nonalphanum method calls the snprintf function, at line 507 of ravynos-2/t_vnops.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	516	516
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/t_vnops.c
Method create_nonalphanum(const atf_tc_t *tc, const char *mp)

```
....
516.                snprintf(buf, sizeof(buf), "%c", i);
```

Unchecked Return Value\Path 49:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=751
Status	New

The suboption method calls the snprintf function, at line 704 of ravynos-2/telnet.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	723	723
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/telnet.c
Method suboption()

```
....
723.                snprintf((char *)temp, sizeof(temp),
```

Unchecked Return Value\Path 50:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=752
Status	New

The suboption method calls the snprintf function, at line 704 of ravynos-2/telnet.c. However, the code does not check the return value from this function, and thus would not detect runtime errors or other unexpected states.

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	746	746
Object	snprintf	snprintf

Code Snippet
File Name ravynos-2/telnet.c
Method suboption()

```
....
746.              snprintf((char *)temp, sizeof(temp),
```

Use of Sizeof On a Pointer Type

Query Path:
CPP\Cx\CPP Low Visibility\Use of Sizeof On a Pointer Type Version:1

Description

Use of Sizeof On a Pointer Type\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=788
Status	New

	Source	Destination
File	ravynos-2/print-eigrp.c	ravynos-2/print-eigrp.c
Line	218	291
Object	eigrp_tlv_header	sizeof

Code Snippet
File Name ravynos-2/print-eigrp.c
Method eigrp_print(netdissect_options *ndo, const u_char *pptr, u_int len)

```
....
218.        const struct eigrp_tlv_header *eigrp_tlv_header;
....
291.            if (eigrp_tlv_len < sizeof(struct eigrp_tlv_header) ||
```

Use of Sizeof On a Pointer Type\Path 2:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=789
Status	New

	Source	Destination
File	ravynos-2/print-eigrp.c	ravynos-2/print-eigrp.c
Line	218	284
Object	eigrp_tlv_header	sizeof

Code Snippet
File Name ravynos-2/print-eigrp.c
Method eigrp_print(netdissect_options *ndo, const u_char *pptr, u_int len)

```
....
218.      const struct eigrp_tlv_header *eigrp_tlv_header;
....
284.          ND_TCHECK_LEN(tptr, sizeof(struct eigrp_tlv_header));
```

Use of Sizeof On a Pointer Type\Path 3:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=790
Status	New

	Source	Destination
File	ravynos-2/print-eigrp.c	ravynos-2/print-eigrp.c
Line	218	293
Object	eigrp_tlv_header	sizeof

Code Snippet

File Name	ravynos-2/print-eigrp.c
Method	eigrp_print(netdissect_options *ndo, const u_char *pptr, u_int len)

```
....
218.      const struct eigrp_tlv_header *eigrp_tlv_header;
....
293.                  print_unknown_data(ndo,tptr+sizeof(struct
eigrp_tlv_header),"\n\t    ",tlen);
```

Use of Sizeof On a Pointer Type\Path 4:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=791
Status	New

	Source	Destination
File	ravynos-2/print-eigrp.c	ravynos-2/print-eigrp.c
Line	218	304
Object	eigrp_tlv_header	sizeof

Code Snippet

File Name	ravynos-2/print-eigrp.c
Method	eigrp_print(netdissect_options *ndo, const u_char *pptr, u_int len)

```
....
218.      const struct eigrp_tlv_header *eigrp_tlv_header;
....
304.          if (eigrp_tlv_len < sizeof(struct eigrp_tlv_header)) {
```

Use of Sizeof On a Pointer Type\Path 5:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=792
Status	New

	Source	Destination
File	ravynos-2/print-eigrp.c	ravynos-2/print-eigrp.c
Line	218	306
Object	eigrp_tlv_header	sizeof

Code Snippet

File Name	ravynos-2/print-eigrp.c
Method	eigrp_print(netdissect_options *ndo, const u_char *pptr, u_int len)

```
....
218.      const struct eigrp_tlv_header *eigrp_tlv_header;
....
306.                               sizeof(struct eigrp_tlv_header));
```

Use of Sizeof On a Pointer Type\Path 6:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=793
Status	New

	Source	Destination
File	ravynos-2/print-eigrp.c	ravynos-2/print-eigrp.c
Line	218	309
Object	eigrp_tlv_header	sizeof

Code Snippet

File Name	ravynos-2/print-eigrp.c
Method	eigrp_print(netdissect_options *ndo, const u_char *pptr, u_int len)

```
....
218.      const struct eigrp_tlv_header *eigrp_tlv_header;
....
309.          tlv_tptr=tptr+sizeof(struct eigrp_tlv_header);
```

Use of Sizeof On a Pointer Type\Path 7:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=794
Status	New

	Source	Destination
File	ravynos-2/print-eigrp.c	ravynos-2/print-eigrp.c
Line	218	310
Object	eigrp_tlv_header	sizeof

Code Snippet
File Name ravynos-2/print-eigrp.c
Method eigrp_print(netdissect_options *ndo, const u_char *pptr, u_int len)

```
....
218.      const struct eigrp_tlv_header *eigrp_tlv_header;
....
310.          tlv_tlen=eigrp_tlv_len-sizeof(struct eigrp_tlv_header);
```

Use of Sizeof On a Pointer Type\Path 8:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=795
Status	New

	Source	Destination
File	ravynos-2/print-eigrp.c	ravynos-2/print-eigrp.c
Line	218	321
Object	eigrp_tlv_header	sizeof

Code Snippet
File Name ravynos-2/print-eigrp.c
Method eigrp_print(netdissect_options *ndo, const u_char *pptr, u_int len)

```
....
218.      const struct eigrp_tlv_header *eigrp_tlv_header;
....
321.                     sizeof(struct eigrp_tlv_header) +
sizeof(*tlv_ptr.eigrp_tlv_general_parm));
```

Use of Sizeof On a Pointer Type\Path 9:

Severity	Low
Result State	To Verify
Online Results	http://WIN-

	BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=796
Status	New

	Source	Destination
File	ravynos-2/print-eigrp.c	ravynos-2/print-eigrp.c
Line	218	338
Object	eigrp_tlv_header	sizeof

Code Snippet
File Name ravynos-2/print-eigrp.c
Method eigrp_print(netdissect_options *ndo, const u_char *pptr, u_int len)

```
....
218.       const struct eigrp_tlv_header *eigrp_tlv_header;
....
338.                                sizeof(struct eigrp_tlv_header) +
sizeof(*tlv_ptr.eigrp_tlv_sw_version));
```

Use of Sizeof On a Pointer Type\Path 10:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=797
Status	New

	Source	Destination
File	ravynos-2/print-eigrp.c	ravynos-2/print-eigrp.c
Line	218	353
Object	eigrp_tlv_header	sizeof

Code Snippet
File Name ravynos-2/print-eigrp.c
Method eigrp_print(netdissect_options *ndo, const u_char *pptr, u_int len)

```
....
218.       const struct eigrp_tlv_header *eigrp_tlv_header;
....
353.                                sizeof(struct eigrp_tlv_header) +
sizeof(*tlv_ptr.eigrp_tlv_ip_int));
```

Use of Sizeof On a Pointer Type\Path 11:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=798
Status	New

	Source	Destination
File	ravynos-2/print-eigrp.c	ravynos-2/print-eigrp.c
Line	218	388
Object	eigrp_tlv_header	sizeof

Code Snippet

File Name	ravynos-2/print-eigrp.c
Method	eigrp_print(netdissect_options *ndo, const u_char *pptr, u_int len)

```
....
218.       const struct eigrp_tlv_header *eigrp_tlv_header;
....
388.                                  sizeof(struct eigrp_tlv_header) +
sizeof(*tlv_ptr.eigrp_tlv_ip_ext));
```

Use of Sizeof On a Pointer Type\Path 12:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=799
Status	New

	Source	Destination
File	ravynos-2/print-eigrp.c	ravynos-2/print-eigrp.c
Line	218	431
Object	eigrp_tlv_header	sizeof

Code Snippet

File Name	ravynos-2/print-eigrp.c
Method	eigrp_print(netdissect_options *ndo, const u_char *pptr, u_int len)

```
....
218.       const struct eigrp_tlv_header *eigrp_tlv_header;
....
431.                                  sizeof(struct eigrp_tlv_header) +
sizeof(*tlv_ptr.eigrp_tlv_at_cable_setup));
```

Use of Sizeof On a Pointer Type\Path 13:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=800
Status	New

	Source	Destination
File	ravynos-2/print-eigrp.c	ravynos-2/print-eigrp.c

Line	218	445
Object	eigrp_tlv_header	sizeof

Code Snippet

File Name	ravynos-2/print-eigrp.c
Method	eigrp_print(netdissect_options *ndo, const u_char *pptr, u_int len)

```
....
218.       const struct eigrp_tlv_header *eigrp_tlv_header;
....
445.                                   sizeof(struct eigrp_tlv_header) +
sizeof(*tlv_ptr.eigrp_tlv_at_int));
```

Use of Sizeof On a Pointer Type\Path 14:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=801
Status	New

	Source	Destination
File	ravynos-2/print-eigrp.c	ravynos-2/print-eigrp.c
Line	218	473
Object	eigrp_tlv_header	sizeof

Code Snippet

File Name	ravynos-2/print-eigrp.c
Method	eigrp_print(netdissect_options *ndo, const u_char *pptr, u_int len)

```
....
218.       const struct eigrp_tlv_header *eigrp_tlv_header;
....
473.                                   sizeof(struct eigrp_tlv_header) +
sizeof(*tlv_ptr.eigrp_tlv_at_ext));
```

Use of Sizeof On a Pointer Type\Path 15:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=802
Status	New

	Source	Destination
File	ravynos-2/print-eigrp.c	ravynos-2/print-eigrp.c
Line	218	523
Object	eigrp_tlv_header	sizeof

Code Snippet	
File Name	ravynos-2/print-eigrp.c
Method	eigrp_print(netdissect_options *ndo, const u_char *pptr, u_int len)

```
....
218.      const struct eigrp_tlv_header *eigrp_tlv_header;
....
523.              print_unknown_data(ndo,tptr+sizeof(struct
eigrp_tlv_header),"\n\t    ",
```

Use of Sizeof On a Pointer Type\Path 16:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=803
Status	New

	Source	Destination
File	ravynos-2/print-eigrp.c	ravynos-2/print-eigrp.c
Line	218	524
Object	eigrp_tlv_header	sizeof

Code Snippet	
File Name	ravynos-2/print-eigrp.c
Method	eigrp_print(netdissect_options *ndo, const u_char *pptr, u_int len)

```
....
218.      const struct eigrp_tlv_header *eigrp_tlv_header;
....
524.                                 eigrp_tlv_len-sizeof(struct
eigrp_tlv_header));
```

Use of Sizeof On a Pointer Type\Path 17:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=804
Status	New

	Source	Destination
File	ravynos-2/print-lwapp.c	ravynos-2/print-lwapp.c
Line	170	230
Object	lwapp_control_header	sizeof

Code Snippet	
File Name	ravynos-2/print-lwapp.c
Method	lwapp_control_print(netdissect_options *ndo,

```
....
170.        const struct lwapp_control_header *lwapp_control_header;
....
230.            if (tlen < sizeof(struct lwapp_control_header)) {
```

Use of Sizeof On a Pointer Type\Path 18:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=805
Status	New

	Source	Destination
File	ravynos-2/print-lwapp.c	ravynos-2/print-lwapp.c
Line	170	229
Object	lwapp_control_header	sizeof

Code Snippet
File Name ravynos-2/print-lwapp.c
Method lwapp_control_print(netdissect_options *ndo,

```
....
170.        const struct lwapp_control_header *lwapp_control_header;
....
229.            ND_TCHECK_LEN(tptr, sizeof(struct lwapp_control_header));
```

Use of Sizeof On a Pointer Type\Path 19:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=806
Status	New

	Source	Destination
File	ravynos-2/print-lwapp.c	ravynos-2/print-lwapp.c
Line	170	237
Object	lwapp_control_header	sizeof

Code Snippet
File Name ravynos-2/print-lwapp.c
Method lwapp_control_print(netdissect_options *ndo,

```
....
170.      const struct lwapp_control_header *lwapp_control_header;
....
237.          if (tlen < sizeof(struct lwapp_control_header) + msg_tlen)
{
```

Use of Sizeof On a Pointer Type\Path 20:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=807
Status	New

	Source	Destination
File	ravynos-2/print-lwapp.c	ravynos-2/print-lwapp.c
Line	170	291
Object	lwapp_control_header	sizeof

Code Snippet

File Name	ravynos-2/print-lwapp.c
Method	lwapp_control_print(netdissect_options *ndo,

```
....
170.      const struct lwapp_control_header *lwapp_control_header;
....
291.          tptr += sizeof(struct lwapp_control_header) + msg_tlen;
```

Use of Sizeof On a Pointer Type\Path 21:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=808
Status	New

	Source	Destination
File	ravynos-2/print-lwapp.c	ravynos-2/print-lwapp.c
Line	170	292
Object	lwapp_control_header	sizeof

Code Snippet

File Name	ravynos-2/print-lwapp.c
Method	lwapp_control_print(netdissect_options *ndo,

```
....
170.        const struct lwapp_control_header *lwapp_control_header;
....
292.            tlen -= sizeof(struct lwapp_control_header) + msg_tlen;
```

Use of Sizeof On a Pointer Type\Path 22:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=809
Status	New

	Source	Destination
File	ravynos-2/vnic_dev.c	ravynos-2/vnic_dev.c
Line	245	277
Object	args	sizeof

Code Snippet
File Name ravynos-2/vnic_dev.c
Method static int vnic_dev_cmd_proxy(struct vnic_dev *vdev,

```
....
245.          u64 *args, int nargs, int wait)
....
277.          memcpy(args, &vdev->args[1], nargs * sizeof(args[0]));
```

Use of Sizeof On a Pointer Type\Path 23:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=810
Status	New

	Source	Destination
File	ravynos-2/vnic_dev.c	ravynos-2/vnic_dev.c
Line	245	262
Object	args	sizeof

Code Snippet
File Name ravynos-2/vnic_dev.c
Method static int vnic_dev_cmd_proxy(struct vnic_dev *vdev,

```
....
245.          u64 *args, int nargs, int wait)
....
262.          memcpy(&vdev->args[2], args, nargs * sizeof(args[0]));
```

Use of Sizeof On a Pointer Type\Path 24:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=811
Status	New

	Source	Destination
File	ravynos-2/vnic_dev.c	ravynos-2/vnic_dev.c
Line	283	296
Object	args	sizeof

Code Snippet
File Name ravynos-2/vnic_dev.c
Method static int vnic_dev_cmd_no_proxy(struct vnic_dev *vdev,

```
....
283.        enum vnic_devcmd_cmd cmd, u64 *args, int nargs, int wait)
....
296.        memcpy(args, vdev->args, nargs * sizeof(args[0]));
```

Use of Sizeof On a Pointer Type\Path 25:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=812
Status	New

	Source	Destination
File	ravynos-2/vnic_dev.c	ravynos-2/vnic_dev.c
Line	283	292
Object	args	sizeof

Code Snippet
File Name ravynos-2/vnic_dev.c
Method static int vnic_dev_cmd_no_proxy(struct vnic_dev *vdev,

```
....
283.        enum vnic_devcmd_cmd cmd, u64 *args, int nargs, int wait)
....
292.        memcpy(vdev->args, args, nargs * sizeof(args[0]));
```

Use of Sizeof On a Pointer Type\Path 26:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=700

	86&pathid=813
Status	New

	Source	Destination
File	ravynos-2/acpi_thermal.c	ravynos-2/acpi_thermal.c
Line	988	988
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/acpi_thermal.c
Method acpi_tz_thread(void *arg)

```
....
988.            sc = malloc(sizeof(struct acpi_tz_softc *) * devcount,
M_TEMP,
```

Use of Sizeof On a Pointer Type\Path 27:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=814
Status	New

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	234	234
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/cachedump.c
Method copy_msg(struct regional* region, struct lruhash_entry* e,

```
....
234.              sizeof(struct ub_packed_rrset_key*) * rep-
>rrset_count);
```

Use of Sizeof On a Pointer Type\Path 28:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=815
Status	New

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c

Line	404	404
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/cachedump.c
Method move_into_cache(struct ub_packed_rrset_key* k,

```
....
404.          s = sizeof(*ad) + (sizeof(size_t) + sizeof(uint8_t*) +
```

Use of Sizeof On a Pointer Type\Path 29:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=816
Status	New

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	419	419
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/cachedump.c
Method move_into_cache(struct ub_packed_rrset_key* k,

```
....
419.          memmove(p, &d->rr_data[0], sizeof(uint8_t*)*num);
```

Use of Sizeof On a Pointer Type\Path 30:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=817
Status	New

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	420	420
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/cachedump.c
Method move_into_cache(struct ub_packed_rrset_key* k,

```
....
420.         p += sizeof(uint8_t*)*num;
```

Use of Sizeof On a Pointer Type\Path 31:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=818
Status	New

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	494	494
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/cachedump.c
Method load_rrset(RES* ssl, sldns_buffer* buf, struct worker* worker)

```
....
494.                 sizeof(uint8_t*)*(d->count+d->rrsig_count));
```

Use of Sizeof On a Pointer Type\Path 32:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=819
Status	New

	Source	Destination
File	ravynos-2/cachedump.c	ravynos-2/cachedump.c
Line	670	670
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/cachedump.c
Method load_msg(RES* ssl, sldns_buffer* buf, struct worker* worker)

```
....
670.                 region, sizeof(struct
ub_packed_rrset_key*)*rep.rrset_count);
```

Use of Sizeof On a Pointer Type\Path 33:

Severity	Low
Result State	To Verify

Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=820
Status	New

	Source	Destination
File	ravynos-2/glob.c	ravynos-2/glob.c
Line	460	460
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/glob.c
Method glob(const char *pattern, int flags, int (*errfunc) (const char *, int),

```
....
460.                pglob->gl_pathc - oldpathc, sizeof(char *), compare);
```

Use of Sizeof On a Pointer Type\Path 34:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=821
Status	New

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	620	620
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/ipnat.c
Method showhostmap_dead(natstat_t *nsp)

```
....
620.        maptable = (hostmap_t **)malloc(sizeof(hostmap_t *) *
```

Use of Sizeof On a Pointer Type\Path 35:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=822
Status	New

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c

Line	623	623
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/ipnat.c
Method showhostmap_dead(natstat_t *nsp)

```
....
623.                    sizeof(hostmap_t *) * nsp->ns_hostmap_sz)) {
```

Use of Sizeof On a Pointer Type\Path 36:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=823
Status	New

	Source	Destination
File	ravynos-2/respip.c	ravynos-2/respip.c
Line	520	520
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/respip.c
Method respip_copy_rrset(const struct ub_packed_rrset_key* key, struct regional* region)

```
....
520.                (sizeof(size_t)+sizeof(uint8_t*)+sizeof(time_t));
```

Use of Sizeof On a Pointer Type\Path 37:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=824
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	998	998
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/session.c
Method do_setup_env(struct ssh *ssh, Session *s, const char *shell)

```
....
998.        env = xcalloc(envsize, sizeof(char *));
```

Use of Sizeof On a Pointer Type\Path 38:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=825
Status	New

	Source	Destination
File	ravynos-2/sh.glob.c	ravynos-2/sh.glob.c
Line	261	261
Object	sizeof	sizeof

Code Snippet

File Name ravynos-2/sh.glob.c

Method expbrace(Char ***nvp, Char ***elp, int size)

```
....
261.                nv = xrealloc(nv, size * sizeof(Char *));
```

Use of Sizeof On a Pointer Type\Path 39:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=826
Status	New

	Source	Destination
File	ravynos-2/sh.glob.c	ravynos-2/sh.glob.c
Line	303	303
Object	sizeof	sizeof

Code Snippet

File Name ravynos-2/sh.glob.c

Method globexpand(Char **v, int noglob)

```
....
303.      fnv = xmalloc(sizeof(Char ***));
```

Use of Sizeof On a Pointer Type\Path 40:

Severity	Low
Result State	To Verify
Online Results	http://WIN-

	BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=827
Status	New

	Source	Destination
File	ravynos-2/sh.glob.c	ravynos-2/sh.glob.c
Line	304	304
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/sh.glob.c
Method globexpand(Char **v, int noglob)

```
....
304.        *fnv = vl = xmalloc(sizeof(Char *) * size);
```

Use of Sizeof On a Pointer Type\Path 41:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=828
Status	New

	Source	Destination
File	ravynos-2/sh.glob.c	ravynos-2/sh.glob.c
Line	321	321
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/sh.glob.c
Method globexpand(Char **v, int noglob)

```
....
321.                    *fnv = xrealloc(*fnv, size * sizeof(Char *));
```

Use of Sizeof On a Pointer Type\Path 42:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=829
Status	New

	Source	Destination
File	ravynos-2/sh.glob.c	ravynos-2/sh.glob.c
Line	331	331

Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/sh.glob.c
Method globexpand(Char **v, int noglob)

```
....
331.             *fnv = xrealloc(*fnv, size * sizeof(Char *));
```

Use of Sizeof On a Pointer Type\Path 43:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=830
Status	New

	Source	Destination
File	ravynos-2/sh.glob.c	ravynos-2/sh.glob.c
Line	904	904
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/sh.glob.c
Method Gnmatch(const Char *string, const Char *pattern, const Char **endstr)

```
....
904.      fblk = xmalloc(sizeof(Char ***));
```

Use of Sizeof On a Pointer Type\Path 44:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=831
Status	New

	Source	Destination
File	ravynos-2/sh.glob.c	ravynos-2/sh.glob.c
Line	905	905
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/sh.glob.c
Method Gnmatch(const Char *string, const Char *pattern, const Char **endstr)

```
....
905.        *fblk = xmalloc(GLOBSPACE * sizeof(Char *));
```

Use of Sizeof On a Pointer Type\Path 45:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=832
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	537	537
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/telnet.c
Method mklist(char *buf, char *name)

```
....
537.          argv = (char **)malloc((n+3)*sizeof(char *));
```

Use of Sizeof On a Pointer Type\Path 46:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=833
Status	New

	Source	Destination
File	ravynos-2/val_utils.c	ravynos-2/val_utils.c
Line	956	956
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/val_utils.c
Method void val_reply_remove_auth(struct reply_info* rep, size_t index)

```
....
956.                sizeof(struct ub_packed_rrset_key*)*
```

Use of Sizeof On a Pointer Type\Path 47:

Severity	Low
Result State	To Verify
Online Results	http://WIN-

	BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=834
Status	New

	Source	Destination
File	ravynos-2/val_utils.c	ravynos-2/val_utils.c
Line	993	993
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/val_utils.c
Method val_check_nonsecure(struct module_env* env, struct reply_info* rep)

```
....
993.                                 sizeof(struct ub_packed_rrset_key*)*
```

Use of Sizeof On a Pointer Type\Path 48:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=835
Status	New

	Source	Destination
File	ravynos-2/val_utils.c	ravynos-2/val_utils.c
Line	1026	1026
Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/val_utils.c
Method val_check_nonsecure(struct module_env* env, struct reply_info* rep)

```
....
1026.                            sizeof(struct ub_packed_rrset_key*)*
```

Use of Sizeof On a Pointer Type\Path 49:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=836
Status	New

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c
Line	2420	2420

Object	sizeof	sizeof

Code Snippet
File Name ravynos-2/wlan_sys.c
Method wlan_get_mac_policy(struct wlan_iface *wif)

```
....
2420.       wif->mac_nacls = argsize / sizeof(struct
ieee80211req_maclist *);
```

Exposure of System Data to Unauthorized Control Sphere

Query Path:
CPP\Cx\CPP Low Visibility\Exposure of System Data to Unauthorized Control Sphere Version:1

Categories

FISMA 2014: Configuration Management
NIST SP 800-53: AC-3 Access Enforcement (P1)

Description

Exposure of System Data to Unauthorized Control Sphere\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1290
Status	New

The system data read by ext4_new_blocks in the file ravynos-2/ext2_extents.c at line 1369 is potentially exposed by ext4_new_blocks found in ravynos-2/ext2_extents.c at line 1369.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1370	1370
Object	perror	perror

Code Snippet
File Name ravynos-2/ext2_extents.c
Method ext4_new_blocks(struct inode *ip, daddr_t lbn, e4fs_daddr_t pref,

```
....
1370.      struct ucred *cred, unsigned long *count, int *perror)
```

Exposure of System Data to Unauthorized Control Sphere\Path 2:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1291
Status	New

The system data read by ext4_new_blocks in the file ravynos-2/ext2_extents.c at line 1369 is potentially exposed by ext4_new_blocks found in ravynos-2/ext2_extents.c at line 1369.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1383	1383
Object	perror	perror

Code Snippet
File Name ravynos-2/ext2_extents.c
Method ext4_new_blocks(struct inode *ip, daddr_t lbn, e4fs_daddr_t pref,

```
....
1383.        *perror = ext2_alloc(ip, lbn, pref, (int)fs->e2fs_bsize,
cred, &newblk);
```

Exposure of System Data to Unauthorized Control Sphere\Path 3:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1292
Status	New

The system data read by ext4_new_blocks in the file ravynos-2/ext2_extents.c at line 1369 is potentially exposed by ext4_new_blocks found in ravynos-2/ext2_extents.c at line 1369.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	1384	1384
Object	perror	perror

Code Snippet
File Name ravynos-2/ext2_extents.c
Method ext4_new_blocks(struct inode *ip, daddr_t lbn, e4fs_daddr_t pref,

```
....
1384.        if (*perror)
```

Exposure of System Data to Unauthorized Control Sphere\Path 4:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1293
Status	New

The system data read by main in the file ravynos-2/http-server.c at line 330 is potentially exposed by main found in ravynos-2/http-server.c at line 330.

	Source	Destination
File	ravynos-2/http-server.c	ravynos-2/http-server.c
Line	389	389
Object	perror	perror

Code Snippet
File Name ravynos-2/http-server.c
Method main(int argc, char **argv)

```
....
389.                            perror("getsockname() failed");
```

Exposure of System Data to Unauthorized Control Sphere\Path 5:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1294
Status	New

The system data read by send_document_cb in the file ravynos-2/http-server.c at line 159 is potentially exposed by send_document_cb found in ravynos-2/http-server.c at line 159.

	Source	Destination
File	ravynos-2/http-server.c	ravynos-2/http-server.c
Line	204	204
Object	perror	perror

Code Snippet
File Name ravynos-2/http-server.c
Method send_document_cb(struct evhttp_request *req, void *arg)

```
....
204.                    perror("malloc");
```

Exposure of System Data to Unauthorized Control Sphere\Path 6:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1295
Status	New

The system data read by send_document_cb in the file ravynos-2/http-server.c at line 159 is potentially exposed by send_document_cb found in ravynos-2/http-server.c at line 159.

	Source	Destination
File	ravynos-2/http-server.c	ravynos-2/http-server.c

Line	291	291
Object	perror	perror

Code Snippet

File Name ravynos-2/http-server.c

Method send_document_cb(struct evhttp_request *req, void *arg)

```
....
291.                    perror("open");
```

Exposure of System Data to Unauthorized Control Sphere\Path 7:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1296
Status	New

The system data read by send_document_cb in the file ravynos-2/http-server.c at line 159 is potentially exposed by send_document_cb found in ravynos-2/http-server.c at line 159.

