



You have invented a new attack against Session Management

Read more about this topic in OWASP's free Cheat Sheets on Session Management, and Cross Site Request Forgery (CSRF) Prevention



William has control over the generation of session identifiers

OWASP SCP 59 0WASP ASVS 3.9 OWASP AppSensor SE2

CAPEC 31, 60, 61

SAFECODE

28



Ryan can use a single account in parallel since concurrent sessions are allowed

OWASP SCP 68 OWASP ASVS

OWASP AppSensor

CAPE

SAFECODE 28



Alison can set session identification cookies on another web application because the domain and path are not restricted sufficiently

OWASP SCP 59, 61

OWASP ASVS

3.12

OWASP AppSensor

SE2

CAPEC 31, 61

SAFECODE

4



John can predict or guess session identifiers because they are not changed when the user's role alters (e.g. pre and post authentication) and when switching between non-encrypted and encrypted communications, or are not sufficiently long and random, or are not changed periodically

OWASP SCP 66, 67, 71, 72

OWASP ASVS 3.6, 3.7, 3.8, 3.11

OWASP AppSensor SE4-6

CAPEC

3

SAFECODE

20



Gary can take over a user's session because there is a long or no inactivity timeout, or a long or no overall session time limit, or the same session can be used from more than one device/location

OWASP SCP 64, 65

OWASP ASVS

OWASP AppSensor

SE5, SE6 CAPEC

21

SAFECODE

28



Casey can utilize Adam's session after he has finished, because there is no log out function, or he cannot easily log out, or log out does not properly terminate the session

OWASP SCP 62, 63

OWASP ASVS 3.2, 3.4, 3.8

OWASP AppSensor

CAPEC

21

SAFECODE

20



Matt can abuse long sessions because the application does not require periodic re-authentication to check if privileges have changed

OWASP SCP

OWASP ASVS

OWASP AppSensor

CAPEC 21

SAFECODE

28



Ivan can steal session identifiers because they are sent over insecure channels, or are logged, or are revealed in error messages, or are included in URLs, or are accessible un-necessarily by code which the attacker can influence or alter

OWASP SCP

69, 75, 76, 119, 138

OWASP ASVS 3.5, 8.10, 11.4

OWASP AppSensor SE4-6

CAPEC

31, 60

SAFECODE 28

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Marce can forge requests because per-session, or per-request for more critical actions, strong random tokens or similar are not being used for actions that change state

OWASP SCP 73, 74

OWASP ASVS

OWASP AppSensor

IE4 CAPEC

62, 111

SAFECODE

18



Jeff can resend an identical interaction (e.g. HTTP request, signal, button press) and it is accepted, not rejected

OWASP SCP

OWASP ASVS

OWASP AppSensor

IE5

CAPEC

SAFECODE

12, 14



Salim can bypass session management because it is not applied comprehensively and consistently across the application

OWASP SCP

58

OWASP ASVS

3.1

OWASP AppSensor

CAPEC

21

SAFECODE

14, 28



Peter can bypass the session management controls because they have been self-built and/or are weak, instead of using a standard framework or approved tested module

OWASP SCP 58, 60

58, 60

OWASP ASVS

OWASP AppSensor

CAPEC

21

SAFECODE

14, 28