# CVE Detail – CVE-2022-25304

All versions of package opcua; all versions of package asyncua are vulnerable to Denial of Service (DoS) due to a missing limitation on the number of received chunks - per single session or in total for all concurrent sessions. An attacker can exploit this vulnerability by sending an unlimited number of huge chunks (e.g. 2GB each) without sending the Final closing chunk.

## Threat-Mapped Scoring

Score: 1.5

Priority: P4 - Informational (Low)

## EPSS

EPSS Score: N/A

Percentile: 0.25949

## CVSS Scoring

CVSS v3.1 Score: 7.5

Severity: HIGH

## Mapped CWE(s)

* CWE-770: Allocation of Resources Without Limits or Throttling

## CAPEC(s)

* CAPEC-125: Flooding
* CAPEC-130: Excessive Allocation
* CAPEC-147: XML Ping of the Death
* CAPEC-197: Exponential Data Expansion
* CAPEC-229: Serialized Data Parameter Blowup
* CAPEC-230: Serialized Data with Nested Payloads
* CAPEC-231: Oversized Serialized Data Payloads
* CAPEC-469: HTTP DoS
* CAPEC-482: TCP Flood
* CAPEC-486: UDP Flood
* CAPEC-487: ICMP Flood
* CAPEC-488: HTTP Flood
* CAPEC-489: SSL Flood
* CAPEC-490: Amplification
* CAPEC-491: Quadratic Data Expansion
* CAPEC-493: SOAP Array Blowup
* CAPEC-494: TCP Fragmentation
* CAPEC-495: UDP Fragmentation
* CAPEC-496: ICMP Fragmentation
* CAPEC-528: XML Flood

## ATT&CK Techniques

* T1498.001: Direct Network Flood
* T1499.001: OS Exhaustion Flood
* T1499.003: Application Exhaustion Flood
* T1498.002: Reflection Amplification
* T1499.002: Service Exhaustion Flood
* T1499: Endpoint Denial of Service

## Used By (Actors/Tools)

* OnionDuke (malware)
* ZxShell (malware)
* Sandworm Team (intrusion-set)

## Affected Products

* cpe:2.3:a:asyncua\_project:asyncua:\*:\*:\*:\*:\*:python:\*:\*
* cpe:2.3:a:opcua\_project:opcua:\*:\*:\*:\*:\*:python:\*:\*