	Source	Destination
File	ravynos-2/http-server.c	ravynos-2/http-server.c
Line	298	298
Object	perror	perror

Code Snippet

File Name ravynos-2/http-server.c

Method send_document_cb(struct evhttp_request *req, void *arg)

```
....
298.                    perror("fstat");
```

Exposure of System Data to Unauthorized Control Sphere\Path 8:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1297
Status	New

The system data read by dostats_dead in the file ravynos-2/ipnat.c at line 331 is potentially exposed by dostats_dead found in ravynos-2/ipnat.c at line 331.

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	342	342
Object	perror	perror

Code Snippet

File Name	ravynos-2/ipnat.c
Method	dostats_dead(natstat_t *nsp, int opts, int *filter)

```
....
342.                          perror("kmemcpy");
```

Exposure of System Data to Unauthorized Control Sphere\Path 9:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1298
Status	New

The system data read by showhostmap_dead in the file ravynos-2/ipnat.c at line 613 is potentially exposed by showhostmap_dead found in ravynos-2/ipnat.c at line 613.

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	624	624
Object	perror	perror

Code Snippet

File Name	ravynos-2/ipnat.c
Method	showhostmap_dead(natstat_t *nsp)

```
....
624.              perror("kmemcpy (maptable)");
```

Exposure of System Data to Unauthorized Control Sphere\Path 10:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1299
Status	New

The system data read by showhostmap_dead in the file ravynos-2/ipnat.c at line 613 is potentially exposed by showhostmap_dead found in ravynos-2/ipnat.c at line 613.

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	633	633
Object	perror	perror

Code Snippet

File Name	ravynos-2/ipnat.c

Method	showhostmap_dead(natstat_t *nsp)

```
....
633.                                      perror("kmemcpy (hostmap)");
```

Exposure of System Data to Unauthorized Control Sphere\Path 11:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1300
Status	New

The system data read by do_local_cmd in the file ravynos-2/scp.c at line 231 is potentially exposed by do_local_cmd found in ravynos-2/scp.c at line 231.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	251	251
Object	perror	perror

Code Snippet

File Name	ravynos-2/scp.c
Method	do_local_cmd(arglist *a)

```
....
251.                    perror(a->list[0]);
```

Exposure of System Data to Unauthorized Control Sphere\Path 12:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1301
Status	New

The system data read by do_cmd in the file ravynos-2/scp.c at line 279 is potentially exposed by do_cmd found in ravynos-2/scp.c at line 279.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	352	352
Object	perror	perror

Code Snippet

File Name	ravynos-2/scp.c
Method	do_cmd(char *program, char *host, char *remuser, int port, int subsystem,

```
....
352.                perror(program);
```

Exposure of System Data to Unauthorized Control Sphere\Path 13:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1302
Status	New

The system data read by do_cmd2 in the file ravynos-2/scp.c at line 379 is potentially exposed by do_cmd2 found in ravynos-2/scp.c at line 379.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	398	398
Object	perror	perror

Code Snippet
File Name ravynos-2/scp.c
Method do_cmd2(char *host, char *remuser, int port, char *cmd,

```
....
398.                        perror("dup2");
```

Exposure of System Data to Unauthorized Control Sphere\Path 14:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1303
Status	New

The system data read by do_cmd2 in the file ravynos-2/scp.c at line 379 is potentially exposed by do_cmd2 found in ravynos-2/scp.c at line 379.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	400	400
Object	perror	perror

Code Snippet
File Name ravynos-2/scp.c
Method do_cmd2(char *host, char *remuser, int port, char *cmd,

```
....
400.                    perror("dup2");
```

Exposure of System Data to Unauthorized Control Sphere\Path 15:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1304
Status	New

The system data read by do_cmd2 in the file ravynos-2/scp.c at line 379 is potentially exposed by do_cmd2 found in ravynos-2/scp.c at line 379.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	417	417
Object	perror	perror

Code Snippet
File Name ravynos-2/scp.c
Method do_cmd2(char *host, char *remuser, int port, char *cmd,

```
....
417.                perror(ssh_program);
```

Exposure of System Data to Unauthorized Control Sphere\Path 16:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1305
Status	New

The system data read by main in the file ravynos-2/scp.c at line 470 is potentially exposed by main found in ravynos-2/scp.c at line 470.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	660	660
Object	perror	perror

Code Snippet
File Name ravynos-2/scp.c
Method main(int argc, char **argv)

```
....
660.                    perror("pledge");
```

Exposure of System Data to Unauthorized Control Sphere\Path 17:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1306
Status	New

The system data read by do_exec_no_pty in the file ravynos-2/session.c at line 388 is potentially exposed by do_exec_no_pty found in ravynos-2/session.c at line 388.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	472	472
Object	perror	perror

Code Snippet
File Name ravynos-2/session.c
Method do_exec_no_pty(struct ssh *ssh, Session *s, const char *command)

```
....
472.                    perror("dup2 stdin");
```

Exposure of System Data to Unauthorized Control Sphere\Path 18:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1307
Status	New

The system data read by do_exec_no_pty in the file ravynos-2/session.c at line 388 is potentially exposed by do_exec_no_pty found in ravynos-2/session.c at line 388.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	478	478
Object	perror	perror

Code Snippet
File Name ravynos-2/session.c
Method do_exec_no_pty(struct ssh *ssh, Session *s, const char *command)

```
....
478.                    perror("dup2 stdout");
```

Exposure of System Data to Unauthorized Control Sphere\Path 19:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1308
Status	New

The system data read by do_exec_no_pty in the file ravynos-2/session.c at line 388 is potentially exposed by do_exec_no_pty found in ravynos-2/session.c at line 388.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	484	484
Object	perror	perror

Code Snippet
File Name ravynos-2/session.c
Method do_exec_no_pty(struct ssh *ssh, Session *s, const char *command)

```
....
484.                    perror("dup2 stderr");
```

Exposure of System Data to Unauthorized Control Sphere\Path 20:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1309
Status	New

The system data read by do_setusercontext in the file ravynos-2/session.c at line 1376 is potentially exposed by do_setusercontext found in ravynos-2/session.c at line 1376.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1386	1386
Object	perror	perror

Code Snippet
File Name ravynos-2/session.c
Method do_setusercontext(struct passwd *pw)

```
....
1386.                     perror("unable to set user context");
```

Exposure of System Data to Unauthorized Control Sphere\Path 21:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1310
Status	New

The system data read by do_setusercontext in the file ravynos-2/session.c at line 1376 is potentially exposed by do_setusercontext found in ravynos-2/session.c at line 1376.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1425	1425
Object	perror	perror

Code Snippet

File Name	ravynos-2/session.c
Method	do_setusercontext(struct passwd *pw)

```
....
1425.                     perror("unable to set user context (setuser)");
```

Exposure of System Data to Unauthorized Control Sphere\Path 22:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1311
Status	New

The system data read by do_pwchange in the file ravynos-2/session.c at line 1459 is potentially exposed by do_pwchange found in ravynos-2/session.c at line 1459.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1475	1475
Object	perror	perror

Code Snippet

File Name	ravynos-2/session.c
Method	do_pwchange(Session *s)

```
....
1475.            perror("passwd");
```

Exposure of System Data to Unauthorized Control Sphere\Path 23:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1312
Status	New

The system data read by do_child in the file ravynos-2/session.c at line 1532 is potentially exposed by do_child found in ravynos-2/session.c at line 1532.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1710	1710
Object	perror	perror

Code Snippet
File Name ravynos-2/session.c
Method do_child(struct ssh *ssh, Session *s, const char *command)

```
....
1710.                   perror(shell);
```

Exposure of System Data to Unauthorized Control Sphere\Path 24:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1313
Status	New

The system data read by do_child in the file ravynos-2/session.c at line 1532 is potentially exposed by do_child found in ravynos-2/session.c at line 1532.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1720	1720
Object	perror	perror

Code Snippet
File Name ravynos-2/session.c
Method do_child(struct ssh *ssh, Session *s, const char *command)

```
....
1720.              perror(shell);
```

Exposure of System Data to Unauthorized Control Sphere\Path 25:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1314
Status	New

The system data read by do_child in the file ravynos-2/session.c at line 1532 is potentially exposed by do_child found in ravynos-2/session.c at line 1532.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1732	1732
Object	perror	perror

Code Snippet	
File Name	ravynos-2/session.c
Method	do_child(struct ssh *ssh, Session *s, const char *command)

```
....
1732.        perror(shell);
```

Exposure of System Data to Unauthorized Control Sphere\Path 26:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1315
Status	New

The system data read by bdg_ctl in the file ravynos-2/valectl.c at line 204 is potentially exposed by bdg_ctl found in ravynos-2/valectl.c at line 204.

	Source	Destination
File	ravynos-2/valectl.c	ravynos-2/valectl.c
Line	220	220
Object	perror	perror

Code Snippet	
File Name	ravynos-2/valectl.c
Method	bdg_ctl(struct args *a)

```
....
220.                perror("/dev/netmap");
```

Exposure of System Data to Unauthorized Control Sphere\Path 27:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1316
Status	New

The system data read by main in the file ravynos-2/ipnat.c at line 92 is potentially exposed by main found in ravynos-2/ipnat.c at line 92.

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	185	184
Object	errno	fprintf

Code Snippet
File Name ravynos-2/ipnat.c
Method main(int argc, char *argv[])

```
....
185.                             STRERROR(errno));
....
184.                      (void) fprintf(stderr, "%s: open: %s\n",
IPNAT_NAME,
```

Exposure of System Data to Unauthorized Control Sphere\Path 28:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1317
Status	New

The system data read by do_child in the file ravynos-2/session.c at line 1532 is potentially exposed by do_child found in ravynos-2/session.c at line 1532.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1650	1648
Object	errno	fprintf

Code Snippet
File Name ravynos-2/session.c
Method do_child(struct ssh *ssh, Session *s, const char *command)

```
....
1650.                       strerror(errno));
....
1648.                   fprintf(stderr, "Could not chdir to home "
```

Exposure of System Data to Unauthorized Control Sphere\Path 29:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1318
Status	New

The system data read by list_all in the file ravynos-2/valectl.c at line 180 is potentially exposed by list_all found in ravynos-2/valectl.c at line 180.

	Source	Destination
File	ravynos-2/valectl.c	ravynos-2/valectl.c
Line	193	193
Object	errno	fprintf

Code Snippet

File Name	ravynos-2/valectl.c
Method	list_all(int fd, struct nmreq_header *hdr)

```
....
193.                    fprintf(stderr, "failed to list all: %s\n",
strerror(errno));
```

Exposure of System Data to Unauthorized Control Sphere\Path 30:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1319
Status	New

The system data read by bdg_ctl in the file ravynos-2/valectl.c at line 204 is potentially exposed by bdg_ctl found in ravynos-2/valectl.c at line 204.

	Source	Destination
File	ravynos-2/valectl.c	ravynos-2/valectl.c
Line	304	303
Object	errno	fprintf

Code Snippet

File Name	ravynos-2/valectl.c
Method	bdg_ctl(struct args *a)

```
....
304.                        action, a->name, strerror(errno));
....
303.                  fprintf(stderr, "failed to %s %s: %s\n",
```

Exposure of System Data to Unauthorized Control Sphere\Path 31:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1320
Status	New

The system data read by wlan_ioctl_init in the file ravynos-2/wlan_sys.c at line 96 is potentially exposed by wlan_ioctl_init found in ravynos-2/wlan_sys.c at line 96.

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c
Line	99	99
Object	errno	strerror

Code Snippet
File Name ravynos-2/wlan_sys.c
Method wlan_ioctl_init(void)

```
....
99.         syslog(LOG_ERR, "cannot open socket : %s", strerror(errno));
```

Exposure of System Data to Unauthorized Control Sphere\Path 32:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1321
Status	New

The system data read by wlan_get_local_addr in the file ravynos-2/wlan_sys.c at line 286 is potentially exposed by wlan_get_local_addr found in ravynos-2/wlan_sys.c at line 286.

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c
Line	295	295
Object	errno	strerror

Code Snippet
File Name ravynos-2/wlan_sys.c
Method wlan_get_local_addr(struct wlan_iface *wif)

```
....
295.                    strerror(errno));
```

Exposure of System Data to Unauthorized Control Sphere\Path 33:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1322
Status	New

The system data read by wlan_clone_create in the file ravynos-2/wlan_sys.c at line 718 is potentially exposed by wlan_clone_create found in ravynos-2/wlan_sys.c at line 718.

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c
Line	783	783
Object	errno	strerror

Code Snippet

File Name	ravynos-2/wlan_sys.c
Method	wlan_clone_create(struct wlan_iface *wif)

```
....
783.                    "failed: %s", strerror(errno));
```

Exposure of System Data to Unauthorized Control Sphere\Path 34:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1323
Status	New

The system data read by wlan_clone_destroy in the file ravynos-2/wlan_sys.c at line 791 is potentially exposed by wlan_clone_destroy found in ravynos-2/wlan_sys.c at line 791.

	Source	Destination
File	ravynos-2/wlan_sys.c	ravynos-2/wlan_sys.c
Line	803	803
Object	errno	strerror

Code Snippet

File Name	ravynos-2/wlan_sys.c
Method	wlan_clone_destroy(struct wlan_iface *wif)

```
....
803.                    "failed: %s", strerror(errno));
```

Exposure of System Data to Unauthorized Control Sphere\Path 35:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1324
Status	New

The system data read by main in the file ravynos-2/zinject.c at line 737 is potentially exposed by main found in ravynos-2/zinject.c at line 737.

	Source	Destination
File	ravynos-2/zinject.c	ravynos-2/zinject.c
Line	765	765
Object	errno	fprintf

Code Snippet

File Name	ravynos-2/zinject.c
Method	main(int argc, char **argv)

```
....
765.                (void) fprintf(stderr, "%s\n",
libzfs_error_init(errno));
```

Exposure of System Data to Unauthorized Control Sphere\Path 36:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1325
Status	New

The system data read by iter_handlers in the file ravynos-2/zinject.c at line 336 is potentially exposed by iter_handlers found in ravynos-2/zinject.c at line 336.

	Source	Destination
File	ravynos-2/zinject.c	ravynos-2/zinject.c
Line	349	348
Object	errno	fprintf

Code Snippet

File Name	ravynos-2/zinject.c
Method	iter_handlers(int (*func)(int, const char *, zinject_record_t *, void *),

```
....
349.                        strerror(errno));
....
348.                   (void) fprintf(stderr, "Unable to list handlers:
%s\n",
```

Exposure of System Data to Unauthorized Control Sphere\Path 37:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1326
Status	New

The system data read by cancel_one_handler in the file ravynos-2/zinject.c at line 502 is potentially exposed by cancel_one_handler found in ravynos-2/zinject.c at line 502.

	Source	Destination
File	ravynos-2/zinject.c	ravynos-2/zinject.c
Line	512	511
Object	errno	fprintf

Code Snippet

File Name ravynos-2/zinject.c

Method cancel_one_handler(int id, const char *pool, zinject_record_t *record,

```
....
512.                        id, strerror(errno));
....
511.                   (void) fprintf(stderr, "failed to remove handler %d:
%s\n",
```

Exposure of System Data to Unauthorized Control Sphere\Path 38:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1327
Status	New

The system data read by cancel_handler in the file ravynos-2/zinject.c at line 537 is potentially exposed by cancel_handler found in ravynos-2/zinject.c at line 537.

	Source	Destination
File	ravynos-2/zinject.c	ravynos-2/zinject.c
Line	545	544
Object	errno	fprintf

Code Snippet

File Name	ravynos-2/zinject.c
Method	cancel_handler(int id)

```
....
545.                    id, strerror(errno));
....
544.                (void) fprintf(stderr, "failed to remove handler %d:
%s\n",
```

Exposure of System Data to Unauthorized Control Sphere\Path 39:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1328
Status	New

The system data read by register_handler in the file ravynos-2/zinject.c at line 558 is potentially exposed by register_handler found in ravynos-2/zinject.c at line 558.

	Source	Destination
File	ravynos-2/zinject.c	ravynos-2/zinject.c
Line	570	568
Object	errno	fprintf

Code Snippet

File Name	ravynos-2/zinject.c
Method	register_handler(const char *pool, int flags, zinject_record_t *record,

```
....
570.                    strerror(errno));
....
568.                (void) fprintf(stderr, "failed to add handler: %s\n",
```

Use of Obsolete Functions

Query Path:
CPP\Cx\CPP Low Visibility\Use of Obsolete Functions Version:0

Categories

OWASP Top 10 2013: A9-Using Components with Known Vulnerabilities
OWASP Top 10 2017: A9-Using Components with Known Vulnerabilities

Description

Use of Obsolete Functions\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1001
Status	New

Method bwi_rf_map_txpower in ravynos-2/bwirf.c, at line 1085, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	1153	1153
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_map_txpower(struct bwi_mac *mac)

```
....
1153.              bcopy(bwi_txpower_map_11b, rf->rf_txpower_map0,
```

Use of Obsolete Functions\Path 2:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1002
Status	New

Method bwi_rf_map_txpower in ravynos-2/bwirf.c, at line 1085, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	1197	1197
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_map_txpower(struct bwi_mac *mac)

```
....
1197.                     bcopy(txpower_map, rf->rf_txpower_map0,
```

Use of Obsolete Functions\Path 3:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1003
Status	New

Method _bwi_rf_lo_update_11g in ravynos-2/bwirf.c, at line 1450, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination

File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	1482	1482
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/bwirf.c
Method _bwi_rf_lo_update_11g(struct bwi_mac *mac, uint16_t orig_rf7a)

```
....
1482.                           bcopy(lo, &lo_save,
sizeof(lo_save));
```

Use of Obsolete Functions\Path 4:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1004
Status	New

Method _bwi_rf_lo_update_11g in ravynos-2/bwirf.c, at line 1450, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	1486	1486
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/bwirf.c
Method _bwi_rf_lo_update_11g(struct bwi_mac *mac, uint16_t orig_rf7a)

```
....
1486.                           bcopy(lo, &lo_save,
sizeof(lo_save));
```

Use of Obsolete Functions\Path 5:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1005
Status	New

Method _bwi_rf_lo_update_11g in ravynos-2/bwirf.c, at line 1450, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	1513	1513

Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/bwirf.c
Method _bwi_rf_lo_update_11g(struct bwi_mac *mac, uint16_t orig_rf7a)

```
....
1513.                    bcopy(lo, &lo_save, sizeof(lo_save));
```

Use of Obsolete Functions\Path 6:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1006
Status	New

Method bwi_rf_lo_measure_11g in ravynos-2/bwirf.c, at line 1547, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	1569	1569
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_lo_measure_11g(struct bwi_mac *mac, const struct bwi_rf_lo *src_lo,

```
....
1569.      bcopy(src_lo, &lo_min, sizeof(lo_min));
```

Use of Obsolete Functions\Path 7:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1007
Status	New

Method bwi_rf_lo_measure_11g in ravynos-2/bwirf.c, at line 1547, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	1600	1600
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/bwirf.c

Method bwi_rf_lo_measure_11g(struct bwi_mac *mac, const struct bwi_rf_lo *src_lo,

```
....
1600.             bcopy(&lo_min, &lo_base, sizeof(lo_base));
```

Use of Obsolete Functions\Path 8:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1008
Status	New

Method bwi_rf_lo_measure_11g in ravynos-2/bwirf.c, at line 1547, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	1618	1618
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_lo_measure_11g(struct bwi_mac *mac, const struct bwi_rf_lo *src_lo,

```
....
1618.                             bcopy(&lo, &lo_min, sizeof(lo_min));
```

Use of Obsolete Functions\Path 9:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1009
Status	New

Method bwi_rf_lo_measure_11g in ravynos-2/bwirf.c, at line 1547, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	1630	1630
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_lo_measure_11g(struct bwi_mac *mac, const struct bwi_rf_lo *src_lo,

```
....
1630.         bcopy(&lo_min, dst_lo, sizeof(*dst_lo));
```

Use of Obsolete Functions\Path 10:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1010
Status	New

Method bwi_rf_clear_state in ravynos-2/bwirf.c, at line 2247, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	2265	2265
Object	bcopy	bcopy

Code Snippet

File Name	ravynos-2/bwirf.c
Method	bwi_rf_clear_state(struct bwi_rf *rf)

```
....
2265.        bcopy(rf->rf_txpower_map0, rf->rf_txpower_map,
```

Use of Obsolete Functions\Path 11:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1011
Status	New

Method ip6_output in ravynos-2/ip6_output.c, at line 409, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	1088	1088
Object	bcopy	bcopy

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	ip6_output(struct mbuf *m0, struct ip6_pktopts *opt,

```
....
1088.              bcopy((fwd_tag+1), &dst_sa, sizeof(struct
sockaddr_in6));
```

Use of Obsolete Functions\Path 12:

Severity	Low
Result State	To Verify

Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1012
Status	New

Method ip6_copyexthdr in ravynos-2/ip6_output.c, at line 1297, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	1312	1312
Object	bcopy	bcopy

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	ip6_copyexthdr(struct mbuf **mp, caddr_t hdr, int hlen)

```
....
1312.           bcopy(hdr, mtod(m, caddr_t), hlen);
```

Use of Obsolete Functions\Path 13:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1013
Status	New

Method ip6_insert_jumboopt in ravynos-2/ip6_output.c, at line 1322, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	1373	1373
Object	bcopy	bcopy

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	ip6_insert_jumboopt(struct ip6_exthdrs *exthdrs, u_int32_t plen)

```
....
1373.                   bcopy(mtod(mopt, caddr_t), mtod(n, caddr_t),
```

Use of Obsolete Functions\Path 14:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1014
Status	New

Method ip6_insert_jumboopt in ravynos-2/ip6_output.c, at line 1322, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	1397	1397
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/ip6_output.c
Method ip6_insert_jumboopt(struct ip6_exthdrs *exthdrs, u_int32_t plen)

```
....
1397.		bcopy(&v, &optbuf[4], sizeof(u_int32_t));
```

Use of Obsolete Functions\Path 15:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1015
Status	New

Method ip6_ctloutput in ravynos-2/ip6_output.c, at line 1600, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2305	2305
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/ip6_output.c
Method ip6_ctloutput(struct socket *so, struct sockopt *sopt)

```
....
2305.					bcopy(&inp->in6p_faddr, &addr,
sizeof(addr));
```

Use of Obsolete Functions\Path 16:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1016
Status	New

Method ip6_getpcbopt in ravynos-2/ip6_output.c, at line 2580, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination

File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2599	2599
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/ip6_output.c
Method ip6_getpcbopt(struct inpcb *inp, int optname, struct sockopt *sopt)

```
....
2599.                   bcopy(pktopt->ip6po_pktinfo, &null_pktinfo,
```

Use of Obsolete Functions\Path 17:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1017
Status	New

Method ip6_getpcbopt in ravynos-2/ip6_output.c, at line 2580, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2615	2615
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/ip6_output.c
Method ip6_getpcbopt(struct inpcb *inp, int optname, struct sockopt *sopt)

```
....
2615.               GET_PKTOPT_EXT_HDR(ip6po_hbh);
```

Use of Obsolete Functions\Path 18:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1018
Status	New

Method ip6_getpcbopt in ravynos-2/ip6_output.c, at line 2580, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2618	2618
Object	bcopy	bcopy

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	ip6_getpcbopt(struct inpcb *inp, int optname, struct sockopt *sopt)

```
....
2618.            GET_PKTOPT_EXT_HDR(ip6po_rthdr);
```

Use of Obsolete Functions\Path 19:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1019
Status	New

Method ip6_getpcbopt in ravynos-2/ip6_output.c, at line 2580, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2621	2621
Object	bcopy	bcopy

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	ip6_getpcbopt(struct inpcb *inp, int optname, struct sockopt *sopt)

```
....
2621.            GET_PKTOPT_EXT_HDR(ip6po_dest1);
```

Use of Obsolete Functions\Path 20:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1020
Status	New

Method ip6_getpcbopt in ravynos-2/ip6_output.c, at line 2580, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2624	2624
Object	bcopy	bcopy

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	ip6_getpcbopt(struct inpcb *inp, int optname, struct sockopt *sopt)

```
....
2624.               GET_PKTOPT_EXT_HDR(ip6po_dest2);
```

Use of Obsolete Functions\Path 21:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1021
Status	New

Method ip6_getpcbopt in ravynos-2/ip6_output.c, at line 2580, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2627	2627
Object	bcopy	bcopy

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	ip6_getpcbopt(struct inpcb *inp, int optname, struct sockopt *sopt)

```
....
2627.               GET_PKTOPT_SOCKADDR(ip6po_nexthop);
```

Use of Obsolete Functions\Path 22:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1022
Status	New

Method copypktopts in ravynos-2/ip6_output.c, at line 2727, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2751	2751
Object	bcopy	bcopy

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	copypktopts(struct ip6_pktopts *dst, struct ip6_pktopts *src, int canwait)

```
....
2751.               bcopy(src->ip6po_nexthop, dst->ip6po_nexthop,
```

Use of Obsolete Functions\Path 23:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1023
Status	New

Method copypktopts in ravynos-2/ip6_output.c, at line 2727, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2754	2754
Object	bcopy	bcopy

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	copypktopts(struct ip6_pktopts *dst, struct ip6_pktopts *src, int canwait)

```
....
2754.         PKTOPT_EXTHDRCPY(ip6po_hbh);
```

Use of Obsolete Functions\Path 24:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1024
Status	New

Method copypktopts in ravynos-2/ip6_output.c, at line 2727, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2755	2755
Object	bcopy	bcopy

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	copypktopts(struct ip6_pktopts *dst, struct ip6_pktopts *src, int canwait)

```
....
2755.         PKTOPT_EXTHDRCPY(ip6po_dest1);
```

Use of Obsolete Functions\Path 25:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=700

	86&pathid=1025
Status	New

Method copypktopts in ravynos-2/ip6_output.c, at line 2727, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2756	2756
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/ip6_output.c
Method copypktopts(struct ip6_pktopts *dst, struct ip6_pktopts *src, int canwait)

```
....
2756.        PKTOPT_EXTHDRCPY(ip6po_dest2);
```

Use of Obsolete Functions\Path 26:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1026
Status	New

Method copypktopts in ravynos-2/ip6_output.c, at line 2727, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2757	2757
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/ip6_output.c
Method copypktopts(struct ip6_pktopts *dst, struct ip6_pktopts *src, int canwait)

```
....
2757.        PKTOPT_EXTHDRCPY(ip6po_rthdr); /* not copy the cached route
*/
```

Use of Obsolete Functions\Path 27:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1027
Status	New

Method ip6_setpktopt in ravynos-2/ip6_output.c, at line 2870, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	2986	2986
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/ip6_output.c
Method ip6_setpktopt(int optname, u_char *buf, int len, struct ip6_pktopts *opt,

```
....
2986.		bcopy(pktinfo, opt->ip6po_pktinfo, sizeof(*pktinfo));
```

Use of Obsolete Functions\Path 28:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1028
Status	New

Method ip6_setpktopt in ravynos-2/ip6_output.c, at line 2870, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	3072	3072
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/ip6_output.c
Method ip6_setpktopt(int optname, u_char *buf, int len, struct ip6_pktopts *opt,

```
....
3072.		bcopy(buf, opt->ip6po_nexthop, *buf);
```

Use of Obsolete Functions\Path 29:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1029
Status	New

Method ip6_setpktopt in ravynos-2/ip6_output.c, at line 2870, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination

File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	3110	3110
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/ip6_output.c
Method ip6_setpktopt(int optname, u_char *buf, int len, struct ip6_pktopts *opt,

```
....
3110.           bcopy(hbh, opt->ip6po_hbh, hbhlen);
```

