# freebsd-src-1 Scan Report

| | |
|---|---|
| Project Name | freebsd-src-1 |
| Scan Start | Saturday, June 22, 2024 1:59:19 AM |
| Preset | Checkmarx Default |
| Scan Time | 03h:32m:22s |
| Lines Of Code Scanned | 297970 |
| Files Scanned | 111 |
| Report Creation Time | Saturday, June 22, 2024 9:04:43 AM |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087 |
| Team | CxServer |
| Checkmarx Version | 8.7.0 |
| Scan Type | Full |
| Source Origin | LocalPath |
| Density | 6/1000 (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 |

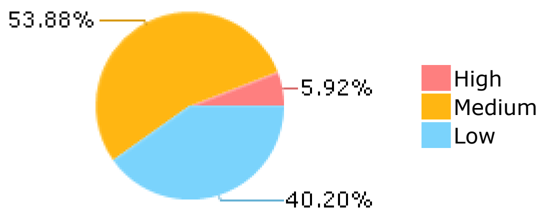
**Results Limit**

Results limit per query was set to 50

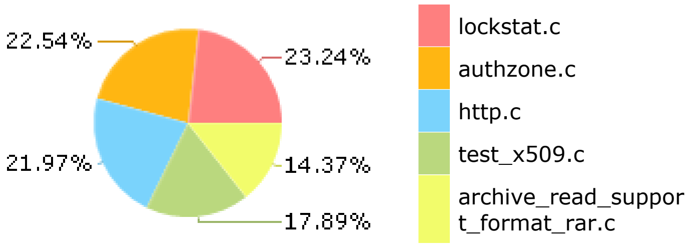
**Selected Queries**

Selected queries are listed in Result Summary

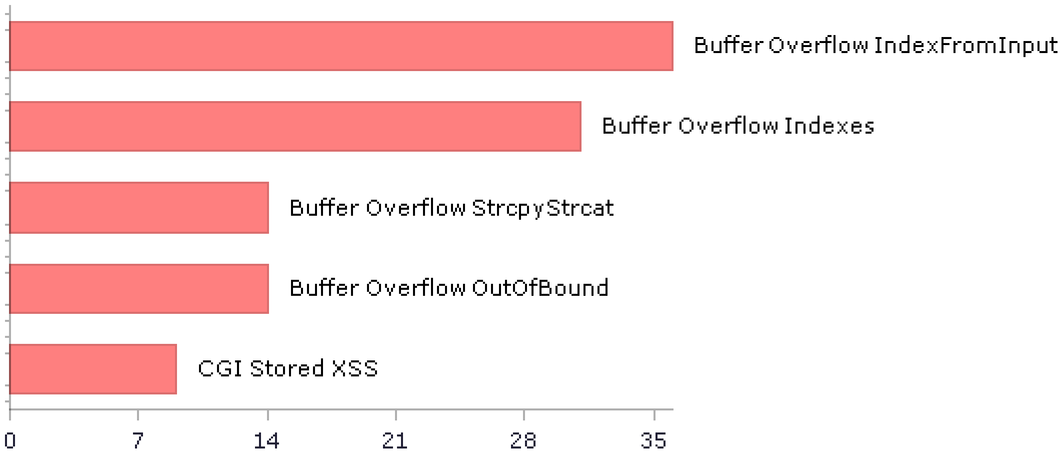
## Result Summary



## 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 | 550 | 321 |
| A2-Broken Authentication | App. Specific | EASY | COMMON | AVERAGE | SEVERE | App. Specific | 173 | 173 |
| A3-Sensitive Data Exposure | App. Specific | AVERAGE | WIDESPREAD | AVERAGE | SEVERE | App. Specific | 28 | 17 |
| 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 | 11 | 3 |
| 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 | 9 | 3 |
| 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 | 396 | 396 |
| 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 | 1 | 1 |
| 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 | 9 | 3 |
| A4-Insecure Direct Object References | SYSTEM USERS | EASY | COMMON | EASY | MODERATE | EXPOSED DATA | 11 | 3 |
| 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 | 3 | 3 |
| 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 | 396 | 396 |
| 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 | 9 | 9 |
| PCI DSS (3.2) - 6.5.2 - Buffer overflows | 328 | 268 |
| 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) | 9 | 3 |
| 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. | 1 | 1 |
| 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. | 31 | 20 |
| 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. | 179 | 173 |
| 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. | 9 | 9 |
| 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. | 31 | 25 |

***** 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) | 189 | 189 |
| 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) | 15 | 4 |
| SC-17 Public Key Infrastructure Certificates (P1) | 0 | 0 |
| SC-18 Mobile Code (P2) | 0 | 0 |
| SC-23 Session Authenticity (P1)* | 16 | 10 |
| SC-28 Protection of Information at Rest (P1) | 8 | 8 |
| SC-4 Information in Shared Resources (P1) | 5 | 5 |
| SC-5 Denial of Service Protection (P1)* | 347 | 162 |
| SC-8 Transmission Confidentiality and Integrity (P1) | 0 | 0 |
| SI-10 Information Input Validation (P1)* | 236 | 168 |
| SI-11 Error Handling (P2)* | 122 | 122 |
| SI-15 Information Output Filtering (P0) | 9 | 3 |
| SI-16 Memory Protection (P1) | 63 | 13 |

* 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:<br>-Failing to identify the user at all when that should be required<br>-Failure to maintain the user's identity when it is required<br>-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.).<br>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

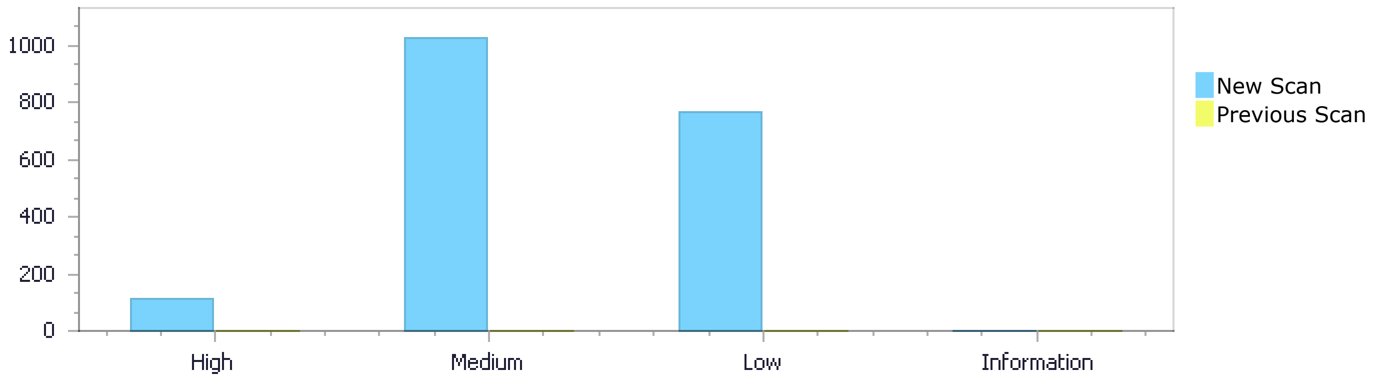
| Category | Issues Found | Best Fix Locations |
|---|---|---|
| Must audit | 0 | 0 |
| Check | 0 | 0 |
| Optional | 0 | 0 |

## Results Distribution By Status

First scan of the project

| | High | Medium | Low | Information | Total |
|---|---|---|---|---|---|
| New Issues | 113 | 1,028 | 767 | 0 | 1,908 |
| Recurrent Issues | 0 | 0 | 0 | 0 | 0 |
| Total | 113 | 1,028 | 767 | 0 | 1,908 |

| | | | | | |
|---|---|---|---|---|---|
| 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 | 113 | 1,028 | 767 | 0 | 1,908 |
| Urgent | 0 | 0 | 0 | 0 | 0 |
| Proposed Not Exploitable | 0 | 0 | 0 | 0 | 0 |
| Total | 113 | 1,028 | 767 | 0 | 1,908 |

## Result Summary

| Vulnerability Type | Occurrences | Severity |
|---|---|---|
| Buffer Overflow IndexFromInput | 36 | High |
| Buffer Overflow Indexes | 31 | High |
| Buffer Overflow OutOfBound | 14 | High |
| Buffer Overflow StrcpyStrcat | 14 | High |
| CGI Stored XSS | 9 | High |

| | | |
|---|---|---|
| Buffer Overflow boundedcpy | 4 | High |
| Buffer Overflow LongString | 4 | High |
| Command Injection | 1 | High |
| Dangerous Functions | 367 | Medium |
| Buffer Overflow boundcpy WrongSizeParam | 211 | Medium |
| Memory Leak | 90 | Medium |
| Use of Zero Initialized Pointer | 81 | Medium |
| MemoryFree on StackVariable | 68 | Medium |
| Wrong Size t Allocation | 63 | Medium |
| Double Free | 55 | Medium |
| Integer Overflow | 17 | Medium |
| Inadequate Encryption Strength | 15 | Medium |
| Char Overflow | 13 | Medium |
| Divide By Zero | 11 | Medium |
| Path Traversal | 11 | Medium |
| Stored Buffer Overflow boundcpy | 9 | Medium |
| Long Overflow | 4 | Medium |
| Stored Buffer Overflow cpycat | 3 | Medium |
| Use of Uninitialized Pointer | 3 | Medium |
| Wrong Memory Allocation | 3 | Medium |
| Buffer Overflow AddressOfLocalVarReturned | 2 | Medium |
| Heap Inspection | 2 | Medium |
| NULL Pointer Dereference | 170 | Low |
| Improper Resource Access Authorization | 161 | Low |
| Unchecked Return Value | 122 | Low |
| Unchecked Array Index | 76 | Low |
| Use of Sizeof On a Pointer Type | 36 | Low |
| Sizeof Pointer Argument | 30 | Low |
| Potential Precision Problem | 29 | Low |
| Use of Obsolete Functions | 29 | Low |
| TOCTOU | 22 | Low |
| Exposure of System Data to Unauthorized Control Sphere | 16 | Low |
| Reliance on DNS Lookups in a Decision | 16 | Low |
| Inconsistent Implementations | 13 | Low |
| Heuristic Buffer Overflow malloc | 12 | Low |
| Incorrect Permission Assignment For Critical Resources | 12 | Low |
| Potential Off by One Error in Loops | 8 | Low |
| Use of Insufficiently Random Values | 7 | Low |
| Heuristic 2nd Order Buffer Overflow malloc | 2 | Low |
| Insecure Temporary File | 2 | Low |
| Arithmenic Operation On Boolean | 1 | Low |
| Information Exposure Through Comments | 1 | Low |
| Leaving Temporary Files | 1 | Low |
| Privacy Violation | 1 | Low |

## 10 Most Vulnerable Files

### High and Medium Vulnerabilities

| File Name | Issues Found |
|---|---|
| freebsd-src-1/http.c | 133 |

| | |
|---|---|
| freebsd-src-1/authzone.c | 114 |
| freebsd-src-1/archive_read_support_format_rar.c | 101 |
| freebsd-src-1/pmcstudy.c | 65 |
| freebsd-src-1/lockstat.c | 63 |
| freebsd-src-1/test_x509.c | 56 |
| freebsd-src-1/mrsas.c | 54 |
| freebsd-src-1/dp_rx.c | 43 |
| freebsd-src-1/name.c | 38 |
| freebsd-src-1/sctp_sys_calls.c | 32 |

# Scan Results Details

## Buffer Overflow IndexFromInput

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

### Categories

OWASP Top 10 2017: A1-Injection

*Description*

**Buffer Overflow IndexFromInput\Path 1:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=54 |
| Status | New |

The size of the buffer used by show_struct in first_word, at line 1471 of freebsd-src-1/cxgbetool.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 argv, at line 3666 of freebsd-src-1/cxgbetool.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3666 | 1486 |
| Object | argv | first_word |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method main(int argc, const char *argv[])

```
....
3666.  main(int argc, const char *argv[])
```

File Name freebsd-src-1/cxgbetool.c
Method show_struct(const uint32_t *words, int nwords, const struct field_desc *fd)

```
....
1486.             data = (words[first_word] >> shift) |
```

**Buffer Overflow IndexFromInput\Path 2:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=55 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 991 |
| Object | getenv | BinaryExpr |

Code Snippet

File Name freebsd-src-1/http.c

Method http_connect(struct url *URL, struct url *purl, const char *flags)

```
....
1423.                        } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
991.                  dst[3] = base64[(t >> 0) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 3:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=56 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1694 | 991 |
| Object | getenv | BinaryExpr |

Code Snippet

File Name freebsd-src-1/http.c

Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1694.                        } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
991.                dst[3] = base64[(t >> 0) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 4:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=57 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 991 |
| Object | getenv | BinaryExpr |

Code Snippet

File Name freebsd-src-1/http.c

Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1724.                    } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
991.                dst[3] = base64[(t >> 0) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 5:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=58 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|

| | | |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 990 |
| Object | getenv | BinaryExpr |

Code Snippet
File Name	freebsd-src-1/http.c
Method	http_connect(struct url *URL, struct url *purl, const char *flags)

```
....
1423.                   } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

File Name	freebsd-src-1/http.c

Method	http_base64(const char *src)

```
....
990.              dst[2] = base64[(t >> 6) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 6:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=59 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1694 | 990 |
| Object | getenv | BinaryExpr |

Code Snippet
File Name	freebsd-src-1/http.c
Method	http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1694.                   } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

File Name	freebsd-src-1/http.c

Method	http_base64(const char *src)

```
....
990.             dst[2] = base64[(t >> 6) & 0x3f];
```

### Buffer Overflow IndexFromInput\Path 7:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=60 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 990 |
| Object | getenv | BinaryExpr |

Code Snippet

File Name freebsd-src-1/http.c

Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1724.                    } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
990.             dst[2] = base64[(t >> 6) & 0x3f];
```

### Buffer Overflow IndexFromInput\Path 8:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=61 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 989 |

| | | |
|---|---|---|
| Object | getenv | BinaryExpr |

Code Snippet
File Name freebsd-src-1/http.c
Method http_connect(struct url *URL, struct url *purl, const char *flags)

```
....
1423.                    } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
989.               dst[1] = base64[(t >> 12) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 9:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=62](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=62) |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1694 | 989 |
| Object | getenv | BinaryExpr |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1694.                    } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
989.               dst[1] = base64[(t >> 12) & 0x3f];
```

### Buffer Overflow IndexFromInput\Path 10:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=63 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 989 |
| Object | getenv | BinaryExpr |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1724.                 } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
989.                dst[1] = base64[(t >> 12) & 0x3f];
```

### Buffer Overflow IndexFromInput\Path 11:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=64 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 988 |
| Object | getenv | BinaryExpr |

Code Snippet
File Name freebsd-src-1/http.c

| | |
|---|---|
| Method | http_connect(struct url *URL, struct url *purl, const char *flags) |

```
....
1423.                   } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_base64(const char *src) |

```
....
988.                dst[0] = base64[(t >> 18) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 12:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=65 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1694 | 988 |
| Object | getenv | BinaryExpr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_request_body(struct url *URL, const char *op, struct url_stat *us, |

```
....
1694.                   } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_base64(const char *src) |

```
....
988.                dst[0] = base64[(t >> 18) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 13:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=600 |

| | |
|---|---|
| | 87&pathid=66 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 988 |
| Object | getenv | BinaryExpr |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1724.                   } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
988.                dst[0] = base64[(t >> 18) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 14:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=67 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 1001 |
| Object | getenv | BinaryExpr |

Code Snippet
File Name freebsd-src-1/http.c
Method http_connect(struct url *URL, struct url *purl, const char *flags)

```
....
1423.               } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1001.               dst[2] = base64[(t >> 6) & 0x3f];
```

### Buffer Overflow IndexFromInput\Path 15:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=68](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=68) |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1694 | 1001 |
| Object | getenv | BinaryExpr |

Code Snippet

File Name freebsd-src-1/http.c

Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1694.               } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1001.               dst[2] = base64[(t >> 6) & 0x3f];
```

### Buffer Overflow IndexFromInput\Path 16:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=69](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=69) |

| | |
|---|---|
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 1001 |
| Object | getenv | BinaryExpr |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1724.                         } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1001.                   dst[2] = base64[(t >> 6) & 0x3f];
```

### Buffer Overflow IndexFromInput\Path 17:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=70 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 1000 |
| Object | getenv | BinaryExpr |

Code Snippet
File Name freebsd-src-1/http.c
Method http_connect(struct url *URL, struct url *purl, const char *flags)

```
....
1423.                         } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1000.            dst[1] = base64[(t >> 12) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 18:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=71](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=71) |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1694 | 1000 |
| Object | getenv | BinaryExpr |

Code Snippet

File Name freebsd-src-1/http.c

Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1694.                    } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1000.            dst[1] = base64[(t >> 12) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 19:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=72](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=72) |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 1000 |
| Object | getenv | BinaryExpr |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1724.                   } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1000.              dst[1] = base64[(t >> 12) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 20:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=73](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=73) |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 999 |
| Object | getenv | BinaryExpr |

Code Snippet
File Name freebsd-src-1/http.c
Method http_connect(struct url *URL, struct url *purl, const char *flags)

```
....
1423.                   } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
999.                  dst[0] = base64[(t >> 18) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 21:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=74 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1694 | 999 |
| Object | getenv | BinaryExpr |

Code Snippet

File Name freebsd-src-1/http.c

Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1694.                        } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
999.                  dst[0] = base64[(t >> 18) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 22:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=75 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |

| | | |
|---|---|---|
| Line | 1724 | 999 |
| Object | getenv | BinaryExpr |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1724.                    } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
999.              dst[0] = base64[(t >> 18) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 23:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=76 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 1008 |
| Object | getenv | BinaryExpr |

Code Snippet
File Name freebsd-src-1/http.c
Method http_connect(struct url *URL, struct url *purl, const char *flags)

```
....
1423.                    } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1008.             dst[1] = base64[(t >> 12) & 0x3f];
```

### Buffer Overflow IndexFromInput\Path 24:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=77](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=77) |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1694 | 1008 |
| Object | getenv | BinaryExpr |

Code Snippet

File Name freebsd-src-1/http.c

Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1694.                    } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1008.               dst[1] = base64[(t >> 12) & 0x3f];
```

### Buffer Overflow IndexFromInput\Path 25:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=78](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=78) |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 1008 |
| Object | getenv | BinaryExpr |

Code Snippet

File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1724.                       } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1008.                dst[1] = base64[(t >> 12) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 26:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=79 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 1007 |
| Object | getenv | BinaryExpr |

Code Snippet
File Name freebsd-src-1/http.c
Method http_connect(struct url *URL, struct url *purl, const char *flags)

```
....
1423.                       } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1007.                dst[0] = base64[(t >> 18) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 27:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=600 |

| | |
|---|---|
| | 87&pathid=80 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1694 | 1007 |
| Object | getenv | BinaryExpr |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1694.                   } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

File Name freebsd-src-1/http.c
Method http_base64(const char *src)

```
....
1007.              dst[0] = base64[(t >> 18) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 28:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=81 |
| Status | New |

The size of the buffer used by http_base64 in BinaryExpr, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 1007 |
| Object | getenv | BinaryExpr |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1724.                    } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_base64(const char *src) |

```
....
1007.              dst[0] = base64[(t >> 18) & 0x3f];
```

**Buffer Overflow IndexFromInput\Path 29:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=82 |
| Status | New |

The size of the buffer used by SB_append_char in PostfixExpr, at line 126 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that conf_next_low passes to fgetc, at line 643 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 651 | 129 |
| Object | fgetc | PostfixExpr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/test_x509.c |
| Method | conf_next_low(void) |

```
....
651.              x = fgetc(conf);
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/test_x509.c |
| Method | SB_append_char(string_builder *sb, int c) |

```
....
129.        sb->buf[sb->ptr ++] = c;
```

**Buffer Overflow IndexFromInput\Path 30:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=83 |
| Status | New |

The size of the buffer used by SB_append_char in PostfixExpr, at line 126 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that conf_next_low passes to fgetc, at line 643 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 657 | 129 |
| Object | fgetc | PostfixExpr |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method conf_next_low(void)

```
....
657.                  x = fgetc(conf);
```

File Name freebsd-src-1/test_x509.c

Method SB_append_char(string_builder *sb, int c)

```
....
129.            sb->buf[sb->ptr ++] = c;
```

**Buffer Overflow IndexFromInput\Path 31:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=84 |
| Status | New |

The size of the buffer used by read_a_line in i, at line 2155 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that read_a_line passes to buffer, at line 2155 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2160 | 2166 |
| Object | buffer | i |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method read_a_line(FILE *io)

```
....
2160.        if (fgets(buffer, sizeof(buffer), io) == NULL) {
....
2166.              cnts[i].vals[pos] = strtol(p, &stop, 0);
```

### Buffer Overflow IndexFromInput\Path 32:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=85 |
| Status | New |

The size of the buffer used by read_a_line in i, at line 2155 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that read_a_line passes to buffer, at line 2155 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2160 | 2168 |
| Object | buffer | i |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method read_a_line(FILE *io)

```
....
2160.        if (fgets(buffer, sizeof(buffer), io) == NULL) {
....
2168.              cnts[i].sum += cnts[i].vals[pos];
```

### Buffer Overflow IndexFromInput\Path 33:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=86 |
| Status | New |

The size of the buffer used by run_test_case in u, at line 1457 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that read_all passes to BinaryExpr, at line 403 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 423 | 1521 |
| Object | BinaryExpr | u |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method read_all(FILE *f, size_t *len)

```
....
423.                 rlen = fread(buf + ptr, 1, blen - ptr, f);
```

| | |
|---|---|
| File Name | freebsd-src-1/test_x509.c |
| Method | run_test_case(test_case *tc) |

```
....
1521.            certs[u].data = read_file(tc->cert_names[u],
&certs[u].len);
```

**Buffer Overflow IndexFromInput\Path 34:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=87](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=87) |
| Status | New |

The size of the buffer used by run_test_case in u, at line 1457 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that read_all passes to BinaryExpr, at line 403 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 423 | 1601 |
| Object | BinaryExpr | u |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/test_x509.c |
| Method | read_all(FILE *f, size_t *len) |

```
....
423.            rlen = fread(buf + ptr, 1, blen - ptr, f);
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/test_x509.c |
| Method | run_test_case(test_case *tc) |

```
....
1601.                              certs[u].data + v, w);
```

**Buffer Overflow IndexFromInput\Path 35:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=88](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=88) |
| Status | New |

The size of the buffer used by run_test_case in u, at line 1457 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that read_all passes to BinaryExpr, at line 403 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|

| | | |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 423 | 1670 |
| Object | BinaryExpr | u |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method read_all(FILE *f, size_t *len)

```
....
423.                  rlen = fread(buf + ptr, 1, blen - ptr, f);
```

File Name freebsd-src-1/test_x509.c

Method run_test_case(test_case *tc)

```
....
1670.                 xfree(certs[u].data);
```

**Buffer Overflow IndexFromInput\Path 36:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=89 |
| Status | New |

The size of the buffer used by run_cmd_loop in n, at line 1695 of freebsd-src-1/cxgbtool.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that run_cmd_loop passes to buf, at line 1695 of freebsd-src-1/cxgbtool.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1715 | 1722 |
| Object | buf | n |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method run_cmd_loop(int argc, char *argv[], const char *iff_name)

```
....
1715.                 n = read(STDIN_FILENO, buf, sizeof(buf) - 1);
....
1722.                       buf[n] = 0;
```

## Buffer Overflow Indexes

Query Path:
CPP\Cx\CPP Buffer Overflow\Buffer Overflow Indexes 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 Indexes\Path 1:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=5 |
| Status | New |

The size of the buffer used by show_struct in first_word, at line 1471 of freebsd-src-1/cxgbetool.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 argv, at line 3666 of freebsd-src-1/cxgbetool.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3666 | 1489 |
| Object | argv | first_word |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method main(int argc, const char *argv[])

```
....
3666.  main(int argc, const char *argv[])
```

File Name freebsd-src-1/cxgbetool.c

Method show_struct(const uint32_t *words, int nwords, const struct field_desc *fd)

```
....
1489.                   data |= ((uint64_t)words[first_word + 2] << (64
- shift));
```

**Buffer Overflow Indexes\Path 2:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=6 |
| Status | New |

The size of the buffer used by show_struct in first_word, at line 1471 of freebsd-src-1/cxgbetool.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 argv, at line 3666 of freebsd-src-1/cxgbetool.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |

| | | |
|---|---|---|
| Line | 3666 | 1487 |
| Object | argv | first_word |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method main(int argc, const char *argv[])

```
....
3666.  main(int argc, const char *argv[])
```

▼

File Name freebsd-src-1/cxgbetool.c

Method show_struct(const uint32_t *words, int nwords, const struct field_desc *fd)

```
....
1487.                    ((uint64_t)words[first_word + 1] << (32 -
shift));
```

**Buffer Overflow Indexes\Path 3:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=7](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=7) |
| Status | New |

The size of the buffer used by show_struct in first_word, at line 1471 of freebsd-src-1/cxgbetool.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 argv, at line 3666 of freebsd-src-1/cxgbetool.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3666 | 1486 |
| Object | argv | first_word |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method main(int argc, const char *argv[])

```
....
3666.  main(int argc, const char *argv[])
```

▼

File Name freebsd-src-1/cxgbetool.c

Method show_struct(const uint32_t *words, int nwords, const struct field_desc *fd)

```
....
1486.                data = (words[first_word] >> shift) |
```

### Buffer Overflow Indexes\Path 4:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=8 |
| Status | New |

The size of the buffer used by parse_offload_policy_line in llen, at line 3268 of freebsd-src-1/cxgbetool.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 argv, at line 3666 of freebsd-src-1/cxgbetool.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3666 | 3279 |
| Object | argv | llen |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cxgbetool.c |
| Method | main(int argc, const char *argv[]) |

```
....
3666.  main(int argc, const char *argv[])
```

| | |
|---|---|
| File Name | freebsd-src-1/cxgbetool.c |
| Method | parse_offload_policy_line(size_t lno, char *line, size_t llen, pcap_t *pd, |

```
....
3279.        s = &line[llen - 1];
```

### Buffer Overflow Indexes\Path 5:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=9 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 991 |
| Object | getenv | t |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_connect(struct url *URL, struct url *purl, const char *flags) |

```
....
1423.                    } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_base64(const char *src) |

```
....
991.                dst[3] = base64[(t >> 0) & 0x3f];
```

### Buffer Overflow Indexes\Path 6:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=10 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 990 |
| Object | getenv | t |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_connect(struct url *URL, struct url *purl, const char *flags) |

```
....
1423.                    } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_base64(const char *src) |

```
....
990.                dst[2] = base64[(t >> 6) & 0x3f];
```

### Buffer Overflow Indexes\Path 7:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=11 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 989 |
| Object | getenv | t |

Code Snippet
File Name freebsd-src-1/http.c
Method http_connect(struct url *URL, struct url *purl, const char *flags)

```
....
1423.                   } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
989.                dst[1] = base64[(t >> 12) & 0x3f];
```

**Buffer Overflow Indexes\Path 8:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=12 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 988 |
| Object | getenv | t |

Code Snippet
File Name freebsd-src-1/http.c
Method http_connect(struct url *URL, struct url *purl, const char *flags)

```
....
1423.                   } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
988.                dst[0] = base64[(t >> 18) & 0x3f];
```

**Buffer Overflow Indexes\Path 9:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=13 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 1001 |
| Object | getenv | t |

Code Snippet

File Name freebsd-src-1/http.c

Method http_connect(struct url *URL, struct url *purl, const char *flags)

```
....
1423.                   } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1001.               dst[2] = base64[(t >> 6) & 0x3f];
```

**Buffer Overflow Indexes\Path 10:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=14 |

| | |
|---|---|
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 1000 |
| Object | getenv | t |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_connect(struct url *URL, struct url *purl, const char *flags) |

```
....
1423.                         } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_base64(const char *src) |

```
....
1000.                 dst[1] = base64[(t >> 12) & 0x3f];
```

**Buffer Overflow Indexes\Path 11:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=15 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 999 |
| Object | getenv | t |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_connect(struct url *URL, struct url *purl, const char *flags) |

```
....
1423.                         } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

|  |  |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_base64(const char *src) |

```
....
999.                dst[0] = base64[(t >> 18) & 0x3f];
```

**Buffer Overflow Indexes\Path 12:**

|  |  |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=16](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=16) |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 1008 |
| Object | getenv | t |

Code Snippet

|  |  |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_connect(struct url *URL, struct url *purl, const char *flags) |

```
....
1423.                    } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

|  |  |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_base64(const char *src) |

```
....
1008.               dst[1] = base64[(t >> 12) & 0x3f];
```

**Buffer Overflow Indexes\Path 13:**

|  |  |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=17](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=17) |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_connect passes to getenv, at line 1379 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1423 | 1007 |
| Object | getenv | t |

Code Snippet
File Name freebsd-src-1/http.c
Method http_connect(struct url *URL, struct url *purl, const char *flags)

```
....
1423.                   } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1007.               dst[0] = base64[(t >> 18) & 0x3f];
```

**Buffer Overflow Indexes\Path 14:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=18 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1694 | 991 |
| Object | getenv | t |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1694.                   } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
991.                dst[3] = base64[(t >> 0) & 0x3f];
```

**Buffer Overflow Indexes\Path 15:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=19 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1694 | 990 |
| Object | getenv | t |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1694.                       } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
990.                dst[2] = base64[(t >> 6) & 0x3f];
```

**Buffer Overflow Indexes\Path 16:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=20 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |

| | | |
|---|---|---|
| Line | 1694 | 989 |
| Object | getenv | t |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1694.                    } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
989.               dst[1] = base64[(t >> 12) & 0x3f];
```

### Buffer Overflow Indexes\Path 17:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=21](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=21) |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1694 | 988 |
| Object | getenv | t |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1694.                    } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
988.                  dst[0] = base64[(t >> 18) & 0x3f];
```

### Buffer Overflow Indexes\Path 18:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=22 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1694 | 1001 |
| Object | getenv | t |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_request_body(struct url *URL, const char *op, struct url_stat *us, |

```
....
1694.                        } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_base64(const char *src) |

```
....
1001.                 dst[2] = base64[(t >> 6) & 0x3f];
```

### Buffer Overflow Indexes\Path 19:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=23 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |

| | | |
|---|---|---|
| Line | 1694 | 1000 |
| Object | getenv | t |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1694.                    } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1000.             dst[1] = base64[(t >> 12) & 0x3f];
```

**Buffer Overflow Indexes\Path 20:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=24 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1694 | 999 |
| Object | getenv | t |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1694.                    } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
999.                dst[0] = base64[(t >> 18) & 0x3f];
```

**Buffer Overflow Indexes\Path 21:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=25 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1694 | 1008 |
| Object | getenv | t |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1694.                           } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1008.               dst[1] = base64[(t >> 12) & 0x3f];
```

**Buffer Overflow Indexes\Path 22:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=26 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |

| | | |
|---|---|---|
| Line | 1694 | 1007 |
| Object | getenv | t |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1694.                   } else if ((p = getenv("HTTP_PROXY_AUTH")) !=
NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1007.              dst[0] = base64[(t >> 18) & 0x3f];
```

**Buffer Overflow Indexes\Path 23:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=27 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 991 |
| Object | getenv | t |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1724.                   } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
991.               dst[3] = base64[(t >> 0) & 0x3f];
```

**Buffer Overflow Indexes\Path 24:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=28 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 990 |
| Object | getenv | t |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_request_body(struct url *URL, const char *op, struct url_stat *us, |

```
....
1724.                   } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_base64(const char *src) |

```
....
990.              dst[2] = base64[(t >> 6) & 0x3f];
```

**Buffer Overflow Indexes\Path 25:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=29 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 989 |
| Object | getenv | t |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_request_body(struct url *URL, const char *op, struct url_stat *us, |

```
....
1724.                    } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_base64(const char *src) |

```
....
989.              dst[1] = base64[(t >> 12) & 0x3f];
```

**Buffer Overflow Indexes\Path 26:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=30](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=30) |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 988 |
| Object | getenv | t |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_request_body(struct url *URL, const char *op, struct url_stat *us, |

```
....
1724.                    } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_base64(const char *src) |

```
....
988.              dst[0] = base64[(t >> 18) & 0x3f];
```

**Buffer Overflow Indexes\Path 27:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=31](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=31) |

| | |
|---|---|
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 1001 |
| Object | getenv | t |

Code Snippet

File Name freebsd-src-1/http.c

Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1724.                    } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

▼

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1001.              dst[2] = base64[(t >> 6) & 0x3f];
```

**Buffer Overflow Indexes\Path 28:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=32 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 1000 |
| Object | getenv | t |

Code Snippet

File Name freebsd-src-1/http.c

Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1724.                    } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_base64(const char *src) |

```
....
1000.                 dst[1] = base64[(t >> 12) & 0x3f];
```

### Buffer Overflow Indexes\Path 29:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=33 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 999 |
| Object | getenv | t |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_request_body(struct url *URL, const char *op, struct url_stat *us, |

```
....
1724.                       } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_base64(const char *src) |

```
....
999.                  dst[0] = base64[(t >> 18) & 0x3f];
```

### Buffer Overflow Indexes\Path 30:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=34 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|

| | | |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 1008 |
| Object | getenv | t |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1724.                    } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1008.              dst[1] = base64[(t >> 12) & 0x3f];
```

**Buffer Overflow Indexes\Path 31:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=35 |
| Status | New |

The size of the buffer used by http_base64 in t, at line 971 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1724 | 1007 |
| Object | getenv | t |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1724.                    } else if ((p = getenv("HTTP_AUTH")) != NULL &&
```

File Name freebsd-src-1/http.c

Method http_base64(const char *src)

```
....
1007.              dst[0] = base64[(t >> 18) & 0x3f];
```

## 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=1060097&projectid=60087&pathid=40 |
| Status | New |

The size of the buffer used by http_request_body in pwd, at line 1585 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_get_proxy passes to getenv, at line 1502 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1511 | 1919 |
| Object | getenv | pwd |

Code Snippet
File Name freebsd-src-1/http.c
Method http_get_proxy(struct url * url, const char *flags)

```
....
1511.        if (((p = getenv("HTTP_PROXY")) || (p =
getenv("http_proxy"))) &&
```

File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1919.                          strcpy(new->pwd, url->pwd);
```

**Buffer Overflow StrcpyStrcat\Path 2:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=41 |
| Status | New |

The size of the buffer used by http_request_body in pwd, at line 1585 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_get_proxy passes to getenv, at line 1502 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1511 | 1919 |
| Object | getenv | pwd |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_get_proxy(struct url * url, const char *flags) |

```
....
1511.        if (((p = getenv("HTTP_PROXY")) || (p =
getenv("http_proxy"))) &&
```

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_request_body(struct url *URL, const char *op, struct url_stat *us, |

```
....
1919.                              strcpy(new->pwd, url->pwd);
```

**Buffer Overflow StrcpyStrcat\Path 3:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=42 |
| Status | New |

The size of the buffer used by http_request_body in pwd, at line 1585 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1760 | 1919 |
| Object | getenv | pwd |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_request_body(struct url *URL, const char *op, struct url_stat *us, |

```
....
1760.            if ((p = getenv("HTTP_USER_AGENT")) != NULL) {
....
1919.                              strcpy(new->pwd, url->pwd);
```

### Buffer Overflow StrcpyStrcat\Path 4:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=43 |
| Status | New |

The size of the buffer used by http_request_body in user, at line 1585 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_get_proxy passes to getenv, at line 1502 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1511 | 1918 |
| Object | getenv | user |

Code Snippet

File Name freebsd-src-1/http.c

Method http_get_proxy(struct url * url, const char *flags)

```
....
1511.       if (((p = getenv("HTTP_PROXY")) || (p =
getenv("http_proxy"))) &&
```

File Name freebsd-src-1/http.c

Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1918.                                     strcpy(new->user, url->user);
```

### Buffer Overflow StrcpyStrcat\Path 5:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=44 |
| Status | New |

The size of the buffer used by http_request_body in user, at line 1585 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_get_proxy passes to getenv, at line 1502 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1511 | 1918 |
| Object | getenv | user |

Code Snippet

File Name freebsd-src-1/http.c

Method http_get_proxy(struct url * url, const char *flags)

```
....
1511.        if (((p = getenv("HTTP_PROXY")) || (p =
getenv("http_proxy"))) &&
```

▼

File Name freebsd-src-1/http.c

Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1918.                                      strcpy(new->user, url->user);
```

**Buffer Overflow StrcpyStrcat\Path 6:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=45 |
| Status | New |

The size of the buffer used by http_request_body in user, at line 1585 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1760 | 1918 |
| Object | getenv | user |

Code Snippet

File Name freebsd-src-1/http.c

Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1760.             if ((p = getenv("HTTP_USER_AGENT")) != NULL) {
....
1918.                                      strcpy(new->user, url->user);
```

**Buffer Overflow StrcpyStrcat\Path 7:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=46 |
| Status | New |

The size of the buffer used by http_get_proxy in scheme, at line 1502 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_get_proxy passes to getenv, at line 1502 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|

| | | |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1511 | 1514 |
| Object | getenv | scheme |

Code Snippet
File Name freebsd-src-1/http.c
Method http_get_proxy(struct url * url, const char *flags)

```
....
1511.        if (((p = getenv("HTTP_PROXY")) || (p =
getenv("http_proxy"))) &&
....
1514.                        strcpy(purl->scheme, SCHEME_HTTP);
```

**Buffer Overflow StrcpyStrcat\Path 8:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=47 |
| Status | New |

The size of the buffer used by http_get_proxy in scheme, at line 1502 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_get_proxy passes to getenv, at line 1502 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1511 | 1514 |
| Object | getenv | scheme |

Code Snippet
File Name freebsd-src-1/http.c
Method http_get_proxy(struct url * url, const char *flags)

```
....
1511.        if (((p = getenv("HTTP_PROXY")) || (p =
getenv("http_proxy"))) &&
....
1514.                        strcpy(purl->scheme, SCHEME_HTTP);
```

**Buffer Overflow StrcpyStrcat\Path 9:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=48 |
| Status | New |

The size of the buffer used by *CRYPTO_strdup in ret, at line 27 of freebsd-src-1/o_str.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that *CRYPTO_strdup passes to file, at line 27 of freebsd-src-1/o_str.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/o_str.c | freebsd-src-1/o_str.c |
| Line | 27 | 35 |
| Object | file | ret |

Code Snippet
File Name freebsd-src-1/o_str.c
Method char *CRYPTO_strdup(const char *str, const char* file, int line)

```
....
27.  char *CRYPTO_strdup(const char *str, const char* file, int line)
....
35.          strcpy(ret, str);
```

**Buffer Overflow StrcpyStrcat\Path 10:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=49 |
| Status | New |

The size of the buffer used by my_popen in command, at line 67 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that my_popen passes to command, at line 67 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 67 | 92 |
| Object | command | command |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method my_popen(const char *command, const char *dir, pid_t *p_pid)

```
....
67.  my_popen(const char *command, const char *dir, pid_t *p_pid)
....
92.   strcpy(cmd2, command);
```

**Buffer Overflow StrcpyStrcat\Path 11:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=50 |
| Status | New |

The size of the buffer used by my_popen in command, at line 67 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that add_it_to passes to vars, at line 2641 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2641 | 92 |
| Object | vars | command |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method add_it_to(char **vars, int cur_cnt, char *name)

```
....
2641.   add_it_to(char **vars, int cur_cnt, char *name)
```

File Name freebsd-src-1/pmcstudy.c
Method my_popen(const char *command, const char *dir, pid_t *p_pid)

```
....
92.   strcpy(cmd2, command);
```

**Buffer Overflow StrcpyStrcat\Path 12:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=51 |
| Status | New |

The size of the buffer used by build_command_for_exp in forming, at line 2669 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that add_it_to passes to vars, at line 2641 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2641 | 2728 |
| Object | vars | forming |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method add_it_to(char **vars, int cur_cnt, char *name)

```
....
2641.   add_it_to(char **vars, int cur_cnt, char *name)
```

File Name freebsd-src-1/pmcstudy.c

Method build_command_for_exp(struct expression *exp)

```
....
2728.               strcat(cmd, forming);
```

### Buffer Overflow StrcpyStrcat\Path 13:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=52 |
| Status | New |

The size of the buffer used by build_command_for_exp in cmd, at line 2669 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that add_it_to passes to vars, at line 2641 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2641 | 2728 |
| Object | vars | cmd |

Code Snippet

File Name freebsd-src-1/pmcstudy.c

Method add_it_to(char **vars, int cur_cnt, char *name)

```
....
2641.   add_it_to(char **vars, int cur_cnt, char *name)
```

File Name freebsd-src-1/pmcstudy.c

Method build_command_for_exp(struct expression *exp)

```
....
2728.               strcat(cmd, forming);
```

### Buffer Overflow StrcpyStrcat\Path 14:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=53 |
| Status | New |

The size of the buffer used by filter_add in neW, at line 635 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that filter_add passes to filt, at line 635 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 635 | 656 |
| Object | filt | neW |

Code Snippet
File Name    freebsd-src-1/lockstat.c
Method    filter_add(char **filt, char *what, uintptr_t base, size_t size)

```
....
635.   filter_add(char **filt, char *what, uintptr_t base, size_t size)
....
656.          (void) strcat(new, c);
```

## 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=1060097&projectid=60087&pathid=90 |
| Status | New |

The size of the buffer used by main in i, at line 1114 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that { passes to g_event_info, at line 147 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 147 | 1295 |
| Object | g_event_info | i |

Code Snippet
File Name    freebsd-src-1/lockstat.c
Method    static ls_event_info_t g_event_info[LS_MAX_EVENTS] = {

```
....
147.   static ls_event_info_t g_event_info[LS_MAX_EVENTS] = {
```

File Name    freebsd-src-1/lockstat.c

Method main(int argc, char **argv)

```
....
1295.                           if (g_event_info[i].ev_type == c)
```

**Buffer Overflow OutOfBound\Path 2:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=91 |
| Status | New |

The size of the buffer used by main in i, at line 1114 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that { passes to g_event_info, at line 147 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 147 | 1194 |
| Object | g_event_info | i |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method static ls_event_info_t g_event_info[LS_MAX_EVENTS] = {

```
....
147.  static ls_event_info_t g_event_info[LS_MAX_EVENTS] = {
```

▼

File Name freebsd-src-1/lockstat.c

Method main(int argc, char **argv)

```
....
1194.                           if (g_event_info[i].ev_type != 'E')
```

**Buffer Overflow OutOfBound\Path 3:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=92 |
| Status | New |

The size of the buffer used by main in g_event_info, at line 1114 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that { passes to g_event_info, at line 147 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |

|  |  |  |
|---|---|---|
| Line | 147 | 1302 |
| Object | g_event_info | g_event_info |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method static ls_event_info_t g_event_info[LS_MAX_EVENTS] = {

```
....
147.  static ls_event_info_t g_event_info[LS_MAX_EVENTS] = {
```

File Name freebsd-src-1/lockstat.c

Method main(int argc, char **argv)

```
....
1302.                           if (strchr("CH", g_event_info[i].ev_type))
```

**Buffer Overflow OutOfBound\Path 4:**

|  |  |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=93 |
| Status | New |

The size of the buffer used by main in i, at line 1114 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that { passes to g_event_info, at line 147 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 147 | 1375 |
| Object | g_event_info | i |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method static ls_event_info_t g_event_info[LS_MAX_EVENTS] = {

```
....
147.  static ls_event_info_t g_event_info[LS_MAX_EVENTS] = {
```

File Name freebsd-src-1/lockstat.c

Method main(int argc, char **argv)

```
....
1375.              if (!events_specified && g_event_info[i].ev_type ==
'C')
```

**Buffer Overflow OutOfBound\Path 5:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=94 |
| Status | New |

The size of the buffer used by main in i, at line 1114 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that { passes to g_event_info, at line 147 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 147 | 1383 |
| Object | g_event_info | i |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | static ls_event_info_t g_event_info[LS_MAX_EVENTS] = { |

```
....
147.   static ls_event_info_t g_event_info[LS_MAX_EVENTS] = {
```

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | main(int argc, char **argv) |

```
....
1383.              if (g_event_info[i].ev_acquire != NULL) {
```

**Buffer Overflow OutOfBound\Path 6:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=95 |
| Status | New |

The size of the buffer used by main in i, at line 1114 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that g_min_duration[LS_MAX_EVENTS]; passes to g_min_duration, at line 129 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 129 | 1195 |
| Object | g_min_duration | i |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | static hrtime_t g_min_duration[LS_MAX_EVENTS]; |

```
....
129.   static hrtime_t g_min_duration[LS_MAX_EVENTS];
```

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | main(int argc, char **argv) |

```
....
1195.                                   g_min_duration[i] = duration;
```

**Buffer Overflow OutOfBound\Path 7:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=96 |
| Status | New |

The size of the buffer used by main in i, at line 1114 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that g_enabled[LS_MAX_EVENTS]; passes to g_enabled, at line 128 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 128 | 1296 |
| Object | g_enabled | i |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | static uchar_t g_enabled[LS_MAX_EVENTS]; |

```
....
128.   static uchar_t g_enabled[LS_MAX_EVENTS];
```

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | main(int argc, char **argv) |

```
....
1296.                                   g_enabled[i] = 1;
```

**Buffer Overflow OutOfBound\Path 8:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=600 |

| | |
|---|---|
| | 87&pathid=97 |
| Status | New |

The size of the buffer used by main in i, at line 1114 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that g_enabled[LS_MAX_EVENTS]; passes to g_enabled, at line 128 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 128 | 1262 |
| Object | g_enabled | i |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method static uchar_t g_enabled[LS_MAX_EVENTS];

```
....
128.  static uchar_t g_enabled[LS_MAX_EVENTS];
```

File Name freebsd-src-1/lockstat.c

Method main(int argc, char **argv)

```
....
1262.                                   g_enabled[i] = 1;
```

**Buffer Overflow OutOfBound\Path 9:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=98 |
| Status | New |

The size of the buffer used by main in i, at line 1114 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that g_enabled[LS_MAX_EVENTS]; passes to g_enabled, at line 128 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 128 | 1303 |
| Object | g_enabled | i |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method static uchar_t g_enabled[LS_MAX_EVENTS];

```
....
128.   static uchar_t g_enabled[LS_MAX_EVENTS];
```

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | main(int argc, char **argv) |

```
....
1303.                                g_enabled[i] = 1;
```

**Buffer Overflow OutOfBound\Path 10:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=99 |
| Status | New |

The size of the buffer used by main in i, at line 1114 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that g_enabled[LS_MAX_EVENTS]; passes to g_enabled, at line 128 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 128 | 1376 |
| Object | g_enabled | i |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | static uchar_t g_enabled[LS_MAX_EVENTS]; |

```
....
128.   static uchar_t g_enabled[LS_MAX_EVENTS];
```

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | main(int argc, char **argv) |

```
....
1376.                    g_enabled[i] = 1;
```

**Buffer Overflow OutOfBound\Path 11:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=100 |
| Status | New |

The size of the buffer used by main in i, at line 1114 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that g_enabled[LS_MAX_EVENTS]; passes to g_enabled, at line 128 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 128 | 1380 |
| Object | g_enabled | i |

Code Snippet

File Name freebsd-src-1/lockstat.c

Method static uchar_t g_enabled[LS_MAX_EVENTS];

```
....
128.   static uchar_t g_enabled[LS_MAX_EVENTS];
```

File Name freebsd-src-1/lockstat.c

Method main(int argc, char **argv)

```
....
1380.              if (!g_enabled[i])
```

**Buffer Overflow OutOfBound\Path 12:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=101 |
| Status | New |

The size of the buffer used by test_for_a_pmc in i, at line 2568 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that my_popen passes to pdesin, at line 67 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 70 | 2604 |
| Object | pdesin | i |

Code Snippet

File Name freebsd-src-1/pmcstudy.c

Method my_popen(const char *command, const char *dir, pid_t *p_pid)

```
....
70.   int pdesin[2], pdesout[2];
```

File Name freebsd-src-1/pmcstudy.c

Method test_for_a_pmc(const char *pmc, int out_so_far)

```
....
2604.             } else if (strncmp(&line[i], resp, len) == 0) {
```

**Buffer Overflow OutOfBound\Path 13:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=102](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=102) |
| Status | New |

The size of the buffer used by test_for_a_pmc in i, at line 2568 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that my_popen passes to pdesin, at line 67 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 70 | 2601 |
| Object | pdesin | i |

Code Snippet

File Name freebsd-src-1/pmcstudy.c

Method my_popen(const char *command, const char *dir, pid_t *p_pid)

```
....
70.   int pdesin[2], pdesout[2];
```

File Name freebsd-src-1/pmcstudy.c

Method test_for_a_pmc(const char *pmc, int out_so_far)

```
....
2601.             if (strncmp(&line[i], "ERROR", 5) == 0) {
```

**Buffer Overflow OutOfBound\Path 14:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=103](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=103) |
| Status | New |

The size of the buffer used by process_header in i, at line 2064 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that my_popen passes to pdesin, at line 67 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|

| | | |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 70 | 2083 |
| Object | pdesin | i |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method my_popen(const char *command, const char *dir, pid_t *p_pid)

```
....
70.    int pdesin[2], pdesout[2];
```

File Name freebsd-src-1/pmcstudy.c

Method process_header(int idx, char *p)

```
....
2083.               if (p[i] == '/') {
```

## 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=1060097&projectid=60087&pathid=317 |
| Status | New |

Unvalidated DB output was found in line number 2095 in freebsd-src-1/pmcstudy.c file. A possible XSS exploitation was found in printf at line number 2064.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2104 | 2075 |
| Object | buffer | printf |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method build_counters_from_header(FILE *io)

```
....
2104.        if (fgets(buffer, sizeof(buffer), io) == NULL) {
```

File Name	freebsd-src-1/pmcstudy.c

Method	process_header(int idx, char *p)

```
....
2075.              printf("Check -- invalid header no s/ in %s\n",
```

**CGI Stored XSS\Path 2:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=318](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=318) |
| Status | New |

Unvalidated DB output was found in line number 2334 in freebsd-src-1/pmcstudy.c file. A possible XSS exploitation was found in printf at line number 2787.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2510 | 2793 |
| Object | linebuf | printf |

Code Snippet

File Name	freebsd-src-1/pmcstudy.c

Method	get_cpuid_set(void)

```
....
2510.        while (fgets(linebuf, sizeof(linebuf), io) != NULL) {
```

File Name	freebsd-src-1/pmcstudy.c

Method	list_all(void)

```
....
2793.              cnt = printf("%s", valid_pmcs[i]);
```

**CGI Stored XSS\Path 3:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=319](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=319) |
| Status | New |

Unvalidated DB output was found in line number 2334 in freebsd-src-1/pmcstudy.c file. A possible XSS exploitation was found in printf at line number 2775.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2510 | 2781 |
| Object | linebuf | printf |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method get_cpuid_set(void)

```
....
2510.        while (fgets(linebuf, sizeof(linebuf), io) != NULL) {
```

File Name freebsd-src-1/pmcstudy.c

Method run_tests(void)

```
....
2781.                lenout = printf("%s", valid_pmcs[i]);
```

**CGI Stored XSS\Path 4:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=320 |
| Status | New |

Unvalidated DB output was found in line number 2568 in freebsd-src-1/pmcstudy.c file. A possible XSS exploitation was found in printf at line number 2568.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2591 | 2602 |
| Object | line | printf |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method test_for_a_pmc(const char *pmc, int out_so_far)

```
....
2591.        if (fgets(line, sizeof(line), io) == NULL) {
....
2602.                        printf("Failed %s\n", line);
```

**CGI Stored XSS\Path 5:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=321 |
| Status | New |

Unvalidated DB output was found in line number 2568 in freebsd-src-1/pmcstudy.c file. A possible XSS exploitation was found in printf at line number 2568.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2591 | 2627 |
| Object | line | printf |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method test_for_a_pmc(const char *pmc, int out_so_far)

```
....
2591.       if (fgets(line, sizeof(line), io) == NULL) {
....
2627.                        printf("%s", &line[j]);
```

### CGI Stored XSS\Path 6:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=322 |
| Status | New |

Unvalidated DB output was found in line number 2568 in freebsd-src-1/pmcstudy.c file. A possible XSS exploitation was found in printf at line number 2568.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2591 | 2634 |
| Object | line | printf |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method test_for_a_pmc(const char *pmc, int out_so_far)

```
....
2591.       if (fgets(line, sizeof(line), io) == NULL) {
....
2634.       printf("Failed -- '%s' not '%s'\n", line, resp);
```

### CGI Stored XSS\Path 7:

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=323 |
| Status | New |

Unvalidated DB output was found in line number 2568 in freebsd-src-1/pmcstudy.c file. A possible XSS exploitation was found in printf at line number 2568.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2607 | 2602 |
| Object | line | printf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | test_for_a_pmc(const char *pmc, int out_so_far) |

```
....
2607.                   if (fgets(line, sizeof(line), io) == NULL) {
....
2602.                   printf("Failed %s\n", line);
```

**CGI Stored XSS\Path 8:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=324 |
| Status | New |

Unvalidated DB output was found in line number 2568 in freebsd-src-1/pmcstudy.c file. A possible XSS exploitation was found in printf at line number 2568.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2607 | 2634 |
| Object | line | printf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | test_for_a_pmc(const char *pmc, int out_so_far) |

```
....
2607.                   if (fgets(line, sizeof(line), io) == NULL) {
....
2634.         printf("Failed -- '%s' not '%s'\n", line, resp);
```

**CGI Stored XSS\Path 9:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=325](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=325) |
| Status | New |

Unvalidated DB output was found in line number 2568 in freebsd-src-1/pmcstudy.c file. A possible XSS exploitation was found in printf at line number 2568.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2607 | 2627 |
| Object | line | printf |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method test_for_a_pmc(const char *pmc, int out_so_far)

```
....
2607.                   if (fgets(line, sizeof(line), io) == NULL) {
....
2627.                        printf("%s", &line[j]);
```

## 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=1060097&projectid=60087&pathid=1](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1) |
| Status | New |

The size of the buffer used by my_popen in argv, at line 67 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that test_for_a_pmc passes to "/usr/sbin/pmcstat -w .25 -c 0 -s %s", at line 2568 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2583 | 95 |
| Object | "/usr/sbin/pmcstat -w .25 -c 0 -s %s" | argv |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method test_for_a_pmc(const char *pmc, int out_so_far)

```
....
2583.       sprintf(my_command, "/usr/sbin/pmcstat -w .25 -c 0 -s %s", 
pmc);
```

▼

File Name freebsd-src-1/pmcstudy.c

Method my_popen(const char *command, const char *dir, pid_t *p_pid)

```
....
95.   argv[2] = cmd2;
```

**Buffer Overflow LongString\Path 2:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=2 |
| Status | New |

The size of the buffer used by my_popen in argv, at line 67 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that build_command_for_exp passes to "/usr/sbin/pmcstat -w 1", at line 2669 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2724 | 95 |
| Object | "/usr/sbin/pmcstat -w 1" | argv |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method build_command_for_exp(struct expression *exp)

```
....
2724.       strcpy(cmd, "/usr/sbin/pmcstat -w 1");
```

▼

File Name freebsd-src-1/pmcstudy.c

Method my_popen(const char *command, const char *dir, pid_t *p_pid)

```
....
95.   argv[2] = cmd2;
```

**Buffer Overflow LongString\Path 3:**

| | |
|---|---|
| Severity | High |

| | |
|---|---|
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=3 |
| Status | New |

The size of the buffer used by my_popen in argv, at line 67 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that build_command_for_exp passes to " -s %s", at line 2669 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2727 | 95 |
| Object | " -s %s" | argv |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | build_command_for_exp(struct expression *exp) |

```
....
2727.               sprintf(forming, " -s %s", vars[i]);
```

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | my_popen(const char *command, const char *dir, pid_t *p_pid) |

```
....
95.   argv[2] = cmd2;
```

**Buffer Overflow LongString\Path 4:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=4 |
| Status | New |

The size of the buffer used by my_popen in argv, at line 67 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that get_cpuid_set passes to "/usr/sbin/pmccontrol - ", at line 2334 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2497 | 95 |
| Object | "/usr/sbin/pmccontrol - " | argv |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |

| | |
|---|---|
| Method | get_cpuid_set(void) |

```
....
2497.       io = my_popen("/usr/sbin/pmccontrol -L", "r",
&pid_of_command);
```

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | my_popen(const char *command, const char *dir, pid_t *p_pid) |

```
....
95.   argv[2] = cmd2;
```

