

Coverity Coverage for Common Weakness Enumeration (CWE): Java

| CWE ID | Coverity Static Analysis Checker | Checker Description |
|---------------------|---|---|
| 79 | FB.XSS_REQUEST_PARAMETER_TO_JSP_WRITER | JSP reflected cross site scripting vulnerability |
| | FB.XSS_REQUEST_PARAMETER_TO_SEND_ERROR | Servlet reflected cross site scripting vulnerability |
| | FB.XSS_REQUEST_PARAMETER_TO_SERVLET_WRITER | Servlet reflected cross site scripting vulnerability |
| 89 | FB.SQL_PREPARED_STATEMENT_GENERATED_FROM_NONCONSTANT_STRING | A prepared statement is generated from a nonconstant String |
| | FB.SQL_NONCONSTANT_STRING_PASSED_TO_EXECUTE | Nonconstant string passed to execute method on an SQL statement |
| 113 | FB.HRS_REQUEST_PARAMETER_TO_COOKIE | HTTP cookie formed from untrusted input |
| | FB.HRS_REQUEST_PARAMETER_TO_HTTP_HEADER | HTTP Response splitting vulnerability |
| 185 | FB.RE_BAD_SYNTAX_FOR_REGULAR_EXPRESSION | Invalid syntax for regular expression |
| | FB.RE_CANT_USE_FILE_SEPARATOR_AS_REGULAR_EXPRESSION | File.separator used for regular expression |
| 192 | FB.ICAST_BAD_SHIFT_AMOUNT | 32 bit int shifted by an amount not in the range 0..31 |
| | FB.ICAST_INT_CAST_TO_DOUBLE_PASSED_TO_CEIL | integral value cast to double and then passed to Math.ceil |
| | FB.ICAST_INT_CAST_TO_FLOAT_PASSED_TO_ROUND | int value cast to float and then passed to Math.round |
| 252 | CHECKED_RETURN | Unchecked return value |
| 259 | FB.DMI_CONSTANT_DB_PASSWORD | Hardcoded constant database password |
| | FB.DMI_EMPTY_DB_PASSWORD | Empty database password |

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| 366 | GUARDED_BY_VIOLATION | Data race condition |
| | VOLATILE_ATOMIICITY | Volatile not atomically updated |
| | FB.IS2_INCONSISTENT_SYNC | Inconsistent synchronization |
| 382 | FB.DM_EXIT | Use of System.exit() or similar |
| 398 | FB.NM_* | Failed to override method |
| | FB.DM_GC | Explicit garbage collection |
| | RESOURCE_LEAK | Socket leak |
| 404 | JDBC_CONNECTION | Database connection leak |
| | RESOURCE_LEAK | Resource leak |
| | FB.DMI_INVOKING_TOSTRING_ON_ARRAY | Stream leak |
| 440 | FORWARD_NULL | Invocation of toString on an array |
| | | Dereference a null pointer |
| 476 | NULL_RETURNS | Dereference after null check |
| | REVERSE_INULL | Dereference null return value |
| | FB.BC_NULL_INSTANCEOF | Dereference before null check |
| | | A known null value is checked to see if it is an instance of a type |
| 481 | FB.QBA_QUESTIONABLE_BOOLEAN_ASSIGNMENT | Method assigns boolean literal in boolean expression |
| 484 | FB.SF_SWITCH_FALLTHROUGH | Switch statement found where one case falls through to the next case |
| 543 | LOCK_INVERSION | Thread deadlock |
| | FB.LI_LAZY_INIT_STATIC | Incorrect lazy initialization of static field |
| | FB.LI_LAZY_INIT_UPDATE_STATIC | Incorrect lazy initialization and update of static field |
| 557 | CALL_SUPER | Failure to call super.finalize() |
| 563 | FB.DLS_DEAD_STORE_OF_CLASS_LITERAL | Dead store of class literal |
| | FB.DLS_OVERWRITTEN_INCREMENT | Overwritten increment |
| 568 | BAD_EQ | Equality test on different types |