Use of Obsolete Functions\Path 30:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1030
Status	New

Method ip6_setpktopt in ravynos-2/ip6_output.c, at line 2870, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	3177	3177
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/ip6_output.c
Method ip6_setpktopt(int optname, u_char *buf, int len, struct ip6_pktopts *opt,

```
....
3177.           bcopy(dest, *newdest, destlen);
```

Use of Obsolete Functions\Path 31:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1031
Status	New

Method ip6_setpktopt in ravynos-2/ip6_output.c, at line 2870, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	3219	3219
Object	bcopy	bcopy

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	ip6_setpktopt(int optname, u_char *buf, int len, struct ip6_pktopts *opt,

```
....
3219.               bcopy(rth, opt->ip6po_rthdr, rthlen);
```

Use of Obsolete Functions\Path 32:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1032
Status	New

Method ip6_splithdr in ravynos-2/ip6_output.c, at line 3315, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/ip6_output.c	ravynos-2/ip6_output.c
Line	3334	3334
Object	bcopy	bcopy

Code Snippet

File Name	ravynos-2/ip6_output.c
Method	ip6_splithdr(struct mbuf *m, struct ip6_exthdrs *exthdrs)

```
....
3334.               bcopy((caddr_t)ip6, mtod(m, caddr_t), sizeof(*ip6));
```

Use of Obsolete Functions\Path 33:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1033
Status	New

Method vga_probe_unit in ravynos-2/vga.c, at line 76, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	88	88
Object	bcopy	bcopy

Code Snippet

File Name	ravynos-2/vga.c
Method	vga_probe_unit(int unit, video_adapter_t *buf, int flags)

```
....
88.    bcopy(adp, buf, sizeof(*buf));
```

Use of Obsolete Functions\Path 34:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1034
Status	New

Method update_adapter_info in ravynos-2/vga.c, at line 804, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	844	844
Object	bcopy	bcopy

Code Snippet

File Name ravynos-2/vga.c

Method update_adapter_info(video_adapter_t *adp, video_info_t *info)

```
....
844.        bcopy(info, &adp->va_info, sizeof(adp->va_info));
```

Use of Obsolete Functions\Path 35:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1035
Status	New

Method vga_set_mode in ravynos-2/vga.c, at line 1531, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/vga.c	ravynos-2/vga.c
Line	1549	1549
Object	bcopy	bcopy

Code Snippet

File Name ravynos-2/vga.c

Method vga_set_mode(video_adapter_t *adp, int mode)

```
....
1549.        bcopy(get_mode_param(mode), params.regs,
sizeof(params.regs));
```

Use of Obsolete Functions\Path 36:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1036
Status	New

Method vnic_dev_discover_res in ravynos-2/vnic_dev.c, at line 36, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

	Source	Destination
File	ravynos-2/vnic_dev.c	ravynos-2/vnic_dev.c
Line	107	107
Object	bcopy	bcopy

Code Snippet
File Name ravynos-2/vnic_dev.c
Method static int vnic_dev_discover_res(struct vnic_dev *vdev,

```
....
107.            bcopy(&softc->mem, &vdev->res[type].bar, sizeof(softc-
>mem));
```

Sizeof Pointer Argument

Query Path:
CPP\Cx\CPP Low Visibility\Sizeof Pointer Argument Version:0

Description

Sizeof Pointer Argument\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1038
Status	New

	Source	Destination
File	ravynos-2/vt_vga.c	ravynos-2/vt_vga.c
Line	542	542
Object	planes	sizeof

Code Snippet
File Name ravynos-2/vt_vga.c
Method vga_bitblt_pixels_block_ncolors(struct vt_device *vd, const uint8_t *masks,

```
....
542.        memset(planes, 0, sizeof(planes));
```

Sizeof Pointer Argument\Path 2:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1039
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	978	978
Object	str_lm	sizeof

Code Snippet
File Name ravynos-2/telnet.c
Method lm_will(unsigned char *cmd, int len)

```
....
978.        if (NETROOM() > sizeof(str_lm)) {
```

Sizeof Pointer Argument\Path 3:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1040
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	978	978
Object	str_lm	sizeof

Code Snippet
File Name ravynos-2/telnet.c
Method lm_will(unsigned char *cmd, int len)

```
....
978.        if (NETROOM() > sizeof(str_lm)) {
```

Sizeof Pointer Argument\Path 4:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1041
Status	New

	Source	Destination

File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	1014	1014
Object	str_lm	sizeof

Code Snippet
File Name ravynos-2/telnet.c
Method lm_do(unsigned char *cmd, int len)

```
....
1014.        if (NETROOM() > sizeof(str_lm)) {
```

Sizeof Pointer Argument\Path 5:

Severity Low
Result State To Verify
Online Results http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1042
Status New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	1014	1014
Object	str_lm	sizeof

Code Snippet
File Name ravynos-2/telnet.c
Method lm_do(unsigned char *cmd, int len)

```
....
1014.        if (NETROOM() > sizeof(str_lm)) {
```

Sizeof Pointer Argument\Path 6:

Severity Low
Result State To Verify
Online Results http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1043
Status New

	Source	Destination
File	ravynos-2/util-print.c	ravynos-2/util-print.c
Line	663	663
Object	bitmasks	sizeof

Code Snippet
File Name ravynos-2/util-print.c
Method mask62plen(const u_char *mask)

```
....
663.                for (bits = 0; bits < (sizeof (bitmasks) / sizeof
(bitmasks[0])); bits++) {
```

Sizeof Pointer Argument\Path 7:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1044
Status	New

	Source	Destination
File	ravynos-2/util-print.c	ravynos-2/util-print.c
Line	663	663
Object	bitmasks	sizeof

Code Snippet
File Name ravynos-2/util-print.c
Method mask62plen(const u_char *mask)

```
....
663.                for (bits = 0; bits < (sizeof (bitmasks) / sizeof
(bitmasks[0])); bits++) {
```

Sizeof Pointer Argument\Path 8:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1045
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	979	979
Object	str_lm	sizeof

Code Snippet
File Name ravynos-2/telnet.c
Method lm_will(unsigned char *cmd, int len)

```
....
979.              ring_supply_data(&netoring, str_lm, sizeof(str_lm));
```

Sizeof Pointer Argument\Path 9:

Severity	Low

Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1046
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	978	979
Object	str_lm	sizeof

Code Snippet

File Name ravynos-2/telnet.c

Method lm_will(unsigned char *cmd, int len)

```
....
978.        if (NETROOM() > sizeof(str_lm)) {
979.            ring_supply_data(&netoring, str_lm, sizeof(str_lm));
```

Sizeof Pointer Argument\Path 10:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1047
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	979	979
Object	str_lm	sizeof

Code Snippet

File Name ravynos-2/telnet.c

Method lm_will(unsigned char *cmd, int len)

```
....
979.            ring_supply_data(&netoring, str_lm, sizeof(str_lm));
```

Sizeof Pointer Argument\Path 11:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1048
Status	New

	Source	Destination

File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	978	979
Object	str_lm	sizeof

Code Snippet
File Name ravynos-2/telnet.c
Method lm_will(unsigned char *cmd, int len)

```
....
978.        if (NETROOM() > sizeof(str_lm)) {
979.            ring_supply_data(&netoring, str_lm, sizeof(str_lm));
```

Sizeof Pointer Argument\Path 12:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1049
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	1015	1015
Object	str_lm	sizeof

Code Snippet
File Name ravynos-2/telnet.c
Method lm_do(unsigned char *cmd, int len)

```
....
1015.           ring_supply_data(&netoring, str_lm, sizeof(str_lm));
```

Sizeof Pointer Argument\Path 13:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1050
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	1014	1015
Object	str_lm	sizeof

Code Snippet
File Name ravynos-2/telnet.c

Method	lm_do(unsigned char *cmd, int len)

```
....
1014.        if (NETROOM() > sizeof(str_lm)) {
1015.            ring_supply_data(&netoring, str_lm, sizeof(str_lm));
```

Sizeof Pointer Argument\Path 14:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1051
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	1015	1015
Object	str_lm	sizeof

Code Snippet

File Name	ravynos-2/telnet.c
Method	lm_do(unsigned char *cmd, int len)

```
....
1015.            ring_supply_data(&netoring, str_lm, sizeof(str_lm));
```

Sizeof Pointer Argument\Path 15:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1052
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	1014	1015
Object	str_lm	sizeof

Code Snippet

File Name	ravynos-2/telnet.c
Method	lm_do(unsigned char *cmd, int len)

```
....
1014.        if (NETROOM() > sizeof(str_lm)) {
1015.            ring_supply_data(&netoring, str_lm, sizeof(str_lm));
```

Sizeof Pointer Argument\Path 16:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1053
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	980	980
Object	str_lm	sizeof

Code Snippet
File Name ravynos-2/telnet.c
Method lm_will(unsigned char *cmd, int len)

```
....
980.            printsub('>', &str_lm[2], sizeof(str_lm)-2);
```

Sizeof Pointer Argument\Path 17:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1054
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	978	980
Object	str_lm	sizeof

Code Snippet
File Name ravynos-2/telnet.c
Method lm_will(unsigned char *cmd, int len)

```
....
978.        if (NETROOM() > sizeof(str_lm)) {
....
980.            printsub('>', &str_lm[2], sizeof(str_lm)-2);
```

Sizeof Pointer Argument\Path 18:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1055
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	980	980
Object	str_lm	sizeof

Code Snippet
File Name ravynos-2/telnet.c
Method lm_will(unsigned char *cmd, int len)

```
....
980.              printsub('>', &str_lm[2], sizeof(str_lm)-2);
```

Sizeof Pointer Argument\Path 19:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1056
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	978	980
Object	str_lm	sizeof

Code Snippet
File Name ravynos-2/telnet.c
Method lm_will(unsigned char *cmd, int len)

```
....
978.          if (NETROOM() > sizeof(str_lm)) {
....
980.              printsub('>', &str_lm[2], sizeof(str_lm)-2);
```

Sizeof Pointer Argument\Path 20:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1057
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	1016	1016
Object	str_lm	sizeof

Code Snippet
File Name ravynos-2/telnet.c
Method lm_do(unsigned char *cmd, int len)

```
....
1016.             printsub('>', &str_lm[2], sizeof(str_lm)-2);
```

Sizeof Pointer Argument\Path 21:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1058
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	1014	1016
Object	str_lm	sizeof

Code Snippet
File Name ravynos-2/telnet.c
Method lm_do(unsigned char *cmd, int len)

```
....
1014.         if (NETROOM() > sizeof(str_lm)) {
....
1016.             printsub('>', &str_lm[2], sizeof(str_lm)-2);
```

Sizeof Pointer Argument\Path 22:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1059
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	1016	1016
Object	str_lm	sizeof

Code Snippet
File Name ravynos-2/telnet.c
Method lm_do(unsigned char *cmd, int len)

```
....
1016.             printsub('>', &str_lm[2], sizeof(str_lm)-2);
```

Sizeof Pointer Argument\Path 23:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1060
Status	New

	Source	Destination
File	ravynos-2/telnet.c	ravynos-2/telnet.c
Line	1014	1016
Object	str_lm	sizeof

Code Snippet
File Name ravynos-2/telnet.c
Method lm_do(unsigned char *cmd, int len)

```
....
1014.       if (NETROOM() > sizeof(str_lm)) {
....
1016.           printsub('>', &str_lm[2], sizeof(str_lm)-2);
```

Unchecked Array Index

Query Path:
CPP\Cx\CPP Low Visibility\Unchecked Array Index Version:1

Categories

NIST SP 800-53: SI-10 Information Input Validation (P1)

Description

Unchecked Array Index\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1345
Status	New

	Source	Destination
File	ravynos-2/bn_gf2m.c	ravynos-2/bn_gf2m.c
Line	373	373
Object	n	n

Code Snippet
File Name ravynos-2/bn_gf2m.c
Method int BN_GF2m_mod_arr(BIGNUM *r, const BIGNUM *a, const int p[])

```
....
373.                z[n] ^= (zz << d0);
```

Unchecked Array Index\Path 2:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1346
Status	New

	Source	Destination
File	ravynos-2/bwirf.c	ravynos-2/bwirf.c
Line	1025	1025
Object	idx	idx

Code Snippet
File Name ravynos-2/bwirf.c
Method bwi_rf_calibval(struct bwi_mac *mac)

```
....
1025.        calib = rf_calibvals[idx] << 1;
```

Unchecked Array Index\Path 3:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1347
Status	New

	Source	Destination
File	ravynos-2/http-server.c	ravynos-2/http-server.c
Line	237	237
Object	dirlen	dirlen

Code Snippet
File Name ravynos-2/http-server.c
Method send_document_cb(struct evhttp_request *req, void *arg)

```
....
237.                pattern[dirlen] = '\\';
```

Unchecked Array Index\Path 4:

Severity	Low
Result State	To Verify
Online Results	http://WIN-

	BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1348
Status	New

	Source	Destination
File	ravynos-2/qmi.c	ravynos-2/qmi.c
Line	341	341
Object	j	j

Code Snippet
File Name ravynos-2/qmi.c
Method static int ath10k_qmi_send_cal_report_req(struct ath10k_qmi *qmi)

```
....
341.                     req.meta_data[j] = qmi->cal_data[i].cal_id;
```

Unchecked Array Index\Path 5:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1349
Status	New

	Source	Destination
File	ravynos-2/respip.c	ravynos-2/respip.c
Line	729	729
Object	rrset_id	rrset_id

Code Snippet
File Name ravynos-2/respip.c
Method respip_data_answer(enum respip_action action,

```
....
729.         new_rep->rrsets[rrset_id] = rp;
```

Unchecked Array Index\Path 6:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1350
Status	New

	Source	Destination
File	ravynos-2/respip.c	ravynos-2/respip.c
Line	1076	1076

Object	id	id

Code Snippet
File Name ravynos-2/respip.c
Method respip_operate(struct module_qstate* qstate, enum module_ev event, int id,

```
....
1076.                    qstate->minfo[id] = rq;
```

Unchecked Array Index\Path 7:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1351
Status	New

	Source	Destination
File	ravynos-2/respip.c	ravynos-2/respip.c
Line	1079	1079
Object	id	id

Code Snippet
File Name ravynos-2/respip.c
Method respip_operate(struct module_qstate* qstate, enum module_ev event, int id,

```
....
1079.                    qstate->ext_state[id] = module_finished;
```

Unchecked Array Index\Path 8:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1352
Status	New

	Source	Destination
File	ravynos-2/respip.c	ravynos-2/respip.c
Line	1083	1083
Object	id	id

Code Snippet
File Name ravynos-2/respip.c
Method respip_operate(struct module_qstate* qstate, enum module_ev event, int id,

```
....
1083.                qstate->ext_state[id] = module_wait_module;
```

Unchecked Array Index\Path 9:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1353
Status	New

	Source	Destination
File	ravynos-2/respip.c	ravynos-2/respip.c
Line	1136	1136
Object	id	id

Code Snippet
File Name ravynos-2/respip.c
Method respip_operate(struct module_qstate* qstate, enum module_ev event, int id,

```
....
1136.                qstate->ext_state[id] = next_state;
```

Unchecked Array Index\Path 10:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1354
Status	New

	Source	Destination
File	ravynos-2/respip.c	ravynos-2/respip.c
Line	1138	1138
Object	id	id

Code Snippet
File Name ravynos-2/respip.c
Method respip_operate(struct module_qstate* qstate, enum module_ev event, int id,

```
....
1138.                qstate->ext_state[id] = module_finished;
```

Unchecked Array Index\Path 11:

Severity	Low
Result State	To Verify
Online Results	http://WIN-

	BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1355
Status	New

	Source	Destination
File	ravynos-2/respip.c	ravynos-2/respip.c
Line	1246	1246
Object	id	id

Code Snippet
File Name ravynos-2/respip.c
Method respip_clear(struct module_qstate* qstate, int id)

```
....
1246.        qstate->minfo[id] = NULL;
```

Unchecked Array Index\Path 12:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1356
Status	New

	Source	Destination
File	ravynos-2/rt2860.c	ravynos-2/rt2860.c
Line	843	843
Object	wcid	wcid

Code Snippet
File Name ravynos-2/rt2860.c
Method rt2860_newassoc(struct ieee80211_node *ni, int isnew)

```
....
843.                sc->wcid2ni[wcid] = ni;
```

Unchecked Array Index\Path 13:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1357
Status	New

	Source	Destination
File	ravynos-2/rt2860.c	ravynos-2/rt2860.c
Line	1673	1673

Object	cur	cur

Code Snippet
File Name ravynos-2/rt2860.c
Method rt2860_tx(struct rt2860_softc *sc, struct mbuf *m, struct ieee80211_node *ni)

```
....
1673.          ring->data[ring->cur] = data;
```

Unchecked Array Index\Path 14:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1358
Status	New

	Source	Destination
File	ravynos-2/rt2860.c	ravynos-2/rt2860.c
Line	1916	1916
Object	cur	cur

Code Snippet
File Name ravynos-2/rt2860.c
Method rt2860_tx_raw(struct rt2860_softc *sc, struct mbuf *m,

```
....
1916.          ring->data[ring->cur] = data;
```

Unchecked Array Index\Path 15:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1359
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	863	863
Object	o	o

Code Snippet
File Name ravynos-2/scp.c
Method emit_expansion(const char *pattern, int brace_start, int brace_end,

```
....
863.        cp[o] = '\0';
```

Unchecked Array Index\Path 16:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1360
Status	New

	Source	Destination
File	ravynos-2/screen.c	ravynos-2/screen.c
Line	194	194
Object	VMIN	VMIN

Code Snippet
File Name ravynos-2/screen.c
Method init_screen(void)

```
....
194.        new_settings.c_cc[VMIN] = 1;
```

Unchecked Array Index\Path 17:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1361
Status	New

	Source	Destination
File	ravynos-2/screen.c	ravynos-2/screen.c
Line	195	195
Object	VTIME	VTIME

Code Snippet
File Name ravynos-2/screen.c
Method init_screen(void)

```
....
195.        new_settings.c_cc[VTIME] = 0;
```

Unchecked Array Index\Path 18:

Severity	Low
Result State	To Verify
Online Results	http://WIN-

	BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1362
Status	New

	Source	Destination
File	ravynos-2/t_vnops.c	ravynos-2/t_vnops.c
Line	654	654
Object	len	len

Code Snippet
File Name ravynos-2/t_vnops.c
Method symlink_len(const atf_tc_t *tc, const char *mp, size_t len)

```
....
654.        buf[len] = '\0';
```

TOCTOU

Query Path:
CPP\Cx\CPP Low Visibility\TOCTOU Version:1

Description

TOCTOU\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1329
Status	New

The main method in ravynos-2/cut.c file utilizes fopen that is accessed by other concurrent functionality in a way that is not thread-safe, which may result in a Race Condition over this resource.

	Source	Destination
File	ravynos-2/cut.c	ravynos-2/cut.c
Line	149	149
Object	fopen	fopen

Code Snippet
File Name ravynos-2/cut.c
Method main(int argc, char *argv[])

```
....
149.                        if (!(fp = fopen(*argv, "r"))) {
```

TOCTOU\Path 2:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1330

Status	New

The read_excludes_file method in ravynos-2/diff.c file utilizes fopen that is accessed by other concurrent functionality in a way that is not thread-safe, which may result in a Race Condition over this resource.

	Source	Destination
File	ravynos-2/diff.c	ravynos-2/diff.c
Line	497	497
Object	fopen	fopen

Code Snippet
File Name ravynos-2/diff.c
Method read_excludes_file(char *file)

```
....
497.         else if ((fp = fopen(file, "r")) == NULL)
```

TOCTOU\Path 3:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1331
Status	New

The get_spl_hostid method in ravynos-2/gethostid.c file utilizes fopen that is accessed by other concurrent functionality in a way that is not thread-safe, which may result in a Race Condition over this resource.

	Source	Destination
File	ravynos-2/gethostid.c	ravynos-2/gethostid.c
Line	46	46
Object	fopen	fopen

Code Snippet
File Name ravynos-2/gethostid.c
Method get_spl_hostid(void)

```
....
46.    f = fopen("/proc/sys/kernel/spl/hostid", "re");
```

TOCTOU\Path 4:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1332
Status	New

The main method in ravynos-2/maketab.c file utilizes fopen that is accessed by other concurrent functionality in a way that is not thread-safe, which may result in a Race Condition over this resource.

	Source	Destination
File	ravynos-2/maketab.c	ravynos-2/maketab.c
Line	132	132
Object	fopen	fopen

Code Snippet
File Name ravynos-2/maketab.c
Method int main(int argc, char *argv[])

```
....
132.        if ((fp = fopen(argv[1], "r")) == NULL) {
```

TOCTOU\Path 5:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1333
Status	New

The do_motd method in ravynos-2/session.c file utilizes fopen that is accessed by other concurrent functionality in a way that is not thread-safe, which may result in a Race Condition over this resource.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	797	797
Object	fopen	fopen

Code Snippet
File Name ravynos-2/session.c
Method do_motd(void)

```
....
797.            f = fopen(login_getcapstr(lc, "welcome", "/etc/motd",
```

TOCTOU\Path 6:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1334
Status	New

The read_environment_file method in ravynos-2/session.c file utilizes fopen that is accessed by other concurrent functionality in a way that is not thread-safe, which may result in a Race Condition over this resource.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	852	852
Object	fopen	fopen

Code Snippet
File Name ravynos-2/session.c
Method read_environment_file(char ***env, u_int *envsize,

```
....
852.         f = fopen(filename, "r");
```

TOCTOU\Path 7:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1335
Status	New

The do_nologin method in ravynos-2/session.c file utilizes fopen that is accessed by other concurrent functionality in a way that is not thread-safe, which may result in a Race Condition over this resource.

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1312	1312
Object	fopen	fopen

Code Snippet
File Name ravynos-2/session.c
Method do_nologin(struct passwd *pw)

```
....
1312.        if ((f = fopen(nl, "r")) != NULL) {
```

TOCTOU\Path 8:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1336
Status	New

The open_log method in ravynos-2/daemon.c file utilizes open that is accessed by other concurrent functionality in a way that is not thread-safe, which may result in a Race Condition over this resource.

	Source	Destination
File	ravynos-2/daemon.c	ravynos-2/daemon.c

Line	673	673
Object	open	open

Code Snippet
File Name ravynos-2/daemon.c
Method open_log(const char *outfn)

```
....
673.        return open(outfn, O_CREAT | O_WRONLY | O_APPEND |
O_CLOEXEC, 0600);
```

TOCTOU\Path 9:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1337
Status	New

The get_system_hostid method in ravynos-2/gethostid.c file utilizes open that is accessed by other concurrent functionality in a way that is not thread-safe, which may result in a Race Condition over this resource.

	Source	Destination
File	ravynos-2/gethostid.c	ravynos-2/gethostid.c
Line	71	71
Object	open	open

Code Snippet
File Name ravynos-2/gethostid.c
Method get_system_hostid(void)

```
....
71.         int fd = open("/etc/hostid", O_RDONLY | O_CLOEXEC);
```

TOCTOU\Path 10:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1338
Status	New

The main method in ravynos-2/ipnat.c file utilizes open that is accessed by other concurrent functionality in a way that is not thread-safe, which may result in a Race Condition over this resource.

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	182	182

Object	open	open

Code Snippet
File Name ravynos-2/ipnat.c
Method main(int argc, char *argv[])

```
....
182.            if (((fd = open(IPNAT_NAME, mode)) == -1) &&
```

TOCTOU\Path 11:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1339
Status	New

The main method in ravynos-2/ipnat.c file utilizes open that is accessed by other concurrent functionality in a way that is not thread-safe, which may result in a Race Condition over this resource.

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	183	183
Object	open	open

Code Snippet
File Name ravynos-2/ipnat.c
Method main(int argc, char *argv[])

```
....
183.                ((fd = open(IPNAT_NAME, O_RDONLY)) == -1)) {
```

TOCTOU\Path 12:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1340
Status	New

The source method in ravynos-2/scp.c file utilizes open that is accessed by other concurrent functionality in a way that is not thread-safe, which may result in a Race Condition over this resource.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1395	1395
Object	open	open

Code Snippet
File Name ravynos-2/scp.c
Method source(int argc, char **argv)

```
....
1395.                if ((fd = open(name, O_RDONLY|O_NONBLOCK)) == -1)
```

TOCTOU\Path 13:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1341
Status	New

The sink method in ravynos-2/scp.c file utilizes open that is accessed by other concurrent functionality in a way that is not thread-safe, which may result in a Race Condition over this resource.

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1856	1856
Object	open	open

Code Snippet
File Name ravynos-2/scp.c
Method sink(int argc, char **argv, const char *src)

```
....
1856.                if ((ofd = open(np, O_WRONLY|O_CREAT, mode)) == -1) {
```

TOCTOU\Path 14:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1342
Status	New

The bdg_ctl method in ravynos-2/valectl.c file utilizes open that is accessed by other concurrent functionality in a way that is not thread-safe, which may result in a Race Condition over this resource.

	Source	Destination
File	ravynos-2/valectl.c	ravynos-2/valectl.c
Line	218	218
Object	open	open

Code Snippet
File Name ravynos-2/valectl.c
Method bdg_ctl(struct args *a)

```
....
218.        fd = open("/dev/netmap", O_RDWR);
```

TOCTOU\Path 15:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1343
Status	New

The main method in ravynos-2/zinject.c file utilizes open that is accessed by other concurrent functionality in a way that is not thread-safe, which may result in a Race Condition over this resource.