## Buffer Overflow boundedcpy

Query Path:
CPP\Cx\CPP Buffer Overflow\Buffer Overflow boundedcpy 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 boundedcpy\Path 1:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=36 |
| Status | New |

The size parameter BinaryExpr in line 223 in file freebsd-src-1/phttpget.c is influenced by the user input argv in line 293 in file freebsd-src-1/phttpget.c. This may lead to a buffer overflow vulnerability, which may in turn result in malicious code execution.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/phttpget.c | freebsd-src-1/phttpget.c |
| Line | 293 | 232 |
| Object | argv | BinaryExpr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/phttpget.c |
| Method | main(int argc, char *argv[]) |

```
....
293.  main(int argc, char *argv[])
```

| | |
|---|---|
| File Name | freebsd-src-1/phttpget.c |
| Method | readln(int sd, char * resbuf, int * resbuflen, int * resbufpos) |

```
....
232.                            *resbuflen - *resbufpos);
```

**Buffer Overflow boundedcpy\Path 2:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=37 |
| Status | New |

The size parameter BinaryExpr in line 223 in file freebsd-src-1/phttpget.c is influenced by the user input BinaryExpr in line 223 in file freebsd-src-1/phttpget.c. This may lead to a buffer overflow vulnerability, which may in turn result in malicious code execution.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/phttpget.c | freebsd-src-1/phttpget.c |
| Line | 242 | 232 |
| Object | BinaryExpr | BinaryExpr |

Code Snippet
File Name freebsd-src-1/phttpget.c
Method readln(int sd, char * resbuf, int * resbuflen, int * resbufpos)

```
....
242.                  len = recv(sd, resbuf + *resbuflen, BUFSIZ -
*resbuflen, 0);
....
232.                            *resbuflen - *resbufpos);
```

**Buffer Overflow boundedcpy\Path 3:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=38 |
| Status | New |

The size parameter BinaryExpr in line 223 in file freebsd-src-1/phttpget.c is influenced by the user input resbuf in line 255 in file freebsd-src-1/phttpget.c. This may lead to a buffer overflow vulnerability, which may in turn result in malicious code execution.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/phttpget.c | freebsd-src-1/phttpget.c |
| Line | 276 | 232 |
| Object | resbuf | BinaryExpr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/phttpget.c |
| Method | copybytes(int sd, int fd, off_t copylen, char * resbuf, int * resbuflen, |

```
....
276.                len = recv(sd, resbuf, BUFSIZ, 0);
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/phttpget.c |
| Method | readln(int sd, char * resbuf, int * resbuflen, int * resbufpos) |

```
....
232.                          *resbuflen - *resbufpos);
```

**Buffer Overflow boundedcpy\Path 4:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=39](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=39) |
| Status | New |

The size parameter len in line 2021 in file freebsd-src-1/test_x509.c is influenced by the user input argv in line 2021 in file freebsd-src-1/test_x509.c. This may lead to a buffer overflow vulnerability, which may in turn result in malicious code execution.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 2021 | 2050 |
| Object | argv | len |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/test_x509.c |
| Method | main(int argc, const char *argv[]) |

```
....
2021.  main(int argc, const char *argv[])
....
2050.                        memcpy(dn, arg, len);
```

## Command Injection

Query Path:
CPP\Cx\CPP High Risk\Command Injection Version:1

### Categories

PCI DSS v3.2: PCI DSS (3.2) - 6.5.1 - Injection flaws - particularly SQL injection
OWASP Top 10 2013: A1-Injection
FISMA 2014: System And Information Integrity
NIST SP 800-53: SI-10 Information Input Validation (P1)
OWASP Top 10 2017: A1-Injection

Description

**Command Injection\Path 1:**

| | |
|---|---|
| Severity | High |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=326 |
| Status | New |

The application's main method calls an OS (shell) command with execvp, at line 1114 of freebsd-src-1/lockstat.c, using an untrusted string with the command to execute.
This could allow an attacker to inject an arbitrary command, and enable a Command Injection attack.

The attacker may be able to inject the executed command via user input, argv, which is retrieved by the application in the main method, at line 1114 of freebsd-src-1/lockstat.c.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1114 | 1476 |
| Object | argv | execvp |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | main(int argc, char **argv) |

```
....
1114.  main(int argc, char **argv)
....
1476.              (void) execvp(argv[0], &argv[0]);
```

## 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=1060097&projectid=60087&pathid=503 |
| Status | New |

The dangerous function, memcpy, was found in use at line 2355 in freebsd-src-1/archive_read_support_format_lha.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|

| | | |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_lha.c | freebsd-src-1/archive_read_support_format_lha.c |
| Line | 2494 | 2494 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_lha.c
Method lzh_decode_blocks(struct lzh_stream *strm, int last)

```
....
2494.                           memcpy(w_buff + w_pos,
```

**Dangerous Functions\Path 2:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=504 |
| Status | New |

The dangerous function, memcpy, was found in use at line 2702 in freebsd-src-1/archive_read_support_format_lha.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_lha.c | freebsd-src-1/archive_read_support_format_lha.c |
| Line | 2799 | 2799 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_lha.c
Method lzh_make_huffman_table(struct huffman *hf)

```
....
2799.                           memcpy(&p[cnt], pc,
```

**Dangerous Functions\Path 3:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=505 |
| Status | New |

The dangerous function, memcpy, was found in use at line 2702 in freebsd-src-1/archive_read_support_format_lha.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_lha.c | freebsd-src-1/archive_read_support_format_lha.c |
| Line | 2804 | 2804 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_lha.c
Method lzh_make_huffman_table(struct huffman *hf)

```
....
2804.                                           memcpy(&p[cnt], pc,
```

**Dangerous Functions\Path 4:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=506 |
| Status | New |

The dangerous function, memcpy, was found in use at line 2702 in freebsd-src-1/archive_read_support_format_lha.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_lha.c | freebsd-src-1/archive_read_support_format_lha.c |
| Line | 2809 | 2809 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_lha.c
Method lzh_make_huffman_table(struct huffman *hf)

```
....
2809.                                     memcpy(p, pc, cnt *
sizeof(uint16_t));
```

**Dangerous Functions\Path 5:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=507 |
| Status | New |

The dangerous function, memcpy, was found in use at line 2084 in freebsd-src-1/archive_read_support_format_mtree.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 2120 | 2120 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_mtree.c
Method readline(struct archive_read *a, struct mtree *mtree, char **start,

```
....
2120.            memcpy(mtree->line.s + total_size, t, bytes_read);
```

**Dangerous Functions\Path 6:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=508 |
| Status | New |

The dangerous function, memcpy, was found in use at line 813 in freebsd-src-1/archive_read_support_format_mtree.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 827 | 827 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_mtree.c
Method add_option(struct archive_read *a, struct mtree_option **global,

```
....
827.        memcpy(opt->value, value, len);
```

**Dangerous Functions\Path 7:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=509 |
| Status | New |

The dangerous function, memcpy, was found in use at line 919 in freebsd-src-1/archive_read_support_format_mtree.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 987 | 987 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_mtree.c
Method process_add_entry(struct archive_read *a, struct mtree *mtree,

```
....
987.         memcpy(entry->name, name, name_len);
```

**Dangerous Functions\Path 8:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=510 |
| Status | New |

The dangerous function, memcpy, was found in use at line 676 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 696 | 696 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method lzss_emit_match(struct rar *rar, int offset, int length)

```
....
696.         memcpy(d, s, l);
```

**Dangerous Functions\Path 9:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=511 |

| | |
|---|---|
| Status | New |

The dangerous function, memcpy, was found in use at line 907 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 983 | 983 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method archive_read_format_rar_read_header(struct archive_read *a,

```
....
983.        memcpy(rar->reserved1, p + 7, sizeof(rar->reserved1));
```

**Dangerous Functions\Path 10:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=512 |
| Status | New |

The dangerous function, memcpy, was found in use at line 907 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 984 | 984 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method archive_read_format_rar_read_header(struct archive_read *a,

```
....
984.        memcpy(rar->reserved2, p + 7 + sizeof(rar->reserved1),
```

**Dangerous Functions\Path 11:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=600 |

| | |
|---|---|
| | 87&pathid=513 |
| Status | New |

The dangerous function, memcpy, was found in use at line 1358 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 1395 | 1395 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method read_header(struct archive_read *a, struct archive_entry *entry,

```
....
1395.     memcpy(&rar_header, p, sizeof(rar_header));
```

**Dangerous Functions\Path 12:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=514 |
| Status | New |

The dangerous function, memcpy, was found in use at line 1358 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 1448 | 1448 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method read_header(struct archive_read *a, struct archive_entry *entry,

```
....
1448.     memcpy(&file_header, p, sizeof(file_header));
```

**Dangerous Functions\Path 13:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=515 |
| Status | New |

The dangerous function, memcpy, was found in use at line 1358 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 1472 | 1472 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method read_header(struct archive_read *a, struct archive_entry *entry,

```
....
1472.       memcpy(packed_size, file_header.pack_size, 4);
```

**Dangerous Functions\Path 14:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=516 |
| Status | New |

The dangerous function, memcpy, was found in use at line 1358 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 1473 | 1473 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method read_header(struct archive_read *a, struct archive_entry *entry,

```
....
1473.       memcpy(packed_size + 4, p, 4); /* High pack size */
```

**Dangerous Functions\Path 15:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |

|  |  |
|---|---|
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=517 |
| Status | New |

The dangerous function, memcpy, was found in use at line 1358 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 1475 | 1475 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method read_header(struct archive_read *a, struct archive_entry *entry,

```
....
1475.       memcpy(unp_size, file_header.unp_size, 4);
```

**Dangerous Functions\Path 16:**

|  |  |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=518 |
| Status | New |

The dangerous function, memcpy, was found in use at line 1358 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 1476 | 1476 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method read_header(struct archive_read *a, struct archive_entry *entry,

```
....
1476.       memcpy(unp_size + 4, p, 4); /* High unpack size */
```

**Dangerous Functions\Path 17:**

|  |  |
|---|---|
| Severity | Medium |

| | |
|---|---|
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=519 |
| Status | New |

The dangerous function, memcpy, was found in use at line 1358 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 1529 | 1529 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method read_header(struct archive_read *a, struct archive_entry *entry,

```
....
1529.     memcpy(filename, p, filename_size);
```

**Dangerous Functions\Path 18:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=520 |
| Status | New |

The dangerous function, memcpy, was found in use at line 1358 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 1683 | 1683 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method read_header(struct archive_read *a, struct archive_entry *entry,

```
....
1683.     memcpy(rar->filename_save, rar->filename, filename_size + 1);
```

**Dangerous Functions\Path 19:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=521 |
| Status | New |

The dangerous function, memcpy, was found in use at line 1358 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 1706 | 1706 |
| Object | memcpy | memcpy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | read_header(struct archive_read *a, struct archive_entry *entry, |

```
....
1706.        memcpy(rar->salt, p, 8);
```

**Dangerous Functions\Path 20:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=522 |
| Status | New |

The dangerous function, memcpy, was found in use at line 3069 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3083 | 3083 |
| Object | memcpy | memcpy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | copy_from_lzss_window(struct archive_read *a, void *buffer, |

```
....
3083.        memcpy(buffer, &rar->lzss.window[windowoffs], firstpart);
```

**Dangerous Functions\Path 21:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=523 |
| Status | New |

The dangerous function, memcpy, was found in use at line 3069 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3084 | 3084 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method copy_from_lzss_window(struct archive_read *a, void *buffer,

```
....
3084.      memcpy(buffer, &rar->lzss.window[0], length - firstpart);
```

**Dangerous Functions\Path 22:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=524 |
| Status | New |

The dangerous function, memcpy, was found in use at line 3069 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3086 | 3086 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method copy_from_lzss_window(struct archive_read *a, void *buffer,

```
....
3086.      memcpy(buffer, &rar->lzss.window[windowoffs], length);
```

### Dangerous Functions\Path 23:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=525 |
| Status | New |

The dangerous function, memcpy, was found in use at line 3092 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3110 | 3110 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method copy_from_lzss_window_to_unp(struct archive_read *a, const void **buffer,

```
....
3110.       memcpy(&rar->unp_buffer[rar->unp_offset], &rar-
>lzss.window[windowoffs],
```

### Dangerous Functions\Path 24:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=526 |
| Status | New |

The dangerous function, memcpy, was found in use at line 3092 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3120 | 3120 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method copy_from_lzss_window_to_unp(struct archive_read *a, const void **buffer,

```
....
3120.         memcpy(&rar->unp_buffer[rar->unp_offset],
```

**Dangerous Functions\Path 25:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=527 |
| Status | New |

The dangerous function, memcpy, was found in use at line 3092 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3122 | 3122 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method copy_from_lzss_window_to_unp(struct archive_read *a, const void **buffer,

```
....
3122.         memcpy(&rar->unp_buffer[rar->unp_offset + firstpart],
```

**Dangerous Functions\Path 26:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=528 |
| Status | New |

The dangerous function, memcpy, was found in use at line 3092 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3125 | 3125 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c

|  |  |
|---|---|
| Method | copy_from_lzss_window_to_unp(struct archive_read *a, const void **buffer, |

```
....
3125.        memcpy(&rar->unp_buffer[rar->unp_offset],
```

### Dangerous Functions\Path 27:

|  |  |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=529 |
| Status | New |

The dangerous function, memcpy, was found in use at line 3313 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3326 | 3326 |
| Object | memcpy | memcpy |

Code Snippet

|  |  |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | create_filter(struct rar_program_code *prog, const uint8_t *globaldata, uint32_t globaldatalen, uint32_t registers[8], size_t startpos, uint32_t length) |

```
....
3326.      memcpy(filter->globaldata, globaldata, globaldatalen);
```

### Dangerous Functions\Path 28:

|  |  |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=530 |
| Status | New |

The dangerous function, memcpy, was found in use at line 3313 in freebsd-src-1/archive_read_support_format_rar.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3328 | 3328 |
| Object | memcpy | memcpy |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | create_filter(struct rar_program_code *prog, const uint8_t *globaldata, uint32_t globaldatalen, uint32_t registers[8], size_t startpos, uint32_t length) |

```
....
3328.      memcpy(filter->initialregisters, registers, sizeof(filter-
>initialregisters));
```

**Dangerous Functions\Path 29:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=531 |
| Status | New |

The dangerous function, memcpy, was found in use at line 795 in freebsd-src-1/authzone.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 809 | 809 |
| Object | memcpy | memcpy |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/authzone.c |
| Method | rrset_add_rr(struct auth_rrset* rrset, uint32_t rr_ttl, uint8_t* rdata, |

```
....
809.        memcpy(d, old, sizeof(struct packed_rrset_data));
```

**Dangerous Functions\Path 30:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=532 |
| Status | New |

The dangerous function, memcpy, was found in use at line 936 in freebsd-src-1/authzone.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 963 | 963 |
| Object | memcpy | memcpy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | rrset_moveover_rrsigs(struct auth_data* node, uint16_t rr_type, |

```
....
963.        memcpy(d, old, sizeof(struct packed_rrset_data));
```

**Dangerous Functions\Path 31:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=533 |
| Status | New |

The dangerous function, memcpy, was found in use at line 936 in freebsd-src-1/authzone.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1027 | 1027 |
| Object | memcpy | memcpy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | rrset_moveover_rrsigs(struct auth_data* node, uint16_t rr_type, |

```
....
1027.       memcpy(sigd, sigold, sizeof(struct packed_rrset_data));
```

**Dangerous Functions\Path 32:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=534 |
| Status | New |

The dangerous function, memcpy, was found in use at line 1567 in freebsd-src-1/authzone.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1613 | 1613 |
| Object | memcpy | memcpy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | auth_zone_read_zonefile(struct auth_zone* z, struct config_file* cfg) |

```
....
1613.            memcpy(state.origin, z->name, z->namelen);
```

**Dangerous Functions\Path 33:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=535](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=535) |
| Status | New |

The dangerous function, memcpy, was found in use at line 2632 in freebsd-src-1/authzone.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 2642 | 2642 |
| Object | memcpy | memcpy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | synth_cname_buf(uint8_t* qname, size_t qname_len, size_t dname_len, |

```
....
2642.        memcpy(buf, qname, qname_len-dname_len);
```

**Dangerous Functions\Path 34:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=536](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=536) |
| Status | New |

The dangerous function, memcpy, was found in use at line 828 in freebsd-src-1/b_print.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/b_print.c | freebsd-src-1/b_print.c |
| Line | 852 | 852 |
| Object | memcpy | memcpy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/b_print.c |
| Method | doapr_outch(char **sbuffer, |

```
....
852.                      memcpy(*buffer, *sbuffer, *currlen);
```

**Dangerous Functions\Path 35:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=537](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=537) |
| Status | New |

The dangerous function, memcpy, was found in use at line 1253 in freebsd-src-1/channels.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 1314 | 1314 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/channels.c
Method x11_open_helper(struct ssh *ssh, struct sshbuf *b)

```
....
1314.        memcpy(ucp + 12 + ((proto_len + 3) & ~3),
```

**Dangerous Functions\Path 36:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=538](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=538) |
| Status | New |

The dangerous function, memcpy, was found in use at line 1509 in freebsd-src-1/channels.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 1561 | 1561 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_decode_socks5(Channel *c, struct sshbuf *input, struct sshbuf *output)

```
....
1561.       memcpy(&s5_req, p, sizeof(s5_req));
```

### Dangerous Functions\Path 37:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=539](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=539) |
| Status | New |

The dangerous function, memcpy, was found in use at line 170 in freebsd-src-1/cms_enc.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cms_enc.c | freebsd-src-1/cms_enc.c |
| Line | 180 | 180 |
| Object | memcpy | memcpy |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/cms_enc.c |
| Method | int cms_EncryptedContent_init(CMS_EncryptedContentInfo *ec, |

```
....
180.          memcpy(ec->key, key, keylen);
```

### Dangerous Functions\Path 38:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=540](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=540) |
| Status | New |

The dangerous function, memcpy, was found in use at line 1115 in freebsd-src-1/cxgbetool.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 1299 | 1299 |
| Object | memcpy | memcpy |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/cxgbetool.c |
| Method | set_filter(uint32_t idx, int argc, const char *argv[], int hash) |

```
....
1299.                    memcpy(t.fs.dmac, daddr, ETHER_ADDR_LEN);
```

**Dangerous Functions\Path 39:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=541](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=541) |
| Status | New |

The dangerous function, memcpy, was found in use at line 1115 in freebsd-src-1/cxgbetool.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 1310 | 1310 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method set_filter(uint32_t idx, int argc, const char *argv[], int hash)

```
....
1310.                    memcpy(t.fs.smac, saddr, ETHER_ADDR_LEN);
```

**Dangerous Functions\Path 40:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=542](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=542) |
| Status | New |

The dangerous function, memcpy, was found in use at line 769 in freebsd-src-1/dp_rx.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 790 | 790 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/dp_rx.c
Method static void ath11k_dp_rx_tid_del_func(struct ath11k_dp *dp, void *ctx,

```
....
790.        memcpy(&elem->data, rx_tid, sizeof(*rx_tid));
```

**Dangerous Functions\Path 41:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=543](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=543) |
| Status | New |

The dangerous function, memcpy, was found in use at line 1249 in freebsd-src-1/dp_rx.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 1267 | 1267 |
| Object | memcpy | memcpy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/dp_rx.c |
| Method | static int ath11k_htt_tlv_ppdu_stats_parse(struct ath11k_base *ab, |

```
....
1267.             memcpy((void *)&ppdu_info->ppdu_stats.common, ptr,
```

**Dangerous Functions\Path 42:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=544](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=544) |
| Status | New |

The dangerous function, memcpy, was found in use at line 1249 in freebsd-src-1/dp_rx.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 1289 | 1289 |
| Object | memcpy | memcpy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/dp_rx.c |
| Method | static int ath11k_htt_tlv_ppdu_stats_parse(struct ath11k_base *ab, |

```
....
1289.                memcpy((void *)&user_stats->rate, ptr,
```

**Dangerous Functions\Path 43:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=545 |
| Status | New |

The dangerous function, memcpy, was found in use at line 1249 in freebsd-src-1/dp_rx.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 1312 | 1312 |
| Object | memcpy | memcpy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/dp_rx.c |
| Method | static int ath11k_htt_tlv_ppdu_stats_parse(struct ath11k_base *ab, |

```
....
1312.                memcpy((void *)&user_stats->cmpltn_cmn, ptr,
```

**Dangerous Functions\Path 44:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=546 |
| Status | New |

The dangerous function, memcpy, was found in use at line 1249 in freebsd-src-1/dp_rx.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 1337 | 1337 |
| Object | memcpy | memcpy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/dp_rx.c |
| Method | static int ath11k_htt_tlv_ppdu_stats_parse(struct ath11k_base *ab, |

```
....
1337.                memcpy((void *)&user_stats->ack_ba, ptr,
```

**Dangerous Functions\Path 45:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=547 |
| Status | New |

The dangerous function, memcpy, was found in use at line 1395 in freebsd-src-1/dp_rx.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 1523 | 1523 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/dp_rx.c
Method ath11k_update_per_peer_tx_stats(struct ath11k *ar,

```
....
1523.          memcpy(&arsta->last_txrate, &arsta->txrate, sizeof(struct
rate_info));
```

**Dangerous Functions\Path 46:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=548 |
| Status | New |

The dangerous function, memcpy, was found in use at line 1979 in freebsd-src-1/dp_rx.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 2030 | 2030 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/dp_rx.c
Method static void ath11k_dp_rx_h_undecap_nwifi(struct ath11k *ar,

```
....
2030.               memcpy(decap_hdr, (uint8_t *)hdr, hdr_len);
```

**Dangerous Functions\Path 47:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=549](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=549) |
| Status | New |

The dangerous function, memcpy, was found in use at line 1979 in freebsd-src-1/dp_rx.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 2034 | 2034 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/dp_rx.c
Method static void ath11k_dp_rx_h_undecap_nwifi(struct ath11k *ar,

```
....
2034.               memcpy(skb_push(msdu,
```

**Dangerous Functions\Path 48:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=550](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=550) |
| Status | New |

The dangerous function, memcpy, was found in use at line 1979 in freebsd-src-1/dp_rx.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 2045 | 2045 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/dp_rx.c
Method static void ath11k_dp_rx_h_undecap_nwifi(struct ath11k *ar,

```
....
2045.               memcpy(skb_push(msdu,
```

### Dangerous Functions\Path 49:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=551 |
| Status | New |

The dangerous function, memcpy, was found in use at line 1979 in freebsd-src-1/dp_rx.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 2048 | 2048 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/dp_rx.c
Method static void ath11k_dp_rx_h_undecap_nwifi(struct ath11k *ar,

```
....
2048.               memcpy(skb_push(msdu, hdr_len), decap_hdr, hdr_len);
```

### Dangerous Functions\Path 50:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=552 |
| Status | New |

The dangerous function, memcpy, was found in use at line 1979 in freebsd-src-1/dp_rx.c file. Such functions may expose information and allow an attacker to get full control over the host machine.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 2052 | 2052 |
| Object | memcpy | memcpy |

Code Snippet
File Name freebsd-src-1/dp_rx.c
Method static void ath11k_dp_rx_h_undecap_nwifi(struct ath11k *ar,

```
....
2052.        memcpy(skb_push(msdu, hdr_len), hdr, hdr_len);
```

## 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=1060097&projectid=60087&pathid=106 |
| Status | New |

The size of the buffer used by archive_read_format_rar_read_header in ->, at line 907 of freebsd-src-1/archive_read_support_format_rar.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that archive_read_format_rar_read_header passes to ->, at line 907 of freebsd-src-1/archive_read_support_format_rar.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 983 | 983 |
| Object | -> | -> |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method archive_read_format_rar_read_header(struct archive_read *a,

```
....
983.        memcpy(rar->reserved1, p + 7, sizeof(rar->reserved1));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 2:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=107 |
| Status | New |

The size of the buffer used by archive_read_format_rar_read_header in ->, at line 907 of freebsd-src-1/archive_read_support_format_rar.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that archive_read_format_rar_read_header passes to ->, at line 907 of freebsd-src-1/archive_read_support_format_rar.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|

| | | |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 985 | 985 |
| Object | -> | -> |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method archive_read_format_rar_read_header(struct archive_read *a,

```
....
985.                 sizeof(rar->reserved2));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 3:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=108 |
| Status | New |

The size of the buffer used by create_filter in ->, at line 3313 of freebsd-src-1/archive_read_support_format_rar.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that create_filter passes to ->, at line 3313 of freebsd-src-1/archive_read_support_format_rar.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3328 | 3328 |
| Object | -> | -> |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method create_filter(struct rar_program_code *prog, const uint8_t *globaldata, uint32_t globaldatalen, uint32_t registers[8], size_t startpos, uint32_t length)

```
....
3328.      memcpy(filter->initialregisters, registers, sizeof(filter-
>initialregisters));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 4:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=109 |
| Status | New |

The size of the buffer used by rrset_add_rr in old, at line 795 of freebsd-src-1/authzone.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that rrset_add_rr passes to old, at line 795 of freebsd-src-1/authzone.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 809 | 809 |
| Object | old | old |

Code Snippet
File Name freebsd-src-1/authzone.c
Method rrset_add_rr(struct auth_rrset* rrset, uint32_t rr_ttl, uint8_t* rdata,

```
....
809.        memcpy(d, old, sizeof(struct packed_rrset_data));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 5:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=110 |
| Status | New |

The size of the buffer used by rrset_moveover_rrsigs in packed_rrset_data, at line 936 of freebsd-src-1/authzone.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that rrset_moveover_rrsigs passes to packed_rrset_data, at line 936 of freebsd-src-1/authzone.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 963 | 963 |
| Object | packed_rrset_data | packed_rrset_data |

Code Snippet
File Name freebsd-src-1/authzone.c
Method rrset_moveover_rrsigs(struct auth_data* node, uint16_t rr_type,

```
....
963.        memcpy(d, old, sizeof(struct packed_rrset_data));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 6:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=111 |
| Status | New |

The size of the buffer used by rrset_moveover_rrsigs in packed_rrset_data, at line 936 of freebsd-src-1/authzone.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that rrset_moveover_rrsigs passes to packed_rrset_data, at line 936 of freebsd-src-1/authzone.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1027 | 1027 |
| Object | packed_rrset_data | packed_rrset_data |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | rrset_moveover_rrsigs(struct auth_data* node, uint16_t rr_type, |

```
....
1027.        memcpy(sigd, sigold, sizeof(struct packed_rrset_data));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 7:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=112 |
| Status | New |

The size of the buffer used by ath11k_dp_rx_tid_del_func in rx_tid, at line 769 of freebsd-src-1/dp_rx.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that ath11k_dp_rx_tid_del_func passes to rx_tid, at line 769 of freebsd-src-1/dp_rx.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 790 | 790 |
| Object | rx_tid | rx_tid |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/dp_rx.c |
| Method | static void ath11k_dp_rx_tid_del_func(struct ath11k_dp *dp, void *ctx, |

```
....
790.        memcpy(&elem->data, rx_tid, sizeof(*rx_tid));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 8:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=113 |
| Status | New |

The size of the buffer used by ath11k_htt_tlv_ppdu_stats_parse in htt_ppdu_stats_common, at line 1249 of freebsd-src-1/dp_rx.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that ath11k_htt_tlv_ppdu_stats_parse passes to htt_ppdu_stats_common, at line 1249 of freebsd-src-1/dp_rx.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 1268 | 1268 |
| Object | htt_ppdu_stats_common | htt_ppdu_stats_common |

Code Snippet
File Name freebsd-src-1/dp_rx.c
Method static int ath11k_htt_tlv_ppdu_stats_parse(struct ath11k_base *ab,

```
....
1268.                       sizeof(struct htt_ppdu_stats_common));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 9:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=114 |
| Status | New |

The size of the buffer used by ath11k_htt_tlv_ppdu_stats_parse in htt_ppdu_stats_user_rate, at line 1249 of freebsd-src-1/dp_rx.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that ath11k_htt_tlv_ppdu_stats_parse passes to htt_ppdu_stats_user_rate, at line 1249 of freebsd-src-1/dp_rx.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 1290 | 1290 |
| Object | htt_ppdu_stats_user_rate | htt_ppdu_stats_user_rate |

Code Snippet
File Name freebsd-src-1/dp_rx.c
Method static int ath11k_htt_tlv_ppdu_stats_parse(struct ath11k_base *ab,

```
....
1290.                       sizeof(struct htt_ppdu_stats_user_rate));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 10:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=115 |
| Status | New |

The size of the buffer used by ath11k_htt_tlv_ppdu_stats_parse in htt_ppdu_stats_usr_cmpltn_cmn, at line 1249 of freebsd-src-1/dp_rx.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that ath11k_htt_tlv_ppdu_stats_parse passes to htt_ppdu_stats_usr_cmpltn_cmn, at line 1249 of freebsd-src-1/dp_rx.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 1313 | 1313 |
| Object | htt_ppdu_stats_usr_cmpltn_cmn | htt_ppdu_stats_usr_cmpltn_cmn |

Code Snippet
File Name    freebsd-src-1/dp_rx.c
Method    static int ath11k_htt_tlv_ppdu_stats_parse(struct ath11k_base *ab,

```
....
1313.                    sizeof(struct htt_ppdu_stats_usr_cmpltn_cmn));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 11:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=116 |
| Status | New |

The size of the buffer used by ath11k_htt_tlv_ppdu_stats_parse in htt_ppdu_stats_usr_cmpltn_ack_ba_status, at line 1249 of freebsd-src-1/dp_rx.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that ath11k_htt_tlv_ppdu_stats_parse passes to htt_ppdu_stats_usr_cmpltn_ack_ba_status, at line 1249 of freebsd-src-1/dp_rx.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 1338 | 1338 |
| Object | htt_ppdu_stats_usr_cmpltn_ack_ba_status | htt_ppdu_stats_usr_cmpltn_ack_ba_status |

Code Snippet
File Name    freebsd-src-1/dp_rx.c
Method    static int ath11k_htt_tlv_ppdu_stats_parse(struct ath11k_base *ab,

```
....
1338.                    sizeof(struct
htt_ppdu_stats_usr_cmpltn_ack_ba_status));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 12:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=117 |
| Status | New |

The size of the buffer used by ath11k_update_per_peer_tx_stats in rate_info, at line 1395 of freebsd-src-1/dp_rx.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that ath11k_update_per_peer_tx_stats passes to rate_info, at line 1395 of freebsd-src-1/dp_rx.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 1523 | 1523 |
| Object | rate_info | rate_info |

Code Snippet
File Name freebsd-src-1/dp_rx.c
Method ath11k_update_per_peer_tx_stats(struct ath11k *ar,

```
....
1523.       memcpy(&arsta->last_txrate, &arsta->txrate, sizeof(struct
rate_info));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 13:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=118 |
| Status | New |

The size of the buffer used by ath11k_dp_rx_h_undecap_eth in ath11k_dp_rfc1042_hdr, at line 2161 of freebsd-src-1/dp_rx.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that ath11k_dp_rx_h_undecap_eth passes to ath11k_dp_rfc1042_hdr, at line 2161 of freebsd-src-1/dp_rx.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 2186 | 2186 |
| Object | ath11k_dp_rfc1042_hdr | ath11k_dp_rfc1042_hdr |

Code Snippet
File Name freebsd-src-1/dp_rx.c
Method static void ath11k_dp_rx_h_undecap_eth(struct ath11k *ar,

```
....
2186.             sizeof(struct ath11k_dp_rfc1042_hdr));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 14:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=119 |
| Status | New |

The size of the buffer used by ath11k_dp_rx_deliver_msdu in known, at line 2477 of freebsd-src-1/dp_rx.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that ath11k_dp_rx_deliver_msdu passes to known, at line 2477 of freebsd-src-1/dp_rx.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 2499 | 2499 |
| Object | known | known |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/dp_rx.c |
| Method | static void ath11k_dp_rx_deliver_msdu(struct ath11k *ar, struct napi_struct *napi, |

```
....
2499.                memcpy(he, &known, sizeof(known));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 15:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=120 |
| Status | New |

The size of the buffer used by ath11k_dp_rx_mon_merg_msdus in __le16, at line 4873 of freebsd-src-1/dp_rx.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that ath11k_dp_rx_mon_merg_msdus passes to __le16, at line 4873 of freebsd-src-1/dp_rx.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 4951 | 4951 |
| Object | __le16 | __le16 |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/dp_rx.c |
| Method | ath11k_dp_rx_mon_merg_msdus(struct ath11k *ar, |

```
....
4951.                                    (u8 *)&qos_field, sizeof(__le16));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 16:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=121 |
| Status | New |

The size of the buffer used by fwctl_response in uint32_t, at line 399 of freebsd-src-1/fwctl.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that fwctl_response passes to uint32_t, at line 399 of freebsd-src-1/fwctl.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/fwctl.c | freebsd-src-1/fwctl.c |
| Line | 427 | 427 |
| Object | uint32_t | uint32_t |

Code Snippet
File Name freebsd-src-1/fwctl.c
Method fwctl_response(uint32_t *retval)

```
....
427.                      memcpy(retval, dp, sizeof(uint32_t));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 17:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=122 |
| Status | New |

The size of the buffer used by imsg_get in ->, at line 126 of freebsd-src-1/imsg.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that imsg_get passes to ->, at line 126 of freebsd-src-1/imsg.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/imsg.c | freebsd-src-1/imsg.c |
| Line | 135 | 135 |
| Object | -> | -> |

Code Snippet
File Name freebsd-src-1/imsg.c
Method imsg_get(struct imsgbuf *ibuf, struct imsg *imsg)

```
....
135.         memcpy(&imsg->hdr, ibuf->r.buf, sizeof(imsg->hdr));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 18:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=123 |
| Status | New |

The size of the buffer used by mrsas_get_seq_num in mrsas_evt_log_info, at line 566 of freebsd-src-1/mrsas.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that mrsas_get_seq_num passes to mrsas_evt_log_info, at line 566 of freebsd-src-1/mrsas.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/mrsas.c | freebsd-src-1/mrsas.c |
| Line | 607 | 607 |
| Object | mrsas_evt_log_info | mrsas_evt_log_info |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/mrsas.c |
| Method | mrsas_get_seq_num(struct mrsas_softc *sc, |

```
....
607.        memcpy(eli, sc->el_info_mem, sizeof(struct
mrsas_evt_log_info));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 19:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=124](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=124) |
| Status | New |

The size of the buffer used by mrsas_get_ctrl_info in mrsas_ctrl_info, at line 3607 of freebsd-src-1/mrsas.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that mrsas_get_ctrl_info passes to mrsas_ctrl_info, at line 3607 of freebsd-src-1/mrsas.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/mrsas.c | freebsd-src-1/mrsas.c |
| Line | 3648 | 3648 |
| Object | mrsas_ctrl_info | mrsas_ctrl_info |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/mrsas.c |
| Method | mrsas_get_ctrl_info(struct mrsas_softc *sc) |

```
....
3648.           memcpy(sc->ctrl_info, sc->ctlr_info_mem, sizeof(struct
mrsas_ctrl_info));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 20:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=125](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=125) |
| Status | New |

The size of the buffer used by mrsas_get_pd_list in ->, at line 4560 of freebsd-src-1/mrsas.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that mrsas_get_pd_list passes to ->, at line 4560 of freebsd-src-1/mrsas.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/mrsas.c | freebsd-src-1/mrsas.c |
| Line | 4645 | 4645 |
| Object | -> | -> |

Code Snippet
File Name freebsd-src-1/mrsas.c
Method mrsas_get_pd_list(struct mrsas_softc *sc)

```
....
4645.           memcpy(sc->pd_list, sc->local_pd_list, sizeof(sc-
>local_pd_list));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 21:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=126 |
| Status | New |

The size of the buffer used by opt_blk in ->, at line 1479 of freebsd-src-1/optimize.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that opt_blk passes to ->, at line 1479 of freebsd-src-1/optimize.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/optimize.c | freebsd-src-1/optimize.c |
| Line | 1511 | 1511 |
| Object | -> | -> |

Code Snippet
File Name freebsd-src-1/optimize.c
Method opt_blk(opt_state_t *opt_state, struct block *b, int do_stmts)

```
....
1511.           memcpy((char *)b->val, (char *)p->pred->val, sizeof(b-
>val));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 22:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=127 |
| Status | New |

The size of the buffer used by decode_udp_ip_header in ->, at line 165 of freebsd-src-1/packet.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that decode_udp_ip_header passes to ->, at line 165 of freebsd-src-1/packet.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/packet.c | freebsd-src-1/packet.c |
| Line | 248 | 248 |
| Object | -> | -> |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/packet.c |
| Method | decode_udp_ip_header(unsigned char *buf, int bufix, struct sockaddr_in *from, |

```
....
248.        memcpy(&from->sin_port, &udp->uh_sport, sizeof(udp-
>uh_sport));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 23:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=128 |
| Status | New |

The size of the buffer used by assemble_hw_header in Namespace862862795, at line 94 of freebsd-src-1/packet.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that assemble_hw_header passes to Namespace862862795, at line 94 of freebsd-src-1/packet.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/packet.c | freebsd-src-1/packet.c |
| Line | 102 | 102 |
| Object | Namespace862862795 | Namespace862862795 |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/packet.c |
| Method | assemble_hw_header(struct interface_info *interface, unsigned char *buf, |

```
....
102.                sizeof(eh.ether_shost));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 24:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=129 |
| Status | New |

The size of the buffer used by assemble_udp_ip_header in ip, at line 113 of freebsd-src-1/packet.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that assemble_udp_ip_header passes to ip, at line 113 of freebsd-src-1/packet.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/packet.c | freebsd-src-1/packet.c |
| Line | 132 | 132 |
| Object | ip | ip |

Code Snippet
File Name freebsd-src-1/packet.c
Method assemble_udp_ip_header(unsigned char *buf, int *bufix, u_int32_t from,

```
....
132.        memcpy(&buf[*bufix], &ip, sizeof(ip));
```

### Buffer Overflow boundcpy WrongSizeParam\Path 25:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=130 |
| Status | New |

The size of the buffer used by assemble_udp_ip_header in udp, at line 113 of freebsd-src-1/packet.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that assemble_udp_ip_header passes to udp, at line 113 of freebsd-src-1/packet.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/packet.c | freebsd-src-1/packet.c |
| Line | 145 | 145 |
| Object | udp | udp |

Code Snippet
File Name freebsd-src-1/packet.c
Method assemble_udp_ip_header(unsigned char *buf, int *bufix, u_int32_t from,

```
....
145.        memcpy(&buf[*bufix], &udp, sizeof(udp));
```

### Buffer Overflow boundcpy WrongSizeParam\Path 26:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=131 |
| Status | New |

The size of the buffer used by decode_hw_header in Namespace862862795, at line 150 of freebsd-src-1/packet.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that decode_hw_header passes to Namespace862862795, at line 150 of freebsd-src-1/packet.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/packet.c | freebsd-src-1/packet.c |
| Line | 156 | 156 |
| Object | Namespace862862795 | Namespace862862795 |

Code Snippet
File Name freebsd-src-1/packet.c
Method decode_hw_header(unsigned char *buf, int bufix, struct hardware *from)

```
....
156.         memcpy(from->haddr, eh.ether_shost, sizeof(eh.ether_shost));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 27:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=132 |
| Status | New |

The size of the buffer used by on_write_request_process in timeval, at line 398 of freebsd-src-1/query.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that on_write_request_process passes to timeval, at line 398 of freebsd-src-1/query.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/query.c | freebsd-src-1/query.c |
| Line | 456 | 456 |
| Object | timeval | timeval |

Code Snippet
File Name freebsd-src-1/query.c
Method on_write_request_process(struct query_state *qstate)

```
....
456.                         sizeof(struct timeval));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 28:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=133 |
| Status | New |

The size of the buffer used by on_negative_write_request_process in timeval, at line 471 of freebsd-src-1/query.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that on_negative_write_request_process passes to timeval, at line 471 of freebsd-src-1/query.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/query.c | freebsd-src-1/query.c |
| Line | 537 | 537 |
| Object | timeval | timeval |

Code Snippet
File Name freebsd-src-1/query.c
Method on_negative_write_request_process(struct query_state *qstate)

```
....
537.                           sizeof(struct timeval));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 29:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=134 |
| Status | New |

The size of the buffer used by on_read_request_process in timeval, at line 660 of freebsd-src-1/query.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that on_read_request_process passes to timeval, at line 660 of freebsd-src-1/query.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/query.c | freebsd-src-1/query.c |
| Line | 816 | 816 |
| Object | timeval | timeval |

Code Snippet
File Name freebsd-src-1/query.c
Method on_read_request_process(struct query_state *qstate)

```
....
816.                           sizeof(struct timeval));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 30:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=135 |
| Status | New |

The size of the buffer used by sctp_connectx in sockaddr_in, at line 104 of freebsd-src-1/sctp_sys_calls.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that sctp_connectx passes to sockaddr_in, at line 104 of freebsd-src-1/sctp_sys_calls.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/sctp_sys_calls.c | freebsd-src-1/sctp_sys_calls.c |
| Line | 134 | 134 |
| Object | sockaddr_in | sockaddr_in |

Code Snippet
File Name        freebsd-src-1/sctp_sys_calls.c
Method        sctp_connectx(int sd, const struct sockaddr *addrs, int addrcnt,

```
....
134.                    memcpy(cpto, at, sizeof(struct sockaddr_in));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 31:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=136 |
| Status | New |

The size of the buffer used by sctp_connectx in sockaddr_in6, at line 104 of freebsd-src-1/sctp_sys_calls.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that sctp_connectx passes to sockaddr_in6, at line 104 of freebsd-src-1/sctp_sys_calls.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/sctp_sys_calls.c | freebsd-src-1/sctp_sys_calls.c |
| Line | 149 | 149 |
| Object | sockaddr_in6 | sockaddr_in6 |

Code Snippet
File Name        freebsd-src-1/sctp_sys_calls.c
Method        sctp_connectx(int sd, const struct sockaddr *addrs, int addrcnt,

```
....
149.                         memcpy(cpto, at, sizeof(struct
sockaddr_in6));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 32:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=137 |
| Status | New |

The size of the buffer used by sctp_recvv in sctp_rcvinfo, at line 877 of freebsd-src-1/sctp_sys_calls.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that sctp_recvv passes to sctp_rcvinfo, at line 877 of freebsd-src-1/sctp_sys_calls.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/sctp_sys_calls.c | freebsd-src-1/sctp_sys_calls.c |
| Line | 954 | 954 |
| Object | sctp_rcvinfo | sctp_rcvinfo |

Code Snippet
File Name freebsd-src-1/sctp_sys_calls.c
Method sctp_recvv(int sd,

```
....
954.                          memcpy(info, rcvinfo, sizeof(struct
sctp_rcvinfo));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 33:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=138 |
| Status | New |

The size of the buffer used by sctp_recvv in sctp_nxtinfo, at line 877 of freebsd-src-1/sctp_sys_calls.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that sctp_recvv passes to sctp_nxtinfo, at line 877 of freebsd-src-1/sctp_sys_calls.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/sctp_sys_calls.c | freebsd-src-1/sctp_sys_calls.c |
| Line | 960 | 960 |
| Object | sctp_nxtinfo | sctp_nxtinfo |

Code Snippet
File Name freebsd-src-1/sctp_sys_calls.c
Method sctp_recvv(int sd,

```
....
960.                          memcpy(info, nxtinfo, sizeof(struct
sctp_nxtinfo));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 34:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=139 |
| Status | New |

The size of the buffer used by sctp_sendv in sctp_sndinfo, at line 970 of freebsd-src-1/sctp_sys_calls.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that sctp_sendv passes to sctp_sndinfo, at line 970 of freebsd-src-1/sctp_sys_calls.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/sctp_sys_calls.c | freebsd-src-1/sctp_sys_calls.c |
| Line | 1027 | 1027 |
| Object | sctp_sndinfo | sctp_sndinfo |

Code Snippet
File Name freebsd-src-1/sctp_sys_calls.c
Method sctp_sendv(int sd,

```
....
1027.           memcpy(CMSG_DATA(cmsg), info, sizeof(struct
sctp_sndinfo));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 35:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=140 |
| Status | New |

The size of the buffer used by sctp_sendv in sctp_prinfo, at line 970 of freebsd-src-1/sctp_sys_calls.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that sctp_sendv passes to sctp_prinfo, at line 970 of freebsd-src-1/sctp_sys_calls.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/sctp_sys_calls.c | freebsd-src-1/sctp_sys_calls.c |
| Line | 1041 | 1041 |
| Object | sctp_prinfo | sctp_prinfo |

Code Snippet
File Name freebsd-src-1/sctp_sys_calls.c
Method sctp_sendv(int sd,

```
....
1041.           memcpy(CMSG_DATA(cmsg), info, sizeof(struct
sctp_prinfo));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 36:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=141 |

| | |
|---|---|
| Status | New |

The size of the buffer used by sctp_sendv in sctp_authinfo, at line 970 of freebsd-src-1/sctp_sys_calls.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that sctp_sendv passes to sctp_authinfo, at line 970 of freebsd-src-1/sctp_sys_calls.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/sctp_sys_calls.c | freebsd-src-1/sctp_sys_calls.c |
| Line | 1054 | 1054 |
| Object | sctp_authinfo | sctp_authinfo |

Code Snippet
File Name freebsd-src-1/sctp_sys_calls.c
Method sctp_sendv(int sd,

```
....
1054.                memcpy(CMSG_DATA(cmsg), info, sizeof(struct
sctp_authinfo));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 37:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=142 |
| Status | New |

The size of the buffer used by sctp_sendv in sctp_sndinfo, at line 970 of freebsd-src-1/sctp_sys_calls.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that sctp_sendv passes to sctp_sndinfo, at line 970 of freebsd-src-1/sctp_sys_calls.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/sctp_sys_calls.c | freebsd-src-1/sctp_sys_calls.c |
| Line | 1069 | 1069 |
| Object | sctp_sndinfo | sctp_sndinfo |

Code Snippet
File Name freebsd-src-1/sctp_sys_calls.c
Method sctp_sendv(int sd,

```
....
1069.                         memcpy(CMSG_DATA(cmsg), &spa_info-
>sendv_sndinfo, sizeof(struct sctp_sndinfo));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 38:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=600 |

| | |
|---|---|
| | 87&pathid=143 |
| Status | New |

The size of the buffer used by sctp_sendv in sctp_prinfo, at line 970 of freebsd-src-1/sctp_sys_calls.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that sctp_sendv passes to sctp_prinfo, at line 970 of freebsd-src-1/sctp_sys_calls.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/sctp_sys_calls.c | freebsd-src-1/sctp_sys_calls.c |
| Line | 1078 | 1078 |
| Object | sctp_prinfo | sctp_prinfo |

Code Snippet
File Name freebsd-src-1/sctp_sys_calls.c
Method sctp_sendv(int sd,

```
....
1078.                    memcpy(CMSG_DATA(cmsg), &spa_info->sendv_prinfo,
sizeof(struct sctp_prinfo));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 39:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=144 |
| Status | New |

The size of the buffer used by sctp_sendv in sctp_authinfo, at line 970 of freebsd-src-1/sctp_sys_calls.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that sctp_sendv passes to sctp_authinfo, at line 970 of freebsd-src-1/sctp_sys_calls.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/sctp_sys_calls.c | freebsd-src-1/sctp_sys_calls.c |
| Line | 1086 | 1086 |
| Object | sctp_authinfo | sctp_authinfo |

Code Snippet
File Name freebsd-src-1/sctp_sys_calls.c
Method sctp_sendv(int sd,

```
....
1086.                    memcpy(CMSG_DATA(cmsg), &spa_info-
>sendv_authinfo, sizeof(struct sctp_authinfo));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 40:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=145 |
| Status | New |

The size of the buffer used by sctp_sendv in in_addr, at line 970 of freebsd-src-1/sctp_sys_calls.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that sctp_sendv passes to in_addr, at line 970 of freebsd-src-1/sctp_sys_calls.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/sctp_sys_calls.c | freebsd-src-1/sctp_sys_calls.c |
| Line | 1117 | 1117 |
| Object | in_addr | in_addr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/sctp_sys_calls.c |
| Method | sctp_sendv(int sd, |

```
....
1117.                                    memcpy(CMSG_DATA(cmsg), &addr_in-
>sin_addr, sizeof(struct in_addr));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 41:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=146 |
| Status | New |

The size of the buffer used by sctp_sendv in in6_addr, at line 970 of freebsd-src-1/sctp_sys_calls.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that sctp_sendv passes to in6_addr, at line 970 of freebsd-src-1/sctp_sys_calls.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/sctp_sys_calls.c | freebsd-src-1/sctp_sys_calls.c |
| Line | 1142 | 1142 |
| Object | in6_addr | in6_addr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/sctp_sys_calls.c |
| Method | sctp_sendv(int sd, |

```
....
1142.                                    memcpy(CMSG_DATA(cmsg), &addr_in6-
>sin6_addr, sizeof(struct in6_addr));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 42:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |

| | |
|---|---|
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=147](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=147) |
| Status | New |

The size of the buffer used by xgbe_set_rss_hash_key in ->, at line 411 of freebsd-src-1/xgbe-dev.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that xgbe_set_rss_hash_key passes to ->, at line 411 of freebsd-src-1/xgbe-dev.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/xgbe-dev.c | freebsd-src-1/xgbe-dev.c |
| Line | 413 | 413 |
| Object | -> | -> |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/xgbe-dev.c |
| Method | xgbe_set_rss_hash_key(struct xgbe_prv_data *pdata, const uint8_t *key) |

```
....
413.        memcpy(pdata->rss_key, key, sizeof(pdata->rss_key));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 43:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=148](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=148) |
| Status | New |

The size of the buffer used by lzh_read_blocks in Namespace1599128780, at line 2120 of freebsd-src-1/archive_read_support_format_lha.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that lzh_read_blocks passes to Namespace1599128780, at line 2120 of freebsd-src-1/archive_read_support_format_lha.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_lha.c | freebsd-src-1/archive_read_support_format_lha.c |
| Line | 2206 | 2206 |
| Object | Namespace1599128780 | Namespace1599128780 |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_lha.c |
| Method | lzh_read_blocks(struct lzh_stream *strm, int last) |

```
....
2206.                   memset(ds->pt.freq, 0, sizeof(ds->pt.freq));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 44:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |

| | |
|---|---|
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=149 |
| Status | New |

The size of the buffer used by lzh_read_blocks in Namespace1599128780, at line 2120 of freebsd-src-1/archive_read_support_format_lha.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that lzh_read_blocks passes to Namespace1599128780, at line 2120 of freebsd-src-1/archive_read_support_format_lha.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_lha.c | freebsd-src-1/archive_read_support_format_lha.c |
| Line | 2283 | 2283 |
| Object | Namespace1599128780 | Namespace1599128780 |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_lha.c
Method lzh_read_blocks(struct lzh_stream *strm, int last)

```
....
2283.                           memset(ds->lt.freq, 0, sizeof(ds->lt.freq));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 45:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=150 |
| Status | New |

The size of the buffer used by read_header in ->, at line 1358 of freebsd-src-1/archive_read_support_format_rar.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that read_header passes to ->, at line 1358 of freebsd-src-1/archive_read_support_format_rar.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 1416 | 1416 |
| Object | -> | -> |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method read_header(struct archive_read *a, struct archive_entry *entry,

```
....
1416.         memset(&rar->salt, 0, sizeof(rar->salt));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 46:**

| | |
|---|---|
| Severity | Medium |

| | |
|---|---|
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=151 |
| Status | New |

The size of the buffer used by read_header in ->, at line 1358 of freebsd-src-1/archive_read_support_format_rar.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that read_header passes to ->, at line 1358 of freebsd-src-1/archive_read_support_format_rar.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 1763 | 1763 |
| Object | -> | -> |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method read_header(struct archive_read *a, struct archive_entry *entry,

```
....
1763.     memset(rar->lengthtable, 0, sizeof(rar->lengthtable));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 47:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=152 |
| Status | New |

The size of the buffer used by parse_codes in ->, at line 2234 of freebsd-src-1/archive_read_support_format_rar.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that parse_codes passes to ->, at line 2234 of freebsd-src-1/archive_read_support_format_rar.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2346 | 2346 |
| Object | -> | -> |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method parse_codes(struct archive_read *a)

```
....
2346.         memset(rar->lengthtable, 0, sizeof(rar->lengthtable));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 48:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=153 |
| Status | New |

The size of the buffer used by free_codes in ->, at line 2512 of freebsd-src-1/archive_read_support_format_rar.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that free_codes passes to ->, at line 2512 of freebsd-src-1/archive_read_support_format_rar.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2523 | 2523 |
| Object | -> | -> |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method free_codes(struct archive_read *a)

```
....
2523.     memset(&rar->maincode, 0, sizeof(rar->maincode));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 49:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=154 |
| Status | New |

The size of the buffer used by free_codes in ->, at line 2512 of freebsd-src-1/archive_read_support_format_rar.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that free_codes passes to ->, at line 2512 of freebsd-src-1/archive_read_support_format_rar.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2524 | 2524 |
| Object | -> | -> |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method free_codes(struct archive_read *a)

```
....
2524.     memset(&rar->offsetcode, 0, sizeof(rar->offsetcode));
```

**Buffer Overflow boundcpy WrongSizeParam\Path 50:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=155 |
| Status | New |

The size of the buffer used by free_codes in ->, at line 2512 of freebsd-src-1/archive_read_support_format_rar.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that free_codes passes to ->, at line 2512 of freebsd-src-1/archive_read_support_format_rar.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2525 | 2525 |
| Object | -> | -> |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method free_codes(struct archive_read *a)

```
....
2525.     memset(&rar->lowoffsetcode, 0, sizeof(rar->lowoffsetcode));
```

## 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=1060097&projectid=60087&pathid=938 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 7144 | 7144 |
| Object | result | result |

Code Snippet
File Name freebsd-src-1/authzone.c
Method dup_all(char* str)

```
....
7144.          char* result = strdup(str);
```

**Memory Leak\Path 2:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=939 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ipsecmod.c | freebsd-src-1/ipsecmod.c |
| Line | 72 | 72 |
| Object | ipsecmod_env | ipsecmod_env |

Code Snippet
File Name freebsd-src-1/ipsecmod.c
Method ipsecmod_init(struct module_env* env, int id)

```
....
72.    struct ipsecmod_env* ipsecmod_env = (struct
ipsecmod_env*)calloc(1,
```

**Memory Leak\Path 3:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=940 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_lha.c | freebsd-src-1/archive_read_support_format_lha.c |
| Line | 1869 | 1869 |
| Object | ds | ds |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_lha.c
Method lzh_decode_init(struct lzh_stream *strm, const char *method)

```
....
1869.            strm->ds = calloc(1, sizeof(*strm->ds));
```

**Memory Leak\Path 4:**

| | |
|---|---|
| Severity | Medium |

| | |
|---|---|
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=941 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_lha.c | freebsd-src-1/archive_read_support_format_lha.c |
| Line | 1896 | 1896 |
| Object | w_buff | w_buff |

Code Snippet

File Name freebsd-src-1/archive_read_support_format_lha.c

Method lzh_decode_init(struct lzh_stream *strm, const char *method)

```
....
1896.                   ds->w_buff = malloc(ds->w_size);
```

**Memory Leak\Path 5:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=942 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 822 | 822 |
| Object | value | value |

Code Snippet

File Name freebsd-src-1/archive_read_support_format_mtree.c

Method add_option(struct archive_read *a, struct mtree_option **global,

```
....
822.            if ((opt->value = malloc(len + 1)) == NULL) {
```

**Memory Leak\Path 6:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=943 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 929 | 929 |
| Object | entry | entry |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_mtree.c |
| Method | process_add_entry(struct archive_read *a, struct mtree *mtree, |

```
....
929.         if ((entry = malloc(sizeof(*entry))) == NULL) {
```

**Memory Leak\Path 7:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=944 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 982 | 982 |
| Object | name | name |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_mtree.c |
| Method | process_add_entry(struct archive_read *a, struct mtree *mtree, |

```
....
982.         if ((entry->name = malloc(name_len + 1)) == NULL) {
```

**Memory Leak\Path 8:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=945 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 1890 | 1890 |

| | | |
|---|---|---|
| Object | buff | buff |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_mtree.c
Method read_data(struct archive_read *a, const void **buff, size_t *size,

```
....
1890.             mtree->buff = malloc(mtree->buffsize);
```

**Memory Leak\Path 9:**

Severity Medium
Result State To Verify
Online Results [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=946](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=946)
Status New

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 1688 | 1688 |
| Object | dbo | dbo |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method read_header(struct archive_read *a, struct archive_entry *entry,