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| 570 | FB.BC_IMPOSSIBLE_INSTANCEOF | instanceof will always return false |
| | FB.BC_IMPOSSIBLE_CAST | Impossible cast |
| | FB.BC_IMPOSSIBLE_DOWNCAST | Impossible downcast |
| | FB.BC_IMPOSSIBLE_DOWNCAST_OF_TOARRAY | Impossible downcast of toArray() result |
| | FB.BC_IMPOSSIBLE_INSTANCEOF | instanceof will always return false |
| 572 | FB.RU_INVOKE_RUN | Invokes run on a thread (did you mean to start it instead?) |
| | CALL_SUPER | Missing call to superclass |
| 580 | PW.ABNORMAL_TERMINATION_OF_FINALLY_BLOCK | Return inside finally block |
| 585 | FB.ESYNC_EMPTY_SYNC | Empty synchronized block |
| 586 | FB.DM_RUN_FINALIZERS_ON_EXIT | Method invokes dangerous method runFinalizersOnExit |
| | BAD_EQ | Wrong kind of equality |
| 595 | FB.EQ_* | Defects when using equals method |
| | FB.ES_COMPARING_PARAMETER_STRING_WITH_EQ | Comparison of String parameter using == or != |
| 597 | FB.ES_COMPARING_STRINGS_WITH_EQ | Comparison of String objects using == or != |
| 609 | ATOMICITY | Value not atomically updated |
| | FB.DC_DOUBLECHECK | Possible double check of field |
| 664 | USE_AFTER_FREE | Use of freed resources |
| 665 | JDBC_CONNECTION | JDBC connection state error |
| 666 | JDBC_CONNECTION | JDBC connection state error |
| 672 | FB.DM_STRING_TOSTRING | Method invokes toString() method on a String |
| 674 | FB.IL_INFINITE_RECURSIVE_LOOP | An apparent infinite recursive loop |

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| None | FB.DM_STRING_CTOR | Method invokes inefficient new String(String) constructor |
| | FB.DM_NUMBER_CTOR | Method invokes inefficient Number constructor |
| | FB.DM_BOOLEAN_CTOR | Method invokes inefficient Boolean constructor |
| | DC.THREADING | Relying on finalizers |
| | FB.ST_WRITE_TO_STATIC_FROM_INSTANCE_METHOD | Write to static field from instance method |
| | UNEXPECTED_SYNC | Unnecessary synchronization |
| | FB.SA_FIELD_DOUBLE_ASSIGNMENT | Double assignment of field |
| | FB.SA_FIELD_SELF_ASSIGNMENT | Self assignment of field |
| | FB.NM_METHOD_CONSTRUCTOR_CONFUSION | Apparent method/constructor confusion |
| | FB.UUF_UNUSED_FIELD | Unused field |
| | FB.UPM_UNCALLED_PRIVATE_METHOD | Private method is never called |
| | FB.SIO_SUPERFLUOUS_INSTANCEOF | Unnecessary type check done using instanceof operator |
| | FB.LI_LAZY_INIT_INSTANCE | Incorrect lazy initialization of instance field |
| | FB.LI_LAZY_INIT_STATIC | Incorrect lazy initialization of static field |
| | FB.BC_IMPOSSIBLE_CAST_PRIMITIVE_ARRAY | Impossible cast involving primitive array |
| FB.SBSC_USE_STRINGBUFFER_CONCATENATION | Method concatenates strings using + in a loop | |

For More Information:
www.coverity.com
 Email: info@coverity.com

Coverity Inc. Headquarters
 185 Berry Street, Suite 6500
 San Francisco, CA 94107 USA

U.S. Sales: (800) 873-8193
 International Sales: +1 (415) 321-5237
 Email: sales@coverity.com