	Source	Destination
File	ravynos-2/zinject.c	ravynos-2/zinject.c
Line	771	771
Object	open	open

Code Snippet
File Name ravynos-2/zinject.c
Method main(int argc, char **argv)

```
....
771.        if ((zfs_fd = open(ZFS_DEV, O_RDWR)) < 0) {
```

Incorrect Permission Assignment For Critical Resources

Query Path:
CPP\Cx\CPP Low Visibility\Incorrect Permission Assignment For Critical Resources Version:1

Categories

FISMA 2014: Access Control
NIST SP 800-53: AC-3 Access Enforcement (P1)
OWASP Top 10 2017: A2-Broken Authentication

Description

Incorrect Permission Assignment For Critical Resources\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1278
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1836	1836
Object	chmod	chmod

Code Snippet
File Name ravynos-2/scp.c
Method sink(int argc, char **argv, const char *src)

```
....
1836.                          (void) chmod(np, mode);
```

Incorrect Permission Assignment For Critical Resources\Path 2:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1279
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1850	1850
Object	chmod	chmod

Code Snippet
File Name ravynos-2/scp.c
Method sink(int argc, char **argv, const char *src)

```
....
1850.                      (void) chmod(vect[0], mode);
```

Incorrect Permission Assignment For Critical Resources\Path 3:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1280
Status	New

	Source	Destination
File	ravynos-2/cut.c	ravynos-2/cut.c
Line	149	149
Object	fp	fp

Code Snippet
File Name ravynos-2/cut.c
Method main(int argc, char *argv[])

```
....
149.                       if (!(fp = fopen(*argv, "r"))) {
```

Incorrect Permission Assignment For Critical Resources\Path 4:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1281
Status	New

	Source	Destination
File	ravynos-2/diff.c	ravynos-2/diff.c
Line	497	497
Object	fp	fp

Code Snippet
File Name ravynos-2/diff.c
Method read_excludes_file(char *file)

```
....
497.            else if ((fp = fopen(file, "r")) == NULL)
```

Incorrect Permission Assignment For Critical Resources\Path 5:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1282
Status	New

	Source	Destination
File	ravynos-2/gethostid.c	ravynos-2/gethostid.c
Line	46	46
Object	f	f

Code Snippet
File Name ravynos-2/gethostid.c
Method get_spl_hostid(void)

```
....
46.    f = fopen("/proc/sys/kernel/spl/hostid", "re");
```

Incorrect Permission Assignment For Critical Resources\Path 6:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1283
Status	New

	Source	Destination
File	ravynos-2/maketab.c	ravynos-2/maketab.c
Line	132	132
Object	fp	fp

Code Snippet

File Name	ravynos-2/maketab.c
Method	int main(int argc, char *argv[])

```
....
132.        if ((fp = fopen(argv[1], "r")) == NULL) {
```

Incorrect Permission Assignment For Critical Resources\Path 7:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1284
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	797	797
Object	f	f

Code Snippet

File Name	ravynos-2/session.c
Method	do_motd(void)

```
....
797.            f = fopen(login_getcapstr(lc, "welcome", "/etc/motd",
```

Incorrect Permission Assignment For Critical Resources\Path 8:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1285
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	852	852
Object	f	f

Code Snippet

File Name	ravynos-2/session.c
Method	read_environment_file(char ***env, u_int *envsize,

```
....
852.          f = fopen(filename, "r");
```

Incorrect Permission Assignment For Critical Resources\Path 9:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1286
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	1312	1312
Object	f	f

Code Snippet

File Name	ravynos-2/session.c
Method	do_nologin(struct passwd *pw)

```
....
1312.         if ((f = fopen(nl, "r")) != NULL) {
```

Incorrect Permission Assignment For Critical Resources\Path 10:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1287
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1596	1596
Object	mkdir	mkdir

Code Snippet

File Name	ravynos-2/scp.c
Method	sink_sftp(int argc, char *dst, const char *src, struct sftp_conn *conn)

```
....
1596.                 if (mkdir(dst, 0777) != 0) {
```

Incorrect Permission Assignment For Critical Resources\Path 11:

Severity	Low

Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1288
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	1840	1840
Object	mkdir	mkdir

Code Snippet
File Name ravynos-2/scp.c
Method sink(int argc, char **argv, const char *src)

```
....
1840.                              if (mkdir(np, mode | S_IRWXU) == -1)
```

Incorrect Permission Assignment For Critical Resources\Path 12:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1289
Status	New

	Source	Destination
File	ravynos-2/templates_test.cpp	ravynos-2/templates_test.cpp
Line	941	941
Object	mkdir	mkdir

Code Snippet
File Name ravynos-2/templates_test.cpp
Method ATF_TEST_CASE_BODY(instantiate__files__output_error)

```
....
941.      fs::mkdir(fs::path("dir"), 0444);
```

Inconsistent Implementations

Query Path:
CPP\Cx\CPP Low Visibility\Inconsistent Implementations Version:0

Description

Inconsistent Implementations\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=696
Status	New

	Source	Destination
File	ravynos-2/cut.c	ravynos-2/cut.c
Line	91	91
Object	getopt	getopt

Code Snippet

File Name	ravynos-2/cut.c
Method	main(int argc, char *argv[])

```
....
91.    while ((ch = getopt(argc, argv, "b:c:d:f:snw")) != -1)
```

Inconsistent Implementations\Path 2:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=697
Status	New

	Source	Destination
File	ravynos-2/ipnat.c	ravynos-2/ipnat.c
Line	110	110
Object	getopt	getopt

Code Snippet

File Name	ravynos-2/ipnat.c
Method	main(int argc, char *argv[])

```
....
110.        while ((c = getopt(argc, argv, "CdFf:hlm:M:N:nO:prRsv")) !=
-1)
```

Inconsistent Implementations\Path 3:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=698
Status	New

	Source	Destination
File	ravynos-2/scp.c	ravynos-2/scp.c
Line	508	508
Object	getopt	getopt

Code Snippet
File Name ravynos-2/scp.c
Method main(int argc, char **argv)

```
....
508.        while ((ch = getopt(argc, argv,
```

Inconsistent Implementations\Path 4:

Severity Low
Result State To Verify
Online Results http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=699
Status New

	Source	Destination
File	ravynos-2/valectl.c	ravynos-2/valectl.c
Line	375	375
Object	getopt	getopt

Code Snippet
File Name ravynos-2/valectl.c
Method main(int argc, char *argv[])

```
....
375.        while ((ch = getopt(argc, argv, "d:a:h:g:l:n:r:C:p:P:m:v"))
!= -1) {
```

Inconsistent Implementations\Path 5:

Severity Low
Result State To Verify
Online Results http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=700
Status New

	Source	Destination
File	ravynos-2/zinject.c	ravynos-2/zinject.c
Line	792	792
Object	getopt	getopt

Code Snippet
File Name ravynos-2/zinject.c
Method main(int argc, char **argv)

```
....
792.        while ((c = getopt(argc, argv,
```

Inconsistent Implementations\Path 6:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=701
Status	New

	Source	Destination
File	ravynos-2/daemon.c	ravynos-2/daemon.c
Line	194	194
Object	getopt_long	getopt_long

Code Snippet
File Name ravynos-2/daemon.c
Method main(int argc, char *argv[])

```
....
194.        while ((ch = getopt_long(argc, argv, shortopts, longopts,
NULL)) != -1) {
```

Inconsistent Implementations\Path 7:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=702
Status	New

	Source	Destination
File	ravynos-2/diff.c	ravynos-2/diff.c
Line	146	146
Object	getopt_long	getopt_long

Code Snippet
File Name ravynos-2/diff.c
Method main(int argc, char **argv)

```
....
146.        while ((ch = getopt_long(argc, argv, OPTIONS, longopts,
NULL)) != -1) {
```

Potential Off by One Error in Loops

Query Path:
CPP\Cx\CPP Heuristic\Potential Off by One Error in Loops Version:1

Categories

PCI DSS v3.2: PCI DSS (3.2) - 6.5.1 - Injection flaws - particularly SQL injection
NIST SP 800-53: SI-16 Memory Protection (P1)

OWASP Top 10 2017: A1-Injection

Description

Potential Off by One Error in Loops\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=837
Status	New

The buffer allocated by <= in ravynos-2/ext2_extents.c at line 575 does not correctly account for the actual size of the value, resulting in an incorrect allocation that is off by one.

	Source	Destination
File	ravynos-2/ext2_extents.c	ravynos-2/ext2_extents.c
Line	583	583
Object	<=	<=

Code Snippet

File Name	ravynos-2/ext2_extents.c
Method	ext4_ext_drop_refs(struct ext4_extent_path *path)

```
....
583.         for (i = 0; i <= depth; i++, path++)
```

Potential Off by One Error in Loops\Path 2:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=838
Status	New

The buffer allocated by <= in ravynos-2/init.c at line 446 does not correctly account for the actual size of the value, resulting in an incorrect allocation that is off by one.

	Source	Destination
File	ravynos-2/init.c	ravynos-2/init.c
Line	497	497
Object	<=	<=

Code Snippet

File Name	ravynos-2/init.c
Method	int mt7615_register_ext_phy(struct mt7615_dev *dev)

```
....
497.         for (i = 0; i <= MT_TXQ_PSD ; i++)
```

Potential Off by One Error in Loops\Path 3:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=839
Status	New

The buffer allocated by <= in ravynos-2/obj_dat.c at line 174 does not correctly account for the actual size of the value, resulting in an incorrect allocation that is off by one.

	Source	Destination
File	ravynos-2/obj_dat.c	ravynos-2/obj_dat.c
Line	197	197
Object	<=	<=

Code Snippet
File Name ravynos-2/obj_dat.c
Method int OBJ_add_object(const ASN1_OBJECT *obj)

```
....
197.        for (i = ADDED_DATA; i <= ADDED_NID; i++) {
```

Potential Off by One Error in Loops\Path 4:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=840
Status	New

The buffer allocated by <= in ravynos-2/obj_dat.c at line 174 does not correctly account for the actual size of the value, resulting in an incorrect allocation that is off by one.

	Source	Destination
File	ravynos-2/obj_dat.c	ravynos-2/obj_dat.c
Line	214	214
Object	<=	<=

Code Snippet
File Name ravynos-2/obj_dat.c
Method int OBJ_add_object(const ASN1_OBJECT *obj)

```
....
214.        for (i = ADDED_DATA; i <= ADDED_NID; i++)
```

Potential Off by One Error in Loops\Path 5:

Severity	Low
Result State	To Verify

Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=841
Status	New

The buffer allocated by <= in ravynos-2/sh.glob.c at line 150 does not correctly account for the actual size of the value, resulting in an incorrect allocation that is off by one.

	Source	Destination
File	ravynos-2/sh.glob.c	ravynos-2/sh.glob.c
Line	185	185
Object	<=	<=

Code Snippet
File Name ravynos-2/sh.glob.c
Method globbrace(const Char *s, Char ***bl)

```
....
185.        for (i = 0, pl = pm = p; pm <= pe; pm++)
```

Arithmenic Operation On Boolean

Query Path:
CPP\Cx\CPP Low Visibility\Arithmenic Operation On Boolean Version:1

Categories

FISMA 2014: Audit And Accountability
NIST SP 800-53: SC-5 Denial of Service Protection (P1)

Description

Arithmenic Operation On Boolean\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=997
Status	New

	Source	Destination
File	ravynos-2/X86_64.cpp	ravynos-2/X86_64.cpp
Line	696	696
Object	>	>

Code Snippet
File Name ravynos-2/X86_64.cpp
Method int64_t X86_64::getImplicitAddend(const uint8_t *buf, RelType type) const {

```
....
696.        return SignExtend64<8>(*buf);
```

Arithmenic Operation On Boolean\Path 2:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=998
Status	New

	Source	Destination
File	ravynos-2/X86_64.cpp	ravynos-2/X86_64.cpp
Line	699	699
Object	>	>

Code Snippet
File Name ravynos-2/X86_64.cpp
Method int64_t X86_64::getImplicitAddend(const uint8_t *buf, RelType type) const {

```
....
699.        return SignExtend64<16>(read16le(buf));
```

Arithmenic Operation On Boolean\Path 3:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=999
Status	New

	Source	Destination
File	ravynos-2/X86_64.cpp	ravynos-2/X86_64.cpp
Line	716	716
Object	>	>

Code Snippet
File Name ravynos-2/X86_64.cpp
Method int64_t X86_64::getImplicitAddend(const uint8_t *buf, RelType type) const {

```
....
716.        return SignExtend64<32>(read32le(buf));
```

Arithmenic Operation On Boolean\Path 4:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1000
Status	New

	Source	Destination
File	ravynos-2/nsutils.c	ravynos-2/nsutils.c
Line	685	685
Object	BinaryExpr	BinaryExpr

Code Snippet
File Name ravynos-2/nsutils.c
Method AcpiNsExternalizeName (

```
....
685.        RequiredLength = PrefixLength + (4 * NumSegments) +
```

Potential Precision Problem

Query Path:
CPP\Cx\CPP Buffer Overflow\Potential Precision Problem Version:0

Categories

NIST SP 800-53: SI-10 Information Input Validation (P1)
OWASP Top 10 2017: A1-Injection

Description

Potential Precision Problem\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=995
Status	New

The size of the buffer used by make_rsid in "%s:%s", at line 656 of ravynos-2/rtsol.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that make_rsid passes to "%s:%s", at line 656 of ravynos-2/rtsol.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/rtsol.c	ravynos-2/rtsol.c
Line	661	661
Object	"%s:%s"	"%s:%s"

Code Snippet
File Name ravynos-2/rtsol.c
Method make_rsid(const char *ifname, const char *origin, struct rainfo *rai)

```
....
661.                sprintf(rsid, "%s:%s", ifname, origin);
```

Potential Precision Problem\Path 2:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=700

	86&pathid=996
Status	New

The size of the buffer used by make_rsid in "%s:%s:[%s]", at line 656 of ravynos-2/rtsol.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that make_rsid passes to "%s:%s:[%s]", at line 656 of ravynos-2/rtsol.c, to overwrite the target buffer.

	Source	Destination
File	ravynos-2/rtsol.c	ravynos-2/rtsol.c
Line	669	669
Object	"%s:%s:[%s]"	"%s:%s:[%s]"

Code Snippet
File Name ravynos-2/rtsol.c
Method make_rsid(const char *ifname, const char *origin, struct rainfo *rai)

```
....
669.            sprintf(rsid, "%s:%s:[%s]", ifname, origin, hbuf);
```

Reliance on DNS Lookups in a Decision

Query Path:
CPP\Cx\CPP Low Visibility\Reliance on DNS Lookups in a Decision Version:0

Categories

FISMA 2014: Identification And Authentication
NIST SP 800-53: SC-23 Session Authenticity (P1)

Description

Reliance on DNS Lookups in a Decision\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=842
Status	New

The make_rsid method performs a reverse DNS lookup with getnameinfo, at line 656 of ravynos-2/rtsol.c. The application then makes a security decision, !=, in ravynos-2/rtsol.c line 656, even though this hostname is not reliable and can be easily spoofed.

	Source	Destination
File	ravynos-2/rtsol.c	ravynos-2/rtsol.c
Line	665	667
Object	getnameinfo	!=

Code Snippet
File Name ravynos-2/rtsol.c
Method make_rsid(const char *ifname, const char *origin, struct rainfo *rai)

```
....
665.            if (getnameinfo((struct sockaddr *)&rai->rai_saddr,
....
667.                  NI_NUMERICHOST) != 0)
```

Insecure Temporary File

Query Path:
CPP\Cx\CPP Low Visibility\Insecure Temporary File Version:0

Categories

NIST SP 800-53: SC-4 Information in Shared Resources (P1)
OWASP Top 10 2017: A3-Sensitive Data Exposure

Description

Insecure Temporary File\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1037
Status	New

	Source	Destination
File	ravynos-2/session.c	ravynos-2/session.c
Line	269	269
Object	mkstemp	mkstemp

Code Snippet
File Name ravynos-2/session.c
Method prepare_auth_info_file(struct passwd *pw, struct sshbuf *info)

```
....
269.        if ((fd = mkstemp(auth_info_file)) == -1) {
```

Information Exposure Through Comments

Query Path:
CPP\Cx\CPP Low Visibility\Information Exposure Through Comments Version:1

Categories

FISMA 2014: Identification And Authentication
NIST SP 800-53: SC-28 Protection of Information at Rest (P1)

Description

Information Exposure Through Comments\Path 1:

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1070096&projectid=70086&pathid=1344
Status	New

	Source	Destination
File	ravynos-2/statem_srvr.c	ravynos-2/statem_srvr.c
Line	1743	1743
Object	cipher-	cipher-

Code Snippet
File Name ravynos-2/statem_srvr.c
Method /* Check what signalling cipher-suite values were received. */

```
....
1743.       /* Check what signalling cipher-suite values were received.
*/
```

Buffer Overflow LongString

Risk

What might happen

Buffer overflow attacks, in their various forms, could allow an attacker to control certain areas of memory. Typically, this is used to overwrite data on the stack necessary for the program to function properly, such as code and memory addresses, though other forms of this attack exist. Exploiting this vulnerability can generally lead to system crashes, infinite loops, or even execution of arbitrary code.

Cause

How does it happen

Buffer Overflows can manifest in numerous different variations. In it's most basic form, the attack controls a buffer, which is then copied to a smaller buffer without size verification. Because the attacker's source buffer is larger than the program's target buffer, the attacker's data overwrites whatever is next on the stack, allowing the attacker to control program structures.

Alternatively, the vulnerability could be the result of improper bounds checking; exposing internal memory addresses outside of their valid scope; allowing the attacker to control the size of the target buffer; or various other forms.

General Recommendations

How to avoid it

- Always perform proper bounds checking before copying buffers or strings.
- Prefer to use safer functions and structures, e.g. safe string classes over `char*`, `strncpy` over `strcpy`, and so on.
- Consistently apply tests for the size of buffers.
- Do not return variable addresses outside the scope of their variables.

Source Code Examples

Off by One Error in Arrays

Risk

What might happen

An off by one error may result in overwriting or over-reading of unintended memory; in most cases, this can result in unexpected behavior and even application crashes. In other cases, where allocation can be controlled by an attacker, a combination of variable assignment and an off by one error can result in execution of malicious code.

Cause

How does it happen

Often when designating variables to memory, a calculation error may occur when determining size or length that is off by one.

For example in loops, when allocating an array of size 2, its cells are counted as 0,1 - therefore, if a For loop iterator on the array is incorrectly set with the start condition i=0 and the continuation condition i<=2, three cells will be accessed instead of 2, and an attempt will be made to write or read cell [2], which was not originally allocated, resulting in potential corruption of memory outside the bounds of the originally assigned array.

Another example occurs when a null-byte terminated string, in the form of a character array, is copied without its terminating null-byte. Without the null-byte, the string representation is unterminated, resulting in certain functions to over-read memory as they expect the missing null terminator.

General Recommendations

How to avoid it

- Always ensure that a given iteration boundary is correct:
  - With array iterations, consider that arrays begin with cell 0 and end with cell n-1, for a size n array.
  - With character arrays and null-byte terminated string representations, consider that the null byte is required and should not be overwritten or ignored; ensure functions in use are not vulnerable to off-by-one, specifically for instances where null-bytes are automatically appended after the buffer, instead of in place of its last character.
- Where possible, use safe functions that manage memory and are not prone to off-by-one errors.

Source Code Examples

Buffer Overflow StrcpyStrcat

Risk

What might happen

Buffer overflow attacks, in their various forms, could allow an attacker to control certain areas of memory. Typically, this is used to overwrite data on the stack necessary for the program to function properly, such as code and memory addresses, though other forms of this attack exist. Exploiting this vulnerability can generally lead to system crashes, infinite loops, or even execution of arbitrary code.

Cause

How does it happen

Buffer Overflows can manifest in numerous different variations. In it's most basic form, the attack controls a buffer, which is then copied to a smaller buffer without size verification. Because the attacker's source buffer is larger than the program's target buffer, the attacker's data overwrites whatever is next on the stack, allowing the attacker to control program structures.

Alternatively, the vulnerability could be the result of improper bounds checking; exposing internal memory addresses outside of their valid scope; allowing the attacker to control the size of the target buffer; or various other forms.

General Recommendations

How to avoid it

- Always perform proper bounds checking before copying buffers or strings.
- Prefer to use safer functions and structures, e.g. safe string classes over `char*`, `strncpy` over `strcpy`, and so on.
- Consistently apply tests for the size of buffers.
- Do not return variable addresses outside the scope of their variables.

Source Code Examples

Buffer Overflow OutOfBound

Risk

What might happen

Buffer overflow attacks, in their various forms, could allow an attacker to control certain areas of memory. Typically, this is used to overwrite data on the stack necessary for the program to function properly, such as code and memory addresses, though other forms of this attack exist. Exploiting this vulnerability can generally lead to system crashes, infinite loops, or even execution of arbitrary code.

Cause

How does it happen

Buffer Overflows can manifest in numerous different variations. In it's most basic form, the attack controls a buffer, which is then copied to a smaller buffer without size verification. Because the attacker's source buffer is larger than the program's target buffer, the attacker's data overwrites whatever is next on the stack, allowing the attacker to control program structures.

Alternatively, the vulnerability could be the result of improper bounds checking; exposing internal memory addresses outside of their valid scope; allowing the attacker to control the size of the target buffer; or various other forms.

General Recommendations

How to avoid it

- Always perform proper bounds checking before copying buffers or strings.
- Prefer to use safer functions and structures, e.g. safe string classes over `char*`, `strncpy` over `strcpy`, and so on.
- Consistently apply tests for the size of buffers.
- Do not return variable addresses outside the scope of their variables.

Source Code Examples

CGI Stored XSS

Risk

What might happen

Stored malicious data might retrieve system information and exploit the system through CGI (Common Gateway Interface).

Cause

How does it happen

The CGI specification provides opportunities to read files, acquire shell access, and corrupt file systems on server machines and their attached hosts.

Means of gaining access include: exploiting assumptions of the script, exploiting weaknesses in the server environment, and exploiting weaknesses in other programs and system calls.

The primary weakness in CGI scripts is insufficient input validation.

General Recommendations

How to avoid it

Do not provide unnecessary file permissions.

Validate and encode all DB output.

Source Code Examples

Perl

Bad - Printing out data from BD without encoding

```
#!/usr/bin/perl
use CGI;
use DBI;

my $cgi = CGI->new();

$dbh = DBI->connect('dbi:mysql:perltest','root','password')
  or die "Connection Error: $DBI::errstr\n";
$sql = "select * from samples";
$sth = $dbh->prepare($sql);
$sth->execute
  or die "SQL Error: $DBI::errstr\n";

my @row = $sth->fetchrow_array;

print $cgi->header();
      $cgi->start_html(),
      $cgi->p("The result from DB is: ", @row),
      $cgi->end_html;
```

Good - Printing out from DB after encoding

```
#!/usr/bin/perl
use CGI;
use DBI;
use HTML::Entities;

my $cgi = CGI->new();

$dbh = DBI->connect('dbi:mysql:perltest','root','password')
  or die "Connection Error: $DBI::errstr\n";
$sql = "select * from samples";
$sth = $dbh->prepare($sql);
$sth->execute
  or die "SQL Error: $DBI::errstr\n";

my @row = $sth->fetchrow_array;

print $cgi->header();
      $cgi->start_html(),
      $cgi->p("The result from DB is: ", HTML::Entities::encode(@row)),
      $cgi->end_html;
```

Divide By Zero

Risk

What might happen

When a program divides a number by zero, an exception will be raised. If this exception is not handled by the application, unexpected results may occur, including crashing the application. This can be considered a DoS (Denial of Service) attack, if an external user has control of the value of the denominator or can cause this error to occur.

Cause

How does it happen

The program receives an unexpected value, and uses it for division without filtering, validation, or verifying that the value is not zero. The application does not explicitly handle this error or prevent division by zero from occuring.

General Recommendations

How to avoid it

- Before dividing by an unknown value, validate the number and explicitly ensure it does not evaluate to zero.
- Validate all untrusted input from all sources, in particular verifying that it is not zero before dividing with it.
- Verify output of methods, calculations, dictionary lookups, and so on, and ensure it is not zero before dividing with the result.
- Ensure divide-by-zero errors are caught and handled appropriately.

Source Code Examples

Java

Divide by Zero

```
public float getAverage(HttpServletRequest req) {
      int total = Integer.parseInt(req.getParameter("total"));
      int count = Integer.parseInt(req.getParameter("count"));

      return total / count;
}
```

Checked Division

```
public float getAverage(HttpServletRequest req) {
      int total = Integer.parseInt(req.getParameter("total"));
      int count = Integer.parseInt(req.getParameter("count"));
```

```
        if (count > 0)
                return total / count;
        else
                return 0;
}
```

Buffer Overflow AddressOfLocalVarReturned

Risk

What might happen

A use after free error will cause code to use an area of memory previously assigned with a specific value, which has since been freed and may have been overwritten by another value. This error will likely cause unexpected behavior, memory corruption and crash errors. In some cases where the freed and used section of memory is used to determine execution flow, and the error can be induced by an attacker, this may result in execution of malicious code.

Cause

How does it happen

Pointers to variables allow code to have an address with a set size to a dynamically allocated variable. Eventually, the pointer's destination may become free - either explicitly in code, such as when programmatically freeing this variable, or implicitly, such as when a local variable is returned - once it is returned, the variable's scope is released. Once freed, this memory will be re-used by the application, overwritten with new data. At this point, dereferencing this pointer will potentially resolve newly written and unexpected data.

General Recommendations

How to avoid it

- Do not return local variables or pointers
- Review code to ensure no flow allows use of a pointer after it has been explicitly freed

Source Code Examples

CPP

Use of Variable after It was Freed

```
free(input);
printf("%s", input);
```

Use of Pointer to Local Variable That Was Freed On Return

```
int* func1()
{
      int i;
      i = 1;
      return &i;
}

void func2()
```

```
{
      int j;
      j = 5;
}

//..
      int * i = func1();
      printf("%d\r\n", *i); // Output could be 1 or Segmentation Fault
      func2();
      printf("%d\r\n", *i); // Output is 5, which is j's value, as func2() overwrote data in
the stack
//..
```

Buffer Overflow boundcpy WrongSizeParam

Risk

What might happen

Buffer overflow attacks, in their various forms, could allow an attacker to control certain areas of memory. Typically, this is used to overwrite data on the stack necessary for the program to function properly, such as code and memory addresses, though other forms of this attack exist. Exploiting this vulnerability can generally lead to system crashes, infinite loops, or even execution of arbitrary code.

Cause

How does it happen

Buffer Overflows can manifest in numerous different variations. In it's most basic form, the attack controls a buffer, which is then copied to a smaller buffer without size verification. Because the attacker's source buffer is larger than the program's target buffer, the attacker's data overwrites whatever is next on the stack, allowing the attacker to control program structures.

Alternatively, the vulnerability could be the result of improper bounds checking; exposing internal memory addresses outside of their valid scope; allowing the attacker to control the size of the target buffer; or various other forms.

General Recommendations

How to avoid it

- Always perform proper bounds checking before copying buffers or strings.
- Prefer to use safer functions and structures, e.g. safe string classes over `char*`, `strncpy` over `strcpy`, and so on.
- Consistently apply tests for the size of buffers.
- Do not return variable addresses outside the scope of their variables.

Source Code Examples

MemoryFree on StackVariable

Risk

What might happen

Undefined Behavior may result with a crash. Crashes may give an attacker valuable information about the system and the program internals. Furthermore, it may leave unprotected files (e.g memory) that may be exploited.

Cause

How does it happen

Calling free() on a variable that was not dynamically allocated (e.g. malloc) will result with an Undefined Behavior.

General Recommendations

How to avoid it

Use free() only on dynamically allocated variables in order to prevent unexpected behavior from the compiler.

Source Code Examples

CPP

Bad - Calling free() on a static variable

```
void clean_up(){
  char temp[256];
  do_something();
  free(tmp);
  return;
}
```

Good - Calling free() only on variables that were dynamically allocated

```
void clean_up(){
  char *buff;
  buff = (char*) malloc(1024);
  free(buff);
  return;
}
```

Wrong Size t Allocation

Risk

What might happen

Incorrect allocation of memory may result in unexpected behavior by either overwriting sections of memory with unexpected values. Under certain conditions where both an incorrect allocation of memory and the values being written can be controlled by an attacker, such an issue may result in execution of malicious code.

Cause

How does it happen

Some memory allocation functions require a size value to be provided as a parameter. The allocated size should be derived from the provided value, by providing the length value of the intended source, multiplied by the size of that length. Failure to perform the correct arithmetic to obtain the exact size of the value will likely result in the source overflowing its destination.

General Recommendations

How to avoid it

- Always perform the correct arithmetic to determine size.
- Specifically for memory allocation, calculate the allocation size from the allocation source:
  - Derive the size value from the length of intended source to determine the amount of units to be processed.
  - Always programmatically consider the size of the each unit and their conversion to memory units - for example, by using sizeof() on the unit's type.
  - Memory allocation should be a multiplication of the amount of units being written, times the size of each unit.