```
....
1688.     if ((rar->dbo = calloc(1, sizeof(*rar->dbo))) == NULL)
```

**Memory Leak\Path 10:**

Severity Medium
Result State To Verify
Online Results [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=947](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=947)
Status New

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2774 | 2774 |
| Object | table | table |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method make_table(struct archive_read *a, struct huffman_code *code)

```
....
2774.     code->table =
```

### Memory Leak\Path 11:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=948](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=948) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3100 | 3100 |
| Object | unp_buffer | unp_buffer |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | copy_from_lzss_window_to_unp(struct archive_read *a, const void **buffer, |

```
....
3100.      if ((rar->unp_buffer = malloc(rar->unp_buffer_size)) == NULL)
```

### Memory Leak\Path 12:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=949](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=949) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3317 | 3317 |
| Object | filter | filter |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | create_filter(struct rar_program_code *prog, const uint8_t *globaldata, uint32_t globaldatalen, uint32_t registers[8], size_t startpos, uint32_t length) |

```
....
3317.     filter = calloc(1, sizeof(*filter));
```

### Memory Leak\Path 13:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=950 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3322 | 3322 |
| Object | globaldata | globaldata |

Code Snippet

File Name freebsd-src-1/archive_read_support_format_rar.c

Method create_filter(struct rar_program_code *prog, const uint8_t *globaldata, uint32_t globaldatalen, uint32_t registers[8], size_t startpos, uint32_t length)

```
....
3322.     filter->globaldata = calloc(1, filter->globaldatalen);
```

**Memory Leak\Path 14:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=951 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3383 | 3383 |
| Object | vm | vm |

Code Snippet

File Name freebsd-src-1/archive_read_support_format_rar.c

Method run_filters(struct archive_read *a)

```
....
3383.      filters->vm = calloc(1, sizeof(*filters->vm));
```

**Memory Leak\Path 15:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=952 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3446 | 3446 |
| Object | prog | prog |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method compile_program(const uint8_t *bytes, size_t length)

```
....
3446.     prog = calloc(1, sizeof(*prog));
```

**Memory Leak\Path 16:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=953 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3454 | 3454 |
| Object | staticdata | staticdata |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method compile_program(const uint8_t *bytes, size_t length)

```
....
3454.      prog->staticdata = malloc(prog->staticdatalen);
```

**Memory Leak\Path 17:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=954 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 566 | 566 |

| | | |
|---|---|---|
| Object | zonefile | zonefile |

Code Snippet
File Name freebsd-src-1/authzone.c
Method auth_zone_set_zonefile(struct auth_zone* z, char* zonefile)

```
....
566.                z->zonefile = strdup(zonefile);
```

**Memory Leak\Path 18:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=955 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 801 | 801 |
| Object | d | d |

Code Snippet
File Name freebsd-src-1/authzone.c
Method rrset_add_rr(struct auth_rrset* rrset, uint32_t rr_ttl, uint8_t* rdata,

```
....
801.         d = (struct packed_rrset_data*)calloc(1,
packed_rrset_sizeof(old)
```

**Memory Leak\Path 19:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=956 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 954 | 954 |
| Object | d | d |

Code Snippet
File Name freebsd-src-1/authzone.c
Method rrset_moveover_rrsigs(struct auth_data* node, uint16_t rr_type,

```
....
954.         d = (struct packed_rrset_data*)calloc(1,
packed_rrset_sizeof(old)
```

**Memory Leak\Path 20:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=957](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=957) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1017 | 1017 |
| Object | sigd | sigd |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | rrset_moveover_rrsigs(struct auth_data* node, uint16_t rr_type, |

```
....
1017.        sigd = (struct packed_rrset_data*)calloc(1,
packed_rrset_sizeof(sigold)
```

**Memory Leak\Path 21:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=958](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=958) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 5626 | 5626 |
| Object | a | a |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_master_add_addrs(struct auth_master* m, struct ub_packed_rrset_key* rrset, |

```
....
5626.             a = (struct auth_addr*)calloc(1, sizeof(*a));
```

**Memory Leak\Path 22:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=959 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 7111 | 7111 |
| Object | m | m |

Code Snippet

File Name freebsd-src-1/authzone.c

Method auth_master_new(struct auth_master*** list)

```
....
7111.        m = (struct auth_master*)calloc(1, sizeof(*m));
```

**Memory Leak\Path 23:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=960 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 7258 | 7258 |
| Object | host | host |

Code Snippet

File Name freebsd-src-1/authzone.c

Method xfer_set_masters(struct auth_master** list, struct config_auth* c,

```
....
7258.              m->host = strdup(p->str);
```

**Memory Leak\Path 24:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=961 |
| Status | New |

| | Source | Destination |
|---|---|---|

|  |  |  |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 7268 | 7268 |
| Object | host | host |

Code Snippet
File Name    freebsd-src-1/authzone.c
Method    xfer_set_masters(struct auth_master** list, struct config_auth* c,

```
....
7268.                   m->host = strdup(p->str);
```

**Memory Leak\Path 25:**

|  |  |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=962 |
| Status | New |

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 239 | 239 |
| Object | sc | sc |

Code Snippet
File Name    freebsd-src-1/channels.c
Method    channel_init_channels(struct ssh *ssh)

```
....
239.            if ((sc = calloc(1, sizeof(*sc))) == NULL)
```

**Memory Leak\Path 26:**

|  |  |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=963 |
| Status | New |

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 2482 | 2482 |
| Object | pre | pre |

Code Snippet
File Name    freebsd-src-1/channels.c
Method    channel_handler_init(struct ssh_channels *sc)

```
....
2482.        if ((pre = calloc(SSH_CHANNEL_MAX_TYPE, sizeof(*pre))) ==
NULL ||
```

### Memory Leak\Path 27:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=964 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 2483 | 2483 |
| Object | post | post |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/channels.c |
| Method | channel_handler_init(struct ssh_channels *sc) |

```
....
2483.            (post = calloc(SSH_CHANNEL_MAX_TYPE, sizeof(*post))) ==
NULL)
```

### Memory Leak\Path 28:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=965 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 499 | 499 |
| Object | data | data |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cxgbtool.c |
| Method | dump_regs(int argc, char *argv[], int start_arg, const char *iff_name) |

```
....
499.        if ((regs.data = malloc(regs.len)) == NULL)
```

### Memory Leak\Path 29:

| | |
|---|---|
| Severity | Medium |

| | |
|---|---|
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=966 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 618 | 618 |
| Object | data | data |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method meminfo(int argc, char *argv[], int start_arg, const char *iff_name)

```
....
618.         if ((regs.data = malloc(regs.len)) == NULL)
```

**Memory Leak\Path 30:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=967 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1004 | 1004 |
| Object | buf | buf |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method load_fw(int argc, char *argv[], int start_arg, const char *iff_name)

```
....
1004.        op.buf = malloc(MAX_FW_IMAGE_SIZE + 1);
```

**Memory Leak\Path 31:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=968 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |

| | | |
|---|---|---|
| Line | 1038 | 1038 |
| Object | buf | buf |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method load_boot(int argc, char *argv[], int start_arg, const char *iff_name)

```
....
1038.        op.buf = malloc(MAX_BOOT_IMAGE_SIZE + 1);
```

**Memory Leak\Path 32:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=969 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1575 | 1575 |
| Object | data | data |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method get_up_la(int argc, char *argv[], int start_arg, const char *iff_name)

```
....
1575.        la.data = malloc(la.bufsize);
```

**Memory Leak\Path 33:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=970 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1609 | 1609 |
| Object | data | data |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method get_up_ioqs(int argc, char *argv[], int start_arg, const char *iff_name)

```
....
1609.       ioqs.data = malloc(IOQS_BUFSIZE);
```

**Memory Leak\Path 34:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=971 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 816 | 816 |
| Object | realm | realm |

Code Snippet
File Name    freebsd-src-1/http.c
Method    http_parse_authenticate(const char *cp, http_auth_challenges_t *cs)

```
....
816.                        cs->challenges[cs->count]->realm =
```

**Memory Leak\Path 35:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=972 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 819 | 819 |
| Object | qop | qop |

Code Snippet
File Name    freebsd-src-1/http.c
Method    http_parse_authenticate(const char *cp, http_auth_challenges_t *cs)

```
....
819.                        cs->challenges[cs->count]->qop =
```

**Memory Leak\Path 36:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=973 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 822 | 822 |
| Object | nonce | nonce |

Code Snippet
File Name freebsd-src-1/http.c
Method http_parse_authenticate(const char *cp, http_auth_challenges_t *cs)

```
....
822.                             cs->challenges[cs->count]->nonce =
```

**Memory Leak\Path 37:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=974 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 825 | 825 |
| Object | opaque | opaque |

Code Snippet
File Name freebsd-src-1/http.c
Method http_parse_authenticate(const char *cp, http_auth_challenges_t *cs)

```
....
825.                             cs->challenges[cs->count]->opaque =
```

**Memory Leak\Path 38:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=975 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 828 | 828 |

| | | |
|---|---|---|
| Object | algo | algo |

Code Snippet
File Name freebsd-src-1/http.c
Method http_parse_authenticate(const char *cp, http_auth_challenges_t *cs)

```
....
828.                       cs->challenges[cs->count]->algo =
```

**Memory Leak\Path 39:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=976 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 982 | 982 |
| Object | str | str |

Code Snippet
File Name freebsd-src-1/http.c
Method http_base64(const char *src)

```
....
982.         if ((str = malloc(((l + 2) / 3) * 4 + 1)) == NULL)
```

**Memory Leak\Path 40:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=977 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1069 | 1069 |
| Object | scheme | scheme |

Code Snippet
File Name freebsd-src-1/http.c
Method http_authfromenv(const char *p, http_auth_params_t *parms)

```
....
1069.        if ((parms->scheme = strdup(v)) == NULL) {
```

**Memory Leak\Path 41:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=978 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1079 | 1079 |
| Object | realm | realm |

Code Snippet
File Name freebsd-src-1/http.c
Method http_authfromenv(const char *p, http_auth_params_t *parms)

```
....
1079.        if ((parms->realm = strdup(v)) == NULL) {
```

**Memory Leak\Path 42:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=979 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1089 | 1089 |
| Object | user | user |

Code Snippet
File Name freebsd-src-1/http.c
Method http_authfromenv(const char *p, http_auth_params_t *parms)

```
....
1089.        if ((parms->user = strdup(v)) == NULL) {
```

**Memory Leak\Path 43:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=980 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1096 | 1096 |
| Object | password | password |

Code Snippet
File Name	freebsd-src-1/http.c
Method	http_authfromenv(const char *p, http_auth_params_t *parms)

```
....
1096.        if ((parms->password = strdup(v)) == NULL) {
```

**Memory Leak\Path 44:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=981 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1262 | 1262 |
| Object | algo | algo |

Code Snippet
File Name	freebsd-src-1/http.c
Method	http_digest_auth(conn_t *conn, const char *hdr, http_auth_challenge_t *c,

```
....
1262.            c->algo = strdup("");
```

**Memory Leak\Path 45:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=982 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1270 | 1270 |

| | | |
|---|---|---|
| Object | qop | qop |

Code Snippet
File Name freebsd-src-1/http.c
Method http_digest_auth(conn_t *conn, const char *hdr, http_auth_challenge_t *c,

```
....
1270.             c->qop = strdup("");
```

**Memory Leak\Path 46:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=983 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/imsg.c | freebsd-src-1/imsg.c |
| Line | 147 | 147 |
| Object | data | data |

Code Snippet
File Name freebsd-src-1/imsg.c
Method imsg_get(struct imsgbuf *ibuf, struct imsg *imsg)

```
....
147.        else if ((imsg->data = malloc(datalen)) == NULL)
```

**Memory Leak\Path 47:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=984 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1608 | 1608 |
| Object | sort_buf | sort_buf |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method main(int argc, char **argv)

```
....
1608.        if ((sort_buf = calloc(2 * (g_nrecs + 1),
```

**Memory Leak\Path 48:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=985 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/mrsas.c | freebsd-src-1/mrsas.c |
| Line | 2429 | 2429 |
| Object | ctrl_info | ctrl_info |

Code Snippet
File Name freebsd-src-1/mrsas.c
Method mrsas_init_fw(struct mrsas_softc *sc)

```
....
2429.        sc->ctrl_info = malloc(sizeof(struct mrsas_ctrl_info),
M_MRSAS, M_NOWAIT);
```

**Memory Leak\Path 49:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=986 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/mrsas.c | freebsd-src-1/mrsas.c |
| Line | 2480 | 2480 |
| Object | streamDetectByLD | streamDetectByLD |

Code Snippet
File Name freebsd-src-1/mrsas.c
Method mrsas_init_fw(struct mrsas_softc *sc)

```
....
2480.                sc->streamDetectByLD =
malloc(sizeof(PTR_LD_STREAM_DETECT) *
```

**Memory Leak\Path 50:**

| | |
|---|---|
| Severity | Medium |

| | |
|---|---|
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=987 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/mrsas.c | freebsd-src-1/mrsas.c |
| Line | 2834 | 2834 |
| Object | req_desc | req_desc |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/mrsas.c |
| Method | mrsas_alloc_mpt_cmds(struct mrsas_softc *sc) |

```
....
2834.         sc->req_desc = malloc(sc->request_alloc_sz, M_MRSAS,
M_NOWAIT);
```

## 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=1060097&projectid=60087&pathid=1161 |
| Status | New |

The variable declared in b at freebsd-src-1/a_d2i_fp.c in line 37 is not initialized when it is used by b at freebsd-src-1/a_d2i_fp.c in line 37.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/a_d2i_fp.c | freebsd-src-1/a_d2i_fp.c |
| Line | 39 | 48 |
| Object | b | b |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/a_d2i_fp.c |
| Method | void *ASN1_d2i_bio(void *(*xnew) (void), d2i_of_void *d2i, BIO *in, void **x) |

```
....
39.       BUF_MEM *b = NULL;
....
48.       p = (unsigned char *)b->data;
```

### Use of Zero Initialized Pointer\Path 2:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1162 |
| Status | New |

The variable declared in b at freebsd-src-1/a_d2i_fp.c in line 57 is not initialized when it is used by b at freebsd-src-1/a_d2i_fp.c in line 57.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/a_d2i_fp.c | freebsd-src-1/a_d2i_fp.c |
| Line | 59 | 68 |
| Object | b | b |

Code Snippet
File Name freebsd-src-1/a_d2i_fp.c
Method void *ASN1_item_d2i_bio(const ASN1_ITEM *it, BIO *in, void *x)

```
....
59.       BUF_MEM *b = NULL;
....
68.       p = (const unsigned char *)b->data;
```

### Use of Zero Initialized Pointer\Path 3:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1163 |
| Status | New |

The variable declared in delete_list at freebsd-src-1/authzone.c in line 2201 is not initialized when it is used by delete_list at freebsd-src-1/authzone.c in line 2201.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 2204 | 2214 |
| Object | delete_list | delete_list |

Code Snippet
File Name freebsd-src-1/authzone.c
Method az_delete_deleted_zones(struct auth_zones* az)

```
....
2204.        struct auth_zone* delete_list = NULL, *next;
....
2214.                    delete_list = z;
```

### Use of Zero Initialized Pointer\Path 4:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1164 |
| Status | New |

The variable declared in cp at freebsd-src-1/authzone.c in line 5443 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 5474 | 5497 |
| Object | cp | cp |

Code Snippet
File Name freebsd-src-1/authzone.c
Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5474.              xfr->task_transfer->cp = NULL;
....
5497.              xfr->task_transfer->cp = outnet_comm_point_for_http(
```

### Use of Zero Initialized Pointer\Path 5:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1165 |
| Status | New |

The variable declared in next at freebsd-src-1/authzone.c in line 3966 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 3978 | 5497 |
| Object | next | cp |

Code Snippet
File Name freebsd-src-1/authzone.c
Method probe_copy_masters_for_allow_notify(struct auth_xfer* xfr)

```
....
3978.             m->next = NULL;
```

▼

File Name freebsd-src-1/authzone.c

Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5497.             xfr->task_transfer->cp = outnet_comm_point_for_http(
```

### Use of Zero Initialized Pointer\Path 6:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1166 |
| Status | New |

The variable declared in list at freebsd-src-1/authzone.c in line 3966 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 3968 | 5497 |
| Object | list | cp |

Code Snippet

File Name freebsd-src-1/authzone.c

Method probe_copy_masters_for_allow_notify(struct auth_xfer* xfr)

```
....
3968.         struct auth_master* list = NULL, *last = NULL;
```

▼

File Name freebsd-src-1/authzone.c

Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5497.             xfr->task_transfer->cp = outnet_comm_point_for_http(
```

### Use of Zero Initialized Pointer\Path 7:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1167 |
| Status | New |

The variable declared in scan_specific at freebsd-src-1/authzone.c in line 4137 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 4149 | 5497 |
| Object | scan_specific | cp |

Code Snippet
File Name freebsd-src-1/authzone.c
Method xfr_transfer_nextmaster(struct auth_xfer* xfr)

```
....
4149.           xfr->task_transfer->scan_specific = NULL;
```

▼

File Name freebsd-src-1/authzone.c
Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5497.           xfr->task_transfer->cp = outnet_comm_point_for_http(
```

**Use of Zero Initialized Pointer\Path 8:**

Severity Medium
Result State To Verify
Online Results http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1168
Status New

The variable declared in scan_specific at freebsd-src-1/authzone.c in line 4051 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 4066 | 5497 |
| Object | scan_specific | cp |

Code Snippet
File Name freebsd-src-1/authzone.c
Method xfr_transfer_start_list(struct auth_xfer* xfr, struct auth_master* spec)

```
....
4066.       xfr->task_transfer->scan_specific = NULL;
```

▼

File Name freebsd-src-1/authzone.c

| | |
|---|---|
| Method | xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env) |

```
....
5497.            xfr->task_transfer->cp = outnet_comm_point_for_http(
```

**Use of Zero Initialized Pointer\Path 9:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1169 |
| Status | New |

The variable declared in scan_addr at freebsd-src-1/authzone.c in line 3990 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 3993 | 5497 |
| Object | scan_addr | cp |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_transfer_start_lookups(struct auth_xfer* xfr) |

```
....
3993.       xfr->task_transfer->scan_addr = NULL;
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env) |

```
....
5497.            xfr->task_transfer->cp = outnet_comm_point_for_http(
```

**Use of Zero Initialized Pointer\Path 10:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1170 |
| Status | New |

The variable declared in scan_target at freebsd-src-1/authzone.c in line 4051 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |

| | | |
|---|---|---|
| Line | 4057 | 5497 |
| Object | scan_target | cp |

Code Snippet
File Name freebsd-src-1/authzone.c
Method xfr_transfer_start_list(struct auth_xfer* xfr, struct auth_master* spec)

```
....
4057.                       xfr->task_transfer->scan_target = NULL;
```

▼

File Name freebsd-src-1/authzone.c

Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5497.                 xfr->task_transfer->cp = outnet_comm_point_for_http(
```

**Use of Zero Initialized Pointer\Path 11:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1171](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1171) |
| Status | New |

The variable declared in scan_addr at freebsd-src-1/authzone.c in line 4051 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 4058 | 5497 |
| Object | scan_addr | cp |

Code Snippet
File Name freebsd-src-1/authzone.c
Method xfr_transfer_start_list(struct auth_xfer* xfr, struct auth_master* spec)

```
....
4058.                       xfr->task_transfer->scan_addr = NULL;
```

▼

File Name freebsd-src-1/authzone.c

Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5497.                 xfr->task_transfer->cp = outnet_comm_point_for_http(
```

### Use of Zero Initialized Pointer\Path 12:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1172 |
| Status | New |

The variable declared in scan_addr at freebsd-src-1/authzone.c in line 4051 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 4067 | 5497 |
| Object | scan_addr | cp |

Code Snippet

File Name freebsd-src-1/authzone.c

Method xfr_transfer_start_list(struct auth_xfer* xfr, struct auth_master* spec)

```
....
4067.        xfr->task_transfer->scan_addr = NULL;
```

File Name freebsd-src-1/authzone.c

Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5497.            xfr->task_transfer->cp = outnet_comm_point_for_http(
```

### Use of Zero Initialized Pointer\Path 13:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1173 |
| Status | New |

The variable declared in worker at freebsd-src-1/authzone.c in line 6312 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 6321 | 5497 |
| Object | worker | cp |

Code Snippet

File Name freebsd-src-1/authzone.c

Method xfr_probe_disown(struct auth_xfer* xfr)

```
....
6321.        xfr->task_probe->worker = NULL;
```

▼

File Name    freebsd-src-1/authzone.c

Method    xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5497.            xfr->task_transfer->cp = outnet_comm_point_for_http(
```

**Use of Zero Initialized Pointer\Path 14:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1174 |
| Status | New |

The variable declared in cp at freebsd-src-1/authzone.c in line 6312 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 6319 | 5497 |
| Object | cp | cp |

Code Snippet

File Name    freebsd-src-1/authzone.c

Method    xfr_probe_disown(struct auth_xfer* xfr)

```
....
6319.        xfr->task_probe->cp = NULL;
```

▼

File Name    freebsd-src-1/authzone.c

Method    xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5497.            xfr->task_transfer->cp = outnet_comm_point_for_http(
```

**Use of Zero Initialized Pointer\Path 15:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1175 |
| Status | New |

The variable declared in env at freebsd-src-1/authzone.c in line 6312 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 6322 | 5497 |
| Object | env | cp |

Code Snippet

File Name freebsd-src-1/authzone.c

Method xfr_probe_disown(struct auth_xfer* xfr)

```
....
6322.        xfr->task_probe->env = NULL;
```

File Name freebsd-src-1/authzone.c

Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5497.              xfr->task_transfer->cp = outnet_comm_point_for_http(
```

**Use of Zero Initialized Pointer\Path 16:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1176 |
| Status | New |

The variable declared in timer at freebsd-src-1/authzone.c in line 6312 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 6316 | 5497 |
| Object | timer | cp |

Code Snippet

File Name freebsd-src-1/authzone.c

Method xfr_probe_disown(struct auth_xfer* xfr)

```
....
6316.        xfr->task_probe->timer = NULL;
```

File Name freebsd-src-1/authzone.c

Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5497.           xfr->task_transfer->cp = outnet_comm_point_for_http(
```

### Use of Zero Initialized Pointer\Path 17:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1177 |
| Status | New |

The variable declared in next at freebsd-src-1/authzone.c in line 6023 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 6029 | 5497 |
| Object | next | cp |

Code Snippet

File Name freebsd-src-1/authzone.c

Method xfer_link_data(sldns_buffer* pkt, struct auth_xfer* xfr)

```
....
6029.       e->next = NULL;
```

▼

File Name freebsd-src-1/authzone.c

Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5497.           xfr->task_transfer->cp = outnet_comm_point_for_http(
```

### Use of Zero Initialized Pointer\Path 18:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1178 |
| Status | New |

The variable declared in cp at freebsd-src-1/authzone.c in line 5443 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |

| | | |
|---|---|---|
| Line | 5474 | 5529 |
| Object | cp | cp |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env) |

```
....
5474.            xfr->task_transfer->cp = NULL;
....
5529.        xfr->task_transfer->cp = outnet_comm_point_for_tcp(env-
>outnet,
```

### Use of Zero Initialized Pointer\Path 19:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1179](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1179) |
| Status | New |

The variable declared in auth_name at freebsd-src-1/authzone.c in line 5443 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 5448 | 5529 |
| Object | auth_name | cp |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env) |

```
....
5448.        char *auth_name = NULL;
....
5529.        xfr->task_transfer->cp = outnet_comm_point_for_tcp(env-
>outnet,
```

### Use of Zero Initialized Pointer\Path 20:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1180](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1180) |
| Status | New |

The variable declared in next at freebsd-src-1/authzone.c in line 3966 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 3978 | 5529 |
| Object | next | cp |

Code Snippet
File Name freebsd-src-1/authzone.c
Method probe_copy_masters_for_allow_notify(struct auth_xfer* xfr)

```
....
3978.             m->next = NULL;
```

File Name freebsd-src-1/authzone.c

Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5529.       xfr->task_transfer->cp = outnet_comm_point_for_tcp(env-
>outnet,
```

**Use of Zero Initialized Pointer\Path 21:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1181 |
| Status | New |

The variable declared in list at freebsd-src-1/authzone.c in line 3966 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 3968 | 5529 |
| Object | list | cp |

Code Snippet
File Name freebsd-src-1/authzone.c
Method probe_copy_masters_for_allow_notify(struct auth_xfer* xfr)

```
....
3968.       struct auth_master* list = NULL, *last = NULL;
```

File Name freebsd-src-1/authzone.c

Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5529.        xfr->task_transfer->cp = outnet_comm_point_for_tcp(env-
>outnet,
```

### Use of Zero Initialized Pointer\Path 22:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1182 |
| Status | New |

The variable declared in scan_specific at freebsd-src-1/authzone.c in line 4137 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 4149 | 5529 |
| Object | scan_specific | cp |

Code Snippet

File Name freebsd-src-1/authzone.c

Method xfr_transfer_nextmaster(struct auth_xfer* xfr)

```
....
4149.              xfr->task_transfer->scan_specific = NULL;
```

File Name freebsd-src-1/authzone.c

Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5529.        xfr->task_transfer->cp = outnet_comm_point_for_tcp(env-
>outnet,
```

### Use of Zero Initialized Pointer\Path 23:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1183 |
| Status | New |

The variable declared in scan_addr at freebsd-src-1/authzone.c in line 3990 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |

| | | |
|---|---|---|
| Line | 3993 | 5529 |
| Object | scan_addr | cp |

Code Snippet
File Name freebsd-src-1/authzone.c
Method xfr_transfer_start_lookups(struct auth_xfer* xfr)

```
....
3993.        xfr->task_transfer->scan_addr = NULL;
```

▼

File Name freebsd-src-1/authzone.c

Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5529.        xfr->task_transfer->cp = outnet_comm_point_for_tcp(env-
>outnet,
```

**Use of Zero Initialized Pointer\Path 24:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1184 |
| Status | New |

The variable declared in scan_target at freebsd-src-1/authzone.c in line 4051 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 4057 | 5529 |
| Object | scan_target | cp |

Code Snippet
File Name freebsd-src-1/authzone.c
Method xfr_transfer_start_list(struct auth_xfer* xfr, struct auth_master* spec)

```
....
4057.                    xfr->task_transfer->scan_target = NULL;
```

▼

File Name freebsd-src-1/authzone.c

Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5529.        xfr->task_transfer->cp = outnet_comm_point_for_tcp(env-
>outnet,
```

### Use of Zero Initialized Pointer\Path 25:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1185 |
| Status | New |

The variable declared in scan_addr at freebsd-src-1/authzone.c in line 4051 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 4058 | 5529 |
| Object | scan_addr | cp |

Code Snippet

File Name freebsd-src-1/authzone.c

Method xfr_transfer_start_list(struct auth_xfer* xfr, struct auth_master* spec)

```
....
4058.                   xfr->task_transfer->scan_addr = NULL;
```

File Name freebsd-src-1/authzone.c

Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5529.        xfr->task_transfer->cp = outnet_comm_point_for_tcp(env-
>outnet,
```

### Use of Zero Initialized Pointer\Path 26:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1186 |
| Status | New |

The variable declared in scan_specific at freebsd-src-1/authzone.c in line 4051 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 4066 | 5529 |
| Object | scan_specific | cp |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_transfer_start_list(struct auth_xfer* xfr, struct auth_master* spec) |

```
....
4066.         xfr->task_transfer->scan_specific = NULL;
```

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env) |

```
....
5529.         xfr->task_transfer->cp = outnet_comm_point_for_tcp(env-
>outnet,
```

### Use of Zero Initialized Pointer\Path 27:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1187 |
| Status | New |

The variable declared in scan_addr at freebsd-src-1/authzone.c in line 4051 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 4067 | 5529 |
| Object | scan_addr | cp |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_transfer_start_list(struct auth_xfer* xfr, struct auth_master* spec) |

```
....
4067.         xfr->task_transfer->scan_addr = NULL;
```

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env) |

```
....
5529.         xfr->task_transfer->cp = outnet_comm_point_for_tcp(env-
>outnet,
```

### Use of Zero Initialized Pointer\Path 28:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1188 |
| Status | New |

The variable declared in env at freebsd-src-1/authzone.c in line 6312 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 6322 | 5529 |
| Object | env | cp |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_probe_disown(struct auth_xfer* xfr) |

```
....
6322.        xfr->task_probe->env = NULL;
```

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env) |

```
....
5529.        xfr->task_transfer->cp = outnet_comm_point_for_tcp(env-
>outnet,
```

### Use of Zero Initialized Pointer\Path 29:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1189 |
| Status | New |

The variable declared in timer at freebsd-src-1/authzone.c in line 6312 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 6316 | 5529 |
| Object | timer | cp |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_probe_disown(struct auth_xfer* xfr) |

```
....
6316.        xfr->task_probe->timer = NULL;
```

▼

File Name freebsd-src-1/authzone.c

Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5529.        xfr->task_transfer->cp = outnet_comm_point_for_tcp(env-
>outnet,
```

**Use of Zero Initialized Pointer\Path 30:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1190 |
| Status | New |

The variable declared in cp at freebsd-src-1/authzone.c in line 6312 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 6319 | 5529 |
| Object | cp | cp |

Code Snippet

File Name freebsd-src-1/authzone.c

Method xfr_probe_disown(struct auth_xfer* xfr)

```
....
6319.        xfr->task_probe->cp = NULL;
```

▼

File Name freebsd-src-1/authzone.c

Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5529.        xfr->task_transfer->cp = outnet_comm_point_for_tcp(env-
>outnet,
```

**Use of Zero Initialized Pointer\Path 31:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1191 |

| | |
|---|---|
| Status | New |

The variable declared in worker at freebsd-src-1/authzone.c in line 6312 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 6321 | 5529 |
| Object | worker | cp |

Code Snippet
File Name freebsd-src-1/authzone.c
Method xfr_probe_disown(struct auth_xfer* xfr)

```
....
6321.       xfr->task_probe->worker = NULL;
```

File Name freebsd-src-1/authzone.c
Method xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env)

```
....
5529.       xfr->task_transfer->cp = outnet_comm_point_for_tcp(env-
>outnet,
```

**Use of Zero Initialized Pointer\Path 32:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1192 |
| Status | New |

The variable declared in next at freebsd-src-1/authzone.c in line 6023 is not initialized when it is used by cp at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 6029 | 5529 |
| Object | next | cp |

Code Snippet
File Name freebsd-src-1/authzone.c
Method xfer_link_data(sldns_buffer* pkt, struct auth_xfer* xfr)

```
....
6029.       e->next = NULL;
```

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env) |

```
....
5529.       xfr->task_transfer->cp = outnet_comm_point_for_tcp(env-
>outnet,
```

### Use of Zero Initialized Pointer\Path 33:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1193 |
| Status | New |

The variable declared in auth_name at freebsd-src-1/authzone.c in line 5443 is not initialized when it is used by auth_name at freebsd-src-1/authzone.c in line 5443.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 5448 | 5532 |
| Object | auth_name | auth_name |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_transfer_init_fetch(struct auth_xfer* xfr, struct module_env* env) |

```
....
5448.       char *auth_name = NULL;
....
5532.             auth_name != NULL, auth_name);
```

### Use of Zero Initialized Pointer\Path 34:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1194 |
| Status | New |

The variable declared in ctype at freebsd-src-1/channels.c in line 3074 is not initialized when it is used by remote_name at freebsd-src-1/channels.c in line 450.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 3079 | 498 |
| Object | ctype | remote_name |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/channels.c |
| Method | channel_proxy_downstream(struct ssh *ssh, Channel *downstream) |

```
....
3079.       char *ctype = NULL, *listen_host = NULL;
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/channels.c |
| Method | channel_new(struct ssh *ssh, char *ctype, int type, int rfd, int wfd, int efd, |

```
....
498.        c->remote_name = xstrdup(remote_name);
```

**Use of Zero Initialized Pointer\Path 35:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1195](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1195) |
| Status | New |

The variable declared in addr at freebsd-src-1/channels.c in line 3667 is not initialized when it is used by listening_addr at freebsd-src-1/channels.c in line 3721.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 3670 | 3864 |
| Object | addr | listening_addr |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/channels.c |
| Method | channel_fwd_bind_addr(struct ssh *ssh, const char *listen_addr, int *wildcardp, |

```
....
3670.       const char *addr = NULL;
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/channels.c |
| Method | channel_setup_fwd_listener_tcpip(struct ssh *ssh, int type, |

```
....
3864.               c->listening_addr = addr == NULL ? NULL :
xstrdup(addr);
```

**Use of Zero Initialized Pointer\Path 36:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |

| | |
|---|---|
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1196 |
| Status | New |

The variable declared in tkey at freebsd-src-1/cms_enc.c in line 23 is not initialized when it is used by key at freebsd-src-1/cms_enc.c in line 23.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cms_enc.c | freebsd-src-1/cms_enc.c |
| Line | 104 | 126 |
| Object | tkey | key |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cms_enc.c |
| Method | BIO *cms_EncryptedContent_init_bio(CMS_EncryptedContentInfo *ec) |

```
....
104.            tkey = NULL;
....
126.                    ec->key = tkey;
```

**Use of Zero Initialized Pointer\Path 37:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1197 |
| Status | New |

The variable declared in tkey at freebsd-src-1/cms_enc.c in line 23 is not initialized when it is used by key at freebsd-src-1/cms_enc.c in line 23.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cms_enc.c | freebsd-src-1/cms_enc.c |
| Line | 30 | 126 |
| Object | tkey | key |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cms_enc.c |
| Method | BIO *cms_EncryptedContent_init_bio(CMS_EncryptedContentInfo *ec) |

```
....
30.      unsigned char *tkey = NULL;
....
126.                    ec->key = tkey;
```

**Use of Zero Initialized Pointer\Path 38:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |

| | |
|---|---|
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1198](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1198) |
| Status | New |

The variable declared in ret at freebsd-src-1/ec_asn1.c in line 585 is not initialized when it is used by ret at freebsd-src-1/ec_asn1.c in line 585.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ec_asn1.c | freebsd-src-1/ec_asn1.c |
| Line | 588 | 764 |
| Object | ret | ret |

Code Snippet
File Name freebsd-src-1/ec_asn1.c
Method EC_GROUP *EC_GROUP_new_from_ecparameters(const ECPARAMETERS *params)

```
....
588.        EC_GROUP *ret = NULL, *dup = NULL;
....
764.            OPENSSL_free(ret->seed);
```

### Use of Zero Initialized Pointer\Path 39:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1199](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1199) |
| Status | New |

The variable declared in strpool at freebsd-src-1/name.c in line 938 is not initialized when it is used by strpool at freebsd-src-1/name.c in line 938.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 940 | 951 |
| Object | strpool | strpool |

Code Snippet
File Name freebsd-src-1/name.c
Method hx509_general_name_unparse(GeneralName *name, char **str)

```
....
940.        struct rk_strpool *strpool = NULL;
....
951.          strpool = rk_strpoolprintf(strpool, "otherName: %s", oid);
```

### Use of Zero Initialized Pointer\Path 40:

| | |
|---|---|
| Severity | Medium |

| | |
|---|---|
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1200 |
| Status | New |

The variable declared in strpool at freebsd-src-1/name.c in line 938 is not initialized when it is used by strpool at freebsd-src-1/name.c in line 938.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 940 | 956 |
| Object | strpool | strpool |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/name.c |
| Method | hx509_general_name_unparse(GeneralName *name, char **str) |

```
....
940.      struct rk_strpool *strpool = NULL;
....
956.        strpool = rk_strpoolprintf(strpool, "rfc822Name: %.*s\n",
```

**Use of Zero Initialized Pointer\Path 41:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1201 |
| Status | New |

The variable declared in strpool at freebsd-src-1/name.c in line 938 is not initialized when it is used by strpool at freebsd-src-1/name.c in line 938.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 940 | 961 |
| Object | strpool | strpool |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/name.c |
| Method | hx509_general_name_unparse(GeneralName *name, char **str) |

```
....
940.      struct rk_strpool *strpool = NULL;
....
961.        strpool = rk_strpoolprintf(strpool, "dNSName: %.*s\n",
```

**Use of Zero Initialized Pointer\Path 42:**

| | |
|---|---|
| Severity | Medium |

| | |
|---|---|
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1202 |
| Status | New |

The variable declared in strpool at freebsd-src-1/name.c in line 938 is not initialized when it is used by strpool at freebsd-src-1/name.c in line 938.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 940 | 974 |
| Object | strpool | strpool |

Code Snippet
File Name freebsd-src-1/name.c
Method hx509_general_name_unparse(GeneralName *name, char **str)

```
....
940.        struct rk_strpool *strpool = NULL;
....
974.          strpool = rk_strpoolprintf(strpool, "directoryName: %s", s);
```

### Use of Zero Initialized Pointer\Path 43:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1203 |
| Status | New |

The variable declared in strpool at freebsd-src-1/name.c in line 938 is not initialized when it is used by strpool at freebsd-src-1/name.c in line 938.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 940 | 979 |
| Object | strpool | strpool |

Code Snippet
File Name freebsd-src-1/name.c
Method hx509_general_name_unparse(GeneralName *name, char **str)

```
....
940.        struct rk_strpool *strpool = NULL;
....
979.          strpool = rk_strpoolprintf(strpool, "URI: %.*s",
```

### Use of Zero Initialized Pointer\Path 44:

| | |
|---|---|
| Severity | Medium |

| | |
|---|---|
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1204 |
| Status | New |

The variable declared in strpool at freebsd-src-1/name.c in line 938 is not initialized when it is used by strpool at freebsd-src-1/name.c in line 938.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 940 | 986 |
| Object | strpool | strpool |

Code Snippet
File Name freebsd-src-1/name.c
Method hx509_general_name_unparse(GeneralName *name, char **str)

```
....
940.      struct rk_strpool *strpool = NULL;
....
986.        strpool = rk_strpoolprintf(strpool, "IPAddress: ");
```

**Use of Zero Initialized Pointer\Path 45:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1205 |
| Status | New |

The variable declared in strpool at freebsd-src-1/name.c in line 938 is not initialized when it is used by strpool at freebsd-src-1/name.c in line 938.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 940 | 1013 |
| Object | strpool | strpool |

Code Snippet
File Name freebsd-src-1/name.c
Method hx509_general_name_unparse(GeneralName *name, char **str)

```
....
940.      struct rk_strpool *strpool = NULL;
....
1013.       strpool = rk_strpoolprintf(strpool, "registeredID: %s", 
oid);
```

**Use of Zero Initialized Pointer\Path 46:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1206 |
| Status | New |

The variable declared in strpool at freebsd-src-1/name.c in line 729 is not initialized when it is used by strpool at freebsd-src-1/name.c in line 729.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 758 | 792 |
| Object | strpool | strpool |

Code Snippet

File Name freebsd-src-1/name.c

Method hx509_name_expand(hx509_context context,

```
....
758.                struct rk_strpool *strpool = NULL;
....
792.                  strpool = rk_strpoolprintf(strpool, "%s", value);
```

### Use of Zero Initialized Pointer\Path 47:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1207 |
| Status | New |

The variable declared in strpool at freebsd-src-1/name.c in line 729 is not initialized when it is used by strpool at freebsd-src-1/name.c in line 729.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 758 | 766 |
| Object | strpool | strpool |

Code Snippet

File Name freebsd-src-1/name.c

Method hx509_name_expand(hx509_context context,

```
....
758.                struct rk_strpool *strpool = NULL;
....
766.                  strpool = rk_strpoolprintf(strpool, "%.*s",
```

### Use of Zero Initialized Pointer\Path 48:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1208 |
| Status | New |

The variable declared in reqbuf at freebsd-src-1/phttpget.c in line 293 is not initialized when it is used by reqbuf at freebsd-src-1/phttpget.c in line 293.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/phttpget.c | freebsd-src-1/phttpget.c |
| Line | 426 | 441 |
| Object | reqbuf | reqbuf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/phttpget.c |
| Method | main(int argc, char *argv[]) |

```
....
426.                        reqbuf = NULL;
....
441.                    len = send(sd, reqbuf + reqbufpos,
```

### Use of Zero Initialized Pointer\Path 49:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1209 |
| Status | New |

The variable declared in reqbuf at freebsd-src-1/phttpget.c in line 293 is not initialized when it is used by reqbuf at freebsd-src-1/phttpget.c in line 293.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/phttpget.c | freebsd-src-1/phttpget.c |
| Line | 448 | 441 |
| Object | reqbuf | reqbuf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/phttpget.c |
| Method | main(int argc, char *argv[]) |

```
....
448.                reqbuf = NULL;
....
441.                    len = send(sd, reqbuf + reqbufpos,
```

### Use of Zero Initialized Pointer\Path 50:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1210 |
| Status | New |

The variable declared in reqbuf at freebsd-src-1/phttpget.c in line 293 is not initialized when it is used by reqbuf at freebsd-src-1/phttpget.c in line 293.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/phttpget.c | freebsd-src-1/phttpget.c |
| Line | 305 | 441 |
| Object | reqbuf | reqbuf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/phttpget.c |
| Method | main(int argc, char *argv[]) |

```
....
305.          char * reqbuf = NULL;    /* Request buffer */
....
441.                          len = send(sd, reqbuf + reqbufpos,
```

## 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=1060097&projectid=60087&pathid=368 |
| Status | New |

Calling free() (line 1673) on a variable that was not dynamically allocated (line 1673) in file freebsd-src-1/archive_read_support_format_lha.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_lha.c | freebsd-src-1/archive_read_support_format_lha.c |
| Line | 1683 | 1683 |
| Object | lha | lha |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_lha.c |
| Method | archive_read_format_lha_cleanup(struct archive_read *a) |

```
....
1683.        free(lha);
```

**MemoryFree on StackVariable\Path 2:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=369](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=369) |
| Status | New |

Calling free() (line 297) on a variable that was not dynamically allocated (line 297) in file freebsd-src-1/archive_read_support_format_mtree.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 309 | 309 |
| Object | p | p |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_mtree.c |
| Method | cleanup(struct archive_read *a) |

```
....
309.                free(p);
```

**MemoryFree on StackVariable\Path 3:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=370](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=370) |
| Status | New |

Calling free() (line 297) on a variable that was not dynamically allocated (line 297) in file freebsd-src-1/archive_read_support_format_mtree.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 318 | 318 |
| Object | mtree | mtree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_mtree.c |
| Method | cleanup(struct archive_read *a) |

```
....
318.        free(mtree);
```

### MemoryFree on StackVariable\Path 4:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=371 |
| Status | New |

Calling free() (line 1339) on a variable that was not dynamically allocated (line 1339) in file freebsd-src-1/archive_read_support_format_rar.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 1352 | 1352 |
| Object | rar | rar |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | archive_read_format_rar_cleanup(struct archive_read *a) |

```
....
1352.     free(rar);
```

### MemoryFree on StackVariable\Path 5:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=372 |
| Status | New |

Calling free() (line 795) on a variable that was not dynamically allocated (line 795) in file freebsd-src-1/authzone.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 859 | 859 |
| Object | old | old |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/authzone.c |
| Method | rrset_add_rr(struct auth_rrset* rrset, uint32_t rr_ttl, uint8_t* rdata, |

```
....
859.         free(old);
```

### MemoryFree on StackVariable\Path 6:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=373 |
| Status | New |

Calling free() (line 1567) on a variable that was not dynamically allocated (line 1567) in file freebsd-src-1/authzone.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1592 | 1592 |
| Object | n | n |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | auth_zone_read_zonefile(struct auth_zone* z, struct config_file* cfg) |

```
....
1592.                    free(n);
```

### MemoryFree on StackVariable\Path 7:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=374 |
| Status | New |

Calling free() (line 1567) on a variable that was not dynamically allocated (line 1567) in file freebsd-src-1/authzone.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1597 | 1597 |
| Object | n | n |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | auth_zone_read_zonefile(struct auth_zone* z, struct config_file* cfg) |

```
....
1597.                  free(n);
```

### MemoryFree on StackVariable\Path 8:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=375](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=375) |
| Status | New |

Calling free() (line 1567) on a variable that was not dynamically allocated (line 1567) in file freebsd-src-1/authzone.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1621 | 1621 |
| Object | n | n |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | auth_zone_read_zonefile(struct auth_zone* z, struct config_file* cfg) |

```
....
1621.                  free(n);
```

### MemoryFree on StackVariable\Path 9:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=376](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=376) |
| Status | New |

Calling free() (line 2267) on a variable that was not dynamically allocated (line 2267) in file freebsd-src-1/authzone.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 2275 | 2275 |
| Object | c | c |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | auth_chunks_delete(struct auth_transfer* at) |

```
....
2275.                   free(c);
```

### MemoryFree on StackVariable\Path 10:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=377 |
| Status | New |

Calling free() (line 699) on a variable that was not dynamically allocated (line 699) in file freebsd-src-1/channels.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 736 | 736 |
| Object | s | s |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/channels.c |
| Method | channel_free(struct ssh *ssh, Channel *c) |

```
....
736.                 free(s);
```

### MemoryFree on StackVariable\Path 11:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=378 |
| Status | New |

Calling free() (line 985) on a variable that was not dynamically allocated (line 985) in file freebsd-src-1/channels.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 1027 | 1027 |
| Object | cp | cp |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/channels.c |
| Method | channel_open_message(struct ssh *ssh) |

```
....
1027.                           free(cp);
```

### MemoryFree on StackVariable\Path 12:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=379 |
| Status | New |

Calling free() (line 985) on a variable that was not dynamically allocated (line 985) in file freebsd-src-1/channels.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 1030 | 1030 |
| Object | cp | cp |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_open_message(struct ssh *ssh)

```
....
1030.                     free(cp);
```

### MemoryFree on StackVariable\Path 13:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=380 |
| Status | New |

Calling free() (line 1774) on a variable that was not dynamically allocated (line 1774) in file freebsd-src-1/channels.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 1819 | 1819 |
| Object | remote_ipaddr | remote_ipaddr |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_post_x11_listener(struct ssh *ssh, Channel *c)

```
....
1819.       free(remote_ipaddr);
```

### MemoryFree on StackVariable\Path 14:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=381](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=381) |
| Status | New |

Calling free() (line 1823) on a variable that was not dynamically allocated (line 1823) in file freebsd-src-1/channels.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 1878 | 1878 |
| Object | local_ipaddr | local_ipaddr |

Code Snippet
File Name freebsd-src-1/channels.c
Method port_open_helper(struct ssh *ssh, Channel *c, char *rtype)

```
....
1878.       free(local_ipaddr);
```

### MemoryFree on StackVariable\Path 15:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=382](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=382) |
| Status | New |

Calling free() (line 2135) on a variable that was not dynamically allocated (line 2135) in file freebsd-src-1/channels.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 2170 | 2170 |
| Object | data | data |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_handle_wfd(struct ssh *ssh, Channel *c)

```
....
2170.              free(data);
```

### MemoryFree on StackVariable\Path 16:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=383 |
| Status | New |

Calling free() (line 3074) on a variable that was not dynamically allocated (line 3074) in file freebsd-src-1/channels.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 3214 | 3214 |
| Object | ctype | ctype |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_proxy_downstream(struct ssh *ssh, Channel *downstream)

```
....
3214.        free(ctype);
```

### MemoryFree on StackVariable\Path 17:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=384 |
| Status | New |

Calling free() (line 3074) on a variable that was not dynamically allocated (line 3074) in file freebsd-src-1/channels.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 3215 | 3215 |
| Object | listen_host | listen_host |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_proxy_downstream(struct ssh *ssh, Channel *downstream)

```
....
3215.         free(listen_host);
```

**MemoryFree on StackVariable\Path 18:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=385 |
| Status | New |

Calling free() (line 3548) on a variable that was not dynamically allocated (line 3548) in file freebsd-src-1/channels.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 3573 | 3573 |
| Object | msg | msg |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_input_open_failure(int type, u_int32_t seq, struct ssh *ssh)

```
....
3573.         free(msg);
```

**MemoryFree on StackVariable\Path 19:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=386 |
| Status | New |

Calling free() (line 3377) on a variable that was not dynamically allocated (line 3377) in file freebsd-src-1/cxgbetool.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3435 | 3435 |
| Object | line | line |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method parse_offload_policy(const char *fname, struct t4_offload_policy *op)

```
....
3435.        free(line);
```

**MemoryFree on StackVariable\Path 20:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=387](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=387) |
| Status | New |

Calling free() (line 95) on a variable that was not dynamically allocated (line 95) in file freebsd-src-1/gvinum.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 126 | 126 |
| Object | inputline | inputline |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method main(int argc, char **argv)

```
....
126.                              free(inputline);
```

**MemoryFree on StackVariable\Path 21:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=388](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=388) |
| Status | New |

Calling free() (line 175) on a variable that was not dynamically allocated (line 175) in file freebsd-src-1/gvinum.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 352 | 352 |
| Object | sdname | sdname |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_create(int argc, char * const *argv)

```
....
352.                                    free(sdname);
```

**MemoryFree on StackVariable\Path 22:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=389 |
| Status | New |

Calling free() (line 421) on a variable that was not dynamically allocated (line 421) in file freebsd-src-1/gvinum.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 469 | 469 |
| Object | dname | dname |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | create_drive(const char *device) |

```
....
469.                      free(dname);
```

**MemoryFree on StackVariable\Path 23:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=390 |
| Status | New |

Calling free() (line 1270) on a variable that was not dynamically allocated (line 1270) in file freebsd-src-1/gvinum.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1295 | 1295 |
| Object | s | s |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_grow(int argc, char * const *argv) |

```
....
1295.              free(s);
```

### MemoryFree on StackVariable\Path 24:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=391 |
| Status | New |

Calling free() (line 1270) on a variable that was not dynamically allocated (line 1270) in file freebsd-src-1/gvinum.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1302 | 1302 |
| Object | s | s |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_grow(int argc, char * const *argv) |

```
....
1302.              free(s);
```

### MemoryFree on StackVariable\Path 25:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=392 |
| Status | New |

Calling free() (line 1270) on a variable that was not dynamically allocated (line 1270) in file freebsd-src-1/gvinum.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1303 | 1303 |
| Object | d | d |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_grow(int argc, char * const *argv) |

```
....
1303.                 free(d);
```

### MemoryFree on StackVariable\Path 26:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=393 |
| Status | New |

Calling free() (line 1270) on a variable that was not dynamically allocated (line 1270) in file freebsd-src-1/gvinum.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1316 | 1316 |
| Object | s | s |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_grow(int argc, char * const *argv) |

```
....
1316.                 free(s);
```

### MemoryFree on StackVariable\Path 27:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=394 |
| Status | New |

Calling free() (line 1270) on a variable that was not dynamically allocated (line 1270) in file freebsd-src-1/gvinum.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1317 | 1317 |
| Object | d | d |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_grow(int argc, char * const *argv) |

```
....
1317.               free(d);
```

### MemoryFree on StackVariable\Path 28:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=395 |
| Status | New |

Calling free() (line 1270) on a variable that was not dynamically allocated (line 1270) in file freebsd-src-1/gvinum.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1318 | 1318 |
| Object | drive | drive |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_grow(int argc, char * const *argv) |

```
....
1318.               free(drive);
```

### MemoryFree on StackVariable\Path 29:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=396 |
| Status | New |

Calling free() (line 1270) on a variable that was not dynamically allocated (line 1270) in file freebsd-src-1/gvinum.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1322 | 1322 |
| Object | sdname | sdname |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_grow(int argc, char * const *argv) |

```
....
1322.        free(sdname);
```

**MemoryFree on StackVariable\Path 30:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=397 |
| Status | New |

Calling free() (line 1270) on a variable that was not dynamically allocated (line 1270) in file freebsd-src-1/gvinum.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1338 | 1338 |
| Object | drive | drive |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_grow(int argc, char * const *argv) |

```
....
1338.        free(drive);
```

**MemoryFree on StackVariable\Path 31:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=398 |
| Status | New |

Calling free() (line 1270) on a variable that was not dynamically allocated (line 1270) in file freebsd-src-1/gvinum.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1341 | 1341 |
| Object | s | s |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_grow(int argc, char * const *argv) |

```
....
1341.              free(s);
```

### MemoryFree on StackVariable\Path 32:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=399 |
| Status | New |

Calling free() (line 1270) on a variable that was not dynamically allocated (line 1270) in file freebsd-src-1/gvinum.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1342 | 1342 |
| Object | d | d |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_grow(int argc, char * const *argv)

```
....
1342.              free(d);
```

### MemoryFree on StackVariable\Path 33:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=400 |
| Status | New |

Calling free() (line 317) on a variable that was not dynamically allocated (line 317) in file freebsd-src-1/http.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 325 | 325 |
| Object | io | io |

Code Snippet
File Name freebsd-src-1/http.c
Method http_closefn(void *v)

```
....
325.         free(io);
```

### MemoryFree on StackVariable\Path 34:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=401](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=401) |
| Status | New |

Calling free() (line 392) on a variable that was not dynamically allocated (line 392) in file freebsd-src-1/http.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 410 | 410 |
| Object | msg | msg |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_cmd(conn_t *conn, const char *fmt, ...) |

```
....
410.         free(msg);
```

### MemoryFree on StackVariable\Path 35:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=402](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=402) |
| Status | New |

Calling free() (line 1249) on a variable that was not dynamically allocated (line 1249) in file freebsd-src-1/http.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1303 | 1303 |
| Object | options | options |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_digest_auth(conn_t *conn, const char *hdr, http_auth_challenge_t *c, |

```
....
1303.               free(options);
```

### MemoryFree on StackVariable\Path 36:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=403](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=403) |
| Status | New |

Calling free() (line 1525) on a variable that was not dynamically allocated (line 1525) in file freebsd-src-1/http.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1562 | 1562 |
| Object | line | line |

Code Snippet
File Name freebsd-src-1/http.c
Method http_print_html(FILE *out, FILE *in)

```
....
1562.        free(line);
```

### MemoryFree on StackVariable\Path 37:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=404](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=404) |
| Status | New |

Calling free() (line 1585) on a variable that was not dynamically allocated (line 1585) in file freebsd-src-1/http.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1899 | 1899 |
| Object | neW | neW |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1899.                                    free(new);
```

**MemoryFree on StackVariable\Path 38:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=405 |
| Status | New |

Calling free() (line 272) on a variable that was not dynamically allocated (line 272) in file freebsd-src-1/imsg.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/imsg.c | freebsd-src-1/imsg.c |
| Line | 282 | 282 |
| Object | ifd | ifd |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/imsg.c |
| Method | imsg_get_fd(struct imsgbuf *ibuf) |

```
....
282.          free(ifd);
```

**MemoryFree on StackVariable\Path 39:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=406 |
| Status | New |

Calling free() (line 88) on a variable that was not dynamically allocated (line 88) in file freebsd-src-1/ipsecmod.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ipsecmod.c | freebsd-src-1/ipsecmod.c |
| Line | 96 | 96 |
| Object | ipsecmod_env | ipsecmod_env |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/ipsecmod.c |
| Method | ipsecmod_deinit(struct module_env* env, int id) |

```
....
96.    free(ipsecmod_env);
```

**MemoryFree on StackVariable\Path 40:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=407](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=407) |
| Status | New |

Calling free() (line 249) on a variable that was not dynamically allocated (line 249) in file freebsd-src-1/ipsecmod.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ipsecmod.c | freebsd-src-1/ipsecmod.c |
| Line | 283 | 283 |
| Object | tempstring | tempstring |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/ipsecmod.c |
| Method | call_hook(struct module_qstate* qstate, struct ipsecmod_qstate* iq, |

```
....
283.              free(tempstring);
```

**MemoryFree on StackVariable\Path 41:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=408](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=408) |
| Status | New |

Calling free() (line 249) on a variable that was not dynamically allocated (line 249) in file freebsd-src-1/ipsecmod.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ipsecmod.c | freebsd-src-1/ipsecmod.c |
| Line | 287 | 287 |
| Object | tempstring | tempstring |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/ipsecmod.c |
| Method | call_hook(struct module_qstate* qstate, struct ipsecmod_qstate* iq, |

```
....
287.         free(tempstring);
```

### MemoryFree on StackVariable\Path 42:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=409](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=409) |
| Status | New |

Calling free() (line 1114) on a variable that was not dynamically allocated (line 1114) in file freebsd-src-1/lockstat.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1604 | 1604 |
| Object | data_buf | data_buf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | main(int argc, char **argv) |

```
....
1604.            free(data_buf);
```

### MemoryFree on StackVariable\Path 43:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=410](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=410) |
| Status | New |

Calling free() (line 938) on a variable that was not dynamically allocated (line 938) in file freebsd-src-1/name.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 952 | 952 |
| Object | oid | oid |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/name.c |
| Method | hx509_general_name_unparse(GeneralName *name, char **str) |

