SSA-568969: Insecure Storage of Sensitive Information in Spectrum Power™ 4

Publication Date: 2020-09-08
Last Update: 2020-09-08
Current Version: V1.0
CVSS v3.1 Base Score: 3.7

SUMMARY

Vulnerabilities in Spectrum Power™ 4 could allow an unauthorized attacker to retrieve a list of software users, or in certain cases to list the contents of a directory.

Siemens has released updates and configuration recommendations for Spectrum Power™ 4 in order to mitigate the issues.

AFFECTED PRODUCTS AND SOLUTION

<table>
<thead>
<tr>
<th>Affected Product and Versions</th>
<th>Remediation</th>
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<tbody>
<tr>
<td>Spectrum Power™ 4:</td>
<td></td>
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<tr>
<td>All versions &lt; V4.70 SP8</td>
<td>Please contact your local Siemens representative.</td>
</tr>
</tbody>
</table>

WORKAROUNDS AND MITIGATIONS

Siemens has identified the following specific workarounds and mitigations that customers can apply to reduce the risk:

- Siemens offers mitigations for customers. Please contact your local Siemens representative for further information.

GENERAL SECURITY RECOMMENDATIONS

Operators of critical power systems (e.g. TSOs or DSOs) worldwide are usually required by regulations to build resilience into the power grids by applying multi-level redundant secondary protection schemes. It is therefore recommended that the operators check whether appropriate resilient protection measures are in place. The risk of cyber incidents impacting the grid's reliability can thus be minimized by virtue of the grid design.

Siemens strongly recommends applying the provided security updates using the corresponding tooling and documented procedures made available with the product. If supported by the product, an automated means to apply the security updates across multiple product instances may be used. Siemens strongly recommends prior validation of any security update before being applied, and supervision by trained staff of the update process in the target environment.

As a general security measure Siemens strongly recommends to protect network access with appropriate mechanisms (e.g. firewalls, segmentation, VPN). It is advised to configure the environment according to our operational guidelines in order to run the devices in a protected IT environment.

Recommended security guidelines to Digital Grid Products can be found at:
https://www.siemens.com/gridsecurity
PRODUCT DESCRIPTION

Spectrum Power™ 4 provides basic components for SCADA, communications, and data modeling for control and monitoring systems. Application suites can be added to optimize network and generation management for all areas of energy management.

VULNERABILITY CLASSIFICATION

The vulnerability classification has been performed by using the CVSS scoring system in version 3.1 (CVSS v3.1) (https://www.first.org/cvss/). The CVSS environmental score is specific to the customer’s environment and will impact the overall CVSS score. The environmental score should therefore be individually defined by the customer to accomplish final scoring.

An additional classification has been performed using the CWE classification, a community-developed list of common software security weaknesses. This serves as a common language and as a baseline for weakness identification, mitigation, and prevention efforts. A detailed list of CWE classes can be found at: https://cwe.mitre.org/.

Vulnerability CVE-2020-15784

Insecure storage of sensitive information in the configuration files could allow the retrieval of user names.

- CVSS v3.1 Base Score: 3.7
- CWE: CWE-312: Cleartext Storage of Sensitive Information

Vulnerability CVE-2020-15790

If configured in an insecure manner, the web server might be susceptible to a directory listing attack.

- CVSS v3.1 Base Score: 3.7
- CWE: CWE-548: Exposure of Information Through Directory Listing

ACKNOWLEDGMENTS

Siemens thanks the following parties for their efforts:

- Can Demirel from Cyberwise for coordinated disclosure

ADDITIONAL INFORMATION

For further inquiries on security vulnerabilities in Siemens products and solutions, please contact the Siemens ProductCERT:

https://www.siemens.com/cert/advisories

HISTORY DATA

V1.0 (2020-09-08): Publication Date
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