Source Code Examples

CPP

Allocating and Assigning Memory without Sizeof Arithmetic

```
int *ptr;
ptr = (int*)malloc(5);
for (int i = 0; i < 5; i++)
{
      ptr[i] = i * 2 + 1;
}
```

Allocating and Assigning Memory with Sizeof Arithmetic

```
int *ptr;
ptr = (int*)malloc(5 * sizeof(int));
```

```
for (int i = 0; i < 5; i++)
{
      ptr[i] = i * 2 + 1;
}
```

Incorrect Arithmetic of Multi-Byte String Allocation

```
wchar_t * dest;
dest = (wchar_t *)malloc(wcslen(source) + 1); // Would not crash for a short "source"
wcscpy((wchar_t *)dest, source);
wprintf(L"Dest: %s\r\n", dest);
```

Correct Arithmetic of Multi-Byte String Allocation

```
wchar_t * dest;
dest = (wchar_t *)malloc((wcslen(source) + 1) * sizeof(wchar_t));
wcscpy((wchar_t *)dest, source);
wprintf(L"Dest: %s\r\n", dest);
```

Char Overflow

Risk

What might happen

Assigning large data types into smaller data types, without proper checks and explicit casting, will lead to undefined behavior and unintentional effects, such as data corruption (e.g. value wraparound, wherein maximum values become minimum values); system crashes; infinite loops; logic errors, such as bypassing of security mechanisms; or even buffer overflows leading to arbitrary code execution.

Cause

How does it happen

This flaw can occur when implicitly casting numerical data types of a larger size, into a variable with a data type of a smaller size. This forces the program to discard some bits of information from the number. Depending on how the numerical data types are stored in memory, this is often the bits with the highest value, causing substantial corruption of the stored number. Alternatively, the sign bit of a signed integer could be lost, completely reversing the intention of the number.

General Recommendations

How to avoid it

- Avoid casting larger data types to smaller types.
- Prefer promoting the target variable to a large enough data type.
- If downcasting is necessary, always check that values are valid and in range of the target type, before casting

Source Code Examples

CPP

Unsafe Downsize Casting

```
int unsafe_addition(short op1, int op2) {

    // op2 gets forced from int into a short
    short total = op1 + op2;

    return total;
}
```

Safer Use of Proper Data Types

```
int safe_addition(short op1, int op2) {

    // total variable is of type int, the largest type that is needed
    int total = 0;

    // check if total will overflow available integer size
    if (INT_MAX - abs(op2) > op1)
    {
        total = op1 + op2;
    }
    else
    {
        // instead of overflow, saturate (but this is not always a good thing)
        total = INT_MAX
    }

    return total;
}
```

Integer Overflow

Risk

What might happen

Assigning large data types into smaller data types, without proper checks and explicit casting, will lead to undefined behavior and unintentional effects, such as data corruption (e.g. value wraparound, wherein maximum values become minimum values); system crashes; infinite loops; logic errors, such as bypassing of security mechanisms; or even buffer overflows leading to arbitrary code execution.

Cause

How does it happen

This flaw can occur when implicitly casting numerical data types of a larger size, into a variable with a data type of a smaller size. This forces the program to discard some bits of information from the number. Depending on how the numerical data types are stored in memory, this is often the bits with the highest value, causing substantial corruption of the stored number. Alternatively, the sign bit of a signed integer could be lost, completely reversing the intention of the number.

General Recommendations

How to avoid it

- Avoid casting larger data types to smaller types.
- Prefer promoting the target variable to a large enough data type.
- If downcasting is necessary, always check that values are valid and in range of the target type, before casting

Source Code Examples

Dangerous Functions

Risk

What might happen

Use of dangerous functions may expose varying risks associated with each particular function, with potential impact of improper usage of these functions varying significantly. The presence of such functions indicates a flaw in code maintenance policies and adherence to secure coding practices, in a way that has allowed introducing known dangerous code into the application.

Cause

How does it happen

A dangerous function has been identified within the code. Functions are often deemed dangerous to use for numerous reasons, as there are different sets of vulnerabilities associated with usage of such functions. For example, some string copy and concatenation functions are vulnerable to Buffer Overflow, Memory Disclosure, Denial of Service and more. Use of these functions is not recommended.

General Recommendations

How to avoid it

- Deploy a secure and recommended alternative to any functions that were identified as dangerous.
    - If no secure alternative is found, conduct further researching and testing to identify whether current usage successfully sanitizes and verifies values, and thus successfully avoids the use-cases for whom the function is indeed dangerous
- Conduct a periodical review of methods that are in use, to ensure that all external libraries and built-in functions are up-to-date and whose use has not been excluded from best secure coding practices.

Source Code Examples

CPP

Buffer Overflow in gets()

```
int main()
{
        char buf[10];

        printf("Please enter your name: ");
        gets(buf); // veryveryverylongname
        if (buf == ACCEPTED_NAME)
        {
                // Do something
        }
        return 0;
}
```

Safe reading from user

```
int main()
{
       char buf[10];

       printf("Please enter your name: ");
       fgets(buf, sizeof(buf), stdin); //setting the amount of bytes to read
       if (buf == ACCEPTED_NAME)
       {
              //Do something
       }
       return 0;
}
```

Unsafe function for string copy

```
int main(int argc, char* argv[])
{
       char buf[10];
       strcpy(buf, argv[1]); // overflow occurs when len(argv[1]) > 10 bytes

       return 0;
}
```

Safe string copy

```
int main(int argc, char* argv[])
{
       char buf[10];
       strncpy(buf, argv[1], sizeof(buf));
       buf[9]= '\0'; //strncpy doesn't NULL terminates

       return 0;
}
```

Unsafe format string

```
int main(int argc, char* argv[])
{
       printf(argv[1]); // If argv[1] contains a format token, such as %s,%x or %d, will cause
an access violation
       return 0;
}
```

Safe format string

```
int main(int argc, char* argv[])
{
      printf("%s", argv[1]); // Second parameter is not a formattable string

      return 0;
}
```

Double Free

Weakness ID: 415 *(Weakness Variant)* **Status:** Draft

Description

Description Summary

The product calls free() twice on the same memory address, potentially leading to modification of unexpected memory locations.

Extended Description

When a program calls free() twice with the same argument, the program's memory management data structures become corrupted. This corruption can cause the program to crash or, in some circumstances, cause two later calls to malloc() to return the same pointer. If malloc() returns the same value twice and the program later gives the attacker control over the data that is written into this doubly-allocated memory, the program becomes vulnerable to a buffer overflow attack.

Alternate Terms

Double-free

Time of Introduction

- Architecture and Design
- Implementation

Applicable Platforms

Languages

C

C++

Common Consequences

Scope	Effect
Access Control	Doubly freeing memory may result in a write-what-where condition, allowing an attacker to execute arbitrary code.

Likelihood of Exploit

Low to Medium

Demonstrative Examples

Example 1

The following code shows a simple example of a double free vulnerability.

(Bad Code)

Example Language: ***C***

```
char* ptr = (char*)malloc (SIZE);
...
if (abrt) {
free(ptr);
}
...
free(ptr);
```

Double free vulnerabilities have two common (and sometimes overlapping) causes:

- Error conditions and other exceptional circumstances
- Confusion over which part of the program is responsible for freeing the memory

Although some double free vulnerabilities are not much more complicated than the previous example, most are spread out across hundreds of lines of code or even different files. Programmers seem particularly susceptible to freeing global variables more than once.

Example 2

While contrived, this code should be exploitable on Linux distributions which do not ship with heap-chunk check summing turned on.

(Bad Code)

Example Language: **C**

```
#include <stdio.h>
#include <unistd.h>
#define BUFSIZE1 512
#define BUFSIZE2 ((BUFSIZE1/2) - 8)

int main(int argc, char **argv) {
char *buf1R1;
char *buf2R1;
char *buf1R2;
buf1R1 = (char *) malloc(BUFSIZE2);
buf2R1 = (char *) malloc(BUFSIZE2);
free(buf1R1);
free(buf2R1);
buf1R2 = (char *) malloc(BUFSIZE1);
strncpy(buf1R2, argv[1], BUFSIZE1-1);
free(buf2R1);
free(buf1R2);
}
```

Observed Examples

Reference	Description
CVE-2004-0642	Double free resultant from certain error conditions.
CVE-2004-0772	Double free resultant from certain error conditions.
CVE-2005-1689	Double free resultant from certain error conditions.
CVE-2003-0545	Double free from invalid ASN.1 encoding.
CVE-2003-1048	Double free from malformed GIF.
CVE-2005-0891	Double free from malformed GIF.
CVE-2002-0059	Double free from malformed compressed data.

Potential Mitigations

Phase: Architecture and Design

Choose a language that provides automatic memory management.

Phase: Implementation

Ensure that each allocation is freed only once. After freeing a chunk, set the pointer to NULL to ensure the pointer cannot be freed again. In complicated error conditions, be sure that clean-up routines respect the state of allocation properly. If the language is object oriented, ensure that object destructors delete each chunk of memory only once.

Phase: Implementation

Use a static analysis tool to find double free instances.

Relationships

Nature	Type	ID	Name	View(s) this relationship pertains to
ChildOf	Weakness Class	398	Indicator of Poor Code Quality	**Seven Pernicious Kingdoms (primary)700**
ChildOf	Category	399	Resource Management Errors	**Development Concepts (primary)699**
ChildOf	Category	633	Weaknesses that Affect Memory	**Resource-specific Weaknesses (primary)631**
ChildOf	Weakness Base	666	Operation on Resource in Wrong Phase of	**Research Concepts (primary)1000**

			Lifetime	
ChildOf	Weakness Class	675	Duplicate Operations on Resource	Research Concepts1000
ChildOf	Category	742	CERT C Secure Coding Section 08 - Memory Management (MEM)	**Weaknesses Addressed by the CERT C Secure Coding Standard (primary)734**
PeerOf	Weakness Base	123	Write-what-where Condition	Research Concepts1000
PeerOf	Weakness Base	416	Use After Free	Development Concepts699 Research Concepts1000
MemberOf	View	630	Weaknesses Examined by SAMATE	**Weaknesses Examined by SAMATE (primary)630**
PeerOf	Weakness Base	364	Signal Handler Race Condition	Research Concepts1000

Relationship Notes

This is usually resultant from another weakness, such as an unhandled error or race condition between threads. It could also be primary to weaknesses such as buffer overflows.

Affected Resources

- Memory

Taxonomy Mappings

Mapped Taxonomy Name	Node ID	Fit	Mapped Node Name
PLOVER			DFREE - Double-Free Vulnerability
7 Pernicious Kingdoms			Double Free
CLASP			Doubly freeing memory
CERT C Secure Coding	MEM00-C		Allocate and free memory in the same module, at the same level of abstraction
CERT C Secure Coding	MEM01-C		Store a new value in pointers immediately after free()
CERT C Secure Coding	MEM31-C		Free dynamically allocated memory exactly once

White Box Definitions

A weakness where code path has:

1. start statement that relinquishes a dynamically allocated memory resource
2. end statement that relinquishes the dynamically allocated memory resource

Maintenance Notes

It could be argued that Double Free would be most appropriately located as a child of "Use after Free", but "Use" and "Release" are considered to be distinct operations within vulnerability theory, therefore this is more accurately "Release of a Resource after Expiration or Release", which doesn't exist yet.

Content History

Submissions

Submission Date	Submitter	Organization	Source
	PLOVER		Externally Mined

Modifications

Modification Date	Modifier	Organization	Source
2008-07-01	Eric Dalci	Cigital	External
	updated Potential Mitigations, Time of Introduction		
2008-08-01		KDM Analytics	External
	added/updated white box definitions		
2008-09-08	CWE Content Team	MITRE	Internal
	updated Applicable Platforms, Common Consequences, Description, Maintenance Notes, Relationships, Other Notes, Relationship Notes, Taxonomy Mappings		
2008-11-24	CWE Content Team	MITRE	Internal

	updated Relationships, Taxonomy Mappings		
2009-05-27	CWE Content Team	MITRE	Internal
	updated Demonstrative Examples		
2009-10-29	CWE Content Team	MITRE	Internal
	updated Other Notes		

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Path Traversal

Risk

What might happen

An attacker could define any arbitrary file path for the application to use, potentially leading to:

- Stealing sensitive files, such as configuration or system files
- Overwriting files such as program binaries, configuration files, or system files
- Deleting critical files, causing a denial of service (DoS).

Cause

How does it happen

The application uses user input in the file path for accessing files on the application server’s local disk. This enables an attacker to arbitrarily determine the file path.

General Recommendations

How to avoid it

1. Ideally, avoid depending on user input for file selection.
2. Validate all input, regardless of source. Validation should be based on a whitelist: accept only data fitting a specified structure, rather than reject bad patterns. Check for:
    - Data type
    - Size
    - Range
    - Format
    - Expected values
3. Accept user input only for the filename, not for the path and folders.
4. Ensure that file path is fully canonicalized.
5. Explicitly limit the application to using a designated folder that separate from the applications binary folder.
6. Restrict the privileges of the application’s OS user to necessary files and folders. The application should not be able to write to the application binary folder, and should not read anything outside of the application folder and data folder.

Source Code Examples

CSharp

Using unvalidated user input as the file name may enable the user to access arbitrary files on the server local disk

```
public class PathTraversal
{
        private void foo(TextBox textbox1)
    {
                string fileNum = textbox1.Text;
                string path = "c:\files\file" + fileNum;
                FileStream f = new FileStream(path, FileMode.Open);
                byte[] output = new byte[10];
                f.Read(output,0, 10);
        }
}
```

Potentially hazardous characters are removed from the user input before use

```
public class PathTraversalFixed
{
        private void foo(TextBox textbox1)
    {
                string fileNum = textbox1.Text.Replace("\", "").Replace("..", "");
         string path = "c:\files\file" + fileNum;
                FileStream f = new FileStream(path, FileMode.Open);
                byte[] output = new byte[10];
                f.Read(output,0, 10);
        }
}
```

Java

Using unvalidated user input as the file name may enable the user to access arbitrary files on the server local disk

```
public class Absolute_Path_Traversal {
    public static void main(String[] args) {
        Scanner userInputScanner = new Scanner(System.in);
        System.out.print("\nEnter file name: ");
        String name = userInputScanner.nextLine();
        String path = "c:\files\file" + name;
        try {
            BufferedReader reader = new BufferedReader(new FileReader(path));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

Potentially hazardous characters are removed from the user input before use

```
public class Absolute_Path_Traversal_Fixed {
    public static void main(String[] args) {
        Scanner userInputScanner = new Scanner(System.in);
        System.out.print("\nEnter file name: ");
        String name = userInputScanner.nextLine();
        name = name.replace("/", "").replace("..", "");
        String path = "c:\files\file" + name;
        try {
            BufferedReader reader = new BufferedReader(new FileReader(path));
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

Heap Inspection

Risk

What might happen

All variables stored by the application in unencrypted memory can potentially be retrieved by an unauthorized user, with privlieged access to the machine. For example, a privileged attacker could attach a debugger to the running process, or retrieve the process's memory from the swapfile or crash dump file.

Once the attacker finds the user passwords in memory, these can be reused to easily impersonate the user to the system.

Cause

How does it happen

String variables are immutable - in other words, once a string variable is assigned, its value cannot be changed or removed. Thus, these strings may remain around in memory, possibly in multiple locations, for an indefinite period of time until the garbage collector happens to remove it. Sensitive data, such as passwords, will remain exposed in memory as plaintext with no control over their lifetime.

General Recommendations

How to avoid it

Generic Guidance:

- Do not store senstiive data, such as passwords or encryption keys, in memory in plaintext, even for a short period of time.
- Prefer to use specialized classes that store encrypted memory.
- Alternatively, store secrets temporarily in mutable data types, such as byte arrays, and then promptly zeroize the memory locations.

Specific Recommendations - Java:

- Instead of storing passwords in immutable strings, prefer to use an encrypted memory object, such as SealedObject.

Specific Recommendations - .NET:

- Instead of storing passwords in immutable strings, prefer to use an encrypted memory object, such as SecureString or ProtectedData.

Source Code Examples

Java

Plaintext Password in Immutable String

```
class Heap_Inspection
{
  private string password;

  void setPassword()
  {
      password = System.console().readLine("Enter your password: ");
   }
}
```

Password Protected in Memory

```
class Heap_Inspection_Fixed
{
  private SealedObject password;

  void setPassword()
 {
      byte[] sKey = getKeyFromConfig();
      Cipher c = Cipher.getInstance("AES");
      c.init(Cipher.ENCRYPT_MODE, sKey);

      char[] input = System.console().readPassword("Enter your password: ");
      password = new SealedObject(Arrays.asList(input), c);

    //Zero out the possible password, for security.
    Arrays.fill(password, '0');
  }
}
```

CPP

Vulnerable C code

```
/* Vulnerable to heap inspection */

#include <stdio.h>


void somefunc(){
      printf("Yea, I'm just being called for the heap of it..\n");
}

void authfunc(){
        char* password = (char *) malloc(256);
        char ch;
        ssize_t k;
            int i=0;
        while(k = read(0, &ch, 1) > 0)
        {
                if (ch == '\n'){
                        password[i]='\0';
                        break;
                } else{
                        password[i++]=ch;
                        fflush(0);
                }
        }
        printf("Password: %s\n",&password[0]);
}

int main()

{

    printf("Please enter a password:\n");

      authfunc();
      printf("You can now dump memory to find this password!");
      somefunc();
      gets();

}
```

Safe C code

```
/* Pesumably safe heap */

#include <stdio.h>
#include <string.h>

#define STDIN_FILENO 0

void somefunc(){
        printf("Yea, I'm just being called for the heap of it..\n");
}

void authfunc(){
      char* password = (char*) malloc(256);
      int i=0;
      char ch;
      ssize_t k;
      while(k = read(STDIN_FILENO, &ch, 1) > 0)
      {
            if (ch == '\n'){
                  password[i]='\0';
                  break;
            } else{
                  password[i++]=ch;
                  fflush(0);
            }
      }
      i=0;
      memset(password,'\0',256);
}

int main()

{

      printf("Please enter a password:\n");
      authfunc();
      somefunc();
      char ch;
      while(read(STDIN_FILENO, &ch, 1) > 0)
      {
            if (ch == '\n')
                  break;
      }
}
```

Failure to Release Memory Before Removing Last Reference ('Memory Leak')

Weakness ID: 401 *(Weakness Base)* **Status:** Draft

Description

Description Summary

The software does not sufficiently track and release allocated memory after it has been used, which slowly consumes remaining memory.

Extended Description

This is often triggered by improper handling of malformed data or unexpectedly interrupted sessions.

Terminology Notes

"memory leak" has sometimes been used to describe other kinds of issues, e.g. for information leaks in which the contents of memory are inadvertently leaked (CVE-2003-0400 is one such example of this terminology conflict).

Time of Introduction

- Architecture and Design
- Implementation

Applicable Platforms

Languages

C

C++

Modes of Introduction

Memory leaks have two common and sometimes overlapping causes:

- Error conditions and other exceptional circumstances
- Confusion over which part of the program is responsible for freeing the memory

Common Consequences

Scope	Effect
Availability	Most memory leaks result in general software reliability problems, but if an attacker can intentionally trigger a memory leak, the attacker might be able to launch a denial of service attack (by crashing or hanging the program) or take advantage of other unexpected program behavior resulting from a low memory condition.

Likelihood of Exploit

Medium

Demonstrative Examples

Example 1

The following C function leaks a block of allocated memory if the call to read() fails to return the expected number of bytes:

(Bad Code)

Example Language: **C**

```
char* getBlock(int fd) {
char* buf = (char*) malloc(BLOCK_SIZE);
if (!buf) {
return NULL;
}
if (read(fd, buf, BLOCK_SIZE) != BLOCK_SIZE) {

return NULL;
}
return buf;
}
```

Example 2

Here the problem is that every time a connection is made, more memory is allocated. So if one just opened up more and more connections, eventually the machine would run out of memory.

(Bad Code)

Example Language: **C**

```
bar connection(){
foo = malloc(1024);
return foo;
}
endConnection(bar foo) {

free(foo);
}
int main() {

while(1) //thread 1
//On a connection
foo=connection(); //thread 2
//When the connection ends
endConnection(foo)
}
```

Observed Examples

Reference	Description
CVE-2005-3119	Memory leak because function does not free() an element of a data structure.
CVE-2004-0427	Memory leak when counter variable is not decremented.
CVE-2002-0574	Memory leak when counter variable is not decremented.
CVE-2005-3181	Kernel uses wrong function to release a data structure, preventing data from being properly tracked by other code.
CVE-2004-0222	Memory leak via unknown manipulations as part of protocol test suite.
CVE-2001-0136	Memory leak via a series of the same command.

Potential Mitigations

Pre-design: Use a language or compiler that performs automatic bounds checking.

Phase: Architecture and Design

Use an abstraction library to abstract away risky APIs. Not a complete solution.

Pre-design through Build: The Boehm-Demers-Weiser Garbage Collector or valgrind can be used to detect leaks in code. This is not a complete solution as it is not 100% effective.

Relationships

Nature	Type	ID	Name	View(s) this relationship pertains to
ChildOf	Weakness Class	398	Indicator of Poor Code Quality	**Seven Pernicious Kingdoms (primary)700**
ChildOf	Category	399	Resource Management Errors	**Development Concepts (primary)699**
ChildOf	Category	633	Weaknesses that Affect Memory	**Resource-specific Weaknesses (primary)631**
ChildOf	Category	730	OWASP Top Ten 2004 Category A9 - Denial of Service	**Weaknesses in OWASP Top Ten (2004) (primary)711**
ChildOf	Weakness Base	772	Missing Release of Resource after Effective	**Research Concepts (primary)1000**

			Lifetime	
MemberOf	View	630	Weaknesses Examined by SAMATE	**Weaknesses Examined by SAMATE (primary)630**
CanFollow	Weakness Class	390	Detection of Error Condition Without Action	Research Concepts1000

Relationship Notes

This is often a resultant weakness due to improper handling of malformed data or early termination of sessions.

Affected Resources

- Memory

Functional Areas

- Memory management

Taxonomy Mappings

Mapped Taxonomy Name	Node ID	Fit	Mapped Node Name
PLOVER			Memory leak
7 Pernicious Kingdoms			Memory Leak
CLASP			Failure to deallocate data
OWASP Top Ten 2004	A9	CWE More Specific	Denial of Service

White Box Definitions

A weakness where the code path has:

1. start statement that allocates dynamically allocated memory resource

2. end statement that loses identity of the dynamically allocated memory resource creating situation where dynamically allocated memory resource is never relinquished

Where "loses" is defined through the following scenarios:

1. identity of the dynamic allocated memory resource never obtained

2. the statement assigns another value to the data element that stored the identity of the dynamically allocated memory resource and there are no aliases of that data element

3. identity of the dynamic allocated memory resource obtained but never passed on to function for memory resource release

4. the data element that stored the identity of the dynamically allocated resource has reached the end of its scope at the statement and there are no aliases of that data element

References

J. Whittaker and H. Thompson. "How to Break Software Security". Addison Wesley. 2003.

Content History

Submissions			
Submission Date	**Submitter**	**Organization**	**Source**
	PLOVER		Externally Mined

Modifications			
Modification Date	**Modifier**	**Organization**	**Source**
2008-07-01	Eric Dalci	Cigital	External
	updated Time of Introduction		
2008-08-01		KDM Analytics	External
	added/updated white box definitions		
2008-08-15		Veracode	External
	Suggested OWASP Top Ten 2004 mapping		
2008-09-08	CWE Content Team	MITRE	Internal
	updated Applicable Platforms, Common Consequences, Relationships, Other Notes, References, Relationship Notes, Taxonomy Mappings, Terminology Notes		
2008-10-14	CWE Content Team	MITRE	Internal
	updated Description		
2009-03-10	CWE Content Team	MITRE	Internal
	updated Other Notes		
2009-05-27	CWE Content Team	MITRE	Internal
	updated Name		
2009-07-17	KDM Analytics		External
	Improved the White Box Definition		

2009-07-27	CWE Content Team	MITRE	Internal
	updated White Box Definitions		
2009-10-29	CWE Content Team	MITRE	Internal
	updated Modes of Introduction, Other Notes		
2010-02-16	CWE Content Team	MITRE	Internal
	updated Relationships		

Previous Entry Names

Change Date	Previous Entry Name
2008-04-11	Memory Leak
2009-05-27	Failure to Release Memory Before Removing Last Reference (aka 'Memory Leak')

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Use of Uninitialized Pointer

Risk

What might happen

A null pointer dereference is likely to cause a run-time exception, a crash, or other unexpected behavior.

Cause

How does it happen

Variables which are declared without being assigned will implicitly retain a null value until they are assigned. The null value can also be explicitly set to a variable, to ensure clear out its contents. Since null is not really a value, it may not have object variables and methods, and any attempt to access contents of a null object, instead of verifying it is set beforehand, will result in a null pointer dereference exception.

General Recommendations

How to avoid it

- For any variable that is created, ensure all logic flows between declaration and use assign a non-null value to the variable first.
- Enforce null checks on any received variable or object before it is dereferenced, to ensure it does not contain a null assigned to it elsewhere.
- Consider the need to assign null values in order to overwrite initialized variables. Consider reassigning or releasing these variables instead.

Source Code Examples

Use of Uninitialized Variable

Weakness ID: 457 *(Weakness Variant)* **Status:** Draft

Description

Description Summary

The code uses a variable that has not been initialized, leading to unpredictable or unintended results.

Extended Description

In some languages, such as C, an uninitialized variable contains contents of previously-used memory. An attacker can sometimes control or read these contents.

Time of Introduction

- Implementation

Applicable Platforms

Languages

C: *(Sometimes)*

C++: *(Sometimes)*

Perl: *(Often)*

All

Common Consequences

Scope	Effect
Availability Integrity	Initial variables usually contain junk, which can not be trusted for consistency. This can lead to denial of service conditions, or modify control flow in unexpected ways. In some cases, an attacker can "pre-initialize" the variable using previous actions, which might enable code execution. This can cause a race condition if a lock variable check passes when it should not.
Authorization	Strings that are not initialized are especially dangerous, since many functions expect a null at the end -- and only at the end -- of a string.

Likelihood of Exploit

High

Demonstrative Examples

Example 1

The following switch statement is intended to set the values of the variables aN and bN, but in the default case, the programmer has accidentally set the value of aN twice. As a result, bN will have an undefined value.

(Bad Code)

Example Language: **C**

```
switch (ctl) {
case -1:
aN = 0;
bN = 0;
break;
case 0:
aN = i;
bN = -i;
break;
case 1:
aN = i + NEXT_SZ;
bN = i - NEXT_SZ;
break;
default:
```

```
aN = -1;
aN = -1;
break;
}
repaint(aN, bN);
```

Most uninitialized variable issues result in general software reliability problems, but if attackers can intentionally trigger the use of an uninitialized variable, they might be able to launch a denial of service attack by crashing the program. Under the right circumstances, an attacker may be able to control the value of an uninitialized variable by affecting the values on the stack prior to the invocation of the function.

Example 2

Example Languages: **C++ and Java**

```
int foo;
void bar() {
if (foo==0)
/.../
/../
}
```

Observed Examples

Reference	Description
CVE-2008-0081	Uninitialized variable leads to code execution in popular desktop application.
CVE-2007-4682	Crafted input triggers dereference of an uninitialized object pointer.
CVE-2007-3468	Crafted audio file triggers crash when an uninitialized variable is used.
CVE-2007-2728	Uninitialized random seed variable used.

Potential Mitigations

Phase: Implementation

Assign all variables to an initial value.

Phase: Build and Compilation

Most compilers will complain about the use of uninitialized variables if warnings are turned on.

Phase: Requirements

The choice could be made to use a language that is not susceptible to these issues.

