

# Coverity Support for CWE Top 25 (2019)

## Coverity Version 2020.09 and Later Versions

| CWE Top 25 (2019)  | CWE | Java | C# | C/C++ | CUDA | Obj-C | JavaScript/TypeScript | Kotlin | Node.js | Android | Swift | Python 2.7 | PHP | Scala | VB.NET | Ruby | Go |
|--|-----|------|----|-------|------|-------|-----------------------|--------|---------|---------|-------|------------|-----|-------|--------|------|----|
| 1. Improper Restriction of Operations within the Bounds of a Memory Buffer                     | 119 |      |    | ●     | ●    | ●     |                       |        |         |         |       |            |     |       |        |      |    |
| 2. Improper Neutralization of Input During Web Page Generation ('Cross-site Scripting')        | 79  | ●    | ●  |       |      |       | ●                     |        | ●       | ●       |       | ●          | ●   |       | ●      | ●    | ●  |
| 3. Improper Input Validation   | 20  |      |    | ●     | ●    | ●     | ●                     |        | ●       |         |       |            |     |       |        |      |    |
| 4. Information Exposure  | 200 | ●    | ●  | ●     | ●    | ●     | ●                     | ●      | ●       | ●       |       |            |     |       | ●      |      |    |
| 5. Out-of-bounds Read  | 125 |      |    | ●     | ●    | ●     |                       |        |         |         |       |            |     |       |        |      |    |
| 6. Improper Neutralization of Special Elements used in an SQL Command ('SQL Injection')        | 89  | ●    | ●  | ●     | ●    | ●     | ●                     | ●      | ●       | ●       | ●     | ●          | ●   |       | ●      | ●    | ●  |
| 7. Use After Free  | 416 |      |    | ●     | ●    | ●     |                       |        |         |         |       |            |     |       |        |      |    |
| 8. Integer Overflow or Wraparound  | 190 | ●    | ●  | ●     | ●    | ●     |                       |        |         | ●       |       |            |     | ●     |        |      |    |
| 9. Cross-Site Request Forgery (CSRF)   | 352 | ●    | ●  |       |      |       | ●                     |        | ●       | ●       |       | ●          | ●   |       | ●      | ●    |    |
| 10. Improper Limitation of a Pathname to a Restricted Directory ('Path Traversal')             | 22  | ●    | ●  | ●     | ●    | ●     | ●                     | ●      | ●       | ●       | ●     | ●          | ●   |       | ●      | ●    | ●  |
| 11. Improper Neutralization of Special Elements used in an OS Command ('OS Command Injection') | 78  | ●    | ●  | ●     | ●    | ●     | ●                     | ●      | ●       | ●       |       | ●          | ●   |       | ●      | ●    | ●  |
| 12. Out-of-bounds Write  | 787 |      |    | ●     |      | ●     |                       |        |         |         |       |            |     |       |        |      |    |
| 13. Improper Authentication  | 287 |      |    |       |      |       | ●                     | ●      |         |         | ●     |            |     |       |        | ●    |    |
| 14. NULL Pointer Dereference   | 476 | ●    | ●  | ●     | ●    | ●     | ●                     |        | ●       | ●       | ●     | ●          | ●   | ●     | ●      | ●    | ●  |
| 15. Incorrect Permission Assignment for Critical Resource                                      | 732 | ●    |    |       |      |       | ●                     |        | ●       | ●       |       |            |     |       |        | ●    |    |
| 16. Unrestricted Upload of File with Dangerous Type  | 434 |      | ●  |       |      |       | ●                     |        | ●       |         |       |            |     |       |        |      |    |

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|---|-----|------|----|-------|------|-------|---------------------------|--------|---------|---------|-------|------------|-----|-------|--------|------|----|
| 17. Improper Restriction of XML External Entity Reference     | 611 | ●    | ●  |       |      |       | ●                         | ●      | ●       | ●       | ●     | ●          | ●   |       | ●      |      | ●  |
| 18. Improper Control of Generation of Code ('Code Injection') | 94  | ●    | ●  |       |      |       | ●                         |        | ●       | ●       | ●     | ●          | ●   |       | ●      | ●    | ●  |
| 19. Use of Hard-coded Credentials                             | 798 | ●    | ●  | ●     | ●    | ●     | ●                         | ●      | ●       | ●       | ●     | ●          | ●   |       | ●      | ●    | ●  |
| 20. Uncontrolled Resource Consumption                         | 400 | ●    |    | ●     | ●    | ●     | ●                         |        | ●       |         |       |            |     |       |        | ●    |    |
| 21. Missing Release of Resource after Effective Lifetime      | 772 |      |    | ●     | ●    | ●     |                           |        |         |         |       |            |     |       |        |      |    |
| 22. Untrusted Search Path                                     | 426 | ●    | ●  | ●     |      | ●     | ●                         |        | ●       |         | ●     | ●          | ●   |       | ●      | ●    | ●  |
| 23. Deserialization of Untrusted Data                         | 502 | ●    | ●  |       |      |       | ●                         | ●      | ●       | ●       |       | ●          | ●   |       | ●      | ●    | ●  |
| 24. Improper Privilege Management                             | 269 | ●    |    |       |      |       | ●                         |        | ●       | ●       |       |            |     |       |        |      |    |
| 25. Improper Certificate Validation                           | 295 | ●    |    |       |      |       | ●                         | ●      | ●       |         | ●     |            |     |       |        |      |    |

## The Synopsys difference

Synopsys helps development teams build secure, high-quality software, minimizing risks while maximizing speed and productivity. Synopsys, a recognized leader in application security, provides static analysis, software composition analysis, and dynamic analysis solutions that enable teams to quickly find and fix vulnerabilities and defects in proprietary code, open source components, and application behavior.

For more information about the Synopsys Software Integrity Group, visit us online at [www.synopsys.com/software](http://www.synopsys.com/software).

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# Coverity Support for CWE Top 25 (2019)

## Coverity Version 2020.06 and Later Versions

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| 2. Improper Neutralization of Input During Web Page Generation ('Cross-site Scripting')        | 79  | ●    | ●  |       |      |       | ●                     |        | ●       | ●       |       | ●          | ●   |       | ●      | ●    | ●  |
| 3. Improper Input Validation   | 20  |      |    | ●     | ●    | ●     | ●                     |        | ●       |         |       |            |     |       |        |      |    |
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For more information about the Synopsys Software Integrity Group, visit us online at [www.synopsys.com/software](http://www.synopsys.com/software).

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