



Topic: Vulnerability “CVE-2020-25182, CVE-2020-25176, CVE-2020-25178, CVE-2020-25184, CVE-2020-25180 “in MFC3000 and MFC1000 controller all versions

Dear Valued Customer,

Summary:

A vulnerability report has been issued from Kaspersky about vulnerability in ISaGRAF® Runtime 4 and 5 software provided by Rockwell Automation.

ISaGRAF® is a component of our MFC3000 and MFC1000 controllers. If successfully exploited, these vulnerabilities may result in remote code execution, information disclosure, or denial of service.

Via the ICS Advisory -advisory referenced vulnerability’s “ICSA-20-280-01”.

A successful exploitation of this vulnerability could lead to information disclosure on the device and allow an unauthenticated attacker to execute arbitrary code.

Details of this vulnerability are available on the ICS security advisory web site:

on the site [ICSA-20-280-01](#)

and on the Rockwell Automation site : [Industrial Security Advisory](#)

The product affected are:

- ALSPA S6 MFC3000 all versions
- ALSPA S6 MFC1000 all versions

Vulnerability detail:

3.2.1 UNCONTROLLED SEARCH PATH ELEMENT Path Element CWE-427

The product uses a fixed or controlled search path to find resources, but one or more locations in that path can be under the control of unintended actors.

[CVE-2020-25182](#) has been assigned to this vulnerability. A CVSS v3.1 base score of 6.7 has been calculated; the CVSS vector string is ([AV:A/AC:L/PR:N/UI:N/S:C/C:H/I:N/A:N](#)).

3.2.1 RELATIVE PATH TRAVERSAL CWE-23

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The software uses external input to construct a pathname that should be within a restricted directory, but it does not properly neutralize sequences such as ".." that can resolve to a location that is outside of that directory.

[CVE-2020-25176](#) has been assigned to this vulnerability. A CVSS v3.1 base score of 9.1 has been calculated; the CVSS vector string is ([AV:A/AC:L/PR:N/UI:N/S:C/C:H/I:N/A:N](#)).

3.2.1 TO CLEARTEXT TRANSMISSION OF SENSITIVE INFORMATION, CWE-319

The software transmits sensitive or security-critical data in cleartext in a communication channel that can be sniffed by unauthorized actors.

[CVE-2020-25178](#) has been assigned to this vulnerability. A CVSS v3.1 base score of 7.5 has been calculated; the CVSS vector string is ([AV:A/AC:L/PR:N/UI:N/S:C/C:H/I:N/A:N](#)).

3.2.1 USE OF HARD CODED CRYPTOGRAPHIC KEY, CWE-321

The use of a hard-coded cryptographic key significantly increases the possibility that encrypted data may be recovered.

[CVE-2020-25180](#) has been assigned to this vulnerability. A CVSS v3.1 base score of 6.5 has been calculated; the CVSS vector string is ([AV:A/AC:L/PR:N/UI:N/S:C/C:H/I:N/A:N](#)).

3.2.1 UNPROTECTED STORAGE OF CREDENTIALS CWE-256

Storing a password in plaintext may result in a system compromise.

[CVE-2020-25184](#) has been assigned to this vulnerability. A CVSS v3.1 base score of 7.8 has been calculated; the CVSS vector string is ([AV:A/AC:L/PR:N/UI:N/S:C/C:H/I:N/A:N](#)).

Defense in depth

To minimize the risk of exposure to vulnerability's, GE recommend implementing defense in depth strategy for critical process control system.

Specifically, for this point GE recommends users take these defensive measures to minimize the risk of exploitation of this vulnerability:

- Minimize network exposure for all control system devices and/or systems and ensure that they are not accessible from the internet without adequate protection (UTM, DMZ, IDS, ...).
- Locate control system networks (Alspa networks : Ethernet Enterprise Network, Ethernet Process Network S8000, Field Network F8000 or EPL) and third party connected equipment (through Modbus, ProdiBus, IEC104, ...) behind firewalls and isolate them from the business or other network.
- When remote access is required, use secure methods, such as Virtual Private Networks (VPNs), recognizing that VPNs may have vulnerabilities and should be updated to the most current version available. Also recognize that VPN is only as secure as the connected devices.
- Restrict system access to authorized personnel only and follow a least privilege approach (access control, locked room, video, ...).

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GE reminds organizations to perform proper impact analysis and risk assessment prior to deploying defensive measures.

GE Power Automation & Control Contact information

We will be please to support the enhancement of the cyber security of your equipment with improved solution, or product update. We can conduct a thorough analysis of your cyber security need stop define the optimal solution. If you would like to assess the level of your cybersecurity level, please contact us

Contact your GE Power Automation & Controls sales person or our Help Desk at +33 1 60 13 43 91 / helpdesk.control-systems@ge.com for help on ordering or cybersecurity services.

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