

## erwin Data Modeler Vulnerability Assessment Report 12.1 and 12.1 SP1

Page. 1 Vulnerability Assessment Report erwin Data Modeler 12.1 and 12.1 SP1 Copyright © 2023

This document walks you through the vulnerabilities that were identified and fixed under the File System Vulnerability Assessment for erwin Data Modeler (erwin DM) 12.1 and 12.1 SP1.

| # | Vulnerability Description   | Reason   | Fix  |
|---|---|--|--|
| 1 | erwin DM 12.1 installs<br>Microsoft Visual C++ 2010 x64<br>Redistributable file.  | Microsoft no<br>longer provides<br>maintenance and<br>security support<br>for this<br>component. | All files associated<br>with Microsoft<br>Visual C++ 2010<br>x64<br>Redistributable<br>have been<br>replaced with the<br>latest supported<br>versions of<br>Microsoft Visual<br>C++.               |
| 2 | erwin DM 12.1 SP1 installs<br>elements of Microsoft C++<br>Runtime Library version<br>7.00.9466.<br>The affected files are:<br>• c:\program files<br>(x86)\windows<br>resource<br>kits\tools\msvcp70.dll<br>• c:\program files<br>(x86)\windows<br>resource<br>kits\tools\msvcr70.dll | Microsoft no<br>longer provides<br>maintenance and<br>security support<br>for this<br>component. | rktools.exe has<br>been removed<br>from erwin DM in<br>12.1 SP1 29229.<br>Now, after<br>installing erwin<br>DM, windows<br>resource kits<br>folder is not<br>created in<br>program files<br>(x86). |
| 3 | erwin DM 12.1 SP1 installs and<br>uses elements of OpenSSL<br>v0.9.8i.<br>The affected files are:<br>• c:\program<br>files\erwin\data<br>modeler<br>r9\libddt32.dll<br>• c:\program<br>files\erwin\data<br>modeler<br>r9\sslddt32.dll   | This version is no<br>longer supported.  | All associations of<br>OpenSSL have<br>been upgraded to<br>use the latest<br>non-vulnerable<br>version.  |
| 4 | erwin DM 12.1 SP1 installs and<br>uses elements of OpenSSL<br>v1.0.2t.<br>The affected files are:<br>c:\program files\erwin\data<br>modeler r9\ssleay32.dll   | This version is no longer<br>supported. <u>Read more</u><br><u>here</u> .                        | All associations of<br>OpenSSL have<br>been upgraded to<br>use the latest<br>non-vulnerable<br>version.  |

| 5 | <ul> <li>c:\program files\erwin\data<br/>modeler r9\libeay32.dll</li> <li>erwin DM 12.1 SP1 installs and<br/>uses the following elements of<br/>the following OpenSSL<br/>versions: <ul> <li>OpenSSL v1.1.1g</li> <li>OpenSSL v1.1.1i</li> <li>OpenSSL v1.1.1k</li> </ul> </li> <li>The affected files are: <ul> <li>c:\program<br/>files\erwin\data<br/>modeler<br/>r9\ssl\openssl.exe</li> <li>c:\program<br/>files\erwin\data<br/>modeler r9\libcrypto-<br/>1_1-x64.dll</li> <li>c:\program<br/>files\erwin\data<br/>modeler r9\libssl-1_1-<br/>x64.dll</li> <li>c:\program<br/>files\erwin\data<br/>modeler<br/>r9\pythondblayer\pyth<br/>on39\dlls\libcrypto-<br/>1_1.dll</li> <li>c:\program<br/>files\erwin\data<br/>modeler<br/>r9\pythondblayer\pyth<br/>on39\dlls\libssl-1_1.dll</li> </ul> </li> </ul> | The National<br>Vulnerability<br>Database has<br>determined that<br>these versions of<br>OpenSSL 1.1.1<br>contain High and<br>Medium<br>Vulnerabilities. For<br>more information,<br>visit:<br>• <u>https://nvd.nist.g</u><br>ov/vuln/detail/C<br>VE-2021-3711<br>• <u>https://nvd.nist.g</u><br>ov/vuln/detail/C<br>VE-2021-23841<br>• <u>https://nvd.nist.g</u><br>ov/vuln/detail/C<br>VE-2021-23841<br>• <u>https://nvd.nist.g</u><br>ov/vuln/detail/C<br>VE-2021-23840 | All affect files<br>have been<br>updated for<br>OpenSSL v1.1.1q        |
|---|---|--|--|
|   | <ul> <li>c:\program<br/>files\erwin\data<br/>modeler</li> </ul>   | <u>VE-2021-23840</u>   |  |
|   | <ul> <li>c:\program<br/>files\erwin\data<br/>modeler r9\ssl\libssl-<br/>1_1.dll</li> </ul>  |  |  |
| 6 | erwin DM 12.1 SP1 installs<br>activeX v6.x.<br>The affected file is:  | activeX v6.x is no<br>longer supported.  | rktools.exe has<br>been removed<br>from erwin DM in<br>12.1 SP1 29229. |

|   | <ul> <li>c:\program files</li> </ul>              |                    | Now, after          |
|---|---|--------------------|---------------------|
|   | (x86)\windows resource                            |                    | installing erwin    |
|   | kits\tools\comctl32.ocx                           |                    | DM, windows         |
|   |   |                    | resource kits       |
|   |   |                    | folder is not       |
|   |   |                    | created in          |
|   |   |                    | program files       |
|   |   |                    | (x86).              |
|   | erwin.exe installs unauthorized<br>firewall rules | These              | These firewall      |
|   |   | unauthorized       | rules are disabled. |
|   |   | firewall rules use | Note: This needs    |
|   |   | TCP/UDP protocols  | verification        |
| 7 |   | to open any port   | whether the         |
|   |   | from any IP        | application         |
|   |   | address, allowing  | function after      |
|   |   | access to the      | disabling these     |
|   |   | system.            | rules.              |

Apart from the above fixes, the following updates have been made:

- 1. The msvcr100.dll file has been removed from the following locations in erwin DM 12.1 SP1 b29259:
  - a. C:\Program Files\erwin\Data Modeler r9\
  - b. C:\Program Files\erwin\Data Modeler r9\OpenAccess\oaserver81\bin\
- 2. Cassandra libraries have been updated. Also, Cassandra OpenSSL version has been updated to v3.0.8
- 3. Zlib library has been updated to 1.2.13
- 4. Microsoft Visual Studio has been updated to 2022
- 5. Python version has been updated to v3.11.2

## Note:

OpenSSL v1.1.1 and subsequent minor versions will no longer be supported after 2023-09-11 which will greatly reduce the allowable certification time of the application. <u>Read more here</u>.