|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| OWASP Top Ten | 2003 | 2004 | 2007 | 2010 | 2013 | 2017 | 2021 |
| Unvalidated Input | A1 | A1[9] |  |  |  |  |  |
| Buffer Overflows | A5 | A5 |  |  |  |  |  |
| Denial of Service |  | A9[2] |  |  |  |  |  |
| Injection | A6 | A6[3] | A2 | A1[10] | A1 | A1 | A3 |
| Cross Site Scripting (XSS) | A4 | A4 | A1 | A2 | A3 | A7 |  |
| Identification and Authentication Failures | A3 | A3 | A7 | A3 | A2 | A2 | A7[22] |
| Insecure Direct Object Reference |  | A2 | A4[11] | A4 | A4 | A5[20] |  |
| Cross Site Request Forgery (CSRF) |  |  | A5 | A5 | A8 |  |  |
| Security Misconfiguration | A10 | A10[3][5] |  | A6 | A5 | A6 | A5 |
| Broken Access Control | A2 | A2[1] | A10[13] | A8 | A7[16] | A5 | A1 |
| Insufficient Attack Protection |  |  |  |  |  |  |  |
| Unvalidated Redirects and Forwards |  |  |  | A10 | A10 |  |  |
| Information Leakage and Improper Error Handling | A7 | A7[14][4] | A6 | A6[8] |  |  |  |
| Malicious File Execution |  |  | A3 | A6[8] |  |  |  |
| Cryptographic Failures | A8 | A8[6][5] | A8 | A7 | A6[17] | A3 | A2[21] |
| Insecure Communications |  | A10 | A9[7] | A9 |  |  |  |
| Remote Administration Flaws | A9 |  |  |  |  |  |  |
| Vulnerable and Outdated Components |  |  |  |  | A9 [18][19] | A9 | A6[25] |
| Unprotected APIs |  |  |  |  |  |  |  |
| Software and Data Integrity Failures |  |  |  |  |  | A8 | A8[23] |
| XML External Entity (XXE) |  |  |  |  |  | A4 | A5 |
| Security Logging and Monitoring Failures |  |  |  |  |  | A10 | A9[24] |
| Server-Side Request Forgery (SSRF) |  |  |  |  |  |  | A10 |
| Insecure Design |  |  |  |  |  |  | A4 |
| Next Steps |  |  |  |  |  |  | A11 |

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| [1] Renamed “Broken Access Control” from 2003 | [13] Split “Broken Access Control” from 2004 |
| [2] Split “Broken Access Control” from 2003 | [14] Renamed “Improper Error Handling” from 2004 |
| [3] Renamed “Command Injection Flaws” from 2003 | [15] Renamed “Insecure Storage” from 2004 |
| [4] Renamed “Error Handling Problems” from 2003 | [16] Renamed “Failure to Restrict URL Access” from 2010 |
| [5] Renamed “Insecure Use of Cryptography” from 2003 | [17] Renamed “Insecure Cryptographic Storage” from 2010 |
| [6] Renamed “Web and Application Server” from 2003 | [18] Split “Insecure Cryptographic Storage” from 2010 |
| [7] Split “Insecure Configuration Management” from 2004 | [19] Split “Security Misconfiguration” from 2010 |
| [8] Reconsidered during T10 2010 Release Candidate (RC) | [20] Split “Broken Access Control” from 2013 |
| [9] Renamed “Unvalidated Parameters” from 2003 | [21] Renamed “Sensitive Data Exposure” from 2017 |
| [10] Renamed “Injection Flaws” from 2007 | [22] Renamed “Broken Authentication and Session Management” from 2017 |
| [11] Split “Broken Access Control” from 2004 | [23] Renamed “Insecure Deserialization” from 2017 |
| [12] Renamed “Insecure Configuration Management” from 2004 | [24] Renamed “Insufficient Logging & Monitoring” from 2017 |
|  | [25] Renamed “Using Known Vulnerable Components” from 2017 |