```
....
952.         free(oid);
```

### MemoryFree on StackVariable\Path 44:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=411 |
| Status | New |

Calling free() (line 938) on a variable that was not dynamically allocated (line 938) in file freebsd-src-1/name.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 1014 | 1014 |
| Object | oid | oid |

Code Snippet

File Name freebsd-src-1/name.c

Method hx509_general_name_unparse(GeneralName *name, char **str)

```
....
1014.        free(oid);
```

### MemoryFree on StackVariable\Path 45:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=412 |
| Status | New |

Calling free() (line 293) on a variable that was not dynamically allocated (line 293) in file freebsd-src-1/phttpget.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/phttpget.c | freebsd-src-1/phttpget.c |
| Line | 425 | 425 |
| Object | reqbuf | reqbuf |

Code Snippet

File Name freebsd-src-1/phttpget.c

Method main(int argc, char *argv[])

```
....
425.                                    free(reqbuf);
```

### MemoryFree on StackVariable\Path 46:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=413 |
| Status | New |

Calling free() (line 293) on a variable that was not dynamically allocated (line 293) in file freebsd-src-1/phttpget.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/phttpget.c | freebsd-src-1/phttpget.c |
| Line | 447 | 447 |
| Object | reqbuf | reqbuf |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/phttpget.c |
| Method | main(int argc, char *argv[]) |

```
....
447.                          free(reqbuf);
```

### MemoryFree on StackVariable\Path 47:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=414 |
| Status | New |

Calling free() (line 293) on a variable that was not dynamically allocated (line 293) in file freebsd-src-1/phttpget.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/phttpget.c | freebsd-src-1/phttpget.c |
| Line | 718 | 718 |
| Object | reqbuf | reqbuf |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/phttpget.c |
| Method | main(int argc, char *argv[]) |

```
....
718.                        free(reqbuf);
```

### MemoryFree on StackVariable\Path 48:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=415 |
| Status | New |

Calling free() (line 125) on a variable that was not dynamically allocated (line 125) in file freebsd-src-1/phttpget.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/phttpget.c | freebsd-src-1/phttpget.c |
| Line | 179 | 179 |
| Object | proxy_auth_userpass | proxy_auth_userpass |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/phttpget.c |
| Method | readenv(void) |

```
....
179.                  free(proxy_auth_userpass);
```

### MemoryFree on StackVariable\Path 49:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=416 |
| Status | New |

Calling free() (line 125) on a variable that was not dynamically allocated (line 125) in file freebsd-src-1/phttpget.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/phttpget.c | freebsd-src-1/phttpget.c |
| Line | 180 | 180 |
| Object | proxy_auth_userpass64 | proxy_auth_userpass64 |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/phttpget.c |
| Method | readenv(void) |

```
....
180.                free(proxy_auth_userpass64);
```

**MemoryFree on StackVariable\Path 50:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=417](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=417) |
| Status | New |

Calling free() (line 307) on a variable that was not dynamically allocated (line 307) in file freebsd-src-1/scsi_ch.c may result with a crash.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/scsi_ch.c | freebsd-src-1/scsi_ch.c |
| Line | 315 | 315 |
| Object | softc | softc |

Code Snippet
File Name freebsd-src-1/scsi_ch.c
Method chcleanup(struct cam_periph *periph)

```
....
315.         free(softc, M_DEVBUF);
```

## 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=1060097&projectid=60087&pathid=436](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=436) |
| Status | New |

The function clip_buf_size in freebsd-src-1/cxgbetool.c at line 3488 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 | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3494 | 3494 |
| Object | clip_buf_size | clip_buf_size |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cxgbetool.c |
| Method | display_clip(void) |

```
....
3494.        buf = malloc(clip_buf_size);
```

### Wrong Size t Allocation\Path 2:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=437 |
| Status | New |

The function datalen in freebsd-src-1/imsg.c at line 126 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 | freebsd-src-1/imsg.c | freebsd-src-1/imsg.c |
| Line | 147 | 147 |
| Object | datalen | datalen |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/imsg.c |
| Method | imsg_get(struct imsgbuf *ibuf, struct imsg *imsg) |

```
....
147.        else if ((imsg->data = malloc(datalen)) == NULL)
```

### Wrong Size t Allocation\Path 3:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=438 |
| Status | New |

The function tolen in freebsd-src-1/name.c at line 83 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 | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 90 | 90 |
| Object | tolen | tolen |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/name.c |
| Method | quote_string(const char *f, size_t len, int flags, size_t *rlen) |

```
....
90.       to = malloc(tolen);
```

**Wrong Size t Allocation\Path 4:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=439 |
| Status | New |

The function prog_size in freebsd-src-1/optimize.c at line 2945 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 | freebsd-src-1/optimize.c | freebsd-src-1/optimize.c |
| Line | 2965 | 2965 |
| Object | prog_size | prog_size |

Code Snippet
File Name freebsd-src-1/optimize.c
Method install_bpf_program(pcap_t *p, struct bpf_program *fp)

```
....
2965.       p->fcode.bf_insns = (struct bpf_insn *)malloc(prog_size);
```

**Wrong Size t Allocation\Path 5:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=440 |
| Status | New |

The function ctlen in freebsd-src-1/phttpget.c at line 71 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 | freebsd-src-1/phttpget.c | freebsd-src-1/phttpget.c |
| Line | 91 | 91 |
| Object | ctlen | ctlen |

Code Snippet
File Name freebsd-src-1/phttpget.c
Method b64enc(const char *ptext)

```
....
91.    if ((ctext = malloc(ctlen)) == NULL)
```

**Wrong Size t Allocation\Path 6:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=441](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=441) |
| Status | New |

The function mlen in freebsd-src-1/pmcstudy.c at line 2095 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 | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2128 | 2128 |
| Object | mlen | mlen |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | build_counters_from_header(FILE *io) |

```
....
2128.        cnts = malloc(mlen);
```

**Wrong Size t Allocation\Path 7:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=442](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=442) |
| Status | New |

The function sz in freebsd-src-1/pmcstudy.c at line 2334 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 | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2502 | 2502 |
| Object | sz | sz |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | get_cpuid_set(void) |

```
....
2502.              valid_pmcs = malloc(sz);
```

**Wrong Size t Allocation\Path 8:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=443](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=443) |
| Status | New |

The function len in freebsd-src-1/pmcstudy.c at line 2334 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 | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2522 | 2522 |
| Object | len | len |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/pmcstudy.c |
| Method | get_cpuid_set(void) |

```
....
2522.              valid_pmcs[valid_pmc_cnt] = malloc(len);
```

**Wrong Size t Allocation\Path 9:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=444](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=444) |
| Status | New |

The function sz in freebsd-src-1/pmcstudy.c at line 2334 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 | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2535 | 2535 |
| Object | sz | sz |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/pmcstudy.c |
| Method | get_cpuid_set(void) |

```
....
2535.                   more = malloc(sz);
```

**Wrong Size t Allocation\Path 10:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=445](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=445) |
| Status | New |

The function len in freebsd-src-1/pmcstudy.c at line 2641 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 | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2658 | 2658 |
| Object | len | len |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | add_it_to(char **vars, int cur_cnt, char *name) |

```
....
2658.         vars[cur_cnt] = malloc(len);
```

**Wrong Size t Allocation\Path 11:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=446](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=446) |
| Status | New |

The function mal in freebsd-src-1/pmcstudy.c at line 2669 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 | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2698 | 2698 |
| Object | mal | mal |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | build_command_for_exp(struct expression *exp) |

```
....
2698.        vars = malloc(mal);
```

**Wrong Size t Allocation\Path 12:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=447 |
| Status | New |

The function size in freebsd-src-1/scsi_ch.c at line 1182 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 | freebsd-src-1/scsi_ch.c | freebsd-src-1/scsi_ch.c |
| Line | 1306 | 1306 |
| Object | size | size |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/scsi_ch.c |
| Method | chgetelemstatus(struct cam_periph *periph, int scsi_version, u_long cmd, |

```
....
1306.        data = (caddr_t)malloc(size, M_DEVBUF, M_WAITOK);
```

**Wrong Size t Allocation\Path 13:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=448 |
| Status | New |

The function len in freebsd-src-1/sctp_sys_calls.c at line 678 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 | freebsd-src-1/sctp_sys_calls.c | freebsd-src-1/sctp_sys_calls.c |
| Line | 736 | 736 |
| Object | len | len |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/sctp_sys_calls.c |
| Method | sctp_sendx(int sd, const void *msg, size_t msg_len, |

```
....
736.        buf = malloc(len);
```

**Wrong Size t Allocation\Path 14:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=449 |
| Status | New |

The function len in freebsd-src-1/test_x509.c at line 49 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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 56 | 56 |
| Object | len | len |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method xmalloc(size_t len)

```
....
56.    buf = malloc(len);
```

**Wrong Size t Allocation\Path 15:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=450 |
| Status | New |

The function slen in freebsd-src-1/ipsecmod.c at line 215 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 | freebsd-src-1/ipsecmod.c | freebsd-src-1/ipsecmod.c |
| Line | 218 | 218 |
| Object | slen | slen |

Code Snippet
File Name freebsd-src-1/ipsecmod.c
Method ipseckey_has_safe_characters(char* s, size_t slen) {

```
....
218.        gateway = (char*)calloc(slen, sizeof(char));
```

### Wrong Size t Allocation\Path 16:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=451](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=451) |
| Status | New |

The function peer_count in freebsd-src-1/show.c at line 47 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 | freebsd-src-1/show.c | freebsd-src-1/show.c |
| Line | 56 | 56 |
| Object | peer_count | peer_count |

Code Snippet
File Name freebsd-src-1/show.c
Method static void sort_peers(struct wgdevice *device)

```
....
56.    peers = calloc(peer_count, sizeof(*peers));
```

### Wrong Size t Allocation\Path 17:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=452](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=452) |
| Status | New |

The function n in freebsd-src-1/test_x509.c at line 74 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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 83 | 83 |
| Object | n | n |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method xstrdup(const char *name)

```
....
83.    s = xmalloc(n);
```

**Wrong Size t Allocation\Path 18:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=453 |
| Status | New |

The function nlen in freebsd-src-1/test_x509.c at line 106 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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 118 | 118 |
| Object | nlen | nlen |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method SB_expand(string_builder *sb, size_t extra_len)

```
....
118.          nbuf = xmalloc(nlen);
```

**Wrong Size t Allocation\Path 19:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=454 |
| Status | New |

The function blen in freebsd-src-1/test_x509.c at line 403 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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 409 | 409 |
| Object | blen | blen |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method read_all(FILE *f, size_t *len)

```
....
409.        buf = xmalloc(blen);
```

### Wrong Size t Allocation\Path 20:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=455](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=455) |
| Status | New |

The function blen in freebsd-src-1/test_x509.c at line 403 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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 418 | 418 |
| Object | blen | blen |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method read_all(FILE *f, size_t *len)

```
....
418.                buf2 = xmalloc(blen);
```

### Wrong Size t Allocation\Path 21:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=456](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=456) |
| Status | New |

The function ptr in freebsd-src-1/test_x509.c at line 403 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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 427 | 427 |
| Object | ptr | ptr |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method read_all(FILE *f, size_t *len)

```
....
427.                    buf3 = xmalloc(ptr);
```

### Wrong Size t Allocation\Path 22:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=457](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=457) |
| Status | New |

The function ptr in freebsd-src-1/test_x509.c at line 975 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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 1022 | 1022 |
| Object | ptr | ptr |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method parse_hex(const char *name, long linenum, const char *value, size_t *len)

```
....
1022.                   buf = xmalloc(ptr);
```

### Wrong Size t Allocation\Path 23:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=458](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=458) |
| Status | New |

The function len in freebsd-src-1/archive_read_support_format_mtree.c at line 813 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 | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 822 | 822 |
| Object | len | len |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_mtree.c
Method add_option(struct archive_read *a, struct mtree_option **global,

```
....
822.          if ((opt->value = malloc(len + 1)) == NULL) {
```

**Wrong Size t Allocation\Path 24:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=459 |
| Status | New |

The function name_len in freebsd-src-1/archive_read_support_format_mtree.c at line 919 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 | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 982 | 982 |
| Object | name_len | name_len |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_mtree.c |
| Method | process_add_entry(struct archive_read *a, struct mtree *mtree, |

```
....
982.          if ((entry->name = malloc(name_len + 1)) == NULL) {
```

**Wrong Size t Allocation\Path 25:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=460 |
| Status | New |

The function num in freebsd-src-1/authzone.c at line 7125 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 | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 7130 | 7130 |
| Object | num | num |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | dup_prefix(char* str, size_t num) |

```
....
7130.         result = (char*)malloc(num+1);
```

**Wrong Size t Allocation\Path 26:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=461](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=461) |
| Status | New |

The function k in freebsd-src-1/name.c at line 201 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 | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 244 | 244 |
| Object | k | k |

Code Snippet
File Name freebsd-src-1/name.c
Method _hx509_Name_to_string(const Name *n, char **str)

```
....
244.                ss = malloc(k + 1);
```

**Wrong Size t Allocation\Path 27:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=462](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=462) |
| Status | New |

The function k in freebsd-src-1/name.c at line 201 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 | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 269 | 269 |
| Object | k | k |

Code Snippet
File Name freebsd-src-1/name.c
Method _hx509_Name_to_string(const Name *n, char **str)

```
....
269.                ss = malloc(k + 1);
```

**Wrong Size t Allocation\Path 28:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=463 |
| Status | New |

The function len in freebsd-src-1/name.c at line 332 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 | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 345 | 345 |
| Object | len | len |

Code Snippet
File Name freebsd-src-1/name.c
Method dsstringprep(const DirectoryString *ds, uint32_t **rname, size_t *rlen)

```
....
345.         COPYVOIDARRAY(ds, ia5String, len, name);
```

**Wrong Size t Allocation\Path 29:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=464 |
| Status | New |

The function len in freebsd-src-1/name.c at line 332 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 | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 350 | 350 |
| Object | len | len |

Code Snippet
File Name freebsd-src-1/name.c
Method dsstringprep(const DirectoryString *ds, uint32_t **rname, size_t *rlen)

```
....
350.        COPYVOIDARRAY(ds, printableString, len, name);
```

**Wrong Size t Allocation\Path 30:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=465](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=465) |
| Status | New |

The function len in freebsd-src-1/name.c at line 332 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 | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 354 | 354 |
| Object | len | len |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/name.c |
| Method | dsstringprep(const DirectoryString *ds, uint32_t **rname, size_t *rlen) |

```
....
354.        COPYCHARARRAY(ds, teletexString, len, name);
```

**Wrong Size t Allocation\Path 31:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=466](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=466) |
| Status | New |

The function len in freebsd-src-1/name.c at line 332 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 | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 358 | 358 |
| Object | len | len |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/name.c |
| Method | dsstringprep(const DirectoryString *ds, uint32_t **rname, size_t *rlen) |

```
....
358.        COPYVALARRAY(ds, bmpString, len, name);
```

### Wrong Size t Allocation\Path 32:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=467 |
| Status | New |

The function len in freebsd-src-1/name.c at line 332 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 | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 362 | 362 |
| Object | len | len |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/name.c |
| Method | dsstringprep(const DirectoryString *ds, uint32_t **rname, size_t *rlen) |

```
....
362.        COPYVALARRAY(ds, universalString, len, name);
```

### Wrong Size t Allocation\Path 33:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=468 |
| Status | New |

The function len in freebsd-src-1/name.c at line 332 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 | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 369 | 369 |
| Object | len | len |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/name.c |
| Method | dsstringprep(const DirectoryString *ds, uint32_t **rname, size_t *rlen) |

```
....
369.            name = malloc(len * sizeof(name[0]));
```

### Wrong Size t Allocation\Path 34:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=469 |
| Status | New |

The function pstr_len in freebsd-src-1/name.c at line 572 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 | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 636 | 636 |
| Object | pstr_len | pstr_len |

Code Snippet
File Name freebsd-src-1/name.c
Method hx509_parse_name(hx509_context context, const char *str, hx509_name *name)

```
....
636.            r = malloc(pstr_len + 1);
```

### Wrong Size t Allocation\Path 35:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=470 |
| Status | New |

The function block_memsize in freebsd-src-1/optimize.c at line 2520 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 | freebsd-src-1/optimize.c | freebsd-src-1/optimize.c |
| Line | 2621 | 2621 |
| Object | block_memsize | block_memsize |

Code Snippet
File Name freebsd-src-1/optimize.c
Method opt_init(opt_state_t *opt_state, struct icode *ic)

```
....
2621.        opt_state->space = (bpf_u_int32 *)malloc(block_memsize +
edge_memsize);
```

**Wrong Size t Allocation\Path 36:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=471](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=471) |
| Status | New |

The function edge_memsize in freebsd-src-1/optimize.c at line 2520 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 | freebsd-src-1/optimize.c | freebsd-src-1/optimize.c |
| Line | 2621 | 2621 |
| Object | edge_memsize | edge_memsize |

Code Snippet
File Name freebsd-src-1/optimize.c
Method opt_init(opt_state_t *opt_state, struct icode *ic)

```
....
2621.        opt_state->space = (bpf_u_int32 *)malloc(block_memsize +
edge_memsize);
```

**Wrong Size t Allocation\Path 37:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=472](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=472) |
| Status | New |

The function mal in freebsd-src-1/pmcstudy.c at line 2669 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 | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2718 | 2718 |
| Object | mal | mal |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method build_command_for_exp(struct expression *exp)

```
....
2718.        cmd = malloc((mal+2));
```

### Wrong Size t Allocation\Path 38:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=473 |
| Status | New |

The function rdatalen in freebsd-src-1/authzone.c at line 795 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 | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 803 | 803 |
| Object | rdatalen | rdatalen |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | rrset_add_rr(struct auth_rrset* rrset, uint32_t rr_ttl, uint8_t* rdata, |

```
....
803.              + rdatalen);
```

### Wrong Size t Allocation\Path 39:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=474 |
| Status | New |

The function sigsz in freebsd-src-1/authzone.c at line 936 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 | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 956 | 956 |
| Object | sigsz | sigsz |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | rrset_moveover_rrsigs(struct auth_data* node, uint16_t rr_type, |

```
....
956.                + sigsz);
```

### Wrong Size t Allocation\Path 40:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=475 |
| Status | New |

The function sigsz in freebsd-src-1/authzone.c at line 936 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 | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1019 | 1019 |
| Object | sigsz | sigsz |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | rrset_moveover_rrsigs(struct auth_data* node, uint16_t rr_type, |

```
....
1019.               - sigsz);
```

### Wrong Size t Allocation\Path 41:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=476 |
| Status | New |

The function len in freebsd-src-1/test_x509.c at line 2021 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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 2049 | 2049 |
| Object | len | len |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/test_x509.c |
| Method | main(int argc, const char *argv[]) |

```
....
2049.                              dn = xmalloc(len + 1);
```

### Wrong Size t Allocation\Path 42:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=477](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=477) |
| Status | New |

The function n2 in freebsd-src-1/test_x509.c at line 265 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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 272 | 272 |
| Object | n2 | n2 |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/test_x509.c |
| Method | HT_expand(HT *ht) |

```
....
272.            new_buckets = xmalloc(n2 * sizeof *new_buckets);
```

### Wrong Size t Allocation\Path 43:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=478](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=478) |
| Status | New |

The function len in freebsd-src-1/test_x509.c at line 790 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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 817 | 817 |
| Object | len | len |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/test_x509.c |
| Method | parse_header_name(void) |

```
....
817.         name = xmalloc(len + 1);
```

### Wrong Size t Allocation\Path 44:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=479 |
| Status | New |

The function u in freebsd-src-1/test_x509.c at line 829 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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 844 | 844 |
| Object | u | u |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method parse_keyvalue(HT *d)

```
....
844.         name = xmalloc(u + 1);
```

### Wrong Size t Allocation\Path 45:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=480 |
| Status | New |

The function all_chains_len in freebsd-src-1/test_x509.c at line 1146 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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 1300 | 1300 |
| Object | all_chains_len | all_chains_len |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method parse_object(char *objtype, HT *objdata, long linenum)

```
....
1300.                                    all_chains_len * sizeof
*all_chains);
```

**Wrong Size t Allocation\Path 46:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=481 |
| Status | New |

The function nlen in freebsd-src-1/test_x509.c at line 1146 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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 1306 | 1306 |
| Object | nlen | nlen |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method parse_object(char *objtype, HT *objdata, long linenum)

```
....
1306.                              ntc = xmalloc(nlen * sizeof *ntc);
```

**Wrong Size t Allocation\Path 47:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=482 |
| Status | New |

The function num_anchors in freebsd-src-1/test_x509.c at line 1457 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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 1492 | 1492 |
| Object | num_anchors | num_anchors |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method run_test_case(test_case *tc)

```
....
1492.        anchors = xmalloc(num_anchors * sizeof *anchors);
```

### Wrong Size t Allocation\Path 48:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=483 |
| Status | New |

The function num_certs in freebsd-src-1/test_x509.c at line 1457 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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 1519 | 1519 |
| Object | num_certs | num_certs |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method run_test_case(test_case *tc)

```
....
1519.        certs = xmalloc(num_certs * sizeof *certs);
```

### Wrong Size t Allocation\Path 49:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=484 |
| Status | New |

The function num_names in freebsd-src-1/test_x509.c at line 1836 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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 1865 | 1865 |
| Object | num_names | num_names |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method test_name_extraction(void)

```
....
1865.        names = xmalloc(num_names * sizeof *names);
```

**Wrong Size t Allocation\Path 50:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=485 |
| Status | New |

The function len in freebsd-src-1/servconf.c at line 1345 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 | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2335 | 2335 |
| Object | len | len |

Code Snippet
File Name freebsd-src-1/servconf.c
Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2335.                options->adm_forced_command = xstrdup(str +
len);
```

## 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=1060097&projectid=60087&pathid=870 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2430 | 2382 |
| Object | tree | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2430.                 free(precode.tree);
....
2382.             free(precode.tree);
```

**Double Free\Path 2:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=871 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2438 | 2382 |
| Object | tree | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2438.                 free(precode.tree);
....
2382.             free(precode.tree);
```

**Double Free\Path 3:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=872 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2404 | 2382 |
| Object | tree | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |

Method parse_codes(struct archive_read *a)

```
....
2404.                 free(precode.tree);
....
2382.             free(precode.tree);
```

**Double Free\Path 4:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=873](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=873) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2412 | 2382 |
| Object | tree | tree |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method parse_codes(struct archive_read *a)

```
....
2412.                 free(precode.tree);
....
2382.             free(precode.tree);
```

**Double Free\Path 5:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=874](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=874) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2413 | 2382 |
| Object | table | tree |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method parse_codes(struct archive_read *a)

```
....
2413.                 free(precode.table);
....
2382.             free(precode.tree);
```

### Double Free\Path 6:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=875](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=875) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2405 | 2382 |
| Object | table | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2405.                 free(precode.table);
....
2382.             free(precode.tree);
```

### Double Free\Path 7:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=876](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=876) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2431 | 2382 |
| Object | table | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2431.                free(precode.table);
....
2382.            free(precode.tree);
```

**Double Free\Path 8:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=877 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2439 | 2382 |
| Object | table | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2439.                free(precode.table);
....
2382.            free(precode.tree);
```

**Double Free\Path 9:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=878 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2413 | 2383 |
| Object | table | table |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2413.                   free(precode.table);
....
2383.               free(precode.table);
```

**Double Free\Path 10:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=879](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=879) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2405 | 2383 |
| Object | table | table |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2405.                   free(precode.table);
....
2383.               free(precode.table);
```

**Double Free\Path 11:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=880](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=880) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2439 | 2383 |
| Object | table | table |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2439.                  free(precode.table);
....
2383.              free(precode.table);
```

**Double Free\Path 12:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=881](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=881) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2431 | 2383 |
| Object | table | table |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method parse_codes(struct archive_read *a)

```
....
2431.                  free(precode.table);
....
2383.              free(precode.table);
```

**Double Free\Path 13:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=882](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=882) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2430 | 2383 |
| Object | tree | table |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method parse_codes(struct archive_read *a)

```
....
2430.                   free(precode.tree);
....
2383.               free(precode.table);
```

**Double Free\Path 14:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=883](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=883) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2438 | 2383 |
| Object | tree | table |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2438.                   free(precode.tree);
....
2383.               free(precode.table);
```

**Double Free\Path 15:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=884](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=884) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2404 | 2383 |
| Object | tree | table |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2404.                   free(precode.tree);
....
2383.               free(precode.table);
```

### Double Free\Path 16:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=885](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=885) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2412 | 2383 |
| Object | tree | table |

Code Snippet

File Name freebsd-src-1/archive_read_support_format_rar.c

Method parse_codes(struct archive_read *a)

```
....
2412.                   free(precode.tree);
....
2383.               free(precode.table);
```

### Double Free\Path 17:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=886](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=886) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2412 | 2395 |
| Object | tree | tree |

Code Snippet

File Name freebsd-src-1/archive_read_support_format_rar.c

Method parse_codes(struct archive_read *a)

```
....
2412.                   free(precode.tree);
....
2395.                 free(precode.tree);
```

**Double Free\Path 18:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=887 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2438 | 2395 |
| Object | tree | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2438.                   free(precode.tree);
....
2395.                 free(precode.tree);
```

**Double Free\Path 19:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=888 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2404 | 2395 |
| Object | tree | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2404.                   free(precode.tree);
....
2395.                 free(precode.tree);
```

**Double Free\Path 20:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=889](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=889) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2430 | 2395 |
| Object | tree | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2430.                   free(precode.tree);
....
2395.                 free(precode.tree);
```

**Double Free\Path 21:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=890](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=890) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2431 | 2395 |
| Object | table | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2431.                 free(precode.table);
....
2395.               free(precode.tree);
```

**Double Free\Path 22:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=891](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=891) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2439 | 2395 |
| Object | table | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2439.                 free(precode.table);
....
2395.               free(precode.tree);
```

**Double Free\Path 23:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=892](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=892) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2405 | 2395 |
| Object | table | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2405.                 free(precode.table);
....
2395.               free(precode.tree);
```

**Double Free\Path 24:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=893](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=893) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2413 | 2395 |
| Object | table | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2413.                 free(precode.table);
....
2395.               free(precode.tree);
```

**Double Free\Path 25:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=894](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=894) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2431 | 2396 |
| Object | table | table |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2431.                   free(precode.table);
....
2396.                 free(precode.table);
```

**Double Free\Path 26:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=895](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=895) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2439 | 2396 |
| Object | table | table |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method parse_codes(struct archive_read *a)

```
....
2439.                   free(precode.table);
....
2396.                 free(precode.table);
```

**Double Free\Path 27:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=896](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=896) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2413 | 2396 |
| Object | table | table |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method parse_codes(struct archive_read *a)

```
....
2413.                   free(precode.table);
....
2396.                 free(precode.table);
```

**Double Free\Path 28:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=897](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=897) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2405 | 2396 |
| Object | table | table |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method parse_codes(struct archive_read *a)

```
....
2405.                   free(precode.table);
....
2396.                 free(precode.table);
```

**Double Free\Path 29:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=898](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=898) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2430 | 2396 |
| Object | tree | table |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method parse_codes(struct archive_read *a)

```
....
2430.                   free(precode.tree);
....
2396.                 free(precode.table);
```

**Double Free\Path 30:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=899 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2438 | 2396 |
| Object | tree | table |

Code Snippet
File Name    freebsd-src-1/archive_read_support_format_rar.c
Method    parse_codes(struct archive_read *a)

```
....
2438.                   free(precode.tree);
....
2396.                 free(precode.table);
```

**Double Free\Path 31:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=900 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2404 | 2396 |
| Object | tree | table |

Code Snippet
File Name    freebsd-src-1/archive_read_support_format_rar.c
Method    parse_codes(struct archive_read *a)

```
....
2404.                   free(precode.tree);
....
2396.                 free(precode.table);
```

**Double Free\Path 32:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=901](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=901) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2412 | 2396 |
| Object | tree | table |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2412.                   free(precode.tree);
....
2396.                 free(precode.table);
```

**Double Free\Path 33:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=902](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=902) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2438 | 2450 |
| Object | tree | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2438.                free(precode.tree);
....
2450.        free(precode.tree);
```

**Double Free\Path 34:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=903](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=903) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2404 | 2450 |
| Object | tree | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2404.                free(precode.tree);
....
2450.        free(precode.tree);
```

**Double Free\Path 35:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=904](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=904) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2412 | 2450 |
| Object | tree | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2412.                 free(precode.tree);
....
2450.         free(precode.tree);
```

**Double Free\Path 36:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=905 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2430 | 2450 |
| Object | tree | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2430.                 free(precode.tree);
....
2450.         free(precode.tree);
```

**Double Free\Path 37:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=906 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2405 | 2450 |
| Object | table | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2405.                free(precode.table);
....
2450.         free(precode.tree);
```

**Double Free\Path 38:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=907 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2431 | 2450 |
| Object | table | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2431.                free(precode.table);
....
2450.         free(precode.tree);
```

**Double Free\Path 39:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=908 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2439 | 2450 |
| Object | table | tree |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2439.                   free(precode.table);
....
2450.           free(precode.tree);
```

### Double Free\Path 40:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=909 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2413 | 2450 |
| Object | table | tree |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method parse_codes(struct archive_read *a)

```
....
2413.                   free(precode.table);
....
2450.           free(precode.tree);
```

### Double Free\Path 41:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=910 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2413 | 2451 |
| Object | table | table |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method parse_codes(struct archive_read *a)

```
....
2413.                free(precode.table);
....
2451.        free(precode.table);
```

**Double Free\Path 42:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=911](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=911) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2405 | 2451 |
| Object | table | table |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2405.                free(precode.table);
....
2451.        free(precode.table);
```

**Double Free\Path 43:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=912](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=912) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2439 | 2451 |
| Object | table | table |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2439.                free(precode.table);
....
2451.        free(precode.table);
```

### Double Free\Path 44:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=913](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=913) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2431 | 2451 |
| Object | table | table |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2431.                free(precode.table);
....
2451.        free(precode.table);
```

### Double Free\Path 45:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=914](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=914) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2412 | 2451 |
| Object | tree | table |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2412.                   free(precode.tree);
....
2451.           free(precode.table);
```

### Double Free\Path 46:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=915 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2404 | 2451 |
| Object | tree | table |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2404.                   free(precode.tree);
....
2451.           free(precode.table);
```

### Double Free\Path 47:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=916 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2438 | 2451 |
| Object | tree | table |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_rar.c |
| Method | parse_codes(struct archive_read *a) |

```
....
2438.                 free(precode.tree);
....
2451.         free(precode.table);
```

**Double Free\Path 48:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=917](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=917) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 2430 | 2451 |
| Object | tree | table |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method parse_codes(struct archive_read *a)

```
....
2430.                 free(precode.tree);
....
2451.         free(precode.table);
```

**Double Free\Path 49:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=918](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=918) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 1027 | 1030 |
| Object | cp | cp |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_open_message(struct ssh *ssh)

```
....
1027.                                 free(cp);
....
1030.                         free(cp);
```

**Double Free\Path 50:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=919](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=919) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1048 | 1321 |
| Object | password | upw |

Code Snippet

File Name freebsd-src-1/http.c

Method clean_http_auth_params(http_auth_params_t *s)

```
....
1048.                 free(s->password);
```

File Name freebsd-src-1/http.c

Method http_basic_auth(conn_t *conn, const char *hdr, const char *usr, const char *pwd)

```
....
1321.         free(upw);
```

## 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=1060097&projectid=60087&pathid=340](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=340) |

| | |
|---|---|
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 703 of freebsd-src-1/bsd-snprintf.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/bsd-snprintf.c | freebsd-src-1/bsd-snprintf.c |
| Line | 773 | 773 |
| Object | AssignExpr | AssignExpr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/bsd-snprintf.c |
| Method | fmtfp (char *buffer, size_t *currlen, size_t maxlen, |

```
....
773.              idx = (int) ((temp -intpart +0.05)* 10.0);
```

**Integer Overflow\Path 2:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=341 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 703 of freebsd-src-1/bsd-snprintf.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/bsd-snprintf.c | freebsd-src-1/bsd-snprintf.c |
| Line | 788 | 788 |
| Object | AssignExpr | AssignExpr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/bsd-snprintf.c |
| Method | fmtfp (char *buffer, size_t *currlen, size_t maxlen, |

```
....
788.                    idx = (int) ((temp -fracpart +0.05)* 10.0);
```

**Integer Overflow\Path 3:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=342 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 1000 of freebsd-src-1/archive_read_support_format_lha.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_lha.c | freebsd-src-1/archive_read_support_format_lha.c |
| Line | 1033 | 1033 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_lha.c
Method lha_read_file_header_2(struct archive_read *a, struct lha *lha)

```
....
1033.       padding = (int)lha->header_size - (int)(H2_FIXED_SIZE +
extdsize);
```

**Integer Overflow\Path 4:**

Severity Medium
Result State To Verify
Online Results http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=343
Status New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 379 of freebsd-src-1/b_print.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/b_print.c | freebsd-src-1/b_print.c |
| Line | 393 | 393 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/b_print.c
Method fmtstr(char **sbuffer,

```
....
393.      padlen = min - strln;
```

**Integer Overflow\Path 5:**

Severity Medium
Result State To Verify
Online Results http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=344
Status New

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 561 of freebsd-src-1/b_print.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/b_print.c | freebsd-src-1/b_print.c |

|  |  |  |
|---|---|---|
| Line | 635 | 635 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/b_print.c
Method fmtfp(char **sbuffer,

```
....
635.                      max -= (exp + 1);
```

**Integer Overflow\Path 6:**

|  |  |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=345](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=345) |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 561 of freebsd-src-1/b_print.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/b_print.c | freebsd-src-1/b_print.c |
| Line | 715 | 715 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/b_print.c
Method fmtfp(char **sbuffer,

```
....
715.                  tmpexp = -exp;
```

**Integer Overflow\Path 7:**

|  |  |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=346](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=346) |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 561 of freebsd-src-1/b_print.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/b_print.c | freebsd-src-1/b_print.c |
| Line | 717 | 717 |
| Object | AssignExpr | AssignExpr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/b_print.c |
| Method | fmtfp(char **sbuffer, |

```
....
717.                tmpexp = exp;
```

**Integer Overflow\Path 8:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=347 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 1381 of freebsd-src-1/cxgbetool.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 1450 | 1450 |
| Object | AssignExpr | AssignExpr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cxgbetool.c |
| Method | filter_cmd(int argc, const char *argv[], int hashfilter) |

```
....
1450.                    prio = (int)val;
```

**Integer Overflow\Path 9:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=348 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 2258 of freebsd-src-1/cxgbetool.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 2277 | 2277 |
| Object | AssignExpr | AssignExpr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cxgbetool.c |
| Method | read_tcb(int argc, const char *argv[]) |

```
....
2277.        tid = 1;
```

**Integer Overflow\Path 10:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=349 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 57 of freebsd-src-1/e_chacha20_poly1305.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/e_chacha20_poly1305.c | freebsd-src-1/e_chacha20_poly1305.c |
| Line | 81 | 81 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/e_chacha20_poly1305.c
Method static int chacha_cipher(EVP_CIPHER_CTX * ctx, unsigned char *out,

```
....
81.        rem = (unsigned int)(len % CHACHA_BLK_SIZE);
```

**Integer Overflow\Path 11:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=350 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 57 of freebsd-src-1/e_chacha20_poly1305.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/e_chacha20_poly1305.c | freebsd-src-1/e_chacha20_poly1305.c |
| Line | 100 | 100 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/e_chacha20_poly1305.c
Method static int chacha_cipher(EVP_CIPHER_CTX * ctx, unsigned char *out,

```
....
100.          ctr32 += (unsigned int)blocks;
```

**Integer Overflow\Path 12:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=351](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=351) |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 1953 of freebsd-src-1/lockstat.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1960 | 1960 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name	freebsd-src-1/lockstat.c
Method	report_trace(FILE *out, lsrec_t **sort_buf)

```
....
1960.        rectype = g_recsize;
```

**Integer Overflow\Path 13:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=352](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=352) |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 1753 of freebsd-src-1/lockstat.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1767 | 1767 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name	freebsd-src-1/lockstat.c
Method	report_stats(FILE *out, lsrec_t **sort_buf, size_t nrecs, uint64_t total_count,

```
....
1767.        rectype = g_recsize;
```

**Integer Overflow\Path 14:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=353 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 2334 of freebsd-src-1/pmcstudy.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2362 | 2362 |
| Object | AssignExpr | AssignExpr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | get_cpuid_set(void) |

```
....
2362.        model = (((eax & 0xF0000) >> 12) | ((eax & 0xF0) >> 4));
```

**Integer Overflow\Path 15:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=354 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 128 of freebsd-src-1/xgbe-dev.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/xgbe-dev.c | freebsd-src-1/xgbe-dev.c |
| Line | 141 | 141 |
| Object | AssignExpr | AssignExpr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/xgbe-dev.c |
| Method | xgbe_usec_to_riwt(struct xgbe_prv_data *pdata, unsigned int usec) |

```
....
141.         ret = (usec * (rate / 1000000)) / 256;
```

**Integer Overflow\Path 16:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=600 |

| | |
|---|---|
| | 87&pathid=355 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 147 of freebsd-src-1/xgbe-dev.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/xgbe-dev.c | freebsd-src-1/xgbe-dev.c |
| Line | 160 | 160 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/xgbe-dev.c
Method xgbe_riwt_to_usec(struct xgbe_prv_data *pdata, unsigned int riwt)

```
....
160.         ret = (riwt * 256) / (rate / 1000000);
```

**Integer Overflow\Path 17:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=356 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 87 of freebsd-src-1/b_print.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/b_print.c | freebsd-src-1/b_print.c |
| Line | 106 | 106 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/b_print.c
Method _dopr(char **sbuffer,

```
....
106.       flags = currlen = cflags = min = 0;
```

## Inadequate Encryption Strength

Query Path:
CPP\Cx\CPP Medium Threat\Inadequate Encryption Strength Version:1

### Categories

FISMA 2014: Configuration Management
NIST SP 800-53: SC-13 Cryptographic Protection (P1)
OWASP Top 10 2017: A3-Sensitive Data Exposure

*Description*

### Inadequate Encryption Strength\Path 1:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1031](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1031) |
| Status | New |

The application uses a weak cryptographic algorithm, MD5_Update at line 1140 of freebsd-src-1/http.c, to protect sensitive personal information password, from freebsd-src-1/http.c at line 1039.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1048 | 1154 |
| Object | password | MD5_Update |

Code Snippet
File Name freebsd-src-1/http.c
Method clean_http_auth_params(http_auth_params_t *s)

```
....
1048.           free(s->password);
```

File Name freebsd-src-1/http.c

Method DigestCalcHA1(

```
....
1154.       MD5Update(&Md5Ctx, pszUserName, strlen(pszUserName));
```

### Inadequate Encryption Strength\Path 2:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1032](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1032) |
| Status | New |

The application uses a weak cryptographic algorithm, MD5_Update at line 1140 of freebsd-src-1/http.c, to protect sensitive personal information password, from freebsd-src-1/http.c at line 1379.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1422 | 1154 |
| Object | password | MD5_Update |

Code Snippet
File Name freebsd-src-1/http.c
Method http_connect(struct url *URL, struct url *purl, const char *flags)

```
....
1422.                           aparams.password = strdup(purl->pwd);
```

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | DigestCalcHA1( |

```
....
1154.         MD5Update(&Md5Ctx, pszUserName, strlen(pszUserName));
```

### Inadequate Encryption Strength\Path 3:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1033 |
| Status | New |

The application uses a weak cryptographic algorithm, MD5_Update at line 1140 of freebsd-src-1/http.c, to protect sensitive personal information password, from freebsd-src-1/http.c at line 1379.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1432 | 1154 |
| Object | password | MD5_Update |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_connect(struct url *URL, struct url *purl, const char *flags) |

```
....
1432.                           aparams.password = strdup(purl->pwd);
```

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | DigestCalcHA1( |

```
....
1154.         MD5Update(&Md5Ctx, pszUserName, strlen(pszUserName));
```

### Inadequate Encryption Strength\Path 4:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1034 |
| Status | New |

The application uses a weak cryptographic algorithm, MD5_Update at line 1140 of freebsd-src-1/http.c, to protect sensitive personal information pwd, from freebsd-src-1/http.c at line 1311.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1318 | 1154 |
| Object | pwd | MD5_Update |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_basic_auth(conn_t *conn, const char *hdr, const char *usr, const char *pwd) |

```
....
1318.        if (asprintf(&upw, "%s:%s", usr, pwd) == -1)
```

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | DigestCalcHA1( |

```
....
1154.        MD5Update(&Md5Ctx, pszUserName, strlen(pszUserName));
```

**Inadequate Encryption Strength\Path 5:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1035 |
| Status | New |

The application uses a weak cryptographic algorithm, MD5_Update at line 1140 of freebsd-src-1/http.c, to protect sensitive personal information pszPassword, from freebsd-src-1/http.c at line 1140.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1158 | 1158 |
| Object | pszPassword | MD5_Update |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | DigestCalcHA1( |

```
....
1158.        MD5Update(&Md5Ctx, pszPassword, strlen(pszPassword));
```

**Inadequate Encryption Strength\Path 6:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |

| | |
|---|---|
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1036 |
| Status | New |

The application uses a weak cryptographic algorithm, MD5_Update at line 1140 of freebsd-src-1/http.c, to protect sensitive personal information pszPassword, from freebsd-src-1/http.c at line 1140.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1158 | 1154 |
| Object | pszPassword | MD5_Update |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | DigestCalcHA1( |

```
....
1158.        MD5Update(&Md5Ctx, pszPassword, strlen(pszPassword));
....
1154.        MD5Update(&Md5Ctx, pszUserName, strlen(pszUserName));
```

**Inadequate Encryption Strength\Path 7:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1037 |
| Status | New |

The application uses a weak cryptographic algorithm, MD5_Update at line 1140 of freebsd-src-1/http.c, to protect sensitive personal information password, from freebsd-src-1/http.c at line 1585.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1723 | 1154 |
| Object | password | MD5_Update |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_request_body(struct url *URL, const char *op, struct url_stat *us, |

```
....
1723.                            aparams.password = strdup(url->pwd);
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | DigestCalcHA1( |

```
....
1154.        MD5Update(&Md5Ctx, pszUserName, strlen(pszUserName));
```

**Inadequate Encryption Strength\Path 8:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1038 |
| Status | New |

The application uses a weak cryptographic algorithm, MD5_Update at line 1175 of freebsd-src-1/http.c, to protect sensitive personal information pwd, from freebsd-src-1/http.c at line 1585.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1906 | 1200 |
| Object | pwd | MD5_Update |

Code Snippet

File Name freebsd-src-1/http.c

Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1906.                                    url->port, p, url->user, url-
>pwd);
```

File Name freebsd-src-1/http.c

Method DigestCalcResponse(

```
....
1200.        MD5Update(&Md5Ctx, pszDigestUri, strlen(pszDigestUri));
```

**Inadequate Encryption Strength\Path 9:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1039 |
| Status | New |

The application uses a weak cryptographic algorithm, MD5_Update at line 1140 of freebsd-src-1/http.c, to protect sensitive personal information password, from freebsd-src-1/http.c at line 1585.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1732 | 1154 |
| Object | password | MD5_Update |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_request_body(struct url *URL, const char *op, struct url_stat *us, |

```
....
1732.                          aparams.password = strdup(url->pwd);
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | DigestCalcHA1( |

```
....
1154.       MD5Update(&Md5Ctx, pszUserName, strlen(pszUserName));
```

### Inadequate Encryption Strength\Path 10:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1040](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1040) |
| Status | New |

The application uses a weak cryptographic algorithm, MD5_Update at line 1140 of freebsd-src-1/http.c, to protect sensitive personal information password, from freebsd-src-1/http.c at line 1585.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1736 | 1154 |
| Object | password | MD5_Update |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | http_request_body(struct url *URL, const char *op, struct url_stat *us, |

```
....
1736.                          aparams.password = strdup(url->pwd);
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | DigestCalcHA1( |

```
....
1154.       MD5Update(&Md5Ctx, pszUserName, strlen(pszUserName));
```

### Inadequate Encryption Strength\Path 11:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=600](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=600) |

| | |
|---|---|
| | 87&pathid=1041 |
| Status | New |

The application uses a weak cryptographic algorithm, MD5_Update at line 1140 of freebsd-src-1/http.c, to protect sensitive personal information password, from freebsd-src-1/http.c at line 1585.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1693 | 1154 |
| Object | password | MD5_Update |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1693.                          aparams.password = strdup(purl->pwd);
```

▼

File Name freebsd-src-1/http.c

Method DigestCalcHA1(

```
....
1154.       MD5Update(&Md5Ctx, pszUserName, strlen(pszUserName));
```

**Inadequate Encryption Strength\Path 12:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1042 |
| Status | New |

The application uses a weak cryptographic algorithm, MD5_Update at line 1140 of freebsd-src-1/http.c, to protect sensitive personal information password, from freebsd-src-1/http.c at line 1585.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1702 | 1154 |
| Object | password | MD5_Update |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1702.                          aparams.password = strdup(purl->pwd);
```

▼

File Name freebsd-src-1/http.c

Method DigestCalcHA1(

```
....
1154.        MD5Update(&Md5Ctx, pszUserName, strlen(pszUserName));
```

### Inadequate Encryption Strength\Path 13:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1043](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1043) |
| Status | New |

The application uses a weak cryptographic algorithm, MD5_Update at line 1140 of freebsd-src-1/http.c, to protect sensitive personal information pszPassword, from freebsd-src-1/http.c at line 1140.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1158 | 1158 |
| Object | pszPassword | MD5_Update |

Code Snippet

File Name freebsd-src-1/http.c

Method DigestCalcHA1(

```
....
1158.        MD5Update(&Md5Ctx, pszPassword, strlen(pszPassword));
```

### Inadequate Encryption Strength\Path 14:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1044](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1044) |
| Status | New |

The application uses a weak cryptographic algorithm, MD5_Update at line 1175 of freebsd-src-1/http.c, to protect sensitive personal information pwd, from freebsd-src-1/http.c at line 1585.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1919 | 1200 |
| Object | pwd | MD5_Update |

Code Snippet

File Name freebsd-src-1/http.c

Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1919.                                    strcpy(new->pwd, url->pwd);
```

| | |
|---|---|
| File Name | freebsd-src-1/http.c |
| Method | DigestCalcResponse( |

```
....
1200.        MD5Update(&Md5Ctx, pszDigestUri, strlen(pszDigestUri));
```

**Inadequate Encryption Strength\Path 15:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1045 |
| Status | New |

The application uses a weak cryptographic algorithm, DES_crypt at line 98 of freebsd-src-1/xcrypt.c, to protect sensitive personal information password, from freebsd-src-1/xcrypt.c at line 98.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/xcrypt.c | freebsd-src-1/xcrypt.c |
| Line | 113 | 113 |
| Object | password | DES_crypt |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/xcrypt.c |
| Method | xcrypt(const char *password, const char *salt) |

```
....
113.                crypted = crypt(password, salt);
```

## 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=1060097&projectid=60087&pathid=327 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 1531 of freebsd-src-1/archive_read_support_format_mtree.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 1586 | 1586 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_mtree.c
Method parse_digest(struct archive_read *a, struct archive_entry *entry,

```
....
1586.            digest_buf[j] = high << 4 | low;
```

**Char Overflow\Path 2:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=328 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 273 of freebsd-src-1/buf.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 279 | 279 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/buf.c
Method translit_text(char *s, int len, int from, int to)

```
....
279.        ctab[i] = i;                /* restore table to initial
state */
```

**Char Overflow\Path 3:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=329 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 273 of freebsd-src-1/buf.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 280 | 280 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/buf.c
Method translit_text(char *s, int len, int from, int to)

```
....
280.        ctab[i = from] = to;
```

**Char Overflow\Path 4:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=330](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=330) |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 248 of freebsd-src-1/buf.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 267 | 267 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/buf.c
Method init_buffers(void)

```
....
267.            ctab[i] = i;
```

**Char Overflow\Path 5:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=331](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=331) |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 73 of freebsd-src-1/property.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/property.c | freebsd-src-1/property.c |
| Line | 130 | 130 |

| | | |
|---|---|---|
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/property.c
Method properties_read(int fd)

```
....
130.                    hold_n[n++] = ch;
```

**Char Overflow\Path 6:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=332 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 73 of freebsd-src-1/property.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/property.c | freebsd-src-1/property.c |
| Line | 158 | 158 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/property.c
Method properties_read(int fd)

```
....
158.                hold_n[n++] = ch;
```

**Char Overflow\Path 7:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=333 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 73 of freebsd-src-1/property.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/property.c | freebsd-src-1/property.c |
| Line | 185 | 185 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/property.c

Method properties_read(int fd)

```
....
185.                    hold_v[v++] = ch;
```

### Char Overflow\Path 8:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=334 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 73 of freebsd-src-1/property.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/property.c | freebsd-src-1/property.c |
| Line | 202 | 202 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/property.c
Method properties_read(int fd)

```
....
202.                hold_v[v++] = ch;
```

### Char Overflow\Path 9:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=335 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 991 of freebsd-src-1/snprintf.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/snprintf.c | freebsd-src-1/snprintf.c |
| Line | 1034 | 1034 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/snprintf.c
Method fmtint(char *str, size_t *len, size_t size, INTMAX_T value, int base, int width,

```
....
1034.                   hexprefix = (flags & PRINT_F_UP) ? 'X' : 'x';
```

**Char Overflow\Path 10:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=336 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 1092 of freebsd-src-1/snprintf.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/snprintf.c | freebsd-src-1/snprintf.c |
| Line | 1285 | 1285 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/snprintf.c
Method fmtflt(char *str, size_t *len, size_t size, LDOUBLE fvalue, int width,

```
....
1285.           econvert[epos++] = (flags & PRINT_F_UP) ? 'E' : 'e';
```

**Char Overflow\Path 11:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=337 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 1076 of freebsd-src-1/test_x509.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 1089 | 1089 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method string_to_hash(const char *name)

```
....
1089.                   tmp[v ++] = c;
```

**Char Overflow\Path 12:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=338 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 1114 of freebsd-src-1/test_x509.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 1127 | 1127 |
| Object | AssignExpr | AssignExpr |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method string_to_curve(const char *name)

```
....
1127.                       tmp[v ++] = c;
```

**Char Overflow\Path 13:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=339 |
| Status | New |

A variable of a larger data type, map, is being assigned to a smaller data type, in 83 of freebsd-src-1/name.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 95 | 95 |
| Object | map | map |

Code Snippet
File Name freebsd-src-1/name.c
Method quote_string(const char *f, size_t len, int flags, size_t *rlen)

```
....
95.   unsigned char map = char_map[from[i]] & 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=1060097&projectid=600 |

| | |
|---|---|
| | 87&pathid=357 |
| Status | New |

The application performs an illegal operation in mtree_atol, in freebsd-src-1/archive_read_support_format_mtree.c. In line 2032, the program attempts to divide by base, 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 base in mtree_atol of freebsd-src-1/archive_read_support_format_mtree.c, at line 2032.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 2049 | 2049 |
| Object | base | base |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_mtree.c
Method mtree_atol(char **p, int base)

```
....
2049.               limit = INT64_MIN / base;
```

**Divide By Zero\Path 2:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=358 |
| Status | New |

The application performs an illegal operation in mtree_atol, in freebsd-src-1/archive_read_support_format_mtree.c. In line 2032, the program attempts to divide by base, 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 base in mtree_atol of freebsd-src-1/archive_read_support_format_mtree.c, at line 2032.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 2050 | 2050 |
| Object | base | base |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_mtree.c
Method mtree_atol(char **p, int base)

```
....
2050.               last_digit_limit = -(INT64_MIN % base);
```

**Divide By Zero\Path 3:**

| | |
|---|---|
| Severity | Medium |

| | |
|---|---|
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=359 |
| Status | New |

The application performs an illegal operation in mtree_atol, in freebsd-src-1/archive_read_support_format_mtree.c. In line 2032, the program attempts to divide by base, 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 base in mtree_atol of freebsd-src-1/archive_read_support_format_mtree.c, at line 2032.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 2063 | 2063 |
| Object | base | base |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_mtree.c |
| Method | mtree_atol(char **p, int base) |

```
....
2063.              limit = INT64_MAX / base;
```

**Divide By Zero\Path 4:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=360 |
| Status | New |

The application performs an illegal operation in mtree_atol, in freebsd-src-1/archive_read_support_format_mtree.c. In line 2032, the program attempts to divide by base, 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 base in mtree_atol of freebsd-src-1/archive_read_support_format_mtree.c, at line 2032.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 2064 | 2064 |
| Object | base | base |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_mtree.c |
| Method | mtree_atol(char **p, int base) |

```
....
2064.              last_digit_limit = INT64_MAX % base;
```

**Divide By Zero\Path 5:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=361 |
| Status | New |

The application performs an illegal operation in ocs_scsi_build_sgls, in freebsd-src-1/ocs_scsi.c. In line 685, the program attempts to divide by blocksize, 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 blocksize in ocs_scsi_build_sgls of freebsd-src-1/ocs_scsi.c, at line 685.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ocs_scsi.c | freebsd-src-1/ocs_scsi.c |
| Line | 729 | 729 |
| Object | blocksize | blocksize |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/ocs_scsi.c |
| Method | ocs_scsi_build_sgls(ocs_hw_t *hw, ocs_hw_io_t *hio, ocs_hw_dif_info_t *hw_dif, ocs_scsi_sgl_t *sgl, uint32_t sgl_count, ocs_hw_io_type_e type) |

```
....
729.                            if ((sgl[i].len % blocksize) != 0) {
```

**Divide By Zero\Path 6:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=362 |
| Status | New |

The application performs an illegal operation in ocs_scsi_build_sgls, in freebsd-src-1/ocs_scsi.c. In line 685, the program attempts to divide by blocksize, 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 blocksize in ocs_scsi_build_sgls of freebsd-src-1/ocs_scsi.c, at line 685.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ocs_scsi.c | freebsd-src-1/ocs_scsi.c |
| Line | 752 | 752 |
| Object | blocksize | blocksize |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/ocs_scsi.c |
| Method | ocs_scsi_build_sgls(ocs_hw_t *hw, ocs_hw_io_t *hio, ocs_hw_dif_info_t *hw_dif, ocs_scsi_sgl_t *sgl, uint32_t sgl_count, ocs_hw_io_type_e type) |

```
....
752.                        blockcount = sgl[i].len / blocksize;
```

**Divide By Zero\Path 7:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=363 |
| Status | New |

The application performs an illegal operation in ssl3_write_bytes, in freebsd-src-1/rec_layer_s3.c. In line 354, the program attempts to divide by split_send_fragment, 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 split_send_fragment in ssl3_write_bytes of freebsd-src-1/rec_layer_s3.c, at line 354.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rec_layer_s3.c | freebsd-src-1/rec_layer_s3.c |
| Line | 615 | 615 |
| Object | split_send_fragment | split_send_fragment |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/rec_layer_s3.c |
| Method | int ssl3_write_bytes(SSL *s, int type, const void *buf_, size_t len, |

```
....
615.                numpipes = ((n - 1) / split_send_fragment) + 1;
```

**Divide By Zero\Path 8:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=364 |
| Status | New |

The application performs an illegal operation in ssl3_write_bytes, in freebsd-src-1/rec_layer_s3.c. In line 354, the program attempts to divide by numpipes, 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 numpipes in ssl3_write_bytes of freebsd-src-1/rec_layer_s3.c, at line 354.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rec_layer_s3.c | freebsd-src-1/rec_layer_s3.c |
| Line | 619 | 619 |
| Object | numpipes | numpipes |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/rec_layer_s3.c |

| | |
|---|---|
| Method | int ssl3_write_bytes(SSL *s, int type, const void *buf_, size_t len, |

```
....
619.            if (n / numpipes >= max_send_fragment) {
```

**Divide By Zero\Path 9:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=365 |
| Status | New |

The application performs an illegal operation in ssl3_write_bytes, in freebsd-src-1/rec_layer_s3.c. In line 354, the program attempts to divide by numpipes, 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 numpipes in ssl3_write_bytes of freebsd-src-1/rec_layer_s3.c, at line 354.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rec_layer_s3.c | freebsd-src-1/rec_layer_s3.c |
| Line | 629 | 629 |
| Object | numpipes | numpipes |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/rec_layer_s3.c |
| Method | int ssl3_write_bytes(SSL *s, int type, const void *buf_, size_t len, |