Phase: Architecture and Design

Mitigating technologies such as safe string libraries and container abstractions could be introduced.

Other Notes

Before variables are initialized, they generally contain junk data of what was left in the memory that the variable takes up. This data is very rarely useful, and it is generally advised to pre-initialize variables or set them to their first values early. If one forgets -- in the C language -- to initialize, for example a char *, many of the simple string libraries may often return incorrect results as they expect the null termination to be at the end of a string.

Stack variables in C and C++ are not initialized by default. Their initial values are determined by whatever happens to be in their location on the stack at the time the function is invoked. Programs should never use the value of an uninitialized variable. It is not uncommon for programmers to use an uninitialized variable in code that handles errors or other rare and exceptional circumstances. Uninitialized variable warnings can sometimes indicate the presence of a typographic error in the code.

Relationships

Nature	Type	ID	Name	View(s) this relationship pertains to
ChildOf	Weakness Class	398	Indicator of Poor Code Quality	**Seven Pernicious Kingdoms (primary)700**
ChildOf	Weakness Base	456	Missing Initialization	**Development Concepts (primary)699 Research Concepts**

				(primary)1000
MemberOf	View	630	Weaknesses Examined by SAMATE	**Weaknesses Examined by SAMATE (primary)630**

Taxonomy Mappings

Mapped Taxonomy Name	Node ID	Fit	Mapped Node Name
CLASP			Uninitialized variable
7 Pernicious Kingdoms			Uninitialized Variable

White Box Definitions

A weakness where the code path has:

1. start statement that defines variable
2. end statement that accesses the variable
3. the code path does not contain a statement that assigns value to the variable

References

mercy. "Exploiting Uninitialized Data". Jan 2006. < http://www.felinemenace.org/~mercy/papers/UBehavior/UBehavior.zip>.

Microsoft Security Vulnerability Research & Defense. "MS08-014 : The Case of the Uninitialized Stack Variable Vulnerability". 2008-03-11. <http://blogs.technet.com/swi/archive/2008/03/11/the-case-of-the-uninitialized-stack-variable-vulnerability.aspx>.

Content History

Submissions

Submission Date	Submitter	Organization	Source
	CLASP		Externally Mined

Modifications

Modification Date	Modifier	Organization	Source
2008-07-01	Eric Dalci	Cigital	External
	updated Time of Introduction		
2008-08-01		KDM Analytics	External
	added/updated white box definitions		
2008-09-08	CWE Content Team	MITRE	Internal
	updated Applicable Platforms, Common Consequences, Description, Relationships, Observed Example, Other Notes, References, Taxonomy Mappings		
2009-01-12	CWE Content Team	MITRE	Internal
	updated Common Consequences, Demonstrative Examples, Potential Mitigations		
2009-03-10	CWE Content Team	MITRE	Internal
	updated Demonstrative Examples		
2009-05-27	CWE Content Team	MITRE	Internal
	updated Demonstrative Examples		

Previous Entry Names

Change Date	Previous Entry Name
2008-04-11	Uninitialized Variable

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Use of Zero Initialized Pointer

Risk

What might happen

A null pointer dereference is likely to cause a run-time exception, a crash, or other unexpected behavior.

Cause

How does it happen

Variables which are declared without being assigned will implicitly retain a null value until they are assigned. The null value can also be explicitly set to a variable, to ensure clear out its contents. Since null is not really a value, it may not have object variables and methods, and any attempt to access contents of a null object, instead of verifying it is set beforehand, will result in a null pointer dereference exception.

General Recommendations

How to avoid it

- For any variable that is created, ensure all logic flows between declaration and use assign a non-null value to the variable first.
- Enforce null checks on any received variable or object before it is dereferenced, to ensure it does not contain a null assigned to it elsewhere.
- Consider the need to assign null values in order to overwrite initialized variables. Consider reassigning or releasing these variables instead.

Source Code Examples

CPP

Explicit NULL Dereference

```
char * input = NULL;
printf("%s", input);
```

Implicit NULL Dereference

```
char * input;
printf("%s", input);
```

Java

Explicit Null Dereference

```
Object o = null;
out.println(o.getClass());
```

Stored Buffer Overflow boundcpy

Risk

What might happen

Buffer overflow attacks, in their various forms, could allow an attacker to control certain areas of memory. Typically, this is used to overwrite data on the stack necessary for the program to function properly, such as code and memory addresses, though other forms of this attack exist. Exploiting this vulnerability can generally lead to system crashes, infinite loops, or even execution of arbitrary code.

Cause

How does it happen

Buffer Overflows can manifest in numerous different variations. In it's most basic form, the attack controls a buffer, which is then copied to a smaller buffer without size verification. Because the attacker's source buffer is larger than the program's target buffer, the attacker's data overwrites whatever is next on the stack, allowing the attacker to control program structures.

Alternatively, the vulnerability could be the result of improper bounds checking; exposing internal memory addresses outside of their valid scope; allowing the attacker to control the size of the target buffer; or various other forms.

General Recommendations

How to avoid it

- Always perform proper bounds checking before copying buffers or strings.
- Prefer to use safer functions and structures, e.g. safe string classes over `char*`, `strncpy` over `strcpy`, and so on.
- Consistently apply tests for the size of buffers.
- Do not return variable addresses outside the scope of their variables.

Source Code Examples

CPP

Overflowing Buffers

```
const int BUFFER_SIZE = 10;
char buffer[BUFFER_SIZE];

void copyStringToBuffer(char* inputString)
{
    strcpy(buffer, inputString);
}
```

Checked Buffers

```
const int BUFFER_SIZE = 10;
const int MAX_INPUT_SIZE = 256;
char buffer[BUFFER_SIZE];

void copyStringToBuffer(char* inputString)
```

```
{

    if (strnlen(inputString, MAX_INPUT_SIZE) < sizeof(buffer))
    {
        strncpy(buffer, inputString, sizeof(buffer));
    }
}
```

Use of Function with Inconsistent Implementations

Weakness ID: 474 *(Weakness Base)* **Status:** Draft

Description

Description Summary

The code uses a function that has inconsistent implementations across operating systems and versions, which might cause security-relevant portability problems.

Time of Introduction

- Architecture and Design
- Implementation

Applicable Platforms

Languages

C: *(Often)*

PHP: *(Often)*

All

Potential Mitigations

Do not accept inconsistent behavior from the API specifications when the deviant behavior increase the risk level.

Other Notes

The behavior of functions in this category varies by operating system, and at times, even by operating system version. Implementation differences can include:

- Slight differences in the way parameters are interpreted leading to inconsistent results.

- Some implementations of the function carry significant security risks.

- The function might not be defined on all platforms.

Relationships

Nature	Type	ID	Name	View(s) this relationship pertains to
ChildOf	Weakness Class	398	Indicator of Poor Code Quality	**Development Concepts (primary)699** **Seven Pernicious Kingdoms (primary)700** **Research Concepts (primary)1000**
ParentOf	Weakness Variant	589	Call to Non-ubiquitous API	**Research Concepts (primary)1000**

Taxonomy Mappings

Mapped Taxonomy Name	Node ID	Fit	Mapped Node Name
7 Pernicious Kingdoms			Inconsistent Implementations

Content History

Submissions

Submission Date	Submitter	Organization	Source
	7 Pernicious Kingdoms		Externally Mined

Modifications

Modification Date	Modifier	Organization	Source
2008-07-01	Eric Dalci	Cigital	External
	updated Potential Mitigations, Time of Introduction		
2008-09-08	CWE Content Team	MITRE	Internal
	updated Applicable Platforms, Relationships, Other Notes, Taxonomy Mappings		

Previous Entry Names

Change Date	Previous Entry Name
2008-04-11	Inconsistent Implementations

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Unchecked Return Value

Risk

What might happen

A program that does not check function return values could cause the application to enter an undefined state. This could lead to unexpected behavior and unintended consequences, including inconsistent data, system crashes or other error-based exploits.

Cause

How does it happen

The application calls a system function, but does not receive or check the result of this funciton. These functions often return error codes in the result, or share other status codes with it's caller. The application simply ignores this result value, losing this vital information.

General Recommendations

How to avoid it

- Always check the result of any called function that returns a value, and verify the result is an expected value.

- Ensure the calling function responds to all possible return values.

- Expect runtime errors and handle them gracefully. Explicitly define a mechanism for handling unexpected errors.

Source Code Examples

CPP

Unchecked Memory Allocation

```
buff = (char*) malloc(size);
strncpy(buff, source, size);
```

Safer Memory Allocation

```
buff = (char*) malloc(size+1);
if (buff==NULL) exit(1);

strncpy(buff, source, size);
buff[size] = '\0';
```

Use of sizeof() on a Pointer Type

Weakness ID: 467 *(Weakness Variant)* **Status:** Draft

Description

Description Summary

The code calls sizeof() on a malloced pointer type, which always returns the wordsize/8. This can produce an unexpected result if the programmer intended to determine how much memory has been allocated.

Time of Introduction

- Implementation

Applicable Platforms

Languages

C

C++

Common Consequences

Scope	Effect
Integrity	This error can often cause one to allocate a buffer that is much smaller than what is needed, leading to resultant weaknesses such as buffer overflows.

Likelihood of Exploit

High

Demonstrative Examples

Example 1

Care should be taken to ensure sizeof returns the size of the data structure itself, and not the size of the pointer to the data structure.

In this example, sizeof(foo) returns the size of the pointer.

(Bad Code)

Example Languages: **C and C++**

```
double *foo;
...
foo = (double *)malloc(sizeof(foo));
```

In this example, sizeof(*foo) returns the size of the data structure and not the size of the pointer.

(Good Code)

Example Languages: **C and C++**

```
double *foo;
...
foo = (double *)malloc(sizeof(*foo));
```

Example 2

This example defines a fixed username and password. The AuthenticateUser() function is intended to accept a username and a password from an untrusted user, and check to ensure that it matches the username and password. If the username and password match, AuthenticateUser() is intended to indicate that authentication succeeded.

(Bad Code)

```
/* Ignore CWE-259 (hard-coded password) and CWE-309 (use of password system for authentication) for this example. */

char *username = "admin";
char *pass = "password";

int AuthenticateUser(char *inUser, char *inPass) {
```

```
printf("Sizeof username = %d\n", sizeof(username));
printf("Sizeof pass = %d\n", sizeof(pass));

if (strncmp(username, inUser, sizeof(username))) {
printf("Auth failure of username using sizeof\n");
return(AUTH_FAIL);
}
/* Because of CWE-467, the sizeof returns 4 on many platforms and architectures. */
if (! strncmp(pass, inPass, sizeof(pass))) {
printf("Auth success of password using sizeof\n");
return(AUTH_SUCCESS);
}
else {
printf("Auth fail of password using sizeof\n");
return(AUTH_FAIL);
}
}

int main (int argc, char **argv)
{
int authResult;

if (argc < 3) {
ExitError("Usage: Provide a username and password");
}
authResult = AuthenticateUser(argv[1], argv[2]);
if (authResult != AUTH_SUCCESS) {
ExitError("Authentication failed");
}
else {
DoAuthenticatedTask(argv[1]);
}
}
```

In AuthenticateUser(), because sizeof() is applied to a parameter with an array type, the sizeof() call might return 4 on many modern architectures. As a result, the strncmp() call only checks the first four characters of the input password, resulting in a partial comparison (CWE-187), leading to improper authentication (CWE-287).

Because of the partial comparison, any of these passwords would still cause authentication to succeed for the "admin" user:

(Attack)

```
pass5
passABCDEFGH
passWORD
```

Because only 4 characters are checked, this significantly reduces the search space for an attacker, making brute force attacks more feasible.

The same problem also applies to the username, so values such as "adminXYZ" and "administrator" will succeed for the username.

Potential Mitigations

Phase: Implementation

Use expressions such as "sizeof(*pointer)" instead of "sizeof(pointer)", unless you intend to run sizeof() on a pointer type to gain some platform independence or if you are allocating a variable on the stack.

Other Notes

The use of sizeof() on a pointer can sometimes generate useful information. An obvious case is to find out the wordsize on a platform. More often than not, the appearance of sizeof(pointer) indicates a bug.

Weakness Ordinalities

Ordinality	Description
Primary	*(where the weakness exists independent of other weaknesses)*

Relationships

Nature	Type	ID	Name	View(s) this relationship pertains to
ChildOf	Category	465	Pointer Issues	**Development Concepts (primary)699**
ChildOf	Weakness Class	682	Incorrect Calculation	**Research Concepts (primary)1000**
ChildOf	Category	737	CERT C Secure Coding Section 03 - Expressions (EXP)	**Weaknesses Addressed by the CERT C Secure Coding Standard (primary)734**
ChildOf	Category	740	CERT C Secure Coding Section 06 - Arrays (ARR)	Weaknesses Addressed by the CERT C Secure Coding Standard734
CanPrecede	Weakness Base	131	Incorrect Calculation of Buffer Size	Research Concepts1000

Taxonomy Mappings

Mapped Taxonomy Name	Node ID	Fit	Mapped Node Name
CLASP			Use of sizeof() on a pointer type
CERT C Secure Coding	ARR01-C		Do not apply the sizeof operator to a pointer when taking the size of an array
CERT C Secure Coding	EXP01-C		Do not take the size of a pointer to determine the size of the pointed-to type

White Box Definitions

A weakness where code path has:

1. end statement that passes an identity of a dynamically allocated memory resource to a sizeof operator
2. start statement that allocates the dynamically allocated memory resource

References

Robert Seacord. "EXP01-A. Do not take the sizeof a pointer to determine the size of a type". <https://www.securecoding.cert.org/confluence/display/seccode/EXP01-A.+Do+not+take+the+sizeof+a+pointer+to+determine+the+size+of+a+type>.

Content History

Submissions

Submission Date	Submitter	Organization	Source
	CLASP		Externally Mined

Modifications

Modification Date	Modifier	Organization	Source
2008-07-01	Eric Dalci	Cigital	External
	updated Time of Introduction		
2008-08-01		KDM Analytics	External
	added/updated white box definitions		
2008-09-08	CWE Content Team	MITRE	Internal
	updated Applicable Platforms, Common Consequences, Relationships, Other Notes, Taxonomy Mappings, Weakness Ordinalities		
2008-11-24	CWE Content Team	MITRE	Internal
	updated Relationships, Taxonomy Mappings		
2009-03-10	CWE Content Team	MITRE	Internal
	updated Demonstrative Examples		
2009-12-28	CWE Content Team	MITRE	Internal
	updated Demonstrative Examples		
2010-02-16	CWE Content Team	MITRE	Internal
	updated Relationships		

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Potential Off by One Error in Loops

Risk

What might happen

An off by one error may result in overwriting or over-reading of unintended memory; in most cases, this can result in unexpected behavior and even application crashes. In other cases, where allocation can be controlled by an attacker, a combination of variable assignment and an off by one error can result in execution of malicious code.

Cause

How does it happen

Often when designating variables to memory, a calculation error may occur when determining size or length that is off by one.

For example in loops, when allocating an array of size 2, its cells are counted as 0,1 - therefore, if a For loop iterator on the array is incorrectly set with the start condition i=0 and the continuation condition i<=2, three cells will be accessed instead of 2, and an attempt will be made to write or read cell [2], which was not originally allocated, resulting in potential corruption of memory outside the bounds of the originally assigned array.

Another example occurs when a null-byte terminated string, in the form of a character array, is copied without its terminating null-byte. Without the null-byte, the string representation is unterminated, resulting in certain functions to over-read memory as they expect the missing null terminator.

General Recommendations

How to avoid it

- Always ensure that a given iteration boundary is correct:
    - With array iterations, consider that arrays begin with cell 0 and end with cell n-1, for a size n array.
    - With character arrays and null-byte terminated string representations, consider that the null byte is required and should not be overwritten or ignored; ensure functions in use are not vulnerable to off-by-one, specifically for instances where null-bytes are automatically appended after the buffer, instead of in place of its last character.
- Where possible, use safe functions that manage memory and are not prone to off-by-one errors.

Source Code Examples

CPP

Off-By-One in For Loop

```
int *ptr;
ptr = (int*)malloc(5 * sizeof(int));
for (int i = 0; i <= 5; i++)
{
      ptr[i] = i * 2 + 1; // ptr[5] will be set, but is out of bounds
}
```

Proper Iteration in For Loop

```
int *ptr;
ptr = (int*)malloc(5 * sizeof(int));
for (int i = 0; i < 5; i++)
{
      ptr[i] = i * 2 + 1; // ptr[0-4] are well defined
}
```

Off-By-One in strncat

```
strncat(buf, input, sizeof(buf) - strlen(buf)); // actual value should be sizeof(buf)-
strlen(buf)-1 - this form will overwrite the terminating nullbyte
```

Reliance on DNS Lookups in a Decision

Risk

What might happen

Relying on reverse DNS records, without verifying domain ownership via cryptographic certificates or protocols, is not a sufficient authentication mechanism. Basing any security decisions on the registered hostname could allow an external attacker to control the application flow. The attacker could possibly perform restricted operations, bypass access controls, and even spoof the user's identity, inject a bogus hostname into the security log, and possibly other logic attacks.

Cause

How does it happen

The application performs a reverse DNS resolution, based on the remote IP address, and performs a security check based on the returned hostname. However, it is relatively easy to spoof DNS names, or cause them to be misreported, depending on the context of the specific environment. If the remote server is controlled by the attacker, it can be configured to report a bogus hostname. Additionally, the attacker could also spoof the hostname if she controls the associated DNS server, or by attacking the legitimate DNS server, or by poisoning the server's DNS cache, or by modifying unprotected DNS traffic to the server. Regardless of the vector, a remote attacker can alter the detected network address, faking the authentication details.

General Recommendations

How to avoid it

- Do not rely on DNS records, network addresses, or system hostnames as a form of authentication, or any other security-related decision.
- Do not perform reverse DNS resolution over an unprotected protocol without record validation.
- Implement a proper authentication mechanism, such as passwords, cryptographic certificates, or public key digital signatures.
- Consider using proposed protocol extensions to cryptographically protect DNS, e.g. DNSSEC (though note the limited support and other drawbacks).

Source Code Examples

Java

Using Reverse DNS as Authentication

```
private boolean isInternalEmployee(ServletRequest req) {
      boolean isCompany = false;

      String ip = req.getRemoteAddr();
      InetAddress address = InetAddress.getByName(ip);

      if (address.getHostName().endsWith(COMPANYNAME)) {
             isCompany = true;
     }
      return isCompany;
}
```

Verify Authenticated User's Identity

```
private boolean isInternalEmployee(ServletRequest req) {
      boolean isCompany = false;

      Principal user = req.getUserPrincipal();
      if (user != null) {
      if (user.getName().startsWith(COMPANYDOMAIN + "\\")) {
             isCompany = true;
        }
    }
      return isCompany;
}
```

NULL Pointer Dereference

Risk

What might happen

A null pointer dereference is likely to cause a run-time exception, a crash, or other unexpected behavior.

Cause

How does it happen

Variables which are declared without being assigned will implicitly retain a null value until they are assigned. The null value can also be explicitly set to a variable, to ensure clear out its contents. Since null is not really a value, it may not have object variables and methods, and any attempt to access contents of a null object, instead of verifying it is set beforehand, will result in a null pointer dereference exception.

General Recommendations

How to avoid it

- For any variable that is created, ensure all logic flows between declaration and use assign a non-null value to the variable first.
- Enforce null checks on any received variable or object before it is dereferenced, to ensure it does not contain a null assigned to it elsewhere.
- Consider the need to assign null values in order to overwrite initialized variables. Consider reassigning or releasing these variables instead.

Source Code Examples

Potential Precision Problem

Risk

What might happen

Buffer overflow attacks, in their various forms, could allow an attacker to control certain areas of memory. Typically, this is used to overwrite data on the stack necessary for the program to function properly, such as code and memory addresses, though other forms of this attack exist. Exploiting this vulnerability can generally lead to system crashes, infinite loops, or even execution of arbitrary code.

Cause

How does it happen

Buffer Overflows can manifest in numerous different variations. In it's most basic form, the attack controls a buffer, which is then copied to a smaller buffer without size verification. Because the attacker's source buffer is larger than the program's target buffer, the attacker's data overwrites whatever is next on the stack, allowing the attacker to control program structures.

Alternatively, the vulnerability could be the result of improper bounds checking; exposing internal memory addresses outside of their valid scope; allowing the attacker to control the size of the target buffer; or various other forms.

General Recommendations

How to avoid it

- Always perform proper bounds checking before copying buffers or strings.
- Prefer to use safer functions and structures, e.g. safe string classes over `char*`, `strncpy` over `strcpy`, and so on.
- Consistently apply tests for the size of buffers.
- Do not return variable addresses outside the scope of their variables.

Source Code Examples

Indicator of Poor Code Quality

Weakness ID: 398 *(Weakness Class)* **Status:** Draft

Description

Description Summary

The code has features that do not directly introduce a weakness or vulnerability, but indicate that the product has not been carefully developed or maintained.

Extended Description

Programs are more likely to be secure when good development practices are followed. If a program is complex, difficult to maintain, not portable, or shows evidence of neglect, then there is a higher likelihood that weaknesses are buried in the code.

Time of Introduction

- Architecture and Design
- Implementation

Relationships

Nature	Type	ID	Name	View(s) this relationship pertains to
ChildOf	Category	18	Source Code	**Development Concepts (primary)699**
ChildOf	Weakness Class	710	Coding Standards Violation	**Research Concepts (primary)1000**
ParentOf	Weakness Variant	107	Struts: Unused Validation Form	**Research Concepts (primary)1000**
ParentOf	Weakness Variant	110	Struts: Validator Without Form Field	**Research Concepts (primary)1000**
ParentOf	Category	399	Resource Management Errors	**Development Concepts (primary)699**
ParentOf	Weakness Base	401	Failure to Release Memory Before Removing Last Reference ('Memory Leak')	**Seven Pernicious Kingdoms (primary)700**
ParentOf	Weakness Base	404	Improper Resource Shutdown or Release	Development Concepts699 **Seven Pernicious Kingdoms (primary)700**
ParentOf	Weakness Variant	415	Double Free	**Seven Pernicious Kingdoms (primary)700**
ParentOf	Weakness Base	416	Use After Free	**Seven Pernicious Kingdoms (primary)700**
ParentOf	Weakness Variant	457	Use of Uninitialized Variable	**Seven Pernicious Kingdoms (primary)700**
ParentOf	Weakness Base	474	Use of Function with Inconsistent Implementations	**Development Concepts (primary)699** **Seven Pernicious Kingdoms (primary)700** **Research Concepts (primary)1000**
ParentOf	Weakness Base	475	Undefined Behavior for Input to API	**Development Concepts (primary)699** **Seven Pernicious Kingdoms (primary)700**
ParentOf	Weakness Base	476	NULL Pointer	**Development**

			Dereference	**Concepts (primary)699** **Seven Pernicious Kingdoms (primary)700** **Research Concepts (primary)1000**
ParentOf	Weakness Base	477	Use of Obsolete Functions	**Development Concepts (primary)699** **Seven Pernicious Kingdoms (primary)700** **Research Concepts (primary)1000**
ParentOf	Weakness Variant	478	Missing Default Case in Switch Statement	**Development Concepts (primary)699**
ParentOf	Weakness Variant	479	Unsafe Function Call from a Signal Handler	**Development Concepts (primary)699**
ParentOf	Weakness Variant	483	Incorrect Block Delimitation	**Development Concepts (primary)699**
ParentOf	Weakness Base	484	Omitted Break Statement in Switch	**Development Concepts (primary)699** Research Concepts1000
ParentOf	Weakness Variant	546	Suspicious Comment	**Development Concepts (primary)699** **Research Concepts (primary)1000**
ParentOf	Weakness Variant	547	Use of Hard-coded, Security-relevant Constants	**Development Concepts (primary)699** **Research Concepts (primary)1000**
ParentOf	Weakness Variant	561	Dead Code	**Development Concepts (primary)699** **Research Concepts (primary)1000**
ParentOf	Weakness Base	562	Return of Stack Variable Address	**Development Concepts (primary)699** Research Concepts1000
ParentOf	Weakness Variant	563	Unused Variable	**Development Concepts (primary)699** **Research Concepts (primary)1000**
ParentOf	Category	569	Expression Issues	**Development Concepts (primary)699**
ParentOf	Weakness Variant	585	Empty Synchronized Block	**Development Concepts (primary)699** **Research Concepts (primary)1000**
ParentOf	Weakness Variant	586	Explicit Call to Finalize()	**Development Concepts (primary)699**
ParentOf	Weakness Variant	617	Reachable Assertion	**Development Concepts (primary)699**
ParentOf	Weakness Base	676	Use of Potentially Dangerous Function	**Development Concepts (primary)699** **Research Concepts (primary)1000**
MemberOf	View	700	Seven Pernicious Kingdoms	**Seven Pernicious Kingdoms (primary)700**

Taxonomy Mappings

Mapped Taxonomy Name	Node ID	Fit	Mapped Node Name

7 Pernicious Kingdoms			Code Quality

Content History

Submissions

Submission Date	Submitter	Organization	Source
	7 Pernicious Kingdoms		Externally Mined

Modifications

Modification Date	Modifier	Organization	Source
2008-07-01	Eric Dalci	Cigital	External
	updated Time of Introduction		
2008-09-08	CWE Content Team	MITRE	Internal
	updated Description, Relationships, Taxonomy Mappings		
2009-10-29	CWE Content Team	MITRE	Internal
	updated Relationships		

Previous Entry Names

Change Date	Previous Entry Name
2008-04-11	Code Quality

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Use of Obsolete Functions

Risk

What might happen

Referencing deprecated modules can cause an application to be exposed to known vulnerabilities, that have been publicly reported and already fixed. A common attack technique is to scan applications for these known vulnerabilities, and then exploit the application through these deprecated versions.
Note that the actual risk involved depends on the specifics of any known vulnerabilities in older versions.

Cause

How does it happen

The application references code elements that have been declared as deprecated. This could include classes, functions, methods, properties, modules, or obsolete library versions that are either out of date by version, or have been entirely deprecated. It is likely that the code that references the obsolete element was developed before it was declared as obsolete, and in the meantime the referenced code was updated.

General Recommendations

How to avoid it

- Always prefer to use the most updated versions of libraries, packages, and other dependancies.
- Do not use or reference any class, method, function, property, or other element that has been declared deprecated.

Source Code Examples

Java

Using Deprecated Methods for Security Checks

```
private void checkPermissions(InetAddress address) {

    SecurityManager secManager = System.getSecurityManager();

    if (secManager != null) {
        secManager.checkMulticast(address, 0)
    }

}
```

A Replacement Security Check

```
private void checkPermissions(InetAddress address) {

    SecurityManager secManager = System.getSecurityManager();

    if (secManager != null) {
        SocketPermission permission = new SocketPermission(address.getHostAddress(),
"accept,connect");

        secManager.checkPermission(permission)
    }
}
```

Insecure Temporary File

Weakness ID: 377 *(Weakness Base)* **Status:** Incomplete

Description

Description Summary

Creating and using insecure temporary files can leave application and system data vulnerable to attack.

Time of Introduction

- Architecture and Design
- Implementation

Applicable Platforms

Languages

All

Demonstrative Examples

Example 1

The following code uses a temporary file for storing intermediate data gathered from the network before it is processed.

