# CWE Detail – CWE-664

## Description

The product does not maintain or incorrectly maintains control over a resource throughout its lifetime of creation, use, and release.

## Extended Description

Resources often have explicit instructions on how to be created, used and destroyed. When code does not follow these instructions, it can lead to unexpected behaviors and potentially exploitable states. Even without explicit instructions, various principles are expected to be adhered to, such as "Do not use an object until after its creation is complete," or "do not use an object after it has been slated for destruction."

## Threat-Mapped Scoring

Score: 1.8

Priority: P4 - Informational (Low)

## Observed Examples (CVEs)

**•** CVE-2018-1000613: Cryptography API uses unsafe reflection when deserializing a private key

**•** CVE-2022-21668: Chain: Python library does not limit the resources used to process images that specify a very large number of bands (CWE-1284), leading to excessive memory consumption (CWE-789) or an integer overflow (CWE-190).

## Related Attack Patterns (CAPEC)

* CAPEC-196
* CAPEC-21
* CAPEC-60
* CAPEC-61
* CAPEC-62

## Attack TTPs

**•** T1539: Steal Web Session Cookie (Tactics: credential-access)

**•** T1134.002: Create Process with Token (Tactics: defense-evasion, privilege-escalation)

**•** T1134.001: Token Impersonation/Theft (Tactics: defense-evasion, privilege-escalation)

**•** T1528: Steal Application Access Token (Tactics: credential-access)

**•** T1134.003: Make and Impersonate Token (Tactics: defense-evasion, privilege-escalation)

**•** T1606: Forge Web Credentials (Tactics: credential-access)

**•** T1550.004: Web Session Cookie (Tactics: defense-evasion, lateral-movement)

**•** T1134: Access Token Manipulation (Tactics: defense-evasion, privilege-escalation)

## Modes of Introduction

**•** Implementation: N/A

## Common Consequences

**•** Impact: Other — Notes:

## Potential Mitigations

**•** Testing: Use Static analysis tools to check for unreleased resources. (Effectiveness: N/A)

## Applicable Platforms

**•** None (Class: Not Language-Specific, Prevalence: Undetermined)

## Notes

**•** Maintenance: More work is needed on this entry and its children. There are perspective/layering issues; for example, one breakdown is based on lifecycle phase (CWE-404, CWE-665), while other children are independent of lifecycle, such as CWE-400. Others do not specify as many bases or variants, such as CWE-704, which primarily covers numbers at this stage.