RBS-2019-003

D2RCG QRCODEX2 ActiveX Control Make() Method
Stack Buffer Overflow
Vulnerable Program Details

Details for tested products and versions:

Vendor: D2RCG
Product: QRCodeX2 ActiveX Control (QRCodeX2.ocx)
Version: 1.0.0.1

NOTE: Other versions than the one listed above are likely affected.

Credits

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Impact

The QRCodeX2 ActiveX control (QRCodeX2.ocx) contains a stack-based buffer overflow that may allow an attacker to compromise a user’s system.

Vulnerability Details

One of the methods provided by the QRCodeX2 ActiveX control is Make(), which accepts a single argument as defined below:

[id(0x0000000d)]
VARIANT_BOOL Make(BSTR BarcodeFile);

When the method is called, control is transferred to a function in QRCodeX2.ocx that first creates a CString object containing the supplied “BarcodeFile” argument.
The supplied argument is then copied to a 1024 byte stack buffer using an inlined strcpy() call without performing any boundary checks.

This can lead to a stack-based buffer overflow and arbitrary code execution.

Solution

The vendor has discontinued this product, and KrCERT/CC plans to set the kill-bit.

References

RBS: RBS-2019-003
VulnDB: 202017

## Timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019-01-07</td>
<td>Vulnerability discovered.</td>
</tr>
<tr>
<td>2019-02-01</td>
<td>Vulnerability reported to KrCERT/CC.</td>
</tr>
<tr>
<td>2019-04-04</td>
<td>Alert published to VulnDB customers.</td>
</tr>
<tr>
<td>2019-05-21</td>
<td>Publication of this vulnerability report.</td>
</tr>
</tbody>
</table>
About Risk Based Security

Risk Based Security offers clients fully integrated security solutions, combining real-time vulnerability and threat data, as well as the analytical resources to understand the implications of the data, resulting in not just security, but the right security.

Company History

Risk Based Security, Inc. (RBS) was established to support organizations with the technology to turn security data into actionable information and a competitive advantage. We do so by enhancing the research available and providing a first of its kind risk identification and evidence-based security management service.

As a data driven and vendor neutral organization, RBS is able to deliver focused security solutions that are timely, cost effective, and built to address the specific threats and vulnerabilities most relevant to the organizations we serve. We not only maintain vulnerability and data breach databases, we also use this information to inform our entire practice.

Solutions

**VulnDB** - Vulnerability intelligence, alerting, and third party library tracking based on the largest and most comprehensive vulnerability database in the world. Available as feature-rich SaaS portal or powerful API. Vendor evaluations including our Vulnerability Timeline and Exposure Metrics (VTEM), Cost of Ownership ratings, Code Maturity, and Social Risk Scores.

**Cyber Risk Analytics** - Extensive data breach database including interactive dashboards and breach analytics. Clients are able to gather and analyze security threat and data breach information on businesses, industries, geographies, and causes of loss. It also allows monitoring of domains for data breaches and leaked credentials as well as implementing a continuous vendor management program with our PreBreach data.

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**Vulnerability Assessments (VA) and Pentesting** - Regularly scheduled VAs and pentests help an organization identify weaknesses before the bad guys do. Managing the most comprehensive VDB puts us in a unique position to offer comprehensive assessments, combining the latest in scanning technology and our own data. Detailed and actionable reports are provided in a clear and easy to understand language.

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