(Bad Code)

Example Language: **C**

```
if (tmpnam_r(filename)) {

FILE* tmp = fopen(filename,"wb+");
while((recv(sock,recvbuf,DATA_SIZE, 0) > 0)&(amt!=0)) amt = fwrite(recvbuf,1,DATA_SIZE,tmp);
}
...
```

This otherwise unremarkable code is vulnerable to a number of different attacks because it relies on an insecure method for creating temporary files. The vulnerabilities introduced by this function and others are described in the following sections. The most egregious security problems related to temporary file creation have occurred on Unix-based operating systems, but Windows applications have parallel risks. This section includes a discussion of temporary file creation on both Unix and Windows systems. Methods and behaviors can vary between systems, but the fundamental risks introduced by each are reasonably constant.

Other Notes

Applications require temporary files so frequently that many different mechanisms exist for creating them in the C Library and Windows(R) API. Most of these functions are vulnerable to various forms of attacks.

The functions designed to aid in the creation of temporary files can be broken into two groups based whether they simply provide a filename or actually open a new file. - Group 1: "Unique" Filenames: The first group of C Library and WinAPI functions designed to help with the process of creating temporary files do so by generating a unique file name for a new temporary file, which the program is then supposed to open. This group includes C Library functions like tmpnam(), tempnam(), mktemp() and their C++ equivalents prefaced with an _ (underscore) as well as the GetTempFileName() function from the Windows API. This group of functions suffers from an underlying race condition on the filename chosen. Although the functions guarantee that the filename is unique at the time it is selected, there is no mechanism to prevent another process or an attacker from creating a file with the same name after it is selected but before the application attempts to open the file. Beyond the risk of a legitimate collision caused by another call to the same function, there is a high probability that an attacker will be able to create a malicious collision because the filenames generated by these functions are not sufficiently randomized to make them difficult to guess. If a file with the selected name is created, then depending on how the file is opened the existing contents or access permissions of the file may remain intact. If the existing contents of the file are malicious in nature, an attacker may be able to inject dangerous data into the application when it reads data back from the temporary file. If an attacker pre-creates the file with relaxed access permissions, then data stored in the temporary file by the application may be accessed, modified or corrupted by an attacker. On Unix based systems an even more insidious attack is possible if the attacker pre-creates the file as a link to another important file. Then, if the application truncates or writes data to the file, it may unwittingly perform damaging operations for the attacker. This is an especially serious threat if the program operates with elevated permissions. Finally, in the best case the file will be opened with the a call to open() using the O_CREAT and O_EXCL flags or to CreateFile() using the CREATE_NEW attribute, which will fail if the file already exists and therefore prevent the types of attacks described above. However, if an attacker is able to accurately predict a sequence of temporary file names, then the application may be prevented from opening necessary temporary storage causing a denial of service (DoS) attack. This type of attack would not be difficult to mount given the small amount of randomness used in the selection of the filenames generated by these functions. - Group 2: "Unique" Files: The second group of C Library functions attempts to resolve some of the security problems related to temporary files by not only generating a unique file name, but also opening the file. This group includes C Library functions like tmpfile() and its C++ equivalents prefaced with an _ (underscore), as well as the slightly better-behaved C Library function mkstemp(). The tmpfile() style functions construct a unique filename and open it in the same way that fopen() would if passed the flags "wb+", that is, as a binary file in read/write mode. If the file already exists, tmpfile() will truncate it to size zero, possibly in an attempt to assuage the security concerns mentioned earlier regarding the race condition that exists between the selection of a supposedly unique filename and the subsequent opening of the selected file. However, this behavior clearly does not solve the function's security problems. First, an attacker can pre-create the file with relaxed access-permissions that will likely be retained by the file opened by tmpfile(). Furthermore, on Unix based systems if the attacker pre-creates the file as a link to another important file, the application may use its possibly elevated permissions to truncate that file, thereby doing damage on behalf of the attacker. Finally, if tmpfile() does create a new file, the access permissions applied to that file will vary from one operating system to another, which can leave application data vulnerable even if an attacker is unable to predict the filename to be used in advance. Finally, mkstemp() is a reasonably safe way create temporary files. It will attempt to create and open a unique file based on a filename template provided by the user combined with a series of randomly generated characters. If it is unable to create such a file, it will fail and return -1. On modern systems the file is opened using mode 0600, which means the file will be secure from tampering unless the user explicitly changes its access permissions. However, mkstemp() still suffers from the use of predictable file names and can leave an application vulnerable to denial of service attacks if an attacker causes mkstemp() to fail by predicting and pre-creating the filenames to be used.

Relationships

Nature	Type	ID	Name	View(s) this relationship pertains to
ChildOf	Category	361	Time and State	**Seven Pernicious Kingdoms (primary)700**
ChildOf	Category	376	Temporary File Issues	**Development Concepts (primary)699**
ChildOf	Weakness Class	668	Exposure of Resource to Wrong Sphere	**Research Concepts (primary)1000**
ParentOf	Weakness Base	378	Creation of Temporary File With Insecure Permissions	**Research Concepts (primary)1000**
ParentOf	Weakness Base	379	Creation of Temporary File in Directory with Incorrect Permissions	**Research Concepts (primary)1000**

Taxonomy Mappings

Mapped Taxonomy Name	Node ID	Fit	Mapped Node Name
7 Pernicious Kingdoms			Insecure Temporary File

References

[REF-11] M. Howard and D. LeBlanc. "Writing Secure Code". Chapter 23, "Creating Temporary Files Securely" Page 682. 2nd Edition. Microsoft. 2002.

Content History

Submissions

Submission Date	Submitter	Organization	Source
	7 Pernicious Kingdoms		Externally Mined

Modifications

Modification Date	Modifier	Organization	Source
2008-07-01	Eric Dalci	Cigital	External
	updated Time of Introduction		
2008-09-08	CWE Content Team	MITRE	Internal
	updated Relationships, Other Notes, Taxonomy Mappings		
2009-03-10	CWE Content Team	MITRE	Internal
	updated Demonstrative Examples		
2009-05-27	CWE Content Team	MITRE	Internal
	updated Demonstrative Examples		
2010-02-16	CWE Content Team	MITRE	Internal
	updated References		

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Use of sizeof() on a Pointer Type

Weakness ID: 467 *(Weakness Variant)* **Status:** Draft

Description

Description Summary

The code calls sizeof() on a malloced pointer type, which always returns the wordsize/8. This can produce an unexpected result if the programmer intended to determine how much memory has been allocated.

Time of Introduction

- Implementation

Applicable Platforms

Languages

C

C++

Common Consequences

Scope	Effect
Integrity	This error can often cause one to allocate a buffer that is much smaller than what is needed, leading to resultant weaknesses such as buffer overflows.

Likelihood of Exploit

High

Demonstrative Examples

Example 1

Care should be taken to ensure sizeof returns the size of the data structure itself, and not the size of the pointer to the data structure.

In this example, sizeof(foo) returns the size of the pointer.

(Bad Code)

Example Languages: **C and C++**

```
double *foo;
...
foo = (double *)malloc(sizeof(foo));
```

In this example, sizeof(*foo) returns the size of the data structure and not the size of the pointer.

(Good Code)

Example Languages: **C and C++**

```
double *foo;
...
foo = (double *)malloc(sizeof(*foo));
```

Example 2

This example defines a fixed username and password. The AuthenticateUser() function is intended to accept a username and a password from an untrusted user, and check to ensure that it matches the username and password. If the username and password match, AuthenticateUser() is intended to indicate that authentication succeeded.

(Bad Code)

```

/* Ignore CWE-259 (hard-coded password) and CWE-309 (use of password system for authentication) for this example. */

char *username = "admin";
char *pass = "password";

int AuthenticateUser(char *inUser, char *inPass) {
```

```
printf("Sizeof username = %d\n", sizeof(username));
printf("Sizeof pass = %d\n", sizeof(pass));

if (strncmp(username, inUser, sizeof(username))) {
printf("Auth failure of username using sizeof\n");
return(AUTH_FAIL);
}
/* Because of CWE-467, the sizeof returns 4 on many platforms and architectures. */
if (! strncmp(pass, inPass, sizeof(pass))) {
printf("Auth success of password using sizeof\n");
return(AUTH_SUCCESS);
}
else {
printf("Auth fail of password using sizeof\n");
return(AUTH_FAIL);
}
}

int main (int argc, char **argv)
{
int authResult;

if (argc < 3) {
ExitError("Usage: Provide a username and password");
}
authResult = AuthenticateUser(argv[1], argv[2]);
if (authResult != AUTH_SUCCESS) {
ExitError("Authentication failed");
}
else {
DoAuthenticatedTask(argv[1]);
}
}
```

In AuthenticateUser(), because sizeof() is applied to a parameter with an array type, the sizeof() call might return 4 on many modern architectures. As a result, the strncmp() call only checks the first four characters of the input password, resulting in a partial comparison (CWE-187), leading to improper authentication (CWE-287).

Because of the partial comparison, any of these passwords would still cause authentication to succeed for the "admin" user:

(Attack)

```
pass5
passABCDEFGH
passWORD
```

Because only 4 characters are checked, this significantly reduces the search space for an attacker, making brute force attacks more feasible.

The same problem also applies to the username, so values such as "adminXYZ" and "administrator" will succeed for the username.

Potential Mitigations

Phase: Implementation

Use expressions such as "sizeof(*pointer)" instead of "sizeof(pointer)", unless you intend to run sizeof() on a pointer type to gain some platform independence or if you are allocating a variable on the stack.

Other Notes

The use of sizeof() on a pointer can sometimes generate useful information. An obvious case is to find out the wordsize on a platform. More often than not, the appearance of sizeof(pointer) indicates a bug.

Weakness Ordinalities

Ordinality	Description
Primary	*(where the weakness exists independent of other weaknesses)*

Relationships

Nature	Type	ID	Name	View(s) this relationship pertains to
ChildOf	Category	465	Pointer Issues	**Development Concepts (primary)699**
ChildOf	Weakness Class	682	Incorrect Calculation	**Research Concepts (primary)1000**
ChildOf	Category	737	CERT C Secure Coding Section 03 - Expressions (EXP)	**Weaknesses Addressed by the CERT C Secure Coding Standard (primary)734**
ChildOf	Category	740	CERT C Secure Coding Section 06 - Arrays (ARR)	Weaknesses Addressed by the CERT C Secure Coding Standard734
CanPrecede	Weakness Base	131	Incorrect Calculation of Buffer Size	Research Concepts1000

Taxonomy Mappings

Mapped Taxonomy Name	Node ID	Fit	Mapped Node Name
CLASP			Use of sizeof() on a pointer type
CERT C Secure Coding	ARR01-C		Do not apply the sizeof operator to a pointer when taking the size of an array
CERT C Secure Coding	EXP01-C		Do not take the size of a pointer to determine the size of the pointed-to type

White Box Definitions

A weakness where code path has:

1. end statement that passes an identity of a dynamically allocated memory resource to a sizeof operator
2. start statement that allocates the dynamically allocated memory resource

References

Robert Seacord. "EXP01-A. Do not take the sizeof a pointer to determine the size of a type". <https://www.securecoding.cert.org/confluence/display/seccode/EXP01-A.+Do+not+take+the+sizeof+a+pointer+to+determine+the+size+of+a+type>.

Content History

Submissions			
Submission Date	**Submitter**	**Organization**	**Source**
	CLASP		Externally Mined

Modifications			
Modification Date	**Modifier**	**Organization**	**Source**
2008-07-01	Eric Dalci	Cigital	External
	updated Time of Introduction		
2008-08-01		KDM Analytics	External
	added/updated white box definitions		
2008-09-08	CWE Content Team	MITRE	Internal
	updated Applicable Platforms, Common Consequences, Relationships, Other Notes, Taxonomy Mappings, Weakness Ordinalities		
2008-11-24	CWE Content Team	MITRE	Internal
	updated Relationships, Taxonomy Mappings		
2009-03-10	CWE Content Team	MITRE	Internal
	updated Demonstrative Examples		
2009-12-28	CWE Content Team	MITRE	Internal
	updated Demonstrative Examples		
2010-02-16	CWE Content Team	MITRE	Internal
	updated Relationships		

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Improper Access Control (Authorization)

Weakness ID: 285 *(Weakness Class)* **Status:** Draft

Description

Description Summary

The software does not perform or incorrectly performs access control checks across all potential execution paths.

Extended Description

When access control checks are not applied consistently - or not at all - users are able to access data or perform actions that they should not be allowed to perform. This can lead to a wide range of problems, including information leaks, denial of service, and arbitrary code execution.

Alternate Terms

AuthZ:	"AuthZ" is typically used as an abbreviation of "authorization" within the web application security community. It is also distinct from "AuthC," which is an abbreviation of "authentication." The use of "Auth" as an abbreviation is discouraged, since it could be used for either authentication or authorization.

Time of Introduction

- Architecture and Design
- Implementation
- Operation

Applicable Platforms

Languages

Language-independent

Technology Classes

Web-Server: *(Often)*

Database-Server: *(Often)*

Modes of Introduction

A developer may introduce authorization weaknesses because of a lack of understanding about the underlying technologies. For example, a developer may assume that attackers cannot modify certain inputs such as headers or cookies.

Authorization weaknesses may arise when a single-user application is ported to a multi-user environment.

Common Consequences

Scope	Effect
Confidentiality	An attacker could read sensitive data, either by reading the data directly from a data store that is not properly restricted, or by accessing insufficiently-protected, privileged functionality to read the data.
Integrity	An attacker could modify sensitive data, either by writing the data directly to a data store that is not properly restricted, or by accessing insufficiently-protected, privileged functionality to write the data.
Integrity	An attacker could gain privileges by modifying or reading critical data directly, or by accessing insufficiently-protected, privileged functionality.

Likelihood of Exploit

High

Detection Methods

Automated Static Analysis

Automated static analysis is useful for detecting commonly-used idioms for authorization. A tool may be able to analyze related configuration files, such as .htaccess in Apache web servers, or detect the usage of commonly-used authorization libraries.

Generally, automated static analysis tools have difficulty detecting custom authorization schemes. In addition, the software's design may include some functionality that is accessible to any user and does not require an authorization check; an automated technique that detects the absence of authorization may report false positives.

Effectiveness: Limited

Automated Dynamic Analysis

Automated dynamic analysis may find many or all possible interfaces that do not require authorization, but manual analysis is required to determine if the lack of authorization violates business logic

Manual Analysis

This weakness can be detected using tools and techniques that require manual (human) analysis, such as penetration testing, threat modeling, and interactive tools that allow the tester to record and modify an active session.

Specifically, manual static analysis is useful for evaluating the correctness of custom authorization mechanisms.

Effectiveness: Moderate

These may be more effective than strictly automated techniques. This is especially the case with weaknesses that are related to design and business rules. However, manual efforts might not achieve desired code coverage within limited time constraints.

Demonstrative Examples

Example 1

The following program could be part of a bulletin board system that allows users to send private messages to each other. This program intends to authenticate the user before deciding whether a private message should be displayed. Assume that LookupMessageObject() ensures that the $id argument is numeric, constructs a filename based on that id, and reads the message details from that file. Also assume that the program stores all private messages for all users in the same directory.

(Bad Code)

Example Language: **Perl**

```
sub DisplayPrivateMessage {
my($id) = @_;
my $Message = LookupMessageObject($id);
print "From: " . encodeHTML($Message->{from}) . "<br>\n";
print "Subject: " . encodeHTML($Message->{subject}) . "\n";
print "<hr>\n";
print "Body: " . encodeHTML($Message->{body}) . "\n";
}

my $q = new CGI;
# For purposes of this example, assume that CWE-309 and
# CWE-523 do not apply.
if (! AuthenticateUser($q->param('username'), $q->param('password'))) {
ExitError("invalid username or password");
}

my $id = $q->param('id');
DisplayPrivateMessage($id);
```

While the program properly exits if authentication fails, it does not ensure that the message is addressed to the user. As a result, an authenticated attacker could provide any arbitrary identifier and read private messages that were intended for other users.

One way to avoid this problem would be to ensure that the "to" field in the message object matches the username of the authenticated user.

Observed Examples

Reference	Description
CVE-2009-3168	Web application does not restrict access to admin scripts, allowing authenticated users to reset administrative passwords.

CVE-2009-2960	Web application does not restrict access to admin scripts, allowing authenticated users to modify passwords of other users.
CVE-2009-3597	Web application stores database file under the web root with insufficient access control (CWE-219), allowing direct request.
CVE-2009-2282	Terminal server does not check authorization for guest access.
CVE-2009-3230	Database server does not use appropriate privileges for certain sensitive operations.
CVE-2009-2213	Gateway uses default "Allow" configuration for its authorization settings.
CVE-2009-0034	Chain: product does not properly interpret a configuration option for a system group, allowing users to gain privileges.
CVE-2008-6123	Chain: SNMP product does not properly parse a configuration option for which hosts are allowed to connect, allowing unauthorized IP addresses to connect.
CVE-2008-5027	System monitoring software allows users to bypass authorization by creating custom forms.
CVE-2008-7109	Chain: reliance on client-side security (CWE-602) allows attackers to bypass authorization using a custom client.
CVE-2008-3424	Chain: product does not properly handle wildcards in an authorization policy list, allowing unintended access.
CVE-2009-3781	Content management system does not check access permissions for private files, allowing others to view those files.
CVE-2008-4577	ACL-based protection mechanism treats negative access rights as if they are positive, allowing bypass of intended restrictions.
CVE-2008-6548	Product does not check the ACL of a page accessed using an "include" directive, allowing attackers to read unauthorized files.
CVE-2007-2925	Default ACL list for a DNS server does not set certain ACLs, allowing unauthorized DNS queries.
CVE-2006-6679	Product relies on the X-Forwarded-For HTTP header for authorization, allowing unintended access by spoofing the header.
CVE-2005-3623	OS kernel does not check for a certain privilege before setting ACLs for files.
CVE-2005-2801	Chain: file-system code performs an incorrect comparison (CWE-697), preventing defauls ACLs from being properly applied.
CVE-2001-1155	Chain: product does not properly check the result of a reverse DNS lookup because of operator precedence (CWE-783), allowing bypass of DNS-based access restrictions.

Potential Mitigations

Phase: Architecture and Design

Divide your application into anonymous, normal, privileged, and administrative areas. Reduce the attack surface by carefully mapping roles with data and functionality. Use role-based access control (RBAC) to enforce the roles at the appropriate boundaries.

Note that this approach may not protect against horizontal authorization, i.e., it will not protect a user from attacking others with the same role.

Phase: Architecture and Design

Ensure that you perform access control checks related to your business logic. These checks may be different than the access control checks that you apply to more generic resources such as files, connections, processes, memory, and database records. For example, a database may restrict access for medical records to a specific database user, but each record might only be intended to be accessible to the patient and the patient's doctor.

Phase: Architecture and Design

Strategy: Libraries or Frameworks

Use a vetted library or framework that does not allow this weakness to occur or provides constructs that make this weakness easier to avoid.

For example, consider using authorization frameworks such as the JAAS Authorization Framework and the OWASP ESAPI Access Control feature.

Phase: Architecture and Design

For web applications, make sure that the access control mechanism is enforced correctly at the server side on every page. Users should not be able to access any unauthorized functionality or information by simply requesting direct access to that page.

One way to do this is to ensure that all pages containing sensitive information are not cached, and that all such pages restrict access to requests that are accompanied by an active and authenticated session token associated with a user who has the required permissions to access that page.

Phases: System Configuration; Installation

Use the access control capabilities of your operating system and server environment and define your access control lists accordingly. Use a "default deny" policy when defining these ACLs.

Relationships

Nature	Type	ID	Name	View(s) this relationship pertains to
ChildOf	Category	254	Security Features	**Seven Pernicious Kingdoms (primary)700**
ChildOf	Weakness Class	284	Access Control (Authorization) Issues	**Development Concepts (primary)699** **Research Concepts (primary)1000**
ChildOf	Category	721	OWASP Top Ten 2007 Category A10 - Failure to Restrict URL Access	**Weaknesses in OWASP Top Ten (2007) (primary)629**
ChildOf	Category	723	OWASP Top Ten 2004 Category A2 - Broken Access Control	**Weaknesses in OWASP Top Ten (2004) (primary)711**
ChildOf	Category	753	2009 Top 25 - Porous Defenses	**Weaknesses in the 2009 CWE/SANS Top 25 Most Dangerous Programming Errors (primary)750**
ChildOf	Category	803	2010 Top 25 - Porous Defenses	**Weaknesses in the 2010 CWE/SANS Top 25 Most Dangerous Programming Errors (primary)800**
ParentOf	Weakness Variant	219	Sensitive Data Under Web Root	**Research Concepts (primary)1000**
ParentOf	Weakness Base	551	Incorrect Behavior Order: Authorization Before Parsing and Canonicalization	**Development Concepts (primary)699** Research Concepts1000
ParentOf	Weakness Class	638	Failure to Use Complete Mediation	Research Concepts1000
ParentOf	Weakness Base	804	Guessable CAPTCHA	**Development Concepts (primary)699** **Research Concepts (primary)1000**

Taxonomy Mappings

Mapped Taxonomy Name	Node ID	Fit	Mapped Node Name
7 Pernicious Kingdoms			Missing Access Control
OWASP Top Ten 2007	A10	CWE More Specific	Failure to Restrict URL Access
OWASP Top Ten 2004	A2	CWE More Specific	Broken Access Control

Related Attack Patterns

CAPEC-ID	Attack Pattern Name	*(CAPEC Version: 1.5)*
1	Accessing Functionality Not Properly Constrained by ACLs	
13	Subverting Environment Variable Values	

17	Accessing, Modifying or Executing Executable Files
87	Forceful Browsing
39	Manipulating Opaque Client-based Data Tokens
45	Buffer Overflow via Symbolic Links
51	Poison Web Service Registry
59	Session Credential Falsification through Prediction
60	Reusing Session IDs (aka Session Replay)
77	Manipulating User-Controlled Variables
76	Manipulating Input to File System Calls
104	Cross Zone Scripting

References

NIST. "Role Based Access Control and Role Based Security". <http://csrc.nist.gov/groups/SNS/rbac/>.

[REF-11] M. Howard and D. LeBlanc. "Writing Secure Code". Chapter 4, "Authorization" Page 114; Chapter 6, "Determining Appropriate Access Control" Page 171. 2nd Edition. Microsoft. 2002.

Content History

Submissions

Submission Date	Submitter	Organization	Source
	7 Pernicious Kingdoms		Externally Mined

Modifications

Modification Date	Modifier	Organization	Source
2008-07-01	Eric Dalci	Cigital	External
	updated Time of Introduction		
2008-08-15		Veracode	External
	Suggested OWASP Top Ten 2004 mapping		
2008-09-08	CWE Content Team	MITRE	Internal
	updated Relationships, Other Notes, Taxonomy Mappings		
2009-01-12	CWE Content Team	MITRE	Internal
	updated Common Consequences, Description, Likelihood of Exploit, Name, Other Notes, Potential Mitigations, References, Relationships		
2009-03-10	CWE Content Team	MITRE	Internal
	updated Potential Mitigations		
2009-05-27	CWE Content Team	MITRE	Internal
	updated Description, Related Attack Patterns		
2009-07-27	CWE Content Team	MITRE	Internal
	updated Relationships		
2009-10-29	CWE Content Team	MITRE	Internal
	updated Type		
2009-12-28	CWE Content Team	MITRE	Internal
	updated Applicable Platforms, Common Consequences, Demonstrative Examples, Detection Factors, Modes of Introduction, Observed Examples, Relationships		
2010-02-16	CWE Content Team	MITRE	Internal
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2010-04-05	CWE Content Team	MITRE	Internal
	updated Potential Mitigations		

Previous Entry Names

Change Date	Previous Entry Name
2009-01-12	Missing or Inconsistent Access Control

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Incorrect Permission Assignment for Critical Resource

Weakness ID: 732 *(Weakness Class)* **Status:** Draft

Description

Description Summary

The software specifies permissions for a security-critical resource in a way that allows that resource to be read or modified by unintended actors.

Extended Description

When a resource is given a permissions setting that provides access to a wider range of actors than required, it could lead to the disclosure of sensitive information, or the modification of that resource by unintended parties. This is especially dangerous when the resource is related to program configuration, execution or sensitive user data.

Time of Introduction

- Architecture and Design
- Implementation
- Installation
- Operation

Applicable Platforms

Languages

Language-independent

Modes of Introduction

The developer may set loose permissions in order to minimize problems when the user first runs the program, then create documentation stating that permissions should be tightened. Since system administrators and users do not always read the documentation, this can result in insecure permissions being left unchanged.

The developer might make certain assumptions about the environment in which the software runs - e.g., that the software is running on a single-user system, or the software is only accessible to trusted administrators. When the software is running in a different environment, the permissions become a problem.

Common Consequences

Scope	Effect
Confidentiality	An attacker may be able to read sensitive information from the associated resource, such as credentials or configuration information stored in a file.
Integrity	An attacker may be able to modify critical properties of the associated resource to gain privileges, such as replacing a world-writable executable with a Trojan horse.
Availability	An attacker may be able to destroy or corrupt critical data in the associated resource, such as deletion of records from a database.

Likelihood of Exploit

Medium to High

Detection Methods

Automated Static Analysis

Automated static analysis may be effective in detecting permission problems for system resources such as files, directories, shared memory, device interfaces, etc. Automated techniques may be able to detect the use of library functions that modify permissions, then analyze function calls for arguments that contain potentially insecure values.

However, since the software's intended security policy might allow loose permissions for certain operations (such as publishing a file on a web server), automated static analysis may produce some false positives - i.e., warnings that do not have any security consequences or require any code changes.

When custom permissions models are used - such as defining who can read messages in a particular forum in a bulletin board system - these can be difficult to detect using automated static analysis. It may be possible to define custom signatures that identify any custom functions that implement the permission checks and assignments.

Automated Dynamic Analysis

Automated dynamic analysis may be effective in detecting permission problems for system resources such as files, directories, shared memory, device interfaces, etc.

However, since the software's intended security policy might allow loose permissions for certain operations (such as publishing a file on a web server), automated dynamic analysis may produce some false positives - i.e., warnings that do not have any security consequences or require any code changes.

When custom permissions models are used - such as defining who can read messages in a particular forum in a bulletin board system - these can be difficult to detect using automated dynamic analysis. It may be possible to define custom signatures that identify any custom functions that implement the permission checks and assignments.

Manual Static Analysis

Manual static analysis may be effective in detecting the use of custom permissions models and functions. The code could then be examined to identifying usage of the related functions. Then the human analyst could evaluate permission assignments in the context of the intended security model of the software.

Manual Dynamic Analysis

Manual dynamic analysis may be effective in detecting the use of custom permissions models and functions. The program could then be executed with a focus on exercising code paths that are related to the custom permissions. Then the human analyst could evaluate permission assignments in the context of the intended security model of the software.

Fuzzing

Fuzzing is not effective in detecting this weakness.

Demonstrative Examples

Example 1

The following code sets the umask of the process to 0 before creating a file and writing "Hello world" into the file.

(Bad Code)

Example Language: **C**

```
#define OUTFILE "hello.out"

umask(0);
FILE *out;
/* Ignore CWE-59 (link following) for brevity */
out = fopen(OUTFILE, "w");
if (out) {
fprintf(out, "hello world!\n");
fclose(out);
}
```

After running this program on a UNIX system, running the "ls -l" command might return the following output:

(Result)

```
-rw-rw-rw- 1 username 13 Nov 24 17:58 hello.out
```

The "rw-rw-rw-" string indicates that the owner, group, and world (all users) can read the file and write to it.

Example 2

The following code snippet might be used as a monitor to periodically record whether a web site is alive. To ensure that the file can always be modified, the code uses chmod() to make the file world-writable.