```
....
629.                tmppipelen = n / numpipes;
```

**Divide By Zero\Path 10:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=366 |
| Status | New |

The application performs an illegal operation in ssl3_write_bytes, in freebsd-src-1/rec_layer_s3.c. In line 354, the program attempts to divide by numpipes, 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 numpipes in ssl3_write_bytes of freebsd-src-1/rec_layer_s3.c, at line 354.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rec_layer_s3.c | freebsd-src-1/rec_layer_s3.c |
| Line | 630 | 630 |
| Object | numpipes | numpipes |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/rec_layer_s3.c |
| Method | int ssl3_write_bytes(SSL *s, int type, const void *buf_, size_t len, |

```
....
630.                remain = n % numpipes;
```

**Divide By Zero\Path 11:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=367 |
| Status | New |

The application performs an illegal operation in report_stats, in freebsd-src-1/lockstat.c. In line 1753, the program attempts to divide by total_bin_count, 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 total_bin_count in report_stats of freebsd-src-1/lockstat.c, at line 1753.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1922 | 1922 |
| Object | total_bin_count | total_bin_count |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | report_stats(FILE *out, lsrec_t **sort_buf, size_t nrecs, uint64_t total_count, |

```
....
1922.                   uint_t depth = (lsp->ls_hist[j] * 30) /
total_bin_count;
```

## 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=1060097&projectid=60087&pathid=925 |
| Status | New |

Method main at line 3666 of freebsd-src-1/cxgbetool.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 loadfw at line 1939 of freebsd-src-1/cxgbetool.c. This may cause a Path Traversal vulnerability.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3666 | 1951 |
| Object | argv | fname |

Code Snippet

File Name freebsd-src-1/cxgbetool.c

Method main(int argc, const char *argv[])

```
....
3666.  main(int argc, const char *argv[])
```

▼

File Name freebsd-src-1/cxgbetool.c

Method loadfw(int argc, const char *argv[])

```
....
1951.        fd = open(fname, O_RDONLY);
```

**Path Traversal\Path 2:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=926 |
| Status | New |

Method main at line 3666 of freebsd-src-1/cxgbetool.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 loadcfg at line 1978 of freebsd-src-1/cxgbetool.c. This may cause a Path Traversal vulnerability.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3666 | 1993 |
| Object | argv | fname |

Code Snippet

File Name freebsd-src-1/cxgbetool.c

Method main(int argc, const char *argv[])

```
....
3666.  main(int argc, const char *argv[])
```

▼

File Name freebsd-src-1/cxgbetool.c

| | |
|---|---|
| Method | loadcfg(int argc, const char *argv[]) |

```
....
1993.         fd = open(fname, O_RDONLY);
```

**Path Traversal\Path 3:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=927 |
| Status | New |

Method main at line 3666 of freebsd-src-1/cxgbetool.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 loadboot at line 2085 of freebsd-src-1/cxgbetool.c. This may cause a Path Traversal vulnerability.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3666 | 2117 |
| Object | argv | fname |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cxgbetool.c |
| Method | main(int argc, const char *argv[]) |

```
....
3666.  main(int argc, const char *argv[])
```

| | |
|---|---|
| File Name | freebsd-src-1/cxgbetool.c |
| Method | loadboot(int argc, const char *argv[]) |

```
....
2117.         fd = open(fname, O_RDONLY);
```

**Path Traversal\Path 4:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=928 |
| Status | New |

Method main at line 3666 of freebsd-src-1/cxgbetool.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 loadbootcfg at line 2144 of freebsd-src-1/cxgbetool.c. This may cause a Path Traversal vulnerability.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |

| | | |
|---|---|---|
| Line | 3666 | 2159 |
| Object | argv | fname |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method main(int argc, const char *argv[])

```
....
3666.  main(int argc, const char *argv[])
```

File Name freebsd-src-1/cxgbetool.c

Method loadbootcfg(int argc, const char *argv[])

```
....
2159.       fd = open(fname, O_RDONLY);
```

**Path Traversal\Path 5:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=929 |
| Status | New |

Method main at line 3666 of freebsd-src-1/cxgbetool.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 dumpstate at line 2021 of freebsd-src-1/cxgbetool.c. This may cause a Path Traversal vulnerability.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3666 | 2044 |
| Object | argv | fname |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method main(int argc, const char *argv[])

```
....
3666.  main(int argc, const char *argv[])
```

File Name freebsd-src-1/cxgbetool.c

Method dumpstate(int argc, const char *argv[])

```
....
2044.       fd = open(fname, O_CREAT | O_TRUNC | O_EXCL | O_WRONLY,
```

### Path Traversal\Path 6:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=930 |
| Status | New |

Method main at line 3666 of freebsd-src-1/cxgbetool.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 parse_offload_policy at line 3377 of freebsd-src-1/cxgbetool.c. This may cause a Path Traversal vulnerability.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3666 | 3386 |
| Object | argv | fname |

Code Snippet

File Name freebsd-src-1/cxgbetool.c

Method main(int argc, const char *argv[])

```
....
3666.   main(int argc, const char *argv[])
```

File Name freebsd-src-1/cxgbetool.c

Method parse_offload_policy(const char *fname, struct t4_offload_policy *op)

```
....
3386.        fp = fopen(fname, "r");
```

### Path Traversal\Path 7:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=931 |
| Status | New |

Method main at line 3666 of freebsd-src-1/cxgbetool.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 real_doit at line 140 of freebsd-src-1/cxgbetool.c. This may cause a Path Traversal vulnerability.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3666 | 149 |
| Object | argv | buf |

Code Snippet

File Name freebsd-src-1/cxgbetool.c

Method main(int argc, const char *argv[])

```
....
3666.  main(int argc, const char *argv[])
```

▼

File Name freebsd-src-1/cxgbetool.c

Method real_doit(unsigned long cmd, void *data, const char *cmdstr)

```
....
149.              if ((fd = open(buf, O_RDWR)) < 0) {
```

**Path Traversal\Path 8:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=932](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=932) |
| Status | New |

Method main at line 1744 of freebsd-src-1/cxgbtool.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 load_fw at line 991 of freebsd-src-1/cxgbtool.c. This may cause a Path Traversal vulnerability.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1744 | 999 |
| Object | argv | fname |

Code Snippet

File Name freebsd-src-1/cxgbtool.c

Method main(int argc, char *argv[])

```
....
1744.  main(int argc, char *argv[])
```

▼

File Name freebsd-src-1/cxgbtool.c

Method load_fw(int argc, char *argv[], int start_arg, const char *iff_name)

```
....
999.         fd = open(fname, O_RDONLY);
```

**Path Traversal\Path 9:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=933](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=933) |
| Status | New |

Method main at line 1744 of freebsd-src-1/cxgbtool.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 load_boot at line 1026 of freebsd-src-1/cxgbtool.c. This may cause a Path Traversal vulnerability.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1744 | 1034 |
| Object | argv | fname |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method main(int argc, char *argv[])

```
....
1744.  main(int argc, char *argv[])
```

File Name freebsd-src-1/cxgbtool.c

Method load_boot(int argc, char *argv[], int start_arg, const char *iff_name)

```
....
1034.        fd = open(fname, O_RDONLY);
```

**Path Traversal\Path 10:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=934](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=934) |
| Status | New |

Method main at line 1744 of freebsd-src-1/cxgbtool.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 doit at line 128 of freebsd-src-1/cxgbtool.c. This may cause a Path Traversal vulnerability.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1744 | 136 |
| Object | argv | buf |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method main(int argc, char *argv[])

```
....
1744.  main(int argc, char *argv[])
```

| | |
|---|---|
| File Name | freebsd-src-1/cxgbtool.c |
| Method | doit(const char *iff_name, unsigned long cmd, void *data) |

```
....
136.              if ((fd = open(buf, O_RDWR)) < 0)
```

**Path Traversal\Path 11:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=935 |
| Status | New |

Method main at line 293 of freebsd-src-1/phttpget.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 293 of freebsd-src-1/phttpget.c. This may cause a Path Traversal vulnerability.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/phttpget.c | freebsd-src-1/phttpget.c |
| Line | 293 | 600 |
| Object | argv | fname |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/phttpget.c |
| Method | main(int argc, char *argv[]) |

```
....
293.  main(int argc, char *argv[])
....
600.                    fd = open(fname, O_CREAT | O_TRUNC | O_WRONLY,
0644);
```

## 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=1060097&projectid=60087&pathid=1245 |
| Status | New |

The size of the buffer used by SB_set_length in len, at line 171 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that conf_next_low passes to fgetc, at line 643 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 651 | 175 |
| Object | fgetc | len |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method conf_next_low(void)

```
....
651.                    x = fgetc(conf);
```

File Name freebsd-src-1/test_x509.c
Method SB_set_length(string_builder *sb, size_t len)

```
....
175.                    memset(sb->buf + sb->ptr, ' ', len - sb->ptr);
```

**Stored Buffer Overflow boundcpy\Path 2:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1246 |
| Status | New |

The size of the buffer used by SB_set_length in len, at line 171 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that conf_next_low passes to fgetc, at line 643 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 657 | 175 |
| Object | fgetc | len |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method conf_next_low(void)

```
....
657.                    x = fgetc(conf);
```

File Name freebsd-src-1/test_x509.c

Method SB_set_length(string_builder *sb, size_t len)

```
....
175.                memset(sb->buf + sb->ptr, ' ', len - sb->ptr);
```

**Stored Buffer Overflow boundcpy\Path 3:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1247 |
| Status | New |

The size of the buffer used by SB_set_length in BinaryExpr, at line 171 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that conf_next_low passes to fgetc, at line 643 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 651 | 175 |
| Object | fgetc | BinaryExpr |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method conf_next_low(void)

```
....
651.                x = fgetc(conf);
```

File Name freebsd-src-1/test_x509.c

Method SB_set_length(string_builder *sb, size_t len)

```
....
175.                memset(sb->buf + sb->ptr, ' ', len - sb->ptr);
```

**Stored Buffer Overflow boundcpy\Path 4:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1248 |
| Status | New |

The size of the buffer used by SB_set_length in BinaryExpr, at line 171 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that conf_next_low passes to fgetc, at line 643 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|

| | | |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 657 | 175 |
| Object | fgetc | BinaryExpr |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method conf_next_low(void)

```
....
657.                x = fgetc(conf);
```

▼

File Name freebsd-src-1/test_x509.c

Method SB_set_length(string_builder *sb, size_t len)

```
....
175.                memset(sb->buf + sb->ptr, ' ', len - sb->ptr);
```

**Stored Buffer Overflow boundcpy\Path 5:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1249 |
| Status | New |

The size of the buffer used by SB_set_length in ptr, at line 171 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that conf_next_low passes to fgetc, at line 643 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 651 | 175 |
| Object | fgetc | ptr |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method conf_next_low(void)

```
....
651.                x = fgetc(conf);
```

▼

File Name freebsd-src-1/test_x509.c

Method SB_set_length(string_builder *sb, size_t len)

```
....
175.                memset(sb->buf + sb->ptr, ' ', len - sb->ptr);
```

### Stored Buffer Overflow boundcpy\Path 6:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1250 |
| Status | New |

The size of the buffer used by SB_set_length in ptr, at line 171 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that conf_next_low passes to fgetc, at line 643 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 657 | 175 |
| Object | fgetc | ptr |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method conf_next_low(void)

```
....
657.                x = fgetc(conf);
```

File Name freebsd-src-1/test_x509.c
Method SB_set_length(string_builder *sb, size_t len)

```
....
175.                memset(sb->buf + sb->ptr, ' ', len - sb->ptr);
```

### Stored Buffer Overflow boundcpy\Path 7:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1251 |
| Status | New |

The size of the buffer used by SB_expand in ptr, at line 106 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that conf_next_low passes to fgetc, at line 643 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 651 | 119 |
| Object | fgetc | ptr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/test_x509.c |
| Method | conf_next_low(void) |

```
....
651.              x = fgetc(conf);
```

| | |
|---|---|
| File Name | freebsd-src-1/test_x509.c |
| Method | SB_expand(string_builder *sb, size_t extra_len) |

```
....
119.          memcpy(nbuf, sb->buf, sb->ptr);
```

**Stored Buffer Overflow boundcpy\Path 8:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1252](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1252) |
| Status | New |

The size of the buffer used by SB_expand in ptr, at line 106 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that conf_next_low passes to fgetc, at line 643 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 657 | 119 |
| Object | fgetc | ptr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/test_x509.c |
| Method | conf_next_low(void) |

```
....
657.              x = fgetc(conf);
```

| | |
|---|---|
| File Name | freebsd-src-1/test_x509.c |
| Method | SB_expand(string_builder *sb, size_t extra_len) |

```
....
119.          memcpy(nbuf, sb->buf, sb->ptr);
```

**Stored Buffer Overflow boundcpy\Path 9:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1253](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1253) |

| | |
|---|---|
| Status | New |

The size of the buffer used by eqpkey in key, at line 1408 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that read_all passes to BinaryExpr, at line 403 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 423 | 1429 |
| Object | BinaryExpr | key |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method read_all(FILE *f, size_t *len)

```
....
423.                rlen = fread(buf + ptr, 1, blen - ptr, f);
```

File Name freebsd-src-1/test_x509.c

Method eqpkey(const br_x509_pkey *pk1, const br_x509_pkey *pk2)

```
....
1429.                              pk2->key.ec.q, pk1->key.ec.qlen) == 0;
```

## Long Overflow

Query Path:
CPP\Cx\CPP Integer Overflow\Long 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*

**Long Overflow\Path 1:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=499 |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 550 of freebsd-src-1/b_print.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/b_print.c | freebsd-src-1/b_print.c |
| Line | 553 | 553 |
| Object | AssignExpr | AssignExpr |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/b_print.c |
| Method | static long roundv(LDOUBLE value) |

```
....
553.       intpart = (long)value;
```

### Long Overflow\Path 2:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=500](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=500) |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 561 of freebsd-src-1/b_print.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/b_print.c | freebsd-src-1/b_print.c |
| Line | 663 | 663 |
| Object | AssignExpr | AssignExpr |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/b_print.c |
| Method | fmtfp(char **sbuffer, |

```
....
663.       intpart = (unsigned long)ufvalue;
```

### Long Overflow\Path 3:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=501](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=501) |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 652 of freebsd-src-1/bsd-snprintf.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/bsd-snprintf.c | freebsd-src-1/bsd-snprintf.c |
| Line | 656 | 656 |
| Object | AssignExpr | AssignExpr |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/bsd-snprintf.c |
| Method | static LLONG ROUND(LDOUBLE value) |

```
....
656.         intpart = (LLONG)value;
```

**Long Overflow\Path 4:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=502](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=502) |
| Status | New |

A variable of a larger data type, AssignExpr, is being assigned to a smaller data type, in 665 of freebsd-src-1/bsd-snprintf.c. This will cause a loss of data, often the significant bits of a numerical value or the sign bit.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/bsd-snprintf.c | freebsd-src-1/bsd-snprintf.c |
| Line | 673 | 673 |
| Object | AssignExpr | AssignExpr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/bsd-snprintf.c |
| Method | static double my_modf(double x0, double *iptr) |

```
....
673.                 l = (long)x;
```

## 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=1060097&projectid=60087&pathid=1028](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1028) |
| Status | New |

The variable declared in peer at freebsd-src-1/show.c in line 47 is not initialized when it is used by peer at freebsd-src-1/show.c in line 47.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/show.c | freebsd-src-1/show.c |
| Line | 50 | 60 |
| Object | peer | peer |

Code Snippet
File Name freebsd-src-1/show.c
Method static void sort_peers(struct wgdevice *device)

```
....
50.   struct wgpeer *peer, **peers;
....
60.         peers[i++] = peer;
```

### Use of Uninitialized Pointer\Path 2:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1029 |
| Status | New |

The variable declared in ifa at freebsd-src-1/in6_ifattach.c in line 242 is not initialized when it is used by ifa at freebsd-src-1/in6_ifattach.c in line 242.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/in6_ifattach.c | freebsd-src-1/in6_ifattach.c |
| Line | 244 | 257 |
| Object | ifa | ifa |

Code Snippet
File Name freebsd-src-1/in6_ifattach.c
Method in6_get_hw_ifid(struct ifnet *ifp, struct in6_addr *in6)

```
....
244.        struct ifaddr *ifa;
....
257.              sdl = (struct sockaddr_dl *)ifa->ifa_addr;
```

### Use of Uninitialized Pointer\Path 3:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1030 |
| Status | New |

The variable declared in ifa at freebsd-src-1/in6_ifattach.c in line 242 is not initialized when it is used by ifa_addr at freebsd-src-1/in6_ifattach.c in line 242.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/in6_ifattach.c | freebsd-src-1/in6_ifattach.c |
| Line | 244 | 255 |
| Object | ifa | ifa_addr |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/in6_ifattach.c |
| Method | in6_get_hw_ifid(struct ifnet *ifp, struct in6_addr *in6) |

```
....
244.        struct ifaddr *ifa;
....
255.                if (ifa->ifa_addr->sa_family != AF_LINK)
```

## Wrong Memory Allocation

Query Path:
CPP\Cx\CPP Medium Threat\Wrong Memory Allocation Version:0

### Categories

NIST SP 800-53: SI-10 Information Input Validation (P1)

*Description*

**Wrong Memory Allocation\Path 1:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1242 |
| Status | New |

The function malloc in freebsd-src-1/mrsas.c at line 2324 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 | freebsd-src-1/mrsas.c | freebsd-src-1/mrsas.c |
| Line | 2429 | 2429 |
| Object | sizeof | malloc |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/mrsas.c |
| Method | mrsas_init_fw(struct mrsas_softc *sc) |

```
....
2429.       sc->ctrl_info = malloc(sizeof(struct mrsas_ctrl_info),
M_MRSAS, M_NOWAIT);
```

**Wrong Memory Allocation\Path 2:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1243 |
| Status | New |

The function malloc in freebsd-src-1/mrsas.c at line 2324 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 | freebsd-src-1/mrsas.c | freebsd-src-1/mrsas.c |
| Line | 2488 | 2488 |
| Object | sizeof | malloc |

Code Snippet
File Name freebsd-src-1/mrsas.c
Method mrsas_init_fw(struct mrsas_softc *sc)

```
....
2488.                        sc->streamDetectByLD[i] =
malloc(sizeof(LD_STREAM_DETECT), M_MRSAS, M_NOWAIT);
```

**Wrong Memory Allocation\Path 3:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1244 |
| Status | New |

The function malloc in freebsd-src-1/property.c at line 47 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 | freebsd-src-1/property.c | freebsd-src-1/property.c |
| Line | 51 | 51 |
| Object | sizeof | malloc |

Code Snippet
File Name freebsd-src-1/property.c
Method property_alloc(char *name, char *value)

```
....
51.       if ((n = (properties)malloc(sizeof(struct _property))) == NULL)
```

## Stored Buffer Overflow cpycat

Query Path:
CPP\Cx\CPP Stored Vulnerabilities\Stored Buffer Overflow cpycat Version:0

### Categories

NIST SP 800-53: SI-10 Information Input Validation (P1)
OWASP Top 10 2017: A1-Injection

*Description*

**Stored Buffer Overflow cpycat\Path 1:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1254 |
| Status | New |

The size of the buffer used by my_popen in command, at line 67 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that get_cpuid_set passes to linebuf, at line 2334 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2510 | 92 |
| Object | linebuf | command |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method get_cpuid_set(void)

```
....
2510.       while (fgets(linebuf, sizeof(linebuf), io) != NULL) {
```

File Name freebsd-src-1/pmcstudy.c
Method my_popen(const char *command, const char *dir, pid_t *p_pid)

```
....
92.   strcpy(cmd2, command);
```

**Stored Buffer Overflow cpycat\Path 2:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1255 |
| Status | New |

The size of the buffer used by process_header in Address, at line 2064 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that build_counters_from_header passes to buffer, at line 2095 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2104 | 2086 |
| Object | buffer | Address |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method build_counters_from_header(FILE *io)

```
....
2104.        if (fgets(buffer, sizeof(buffer), io) == NULL) {
```

File Name freebsd-src-1/pmcstudy.c

Method process_header(int idx, char *p)

```
....
2086.                             strcpy(up->counter_name, &p[(i+1)]);
```

**Stored Buffer Overflow cpycat\Path 3:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1256 |
| Status | New |

The size of the buffer used by process_header in p, at line 2064 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that build_counters_from_header passes to buffer, at line 2095 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2104 | 2086 |
| Object | buffer | p |

Code Snippet

File Name freebsd-src-1/pmcstudy.c

Method build_counters_from_header(FILE *io)

```
....
2104.        if (fgets(buffer, sizeof(buffer), io) == NULL) {
```

File Name freebsd-src-1/pmcstudy.c

Method process_header(int idx, char *p)

```
....
2086.                             strcpy(up->counter_name, &p[(i+1)]);
```

## 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=1060097&projectid=60087&pathid=104 |
| Status | New |

The pointer chacha20 at freebsd-src-1/e_chacha20_poly1305.c in line 143 is being used after it has been freed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/e_chacha20_poly1305.c | freebsd-src-1/e_chacha20_poly1305.c |
| Line | 145 | 145 |
| Object | chacha20 | chacha20 |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/e_chacha20_poly1305.c |
| Method | const EVP_CIPHER *EVP_chacha20(void) |

```
....
145.        return &chacha20;
```

**Buffer Overflow AddressOfLocalVarReturned\Path 2:**

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=105 |
| Status | New |

The pointer rand_chan at freebsd-src-1/acs.c in line 838 is being used after it has been freed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/acs.c | freebsd-src-1/acs.c |
| Line | 899 | 899 |
| Object | rand_chan | rand_chan |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/acs.c |
| Method | acs_find_ideal_chan(struct hostapd_iface *iface) |

```
....
899.          return rand_chan;
```

## 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=1060097&projectid=60087&pathid=936 |
| Status | New |

Method shadow_pw at line 129 of freebsd-src-1/xcrypt.c defines pw_password, which is designated to contain user passwords. However, while plaintext passwords are later assigned to pw_password, this variable is never cleared from memory.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/xcrypt.c | freebsd-src-1/xcrypt.c |
| Line | 131 | 131 |
| Object | pw_password | pw_password |

Code Snippet
File Name freebsd-src-1/xcrypt.c
Method shadow_pw(struct passwd *pw)

```
....
131.        char *pw_password = pw->pw_passwd;
```

### Heap Inspection\Path 2:

| | |
|---|---|
| Severity | Medium |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=937 |
| Status | New |

Method pick_salt at line 71 of freebsd-src-1/xcrypt.c defines passwd, which is designated to contain user passwords. However, while plaintext passwords are later assigned to passwd, this variable is never cleared from memory.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/xcrypt.c | freebsd-src-1/xcrypt.c |
| Line | 74 | 74 |
| Object | passwd | passwd |

Code Snippet
File Name freebsd-src-1/xcrypt.c

| | |
|---|---|
| Method | pick_salt(void) |

```
....
74.    char *passwd, *p;
```

## 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=1060097&projectid=60087&pathid=1634 |
| Status | New |

The variable declared in null at freebsd-src-1/archive_read_support_format_mtree.c in line 887 is not initialized when it is used by value at freebsd-src-1/archive_read_support_format_mtree.c in line 835.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 909 | 853 |
| Object | null | value |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_mtree.c |
| Method | process_global_unset(struct archive_read *a, |

```
....
909.                        *global = NULL;
```

▾

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_mtree.c |
| Method | remove_option(struct mtree_option **global, const char *value, size_t len) |

```
....
853.            free(iter->value);
```

**NULL Pointer Dereference\Path 2:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=600 |

| | |
|---|---|
| | 87&pathid=1635 |
| Status | New |

The variable declared in null at freebsd-src-1/archive_read_support_format_mtree.c in line 1175 is not initialized when it is used by st_mtimespec at freebsd-src-1/archive_read_support_format_mtree.c in line 1175.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 1281 | 1363 |
| Object | null | st_mtimespec |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_mtree.c
Method parse_file(struct archive_read *a, struct archive_entry *entry,

```
....
1281.                         st = NULL;
....
1363.                                     st->st_mtimespec.tv_nsec);
```

**NULL Pointer Dereference\Path 3:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1636 |
| Status | New |

The variable declared in null at freebsd-src-1/archive_read_support_format_mtree.c in line 1175 is not initialized when it is used by st_mtimespec at freebsd-src-1/archive_read_support_format_mtree.c in line 1175.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 1284 | 1363 |
| Object | null | st_mtimespec |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_mtree.c
Method parse_file(struct archive_read *a, struct archive_entry *entry,

```
....
1284.                   st = NULL;
....
1363.                                     st->st_mtimespec.tv_nsec);
```

**NULL Pointer Dereference\Path 4:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |

| | |
|---|---|
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1637 |
| Status | New |

The variable declared in null at freebsd-src-1/authzone.c in line 7689 is not initialized when it is used by Pointer at freebsd-src-1/authzone.c in line 1875.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 7695 | 1947 |
| Object | null | Pointer |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | int auth_zone_generate_zonemd_check(struct auth_zone* z, int scheme, |

```
....
7695.        *reason = NULL;
```

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | static int auth_zone_zonemd_check_hash(struct auth_zone* z, |

```
....
1947.                                    verbose(VERB_ALGO, "auth-zone %s
ZONEMD %d %d is unsupported: %s", zstr, (int)scheme, (int)hashalgo,
*reason);
```

### NULL Pointer Dereference\Path 5:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1638 |
| Status | New |

The variable declared in null at freebsd-src-1/authzone.c in line 1875 is not initialized when it is used by Pointer at freebsd-src-1/authzone.c in line 1875.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1936 | 1947 |
| Object | null | Pointer |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | static int auth_zone_zonemd_check_hash(struct auth_zone* z, |

```
....
1936.                *reason = NULL;
....
1947.                                   verbose(VERB_ALGO, "auth-zone %s
ZONEMD %d %d is unsupported: %s", zstr, (int)scheme, (int)hashalgo,
*reason);
```

### NULL Pointer Dereference\Path 6:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1639 |
| Status | New |

The variable declared in null at freebsd-src-1/authzone.c in line 7995 is not initialized when it is used by Pointer at freebsd-src-1/authzone.c in line 1875.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 7999 | 1947 |
| Object | null | Pointer |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | auth_zone_verify_zonemd_with_key(struct auth_zone* z, struct module_env* env, |

```
....
7999.        char* reason = NULL, *why_bogus = NULL;
```

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | static int auth_zone_zonemd_check_hash(struct auth_zone* z, |

```
....
1947.                                   verbose(VERB_ALGO, "auth-zone %s
ZONEMD %d %d is unsupported: %s", zstr, (int)scheme, (int)hashalgo,
*reason);
```

### NULL Pointer Dereference\Path 7:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1640 |
| Status | New |

The variable declared in null at freebsd-src-1/authzone.c in line 2094 is not initialized when it is used by task_transfer at freebsd-src-1/authzone.c in line 2094.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 2097 | 2169 |
| Object | null | task_transfer |

Code Snippet
File Name freebsd-src-1/authzone.c
Method auth_zones_cfg(struct auth_zones* az, struct config_auth* c)

```
....
2097.       struct auth_xfer* x = NULL;
....
2169.             if(!xfer_set_masters(&x->task_transfer->masters, c,
1)) {
```

### NULL Pointer Dereference\Path 8:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1641 |
| Status | New |

The variable declared in null at freebsd-src-1/authzone.c in line 2094 is not initialized when it is used by task_probe at freebsd-src-1/authzone.c in line 2094.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 2097 | 2164 |
| Object | null | task_probe |

Code Snippet
File Name freebsd-src-1/authzone.c
Method auth_zones_cfg(struct auth_zones* az, struct config_auth* c)

```
....
2097.       struct auth_xfer* x = NULL;
....
2164.             if(!xfer_set_masters(&x->task_probe->masters, c, 0)) {
```

### NULL Pointer Dereference\Path 9:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1642 |
| Status | New |

The variable declared in null at freebsd-src-1/authzone.c in line 3558 is not initialized when it is used by rep at freebsd-src-1/authzone.c in line 3515.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 3562 | 3527 |
| Object | null | rep |

Code Snippet
File Name    freebsd-src-1/authzone.c
Method    int auth_zones_answer(struct auth_zones* az, struct module_env* env,

```
....
3562.        struct dns_msg* msg = NULL;
```

File Name    freebsd-src-1/authzone.c

Method    auth_answer_encode(struct query_info* qinfo, struct module_env* env,

```
....
3527.            (int)FLAGS_GET_RCODE(msg->rep->flags), edns, repinfo,
temp, env->now_tv)
```

**NULL Pointer Dereference\Path 10:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1643 |
| Status | New |

The variable declared in null at freebsd-src-1/authzone.c in line 3966 is not initialized when it is used by task_probe at freebsd-src-1/authzone.c in line 6312.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 3968 | 6318 |
| Object | null | task_probe |

Code Snippet
File Name    freebsd-src-1/authzone.c
Method    probe_copy_masters_for_allow_notify(struct auth_xfer* xfr)

```
....
3968.        struct auth_master* list = NULL, *last = NULL;
```

File Name    freebsd-src-1/authzone.c

Method    xfr_probe_disown(struct auth_xfer* xfr)

```
....
6318.        comm_point_delete(xfr->task_probe->cp);
```

### NULL Pointer Dereference\Path 11:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1644](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1644) |
| Status | New |

The variable declared in null at freebsd-src-1/authzone.c in line 3966 is not initialized when it is used by task_probe at freebsd-src-1/authzone.c in line 6312.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 3968 | 6315 |
| Object | null | task_probe |

Code Snippet
File Name freebsd-src-1/authzone.c
Method probe_copy_masters_for_allow_notify(struct auth_xfer* xfr)

```
....
3968.        struct auth_master* list = NULL, *last = NULL;
```

File Name freebsd-src-1/authzone.c

Method xfr_probe_disown(struct auth_xfer* xfr)

```
....
6315.        comm_timer_delete(xfr->task_probe->timer);
```

### NULL Pointer Dereference\Path 12:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1645](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1645) |
| Status | New |

The variable declared in null at freebsd-src-1/authzone.c in line 3966 is not initialized when it is used by task_probe at freebsd-src-1/authzone.c in line 4130.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 3968 | 4132 |

| | | |
|---|---|---|
| Object | null | task_probe |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | probe_copy_masters_for_allow_notify(struct auth_xfer* xfr) |

```
....
3968.       struct auth_master* list = NULL, *last = NULL;
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_probe_end_of_list(struct auth_xfer* xfr) |

```
....
4132.       return !xfr->task_probe->scan_specific && !xfr->task_probe-
>scan_target;
```

**NULL Pointer Dereference\Path 13:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1646 |
| Status | New |

The variable declared in null at freebsd-src-1/authzone.c in line 3966 is not initialized when it is used by task_probe at freebsd-src-1/authzone.c in line 4130.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 3968 | 4132 |
| Object | null | task_probe |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | probe_copy_masters_for_allow_notify(struct auth_xfer* xfr) |

```
....
3968.       struct auth_master* list = NULL, *last = NULL;
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_probe_end_of_list(struct auth_xfer* xfr) |

```
....
4132.       return !xfr->task_probe->scan_specific && !xfr->task_probe-
>scan_target;
```

### NULL Pointer Dereference\Path 14:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1647 |
| Status | New |

The variable declared in null at freebsd-src-1/channels.c in line 640 is not initialized when it is used by host_to_connect at freebsd-src-1/channels.c in line 640.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 656 | 656 |
| Object | null | host_to_connect |

Code Snippet
File Name freebsd-src-1/channels.c
Method permission_set_add(struct ssh *ssh, int who, int where,

```
....
656.         (*permp)[n].host_to_connect = MAYBE_DUP(host_to_connect);
```

### NULL Pointer Dereference\Path 15:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1648 |
| Status | New |

The variable declared in null at freebsd-src-1/channels.c in line 640 is not initialized when it is used by listen_host at freebsd-src-1/channels.c in line 640.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 658 | 658 |
| Object | null | listen_host |

Code Snippet
File Name freebsd-src-1/channels.c
Method permission_set_add(struct ssh *ssh, int who, int where,

```
....
658.         (*permp)[n].listen_host = MAYBE_DUP(listen_host);
```

### NULL Pointer Dereference\Path 16:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |

| | |
|---|---|
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1649 |
| Status | New |

The variable declared in null at freebsd-src-1/channels.c in line 640 is not initialized when it is used by listen_path at freebsd-src-1/channels.c in line 640.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 659 | 659 |
| Object | null | listen_path |

Code Snippet
File Name freebsd-src-1/channels.c
Method permission_set_add(struct ssh *ssh, int who, int where,

```
....
659.         (*permp)[n].listen_path = MAYBE_DUP(listen_path);
```

**NULL Pointer Dereference\Path 17:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1650 |
| Status | New |

The variable declared in null at freebsd-src-1/channels.c in line 3721 is not initialized when it is used by listening_addr at freebsd-src-1/channels.c in line 3721.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 3864 | 3864 |
| Object | null | listening_addr |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_setup_fwd_listener_tcpip(struct ssh *ssh, int type,

```
....
3864.             c->listening_addr = addr == NULL ? NULL :
xstrdup(addr);
```

**NULL Pointer Dereference\Path 18:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=600 |

| | |
|---|---|
| | 87&pathid=1651 |
| Status | New |

The variable declared in 0 at freebsd-src-1/channels.c in line 3721 is not initialized when it is used by listening_port at freebsd-src-1/channels.c in line 3721.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 3776 | 3867 |
| Object | 0 | listening_port |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_setup_fwd_listener_tcpip(struct ssh *ssh, int type,

```
....
3776.             *allocated_listen_port = 0;
....
3867.                   c->listening_port = *allocated_listen_port;
```

**NULL Pointer Dereference\Path 19:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1652 |
| Status | New |

The variable declared in null at freebsd-src-1/channels.c in line 4085 is not initialized when it is used by listening_port at freebsd-src-1/channels.c in line 3721.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 4093 | 3867 |
| Object | null | listening_port |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_setup_local_fwd_listener(struct ssh *ssh,

```
....
4093.                 SSH_CHANNEL_PORT_LISTENER, fwd, NULL, fwd_opts);
```

File Name freebsd-src-1/channels.c
Method channel_setup_fwd_listener_tcpip(struct ssh *ssh, int type,

```
....
3867.                    c->listening_port = *allocated_listen_port;
```

### NULL Pointer Dereference\Path 20:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1653 |
| Status | New |

The variable declared in null at freebsd-src-1/ec_asn1.c in line 585 is not initialized when it is used by seed at freebsd-src-1/ec_asn1.c in line 585.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ec_asn1.c | freebsd-src-1/ec_asn1.c |
| Line | 588 | 764 |
| Object | null | seed |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/ec_asn1.c |
| Method | EC_GROUP *EC_GROUP_new_from_ecparameters(const ECPARAMETERS *params) |

```
....
588.        EC_GROUP *ret = NULL, *dup = NULL;
....
764.            OPENSSL_free(ret->seed);
```

### NULL Pointer Dereference\Path 21:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1654 |
| Status | New |

The variable declared in null at freebsd-src-1/ec_asn1.c in line 985 is not initialized when it is used by value at freebsd-src-1/ec_asn1.c in line 532.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ec_asn1.c | freebsd-src-1/ec_asn1.c |
| Line | 988 | 545 |
| Object | null | value |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/ec_asn1.c |
| Method | int i2d_ECPKParameters(const EC_GROUP *a, unsigned char **out) |

```
....
988.       ECPKPARAMETERS *tmp = EC_GROUP_get_ecpkparameters(a, NULL);
```

File Name freebsd-src-1/ec_asn1.c

Method ECPKPARAMETERS *EC_GROUP_get_ecpkparameters(const EC_GROUP *group,

```
....
545.                ASN1_OBJECT_free(ret->value.named_curve);
```

### NULL Pointer Dereference\Path 22:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1655 |
| Status | New |

The variable declared in null at freebsd-src-1/ec_asn1.c in line 985 is not initialized when it is used by value at freebsd-src-1/ec_asn1.c in line 532.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ec_asn1.c | freebsd-src-1/ec_asn1.c |
| Line | 988 | 548 |
| Object | null | value |

Code Snippet

File Name freebsd-src-1/ec_asn1.c

Method int i2d_ECPKParameters(const EC_GROUP *a, unsigned char **out)

```
....
988.       ECPKPARAMETERS *tmp = EC_GROUP_get_ecpkparameters(a, NULL);
```

File Name freebsd-src-1/ec_asn1.c

Method ECPKPARAMETERS *EC_GROUP_get_ecpkparameters(const EC_GROUP *group,

```
....
548.                ECPARAMETERS_free(ret->value.parameters);
```

### NULL Pointer Dereference\Path 23:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1656 |
| Status | New |

The variable declared in null at freebsd-src-1/ec_asn1.c in line 985 is not initialized when it is used by value at freebsd-src-1/ec_asn1.c in line 532.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ec_asn1.c | freebsd-src-1/ec_asn1.c |
| Line | 988 | 547 |
| Object | null | value |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/ec_asn1.c |
| Method | int i2d_ECPKParameters(const EC_GROUP *a, unsigned char **out) |

```
....
988.        ECPKPARAMETERS *tmp = EC_GROUP_get_ecpkparameters(a, NULL);
```

| | |
|---|---|
| File Name | freebsd-src-1/ec_asn1.c |
| Method | ECPKPARAMETERS *EC_GROUP_get_ecpkparameters(const EC_GROUP *group, |

```
....
547.                     && ret->value.parameters != NULL)
```

**NULL Pointer Dereference\Path 24:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1657 |
| Status | New |

The variable declared in null at freebsd-src-1/imx6_ipu.c in line 1111 is not initialized when it is used by vdisplay at freebsd-src-1/imx6_ipu.c in line 1111.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/imx6_ipu.c | freebsd-src-1/imx6_ipu.c |
| Line | 1127 | 1149 |
| Object | null | vdisplay |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/imx6_ipu.c |
| Method | ipu_hdmi_event(void *arg, device_t hdmi_dev) |

```
....
1127.        videomode = NULL;
....
1149.                videomode->hdisplay, videomode->vdisplay);
```

**NULL Pointer Dereference\Path 25:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1658 |
| Status | New |

The variable declared in null at freebsd-src-1/imx6_ipu.c in line 1111 is not initialized when it is used by hdisplay at freebsd-src-1/imx6_ipu.c in line 1111.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/imx6_ipu.c | freebsd-src-1/imx6_ipu.c |
| Line | 1127 | 1149 |
| Object | null | hdisplay |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/imx6_ipu.c |
| Method | ipu_hdmi_event(void *arg, device_t hdmi_dev) |

```
....
1127.        videomode = NULL;
....
1149.                  videomode->hdisplay, videomode->vdisplay);
```

**NULL Pointer Dereference\Path 26:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1659 |
| Status | New |

The variable declared in null at freebsd-src-1/sctp_sys_calls.c in line 877 is not initialized when it is used by recvv_rcvinfo at freebsd-src-1/sctp_sys_calls.c in line 877.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/sctp_sys_calls.c | freebsd-src-1/sctp_sys_calls.c |
| Line | 921 | 949 |
| Object | null | recvv_rcvinfo |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/sctp_sys_calls.c |
| Method | sctp_recvv(int sd, |

```
....
921.              rcvinfo = NULL;
....
949.                                rn_info->recvv_rcvinfo = *rcvinfo;
```

**NULL Pointer Dereference\Path 27:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1660 |
| Status | New |

The variable declared in null at freebsd-src-1/sctp_sys_calls.c in line 877 is not initialized when it is used by recvv_nxtinfo at freebsd-src-1/sctp_sys_calls.c in line 877.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/sctp_sys_calls.c | freebsd-src-1/sctp_sys_calls.c |
| Line | 922 | 950 |
| Object | null | recvv_nxtinfo |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/sctp_sys_calls.c |
| Method | sctp_recvv(int sd, |

```
....
922.                    nxtinfo = NULL;
....
950.                                rn_info->recvv_nxtinfo = *nxtinfo;
```

**NULL Pointer Dereference\Path 28:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1661 |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 883 is not initialized when it is used by rdomain at freebsd-src-1/servconf.c in line 883.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 895 | 895 |
| Object | null | rdomain |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/servconf.c |
| Method | queue_listen_addr(ServerOptions *options, const char *addr, |

```
....
895.          qla->rdomain = rdomain == NULL ? NULL : xstrdup(rdomain);
```

**NULL Pointer Dereference\Path 29:**

| | |
|---|---|
| Severity | Low |

| | |
|---|---|
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1662 |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by host at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1189 |
| Object | null | host |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/servconf.c |
| Method | process_server_config_line_depth(ServerOptions *options, char *line, |

```
....
2258.              (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

| | |
|---|---|
| File Name | freebsd-src-1/servconf.c |
| Method | match_cfg_line(char **condition, int line, struct connection_info *ci) |

```
....
1189.                   if (ci->host == NULL)
```

**NULL Pointer Dereference\Path 30:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1663 |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by host at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1128 |
| Object | null | host |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/servconf.c |
| Method | process_server_config_line_depth(ServerOptions *options, char *line, |

```
....
2258.               (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name    freebsd-src-1/servconf.c

Method    match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1128.                   ci->host ? ci->host : "(null)",
```

**NULL Pointer Dereference\Path 31:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1664 |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by host at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1128 |
| Object | null | host |

Code Snippet

File Name    freebsd-src-1/servconf.c

Method    process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.               (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name    freebsd-src-1/servconf.c

Method    match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1128.                   ci->host ? ci->host : "(null)",
```

**NULL Pointer Dereference\Path 32:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1665 |

| | |
|---|---|
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by address at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1209 |
| Object | null | address |

Code Snippet
File Name freebsd-src-1/servconf.c
Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.                (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name freebsd-src-1/servconf.c
Method match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1209.                              "%.100s' at line %d", ci->address,
arg, line);
```

**NULL Pointer Dereference\Path 33:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1666 |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by addr_match_list at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1206 |
| Object | null | addr_match_list |

Code Snippet
File Name freebsd-src-1/servconf.c
Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.                (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name freebsd-src-1/servconf.c

Method match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1206.                          switch (addr_match_list(ci->address, arg)) {
```

**NULL Pointer Dereference\Path 34:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1667 |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by address at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1204 |
| Object | null | address |

Code Snippet
File Name freebsd-src-1/servconf.c
Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.                (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name freebsd-src-1/servconf.c

Method match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1204.                          if (ci->address == NULL)
```

**NULL Pointer Dereference\Path 35:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1668 |

Status New

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by address at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1129 |
| Object | null | address |

Code Snippet
File Name freebsd-src-1/servconf.c
Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.                (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name freebsd-src-1/servconf.c

Method match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1129.                ci->address ? ci->address : "(null)",
```

**NULL Pointer Dereference\Path 36:**

Severity Low
Result State To Verify
Online Results [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1669](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1669)
Status New

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by address at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1129 |
| Object | null | address |

Code Snippet
File Name freebsd-src-1/servconf.c
Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.                (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name freebsd-src-1/servconf.c

Method match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1129.                   ci->address ? ci->address : "(null)",
```

**NULL Pointer Dereference\Path 37:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1670 |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by laddress at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1234 |
| Object | null | laddress |

Code Snippet

File Name freebsd-src-1/servconf.c

Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.                   (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name freebsd-src-1/servconf.c

Method match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1234.                               ci->laddress, arg, line);
```

**NULL Pointer Dereference\Path 38:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1671 |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by addr_match_list at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1230 |
| Object | null | addr_match_list |

Code Snippet
File Name freebsd-src-1/servconf.c
Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.                   (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name freebsd-src-1/servconf.c

Method match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1230.                     switch (addr_match_list(ci->laddress, arg)) {
```

**NULL Pointer Dereference\Path 39:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1672 |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by laddress at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1227 |
| Object | null | laddress |

Code Snippet
File Name freebsd-src-1/servconf.c
Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.                   (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name freebsd-src-1/servconf.c

Method match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1227.                   if (ci->laddress == NULL)
```

**NULL Pointer Dereference\Path 40:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1673](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1673) |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by laddress at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1130 |
| Object | null | laddress |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/servconf.c |
| Method | process_server_config_line_depth(ServerOptions *options, char *line, |

```
....
2258.                  (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

| | |
|---|---|
| File Name | freebsd-src-1/servconf.c |
| Method | match_cfg_line(char **condition, int line, struct connection_info *ci) |

```
....
1130.                  ci->laddress ? ci->laddress : "(null)", ci-
>lport);
```

**NULL Pointer Dereference\Path 41:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1674](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1674) |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by laddress at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |

| | | |
|---|---|---|
| Line | 2258 | 1130 |
| Object | null | laddress |

Code Snippet
File Name freebsd-src-1/servconf.c
Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.                (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name freebsd-src-1/servconf.c

Method match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1130.                ci->laddress ? ci->laddress : "(null)", ci-
>lport);
```

**NULL Pointer Dereference\Path 42:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1675 |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by lport at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1130 |
| Object | null | lport |

Code Snippet
File Name freebsd-src-1/servconf.c
Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.                (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name freebsd-src-1/servconf.c

Method match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1130.                 ci->laddress ? ci->laddress : "(null)", ci-
>lport);
```

**NULL Pointer Dereference\Path 43:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1676 |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by rdomain at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1267 |
| Object | null | rdomain |

Code Snippet
File Name freebsd-src-1/servconf.c
Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.                 (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name freebsd-src-1/servconf.c

Method match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1267.                       if (ci->rdomain == NULL)
```

**NULL Pointer Dereference\Path 44:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1677 |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by user at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |

| | | |
|---|---|---|
| Line | 2258 | 1164 |
| Object | null | user |

Code Snippet
File Name freebsd-src-1/servconf.c
Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.                  (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name freebsd-src-1/servconf.c

Method match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1164.                    if (ci->user == NULL)
```

**NULL Pointer Dereference\Path 45:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1678 |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by match_cfg_line_group at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1178 |
| Object | null | match_cfg_line_group |

Code Snippet
File Name freebsd-src-1/servconf.c
Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.                  (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name freebsd-src-1/servconf.c

Method match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1178.                switch (match_cfg_line_group(arg, line, ci-
>user)) {
```

### NULL Pointer Dereference\Path 46:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1679 |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by user at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1176 |
| Object | null | user |

Code Snippet
File Name freebsd-src-1/servconf.c
Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.               (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name freebsd-src-1/servconf.c

Method match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1176.                if (ci->user == NULL)
```

### NULL Pointer Dereference\Path 47:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1680 |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by user at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |

| | | |
|---|---|---|
| Line | 2258 | 1127 |
| Object | null | user |

Code Snippet
File Name freebsd-src-1/servconf.c
Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.                   (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name freebsd-src-1/servconf.c

Method match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1127.                  "laddr %s lport %d", cp, ci->user ? ci->user :
"(null)",
```

**NULL Pointer Dereference\Path 48:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1681 |
| Status | New |

The variable declared in null at freebsd-src-1/servconf.c in line 1345 is not initialized when it is used by user at freebsd-src-1/servconf.c in line 1118.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2258 | 1127 |
| Object | null | user |

Code Snippet
File Name freebsd-src-1/servconf.c
Method process_server_config_line_depth(ServerOptions *options, char *line,

```
....
2258.                   (*inc_flags & SSHCFG_NEVERMATCH ? NULL :
connectinfo));
```

File Name freebsd-src-1/servconf.c

Method match_cfg_line(char **condition, int line, struct connection_info *ci)

```
....
1127.                "laddr %s lport %d", cp, ci->user ? ci->user :
"(null)",
```

### NULL Pointer Dereference\Path 49:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1682 |
| Status | New |

The variable declared in null at freebsd-src-1/show.c in line 379 is not initialized when it is used by public_key at freebsd-src-1/show.c in line 253.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/show.c | freebsd-src-1/show.c |
| Line | 440 | 261 |
| Object | null | public_key |

Code Snippet

File Name freebsd-src-1/show.c

Method int show_main(int argc, const char *argv[])

```
....
440.            struct wgdevice *device = NULL;
```

File Name freebsd-src-1/show.c

Method static void dump_print(struct wgdevice *device, bool with_interface)

```
....
261.        printf("%s\t", maybe_key(device->public_key, device->flags &
WGDEVICE_HAS_PUBLIC_KEY));
```

### NULL Pointer Dereference\Path 50:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1683 |
| Status | New |

The variable declared in null at freebsd-src-1/show.c in line 379 is not initialized when it is used by public_key at freebsd-src-1/show.c in line 253.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/show.c | freebsd-src-1/show.c |

| | | |
|---|---|---|
| Line | 400 | 261 |
| Object | null | public_key |

Code Snippet
File Name freebsd-src-1/show.c
Method int show_main(int argc, const char *argv[])

```
....
400.                    struct wgdevice *device = NULL;
```

File Name freebsd-src-1/show.c

Method static void dump_print(struct wgdevice *device, bool with_interface)

```
....
261.          printf("%s\t", maybe_key(device->public_key, device->flags &
WGDEVICE_HAS_PUBLIC_KEY));
```

## 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=1060097&projectid=60087&pathid=1257 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3626 | 3626 |
| Object | fgets | fgets |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method run_cmd_loop(void)

```
....
3626.              buf = fgets(buffer, sizeof(buffer), stdin);
```

**Improper Resource Access Authorization\Path 2:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1258](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1258) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 249 | 249 |
| Object | fgets | fgets |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_create(int argc, char * const *argv) |

```
....
249.         while ((fgets(buf, BUFSIZ, tmp)) != NULL) {
```

**Improper Resource Access Authorization\Path 3:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1259](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1259) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1136 | 1136 |
| Object | fgets | fgets |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_resetconfig(int argc, char * const *argv) |

```
....
1136.            fgets(reply, sizeof(reply), stdin);
```

**Improper Resource Access Authorization\Path 4:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1260](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1260) |
| Status | New |

| | Source | Destination |
|---|---|---|

| | | |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2104 | 2104 |
| Object | fgets | fgets |

Code Snippet
File Name	freebsd-src-1/pmcstudy.c
Method	build_counters_from_header(FILE *io)

```
....
2104.       if (fgets(buffer, sizeof(buffer), io) == NULL) {
```

**Improper Resource Access Authorization\Path 5:**

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1261
Status	New

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2160 | 2160 |
| Object | fgets | fgets |

Code Snippet
File Name	freebsd-src-1/pmcstudy.c
Method	read_a_line(FILE *io)

```
....
2160.       if (fgets(buffer, sizeof(buffer), io) == NULL) {
```

**Improper Resource Access Authorization\Path 6:**

Severity	Low
Result State	To Verify
Online Results	http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1262
Status	New

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2510 | 2510 |
| Object | fgets | fgets |

Code Snippet
File Name	freebsd-src-1/pmcstudy.c
Method	get_cpuid_set(void)

```
....
2510.        while (fgets(linebuf, sizeof(linebuf), io) != NULL) {
```

**Improper Resource Access Authorization\Path 7:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1263 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2591 | 2591 |
| Object | fgets | fgets |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method test_for_a_pmc(const char *pmc, int out_so_far)

```
....
2591.        if (fgets(line, sizeof(line), io) == NULL) {
```

**Improper Resource Access Authorization\Path 8:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1264 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2607 | 2607 |
| Object | fgets | fgets |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method test_for_a_pmc(const char *pmc, int out_so_far)

```
....
2607.                if (fgets(line, sizeof(line), io) == NULL) {
```

**Improper Resource Access Authorization\Path 9:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1265 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 651 | 651 |
| Object | fgetc | fgetc |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method conf_next_low(void)

```
....
651.                x = fgetc(conf);
```

**Improper Resource Access Authorization\Path 10:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1266 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 657 | 657 |
| Object | fgetc | fgetc |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method conf_next_low(void)

```
....
657.                x = fgetc(conf);
```

**Improper Resource Access Authorization\Path 11:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1267 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3626 | 3626 |

| | | |
|---|---|---|
| Object | buffer | buffer |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method run_cmd_loop(void)

```
....
3626.               buf = fgets(buffer, sizeof(buffer), stdin);
```

**Improper Resource Access Authorization\Path 12:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1268 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 249 | 249 |
| Object | buf | buf |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_create(int argc, char * const *argv)

```
....
249.         while ((fgets(buf, BUFSIZ, tmp)) != NULL) {
```

**Improper Resource Access Authorization\Path 13:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1269 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1136 | 1136 |
| Object | reply | reply |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_resetconfig(int argc, char * const *argv)

```
....
1136.              fgets(reply, sizeof(reply), stdin);
```

### Improper Resource Access Authorization\Path 14:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1270 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2104 | 2104 |
| Object | buffer | buffer |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method build_counters_from_header(FILE *io)

```
....
2104.        if (fgets(buffer, sizeof(buffer), io) == NULL) {
```

### Improper Resource Access Authorization\Path 15:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1271 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2160 | 2160 |
| Object | buffer | buffer |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method read_a_line(FILE *io)

```
....
2160.        if (fgets(buffer, sizeof(buffer), io) == NULL) {
```

### Improper Resource Access Authorization\Path 16:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1272 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2510 | 2510 |
| Object | linebuf | linebuf |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method get_cpuid_set(void)

```
....
2510.        while (fgets(linebuf, sizeof(linebuf), io) != NULL) {
```

### Improper Resource Access Authorization\Path 17:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1273 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2591 | 2591 |
| Object | line | line |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method test_for_a_pmc(const char *pmc, int out_so_far)

```
....
2591.        if (fgets(line, sizeof(line), io) == NULL) {
```

### Improper Resource Access Authorization\Path 18:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1274 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2607 | 2607 |

| | | |
|---|---|---|
| Object | line | line |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method test_for_a_pmc(const char *pmc, int out_so_far)

```
....
2607.                       if (fgets(line, sizeof(line), io) == NULL) {
```

**Improper Resource Access Authorization\Path 19:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1275 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 67 | 67 |
| Object | sfbuf | sfbuf |

Code Snippet
File Name freebsd-src-1/buf.c
Method get_sbuf_line(line_t *lp)

```
....
67.    if (fread(sfbuf, sizeof(char), len, sfp) != len) {
```

**Improper Resource Access Authorization\Path 20:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1276 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 423 | 423 |
| Object | BinaryExpr | BinaryExpr |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method read_all(FILE *f, size_t *len)

```
....
423.                    rlen = fread(buf + ptr, 1, blen - ptr, f);
```

**Improper Resource Access Authorization\Path 21:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1277](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1277) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 1904 | 1904 |
| Object | buff | buff |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_mtree.c
Method read_data(struct archive_read *a, const void **buff, size_t *size,

```
....
1904.           bytes_read = read(mtree->fd, mtree->buff, bytes_to_read);
```

**Improper Resource Access Authorization\Path 22:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1278](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1278) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 2098 | 2098 |
| Object | buf | buf |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_handle_rfd(struct ssh *ssh, Channel *c)

```
....
2098.           len = read(c->rfd, buf, sizeof(buf));
```

**Improper Resource Access Authorization\Path 23:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |

| | |
|---|---|
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1279](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1279) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 2266 | 2266 |
| Object | buf | buf |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_handle_efd_read(struct ssh *ssh, Channel *c)

```
....
2266.         len = read(c->efd, buf, sizeof(buf));
```

**Improper Resource Access Authorization\Path 24:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1280](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1280) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 2348 | 2348 |
| Object | buf | buf |

Code Snippet
File Name freebsd-src-1/channels.c
Method read_mux(struct ssh *ssh, Channel *c, u_int need)

```
....
2348.               len = read(c->rfd, buf, MINIMUM(rlen, CHAN_RBUF));
```

**Improper Resource Access Authorization\Path 25:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1281](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1281) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |

| | | |
|---|---|---|
| Line | 1008 | 1008 |
| Object | buf | buf |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method load_fw(int argc, char *argv[], int start_arg, const char *iff_name)

```
....
1008.        len = read(fd, op.buf, MAX_FW_IMAGE_SIZE + 1);
```

**Improper Resource Access Authorization\Path 26:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1282 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1042 | 1042 |
| Object | buf | buf |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method load_boot(int argc, char *argv[], int start_arg, const char *iff_name)

```
....
1042.        len = read(fd, op.buf, MAX_BOOT_IMAGE_SIZE + 1);
```

**Improper Resource Access Authorization\Path 27:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1283 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1715 | 1715 |
| Object | buf | buf |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method run_cmd_loop(int argc, char *argv[], const char *iff_name)

```
....
1715.              n = read(STDIN_FILENO, buf, sizeof(buf) - 1);
```

### Improper Resource Access Authorization\Path 28:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1284 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/property.c | freebsd-src-1/property.c |
| Line | 96 | 96 |
| Object | buf | buf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/property.c |
| Method | properties_read(int fd) |

