Hirschmann RSP, RSPE, and OS2 series HSR denial of service vulnerability

Date: 2021-01-28
Version: 1.0
References: CVE-2020-93071

Executive Summary
A crafted HSR frame can cause a denial of service on one of the ports in an HSR ring.

Details
A change in the HSR implementation of the RSP, RSPE, or OS2 devices in HiOS 07.0.04 introduced a vulnerability. It could allow an unauthenticated, adjacent attacker to cause a denial of service on one of the HSR ring ports of the device. The CVSS v3.1 severity of this vulnerability is 6.5 (medium): CVSS:3.1/AV:A/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H

Impact
A successful attack on a device in an HSR ring causes one of the ports in the ring to no longer switch packets, effectively breaking the redundancy of the HSR ring. If the attacker can perform the same attack on a second device, the ring is broken into two parts, thus disrupting communication between devices in the different parts.

Affected Products

<table>
<thead>
<tr>
<th>Brand</th>
<th>Product Line / Platform</th>
<th>Product</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hirschmann</td>
<td>HiOS</td>
<td>RSP, RSPE, OS2</td>
<td>07.0.04 – 07.1.00</td>
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<td>08.0.00 – 08.3.xx</td>
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Solution
Updates are available, which address the vulnerability. Customers are advised to update their product.

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<tr>
<td>Hirschmann</td>
<td>HiOS</td>
<td>RSP, RSPE, OS2</td>
<td>07.1.01 or higher</td>
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<td></td>
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<td>08.4.00 or higher</td>
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To view all Belden Security Advisories and Bulletins or to report suspected security vulnerabilities, go to https://www.belden.com/security.
For technical support and other requests, please visit https://hirschmann-support.belden.com.

Acknowledgments
Belden thanks the following for working with us to help protect customers:

- The French National Cybersecurity Agency (ANSSI)
Related Links

- [1] https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2020-9307

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Revisions

V1.0 (2021-01-28): Bulletin published.