(Bad Code)

Example Language: **Perl**

```
$fileName = "secretFile.out";

if (-e $fileName) {
chmod 0777, $fileName;
}
```

```
my $outFH;
if (! open($outFH, ">>$fileName")) {
ExitError("Couldn't append to $fileName: $!");
}
my $dateString = FormatCurrentTime();
my $status = IsHostAlive("cwe.mitre.org");
print $outFH "$dateString cwe status: $status!\n";
close($outFH);
```

The first time the program runs, it might create a new file that inherits the permissions from its environment. A file listing might look like:

(Result)

```
-rw-r--r-- 1 username 13 Nov 24 17:58 secretFile.out
```

This listing might occur when the user has a default umask of 022, which is a common setting. Depending on the nature of the file, the user might not have intended to make it readable by everyone on the system.

The next time the program runs, however - and all subsequent executions - the chmod will set the file's permissions so that the owner, group, and world (all users) can read the file and write to it:

(Result)

```
-rw-rw-rw- 1 username 13 Nov 24 17:58 secretFile.out
```

Perhaps the programmer tried to do this because a different process uses different permissions that might prevent the file from being updated.

Example 3

The following command recursively sets world-readable permissions for a directory and all of its children:

(Bad Code)

Example Language: **Shell**

```
chmod -R ugo+r DIRNAME
```

If this command is run from a program, the person calling the program might not expect that all the files under the directory will be world-readable. If the directory is expected to contain private data, this could become a security problem.

Observed Examples

Reference	Description
CVE-2009-3482	Anti-virus product sets insecure "Everyone: Full Control" permissions for files under the "Program Files" folder, allowing attackers to replace executables with Trojan horses.
CVE-2009-3897	Product creates directories with 0777 permissions at installation, allowing users to gain privileges and access a socket used for authentication.
CVE-2009-3489	Photo editor installs a service with an insecure security descriptor, allowing users to stop or start the service, or execute commands as SYSTEM.
CVE-2009-3289	Library function copies a file to a new target and uses the source file's permissions for the target, which is incorrect when the source file is a symbolic link, which typically has 0777 permissions.
CVE-2009-0115	Device driver uses world-writable permissions for a socket file, allowing attackers to inject arbitrary commands.
CVE-2009-1073	LDAP server stores a cleartext password in a world-readable file.
CVE-2009-0141	Terminal emulator creates TTY devices with world-writable permissions, allowing an attacker to write to the terminals of other users.

CVE-2008-0662	VPN product stores user credentials in a registry key with "Everyone: Full Control" permissions, allowing attackers to steal the credentials.
CVE-2008-0322	Driver installs its device interface with "Everyone: Write" permissions.
CVE-2009-3939	Driver installs a file with world-writable permissions.
CVE-2009-3611	Product changes permissions to 0777 before deleting a backup; the permissions stay insecure for subsequent backups.
CVE-2007-6033	Product creates a share with "Everyone: Full Control" permissions, allowing arbitrary program execution.
CVE-2007-5544	Product uses "Everyone: Full Control" permissions for memory-mapped files (shared memory) in inter-process communication, allowing attackers to tamper with a session.
CVE-2005-4868	Database product uses read/write permissions for everyone for its shared memory, allowing theft of credentials.
CVE-2004-1714	Security product uses "Everyone: Full Control" permissions for its configuration files.
CVE-2001-0006	"Everyone: Full Control" permissions assigned to a mutex allows users to disable network connectivity.
CVE-2002-0969	Chain: database product contains buffer overflow that is only reachable through a .ini configuration file - which has "Everyone: Full Control" permissions.

Potential Mitigations

Phase: Implementation

When using a critical resource such as a configuration file, check to see if the resource has insecure permissions (such as being modifiable by any regular user), and generate an error or even exit the software if there is a possibility that the resource could have been modified by an unauthorized party.

Phase: Architecture and Design

Divide your application into anonymous, normal, privileged, and administrative areas. Reduce the attack surface by carefully defining distinct user groups, privileges, and/or roles. Map these against data, functionality, and the related resources. Then set the permissions accordingly. This will allow you to maintain more fine-grained control over your resources.

Phases: Implementation; Installation

During program startup, explicitly set the default permissions or umask to the most restrictive setting possible. Also set the appropriate permissions during program installation. This will prevent you from inheriting insecure permissions from any user who installs or runs the program.

Phase: System Configuration

For all configuration files, executables, and libraries, make sure that they are only readable and writable by the software's administrator.

Phase: Documentation

Do not suggest insecure configuration changes in your documentation, especially if those configurations can extend to resources and other software that are outside the scope of your own software.

Phase: Installation

Do not assume that the system administrator will manually change the configuration to the settings that you recommend in the manual.

Phase: Testing

Use tools and techniques that require manual (human) analysis, such as penetration testing, threat modeling, and interactive tools that allow the tester to record and modify an active session. These may be more effective than strictly automated techniques. This is especially the case with weaknesses that are related to design and business rules.

Phase: Testing

Use monitoring tools that examine the software's process as it interacts with the operating system and the network. This technique is useful in cases when source code is unavailable, if the software was not developed by you, or if you want to verify that the build phase did not introduce any new weaknesses. Examples include debuggers that directly attach to the running process; system-call tracing utilities such as truss (Solaris) and strace (Linux); system activity monitors such as FileMon, RegMon, Process Monitor, and other Sysinternals utilities (Windows); and sniffers and protocol analyzers that monitor network traffic.

Attach the monitor to the process and watch for library functions or system calls on OS resources such as files, directories, and shared memory. Examine the arguments to these calls to infer which permissions are being used.

Note that this technique is only useful for permissions issues related to system resources. It is not likely to detect application-level business rules that are related to permissions, such as if a user of a blog system marks a post as "private," but the blog system inadvertently marks it as "public."

Phases: Testing; System Configuration

Ensure that your software runs properly under the Federal Desktop Core Configuration (FDCC) or an equivalent hardening configuration guide, which many organizations use to limit the attack surface and potential risk of deployed software.

Relationships

Nature	Type	ID	Name	View(s) this relationship pertains to
ChildOf	Category	275	Permission Issues	**Development Concepts (primary)699**
ChildOf	Weakness Class	668	Exposure of Resource to Wrong Sphere	**Research Concepts (primary)1000**
ChildOf	Category	753	2009 Top 25 - Porous Defenses	**Weaknesses in the 2009 CWE/SANS Top 25 Most Dangerous Programming Errors (primary)750**
ChildOf	Category	803	2010 Top 25 - Porous Defenses	**Weaknesses in the 2010 CWE/SANS Top 25 Most Dangerous Programming Errors (primary)800**
RequiredBy	Compound Element: Composite	689	Permission Race Condition During Resource Copy	Research Concepts1000
ParentOf	Weakness Variant	276	Incorrect Default Permissions	**Research Concepts (primary)1000**
ParentOf	Weakness Variant	277	Insecure Inherited Permissions	**Research Concepts (primary)1000**
ParentOf	Weakness Variant	278	Insecure Preserved Inherited Permissions	**Research Concepts (primary)1000**
ParentOf	Weakness Variant	279	Incorrect Execution-Assigned Permissions	**Research Concepts (primary)1000**
ParentOf	Weakness Base	281	Improper Preservation of Permissions	**Research Concepts (primary)1000**

Related Attack Patterns

CAPEC-ID	Attack Pattern Name	*(CAPEC Version: 1.5)*
232	Exploitation of Privilege/Trust	
1	Accessing Functionality Not Properly Constrained by ACLs	
17	Accessing, Modifying or Executing Executable Files	
60	Reusing Session IDs (aka Session Replay)	
61	Session Fixation	
62	Cross Site Request Forgery (aka Session Riding)	
122	Exploitation of Authorization	
180	Exploiting Incorrectly Configured Access Control Security Levels	
234	Hijacking a privileged process	

References

Mark Dowd, John McDonald and Justin Schuh. "The Art of Software Security Assessment". Chapter 9, "File Permissions." Page 495.. 1st Edition. Addison Wesley. 2006.

John Viega and Gary McGraw. "Building Secure Software". Chapter 8, "Access Control." Page 194.. 1st Edition. Addison-Wesley. 2002.

Maintenance Notes

The relationships between privileges, permissions, and actors (e.g. users and groups) need further refinement within the Research view. One complication is that these concepts apply to two different pillars, related to control of resources (CWE-664) and protection mechanism failures (CWE-396).

Content History

Submissions

Submission Date	Submitter	Organization	Source
2008-09-08			Internal CWE Team
	new weakness-focused entry for Research view.		

Modifications

Modification Date	Modifier	Organization	Source
2009-01-12	CWE Content Team	MITRE	Internal
	updated Description, Likelihood of Exploit, Name, Potential Mitigations, Relationships		
2009-03-10	CWE Content Team	MITRE	Internal
	updated Potential Mitigations, Related Attack Patterns		
2009-05-27	CWE Content Team	MITRE	Internal
	updated Name		
2009-12-28	CWE Content Team	MITRE	Internal
	updated Applicable Platforms, Common Consequences, Demonstrative Examples, Detection Factors, Modes of Introduction, Observed Examples, Potential Mitigations, References		
2010-02-16	CWE Content Team	MITRE	Internal
	updated Relationships		
2010-04-05	CWE Content Team	MITRE	Internal
	updated Potential Mitigations, Related Attack Patterns		

Previous Entry Names

Change Date	Previous Entry Name
2009-01-12	Insecure Permission Assignment for Resource
2009-05-27	Insecure Permission Assignment for Critical Resource

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Exposure of System Data to Unauthorized Control Sphere

Risk

What might happen

System data can provide attackers with valuable insights on systems and services they are targeting - any type of system data, from service version to operating system fingerprints, can assist attackers to hone their attack, correlate data with known vulnerabilities or focus efforts on developing new attacks against specific technologies.

Cause

How does it happen

System data is read and subsequently exposed where it might be read by untrusted entities.

General Recommendations

How to avoid it

Consider the implications of exposure of the specified input, and expected level of access to the specified output. If not required, consider removing this code, or modifying exposed information to exclude potentially sensitive system data.

Source Code Examples

Java

Leaking Environment Variables in JSP Web-Page

```
    String envVarValue = System.getenv(envVar);
    if (envVarValue == null) {
        out.println("Environment variable is not defined:");
        out.println(System.getenv());
    } else {
        //[..]
    };
```

TOCTOU

Risk

What might happen

At best, a Race Condition may cause errors in accuracy, overidden values or unexpected behavior that may result in denial-of-service. At worst, it may allow attackers to retrieve data or bypass security processes by replaying a controllable Race Condition until it plays out in their favor.

Cause

How does it happen

Race Conditions occur when a public, single instance of a resource is used by multiple concurrent logical processes. If the these logical processes attempt to retrieve and update the resource without a timely management system, such as a lock, a Race Condition will occur.

An example for when a Race Condition occurs is a resource that may return a certain value to a process for further editing, and then updated by a second process, resulting in the original process' data no longer being valid. Once the original process edits and updates the incorrect value back into the resource, the second process' update has been overwritten and lost.

General Recommendations

How to avoid it

When sharing resources between concurrent processes across the application ensure that these resources are either thread-safe, or implement a locking mechanism to ensure expected concurrent activity.

Source Code Examples

Java

Different Threads Increment and Decrement The Same Counter Repeatedly, Resulting in a Race Condition

```
      public static int counter = 0;
      public static void start() throws InterruptedException {
             incrementCounter ic;
             decrementCounter dc;
             while(counter == 0) {
                    counter = 0;
                    ic = new incrementCounter();
                    dc = new decrementCounter();
                    ic.start();
                    dc.start();
                    ic.join();
                    dc.join();
             }
             System.out.println(counter); //Will stop and return either -1 or 1 due to race
condition over counter
      }

      public static class incrementCounter extends Thread {
          public void run() {
             counter++;
          }
```

```
        }

        public static class decrementCounter extends Thread {
            public void run() {
               counter--;
            }
        }
```

Different Threads Increment and Decrement The Same Thread-Safe Counter Repeatedly, Never Resulting in a Race Condition

```
        public static int counter = 0;
        public static Object lock = new Object();

        public static void start() throws InterruptedException {
               incrementCounter ic;
               decrementCounter dc;
               while(counter == 0) { // because of proper locking, this condition is never false
                      counter = 0;
                      ic = new incrementCounter();
                      dc = new decrementCounter();
                      ic.start();
                      dc.start();
                      ic.join();
                      dc.join();
               }
               System.out.println(counter); // Never reached
        }

        public static class incrementCounter extends Thread {
            public void run() {
               synchronized (lock) {
                      counter++;
               }
            }
        }

        public static class decrementCounter extends Thread {
            public void run() {
               synchronized (lock) {
                      counter--;
               }
            }
        }
```

Information Leak Through Comments

Weakness ID: 615 *(Weakness Variant)* **Status:** Incomplete

Description

Description Summary

While adding general comments is very useful, some programmers tend to leave important data, such as: filenames related to the web application, old links or links which were not meant to be browsed by users, old code fragments, etc.

Extended Description

An attacker who finds these comments can map the application's structure and files, expose hidden parts of the site, and study the fragments of code to reverse engineer the application, which may help develop further attacks against the site.

Time of Introduction

- Implementation

Demonstrative Examples

Example 1

The following comment, embedded in a JSP, will be displayed in the resulting HTML output.

(Bad Code)

Example Languages: **HTML and JSP**

```
<!-- FIXME: calling this with more than 30 args kills the JDBC server -->
```

Observed Examples

Reference	Description
CVE-2007-6197	Version numbers and internal hostnames leaked in HTML comments.
CVE-2007-4072	CMS places full pathname of server in HTML comment.
CVE-2009-2431	blog software leaks real username in HTML comment.

Potential Mitigations

Remove comments which have sensitive information about the design/implementation of the application. Some of the comments may be exposed to the user and affect the security posture of the application.

Relationships

Nature	Type	ID	Name	View(s) this relationship pertains to
ChildOf	Weakness Variant	540	Information Leak Through Source Code	**Development Concepts (primary)699** **Research Concepts (primary)1000**

Content History

Submissions			
Submission Date	**Submitter**	**Organization**	**Source**
	Anonymous Tool Vendor (under NDA)		Externally Mined
Modifications			
Modification Date	**Modifier**	**Organization**	**Source**
2008-07-01	Sean Eidemiller	Cigital	External
	added/updated demonstrative examples		
2008-07-01	Eric Dalci	Cigital	External
	updated Potential Mitigations, Time of Introduction		
2008-09-08	CWE Content Team	MITRE	Internal
	updated Relationships, Taxonomy Mappings		
2008-10-14	CWE Content Team	MITRE	Internal
	updated Description		
2009-03-10	CWE Content Team	MITRE	Internal

	updated Demonstrative Examples		
2009-07-27	CWE Content Team	MITRE	Internal
	updated Observed Examples, Taxonomy Mappings		

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Improper Validation of Array Index

Weakness ID: 129 *(Weakness Base)* **Status:** Draft

Description

Description Summary

The product uses untrusted input when calculating or using an array index, but the product does not validate or incorrectly validates the index to ensure the index references a valid position within the array.

Alternate Terms

out-of-bounds array index

index-out-of-range

array index underflow

Time of Introduction

- Implementation

Applicable Platforms

Languages

C: *(Often)*

C++: *(Often)*

Language-independent

Common Consequences

Scope	Effect
Integrity Availability	Unchecked array indexing will very likely result in the corruption of relevant memory and perhaps instructions, leading to a crash, if the values are outside of the valid memory area.
Integrity	If the memory corrupted is data, rather than instructions, the system will continue to function with improper values.
Confidentiality Integrity	Unchecked array indexing can also trigger out-of-bounds read or write operations, or operations on the wrong objects; i.e., "buffer overflows" are not always the result. This may result in the exposure or modification of sensitive data.
Integrity	If the memory accessible by the attacker can be effectively controlled, it may be possible to execute arbitrary code, as with a standard buffer overflow and possibly without the use of large inputs if a precise index can be controlled.
Integrity Availability Confidentiality	A single fault could allow either an overflow (CWE-788) or underflow (CWE-786) of the array index. What happens next will depend on the type of operation being performed out of bounds, but can expose sensitive information, cause a system crash, or possibly lead to arbitrary code execution.

Likelihood of Exploit

High

Detection Methods

Automated Static Analysis

This weakness can often be detected using automated static analysis tools. Many modern tools use data flow analysis or constraint-based techniques to minimize the number of false positives.

Automated static analysis generally does not account for environmental considerations when reporting out-of-bounds memory operations. This can make it difficult for users to determine which warnings should be investigated first. For example, an analysis tool might report array index errors that originate from command line arguments in a program that is not expected to run with setuid or other special privileges.

Effectiveness: High

This is not a perfect solution, since 100% accuracy and coverage are not feasible.

Automated Dynamic Analysis

This weakness can be detected using dynamic tools and techniques that interact with the software using large test suites with many diverse inputs, such as fuzz testing (fuzzing), robustness testing, and fault injection. The software's operation may slow down, but it should not become unstable, crash, or generate incorrect results.

Black Box

Black box methods might not get the needed code coverage within limited time constraints, and a dynamic test might not produce any noticeable side effects even if it is successful.

Demonstrative Examples

Example 1

The following C/C++ example retrieves the sizes of messages for a pop3 mail server. The message sizes are retrieved from a socket that returns in a buffer the message number and the message size, the message number (num) and size (size) are extracted from the buffer and the message size is placed into an array using the message number for the array index.

(Bad Code)

Example Language: **C**

```
/* capture the sizes of all messages */
int getsizes(int sock, int count, int *sizes) {
...
char buf[BUFFER_SIZE];
int ok;
int num, size;

// read values from socket and added to sizes array
while ((ok = gen_recv(sock, buf, sizeof(buf))) == 0)
{

// continue read from socket until buf only contains '.'
if (DOTLINE(buf))
break;
else if (sscanf(buf, "%d %d", &num, &size) == 2)
sizes[num - 1] = size;
}
...
}
```

In this example the message number retrieved from the buffer could be a value that is outside the allowable range of indices for the array and could possibly be a negative number. Without proper validation of the value to be used for the array index an array overflow could occur and could potentially lead to unauthorized access to memory addresses and system crashes. The value of the array index should be validated to ensure that it is within the allowable range of indices for the array as in the following code.

(Good Code)

Example Language: **C**

```
/* capture the sizes of all messages */
int getsizes(int sock, int count, int *sizes) {
...
char buf[BUFFER_SIZE];
int ok;
int num, size;

// read values from socket and added to sizes array
while ((ok = gen_recv(sock, buf, sizeof(buf))) == 0)
{

// continue read from socket until buf only contains '.'
if (DOTLINE(buf))
break;
else if (sscanf(buf, "%d %d", &num, &size) == 2) {
if (num > 0 && num <= (unsigned)count)
sizes[num - 1] = size;
else
/* warn about possible attempt to induce buffer overflow */
report(stderr, "Warning: ignoring bogus data for message sizes returned by server.\n");
}
}
...
}
```

Example 2

In the code snippet below, an unchecked integer value is used to reference an object in an array.

(Bad Code)

Example Language: **Java**

```
public String getValue(int index) {
return array[index];
}
```

If index is outside of the range of the array, this may result in an ArrayIndexOutOfBounds Exception being raised.

Example 3

In the following Java example the method displayProductSummary is called from a Web service servlet to retrieve product summary information for display to the user. The servlet obtains the integer value of the product number from the user and passes it to the displayProductSummary method. The displayProductSummary method passes the integer value of the product number to the getProductSummary method which obtains the product summary from the array object containing the project summaries using the integer value of the product number as the array index.

(Bad Code)

Example Language: **Java**

```
// Method called from servlet to obtain product information
public String displayProductSummary(int index) {

String productSummary = new String("");

try {
String productSummary = getProductSummary(index);

} catch (Exception ex) {...}

return productSummary;
}

public String getProductSummary(int index) {
return products[index];
}
```

In this example the integer value used as the array index that is provided by the user may be outside the allowable range of indices for the array which may provide unexpected results or may comes the application to fail. The integer value used for the array index should be validated to ensure that it is within the allowable range of indices for the array as in the following code.

(Good Code)

Example Language: **Java**

```
// Method called from servlet to obtain product information
public String displayProductSummary(int index) {

String productSummary = new String("");
try {
String productSummary = getProductSummary(index);

} catch (Exception ex) {...}

return productSummary;
}

public String getProductSummary(int index) {
String productSummary = "";

if ((index >= 0) && (index < MAX_PRODUCTS)) {
productSummary = products[index];
}
else {
System.err.println("index is out of bounds");
throw new IndexOutOfBoundsException();
}

return productSummary;
}
```

An alternative in Java would be to use one of the collection objects such as ArrayList that will automatically generate an exception if an attempt is made to access an array index that is out of bounds.

(Good Code)

Example Language: **Java**

```
ArrayList productArray = new ArrayList(MAX_PRODUCTS);
...
try {
productSummary = (String) productArray.get(index);
} catch (IndexOutOfBoundsException ex) {...}
```

Observed Examples

Reference	Description
CVE-2005-0369	large ID in packet used as array index
CVE-2001-1009	negative array index as argument to POP LIST command
CVE-2003-0721	Integer signedness error leads to negative array index
CVE-2004-1189	product does not properly track a count and a maximum number, which can lead to resultant array index overflow.
CVE-2007-5756	chain: device driver for packet-capturing software allows access to an unintended IOCTL with resultant array index error.

Potential Mitigations

Phase: Architecture and Design

Strategies: Input Validation; Libraries or Frameworks

Use an input validation framework such as Struts or the OWASP ESAPI Validation API. If you use Struts, be mindful of weaknesses covered by the CWE-101 category.

Phase: Architecture and Design

For any security checks that are performed on the client side, ensure that these checks are duplicated on the server side, in order to avoid CWE-602. Attackers can bypass the client-side checks by modifying values after the checks have been performed, or by changing the client to remove the client-side checks entirely. Then, these modified values would be submitted to the server.

Even though client-side checks provide minimal benefits with respect to server-side security, they are still useful. First, they can support intrusion detection. If the server receives input that should have been rejected by the client, then it may be an indication of an attack. Second, client-side error-checking can provide helpful feedback to the user about the expectations for valid input. Third, there may be a reduction in server-side processing time for accidental input errors, although this is typically a small savings.

Phase: Requirements

Strategy: Language Selection

Use a language with features that can automatically mitigate or eliminate out-of-bounds indexing errors.

For example, Ada allows the programmer to constrain the values of a variable and languages such as Java and Ruby will allow the programmer to handle exceptions when an out-of-bounds index is accessed.

Phase: Implementation

Strategy: Input Validation

Assume all input is malicious. Use an "accept known good" input validation strategy (i.e., use a whitelist). Reject any input that does not strictly conform to specifications, or transform it into something that does. Use a blacklist to reject any unexpected inputs and detect potential attacks.

When accessing a user-controlled array index, use a stringent range of values that are within the target array. Make sure that you do not allow negative values to be used. That is, verify the minimum as well as the maximum of the range of acceptable values.

Phase: Implementation

Be especially careful to validate your input when you invoke code that crosses language boundaries, such as from an interpreted language to native code. This could create an unexpected interaction between the language boundaries. Ensure that you are not violating any of the expectations of the language with which you are interfacing. For example, even though Java may not be susceptible to buffer overflows, providing a large argument in a call to native code might trigger an overflow.

Weakness Ordinalities

Ordinality	Description
Resultant	The most common condition situation leading to unchecked array indexing is the use of loop index variables as buffer indexes. If the end condition for the loop is subject to a flaw, the index can grow or shrink unbounded, therefore causing a buffer overflow or underflow. Another common situation leading to this condition is the use of a function's return value, or the resulting value of a calculation directly as an index in to a buffer.

Relationships

Nature	Type	ID	Name	View(s) this relationship pertains to
ChildOf	Weakness Class	20	Improper Input Validation	**Development Concepts (primary)699** **Research Concepts (primary)1000**
ChildOf	Category	189	Numeric Errors	Development Concepts699
ChildOf	Category	633	Weaknesses that Affect Memory	**Resource-specific Weaknesses (primary)631**
ChildOf	Category	738	CERT C Secure Coding Section 04 - Integers (INT)	**Weaknesses Addressed by the CERT C Secure Coding Standard (primary)734**
ChildOf	Category	740	CERT C Secure Coding Section 06 - Arrays (ARR)	Weaknesses Addressed by the CERT C Secure Coding Standard734
ChildOf	Category	802	2010 Top 25 - Risky Resource Management	**Weaknesses in the 2010 CWE/SANS Top 25 Most Dangerous Programming Errors (primary)800**
CanPrecede	Weakness Class	119	Failure to Constrain Operations within the Bounds of a Memory Buffer	Research Concepts1000
CanPrecede	Weakness Variant	789	Uncontrolled Memory Allocation	Research Concepts1000
PeerOf	Weakness Base	124	Buffer Underwrite ('Buffer Underflow')	Research Concepts1000

Theoretical Notes

An improperly validated array index might lead directly to the always-incorrect behavior of "access of array using out-of-bounds index."

Affected Resources

- Memory

f Causal Nature

Explicit

Taxonomy Mappings

Mapped Taxonomy Name	Node ID	Fit	Mapped Node Name
CLASP			Unchecked array indexing
PLOVER			INDEX - Array index overflow
CERT C Secure Coding	ARR00-C		Understand how arrays work
CERT C Secure Coding	ARR30-C		Guarantee that array indices are within the valid range
CERT C Secure Coding	ARR38-C		Do not add or subtract an integer to a pointer if the resulting value does not refer to a valid array element
CERT C Secure Coding	INT32-C		Ensure that operations on signed integers do not result in overflow

Related Attack Patterns

CAPEC-ID	Attack Pattern Name	*(CAPEC Version: 1.5)*
100	Overflow Buffers	

References

[REF-11] M. Howard and D. LeBlanc. "Writing Secure Code". Chapter 5, "Array Indexing Errors" Page 144. 2nd Edition. Microsoft. 2002.

Content History

Submissions

Submission Date	Submitter	Organization	Source
	CLASP		Externally Mined

Modifications

Modification Date	Modifier	Organization	Source
2008-07-01	Sean Eidemiller	Cigital	External
	added/updated demonstrative examples		
2008-09-08	CWE Content Team	MITRE	Internal
	updated Alternate Terms, Applicable Platforms, Common Consequences, Relationships, Other Notes, Taxonomy Mappings, Weakness Ordinalities		
2008-11-24	CWE Content Team	MITRE	Internal
	updated Relationships, Taxonomy Mappings		
2009-01-12	CWE Content Team	MITRE	Internal
	updated Common Consequences		
2009-10-29	CWE Content Team	MITRE	Internal
	updated Description, Name, Relationships		
2009-12-28	CWE Content Team	MITRE	Internal
	updated Applicable Platforms, Common Consequences, Observed Examples, Other Notes, Potential Mitigations, Theoretical Notes, Weakness Ordinalities		
2010-02-16	CWE Content Team	MITRE	Internal
	updated Applicable Platforms, Demonstrative Examples, Detection Factors, Likelihood of Exploit, Potential Mitigations, References, Related Attack Patterns, Relationships		
2010-04-05	CWE Content Team	MITRE	Internal
	updated Related Attack Patterns		

Previous Entry Names

Change Date	Previous Entry Name
2009-10-29	Unchecked Array Indexing

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Scanned Languages

Language	Hash Number	Change Date
CPP	4541647240435660	6/19/2024
Common	0105849645654507	6/19/2024