```
....
96.         if ((max = read(fd, buf, sizeof buf)) < 0) {
```

### Improper Resource Access Authorization\Path 29:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1285 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/query.c | freebsd-src-1/query.c |
| Line | 1195 | 1195 |
| Object | buf | buf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/query.c |
| Method | query_socket_read(struct query_state *qstate, void *buf, size_t nbytes) |

```
....
1195.         result = read(qstate->sockfd, buf, nbytes);
```

### Improper Resource Access Authorization\Path 30:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1286 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 60 | 60 |
| Object | fprintf | fprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/buf.c |
| Method | get_sbuf_line(line_t *lp) |

```
....
60.                 fprintf(stderr, "%s\n", strerror(errno));
```

**Improper Resource Access Authorization\Path 31:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1287 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 68 | 68 |
| Object | fprintf | fprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/buf.c |
| Method | get_sbuf_line(line_t *lp) |

```
....
68.           fprintf(stderr, "%s\n", strerror(errno));
```

**Improper Resource Access Authorization\Path 32:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1288 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 88 | 88 |

| | | |
|---|---|---|
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/buf.c
Method put_sbuf_line(const char *cs)

```
....
88.         fprintf(stderr, "%s\n", strerror(errno));
```

**Improper Resource Access Authorization\Path 33:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1289 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 104 | 104 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/buf.c
Method put_sbuf_line(const char *cs)

```
....
104.                    fprintf(stderr, "%s\n", strerror(errno));
```

**Improper Resource Access Authorization\Path 34:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1290 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 115 | 115 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/buf.c
Method put_sbuf_line(const char *cs)

```
....
115.                fprintf(stderr, "%s\n", strerror(errno));
```

### Improper Resource Access Authorization\Path 35:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1291 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 220 | 220 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/buf.c
Method close_sbuf(void)

```
....
220.                        fprintf(stderr, "%s: %s\n", sfn,
strerror(errno));
```

### Improper Resource Access Authorization\Path 36:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1292 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 93 | 93 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method usage(FILE *fp)

```
....
93.     fprintf(fp, "Usage: %s <nexus> [operation]\n", progname);
```

### Improper Resource Access Authorization\Path 37:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |

| | |
|---|---|
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1293 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 94 | 94 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method usage(FILE *fp)

```
....
94.    fprintf(fp,
```

**Improper Resource Access Authorization\Path 38:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1294 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 313 | 313 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method dump_regs_table(int argc, const char *argv[], const uint32_t *regs,

```
....
313.                    fprintf(stderr, "\nAvailable blocks:");
```

**Improper Resource Access Authorization\Path 39:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1295 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |

| | | |
|---|---|---|
| Line | 315 | 315 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method dump_regs_table(int argc, const char *argv[], const uint32_t *regs,

```
....
315.                                    fprintf(stderr, " %s", modtab->name);
```

**Improper Resource Access Authorization\Path 40:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1296 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 316 | 316 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method dump_regs_table(int argc, const char *argv[], const uint32_t *regs,

```
....
316.                            fprintf(stderr, "\n");
```

**Improper Resource Access Authorization\Path 41:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1297 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3624 | 3624 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method run_cmd_loop(void)

```
....
3624.               fprintf(stdout, "> ");
```

### Improper Resource Access Authorization\Path 42:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1298 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 91 | 91 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method usage(FILE *fp)

```
....
91.    fprintf(fp, "Usage: %s <interface> [operation]\n", progname);
```

### Improper Resource Access Authorization\Path 43:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1299 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 92 | 92 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method usage(FILE *fp)

```
....
92.    fprintf(fp,
```

### Improper Resource Access Authorization\Path 44:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1300 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1713 | 1713 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method run_cmd_loop(int argc, char *argv[], const char *iff_name)

```
....
1713.            fprintf(stdout, "> ");
```

### Improper Resource Access Authorization\Path 45:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1301 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1444 | 1444 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method printconfig(FILE *of, const char *comment)

```
....
1444.        fprintf(of, "# Vinum configuration of %s, saved at %s",
```

### Improper Resource Access Authorization\Path 46:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1302 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1449 | 1449 |

| | | |
|---|---|---|
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method printconfig(FILE *of, const char *comment)

```
....
1449.           fprintf(of, "# Current configuration:\n");
```

### Improper Resource Access Authorization\Path 47:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1303 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1451 | 1451 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method printconfig(FILE *of, const char *comment)

```
....
1451.       fprintf(of, "%s", buf);
```

### Improper Resource Access Authorization\Path 48:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1304 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 179 | 179 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/http.c
Method http_new_chunk(struct httpio *io)

```
....
179.                    fprintf(stderr, "%s(): end of last chunk\n",
__func__);
```

### Improper Resource Access Authorization\Path 49:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1305 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 181 | 181 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/http.c
Method http_new_chunk(struct httpio *io)

```
....
181.                    fprintf(stderr, "%s(): new chunk: %lu (%lu)\n",
```

### Improper Resource Access Authorization\Path 50:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1306 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1963 | 1963 |
| Object | fprintf | fprintf |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method report_trace(FILE *out, lsrec_t **sort_buf)

```
....
1963.              (void) fprintf(out, "%5s  %7s  %11s  %-24s  %-24s\n",
```

## 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=1060097&projectid=60087&pathid=1476 |
| Status | New |

The archive_read_format_lha_read_header method calls the snprintf function, at line 475 of freebsd-src-1/archive_read_support_format_lha.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 | freebsd-src-1/archive_read_support_format_lha.c | freebsd-src-1/archive_read_support_format_lha.c |
| Line | 742 | 742 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_lha.c
Method archive_read_format_lha_read_header(struct archive_read *a,

```
....
742.		snprintf(lha->format_name, sizeof(lha->format_name), "lha -
%c%c%c-",
```

**Unchecked Return Value\Path 2:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1477 |
| Status | New |

The auth_zone_generate_answer method calls the snprintf function, at line 3425 of freebsd-src-1/authzone.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 | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 3455 | 3455 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/authzone.c
Method auth_zone_generate_answer(struct auth_zone* z, struct query_info* qinfo,

```
....
3455.              else  snprintf(nname, sizeof(nname), "NULL");
```

### Unchecked Return Value\Path 3:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1478 |
| Status | New |

The auth_zone_generate_answer method calls the snprintf function, at line 3425 of freebsd-src-1/authzone.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 | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 3459 | 3459 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/authzone.c
Method auth_zone_generate_answer(struct auth_zone* z, struct query_info* qinfo,

```
....
3459.              else  snprintf(cename, sizeof(cename), "NULL");
```

### Unchecked Return Value\Path 4:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1479 |
| Status | New |

The auth_zone_generate_answer method calls the snprintf function, at line 3425 of freebsd-src-1/authzone.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 | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 3462 | 3462 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/authzone.c
Method auth_zone_generate_answer(struct auth_zone* z, struct query_info* qinfo,

```
....
3462.             else  snprintf(rrstr, sizeof(rrstr), "NULL");
```

**Unchecked Return Value\Path 5:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1480](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1480) |
| Status | New |

The xfr_write_after_update method calls the snprintf function, at line 5165 of freebsd-src-1/authzone.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 | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 5210 | 5210 |
| Object | snprintf | snprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_write_after_update(struct auth_xfer* xfr, struct module_env* env) |

```
....
5210.       snprintf(tmpfile, sizeof(tmpfile), "%s.tmp%u", zfilename,
```

**Unchecked Return Value\Path 6:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1481](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1481) |
| Status | New |

The xfr_transfer_lookup_host method calls the snprintf function, at line 5374 of freebsd-src-1/authzone.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 | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 5411 | 5411 |
| Object | snprintf | snprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | xfr_transfer_lookup_host(struct auth_xfer* xfr, struct module_env* env) |

```
....
5411.            snprintf(buf1, sizeof(buf1), "auth zone %s: master
lookup"
```

**Unchecked Return Value\Path 7:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1482 |
| Status | New |

The xfr_probe_lookup_host method calls the snprintf function, at line 6565 of freebsd-src-1/authzone.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 | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 6604 | 6604 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/authzone.c
Method xfr_probe_lookup_host(struct auth_xfer* xfr, struct module_env* env)

```
....
6604.            snprintf(buf1, sizeof(buf1), "auth zone %s: master
lookup"
```

**Unchecked Return Value\Path 8:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1483 |
| Status | New |

The auth_zone_zonemd_fail method calls the snprintf function, at line 7947 of freebsd-src-1/authzone.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 | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 7958 | 7958 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/authzone.c

| | |
|---|---|
| Method | static void auth_zone_zonemd_fail(struct auth_zone* z, struct module_env* env, |

```
....
7958.                   snprintf(res, sizeof(res), "%s: %s", reason,
```

**Unchecked Return Value\Path 9:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1484 |
| Status | New |

The zonemd_lookup_dnskey method calls the snprintf function, at line 8350 of freebsd-src-1/authzone.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 | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 8387 | 8387 |
| Object | snprintf | snprintf |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/authzone.c |
| Method | zonemd_lookup_dnskey(struct auth_zone* z, struct module_env* env) |

```
....
8387.             snprintf(buf1, sizeof(buf1), "auth zone %s: lookup %s
"
```

**Unchecked Return Value\Path 10:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1485 |
| Status | New |

The channel_post_x11_listener method calls the snprintf function, at line 1774 of freebsd-src-1/channels.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 | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 1806 | 1806 |
| Object | snprintf | snprintf |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/channels.c |

|  |  |
|---|---|
| Method | channel_post_x11_listener(struct ssh *ssh, Channel *c) |

```
....
1806.       snprintf(buf, sizeof buf, "X11 connection from %.200s port
%d",
```

### Unchecked Return Value\Path 11:

|  |  |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1486 |
| Status | New |

The channel_setup_fwd_listener_tcpip method calls the snprintf function, at line 3721 of freebsd-src-1/channels.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 | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 3763 | 3763 |
| Object | snprintf | snprintf |

|  |  |
|---|---|
| Code Snippet |  |
| File Name | freebsd-src-1/channels.c |
| Method | channel_setup_fwd_listener_tcpip(struct ssh *ssh, int type, |

```
....
3763.       snprintf(strport, sizeof strport, "%d", fwd->listen_port);
```

### Unchecked Return Value\Path 12:

|  |  |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1487 |
| Status | New |

The connect_to_helper method calls the snprintf function, at line 4598 of freebsd-src-1/channels.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 | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 4636 | 4636 |
| Object | snprintf | snprintf |

|  |  |
|---|---|
| Code Snippet |  |
| File Name | freebsd-src-1/channels.c |

| | |
|---|---|
| Method | connect_to_helper(struct ssh *ssh, const char *name, int port, int socktype, |

```
....
4636.                snprintf(strport, sizeof strport, "%d", port);
```

**Unchecked Return Value\Path 13:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1488 |
| Status | New |

The x11_create_display_inet method calls the snprintf function, at line 4939 of freebsd-src-1/channels.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 | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 4961 | 4961 |
| Object | snprintf | snprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/channels.c |
| Method | x11_create_display_inet(struct ssh *ssh, int x11_display_offset, |

```
....
4961.                snprintf(strport, sizeof strport, "%d", port);
```

**Unchecked Return Value\Path 14:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1489 |
| Status | New |

The connect_local_xsocket method calls the snprintf function, at line 5061 of freebsd-src-1/channels.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 | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 5064 | 5064 |
| Object | snprintf | snprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/channels.c |
| Method | connect_local_xsocket(u_int dnr) |

```
....
5064.        snprintf(buf, sizeof buf, _PATH_UNIX_X, dnr);
```

**Unchecked Return Value\Path 15:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1490 |
| Status | New |

The x11_connect_display method calls the snprintf function, at line 5096 of freebsd-src-1/channels.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 | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 5180 | 5180 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/channels.c
Method x11_connect_display(struct ssh *ssh)

```
....
5180.        snprintf(strport, sizeof strport, "%u", 6000 +
display_number);
```

**Unchecked Return Value\Path 16:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1491 |
| Status | New |

The real_doit method calls the snprintf function, at line 140 of freebsd-src-1/cxgbetool.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 | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 148 | 148 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method real_doit(unsigned long cmd, void *data, const char *cmdstr)

```
....
148.                snprintf(buf, sizeof(buf), "/dev/%s", nexus);
```

**Unchecked Return Value\Path 17:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1492 |
| Status | New |

The display_clip method calls the snprintf function, at line 3488 of freebsd-src-1/cxgbetool.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 | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3500 | 3500 |
| Object | snprintf | snprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cxgbetool.c |
| Method | display_clip(void) |

```
....
3500.        snprintf(name, sizeof(name), "dev.t%unex.%u.misc.clip",
chip_id, inst);
```

**Unchecked Return Value\Path 18:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1493 |
| Status | New |

The doit method calls the snprintf function, at line 128 of freebsd-src-1/cxgbtool.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 | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 134 | 134 |
| Object | snprintf | snprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cxgbtool.c |
| Method | doit(const char *iff_name, unsigned long cmd, void *data) |

```
....
134.                snprintf(buf, 64, "/dev/%s", iff_name);
```

### Unchecked Return Value\Path 19:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1494 |
| Status | New |

The show_filters method calls the sprintf function, at line 1284 of freebsd-src-1/cxgbtool.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 | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1314 | 1314 |
| Object | sprintf | sprintf |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method show_filters(const char *iff_name)

```
....
1314.               sprintf(sip, "%u.%u.%u.%u/%-2u", nsip.octet[0],
nsip.octet[1],
```

### Unchecked Return Value\Path 20:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1495 |
| Status | New |

The show_filters method calls the sprintf function, at line 1284 of freebsd-src-1/cxgbtool.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 | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1317 | 1317 |
| Object | sprintf | sprintf |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method show_filters(const char *iff_name)

```
....
1317.               sprintf(dip, "%u.%u.%u.%u", ndip.octet[0],
ndip.octet[1],
```

**Unchecked Return Value\Path 21:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1496 |
| Status | New |

The gvinum_create method calls the snprintf function, at line 175 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 208 | 208 |
| Object | snprintf | snprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_create(int argc, char * const *argv) |

```
....
208.                snprintf(tmpfile, sizeof(tmpfile),
"/tmp/gvinum.XXXXXX");
```

**Unchecked Return Value\Path 22:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1497 |
| Status | New |

The gvinum_create method calls the snprintf function, at line 175 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 225 | 225 |
| Object | snprintf | snprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |

| | |
|---|---|
| Method | gvinum_create(int argc, char * const *argv) |

```
....
225.               snprintf(commandline, sizeof(commandline), "%s %s",
ed,
```

**Unchecked Return Value\Path 23:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1498 |
| Status | New |

The gvinum_create method calls the snprintf function, at line 175 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 293 | 293 |
| Object | snprintf | snprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_create(int argc, char * const *argv) |

```
....
293.                    snprintf(buf1, sizeof(buf1), "volume%d",
volumes);
```

**Unchecked Return Value\Path 24:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1499 |
| Status | New |

The gvinum_create method calls the snprintf function, at line 175 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 313 | 313 |
| Object | snprintf | snprintf |

Code Snippet

File Name freebsd-src-1/gvinum.c
Method gvinum_create(int argc, char * const *argv)

```
....
313.                            snprintf(p->name, sizeof(p->name),
"%s.p%d",
```

### Unchecked Return Value\Path 25:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1500 |
| Status | New |

The gvinum_create method calls the snprintf function, at line 175 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 319 | 319 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_create(int argc, char * const *argv)

```
....
319.                            snprintf(p->volume, sizeof(p->volume),
"%s",
```

### Unchecked Return Value\Path 26:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1501 |
| Status | New |

The gvinum_create method calls the snprintf function, at line 175 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 329 | 329 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_create(int argc, char * const *argv)

```
....
329.                          snprintf(buf1, sizeof(buf1), "plex%d", plexes);
```

**Unchecked Return Value\Path 27:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1502 |
| Status | New |

The gvinum_create method calls the snprintf function, at line 175 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 350 | 350 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_create(int argc, char * const *argv)

```
....
350.                                        snprintf(s->name, sizeof(s->name),
```

**Unchecked Return Value\Path 28:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1503 |
| Status | New |

The gvinum_create method calls the snprintf function, at line 175 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 354 | 354 |
| Object | snprintf | snprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_create(int argc, char * const *argv) |

```
....
354.                                snprintf(s->name, sizeof(s->name),
```

### Unchecked Return Value\Path 29:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1504 |
| Status | New |

The gvinum_create method calls the snprintf function, at line 175 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 361 | 361 |
| Object | snprintf | snprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_create(int argc, char * const *argv) |

```
....
361.                          snprintf(s->plex, sizeof(s->plex), "%s",
plex);
```

### Unchecked Return Value\Path 30:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1505 |
| Status | New |

The gvinum_create method calls the snprintf function, at line 175 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 363 | 363 |
| Object | snprintf | snprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_create(int argc, char * const *argv) |

```
....
363.                    snprintf(buf1, sizeof(buf1), "sd%d", subdisks);
```

**Unchecked Return Value\Path 31:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1506 |
| Status | New |

The gvinum_create method calls the snprintf function, at line 175 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 379 | 379 |
| Object | snprintf | snprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_create(int argc, char * const *argv) |

```
....
379.                    snprintf(buf1, sizeof(buf1), "drive%d", drives);
```

**Unchecked Return Value\Path 32:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1507 |
| Status | New |

The create_volume method calls the snprintf function, at line 489 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 520 | 520 |
| Object | snprintf | snprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |

|  |  |
|---|---|
| Method | create_volume(int argc, char * const *argv, const char *verb) |

```
....
520.                    snprintf(buf, sizeof(buf), "drive%d", drives++);
```

### Unchecked Return Value\Path 33:

|  |  |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1508 |
| Status | New |

The find_name method calls the snprintf function, at line 569 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 601 | 601 |
| Object | snprintf | snprintf |

Code Snippet

|  |  |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | find_name(const char *prefix, int type, int namelen) |

```
....
601.               snprintf(sname, namelen, "%s%d", prefix, n);
```

### Unchecked Return Value\Path 34:

|  |  |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1509 |
| Status | New |

The gvinum_list method calls the snprintf function, at line 806 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 858 | 858 |
| Object | snprintf | snprintf |

Code Snippet

|  |  |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_list(int argc, char * const *argv) |

```
....
858.                    snprintf(buf, sizeof(buf), "argv%d", i);
```

### Unchecked Return Value\Path 35:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1510 |
| Status | New |

The gvinum_move method calls the snprintf function, at line 887 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 930 | 930 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_move(int argc, char * const *argv)

```
....
930.               snprintf(buf, sizeof(buf), "argv%d", i);
```

### Unchecked Return Value\Path 36:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1511 |
| Status | New |

The gvinum_rm method calls the snprintf function, at line 1061 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1093 | 1093 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_rm(int argc, char * const *argv)

```
....
1093.                     snprintf(buf, sizeof(buf), "argv%d", i);
```

**Unchecked Return Value\Path 37:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1512 |
| Status | New |

The gvinum_resetconfig method calls the fgets function, at line 1107 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1136 | 1136 |
| Object | fgets | fgets |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_resetconfig(int argc, char * const *argv)

```
....
1136.               fgets(reply, sizeof(reply), stdin);
```

**Unchecked Return Value\Path 38:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1513 |
| Status | New |

The gvinum_start method calls the snprintf function, at line 1171 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1208 | 1208 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_start(int argc, char * const *argv)

```
....
1208.                   snprintf(buf, sizeof(buf), "argv%d", i);
```

### Unchecked Return Value\Path 39:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1514 |
| Status | New |

The gvinum_grow method calls the snprintf function, at line 1270 of freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1312 | 1312 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_grow(int argc, char * const *argv)

```
....
1312.         snprintf(sdprefix, sizeof(sdprefix), "%s.s", argv[1]);
```

### Unchecked Return Value\Path 40:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1515 |
| Status | New |

The http_digest_auth method calls the sprintf function, at line 1249 of freebsd-src-1/http.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 | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1275 | 1275 |
| Object | sprintf | sprintf |

Code Snippet
File Name freebsd-src-1/http.c
Method http_digest_auth(conn_t *conn, const char *hdr, http_auth_challenge_t *c,

```
....
1275.              sprintf(noncecount, "%08x", c->nc);
```

### Unchecked Return Value\Path 41:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1516 |
| Status | New |

The http_digest_auth method calls the sprintf function, at line 1249 of freebsd-src-1/http.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 | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1277 | 1277 |
| Object | sprintf | sprintf |

Code Snippet
File Name freebsd-src-1/http.c
Method http_digest_auth(conn_t *conn, const char *hdr, http_auth_challenge_t *c,

```
....
1277.              sprintf(cnonce, "%x%lx", getpid(), (unsigned
long)time(0));
```

### Unchecked Return Value\Path 42:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1517 |
| Status | New |

The http_request_body method calls the snprintf function, at line 1585 of freebsd-src-1/http.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 | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1656 | 1656 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1656.                    snprintf(hbuf, sizeof(hbuf), "%s:%d", host, url-
>port);
```

### Unchecked Return Value\Path 43:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1518 |
| Status | New |

The bge_probe method calls the snprintf function, at line 2702 of freebsd-src-1/if_bge.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 | freebsd-src-1/if_bge.c | freebsd-src-1/if_bge.c |
| Line | 2724 | 2724 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/if_bge.c
Method bge_probe(device_t dev)

```
....
2724.                           snprintf(model, sizeof(model), "%s",
pname);
```

### Unchecked Return Value\Path 44:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1519 |
| Status | New |

The bge_probe method calls the snprintf function, at line 2702 of freebsd-src-1/if_bge.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 | freebsd-src-1/if_bge.c | freebsd-src-1/if_bge.c |
| Line | 2727 | 2727 |
| Object | snprintf | snprintf |

Code Snippet
File Name freebsd-src-1/if_bge.c

|  |  |
|---|---|
| Method | bge_probe(device_t dev) |

```
....
2727.                          snprintf(model, sizeof(model), "%s %s",
```

### Unchecked Return Value\Path 45:

|  |  |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1520 |
| Status | New |

The bge_probe method calls the snprintf function, at line 2702 of freebsd-src-1/if_bge.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 | freebsd-src-1/if_bge.c | freebsd-src-1/if_bge.c |
| Line | 2732 | 2732 |
| Object | snprintf | snprintf |

Code Snippet

|  |  |
|---|---|
| File Name | freebsd-src-1/if_bge.c |
| Method | bge_probe(device_t dev) |

```
....
2732.                       snprintf(buf, sizeof(buf), "%s, %sASIC rev.
%#08x",
```

### Unchecked Return Value\Path 46:

|  |  |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1521 |
| Status | New |

The predicate_add method calls the sprintf function, at line 590 of freebsd-src-1/lockstat.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 | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 609 | 609 |
| Object | sprintf | sprintf |

Code Snippet

|  |  |
|---|---|
| File Name | freebsd-src-1/lockstat.c |

| | |
|---|---|
| Method | predicate_add(char **pred, char *what, char *cmp, uintptr_t value) |

```
....
609.                    (void) sprintf(new, "(%s) && (%s %s %p)",
```

### Unchecked Return Value\Path 47:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1522 |
| Status | New |

The predicate_add method calls the sprintf function, at line 590 of freebsd-src-1/lockstat.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 | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 612 | 612 |
| Object | sprintf | sprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | predicate_add(char **pred, char *what, char *cmp, uintptr_t value) |

```
....
612.                    (void) sprintf(new, "(%s) && (%s)", *pred,
what);
```

### Unchecked Return Value\Path 48:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1523 |
| Status | New |

The predicate_add method calls the sprintf function, at line 590 of freebsd-src-1/lockstat.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 | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 616 | 616 |
| Object | sprintf | sprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |

| | |
|---|---|
| Method | predicate_add(char **pred, char *what, char *cmp, uintptr_t value) |

```
....
616.                     (void) sprintf(new, "%s %s %p",
```

**Unchecked Return Value\Path 49:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1524 |
| Status | New |

The predicate_add method calls the sprintf function, at line 590 of freebsd-src-1/lockstat.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 | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 619 | 619 |
| Object | sprintf | sprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | predicate_add(char **pred, char *what, char *cmp, uintptr_t value) |

```
....
619.                     (void) sprintf(new, "%s", what);
```

**Unchecked Return Value\Path 50:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1525 |
| Status | New |

The filter_add method calls the sprintf function, at line 635 of freebsd-src-1/lockstat.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 | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 646 | 646 |
| Object | sprintf | sprintf |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | filter_add(char **filt, char *what, uintptr_t base, size_t size) |

```
....
646.        (void) sprintf(c, "%s(%s >= 0x%p && %s < 0x%p)", *filt[0] !=
'\0' ?
```

## 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=1060097&projectid=60087&pathid=1833 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 1586 | 1586 |
| Object | j | j |

Code Snippet
File Name    freebsd-src-1/archive_read_support_format_mtree.c
Method    parse_digest(struct archive_read *a, struct archive_entry *entry,

```
....
1586.            digest_buf[j] = high << 4 | low;
```

**Unchecked Array Index\Path 2:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1834 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 2737 | 2737 |
| Object | rrset_count | rrset_count |

Code Snippet
File Name    freebsd-src-1/authzone.c

Method add_synth_cname(struct auth_zone* z, uint8_t* qname, size_t qname_len,

```
....
2737.       msg->rep->rrsets[msg->rep->rrset_count] = cname;
```

### Unchecked Array Index\Path 3:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1835 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 279 | 279 |
| Object | i | i |

Code Snippet
File Name freebsd-src-1/buf.c
Method translit_text(char *s, int len, int from, int to)

```
....
279.        ctab[i] = i;                  /* restore table to initial
state */
```

### Unchecked Array Index\Path 4:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1836 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 482 | 482 |
| Object | found | found |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_new(struct ssh *ssh, char *ctype, int type, int rfd, int wfd, int efd,

```
....
482.        c = sc->channels[found] = xcalloc(1, sizeof(Channel));
```

### Unchecked Array Index\Path 5:

| | |
|---|---|
| Severity | Low |

| | |
|---|---|
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1837 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 2492 | 2492 |
| Object | SSH_CHANNEL_X11_LISTENER | SSH_CHANNEL_X11_LISTENER |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_handler_init(struct ssh_channels *sc)

```
....
2492.        pre[SSH_CHANNEL_X11_LISTENER] =
      &channel_pre_listener;
```

**Unchecked Array Index\Path 6:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1838 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 2493 | 2493 |
| Object | SSH_CHANNEL_AUTH_SOCKET | SSH_CHANNEL_AUTH_SOCKET |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_handler_init(struct ssh_channels *sc)

```
....
2493.        pre[SSH_CHANNEL_AUTH_SOCKET] =
      &channel_pre_listener;
```

**Unchecked Array Index\Path 7:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1839 |
| Status | New |

| | Source | Destination |
|---|---|---|

|  |  |  |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 2494 | 2494 |
| Object | SSH_CHANNEL_CONNECTING | SSH_CHANNEL_CONNECTING |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_handler_init(struct ssh_channels *sc)

```
....
2494.         pre[SSH_CHANNEL_CONNECTING] =         &channel_pre_connecting;
```

**Unchecked Array Index\Path 8:**

|  |  |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1840 |
| Status | New |

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 2505 | 2505 |
| Object | SSH_CHANNEL_X11_LISTENER | SSH_CHANNEL_X11_LISTENER |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_handler_init(struct ssh_channels *sc)

```
....
2505.         post[SSH_CHANNEL_X11_LISTENER] =
       &channel_post_x11_listener;
```

**Unchecked Array Index\Path 9:**

|  |  |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1841 |
| Status | New |

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 2506 | 2506 |
| Object | SSH_CHANNEL_AUTH_SOCKET | SSH_CHANNEL_AUTH_SOCKET |

Code Snippet
File Name freebsd-src-1/channels.c

| | |
|---|---|
| Method | channel_handler_init(struct ssh_channels *sc) |

```
....
2506.        post[SSH_CHANNEL_AUTH_SOCKET] =
     &channel_post_auth_listener;
```

### Unchecked Array Index\Path 10:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1842](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1842) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 2507 | 2507 |
| Object | SSH_CHANNEL_CONNECTING | SSH_CHANNEL_CONNECTING |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/channels.c |
| Method | channel_handler_init(struct ssh_channels *sc) |

```
....
2507.        post[SSH_CHANNEL_CONNECTING] =
     &channel_post_connecting;
```

### Unchecked Array Index\Path 11:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1843](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1843) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 2867 | 2867 |
| Object | ru_alloc | ru_alloc |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/dp_rx.c |
| Method | static void ath11k_dp_rx_update_peer_stats(struct ath11k_sta *arsta, |

```
....
2867.        rx_stats->ru_alloc_cnt[ppdu_info->ru_alloc] += num_msdu;
```

### Unchecked Array Index\Path 12:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1844 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 736 | 736 |
| Object | l | l |

Code Snippet
File Name freebsd-src-1/http.c
Method http_header_lex(const char **cpp, char *buf)

```
....
736.        buf[l] = 0;
```

**Unchecked Array Index\Path 13:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1845 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/if_bge.c | freebsd-src-1/if_bge.c |
| Line | 5314 | 5314 |
| Object | idx | idx |

Code Snippet
File Name freebsd-src-1/if_bge.c
Method bge_encap(struct bge_softc *sc, struct mbuf **m_head, uint32_t *txidx)

```
....
5314.        sc->bge_cdata.bge_tx_dmamap[idx] = map;
```

**Unchecked Array Index\Path 14:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1846 |
| Status | New |

| | Source | Destination |
|---|---|---|

| | | |
|---|---|---|
| File | freebsd-src-1/if_bge.c | freebsd-src-1/if_bge.c |
| Line | 5315 | 5315 |
| Object | idx | idx |

Code Snippet
File Name freebsd-src-1/if_bge.c
Method bge_encap(struct bge_softc *sc, struct mbuf **m_head, uint32_t *txidx)

```
....
5315.        sc->bge_cdata.bge_tx_chain[idx] = m;
```

**Unchecked Array Index\Path 15:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1847 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/imx6_ipu.c | freebsd-src-1/imx6_ipu.c |
| Line | 419 | 419 |
| Object | datapos | datapos |

Code Snippet
File Name freebsd-src-1/imx6_ipu.c
Method ipu_ch_param_set_value(struct ipu_cpmem_ch_param *param,

```
....
419.        param->word[word].data[datapos] = data;
```

**Unchecked Array Index\Path 16:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1848 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ipsecmod.c | freebsd-src-1/ipsecmod.c |
| Line | 78 | 78 |
| Object | id | id |

Code Snippet
File Name freebsd-src-1/ipsecmod.c
Method ipsecmod_init(struct module_env* env, int id)

```
....
78.   env->modinfo[id] = (void*)ipsecmod_env;
```

### Unchecked Array Index\Path 17:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1849](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1849) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ipsecmod.c | freebsd-src-1/ipsecmod.c |
| Line | 106 | 106 |
| Object | id | id |

Code Snippet
File Name freebsd-src-1/ipsecmod.c
Method ipsecmod_new(struct module_qstate* qstate, int id)

```
....
106.        qstate->minfo[id] = iq;
```

### Unchecked Array Index\Path 18:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1850](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1850) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ipsecmod.c | freebsd-src-1/ipsecmod.c |
| Line | 126 | 126 |
| Object | id | id |

Code Snippet
File Name freebsd-src-1/ipsecmod.c
Method ipsecmod_error(struct module_qstate* qstate, int id)

```
....
126.        qstate->ext_state[id] = module_error;
```

### Unchecked Array Index\Path 19:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-](http://WIN-) |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1851 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ipsecmod.c | freebsd-src-1/ipsecmod.c |
| Line | 171 | 171 |
| Object | id | id |

Code Snippet
File Name freebsd-src-1/ipsecmod.c
Method generate_request(struct module_qstate* qstate, int id, uint8_t* name,

```
....
171.         qstate->ext_state[id] = module_wait_subquery;
```

**Unchecked Array Index\Path 20:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1852 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ipsecmod.c | freebsd-src-1/ipsecmod.c |
| Line | 394 | 394 |
| Object | id | id |

Code Snippet
File Name freebsd-src-1/ipsecmod.c
Method ipsecmod_handle_query(struct module_qstate* qstate,

```
....
394.                 qstate->ext_state[id] = module_wait_module;
```

**Unchecked Array Index\Path 21:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1853 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ipsecmod.c | freebsd-src-1/ipsecmod.c |
| Line | 410 | 410 |

| | | |
|---|---|---|
| Object | id | id |

Code Snippet
File Name freebsd-src-1/ipsecmod.c
Method ipsecmod_handle_query(struct module_qstate* qstate,

```
....
410.                qstate->ext_state[id] = module_wait_module;
```

**Unchecked Array Index\Path 22:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1854 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ipsecmod.c | freebsd-src-1/ipsecmod.c |
| Line | 462 | 462 |
| Object | id | id |

Code Snippet
File Name freebsd-src-1/ipsecmod.c
Method ipsecmod_handle_query(struct module_qstate* qstate,

```
....
462.          qstate->ext_state[id] = module_finished;
```

**Unchecked Array Index\Path 23:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1855 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ipsecmod.c | freebsd-src-1/ipsecmod.c |
| Line | 601 | 601 |
| Object | id | id |

Code Snippet
File Name freebsd-src-1/ipsecmod.c
Method ipsecmod_clear(struct module_qstate* qstate, int id)

```
....
601.        qstate->minfo[id] = NULL;
```

### Unchecked Array Index\Path 24:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1856 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 468 | 468 |
| Object | IPOPT_OPTVAL | IPOPT_OPTVAL |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/iptests.c |
| Method | void ip_test2(dev, mtu, ip, gwip, ptest) |

```
....
468.        s[IPOPT_OPTVAL] = IPOPT_NOP;
```

### Unchecked Array Index\Path 25:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1857 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 475 | 475 |
| Object | IPOPT_OPTVAL | IPOPT_OPTVAL |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/iptests.c |
| Method | void ip_test2(dev, mtu, ip, gwip, ptest) |

```
....
475.              s[IPOPT_OPTVAL] = IPOPT_TS;
```

### Unchecked Array Index\Path 26:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1858 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 476 | 476 |
| Object | IPOPT_OLEN | IPOPT_OLEN |

Code Snippet
File Name freebsd-src-1/iptests.c
Method void ip_test2(dev, mtu, ip, gwip, ptest)

```
....
476.                s[IPOPT_OLEN] = 4;
```

**Unchecked Array Index\Path 27:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1859 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 477 | 477 |
| Object | IPOPT_OFFSET | IPOPT_OFFSET |

Code Snippet
File Name freebsd-src-1/iptests.c
Method void ip_test2(dev, mtu, ip, gwip, ptest)

```
....
477.                s[IPOPT_OFFSET] = IPOPT_MINOFF;
```

**Unchecked Array Index\Path 28:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1860 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 492 | 492 |

| | | |
|---|---|---|
| Object | IPOPT_OPTVAL | IPOPT_OPTVAL |

Code Snippet
File Name freebsd-src-1/iptests.c
Method void ip_test2(dev, mtu, ip, gwip, ptest)

```
....
492.                s[IPOPT_OPTVAL] = IPOPT_RR;
```

**Unchecked Array Index\Path 29:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1861 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 493 | 493 |
| Object | IPOPT_OLEN | IPOPT_OLEN |

Code Snippet
File Name freebsd-src-1/iptests.c
Method void ip_test2(dev, mtu, ip, gwip, ptest)

```
....
493.                s[IPOPT_OLEN] = 0;
```

**Unchecked Array Index\Path 30:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1862 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 499 | 499 |
| Object | IPOPT_OPTVAL | IPOPT_OPTVAL |

Code Snippet
File Name freebsd-src-1/iptests.c
Method void ip_test2(dev, mtu, ip, gwip, ptest)

```
....
499.                s[IPOPT_OPTVAL] = IPOPT_TS;
```

### Unchecked Array Index\Path 31:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1863 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 500 | 500 |
| Object | IPOPT_OLEN | IPOPT_OLEN |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/iptests.c |
| Method | void ip_test2(dev, mtu, ip, gwip, ptest) |

```
....
500.                s[IPOPT_OLEN] = 0;
```

### Unchecked Array Index\Path 32:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1864 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 506 | 506 |
| Object | IPOPT_OPTVAL | IPOPT_OPTVAL |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/iptests.c |
| Method | void ip_test2(dev, mtu, ip, gwip, ptest) |

```
....
506.                s[IPOPT_OPTVAL] = IPOPT_SECURITY;
```

### Unchecked Array Index\Path 33:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1865 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 507 | 507 |
| Object | IPOPT_OLEN | IPOPT_OLEN |

Code Snippet
File Name freebsd-src-1/iptests.c
Method void ip_test2(dev, mtu, ip, gwip, ptest)

```
....
507.                    s[IPOPT_OLEN] = 0;
```

**Unchecked Array Index\Path 34:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1866 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 513 | 513 |
| Object | IPOPT_OPTVAL | IPOPT_OPTVAL |

Code Snippet
File Name freebsd-src-1/iptests.c
Method void ip_test2(dev, mtu, ip, gwip, ptest)

```
....
513.                    s[IPOPT_OPTVAL] = IPOPT_LSRR;
```

**Unchecked Array Index\Path 35:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1867 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 514 | 514 |

| | | |
|---|---|---|
| Object | IPOPT_OLEN | IPOPT_OLEN |

Code Snippet
File Name freebsd-src-1/iptests.c
Method void ip_test2(dev, mtu, ip, gwip, ptest)

```
....
514.                s[IPOPT_OLEN] = 0;
```

**Unchecked Array Index\Path 36:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1868](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1868) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 520 | 520 |
| Object | IPOPT_OPTVAL | IPOPT_OPTVAL |

Code Snippet
File Name freebsd-src-1/iptests.c
Method void ip_test2(dev, mtu, ip, gwip, ptest)

```
....
520.                s[IPOPT_OPTVAL] = IPOPT_SATID;
```

**Unchecked Array Index\Path 37:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1869](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1869) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 521 | 521 |
| Object | IPOPT_OLEN | IPOPT_OLEN |

Code Snippet
File Name freebsd-src-1/iptests.c
Method void ip_test2(dev, mtu, ip, gwip, ptest)

```
....
521.                s[IPOPT_OLEN] = 0;
```

### Unchecked Array Index\Path 38:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1870 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 527 | 527 |
| Object | IPOPT_OPTVAL | IPOPT_OPTVAL |

Code Snippet
File Name freebsd-src-1/iptests.c
Method void ip_test2(dev, mtu, ip, gwip, ptest)

```
....
527.                s[IPOPT_OPTVAL] = IPOPT_SSRR;
```

### Unchecked Array Index\Path 39:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1871 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 528 | 528 |
| Object | IPOPT_OLEN | IPOPT_OLEN |

Code Snippet
File Name freebsd-src-1/iptests.c
Method void ip_test2(dev, mtu, ip, gwip, ptest)

```
....
528.                s[IPOPT_OLEN] = 0;
```

### Unchecked Array Index\Path 40:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1872 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1033 | 1033 |
| Object | j | j |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method process_aggregate(const dtrace_aggdata_t *agg, void *arg)

```
....
1033.                       lsrec->ls_hist[j] = quantized[i];
```

**Unchecked Array Index\Path 41:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1873 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/mrsas.c | freebsd-src-1/mrsas.c |
| Line | 4737 | 4737 |
| Object | ids | ids |

Code Snippet
File Name freebsd-src-1/mrsas.c
Method mrsas_get_ld_list(struct mrsas_softc *sc)

```
....
4737.                             sc->ld_ids[ids] = ld_list_mem-
>ldList[ld_index].ref.ld_context.targetId;
```

**Unchecked Array Index\Path 42:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1874 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/name.c | freebsd-src-1/name.c |

| | | |
|---|---|---|
| Line | 252 | 252 |
| Object | k | k |

Code Snippet
File Name freebsd-src-1/name.c
Method _hx509_Name_to_string(const Name *n, char **str)

```
....
252.                    ss[k] = '\0';
```

**Unchecked Array Index\Path 43:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1875](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1875) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 277 | 277 |
| Object | k | k |

Code Snippet
File Name freebsd-src-1/name.c
Method _hx509_Name_to_string(const Name *n, char **str)

```
....
277.                    ss[k] = '\0';
```

**Unchecked Array Index\Path 44:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1876](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1876) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 644 | 644 |
| Object | pstr_len | pstr_len |

Code Snippet
File Name freebsd-src-1/name.c
Method hx509_parse_name(hx509_context context, const char *str, hx509_name *name)

```
....
644.              r[pstr_len] = '\0';
```

### Unchecked Array Index\Path 45:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1877 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/o_str.c | freebsd-src-1/o_str.c |
| Line | 52 | 52 |
| Object | maxlen | maxlen |

Code Snippet
File Name freebsd-src-1/o_str.c
Method char *CRYPTO_strndup(const char *str, size_t s, const char* file, int line)

```
....
52.             ret[maxlen] = '\0';
```

### Unchecked Array Index\Path 46:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1878 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/optimize.c | freebsd-src-1/optimize.c |
| Line | 397 | 397 |
| Object | level | level |

Code Snippet
File Name freebsd-src-1/optimize.c
Method find_levels_r(opt_state_t *opt_state, struct icode *ic, struct block *b)

```
....
397.          opt_state->levels[level] = b;
```

### Unchecked Array Index\Path 47:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1879 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/optimize.c | freebsd-src-1/optimize.c |
| Line | 447 | 447 |
| Object | dom | dom |

Code Snippet
File Name freebsd-src-1/optimize.c
Method find_dom(opt_state_t *opt_state, struct block *root)

```
....
447.                        SET_INSERT(b->dom, b->id);
```

**Unchecked Array Index\Path 48:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1880 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/optimize.c | freebsd-src-1/optimize.c |
| Line | 459 | 459 |
| Object | edom | edom |

Code Snippet
File Name freebsd-src-1/optimize.c
Method propedom(opt_state_t *opt_state, struct edge *ep)

```
....
459.          SET_INSERT(ep->edom, ep->id);
```

**Unchecked Array Index\Path 49:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1881 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/optimize.c | freebsd-src-1/optimize.c |
| Line | 520 | 520 |

|  |  |  |
|---|---|---|
| Object | closure | closure |

Code Snippet
File Name freebsd-src-1/optimize.c
Method find_closure(opt_state_t *opt_state, struct block *root)

```
....
520.                        SET_INSERT(b->closure, b->id);
```

**Unchecked Array Index\Path 50:**

|  |  |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1882](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1882) |
| Status | New |

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/optimize.c | freebsd-src-1/optimize.c |
| Line | 763 | 763 |
| Object | hash | hash |

Code Snippet
File Name freebsd-src-1/optimize.c
Method F(opt_state_t *opt_state, int code, bpf_u_int32 v0, bpf_u_int32 v1)

```
....
763.        opt_state->hashtbl[hash] = p;
```

## 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=1060097&projectid=60087&pathid=1598](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1598) |
| Status | New |

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_lha.c | freebsd-src-1/archive_read_support_format_lha.c |
| Line | 482 | 504 |
| Object | signature | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/archive_read_support_format_lha.c |
| Method | archive_read_format_lha_read_header(struct archive_read *a, |

```
....
482.          const char *signature;
....
504.                    signature = __archive_read_ahead(a,
sizeof(signature[0]), NULL);
```

### Use of Sizeof On a Pointer Type\Path 2:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1599 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ipsecmod.c | freebsd-src-1/ipsecmod.c |
| Line | 72 | 73 |
| Object | ipsecmod_env | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/ipsecmod.c |
| Method | ipsecmod_init(struct module_env* env, int id) |

```
....
72.    struct ipsecmod_env* ipsecmod_env = (struct
ipsecmod_env*)calloc(1,
73.             sizeof(struct ipsecmod_env));
```

### Use of Sizeof On a Pointer Type\Path 3:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1600 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/name.c | freebsd-src-1/name.c |
| Line | 337 | 369 |
| Object | name | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/name.c |
| Method | dsstringprep(const DirectoryString *ds, uint32_t **rname, size_t *rlen) |

```
....
337.       uint32_t *name;
....
369.         name = malloc(len * sizeof(name[0]));
```

### Use of Sizeof On a Pointer Type\Path 4:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1601](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1601) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/print-lspping.c | freebsd-src-1/print-lspping.c |
| Line | 494 | 625 |
| Object | lspping_tlv_header | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/print-lspping.c |
| Method | lspping_print(netdissect_options *ndo, |

```
....
494.       const struct lspping_tlv_header *lspping_tlv_header;
....
625.               tptr+=sizeof(struct lspping_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=1060097&projectid=60087&pathid=1602](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1602) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/print-lspping.c | freebsd-src-1/print-lspping.c |
| Line | 494 | 609 |
| Object | lspping_tlv_header | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/print-lspping.c |
| Method | lspping_print(netdissect_options *ndo, |

```
....
494.       const struct lspping_tlv_header *lspping_tlv_header;
....
609.           if (tlen < sizeof(struct lspping_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=1060097&projectid=60087&pathid=1603 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/print-lspping.c | freebsd-src-1/print-lspping.c |
| Line | 494 | 626 |
| Object | lspping_tlv_header | sizeof |

Code Snippet
File Name freebsd-src-1/print-lspping.c
Method lspping_print(netdissect_options *ndo,

```
....
494.      const struct lspping_tlv_header *lspping_tlv_header;
....
626.              tlen-=sizeof(struct lspping_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=1060097&projectid=60087&pathid=1604 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/print-lspping.c | freebsd-src-1/print-lspping.c |
| Line | 494 | 630 |
| Object | lspping_tlv_header | sizeof |

Code Snippet
File Name freebsd-src-1/print-lspping.c
Method lspping_print(netdissect_options *ndo,

```
....
494.      const struct lspping_tlv_header *lspping_tlv_header;
....
630.          tlv_tptr=tptr+sizeof(struct lspping_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=1060097&projectid=600 |

|  |  |
|---|---|
|  | 87&pathid=1605 |
| Status | New |

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/print-lspping.c | freebsd-src-1/print-lspping.c |
| Line | 494 | 634 |
| Object | lspping_tlv_header | sizeof |

Code Snippet
File Name freebsd-src-1/print-lspping.c
Method lspping_print(netdissect_options *ndo,

```
....
494.      const struct lspping_tlv_header *lspping_tlv_header;
....
634.          if (tlen < lspping_tlv_len+sizeof(struct
lspping_tlv_header))
```

### Use of Sizeof On a Pointer Type\Path 9:

|  |  |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1606 |
| Status | New |

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/print-lspping.c | freebsd-src-1/print-lspping.c |
| Line | 494 | 644 |
| Object | lspping_tlv_header | sizeof |

Code Snippet
File Name freebsd-src-1/print-lspping.c
Method lspping_print(netdissect_options *ndo,

```
....
494.      const struct lspping_tlv_header *lspping_tlv_header;
....
644.                  if (tlv_tlen < sizeof(struct lspping_tlv_header))
{
```

### Use of Sizeof On a Pointer Type\Path 10:

|  |  |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1607 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/print-lspping.c | freebsd-src-1/print-lspping.c |
| Line | 494 | 654 |
| Object | lspping_tlv_header | sizeof |

Code Snippet
File Name	freebsd-src-1/print-lspping.c
Method	lspping_print(netdissect_options *ndo,

```
....
494.      const struct lspping_tlv_header *lspping_tlv_header;
....
654.                  subtlv_tptr=tlv_tptr+sizeof(struct
lspping_tlv_header);
```

**Use of Sizeof On a Pointer Type\Path 11:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1608 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/print-lspping.c | freebsd-src-1/print-lspping.c |
| Line | 494 | 657 |
| Object | lspping_tlv_header | sizeof |

Code Snippet
File Name	freebsd-src-1/print-lspping.c
Method	lspping_print(netdissect_options *ndo,

```
....
494.      const struct lspping_tlv_header *lspping_tlv_header;
....
657.                  if (tlv_tlen < lspping_subtlv_len+sizeof(struct
lspping_tlv_header)) {
```

**Use of Sizeof On a Pointer Type\Path 12:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1609 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/print-lspping.c | freebsd-src-1/print-lspping.c |

| | | |
|---|---|---|
| Line | 494 | 863 |
| Object | lspping_tlv_header | sizeof |

Code Snippet
File Name freebsd-src-1/print-lspping.c
Method lspping_print(netdissect_options *ndo,

```
....
494.      const struct lspping_tlv_header *lspping_tlv_header;
....
863.                        print_unknown_data(ndo, tlv_tptr+sizeof(struct
lspping_tlv_header),
```

**Use of Sizeof On a Pointer Type\Path 13:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1610](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1610) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/print-lspping.c | freebsd-src-1/print-lspping.c |
| Line | 494 | 871 |
| Object | lspping_tlv_header | sizeof |

Code Snippet
File Name freebsd-src-1/print-lspping.c
Method lspping_print(netdissect_options *ndo,

```
....
494.      const struct lspping_tlv_header *lspping_tlv_header;
....
871.                        if (tlv_tlen <
lspping_subtlv_len+sizeof(struct lspping_tlv_header)) {
```

**Use of Sizeof On a Pointer Type\Path 14:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1611](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1611) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/print-lspping.c | freebsd-src-1/print-lspping.c |
| Line | 494 | 877 |
| Object | lspping_tlv_header | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/print-lspping.c |
| Method | lspping_print(netdissect_options *ndo, |

```
....
494.      const struct lspping_tlv_header *lspping_tlv_header;
....
877.                  tlv_tlen-=lspping_subtlv_len+sizeof(struct
lspping_tlv_header);
```

**Use of Sizeof On a Pointer Type\Path 15:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1612 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/print-lspping.c | freebsd-src-1/print-lspping.c |
| Line | 494 | 1059 |
| Object | lspping_tlv_header | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/print-lspping.c |
| Method | lspping_print(netdissect_options *ndo, |

```
....
494.      const struct lspping_tlv_header *lspping_tlv_header;
....
1059.              print_unknown_data(ndo, tptr+sizeof(struct
lspping_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=1060097&projectid=60087&pathid=1613 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/print-lspping.c | freebsd-src-1/print-lspping.c |
| Line | 494 | 1067 |
| Object | lspping_tlv_header | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/print-lspping.c |
| Method | lspping_print(netdissect_options *ndo, |

```
....
494.      const struct lspping_tlv_header *lspping_tlv_header;
....
1067.              if (tlen < lspping_tlv_len+sizeof(struct
lspping_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=1060097&projectid=60087&pathid=1614](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1614) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/print-lspping.c | freebsd-src-1/print-lspping.c |
| Line | 494 | 1071 |
| Object | lspping_tlv_header | sizeof |

Code Snippet
File Name freebsd-src-1/print-lspping.c
Method lspping_print(netdissect_options *ndo,

```
....
494.      const struct lspping_tlv_header *lspping_tlv_header;
....
1071.          tptr+=lspping_tlv_len+sizeof(struct lspping_tlv_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=1060097&projectid=60087&pathid=1615](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1615) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/print-lspping.c | freebsd-src-1/print-lspping.c |
| Line | 494 | 1072 |
| Object | lspping_tlv_header | sizeof |

Code Snippet
File Name freebsd-src-1/print-lspping.c
Method lspping_print(netdissect_options *ndo,

```
....
494.       const struct lspping_tlv_header *lspping_tlv_header;
....
1072.           tlen-=lspping_tlv_len+sizeof(struct lspping_tlv_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=1060097&projectid=60087&pathid=1616](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1616) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 147 | 147 |
| Object | sizeof | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | msg_grow_array(struct regional* region, struct dns_msg* msg) |

```
....
147.                    sizeof(struct ub_packed_rrset_key*)*(msg->rep-
>rrset_count+1));
```

### Use of Sizeof On a Pointer Type\Path 20:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1617](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1617) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 153 | 153 |
| Object | sizeof | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | msg_grow_array(struct regional* region, struct dns_msg* msg) |

```
....
153.                    sizeof(struct ub_packed_rrset_key*)*(msg->rep-
>rrset_count+1));
```

## Use of Sizeof On a Pointer Type\Path 21:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1618 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 157 | 157 |
| Object | sizeof | sizeof |

Code Snippet
File Name freebsd-src-1/authzone.c
Method msg_grow_array(struct regional* region, struct dns_msg* msg)

```
....
157.                     sizeof(struct ub_packed_rrset_key*)*msg->rep-
>rrset_count);
```

## Use of Sizeof On a Pointer Type\Path 22:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1619 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 740 | 740 |
| Object | sizeof | sizeof |

Code Snippet
File Name freebsd-src-1/authzone.c
Method rrset_remove_rr(struct auth_rrset* rrset, size_t index)

```
....
740.                sizeof(size_t) + sizeof(uint8_t*) + sizeof(time_t) +
```

## Use of Sizeof On a Pointer Type\Path 23:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1620 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 802 | 802 |
| Object | sizeof | sizeof |

Code Snippet
File Name freebsd-src-1/authzone.c
Method rrset_add_rr(struct auth_rrset* rrset, uint32_t rr_ttl, uint8_t* rdata,

```
....
802.            + sizeof(size_t) + sizeof(uint8_t*) + sizeof(time_t)
```

**Use of Sizeof On a Pointer Type\Path 24:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1621 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 881 | 881 |
| Object | sizeof | sizeof |

Code Snippet
File Name freebsd-src-1/authzone.c
Method rrset_create(struct auth_data* node, uint16_t rr_type, uint32_t rr_ttl,

```
....
881.            sizeof(uint8_t*) + sizeof(time_t) + rdatalen);
```

**Use of Sizeof On a Pointer Type\Path 25:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1622 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 955 | 955 |
| Object | sizeof | sizeof |

Code Snippet

File Name freebsd-src-1/authzone.c
Method rrset_moveover_rrsigs(struct auth_data* node, uint16_t rr_type,

```
....
955.                + sigs*(sizeof(size_t) + sizeof(uint8_t*) +
sizeof(time_t))
```

### Use of Sizeof On a Pointer Type\Path 26:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1623 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1016 | 1016 |
| Object | sizeof | sizeof |

Code Snippet
File Name freebsd-src-1/authzone.c
Method rrset_moveover_rrsigs(struct auth_data* node, uint16_t rr_type,

```
....
1016.               sizeof(uint8_t*) + sizeof(time_t)) + sigsz);
```

### Use of Sizeof On a Pointer Type\Path 27:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1624 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1018 | 1018 |
| Object | sizeof | sizeof |

Code Snippet
File Name freebsd-src-1/authzone.c
Method rrset_moveover_rrsigs(struct auth_data* node, uint16_t rr_type,

```
....
1018.               - sigs*(sizeof(size_t) + sizeof(uint8_t*) +
sizeof(time_t))
```

### Use of Sizeof On a Pointer Type\Path 28:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1625 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 2697 | 2697 |
| Object | sizeof | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/authzone.c |
| Method | create_synth_cname(uint8_t* qname, size_t qname_len, struct regional* region, |

```
....
2697.            sizeof(uint8_t*) + sizeof(time_t) + sizeof(uint16_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=1060097&projectid=60087&pathid=1626 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1609 | 1609 |
| Object | sizeof | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | main(int argc, char **argv) |

```
....
1609.          sizeof (void *))) == NULL)
```

### Use of Sizeof On a Pointer Type\Path 30:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1627 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/mrsas.c | freebsd-src-1/mrsas.c |
| Line | 2846 | 2846 |
| Object | sizeof | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/mrsas.c |
| Method | mrsas_alloc_mpt_cmds(struct mrsas_softc *sc) |

```
....
2846.       sc->mpt_cmd_list = malloc(sizeof(struct mrsas_mpt_cmd *) *
max_fw_cmds,
```

### Use of Sizeof On a Pointer Type\Path 31:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1628 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/mrsas.c | freebsd-src-1/mrsas.c |
| Line | 2852 | 2852 |
| Object | sizeof | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/mrsas.c |
| Method | mrsas_alloc_mpt_cmds(struct mrsas_softc *sc) |

```
....
2852.       memset(sc->mpt_cmd_list, 0, sizeof(struct mrsas_mpt_cmd *) *
max_fw_cmds);
```

### Use of Sizeof On a Pointer Type\Path 32:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1629 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/optimize.c | freebsd-src-1/optimize.c |
| Line | 2714 | 2714 |
| Object | sizeof | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/optimize.c |
| Method | convert_code_r(conv_state_t *conv_state, struct icode *ic, struct block *p) |

```
....
2714.           offset = (struct slist **)calloc(slen, sizeof(struct
slist *));
```

### Use of Sizeof On a Pointer Type\Path 33:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1630 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2501 | 2501 |
| Object | sizeof | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | get_cpuid_set(void) |

```
....
2501.           sz = sizeof(char *) * pmc_allocated_cnt;
```

### Use of Sizeof On a Pointer Type\Path 34:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1631 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2534 | 2534 |
| Object | sizeof | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | get_cpuid_set(void) |

```
....
2534.               sz = sizeof(char *) * (pmc_allocated_cnt * 2);
```

**Use of Sizeof On a Pointer Type\Path 35:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1632](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1632) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2697 | 2697 |
| Object | sizeof | sizeof |

Code Snippet

File Name freebsd-src-1/pmcstudy.c

Method build_command_for_exp(struct expression *exp)

```
....
2697.		mal = cnt_pmc * sizeof(char *);
```

**Use of Sizeof On a Pointer Type\Path 36:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1633](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1633) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 214 | 214 |
| Object | sizeof | sizeof |

Code Snippet

File Name freebsd-src-1/test_x509.c

Method HT_new(void)

```
....
214.		ht->buckets = xmalloc(ht->num_buckets * sizeof(ht_elt *));
```

## 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=1060097&projectid=600 |

| | |
|---|---|
| | 87&pathid=1131 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 1563 | 1563 |
| Object | digest_buf | sizeof |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_mtree.c
Method parse_digest(struct archive_read *a, struct archive_entry *entry,

```
....
1563.        if (len > sizeof(digest_buf)) {
```

### Sizeof Pointer Argument\Path 2:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1132 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rtadvctl.c | freebsd-src-1/rtadvctl.c |
| Line | 177 | 177 |
| Object | dtable | sizeof |

Code Snippet
File Name freebsd-src-1/rtadvctl.c
Method main(int argc, char *argv[])

```
....
177.        for (i = 0; (size_t)i < sizeof(dtable)/sizeof(dtable[0]);
i++) {
```

### Sizeof Pointer Argument\Path 3:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1133 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rtadvctl.c | freebsd-src-1/rtadvctl.c |

| | | |
|---|---|---|
| Line | 177 | 177 |
| Object | dtable | sizeof |

Code Snippet
File Name freebsd-src-1/rtadvctl.c
Method main(int argc, char *argv[])

```
....
177.         for (i = 0; (size_t)i < sizeof(dtable)/sizeof(dtable[0]);
i++) {
```

**Sizeof Pointer Argument\Path 4:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1134 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 2651 | 2651 |
| Object | string | sizeof |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method modinfo(int argc, const char *argv[])

```
....
2651.        bzero(&string, sizeof(string));
```

**Sizeof Pointer Argument\Path 5:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1135 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 2660 | 2660 |
| Object | string | sizeof |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method modinfo(int argc, const char *argv[])

```
....
2660.        bzero(&string, sizeof(string));
```

### Sizeof Pointer Argument\Path 6:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1136 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 2651 | 2660 |
| Object | string | sizeof |

Code Snippet

File Name freebsd-src-1/cxgbetool.c

Method modinfo(int argc, const char *argv[])

```
....
2651.        bzero(&string, sizeof(string));
....
2660.        bzero(&string, sizeof(string));
```

### Sizeof Pointer Argument\Path 7:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1137 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 2669 | 2669 |
| Object | string | sizeof |

Code Snippet

File Name freebsd-src-1/cxgbetool.c

Method modinfo(int argc, const char *argv[])

```
....
2669.        bzero(&string, sizeof(string));
```

### Sizeof Pointer Argument\Path 8:

| | |
|---|---|
| Severity | Low |

| | |
|---|---|
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1138](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1138) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 2660 | 2669 |
| Object | string | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cxgbetool.c |
| Method | modinfo(int argc, const char *argv[]) |

```
....
2660.        bzero(&string, sizeof(string));
....
2669.        bzero(&string, sizeof(string));
```

**Sizeof Pointer Argument\Path 9:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1139](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1139) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 2651 | 2669 |
| Object | string | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cxgbetool.c |
| Method | modinfo(int argc, const char *argv[]) |

```
....
2651.        bzero(&string, sizeof(string));
....
2669.        bzero(&string, sizeof(string));
```

**Sizeof Pointer Argument\Path 10:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1140](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1140) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 2678 | 2678 |
| Object | string | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cxgbetool.c |
| Method | modinfo(int argc, const char *argv[]) |

```
....
2678.        bzero(&string, sizeof(string));
```

### Sizeof Pointer Argument\Path 11:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1141 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 2669 | 2678 |
| Object | string | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cxgbetool.c |
| Method | modinfo(int argc, const char *argv[]) |

```
....
2669.        bzero(&string, sizeof(string));
....
2678.        bzero(&string, sizeof(string));
```

### Sizeof Pointer Argument\Path 12:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1142 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 2660 | 2678 |
| Object | string | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cxgbetool.c |
| Method | modinfo(int argc, const char *argv[]) |

```
....
2660.       bzero(&string, sizeof(string));
....
2678.       bzero(&string, sizeof(string));
```

**Sizeof Pointer Argument\Path 13:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1143](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1143) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 2651 | 2678 |
| Object | string | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cxgbetool.c |
| Method | modinfo(int argc, const char *argv[]) |

```
....
2651.       bzero(&string, sizeof(string));
....
2678.       bzero(&string, sizeof(string));
```

**Sizeof Pointer Argument\Path 14:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1144](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1144) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 854 | 854 |
| Object | config | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_list(int argc, char * const *argv) |

```
....
854.        gctl_add_param(req, "config", sizeof(config), config,
```

**Sizeof Pointer Argument\Path 15:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1145 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/in6_ifattach.c | freebsd-src-1/in6_ifattach.c |
| Line | 191 | 191 |
| Object | seed | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/in6_ifattach.c |
| Method | generate_tmp_ifid(u_int8_t *seed0, const u_int8_t *seed1, u_int8_t *ret) |

```
....
191.        MD5Update(&ctxt, seed, sizeof(seed));
```

**Sizeof Pointer Argument\Path 16:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1146 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2813 | 2813 |
| Object | glob_cpu | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | main(int argc, char **argv) |

```
....
2813.        memset(glob_cpu, 0, sizeof(glob_cpu));
```

**Sizeof Pointer Argument\Path 17:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1147 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rec_layer_s3.c | freebsd-src-1/rec_layer_s3.c |
| Line | 858 | 858 |
| Object | wr | sizeof |

Code Snippet
File Name freebsd-src-1/rec_layer_s3.c
Method int do_ssl3_write(SSL *s, int type, const unsigned char *buf,

```
....
858.       memset(wr, 0, sizeof(wr));
```

**Sizeof Pointer Argument\Path 18:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1148 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/snprintf.c | freebsd-src-1/snprintf.c |
| Line | 1016 | 1016 |
| Object | iconvert | sizeof |

Code Snippet
File Name freebsd-src-1/snprintf.c
Method fmtint(char *str, size_t *len, size_t size, INTMAX_T value, int base, int width,

```
....
1016.       pos = convert(uvalue, iconvert, sizeof(iconvert), base,
```

**Sizeof Pointer Argument\Path 19:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1149 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/snprintf.c | freebsd-src-1/snprintf.c |
| Line | 1289 | 1289 |

| | | |
|---|---|---|
| Object | iconvert | sizeof |

Code Snippet
File Name freebsd-src-1/snprintf.c
Method fmtflt(char *str, size_t *len, size_t size, LDOUBLE fvalue, int width,

```
....
1289.        ipos = convert(intpart, iconvert, sizeof(iconvert), 10, 0);
```

**Sizeof Pointer Argument\Path 20:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1150 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1725 | 1725 |
| Object | args | sizeof |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method run_cmd_loop(int argc, char *argv[], const char *iff_name)

```
....
1725.             for (i = 2; i < sizeof(args)/sizeof(args[0]) - 1; i++)
{
```

**Sizeof Pointer Argument\Path 21:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1151 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1725 | 1725 |
| Object | args | sizeof |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method run_cmd_loop(int argc, char *argv[], const char *iff_name)

```
....
1725.            for (i = 2; i < sizeof(args)/sizeof(args[0]) - 1; i++)
{
```

**Sizeof Pointer Argument\Path 22:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1152 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2946 | 2946 |
| Object | glob_cpu | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | main(int argc, char **argv) |

```
....
2946.            memset(glob_cpu, 0, sizeof(glob_cpu));
```

**Sizeof Pointer Argument\Path 23:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1153 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/snprintf.c | freebsd-src-1/snprintf.c |
| Line | 1291 | 1291 |
| Object | fconvert | sizeof |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/snprintf.c |
| Method | fmtflt(char *str, size_t *len, size_t size, LDOUBLE fvalue, int width, |

```
....
1291.            fpos = convert(fracpart, fconvert, sizeof(fconvert),
10, 0);
```

**Sizeof Pointer Argument\Path 24:**

| | |
|---|---|
| Severity | Low |

| | |
|---|---|
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1154 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 1090 | 1090 |
| Object | tmp | sizeof |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method string_to_hash(const char *name)

```
....
1090.                          if (v == sizeof tmp) {
```

**Sizeof Pointer Argument\Path 25:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1155 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 1128 | 1128 |
| Object | tmp | sizeof |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method string_to_curve(const char *name)

```
....
1128.                          if (v == sizeof tmp) {
```

**Sizeof Pointer Argument\Path 26:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1156 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |

| | | |
|---|---|---|
| Line | 1731 | 1731 |
| Object | args | sizeof |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method run_cmd_loop(int argc, char *argv[], const char *iff_name)

```
....
1731.            args[sizeof(args)/sizeof(args[0]) - 1] = 0;
```

### Sizeof Pointer Argument\Path 27:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1157 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1725 | 1731 |
| Object | args | sizeof |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method run_cmd_loop(int argc, char *argv[], const char *iff_name)

```
....
1725.            for (i = 2; i < sizeof(args)/sizeof(args[0]) - 1; i++)
{
....
1731.            args[sizeof(args)/sizeof(args[0]) - 1] = 0;
```

### Sizeof Pointer Argument\Path 28:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1158 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1725 | 1731 |
| Object | args | sizeof |

Code Snippet
File Name freebsd-src-1/cxgbtool.c

| | |
|---|---|
| Method | run_cmd_loop(int argc, char *argv[], const char *iff_name) |

```
....
1725.               for (i = 2; i < sizeof(args)/sizeof(args[0]) - 1; i++)
{
....
1731.               args[sizeof(args)/sizeof(args[0]) - 1] = 0;
```

**Sizeof Pointer Argument\Path 29:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1159](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1159) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1715 | 1715 |
| Object | buf | sizeof |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/cxgbtool.c |
| Method | run_cmd_loop(int argc, char *argv[], const char *iff_name) |

```
....
1715.               n = read(STDIN_FILENO, buf, sizeof(buf) - 1);
```

**Sizeof Pointer Argument\Path 30:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1160](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1160) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 327 | 327 |
| Object | plex | sizeof |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_create(int argc, char * const *argv) |

```
....
327.                    strlcpy(plex, p->name, sizeof(plex));
```

## 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=1060097&projectid=60087&pathid=1086 |
| Status | New |

The size of the buffer used by ipseckey_has_safe_characters in "%d %d %d %s ", at line 215 of freebsd-src-1/ipsecmod.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that ipseckey_has_safe_characters passes to "%d %d %d %s ", at line 215 of freebsd-src-1/ipsecmod.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/ipsecmod.c | freebsd-src-1/ipsecmod.c |
| Line | 223 | 223 |
| Object | "%d %d %d %s " | "%d %d %d %s " |

Code Snippet
File Name	freebsd-src-1/ipsecmod.c
Method	ipseckey_has_safe_characters(char* s, size_t slen) {

```
....
223.        if(sscanf(s, "%d %d %d %s ",
```

**Potential Precision Problem\Path 2:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1087 |
| Status | New |

The size of the buffer used by predicate_add in "(%s) && (%s %s %p)", at line 590 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that predicate_add passes to "(%s) && (%s %s %p)", at line 590 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 609 | 609 |
| Object | "(%s) && (%s %s %p)" | "(%s) && (%s %s %p)" |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method predicate_add(char **pred, char *what, char *cmp, uintptr_t value)

```
....
609.                    (void) sprintf(new, "(%s) && (%s %s %p)",
```

**Potential Precision Problem\Path 3:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1088 |
| Status | New |

The size of the buffer used by predicate_add in "(%s) && (%s)", at line 590 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that predicate_add passes to "(%s) && (%s)", at line 590 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 612 | 612 |
| Object | "(%s) && (%s)" | "(%s) && (%s)" |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method predicate_add(char **pred, char *what, char *cmp, uintptr_t value)

```
....
612.                    (void) sprintf(new, "(%s) && (%s)", *pred,
what);
```

**Potential Precision Problem\Path 4:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1089 |
| Status | New |

The size of the buffer used by predicate_add in "%s %s %p", at line 590 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that predicate_add passes to "%s %s %p", at line 590 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 616 | 616 |
| Object | "%s %s %p" | "%s %s %p" |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/lockstat.c |
| Method | predicate_add(char **pred, char *what, char *cmp, uintptr_t value) |

```
....
616.                    (void) sprintf(new, "%s %s %p",
```

### Potential Precision Problem\Path 5:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1090 |
| Status | New |

The size of the buffer used by predicate_add in "%s", at line 590 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that predicate_add passes to "%s", at line 590 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 619 | 619 |
| Object | "%s" | "%s" |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/lockstat.c |
| Method | predicate_add(char **pred, char *what, char *cmp, uintptr_t value) |

```
....
619.                    (void) sprintf(new, "%s", what);
```

### Potential Precision Problem\Path 6:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1091 |
| Status | New |

The size of the buffer used by filter_add in "%s(%s >= 0x%p && %s < 0x%p)", at line 635 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that filter_add passes to "%s(%s >= 0x%p && %s < 0x%p)", at line 635 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 646 | 646 |
| Object | "%s(%s >= 0x%p && %s < 0x%p)" | "%s(%s >= 0x%p && %s < 0x%p)" |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/lockstat.c |

Method filter_add(char **filt, char *what, uintptr_t base, size_t size)

```
....
646.        (void) sprintf(c, "%s(%s >= 0x%p && %s < 0x%p)", *filt[0] !=
'\0' ?
```

**Potential Precision Problem\Path 7:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1092 |
| Status | New |

The size of the buffer used by format_symbol in "%s[%ld]", at line 1726 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that format_symbol passes to "%s[%ld]", at line 1726 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1735 | 1735 |
| Object | "%s[%ld]" | "%s[%ld]" |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method format_symbol(char *buf, uintptr_t addr, int show_size)

```
....
1735.           (void) sprintf(buf, "%s[%ld]", symname,
(long)symsize);
```

**Potential Precision Problem\Path 8:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1093 |
| Status | New |

The size of the buffer used by format_symbol in "%s", at line 1726 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that format_symbol passes to "%s", at line 1726 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1737 | 1737 |
| Object | "%s" | "%s" |

Code Snippet
File Name freebsd-src-1/lockstat.c

| | |
|---|---|
| Method | format_symbol(char *buf, uintptr_t addr, int show_size) |

```
....
1737.             (void) sprintf(buf, "%s", symname);
```

### Potential Precision Problem\Path 9:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1094 |
| Status | New |

The size of the buffer used by format_symbol in "%s+%ld", at line 1726 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that format_symbol passes to "%s+%ld", at line 1726 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1740 | 1740 |
| Object | "%s+%ld" | "%s+%ld" |

| Code Snippet | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | format_symbol(char *buf, uintptr_t addr, int show_size) |

```
....
1740.             (void) sprintf(buf, "%s+%ld", symname, (long)symoff);
```

### Potential Precision Problem\Path 10:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1095 |
| Status | New |

The size of the buffer used by format_symbol in "%s+0x%llx", at line 1726 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that format_symbol passes to "%s+0x%llx", at line 1726 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1745 | 1745 |
| Object | "%s+0x%llx" | "%s+0x%llx" |

| Code Snippet | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | format_symbol(char *buf, uintptr_t addr, int show_size) |

```
....
1745.               (void) sprintf(buf, "%s+0x%llx", symname,
```

### Potential Precision Problem\Path 11:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1096 |
| Status | New |

The size of the buffer used by report_stats in "%s%s", at line 1753 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that report_stats passes to "%s%s", at line 1753 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1777 | 1777 |
| Object | "%s%s" | "%s%s" |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | report_stats(FILE *out, lsrec_t **sort_buf, size_t nrecs, uint64_t total_count, |

```
....
1777.         (void) sprintf(lhdr, "%s%s",
```

### Potential Precision Problem\Path 12:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1097 |
| Status | New |

The size of the buffer used by report_stats in "%s%s", at line 1753 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that report_stats passes to "%s%s", at line 1753 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1779 | 1779 |
| Object | "%s%s" | "%s%s" |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | report_stats(FILE *out, lsrec_t **sort_buf, size_t nrecs, uint64_t total_count, |

```
....
1779.        (void) sprintf(chdr, "%s%s",
```

### Potential Precision Problem\Path 13:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1098 |
| Status | New |

The size of the buffer used by report_stats in "%s", at line 1753 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that report_stats passes to "%s", at line 1753 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1790 | 1790 |
| Object | "%s" | "%s" |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | report_stats(FILE *out, lsrec_t **sort_buf, size_t nrecs, uint64_t total_count, |

```
....
1790.              (void) sprintf(buf, "%s",
g_event_info[event].ev_units);
```

### Potential Precision Problem\Path 14:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1099 |
| Status | New |

The size of the buffer used by report_stats in "%s", at line 1753 of freebsd-src-1/lockstat.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that report_stats passes to "%s", at line 1753 of freebsd-src-1/lockstat.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1843 | 1843 |
| Object | "%s" | "%s" |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/lockstat.c |
| Method | report_stats(FILE *out, lsrec_t **sort_buf, size_t nrecs, uint64_t total_count, |

```
....
1843.                    (void) sprintf(buf, "%s",
```

### Potential Precision Problem\Path 15:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1100 |
| Status | New |

The size of the buffer used by test_for_a_pmc in "/usr/sbin/pmcstat -w .25 -c 0 -s %s", at line 2568 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that test_for_a_pmc passes to "/usr/sbin/pmcstat -w .25 -c 0 -s %s", at line 2568 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2583 | 2583 |
| Object | "/usr/sbin/pmcstat -w .25 -c 0 -s %s" | "/usr/sbin/pmcstat -w .25 -c 0 -s %s" |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | test_for_a_pmc(const char *pmc, int out_so_far) |

```
....
2583.        sprintf(my_command, "/usr/sbin/pmcstat -w .25 -c 0 -s %s",
pmc);
```

### Potential Precision Problem\Path 16:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1101 |
| Status | New |

The size of the buffer used by test_for_a_pmc in "%s", at line 2568 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that test_for_a_pmc passes to "%s", at line 2568 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2590 | 2590 |
| Object | "%s" | "%s" |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | test_for_a_pmc(const char *pmc, int out_so_far) |

```
....
2590.        len = sprintf(resp, "%s", pmc);
```

**Potential Precision Problem\Path 17:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1102 |
| Status | New |

The size of the buffer used by build_command_for_exp in " -s %s", at line 2669 of freebsd-src-1/pmcstudy.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that build_command_for_exp passes to " -s %s", at line 2669 of freebsd-src-1/pmcstudy.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2727 | 2727 |
| Object | " -s %s" | " -s %s" |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method build_command_for_exp(struct expression *exp)

```
....
2727.            sprintf(forming, " -s %s", vars[i]);
```

**Potential Precision Problem\Path 18:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1103 |
| Status | New |

The size of the buffer used by action_disable in "%s:disable=", at line 308 of freebsd-src-1/rtadvctl.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that action_disable passes to "%s:disable=", at line 308 of freebsd-src-1/rtadvctl.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rtadvctl.c | freebsd-src-1/rtadvctl.c |
| Line | 320 | 320 |
| Object | "%s:disable=" | "%s:disable=" |

Code Snippet
File Name freebsd-src-1/rtadvctl.c
Method action_disable(int argc, char **argv)

```
....
320.              sprintf(argv_disable, "%s:disable=", argv[i]);
```

### Potential Precision Problem\Path 19:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1104 |
| Status | New |

The size of the buffer used by action_enable in "%s:enable=", at line 329 of freebsd-src-1/rtadvctl.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that action_enable passes to "%s:enable=", at line 329 of freebsd-src-1/rtadvctl.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rtadvctl.c | freebsd-src-1/rtadvctl.c |
| Line | 341 | 341 |
| Object | "%s:enable=" | "%s:enable=" |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/rtadvctl.c |
| Method | action_enable(int argc, char **argv) |

```
....
341.              sprintf(argv_enable, "%s:enable=", argv[i]);
```

### Potential Precision Problem\Path 20:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1105 |
| Status | New |

The size of the buffer used by action_reload in "%s:reload=", at line 350 of freebsd-src-1/rtadvctl.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that action_reload passes to "%s:reload=", at line 350 of freebsd-src-1/rtadvctl.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rtadvctl.c | freebsd-src-1/rtadvctl.c |
| Line | 364 | 364 |
| Object | "%s:reload=" | "%s:reload=" |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/rtadvctl.c |
| Method | action_reload(int argc, char **argv) |

```
....
364.              sprintf(argv_reload, "%s:reload=", argv[i]);
```

**Potential Precision Problem\Path 21:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1106](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1106) |
| Status | New |

The size of the buffer used by action_show in "invalid interface %s", at line 408 of freebsd-src-1/rtadvctl.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that action_show passes to "invalid interface %s", at line 408 of freebsd-src-1/rtadvctl.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rtadvctl.c | freebsd-src-1/rtadvctl.c |
| Line | 460 | 460 |
| Object | "invalid interface %s" | "invalid interface %s" |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/rtadvctl.c |
| Method | action_show(int argc, char **argv) |

```
....
460.                              sprintf(errmsgbuf, "invalid interface %s",
```

**Potential Precision Problem\Path 22:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1107](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1107) |
| Status | New |

The size of the buffer used by action_show in "%s:ifi=", at line 408 of freebsd-src-1/rtadvctl.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that action_show passes to "%s:ifi=", at line 408 of freebsd-src-1/rtadvctl.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rtadvctl.c | freebsd-src-1/rtadvctl.c |
| Line | 483 | 483 |
| Object | "%s:ifi=" | "%s:ifi=" |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/rtadvctl.c |
| Method | action_show(int argc, char **argv) |

```
....
483.            sprintf(argv_ifi, "%s:ifi=", ifi->ifi_ifname);
```

### Potential Precision Problem\Path 23:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1108 |
| Status | New |

The size of the buffer used by action_show in "%s:rai=", at line 408 of freebsd-src-1/rtadvctl.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that action_show passes to "%s:rai=", at line 408 of freebsd-src-1/rtadvctl.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rtadvctl.c | freebsd-src-1/rtadvctl.c |
| Line | 550 | 550 |
| Object | "%s:rai=" | "%s:rai=" |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/rtadvctl.c |
| Method | action_show(int argc, char **argv) |

```
....
550.            sprintf(argv_rai, "%s:rai=", ifi->ifi_ifname);
```

### Potential Precision Problem\Path 24:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1109 |
| Status | New |

The size of the buffer used by action_show in "%s:ifi_ra_timer=", at line 408 of freebsd-src-1/rtadvctl.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that action_show passes to "%s:ifi_ra_timer=", at line 408 of freebsd-src-1/rtadvctl.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rtadvctl.c | freebsd-src-1/rtadvctl.c |
| Line | 601 | 601 |
| Object | "%s:ifi_ra_timer=" | "%s:ifi_ra_timer=" |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/rtadvctl.c |
| Method | action_show(int argc, char **argv) |

```
....
601.                    sprintf(argv_ifi_ra_timer, "%s:ifi_ra_timer=",
```

### Potential Precision Problem\Path 25:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1110](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1110) |
| Status | New |

The size of the buffer used by action_show in "%s:rti=", at line 408 of freebsd-src-1/rtadvctl.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that action_show passes to "%s:rti=", at line 408 of freebsd-src-1/rtadvctl.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rtadvctl.c | freebsd-src-1/rtadvctl.c |
| Line | 633 | 633 |
| Object | "%s:rti=" | "%s:rti=" |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/rtadvctl.c |
| Method | action_show(int argc, char **argv) |

```
....
633.                sprintf(argv_rti, "%s:rti=", ifi->ifi_ifname);
```

### Potential Precision Problem\Path 26:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1111](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1111) |
| Status | New |

The size of the buffer used by action_show in "%s:pfx=", at line 408 of freebsd-src-1/rtadvctl.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that action_show passes to "%s:pfx=", at line 408 of freebsd-src-1/rtadvctl.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rtadvctl.c | freebsd-src-1/rtadvctl.c |
| Line | 649 | 649 |
| Object | "%s:pfx=" | "%s:pfx=" |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/rtadvctl.c |
| Method | action_show(int argc, char **argv) |

```
....
649.            sprintf(argv_pfx, "%s:pfx=", ifi->ifi_ifname);
```

**Potential Precision Problem\Path 27:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1112](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1112) |
| Status | New |

The size of the buffer used by action_show in "%s:rdnss=", at line 408 of freebsd-src-1/rtadvctl.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that action_show passes to "%s:rdnss=", at line 408 of freebsd-src-1/rtadvctl.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rtadvctl.c | freebsd-src-1/rtadvctl.c |
| Line | 667 | 667 |
| Object | "%s:rdnss=" | "%s:rdnss=" |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/rtadvctl.c |
| Method | action_show(int argc, char **argv) |

```
....
667.            sprintf(argv_rdnss, "%s:rdnss=", ifi->ifi_ifname);
```

**Potential Precision Problem\Path 28:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1113](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1113) |
| Status | New |

The size of the buffer used by action_show in "%s:dnssl=", at line 408 of freebsd-src-1/rtadvctl.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that action_show passes to "%s:dnssl=", at line 408 of freebsd-src-1/rtadvctl.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rtadvctl.c | freebsd-src-1/rtadvctl.c |
| Line | 682 | 682 |
| Object | "%s:dnssl=" | "%s:dnssl=" |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/rtadvctl.c |
| Method | action_show(int argc, char **argv) |

```
....
682.             sprintf(argv_dnssl, "%s:dnssl=", ifi->ifi_ifname);
```

**Potential Precision Problem\Path 29:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1114 |
| Status | New |

The size of the buffer used by read_file in "%s/%s", at line 438 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that read_file passes to "%s/%s", at line 438 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 447 | 447 |
| Object | "%s/%s" | "%s/%s" |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/test_x509.c |
| Method | read_file(const char *name, size_t *len) |

```
....
447.         sprintf(dname, "%s/%s", DIRNAME, name);
```

## 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=1060097&projectid=60087&pathid=1804 |
| Status | New |

Method freebsd4_sendsig in freebsd-src-1/exec_machdep.c, at line 261, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/exec_machdep.c | freebsd-src-1/exec_machdep.c |
| Line | 288 | 288 |

| | | |
|---|---|---|
| Object | bcopy | bcopy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/exec_machdep.c |
| Method | freebsd4_sendsig(sig_t catcher, ksiginfo_t *ksi, sigset_t *mask) |

```
....
288.        bcopy(regs, &sf.sf_uc.uc_mcontext.mc_fs, sizeof(*regs));
```

### Use of Obsolete Functions\Path 2:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1805 |
| Status | New |

Method sendsig in freebsd-src-1/exec_machdep.c, at line 380, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/exec_machdep.c | freebsd-src-1/exec_machdep.c |
| Line | 431 | 431 |
| Object | bcopy | bcopy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/exec_machdep.c |
| Method | sendsig(sig_t catcher, ksiginfo_t *ksi, sigset_t *mask) |

```
....
431.        bcopy(regs, &sf.sf_uc.uc_mcontext.mc_fs, sizeof(*regs));
```

### Use of Obsolete Functions\Path 3:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1806 |
| Status | New |

Method freebsd4_sigreturn in freebsd-src-1/exec_machdep.c, at line 659, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/exec_machdep.c | freebsd-src-1/exec_machdep.c |
| Line | 703 | 703 |
| Object | bcopy | bcopy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/exec_machdep.c |

| | |
|---|---|
| Method | freebsd4_sigreturn(struct thread *td, struct freebsd4_sigreturn_args *uap) |

```
....
703.            bcopy(&ucp->uc_mcontext.mc_fs, tf, sizeof(struct
trapframe));
```

### Use of Obsolete Functions\Path 4:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1807 |
| Status | New |

Method freebsd4_sigreturn in freebsd-src-1/exec_machdep.c, at line 659, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/exec_machdep.c | freebsd-src-1/exec_machdep.c |
| Line | 741 | 741 |
| Object | bcopy | bcopy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/exec_machdep.c |
| Method | freebsd4_sigreturn(struct thread *td, struct freebsd4_sigreturn_args *uap) |

```
....
741.            bcopy(&ucp->uc_mcontext.mc_fs, regs, sizeof(*regs));
```

### Use of Obsolete Functions\Path 5:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1808 |
| Status | New |

Method sys_sigreturn in freebsd-src-1/exec_machdep.c, at line 757, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/exec_machdep.c | freebsd-src-1/exec_machdep.c |
| Line | 812 | 812 |
| Object | bcopy | bcopy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/exec_machdep.c |
| Method | sys_sigreturn(struct thread *td, struct sigreturn_args *uap) |

```
....
812.            bcopy(&ucp->uc_mcontext.mc_fs, tf, sizeof(struct
trapframe));
```

### Use of Obsolete Functions\Path 6:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1809 |
| Status | New |

Method sys_sigreturn in freebsd-src-1/exec_machdep.c, at line 757, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/exec_machdep.c | freebsd-src-1/exec_machdep.c |
| Line | 876 | 876 |
| Object | bcopy | bcopy |

Code Snippet
File Name   freebsd-src-1/exec_machdep.c
Method   sys_sigreturn(struct thread *td, struct sigreturn_args *uap)

```
....
876.            bcopy(&ucp->uc_mcontext.mc_fs, regs, sizeof(*regs));
```

### Use of Obsolete Functions\Path 7:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1810 |
| Status | New |

Method fill_fpregs in freebsd-src-1/exec_machdep.c, at line 1076, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/exec_machdep.c | freebsd-src-1/exec_machdep.c |
| Line | 1087 | 1087 |
| Object | bcopy | bcopy |

Code Snippet
File Name   freebsd-src-1/exec_machdep.c
Method   fill_fpregs(struct thread *td, struct fpreg *fpregs)

```
....
1087.           bcopy(&get_pcb_user_save_td(td)->sv_87, fpregs,
```

### Use of Obsolete Functions\Path 8:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1811 |
| Status | New |

Method set_fpregs in freebsd-src-1/exec_machdep.c, at line 1093, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/exec_machdep.c | freebsd-src-1/exec_machdep.c |
| Line | 1101 | 1101 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/exec_machdep.c
Method set_fpregs(struct thread *td, struct fpreg *fpregs)

```
....
1101.                bcopy(fpregs, &get_pcb_user_save_td(td)->sv_87,
```

### Use of Obsolete Functions\Path 9:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1812 |
| Status | New |

Method get_fpcontext in freebsd-src-1/exec_machdep.c, at line 1210, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/exec_machdep.c | freebsd-src-1/exec_machdep.c |
| Line | 1216 | 1216 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/exec_machdep.c
Method get_fpcontext(struct thread *td, mcontext_t *mcp, char *xfpusave,

```
....
1216.         bcopy(get_pcb_user_save_td(td), &mcp->mc_fpstate[0],
```

### Use of Obsolete Functions\Path 10:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1813 |
| Status | New |

Method get_fpcontext in freebsd-src-1/exec_machdep.c, at line 1210, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/exec_machdep.c | freebsd-src-1/exec_machdep.c |
| Line | 1229 | 1229 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/exec_machdep.c
Method get_fpcontext(struct thread *td, mcontext_t *mcp, char *xfpusave,

```
....
1229.       bcopy(get_pcb_user_save_td(td) + 1, xfpusave, len);
```

**Use of Obsolete Functions\Path 11:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1814 |
| Status | New |

Method bge_rxeof in freebsd-src-1/if_bge.c, at line 4302, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/if_bge.c | freebsd-src-1/if_bge.c |
| Line | 4387 | 4387 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/if_bge.c
Method bge_rxeof(struct bge_softc *sc, uint16_t rx_prod, int holdlck)

```
....
4387.                   bcopy(m->m_data, m->m_data + ETHER_ALIGN,
```

**Use of Obsolete Functions\Path 12:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1815 |
| Status | New |

Method get_rand_ifid in freebsd-src-1/in6_ifattach.c, at line 118, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/in6_ifattach.c | freebsd-src-1/in6_ifattach.c |
| Line | 144 | 144 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/in6_ifattach.c
Method get_rand_ifid(struct ifnet *ifp, struct in6_addr *in6)

```
....
144.         bcopy(digest, &in6->s6_addr[8], 8);
```

**Use of Obsolete Functions\Path 13:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1816 |
| Status | New |

Method generate_tmp_ifid in freebsd-src-1/in6_ifattach.c, at line 157, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/in6_ifattach.c | freebsd-src-1/in6_ifattach.c |
| Line | 170 | 170 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/in6_ifattach.c
Method generate_tmp_ifid(u_int8_t *seed0, const u_int8_t *seed1, u_int8_t *ret)

```
....
170.                 bcopy(&val32, seed + sizeof(val32) * i,
sizeof(val32));
```

**Use of Obsolete Functions\Path 14:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1817 |
| Status | New |

Method generate_tmp_ifid in freebsd-src-1/in6_ifattach.c, at line 157, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|

| | | |
|---|---|---|
| File | freebsd-src-1/in6_ifattach.c | freebsd-src-1/in6_ifattach.c |
| Line | 173 | 173 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/in6_ifattach.c
Method generate_tmp_ifid(u_int8_t *seed0, const u_int8_t *seed1, u_int8_t *ret)

```
....
173.                bcopy(seed0, seed, 8);
```

### Use of Obsolete Functions\Path 15:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1818 |
| Status | New |

Method generate_tmp_ifid in freebsd-src-1/in6_ifattach.c, at line 157, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/in6_ifattach.c | freebsd-src-1/in6_ifattach.c |
| Line | 177 | 177 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/in6_ifattach.c
Method generate_tmp_ifid(u_int8_t *seed0, const u_int8_t *seed1, u_int8_t *ret)

```
....
177.          bcopy(seed1, &seed[8], 8);
```

### Use of Obsolete Functions\Path 16:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1819 |
| Status | New |

Method generate_tmp_ifid in freebsd-src-1/in6_ifattach.c, at line 157, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/in6_ifattach.c | freebsd-src-1/in6_ifattach.c |
| Line | 199 | 199 |
| Object | bcopy | bcopy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/in6_ifattach.c |
| Method | generate_tmp_ifid(u_int8_t *seed0, const u_int8_t *seed1, u_int8_t *ret) |

```
....
199.        bcopy(digest, ret, 8);
```

### Use of Obsolete Functions\Path 17:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1820 |
| Status | New |

Method generate_tmp_ifid in freebsd-src-1/in6_ifattach.c, at line 157, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/in6_ifattach.c | freebsd-src-1/in6_ifattach.c |
| Line | 221 | 221 |
| Object | bcopy | bcopy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/in6_ifattach.c |
| Method | generate_tmp_ifid(u_int8_t *seed0, const u_int8_t *seed1, u_int8_t *ret) |

```
....
221.        bcopy(&digest[8], seed0, 8);
```

### Use of Obsolete Functions\Path 18:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1821 |
| Status | New |

Method in6_get_hw_ifid in freebsd-src-1/in6_ifattach.c, at line 242, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/in6_ifattach.c | freebsd-src-1/in6_ifattach.c |
| Line | 300 | 300 |
| Object | bcopy | bcopy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/in6_ifattach.c |
| Method | in6_get_hw_ifid(struct ifnet *ifp, struct in6_addr *in6) |

```
....
300.                    bcopy(addr, &in6->s6_addr[8], 8);
```

### Use of Obsolete Functions\Path 19:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1822 |
| Status | New |

Method in6_get_hw_ifid in freebsd-src-1/in6_ifattach.c, at line 242, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/in6_ifattach.c | freebsd-src-1/in6_ifattach.c |
| Line | 326 | 326 |
| Object | bcopy | bcopy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/in6_ifattach.c |
| Method | in6_get_hw_ifid(struct ifnet *ifp, struct in6_addr *in6) |

```
....
326.              bcopy(addr + 12, &in6->s6_addr[8], 8);
```

### Use of Obsolete Functions\Path 20:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1823 |
| Status | New |

Method in6_nigroup0 in freebsd-src-1/in6_ifattach.c, at line 582, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/in6_ifattach.c | freebsd-src-1/in6_ifattach.c |
| Line | 641 | 641 |
| Object | bcopy | bcopy |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/in6_ifattach.c |
| Method | in6_nigroup0(struct ifnet *ifp, const char *name, int namelen, |

```
....
641.              bcopy(digest, &in6->s6_addr8[13], 3);
```

### Use of Obsolete Functions\Path 21:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1824 |
| Status | New |

Method in6_get_tmpifid in freebsd-src-1/in6_ifattach.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 | freebsd-src-1/in6_ifattach.c | freebsd-src-1/in6_ifattach.c |
| Line | 817 | 817 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/in6_ifattach.c
Method in6_get_tmpifid(struct ifnet *ifp, u_int8_t *retbuf,

```
....
817.            bcopy(baseid, ndi->randomseed1, sizeof(ndi-
>randomseed1));
```

### Use of Obsolete Functions\Path 22:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1825 |
| Status | New |

Method in6_get_tmpifid in freebsd-src-1/in6_ifattach.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 | freebsd-src-1/in6_ifattach.c | freebsd-src-1/in6_ifattach.c |
| Line | 823 | 823 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/in6_ifattach.c
Method in6_get_tmpifid(struct ifnet *ifp, u_int8_t *retbuf,

```
....
823.        bcopy(ndi->randomid, retbuf, 8);
```

### Use of Obsolete Functions\Path 23:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1826 |
| Status | New |

Method ip_test7 in freebsd-src-1/iptests.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 | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 1347 | 1347 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/iptests.c
Method ip_test7(char *dev, int mtu, ip_t *ip, struct  in_addr gwip, int ptest)

```
....
1347.             bcopy((char *)&ip->ip_dst, (char *)&pip->ip_dst,
```

**Use of Obsolete Functions\Path 24:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1827 |
| Status | New |

Method ip_test7 in freebsd-src-1/iptests.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 | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 1363 | 1363 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/iptests.c
Method ip_test7(char *dev, int mtu, ip_t *ip, struct  in_addr gwip, int ptest)

```
....
1363.             bcopy((char *)&ip->ip_dst, (char *)&pip->ip_dst,
```

**Use of Obsolete Functions\Path 25:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1828 |
| Status | New |

Method ip_test5 in freebsd-src-1/iptests.c, at line 900, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 1082 | 1082 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/iptests.c
Method ip_test5(char *dev, int mtu, ip_t *ip, struct  in_addr gwip, int ptest)

```
....
1082.		bcopy((char *)ip, (char *)&ti, sizeof(*ip));
```

### Use of Obsolete Functions\Path 26:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1829 |
| Status | New |

Method filter_add in freebsd-src-1/lockstat.c, at line 635, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 655 | 655 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method filter_add(char **filt, char *what, uintptr_t base, size_t size)

```
....
655.		bcopy(*filt, new, len);
```

### Use of Obsolete Functions\Path 27:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1830 |
| Status | New |

Method main in freebsd-src-1/lockstat.c, at line 1114, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|

| | | |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1583 | 1583 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method main(int argc, char **argv)

```
....
1583.                           bcopy(oldlsp, lsp, LS_TIME);
```

**Use of Obsolete Functions\Path 28:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1831 |
| Status | New |

Method main in freebsd-src-1/lockstat.c, at line 1114, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1592 | 1592 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method main(int argc, char **argv)

```
....
1592.                           bcopy(oldlsp, lsp, LS_TIME);
```

**Use of Obsolete Functions\Path 29:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1832 |
| Status | New |

Method copy_element_status in freebsd-src-1/scsi_ch.c, at line 1049, calls an obsolete API, bcopy. This has been deprecated, and should not be used in a modern codebase.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/scsi_ch.c | freebsd-src-1/scsi_ch.c |
| Line | 1131 | 1131 |
| Object | bcopy | bcopy |

Code Snippet
File Name freebsd-src-1/scsi_ch.c
Method copy_element_status(struct ch_softc *softc,

```
....
1131.                   bcopy((void *)devid->designator,
```

## 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=1060097&projectid=60087&pathid=1446 |
| Status | New |

The az_parse_file method in freebsd-src-1/authzone.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 | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1516 | 1516 |
| Object | fopen | fopen |

Code Snippet
File Name freebsd-src-1/authzone.c
Method az_parse_file(struct auth_zone* z, FILE* in, uint8_t* rr, size_t rrbuflen,

```
....
1516.                        inc = fopen(incfile, "r");
```

### TOCTOU\Path 2:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1447 |
| Status | New |

The auth_zone_read_zonefile method in freebsd-src-1/authzone.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 | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1585 | 1585 |

| | | |
|---|---|---|
| Object | fopen | fopen |

Code Snippet
File Name	freebsd-src-1/authzone.c
Method	auth_zone_read_zonefile(struct auth_zone* z, struct config_file* cfg)

```
....
1585.		in = fopen(zfilename, "r");
```

**TOCTOU\Path 3:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1448 |
| Status | New |

The auth_zone_write_file method in freebsd-src-1/authzone.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 | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1733 | 1733 |
| Object | fopen | fopen |

Code Snippet
File Name	freebsd-src-1/authzone.c
Method	int auth_zone_write_file(struct auth_zone* z, const char* fname)

```
....
1733.		out = fopen(fname, "w");
```

**TOCTOU\Path 4:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1449 |
| Status | New |

The auth_zone_write_chunks method in freebsd-src-1/authzone.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 | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 5147 | 5147 |

| | | |
|---|---|---|
| Object | fopen | fopen |

Code Snippet
File Name freebsd-src-1/authzone.c
Method auth_zone_write_chunks(struct auth_xfer* xfr, const char* fname)

```
....
5147.        out = fopen(fname, "w");
```

**TOCTOU\Path 5:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1450 |
| Status | New |

The parse_offload_policy method in freebsd-src-1/cxgbetool.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 | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3386 | 3386 |
| Object | fopen | fopen |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method parse_offload_policy(const char *fname, struct t4_offload_policy *op)

```
....
3386.        fp = fopen(fname, "r");
```

**TOCTOU\Path 6:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1451 |
| Status | New |

The gvinum_create method in freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 199 | 199 |
| Object | fopen | fopen |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_create(int argc, char * const *argv)

```
....
199.                    if ((tmp = fopen(argv[i], "r")) == NULL) {
```

**TOCTOU\Path 7:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1452 |
| Status | New |

The gvinum_create method in freebsd-src-1/gvinum.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 | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 233 | 233 |
| Object | fopen | fopen |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_create(int argc, char * const *argv)

```
....
233.                if ((tmp = fopen(tmpfile, "r")) == NULL) {
```

**TOCTOU\Path 8:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1453 |
| Status | New |

The main method in freebsd-src-1/lockstat.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 | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1330 | 1330 |
| Object | fopen | fopen |

Code Snippet
File Name freebsd-src-1/lockstat.c

| | |
|---|---|
| Method | main(int argc, char **argv) |

```
....
1330.                   if ((out = fopen(optarg, "w")) == NULL)
```

**TOCTOU\Path 9:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1454 |
| Status | New |

The process_file method in freebsd-src-1/pmcstudy.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 | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2257 | 2257 |
| Object | fopen | fopen |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/pmcstudy.c |
| Method | process_file(char *filename) |

```
....
2257.              io = fopen(filename, "r");
```

**TOCTOU\Path 10:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1455 |
| Status | New |

The load_server_config method in freebsd-src-1/servconf.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 | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2628 | 2628 |
| Object | fopen | fopen |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/servconf.c |
| Method | load_server_config(const char *filename, struct sshbuf *conf) |

```
....
2628.        if ((f = fopen(filename, "r")) == NULL) {
```

**TOCTOU\Path 11:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1456 |
| Status | New |

The read_file method in freebsd-src-1/test_x509.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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 450 | 450 |
| Object | fopen | fopen |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method read_file(const char *name, size_t *len)

```
....
450.         f = fopen(name, "rb");
```

**TOCTOU\Path 12:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1457 |
| Status | New |

The conf_init method in freebsd-src-1/test_x509.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 | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 612 | 612 |
| Object | fopen | fopen |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method conf_init(const char *fname)

```
....
612.        conf = fopen(fname, "r");
```

**TOCTOU\Path 13:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1458 |
| Status | New |

The parse_file method in freebsd-src-1/archive_read_support_format_mtree.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 | freebsd-src-1/archive_read_support_format_mtree.c | freebsd-src-1/archive_read_support_format_mtree.c |
| Line | 1253 | 1253 |
| Object | open | open |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_mtree.c
Method parse_file(struct archive_read *a, struct archive_entry *entry,

```
....
1253.                    mtree->fd = open(path, O_RDONLY | O_BINARY |
O_CLOEXEC);
```

**TOCTOU\Path 14:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1459 |
| Status | New |

The real_doit method in freebsd-src-1/cxgbetool.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 | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 149 | 149 |
| Object | open | open |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method real_doit(unsigned long cmd, void *data, const char *cmdstr)

```
....
149.                if ((fd = open(buf, O_RDWR)) < 0) {
```

**TOCTOU\Path 15:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1460 |
| Status | New |

The loadfw method in freebsd-src-1/cxgbetool.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 | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 1951 | 1951 |
| Object | open | open |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method loadfw(int argc, const char *argv[])

```
....
1951.        fd = open(fname, O_RDONLY);
```

**TOCTOU\Path 16:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1461 |
| Status | New |

The loadcfg method in freebsd-src-1/cxgbetool.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 | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 1993 | 1993 |
| Object | open | open |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method loadcfg(int argc, const char *argv[])

```
....
1993.        fd = open(fname, O_RDONLY);
```

**TOCTOU\Path 17:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1462 |
| Status | New |

The loadboot method in freebsd-src-1/cxgbetool.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 | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 2117 | 2117 |
| Object | open | open |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method loadboot(int argc, const char *argv[])

```
....
2117.        fd = open(fname, O_RDONLY);
```

**TOCTOU\Path 18:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1463 |
| Status | New |

The loadbootcfg method in freebsd-src-1/cxgbetool.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 | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 2159 | 2159 |
| Object | open | open |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method loadbootcfg(int argc, const char *argv[])

```
....
2159.        fd = open(fname, O_RDONLY);
```

**TOCTOU\Path 19:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1464 |
| Status | New |

The doit method in freebsd-src-1/cxgbtool.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 | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 136 | 136 |
| Object | open | open |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method doit(const char *iff_name, unsigned long cmd, void *data)

```
....
136.              if ((fd = open(buf, O_RDWR)) < 0)
```

**TOCTOU\Path 20:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1465 |
| Status | New |

The load_fw method in freebsd-src-1/cxgbtool.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 | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 999 | 999 |
| Object | open | open |

Code Snippet
File Name freebsd-src-1/cxgbtool.c
Method load_fw(int argc, char *argv[], int start_arg, const char *iff_name)

```
....
999.        fd = open(fname, O_RDONLY);
```

**TOCTOU\Path 21:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1466](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1466) |
| Status | New |

The load_boot method in freebsd-src-1/cxgbtool.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 | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1034 | 1034 |
| Object | open | open |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cxgbtool.c |
| Method | load_boot(int argc, char *argv[], int start_arg, const char *iff_name) |

```
....
1034.       fd = open(fname, O_RDONLY);
```

**TOCTOU\Path 22:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1467](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1467) |
| Status | New |

The main method in freebsd-src-1/phttpget.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 | freebsd-src-1/phttpget.c | freebsd-src-1/phttpget.c |
| Line | 600 | 600 |
| Object | open | open |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/phttpget.c |
| Method | main(int argc, char *argv[]) |

```
....
600.                    fd = open(fname, O_CREAT | O_TRUNC | O_WRONLY,
0644);
```

## 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=1060097&projectid=60087&pathid=1068 |
| Status | New |

The channel_setup_fwd_listener_tcpip method performs a reverse DNS lookup with getnameinfo, at line 3721 of freebsd-src-1/channels.c. The application then makes a security decision, !=, in freebsd-src-1/channels.c line 3721, even though this hostname is not reliable and can be easily spoofed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 3799 | 3801 |
| Object | getnameinfo | != |

Code Snippet
File Name     freebsd-src-1/channels.c
Method     channel_setup_fwd_listener_tcpip(struct ssh *ssh, int type,

```
....
3799.            if (getnameinfo(ai->ai_addr, ai->ai_addrlen, ntop,
sizeof(ntop),
....
3801.                NI_NUMERICHOST|NI_NUMERICSERV) != 0) {
```

**Reliance on DNS Lookups in a Decision\Path 2:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1069 |
| Status | New |

The connect_next method performs a reverse DNS lookup with getnameinfo, at line 4522 of freebsd-src-1/channels.c. The application then makes a security decision, !=, in freebsd-src-1/channels.c line 4522, even though this hostname is not reliable and can be easily spoofed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 4539 | 4541 |
| Object | getnameinfo | != |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/channels.c |
| Method | connect_next(struct channel_connect *cctx) |

```
....
4539.                   if (getnameinfo(cctx->ai->ai_addr, cctx->ai-
>ai_addrlen,
....
4541.                       NI_NUMERICHOST|NI_NUMERICSERV) != 0) {
```

### Reliance on DNS Lookups in a Decision\Path 3:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1070 |
| Status | New |

The format_listen_addrs method performs a reverse DNS lookup with getnameinfo, at line 2961 of freebsd-src-1/servconf.c. The application then makes a security decision, !=, in freebsd-src-1/servconf.c line 2961, even though this hostname is not reliable and can be easily spoofed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2974 | 2976 |
| Object | getnameinfo | != |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/servconf.c |
| Method | format_listen_addrs(struct listenaddr *la) |

```
....
2974.             if ((r = getnameinfo(ai->ai_addr, ai->ai_addrlen,
addr,
....
2976.                 NI_NUMERICHOST|NI_NUMERICSERV)) != 0) {
```

### Reliance on DNS Lookups in a Decision\Path 4:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1071 |
| Status | New |

The format_listen_addrs method performs a reverse DNS lookup with getnameinfo, at line 2961 of freebsd-src-1/servconf.c. The application then makes a security decision, r, in freebsd-src-1/servconf.c line 2961, even though this hostname is not reliable and can be easily spoofed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2974 | 2974 |
| Object | getnameinfo | r |

Code Snippet
File Name	freebsd-src-1/servconf.c
Method	format_listen_addrs(struct listenaddr *la)

```
....
2974.                 if ((r = getnameinfo(ai->ai_addr, ai->ai_addrlen,
addr,
```

**Reliance on DNS Lookups in a Decision\Path 5:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1072 |
| Status | New |

The *endpoint method performs a reverse DNS lookup with getnameinfo, at line 106 of freebsd-src-1/show.c. The application then makes a security decision, ret, in freebsd-src-1/show.c line 106, even though this hostname is not reliable and can be easily spoofed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/show.c | freebsd-src-1/show.c |
| Line | 120 | 121 |
| Object | getnameinfo | ret |

Code Snippet
File Name	freebsd-src-1/show.c
Method	static char *endpoint(const struct sockaddr *addr)

```
....
120.        ret = getnameinfo(addr, addr_len, host, sizeof(host),
service, sizeof(service), NI_DGRAM | NI_NUMERICSERV | NI_NUMERICHOST);
121.        if (ret) {
```

**Reliance on DNS Lookups in a Decision\Path 6:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1073 |

| | |
|---|---|
| Status | New |

The channel_setup_fwd_listener_tcpip method performs a reverse DNS lookup with getaddrinfo, at line 3721 of freebsd-src-1/channels.c. The application then makes a security decision, !=, in freebsd-src-1/channels.c line 3721, even though this hostname is not reliable and can be easily spoofed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 3764 | 3764 |
| Object | getaddrinfo | != |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_setup_fwd_listener_tcpip(struct ssh *ssh, int type,

```
....
3764.        if ((r = getaddrinfo(addr, strport, &hints, &aitop)) != 0) {
```

**Reliance on DNS Lookups in a Decision\Path 7:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1074 |
| Status | New |

The channel_setup_fwd_listener_tcpip method performs a reverse DNS lookup with getaddrinfo, at line 3721 of freebsd-src-1/channels.c. The application then makes a security decision, r, in freebsd-src-1/channels.c line 3721, even though this hostname is not reliable and can be easily spoofed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 3764 | 3764 |
| Object | getaddrinfo | r |

Code Snippet
File Name freebsd-src-1/channels.c
Method channel_setup_fwd_listener_tcpip(struct ssh *ssh, int type,

```
....
3764.        if ((r = getaddrinfo(addr, strport, &hints, &aitop)) != 0) {
```

**Reliance on DNS Lookups in a Decision\Path 8:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1075 |
| Status | New |

The connect_to_helper method performs a reverse DNS lookup with getaddrinfo, at line 4598 of freebsd-src-1/channels.c. The application then makes a security decision, !=, in freebsd-src-1/channels.c line 4598, even though this hostname is not reliable and can be easily spoofed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 4637 | 4638 |
| Object | getaddrinfo | != |

Code Snippet
File Name freebsd-src-1/channels.c
Method connect_to_helper(struct ssh *ssh, const char *name, int port, int socktype,

```
....
4637.             if ((gaierr = getaddrinfo(name, strport, &hints,
&cctx->aitop))
4638.                 != 0) {
```

**Reliance on DNS Lookups in a Decision\Path 9:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1076 |
| Status | New |

The connect_to_helper method performs a reverse DNS lookup with getaddrinfo, at line 4598 of freebsd-src-1/channels.c. The application then makes a security decision, gaierr, in freebsd-src-1/channels.c line 4598, even though this hostname is not reliable and can be easily spoofed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 4637 | 4637 |
| Object | getaddrinfo | gaierr |

Code Snippet
File Name freebsd-src-1/channels.c
Method connect_to_helper(struct ssh *ssh, const char *name, int port, int socktype,

```
....
4637.             if ((gaierr = getaddrinfo(name, strport, &hints,
&cctx->aitop))
```

**Reliance on DNS Lookups in a Decision\Path 10:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=600 |

| | |
|---|---|
| | 87&pathid=1077 |
| Status | New |

The x11_create_display_inet method performs a reverse DNS lookup with getaddrinfo, at line 4939 of freebsd-src-1/channels.c. The application then makes a security decision, !=, in freebsd-src-1/channels.c line 4939, even though this hostname is not reliable and can be easily spoofed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 4962 | 4963 |
| Object | getaddrinfo | != |

Code Snippet
File Name freebsd-src-1/channels.c
Method x11_create_display_inet(struct ssh *ssh, int x11_display_offset,

```
....
4962.                   if ((gaierr = getaddrinfo(NULL, strport,
4963.                       &hints, &aitop)) != 0) {
```

**Reliance on DNS Lookups in a Decision\Path 11:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1078 |
| Status | New |

The x11_create_display_inet method performs a reverse DNS lookup with getaddrinfo, at line 4939 of freebsd-src-1/channels.c. The application then makes a security decision, gaierr, in freebsd-src-1/channels.c line 4939, even though this hostname is not reliable and can be easily spoofed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 4962 | 4962 |
| Object | getaddrinfo | gaierr |

Code Snippet
File Name freebsd-src-1/channels.c
Method x11_create_display_inet(struct ssh *ssh, int x11_display_offset,

```
....
4962.                   if ((gaierr = getaddrinfo(NULL, strport,
```

**Reliance on DNS Lookups in a Decision\Path 12:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=600 |

| | |
|---|---|
| | 87&pathid=1079 |
| Status | New |

The x11_connect_display method performs a reverse DNS lookup with getaddrinfo, at line 5096 of freebsd-src-1/channels.c. The application then makes a security decision, !=, in freebsd-src-1/channels.c line 5096, even though this hostname is not reliable and can be easily spoofed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 5181 | 5181 |
| Object | getaddrinfo | != |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/channels.c |
| Method | x11_connect_display(struct ssh *ssh) |

```
....
5181.		if ((gaierr = getaddrinfo(buf, strport, &hints, &aitop)) !=
0) {
```

**Reliance on DNS Lookups in a Decision\Path 13:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1080 |
| Status | New |

The x11_connect_display method performs a reverse DNS lookup with getaddrinfo, at line 5096 of freebsd-src-1/channels.c. The application then makes a security decision, gaierr, in freebsd-src-1/channels.c line 5096, even though this hostname is not reliable and can be easily spoofed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/channels.c | freebsd-src-1/channels.c |
| Line | 5181 | 5181 |
| Object | getaddrinfo | gaierr |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/channels.c |
| Method | x11_connect_display(struct ssh *ssh) |

```
....
5181.		if ((gaierr = getaddrinfo(buf, strport, &hints, &aitop)) !=
0) {
```

**Reliance on DNS Lookups in a Decision\Path 14:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1081 |
| Status | New |

The main method performs a reverse DNS lookup with getaddrinfo, at line 293 of freebsd-src-1/phttpget.c. The application then makes a security decision, error, in freebsd-src-1/phttpget.c line 293, even though this hostname is not reliable and can be easily spoofed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/phttpget.c | freebsd-src-1/phttpget.c |
| Line | 345 | 347 |
| Object | getaddrinfo | error |

Code Snippet
File Name freebsd-src-1/phttpget.c
Method main(int argc, char *argv[])

```
....
345.          error = getaddrinfo(env_HTTP_PROXY ? env_HTTP_PROXY :
servername,
....
347.          if (error)
```

**Reliance on DNS Lookups in a Decision\Path 15:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1082 |
| Status | New |

The add_one_listen_addr method performs a reverse DNS lookup with getaddrinfo, at line 797 of freebsd-src-1/servconf.c. The application then makes a security decision, !=, in freebsd-src-1/servconf.c line 797, even though this hostname is not reliable and can be easily spoofed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 832 | 832 |
| Object | getaddrinfo | != |

Code Snippet
File Name freebsd-src-1/servconf.c
Method add_one_listen_addr(ServerOptions *options, const char *addr,

```
....
832.          if ((gaierr = getaddrinfo(addr, strport, &hints, &aitop)) !=
0)
```

**Reliance on DNS Lookups in a Decision\Path 16:**

| | |
|---|---|
| Severity | Low |

| | |
|---|---|
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1083](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1083) |
| Status | New |

The add_one_listen_addr method performs a reverse DNS lookup with getaddrinfo, at line 797 of freebsd-src-1/servconf.c. The application then makes a security decision, gaierr, in freebsd-src-1/servconf.c line 797, even though this hostname is not reliable and can be easily spoofed.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 832 | 832 |
| Object | getaddrinfo | gaierr |

Code Snippet
File Name freebsd-src-1/servconf.c
Method add_one_listen_addr(ServerOptions *options, const char *addr,

```
....
832.        if ((gaierr = getaddrinfo(addr, strport, &hints, &aitop)) !=
0)
```

## 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=1060097&projectid=60087&pathid=1430](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1430) |
| Status | New |

The system data read by open_sbuf in the file freebsd-src-1/buf.c at line 192 is potentially exposed by open_sbuf found in freebsd-src-1/buf.c at line 192.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 204 | 204 |
| Object | perror | perror |

Code Snippet
File Name freebsd-src-1/buf.c

| | |
|---|---|
| Method | open_sbuf(void) |

```
....
204.                perror(sfn);
```

### 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=1060097&projectid=60087&pathid=1431 |
| Status | New |

The system data read by load_server_config in the file freebsd-src-1/servconf.c at line 2619 is potentially exposed by load_server_config found in freebsd-src-1/servconf.c at line 2619.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2629 | 2629 |
| Object | perror | perror |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/servconf.c |
| Method | load_server_config(const char *filename, struct sshbuf *conf) |

```
....
2629.                perror(filename);
```

### 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=1060097&projectid=60087&pathid=1432 |
| Status | New |

The system data read by show_main in the file freebsd-src-1/show.c at line 379 is potentially exposed by show_main found in freebsd-src-1/show.c at line 379.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/show.c | freebsd-src-1/show.c |
| Line | 394 | 394 |
| Object | perror | perror |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/show.c |
| Method | int show_main(int argc, const char *argv[]) |

```
....
394.                     perror("Unable to list interfaces");
```

### 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=1060097&projectid=60087&pathid=1433](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1433) |
| Status | New |

The system data read by show_main in the file freebsd-src-1/show.c at line 379 is potentially exposed by show_main found in freebsd-src-1/show.c at line 379.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/show.c | freebsd-src-1/show.c |
| Line | 430 | 430 |
| Object | perror | perror |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/show.c |
| Method | int show_main(int argc, const char *argv[]) |

```
....
430.                     perror("Unable to list interfaces");
```

### 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=1060097&projectid=60087&pathid=1434](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1434) |
| Status | New |

The system data read by show_main in the file freebsd-src-1/show.c at line 379 is potentially exposed by show_main found in freebsd-src-1/show.c at line 379.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/show.c | freebsd-src-1/show.c |
| Line | 443 | 443 |
| Object | perror | perror |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/show.c |
| Method | int show_main(int argc, const char *argv[]) |

```
....
443.                    perror("Unable to access interface");
```

**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=1060097&projectid=60087&pathid=1435 |
| Status | New |

The system data read by get_sbuf_line in the file freebsd-src-1/buf.c at line 46 is potentially exposed by get_sbuf_line found in freebsd-src-1/buf.c at line 46.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 60 | 60 |
| Object | errno | fprintf |

Code Snippet
File Name freebsd-src-1/buf.c
Method get_sbuf_line(line_t *lp)

```
....
60.                 fprintf(stderr, "%s\n", strerror(errno));
```

**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=1060097&projectid=60087&pathid=1436 |
| Status | New |

The system data read by get_sbuf_line in the file freebsd-src-1/buf.c at line 46 is potentially exposed by get_sbuf_line found in freebsd-src-1/buf.c at line 46.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 68 | 68 |
| Object | errno | fprintf |

Code Snippet
File Name freebsd-src-1/buf.c
Method get_sbuf_line(line_t *lp)

```
....
68.          fprintf(stderr, "%s\n", strerror(errno));
```

### 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=1060097&projectid=60087&pathid=1437](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1437) |
| Status | New |

The system data read by put_sbuf_line in the file freebsd-src-1/buf.c at line 81 is potentially exposed by put_sbuf_line found in freebsd-src-1/buf.c at line 81.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 88 | 88 |
| Object | errno | fprintf |

Code Snippet
File Name freebsd-src-1/buf.c
Method put_sbuf_line(const char *cs)

```
....
88.          fprintf(stderr, "%s\n", strerror(errno));
```

### 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=1060097&projectid=60087&pathid=1438](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1438) |
| Status | New |

The system data read by put_sbuf_line in the file freebsd-src-1/buf.c at line 81 is potentially exposed by put_sbuf_line found in freebsd-src-1/buf.c at line 81.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 104 | 104 |
| Object | errno | fprintf |

Code Snippet
File Name freebsd-src-1/buf.c
Method put_sbuf_line(const char *cs)

```
....
104.                    fprintf(stderr, "%s\n", strerror(errno));
```

### 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=1060097&projectid=60087&pathid=1439 |
| Status | New |

The system data read by put_sbuf_line in the file freebsd-src-1/buf.c at line 81 is potentially exposed by put_sbuf_line found in freebsd-src-1/buf.c at line 81.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 115 | 115 |
| Object | errno | fprintf |

Code Snippet
File Name freebsd-src-1/buf.c
Method put_sbuf_line(const char *cs)

```
....
115.                fprintf(stderr, "%s\n", strerror(errno));
```

### 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=1060097&projectid=60087&pathid=1440 |
| Status | New |

The system data read by close_sbuf in the file freebsd-src-1/buf.c at line 216 is potentially exposed by close_sbuf found in freebsd-src-1/buf.c at line 216.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 220 | 220 |
| Object | errno | fprintf |

Code Snippet
File Name freebsd-src-1/buf.c
Method close_sbuf(void)

```
....
220.                    fprintf(stderr, "%s: %s\n", sfn,
strerror(errno));
```

### 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=1060097&projectid=60087&pathid=1441 |
| Status | New |

The system data read by fail in the file freebsd-src-1/lockstat.c at line 267 is potentially exposed by fail found in freebsd-src-1/lockstat.c at line 267.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 270 | 277 |
| Object | errno | fprintf |

Code Snippet
File Name    freebsd-src-1/lockstat.c
Method    fail(int do_perror, const char *message, ...)

```
....
270.          int save_errno = errno;
....
277.                (void) fprintf(stderr, ": %s", strerror(save_errno));
```

### 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=1060097&projectid=60087&pathid=1442 |
| Status | New |

The system data read by build_counters_from_header in the file freebsd-src-1/pmcstudy.c at line 2095 is potentially exposed by build_counters_from_header found in freebsd-src-1/pmcstudy.c at line 2095.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2105 | 2105 |
| Object | errno | printf |

Code Snippet
File Name    freebsd-src-1/pmcstudy.c
Method    build_counters_from_header(FILE *io)

```
....
2105.           printf("First line can't be read from file err:%d\n",
errno);
```

### 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=1060097&projectid=60087&pathid=1443 |
| Status | New |

The system data read by build_counters_from_header in the file freebsd-src-1/pmcstudy.c at line 2095 is potentially exposed by build_counters_from_header found in freebsd-src-1/pmcstudy.c at line 2095.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2131 | 2131 |
| Object | errno | printf |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method build_counters_from_header(FILE *io)

```
....
2131.           printf("No memory err:%d\n", errno);
```

### 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=1060097&projectid=60087&pathid=1444 |
| Status | New |

The system data read by process_file in the file freebsd-src-1/pmcstudy.c at line 2243 is potentially exposed by process_file found in freebsd-src-1/pmcstudy.c at line 2243.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2260 | 2259 |
| Object | errno | printf |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method process_file(char *filename)

```
....
2260.                           filename, errno);
....
2259.                   printf("Can't process file %s err:%d\n",
```

**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=1060097&projectid=60087&pathid=1445 |
| Status | New |

The system data read by show_main in the file freebsd-src-1/show.c at line 379 is potentially exposed by show_main found in freebsd-src-1/show.c at line 379.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/show.c | freebsd-src-1/show.c |
| Line | 403 | 403 |
| Object | errno | fprintf |

Code Snippet
File Name freebsd-src-1/show.c
Method int show_main(int argc, const char *argv[])

```
....
403.                            fprintf(stderr, "Unable to access
interface %s: %s\n", interface, strerror(errno));
```

## 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=1060097&projectid=60087&pathid=1046 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 661 | 661 |
| Object | getopt | getopt |

Code Snippet
File Name freebsd-src-1/gvinum.c

Method gvinum_detach(int argc, char * const *argv)

```
....
661.         while ((i = getopt(argc, argv, "f")) != -1) {
```

**Inconsistent Implementations\Path 2:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1047 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 762 | 762 |
| Object | getopt | getopt |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_setstate(int argc, char * const *argv)

```
....
762.         while ((i = getopt(argc, argv, "f")) != -1) {
```

**Inconsistent Implementations\Path 3:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1048 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 821 | 821 |
| Object | getopt | getopt |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_list(int argc, char * const *argv)

```
....
821.                 while ((j = getopt(argc, argv, "rsvV")) != -1) {
```

**Inconsistent Implementations\Path 4:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |

| | |
|---|---|
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1049](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1049) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 898 | 898 |
| Object | getopt | getopt |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_move(int argc, char * const *argv)

```
....
898.            while ((j = getopt(argc, argv, "f")) != -1) {
```

**Inconsistent Implementations\Path 5:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1050](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1050) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 963 | 963 |
| Object | getopt | getopt |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_parityop(int argc, char * const *argv, int rebuild)

```
....
963.        while ((i = getopt(argc, argv, "fv")) != -1) {
```

**Inconsistent Implementations\Path 6:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1051](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1051) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |

| | | |
|---|---|---|
| Line | 1021 | 1021 |
| Object | getopt | getopt |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_rename(int argc, char * const *argv)

```
....
1021.              while ((j = getopt(argc, argv, "r")) != -1) {
```

**Inconsistent Implementations\Path 7:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1052 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1071 | 1071 |
| Object | getopt | getopt |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_rm(int argc, char * const *argv)

```
....
1071.        while ((j = getopt(argc, argv, "rf")) != -1) {
```

**Inconsistent Implementations\Path 8:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1053 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1115 | 1115 |
| Object | getopt | getopt |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_resetconfig(int argc, char * const *argv)

```
....
1115.        while ((i = getopt(argc, argv, "f")) != -1) {
```

### Inconsistent Implementations\Path 9:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1054](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1054) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 1186 | 1186 |
| Object | getopt | getopt |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_start(int argc, char * const *argv)

```
....
1186.        while ((j = getopt(argc, argv, "S")) != -1) {
```

### Inconsistent Implementations\Path 10:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1055](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1055) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1152 | 1152 |
| Object | getopt | getopt |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method main(int argc, char **argv)

```
....
1152.        while ((c = getopt(argc, argv, LOCKSTAT_OPTSTR)) !=
GETOPT_EOF) {
```

### Inconsistent Implementations\Path 11:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |

| | |
|---|---|
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1056 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1448 | 1448 |
| Object | getopt | getopt |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method main(int argc, char **argv)

```
....
1448.        while ((c = getopt(argc, argv, LOCKSTAT_OPTSTR)) !=
GETOPT_EOF) {
```

**Inconsistent Implementations\Path 12:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1057 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2814 | 2814 |
| Object | getopt | getopt |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method main(int argc, char **argv)

```
....
2814.        while ((i = getopt(argc, argv, "ALHhvm:i:?e:TE:")) != -1) {
```

**Inconsistent Implementations\Path 13:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1058 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/rtadvctl.c | freebsd-src-1/rtadvctl.c |

| | | |
|---|---|---|
| Line | 159 | 159 |
| Object | getopt | getopt |

Code Snippet
File Name freebsd-src-1/rtadvctl.c
Method main(int argc, char *argv[])

```
....
159.        while ((ch = getopt(argc, argv, "Dv")) != -1) {
```

## Heuristic Buffer Overflow malloc

Query Path:
CPP\Cx\CPP Heuristic\Heuristic Buffer Overflow malloc Version:0

### 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*

**Heuristic Buffer Overflow malloc\Path 1:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1115 |
| Status | New |

The size of the buffer used by read_mem in len, at line 2059 of freebsd-src-1/cxgbetool.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 argv, at line 3666 of freebsd-src-1/cxgbetool.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3666 | 2066 |
| Object | argv | len |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method main(int argc, const char *argv[])

```
....
3666.  main(int argc, const char *argv[])
```

File Name freebsd-src-1/cxgbetool.c
Method read_mem(uint32_t addr, uint32_t len, void (*output)(uint32_t *, uint32_t))

```
....
2066.        mr.data = malloc(mr.len);
```

### Heuristic Buffer Overflow malloc\Path 2:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1116](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1116) |
| Status | New |

The size of the buffer used by dump_mc7 in len, at line 949 of freebsd-src-1/cxgbtool.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 argv, at line 1744 of freebsd-src-1/cxgbtool.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbtool.c | freebsd-src-1/cxgbtool.c |
| Line | 1744 | 970 |
| Object | argv | len |

Code Snippet

File Name freebsd-src-1/cxgbtool.c

Method main(int argc, char *argv[])

```
....
1744.  main(int argc, char *argv[])
```

File Name freebsd-src-1/cxgbtool.c

Method dump_mc7(int argc, char *argv[], int start_arg, const char *iff_name)

```
....
970.         mem.buf = malloc(len);
```

### Heuristic Buffer Overflow malloc\Path 3:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1117](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1117) |
| Status | New |

The size of the buffer used by xmalloc in len, at line 49 of freebsd-src-1/test_x509.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 argv, at line 2021 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 2021 | 56 |

| | | |
|---|---|---|
| Object | argv | len |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method main(int argc, const char *argv[])

```
....
2021.  main(int argc, const char *argv[])
```

▼

File Name freebsd-src-1/test_x509.c

Method xmalloc(size_t len)

```
....
56.   buf = malloc(len);
```

**Heuristic Buffer Overflow malloc\Path 4:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1118](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1118) |
| Status | New |

The size of the buffer used by http_parse_authenticate in cp, at line 754 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_get_proxy passes to getenv, at line 1502 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1511 | 758 |
| Object | getenv | cp |

Code Snippet
File Name freebsd-src-1/http.c
Method http_get_proxy(struct url * url, const char *flags)

```
....
1511.       if (((p = getenv("HTTP_PROXY")) || (p =
getenv("http_proxy"))) &&
```

▼

File Name freebsd-src-1/http.c

Method http_parse_authenticate(const char *cp, http_auth_challenges_t *cs)

```
....
758.        char *key = malloc(strlen(cp) + 1);
```

**Heuristic Buffer Overflow malloc\Path 5:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1119 |
| Status | New |

The size of the buffer used by http_parse_authenticate in cp, at line 754 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_get_proxy passes to getenv, at line 1502 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1511 | 758 |
| Object | getenv | cp |

Code Snippet
File Name freebsd-src-1/http.c
Method http_get_proxy(struct url * url, const char *flags)

```
....
1511.         if (((p = getenv("HTTP_PROXY")) || (p =
getenv("http_proxy"))) &&
```

▼

File Name freebsd-src-1/http.c

Method http_parse_authenticate(const char *cp, http_auth_challenges_t *cs)

```
....
758.          char *key = malloc(strlen(cp) + 1);
```

### Heuristic Buffer Overflow malloc\Path 6:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1120 |
| Status | New |

The size of the buffer used by http_parse_authenticate in cp, at line 754 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1760 | 758 |
| Object | getenv | cp |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1760.             if ((p = getenv("HTTP_USER_AGENT")) != NULL) {
```

File Name freebsd-src-1/http.c

Method http_parse_authenticate(const char *cp, http_auth_challenges_t *cs)

```
....
758.          char *key = malloc(strlen(cp) + 1);
```

### Heuristic Buffer Overflow malloc\Path 7:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1121 |
| Status | New |

The size of the buffer used by http_parse_authenticate in cp, at line 754 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_get_proxy passes to getenv, at line 1502 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1511 | 759 |
| Object | getenv | cp |

Code Snippet

File Name freebsd-src-1/http.c

Method http_get_proxy(struct url * url, const char *flags)

```
....
1511.         if (((p = getenv("HTTP_PROXY")) || (p =
getenv("http_proxy"))) &&
```

File Name freebsd-src-1/http.c

Method http_parse_authenticate(const char *cp, http_auth_challenges_t *cs)

```
....
759.          char *value = malloc(strlen(cp) + 1);
```

### Heuristic Buffer Overflow malloc\Path 8:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1122 |
| Status | New |

The size of the buffer used by http_parse_authenticate in cp, at line 754 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_get_proxy passes to getenv, at line 1502 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1511 | 759 |
| Object | getenv | cp |

Code Snippet
File Name freebsd-src-1/http.c
Method http_get_proxy(struct url * url, const char *flags)

```
....
1511.        if (((p = getenv("HTTP_PROXY")) || (p =
getenv("http_proxy"))) &&
```

File Name freebsd-src-1/http.c
Method http_parse_authenticate(const char *cp, http_auth_challenges_t *cs)

```
....
759.         char *value = malloc(strlen(cp) + 1);
```

**Heuristic Buffer Overflow malloc\Path 9:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1123 |
| Status | New |

The size of the buffer used by http_parse_authenticate in cp, at line 754 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1760 | 759 |
| Object | getenv | cp |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1760.            if ((p = getenv("HTTP_USER_AGENT")) != NULL) {
```

File Name freebsd-src-1/http.c

Method http_parse_authenticate(const char *cp, http_auth_challenges_t *cs)

```
....
759.        char *value = malloc(strlen(cp) + 1);
```

### Heuristic Buffer Overflow malloc\Path 10:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1124](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1124) |
| Status | New |

The size of the buffer used by http_parse_authenticate in cp, at line 754 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_get_proxy passes to getenv, at line 1502 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1511 | 760 |
| Object | getenv | cp |

Code Snippet

File Name freebsd-src-1/http.c

Method http_get_proxy(struct url * url, const char *flags)

```
....
1511.       if (((p = getenv("HTTP_PROXY")) || (p =
getenv("http_proxy"))) &&
```

File Name freebsd-src-1/http.c

Method http_parse_authenticate(const char *cp, http_auth_challenges_t *cs)

```
....
760.        char *buf = malloc(strlen(cp) + 1);
```

### Heuristic Buffer Overflow malloc\Path 11:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1125](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1125) |
| Status | New |

The size of the buffer used by http_parse_authenticate in cp, at line 754 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_get_proxy passes to getenv, at line 1502 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|

| | | |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1511 | 760 |
| Object | getenv | cp |

Code Snippet
File Name freebsd-src-1/http.c
Method http_get_proxy(struct url * url, const char *flags)

```
....
1511.        if (((p = getenv("HTTP_PROXY")) || (p =
getenv("http_proxy"))) &&
```

▼

File Name freebsd-src-1/http.c

Method http_parse_authenticate(const char *cp, http_auth_challenges_t *cs)

```
....
760.         char *buf = malloc(strlen(cp) + 1);
```

**Heuristic Buffer Overflow malloc\Path 12:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1126 |
| Status | New |

The size of the buffer used by http_parse_authenticate in cp, at line 754 of freebsd-src-1/http.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that http_request_body passes to getenv, at line 1585 of freebsd-src-1/http.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/http.c | freebsd-src-1/http.c |
| Line | 1760 | 760 |
| Object | getenv | cp |

Code Snippet
File Name freebsd-src-1/http.c
Method http_request_body(struct url *URL, const char *op, struct url_stat *us,

```
....
1760.              if ((p = getenv("HTTP_USER_AGENT")) != NULL) {
```

▼

File Name freebsd-src-1/http.c

Method http_parse_authenticate(const char *cp, http_auth_challenges_t *cs)

```
....
760.        char *buf = malloc(strlen(cp) + 1);
```

## 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=1060097&projectid=60087&pathid=1418 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1516 | 1516 |
| Object | inc | inc |

Code Snippet
File Name freebsd-src-1/authzone.c
Method az_parse_file(struct auth_zone* z, FILE* in, uint8_t* rr, size_t rrbuflen,

```
....
1516.                           inc = fopen(incfile, "r");
```

**Incorrect Permission Assignment For Critical Resources\Path 2:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1419 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1585 | 1585 |
| Object | in | in |

Code Snippet
File Name freebsd-src-1/authzone.c

| | |
|---|---|
| Method | auth_zone_read_zonefile(struct auth_zone* z, struct config_file* cfg) |

```
....
1585.        in = fopen(zfilename, "r");
```

### Incorrect Permission Assignment For Critical Resources\Path 3:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1420 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 1733 | 1733 |
| Object | out | out |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/authzone.c |
| Method | int auth_zone_write_file(struct auth_zone* z, const char* fname) |

```
....
1733.        out = fopen(fname, "w");
```

### Incorrect Permission Assignment For Critical Resources\Path 4:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1421 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/authzone.c | freebsd-src-1/authzone.c |
| Line | 5147 | 5147 |
| Object | out | out |

| | |
|---|---|
| Code Snippet | |
| File Name | freebsd-src-1/authzone.c |
| Method | auth_zone_write_chunks(struct auth_xfer* xfr, const char* fname) |

```
....
5147.        out = fopen(fname, "w");
```

### Incorrect Permission Assignment For Critical Resources\Path 5:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |

| | |
|---|---|
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1422 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 3386 | 3386 |
| Object | fp | fp |

Code Snippet
File Name freebsd-src-1/cxgbetool.c
Method parse_offload_policy(const char *fname, struct t4_offload_policy *op)

```
....
3386.        fp = fopen(fname, "r");
```

**Incorrect Permission Assignment For Critical Resources\Path 6:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1423 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 199 | 199 |
| Object | tmp | tmp |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_create(int argc, char * const *argv)

```
....
199.                    if ((tmp = fopen(argv[i], "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=1060097&projectid=60087&pathid=1424 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |

|  |  |  |
|---|---|---|
| Line | 233 | 233 |
| Object | tmp | tmp |

Code Snippet
File Name freebsd-src-1/gvinum.c
Method gvinum_create(int argc, char * const *argv)

```
....
233.                 if ((tmp = fopen(tmpfile, "r")) == NULL) {
```

### Incorrect Permission Assignment For Critical Resources\Path 8:

|  |  |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1425](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1425) |
| Status | New |

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/lockstat.c | freebsd-src-1/lockstat.c |
| Line | 1330 | 1330 |
| Object | out | out |

Code Snippet
File Name freebsd-src-1/lockstat.c
Method main(int argc, char **argv)

```
....
1330.                    if ((out = fopen(optarg, "w")) == NULL)
```

### Incorrect Permission Assignment For Critical Resources\Path 9:

|  |  |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1426](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1426) |
| Status | New |

|  | Source | Destination |
|---|---|---|
| File | freebsd-src-1/pmcstudy.c | freebsd-src-1/pmcstudy.c |
| Line | 2257 | 2257 |
| Object | io | io |

Code Snippet
File Name freebsd-src-1/pmcstudy.c
Method process_file(char *filename)

```
....
2257.                io = fopen(filename, "r");
```

### Incorrect Permission Assignment For Critical Resources\Path 10:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1427 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |
| Line | 2628 | 2628 |
| Object | f | f |

Code Snippet
File Name freebsd-src-1/servconf.c
Method load_server_config(const char *filename, struct sshbuf *conf)

```
....
2628.         if ((f = fopen(filename, "r")) == NULL) {
```

### Incorrect Permission Assignment For Critical Resources\Path 11:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1428 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 450 | 450 |
| Object | f | f |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method read_file(const char *name, size_t *len)

```
....
450.          f = fopen(name, "rb");
```

### Incorrect Permission Assignment For Critical Resources\Path 12:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN- |

| | |
|---|---|
| | BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1429 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 612 | 612 |
| Object | conf | conf |

Code Snippet
File Name freebsd-src-1/test_x509.c
Method conf_init(const char *fname)

```
....
612.        conf = fopen(fname, "r");
```

## 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=1060097&projectid=60087&pathid=1060 |
| Status | New |

The buffer allocated by <= in freebsd-src-1/archive_read_support_format_rar.c at line 3621 does not correctly account for the actual size of the value, resulting in an incorrect allocation that is off by one.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/archive_read_support_format_rar.c | freebsd-src-1/archive_read_support_format_rar.c |
| Line | 3630 | 3630 |
| Object | <= | <= |

Code Snippet
File Name freebsd-src-1/archive_read_support_format_rar.c
Method execute_filter_e8(struct rar_filter *filter, struct rar_virtual_machine *vm, size_t pos, int e9also)

```
....
3630.     for (i = 0; i <= length - 5; i++)
```

### Potential Off by One Error in Loops\Path 2:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1061 |
| Status | New |

The buffer allocated by <= in freebsd-src-1/cxgbetool.c at line 1115 does not correctly account for the actual size of the value, resulting in an incorrect allocation that is off by one.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/cxgbetool.c | freebsd-src-1/cxgbetool.c |
| Line | 1129 | 1129 |
| Object | <= | <= |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/cxgbetool.c |
| Method | set_filter(uint32_t idx, int argc, const char *argv[], int hash) |

```
....
1129.       for (start_arg = 0; start_arg + 2 <= argc; start_arg += 2) {
```

### Potential Off by One Error in Loops\Path 3:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1062 |
| Status | New |

The buffer allocated by <= in freebsd-src-1/dp_rx.c at line 900 does not correctly account for the actual size of the value, resulting in an incorrect allocation that is off by one.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 907 | 907 |
| Object | <= | <= |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/dp_rx.c |
| Method | void ath11k_peer_frags_flush(struct ath11k *ar, struct ath11k_peer *peer) |

```
....
907.          for (i = 0; i <= IEEE80211_NUM_TIDS; 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=1060097&projectid=60087&pathid=1063 |
| Status | New |

The buffer allocated by <= in freebsd-src-1/dp_rx.c at line 918 does not correctly account for the actual size of the value, resulting in an incorrect allocation that is off by one.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 925 | 925 |
| Object | <= | <= |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/dp_rx.c |
| Method | void ath11k_peer_rx_tid_cleanup(struct ath11k *ar, struct ath11k_peer *peer) |

```
....
925.          for (i = 0; i <= IEEE80211_NUM_TIDS; 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=1060097&projectid=60087&pathid=1064 |
| Status | New |

The buffer allocated by <= in freebsd-src-1/dp_rx.c at line 1160 does not correctly account for the actual size of the value, resulting in an incorrect allocation that is off by one.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 1211 | 1211 |
| Object | <= | <= |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/dp_rx.c |
| Method | int ath11k_dp_peer_rx_pn_replay_config(struct ath11k_vif *arvif, |

```
....
1211.        for (tid = 0; tid <= IEEE80211_NUM_TIDS; tid++) {
```

**Potential Off by One Error in Loops\Path 6:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1065 |
| Status | New |

The buffer allocated by <= in freebsd-src-1/dp_rx.c at line 3152 does not correctly account for the actual size of the value, resulting in an incorrect allocation that is off by one.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/dp_rx.c | freebsd-src-1/dp_rx.c |
| Line | 3173 | 3173 |
| Object | <= | <= |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/dp_rx.c |
| Method | int ath11k_peer_rx_frag_setup(struct ath11k *ar, const u8 *peer_mac, int vdev_id) |

```
....
3173.        for (i = 0; i <= IEEE80211_NUM_TIDS; i++) {
```

**Potential Off by One Error in Loops\Path 7:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1066 |
| Status | New |

The buffer allocated by <= in freebsd-src-1/if_bge.c at line 3138 does not correctly account for the actual size of the value, resulting in an incorrect allocation that is off by one.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/if_bge.c | freebsd-src-1/if_bge.c |
| Line | 3147 | 3147 |
| Object | <= | <= |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/if_bge.c |
| Method | bge_has_multiple_ports(struct bge_softc *sc) |

```
....
3147.        for (fscan = 0; fscan <= PCI_FUNCMAX; fscan++)
```

**Potential Off by One Error in Loops\Path 8:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1067](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1067) |
| Status | New |

The buffer allocated by <= in freebsd-src-1/iptests.c at line 900 does not correctly account for the actual size of the value, resulting in an incorrect allocation that is off by one.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 932 | 932 |
| Object | <= | <= |

Code Snippet
File Name	freebsd-src-1/iptests.c
Method	ip_test5(char *dev, int mtu, ip_t *ip, struct  in_addr gwip, int ptest)

```
....
932.                for (i = 0; i <=
(TH_URG|TH_ACK|TH_PUSH|TH_RST|TH_SYN|TH_FIN);
```

## Use of Insufficiently Random Values

Query Path:
CPP\Cx\CPP Low Visibility\Use of Insufficiently Random Values Version:0

### Categories

FISMA 2014: Media Protection
NIST SP 800-53: SC-28 Protection of Information at Rest (P1)
OWASP Top 10 2017: A3-Sensitive Data Exposure

*Description*

**Use of Insufficiently Random Values\Path 1:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1469](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1469) |
| Status | New |

Method ip_test7 at line 1322 of freebsd-src-1/iptests.c uses a weak method rand to produce random values. These values might be used for secret values, personal identifiers or cryptographic input, allowing an attacker to guess the value.

| | Source | Destination |
|---|---|---|

| | | |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 1345 | 1345 |
| Object | rand | rand |

Code Snippet
File Name freebsd-src-1/iptests.c
Method ip_test7(char *dev, int mtu, ip_t *ip, struct in_addr gwip, int ptest)

```
....
1345.                        *s = (rand() >> 13) & 0xff;
```

### Use of Insufficiently Random Values\Path 2:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1470 |
| Status | New |

Method ip_test7 at line 1322 of freebsd-src-1/iptests.c uses a weak method rand to produce random values. These values might be used for secret values, personal identifiers or cryptographic input, allowing an attacker to guess the value.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 1360 | 1360 |
| Object | rand | rand |

Code Snippet
File Name freebsd-src-1/iptests.c
Method ip_test7(char *dev, int mtu, ip_t *ip, struct in_addr gwip, int ptest)

```
....
1360.                        *s = (rand() >> 13) & 0xff;
```

### Use of Insufficiently Random Values\Path 3:

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1471 |
| Status | New |

Method ip_test1 at line 99 of freebsd-src-1/iptests.c uses a weak method rand to produce random values. These values might be used for secret values, personal identifiers or cryptographic input, allowing an attacker to guess the value.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |

| | | |
|---|---|---|
| Line | 341 | 341 |
| Object | rand | rand |

Code Snippet
File Name freebsd-src-1/iptests.c
Method ip_test1(char *dev, int mtu, ip_t *ip, struct  in_addr gwip, int ptest)

```
....
341.                  if ((rand() & 0x1f) != 0) {
```

**Use of Insufficiently Random Values\Path 4:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1472 |
| Status | New |

Method ip_test1 at line 99 of freebsd-src-1/iptests.c uses a weak method rand to produce random values. These values might be used for secret values, personal identifiers or cryptographic input, allowing an attacker to guess the value.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 351 | 351 |
| Object | rand | rand |

Code Snippet
File Name freebsd-src-1/iptests.c
Method ip_test1(char *dev, int mtu, ip_t *ip, struct  in_addr gwip, int ptest)

```
....
351.                        if ((rand() & 0x1f) != 0) {
```

**Use of Insufficiently Random Values\Path 5:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1473 |
| Status | New |

Method ip_test1 at line 99 of freebsd-src-1/iptests.c uses a weak method rand to produce random values. These values might be used for secret values, personal identifiers or cryptographic input, allowing an attacker to guess the value.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 361 | 361 |

| | | |
|---|---|---|
| Object | rand | rand |

Code Snippet
File Name	freebsd-src-1/iptests.c
Method	ip_test1(char *dev, int mtu, ip_t *ip, struct  in_addr gwip, int ptest)

```
....
361.                if ((rand() & 0x1f) != 0) {
```

**Use of Insufficiently Random Values\Path 6:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1474 |
| Status | New |

Method ip_test7 at line 1322 of freebsd-src-1/iptests.c uses a weak method srand to produce random values. These values might be used for secret values, personal identifiers or cryptographic input, allowing an attacker to guess the value.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 1339 | 1339 |
| Object | srand | srand |

Code Snippet
File Name	freebsd-src-1/iptests.c
Method	ip_test7(char *dev, int mtu, ip_t *ip, struct  in_addr gwip, int ptest)

```
....
1339.        srand(time(NULL) ^ (getpid() * getppid()));
```

**Use of Insufficiently Random Values\Path 7:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1475 |
| Status | New |

Method ip_test1 at line 99 of freebsd-src-1/iptests.c uses a weak method srand to produce random values. These values might be used for secret values, personal identifiers or cryptographic input, allowing an attacker to guess the value.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/iptests.c | freebsd-src-1/iptests.c |
| Line | 297 | 297 |
| Object | srand | srand |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/iptests.c |
| Method | ip_test1(char *dev, int mtu, ip_t *ip, struct  in_addr gwip, int ptest) |

```
....
297.            srand(tv.tv_sec ^ getpid() ^ tv.tv_usec);
```

## Heuristic 2nd Order Buffer Overflow malloc

Query Path:
CPP\Cx\CPP Heuristic\Heuristic 2nd Order Buffer Overflow malloc Version:0

### 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*

**Heuristic 2nd Order Buffer Overflow malloc\Path 1:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1084 |
| Status | New |

The size of the buffer used by xmalloc in len, at line 49 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that conf_next_low passes to fgetc, at line 643 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 651 | 56 |
| Object | fgetc | len |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/test_x509.c |
| Method | conf_next_low(void) |

```
....
651.            x = fgetc(conf);
```

▼

| | |
|---|---|
| File Name | freebsd-src-1/test_x509.c |
| Method | xmalloc(size_t len) |

```
....
56.   buf = malloc(len);
```

**Heuristic 2nd Order Buffer Overflow malloc\Path 2:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |

| | |
|---|---|
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1085 |
| Status | New |

The size of the buffer used by xmalloc in len, at line 49 of freebsd-src-1/test_x509.c, is not properly verified before writing data to the buffer. This can enable a buffer overflow attack, using the source buffer that conf_next_low passes to fgetc, at line 643 of freebsd-src-1/test_x509.c, to overwrite the target buffer.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/test_x509.c | freebsd-src-1/test_x509.c |
| Line | 657 | 56 |
| Object | fgetc | len |

Code Snippet

File Name freebsd-src-1/test_x509.c

Method conf_next_low(void)

```
....
657.                x = fgetc(conf);
```

File Name freebsd-src-1/test_x509.c

Method xmalloc(size_t len)

```
....
56.    buf = malloc(len);
```

## 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=1060097&projectid=60087&pathid=1128 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/buf.c | freebsd-src-1/buf.c |
| Line | 200 | 200 |
| Object | mkstemp | mkstemp |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/buf.c |
| Method | open_sbuf(void) |

```
....
200.          if ((fd = mkstemp(sfn)) == -1 ||
```

**Insecure Temporary File\Path 2:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1129](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1129) |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 210 | 210 |
| Object | mkstemp | mkstemp |

Code Snippet

| | |
|---|---|
| File Name | freebsd-src-1/gvinum.c |
| Method | gvinum_create(int argc, char * const *argv) |

```
....
210.                  if ((fd = mkstemp(tmpfile)) == -1) {
```

## Privacy Violation

Query Path:

CPP\Cx\CPP Low Visibility\Privacy Violation Version:1

### Categories

OWASP Top 10 2013: A6-Sensitive Data Exposure
FISMA 2014: Identification And Authentication
NIST SP 800-53: SC-4 Information in Shared Resources (P1)
OWASP Top 10 2017: A3-Sensitive Data Exposure

*Description*

**Privacy Violation\Path 1:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | [http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1059](http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1059) |
| Status | New |

Method dump_config at line 3000 of freebsd-src-1/servconf.c sends user information outside the application. This may constitute a Privacy Violation.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/servconf.c | freebsd-src-1/servconf.c |

| | | |
|---|---|---|
| Line | 3124 | 2952 |
| Object | auth_methods | printf |

Code Snippet
File Name freebsd-src-1/servconf.c
Method dump_config(ServerOptions *o)

```
....
3124.           o->num_auth_methods, o->auth_methods);
```

File Name freebsd-src-1/servconf.c

Method dump_cfg_strarray_oneline(ServerOpCodes code, u_int count, char **vals)

```
....
2952.             printf(" %s",  vals[i]);
```

## 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=1060097&projectid=60087&pathid=1127 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/optimize.c | freebsd-src-1/optimize.c |
| Line | 392 | 392 |
| Object | BinaryExpr | BinaryExpr |

Code Snippet
File Name freebsd-src-1/optimize.c
Method find_levels_r(opt_state_t *opt_state, struct icode *ic, struct block *b)

```
....
392.             level = MAX(JT(b)->level, JF(b)->level) + 1;
```

## Leaving Temporary Files

Query Path:

CPP\Cx\CPP Low Visibility\Leaving Temporary Files Version:0

Categories

OWASP Top 10 2017: A3-Sensitive Data Exposure

*Description*

**Leaving Temporary Files\Path 1:**

| | |
|---|---|
| Severity | Low |
| Result State | To Verify |
| Online Results | http://WIN-BA8RD5TJ8IG/CxWebClient/ViewerMain.aspx?scanid=1060097&projectid=60087&pathid=1130 |
| Status | New |

The application generates a temporary file mkstemp, in the gvinum_create method at freebsd-src-1/gvinum.c:175. This temporary file is never removed, and will remain in the TEMP folder indefinitely.

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/gvinum.c | freebsd-src-1/gvinum.c |
| Line | 210 | 210 |
| Object | mkstemp | mkstemp |

Code Snippet

File Name freebsd-src-1/gvinum.c

Method gvinum_create(int argc, char * const *argv)

```
....
210.                if ((fd = mkstemp(tmpfile)) == -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=1060097&projectid=60087&pathid=1468 |
| Status | New |

| | Source | Destination |
|---|---|---|
| File | freebsd-src-1/camcontrol.c | freebsd-src-1/camcontrol.c |
| Line | 2454 | 2454 |
| Object | pwd- | pwd- |

Code Snippet
File Name freebsd-src-1/camcontrol.c
Method /* pwd->password may not be null terminated */

```
....
2454.           /* pwd->password may not be null terminated */
```

# 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

# Buffer Overflow Indexes

## 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 boundedcpy

## Risk

### What might happen

Allowing tainted inputs to set the size of how many bytes to copy from source to destination may cause memory corruption, unexpected behavior, instability and data leakage. In some cases, such as when additional and specific areas of memory are also controlled by user input, it may result in code execution.

## Cause

### How does it happen

Should the size of the amount of bytes to copy from source to destination be greater than the size of the destination, an overflow will occur, and memory beyond the intended buffer will get overwritten. Since this size value is derived from user input, the user may provide an invalid and dangerous buffer size.

## General Recommendations

### How to avoid it

- Do not trust memory allocation sizes provided by the user; derive them from the copied values instead.
- If memory allocation by a provided value is absolutely required, restrict this size to safe values only. Specifically ensure that this value does not exceed the destination buffer's size.

## Source Code Examples

### CPP

### Size Parameter is Influenced by User Input

```
char dest_buf[10];
memset(dest_buf, '\0', sizeof(dest_buf));
strncpy(dest_buf, src_buf, size); //Assuming size is provided by user input
```

### Validating Destination Buffer Length

```
char dest_buf[10];
memset(dest_buf, '\0', sizeof(dest_buf));
if (size < sizeof(dest_buf) && sizeof(src_buf) >= size) //Assuming size is provided by user
input
{
      strncpy(dest_buf, src_buf, size);
}
else
{
      //...
}
```

# 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 IndexFromInput

## 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;
```

# Command Injection

## Risk

### What might happen

An attacker could run arbitrary system-level OS commands on the application server host. Depending on the application’s OS permissions, these could include:

- File actions (read / create / modify / delete)
- Open a network connection to the attacker’s server
- Start and stop system services
- Modify the running application
- Complete server takeover

## Cause

### How does it happen

The application runs an OS system-level command to complete it's task, rather than via the application code. The command includes untrusted data, that may be controllable by an attacker. This untrusted string may contain malicious system-level commands engineered by an attacker, which could be executed as though the attacker were running commands directly on the application server.

In this case, the application receives data from the user input, and passes it as a string to the Operating System. This unvalidated data is then executed by the OS as a system command, running with the same system privileges as the application.

## General Recommendations

### How to avoid it

- Refactor the code to avoid any direct shell command execution. Instead, use platform provided APIs or library calls.
- If it is impossible to remove the command execution, execute only static commands that do not include dynamic, user-controlled data.
- Validate all input, regardless of source. Validation should be based on a whitelist: accept only data fitting a specified format, rather than rejecting bad patterns (blacklist). Parameters should be limited to an allowed character set, and non-validated input should be dropped. In addition to characters, check for:
    - Data type
    - Size
    - Range
    - Format
    - Expected values
- In order to minimize damage as a measure of defense in depth, configure the application to run using a restricted user account that has no unnecessary OS privileges.
- If possible, isolate all OS commands to use a separate dedicated user account that has minimal privileges only for the specific commands and files used by the application, according to the Principle of Least Privilege.

- If absolutely necessary to call a system command or execute external program with user input, do not concatenate the user input with the command. Instead, isolate the parameters from the command by using a platform function that supports this.

- Do not call `system()` or it's variants, as this does not support separating data parameters from the system command.
- Instead, use one of the functions that receive arguments separately from the command, and validates them. This includes `ShellExecute()`, `execve()`, or one of it's variants.
- It is very important to pass user-controlled data to the function as the `lpParameters` or `argN` argument (or equivalent), and ensure that it is properly quoted. Never pass user controlled data to as the first parameter for `cmdname` or `filePath`.
- Do not directly execute any shell or command interpreters, such as `bash`, `cmd`, or `make`, with user-controlled input.

## Source Code Examples

### CPP

### Execute System (Shell) Command With User Input

```
int main( int argc, char* argv[] )
{
      int result;
      if ( argc == 2 )
      {
             result = system(argv[1]);
      }
      return result;
}
```

### Call External Program with Safe Parameters

```
int main( int argc, char* argv[] )
{
      int result;
      if ( argc == 2 )
      {
             char* param = escapeArg(argv[1]);

             result = _spawnl(_P_WAIT, EXTERNAL_PROGRAM_PATH, EXTERNAL_PROGRAM_PATH, param,
NULL);
      }
      return result;
}
```

### Refactor Code to Use API Function

```
int main( int argc, char* argv[] )
{
      int result;
      if ( argc == 2 )
      {
            char* param = escapeArg(argv[1]);

            result = performSpecificAction(param);
      }
      return result;
}
```

# 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

# 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

# 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

```java
public float getAverage(HttpServletRequest req) {
      int total = Integer.parseInt(req.getParameter("total"));
      int count = Integer.parseInt(req.getParameter("count"));

      return total / count;
}
```

### Checked Division

```java
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;
}
```

# 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

# Long 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<br>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 |  |  |

BACK TO TOP

# 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') |

BACK TO TOP

# 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

# Inadequate Encryption Strength

## Risk

### What might happen

Using weak or outdated cryptography does not provide sufficient protection for sensitive data. An attacker that gains access to the encrypted data would likely be able to break the encryption, using either cryptanalysis or brute force attacks. Thus, the attacker would be able to steal user passwords and other personal data. This could lead to user impersonation or identity theft.

## Cause

### How does it happen

The application uses a weak algorithm, that is considered obselete since it is relatively easy to break. These obselete algorithms are vulnerable to several different kinds of attacks, including brute force.

## General Recommendations

### How to avoid it

Generic Guidance:

- Always use strong, modern algorithms for encryption, hashing, and so on.
- Do not use weak, outdated, or obsolete algorithms.
- Ensure you select the correct cryptographic mechanism according to the specific requirements.
- Passwords should be protected with a dedicated password protection scheme, such as bcrypt, scrypt, PBKDF2, or Argon2.

Specific Recommendations:

- Do not use SHA-1, MD5, or any other weak hash algorithm to protect passwords or personal data. Instead, use a stronger hash such as SHA-256 when a secure hash is required.
- Do not use DES, Triple-DES, RC2, or any other weak encryption algorithm to protect passwords or personal data. Instead, use a stronger encryption algorithm such as AES to protect personal data.
- Do not use weak encryption modes such as ECB, or rely on insecure defaults. Explicitly specify a stronger encryption mode, such as GCM.
- For symmetric encryption, use a key length of at least 256 bits.

## Source Code Examples

### Java

### Weakly Hashed PII

```java
string protectSSN(HttpServletRequest req) {
    string socialSecurityNum = req.getParameter("SocialSecurityNo");

    return DigestUtils.md5Hex(socialSecurityNum);
}
```

### Stronger Hash for PII

```
string protectSSN(HttpServletRequest req) {
     string socialSecurityNum = req.getParameter("SocialSecurityNo");

     return DigestUtils.sha256Hex(socialSecurityNum);
}
```

# 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());
```

# Wrong Memory 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

```cpp
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

```cpp
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);
```

# 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));
    }
}
```

# Stored Buffer Overflow cpycat

## 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

## 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**<br>**Seven Pernicious Kingdoms (primary)700**<br>**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 |

BACK TO TOP

# Privacy Violation

## Risk

### What might happen

A user’s personal information could be stolen by a malicious programmer, or an attacker that intercepts the data.

## Cause

### How does it happen

The application sends user information, such as passwords, account information, or credit card numbers, outside the application, such as writing it to a local text or log file or sending it to an external web service.

## General Recommendations

### How to avoid it

1. Personal data should be removed before writing to logs or other files.
2. Review the need and justification of sending personal data to remote web services.

## Source Code Examples

### CSharp

**The user's password is written to the screen**

```
class PrivacyViolation
{
        static void foo(string insert_sql)
    {
                string password = "unsafe_password";
                insert_sql = insert_sql.Replace("$password", password);
                System.Console.WriteLine(insert_sql);
        }
}
```

**the user's password is MD5 coded before being written to the screen**

```
class PrivacyViolationFixed
{
        static void foo(string insert_sql)
    {
```

```
                string password = "unsafe_password";
                MD5 md5Hash = System.Security.Cryptography.MD5.Create();
                byte[] data = md5Hash.ComputeHash(Encoding.UTF8.GetBytes(password));
        StringBuilder md5Password = new StringBuilder();

                for (int i = 0; i < data.Length; i++)
            {
                   md5Password.Append(data[i].ToString("x2"));
            }
            insert_sql = insert_sql.Replace("$password", md5Password.ToString());
                System.Console.WriteLine(insert_sql);
        }
}
```

# 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;
}
```

# Heuristic 2nd Order Buffer Overflow malloc

## 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

# 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

# Heuristic Buffer Overflow malloc

## 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<br>**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**<br>**Seven Pernicious Kingdoms (primary)700**<br>**Research Concepts (primary)1000** |
| ParentOf | Weakness Base | 475 | Undefined Behavior for Input to API | **Development Concepts (primary)699**<br>**Seven Pernicious Kingdoms (primary)700** |
| ParentOf | Weakness Base | 476 | NULL Pointer | **Development** |

| | | | | |
|---|---|---|---|---|
| | | | Dereference | **Concepts (primary)699**<br>**Seven Pernicious Kingdoms (primary)700**<br>**Research Concepts (primary)1000** |
| ParentOf | Weakness Base | 477 | Use of Obsolete Functions | **Development Concepts (primary)699**<br>**Seven Pernicious Kingdoms (primary)700**<br>**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**<br>Research Concepts1000 |
| ParentOf | Weakness Variant | 546 | Suspicious Comment | **Development Concepts (primary)699**<br>**Research Concepts (primary)1000** |
| ParentOf | Weakness Variant | 547 | Use of Hard-coded, Security-relevant Constants | **Development Concepts (primary)699**<br>**Research Concepts (primary)1000** |
| ParentOf | Weakness Variant | 561 | Dead Code | **Development Concepts (primary)699**<br>**Research Concepts (primary)1000** |
| ParentOf | Weakness Base | 562 | Return of Stack Variable Address | **Development Concepts (primary)699**<br>Research Concepts1000 |
| ParentOf | Weakness Variant | 563 | Unused Variable | **Development Concepts (primary)699**<br>**Research Concepts (primary)1000** |
| ParentOf | Category | 569 | Expression Issues | **Development Concepts (primary)699** |
| ParentOf | Weakness Variant | 585 | Empty Synchronized Block | **Development Concepts (primary)699**<br>**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**<br>**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 |

BACK TO TOP

## 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 | | |

BACK TO TOP

# Leaving Temporary Files

## Risk

### What might happen

Applications often create temporary files containing sensitive business data or personal information, in order to handle the file generation process in several steps, or even as the output of an automatic process. These files, if left exposed on disk for an indeterminate period of time, could leak the secret data to unauthorized users.

## Cause

### How does it happen

It is very common for applications to use temporary files, as intermediate storage and to aid with processing large amounts of data or long-running calculations. Applications require such files so frequently that most operating systems allocate a dedicated area for temporary files, such as a TEMP directory, and several different mechanisms for creating them exist in most platforms. However, by default these temporary files are not deleted automatically, and will remain on disk indefinitely. If the program does not explicitly and proactively delete the temporary files when it is finished processing them, they might be accessbile to other users of the computer.

## General Recommendations

### How to avoid it

- Always explicitly delete any temporary file created. Ensure temp file deletion will occur by wrapping it in a `finally { }` block, or call `File.deleteOnExit()` to ensure eventual deletion.
- Additionally, to ensure that all temporary files will eventually be deleted, consider implementing additional functionality that will periodically scrape and delete all unused, existing temporary files.
- Ensure all existing file handles or references are closed before attempting deletion.

## Source Code Examples

### Java

### Leaving Temporary Report File

```
private byte[] generateData(int key) {
      File tempFile = File.createTempFile(TEMP_PREFIX, ".txt");

      FileOutputStream writer = new FileOutputStream(tempFile);
      ReportGenerator.writeHugeReportToFileStream(writer, key);

      FileInputStream reader = new FileInputStream(tempFile);
      int length = reader.available();
      if (length > 0) {
            byte[] reportData = new byte[length];
            reader.read(reportData);

            return reportData;
    }
      else {
            return null;
    }
}
```

## Cleaning Up Temporary Report File

```
private byte[] generateData(int key) {
      byte[] reportData = null;
      File tempFile = null;
      FileOutputStream writer = null;
      FileInputStream reader = null;

      try {
      tempFile = File.createTempFile(TEMP_PREFIX, ".txt");

      writer = new FileOutputStream(tempFile);
      ReportGenerator.writeHugeReportToFileStream(writer, key);

      reader = new FileInputStream(tempFile);
      int length = reader.available();
      if (length > 0) {
              reportData = new byte[length];
          reader.read(reportData);
      }
    }
      catch (IOException e) {
            handleError(e);
    }
      finally {
            if (reader != null) {
            try {
                   reader.close();
            }
                   catch (IOException e) {
                          handleError(e);
            }
        }

            if (writer != null) {
            try {
                   writer.close();
            }
            catch (IOException e) {
                handleError(e);
            }
        }

            if (tempFile != null) {
            try {
            tempFile.delete();
            }
            catch (IOException e) {
                handleError(e);
            }
        }
    }
      return reportData;
}
```

# 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 | | |

BACK TO TOP

## 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**<br>**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**<br>Research Concepts1000 |
| ParentOf | Weakness Class | 638 | Failure to Use Complete Mediation | Research Concepts1000 |
| ParentOf | Weakness Base | 804 | Guessable CAPTCHA | **Development Concepts (primary)699**<br>**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 |
| | updated Alternate Terms, Detection Factors, Potential Mitigations, References, Relationships | | |
| 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 |

BACK TO TOP

## 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 |

BACK TO TOP

# 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**<br>**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 | | |

BACK TO TOP

# Use of Insufficiently Random Values

## Risk

### What might happen

Random values are often used as a mechanism to prevent malicious users from guessing a value, such as a password, encryption key, or session identifier. Depending on what this random value is used for, an attacker would be able to predict the next numbers generated, or previously generated values. This could enable the attacker to hijack another user's session, impersonate another user, or crack an encryption key (depending on what the pseudo-random value was used for).

## Cause

### How does it happen

The application uses a weak method of generating pseudo-random values, such that other numbers could be determined from a relatively small sample size. Since the pseudo-random number generator used is designed for statistically uniform distribution of values, it is approximately deterministic. Thus, after collecting a few generated values (e.g. by creating a few individual sessions, and collecting the sessionids), it would be possible for an attacker to calculate another sessionid.
Specifically, if this pseudo-random value is used in any security context, such as passwords, keys, or secret identifiers, an attacker would be able to predict the next numbers generated, or previously generated values.

## General Recommendations

### How to avoid it

Generic Guidance:

- Whenever unpredicatable numbers are required in a security context, use a cryptographically strong random number generator, instead of a statistical pseudo-random generator.
- Use the cryptorandom generator that is built-in to your language or platform, and ensure it is securely seeded. Do not seed the generator with a weak, non-random seed. (In most cases, the default is securely random).
- Ensure you use a long enough random value, to make brute-force attacks unfeasible.

Specific Recommendations:

- Do not use the statistical pseudo-random number generator, use the cryptorandom generator instead. In Java, this is the SecureRandom class.

## Source Code Examples

### Java

**Use of a weak pseudo-random number generator**

```
Random random = new Random();

long sessNum = random.nextLong();

String sessionId = sessNum.toString();
```

### Cryptographically secure random number generator

```
SecureRandom random = new SecureRandom();

byte sessBytes[] = new byte[32];

random.nextBytes(sessBytes);

String sessionId = new String(sessBytes);
```

## Objc

### Use of a weak pseudo-random number generator

```
long sessNum = rand();
NSString* sessionId = [NSString stringWithFormat:@"%ld", sessNum];
```

### Cryptographically secure random number generator

```
UInt32 sessBytes;
SecRandomCopyBytes(kSecRandomDefault, sizeof(sessBytes), (uint8_t*)&sessBytes);

NSString* sessionId = [NSString stringWithFormat:@"%llu", sessBytes];
```

## Swift

### Use of a weak pseudo-random number generator

```
let sessNum = rand();
let sessionId = String(format:"%ld", sessNum)
```

### Cryptographically secure random number generator

```
var sessBytes: UInt32 = 0
withUnsafeMutablePointer(&sessBytes, { (sessBytesPointer) -> Void in
    let castedPointer = unsafeBitCast(sessBytesPointer, UnsafeMutablePointer<UInt8>.self)
    SecRandomCopyBytes(kSecRandomDefault, sizeof(UInt32), castedPointer)
})

let sessionId = String(format:"%llu", sessBytes)
```

# 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 | | |

BACK TO TOP

# 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

# 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)
    }
```

```
  }
```

## 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<br>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<br>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<br>Availability<br>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**<br>**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 |

BACK TO TOP

# Scanned Languages

| Language | Hash Number | Change Date |
|---|---|---|
| CPP | 4541647240435660 | 6/19/2024 |
| Common | 0105849645654507 | 6/19/2024 |