

TAB Number: TB-00388-00-180911

## victor communication issues caused by Windows update

Date Issued: 11 September, 2018

Product	Model	Software	Part Number(s)
victor client	N/A	all	N/A

#### **ISSUE**

Installing certain Windows Updates can cause communication errors in victor client. If the update is not installed on all victor clients and servers, an error message appears on remote victor clients:

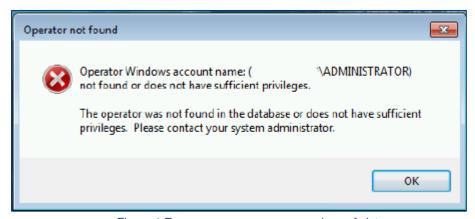


Figure 1 Error message on newer versions of victor

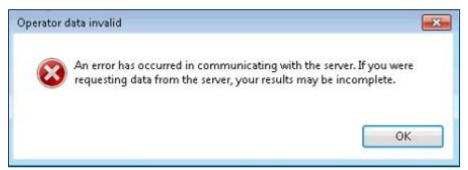


Figure 2 Error message on older versions of victor

For victor operators that use Basic Authentication, remote clients that have the update (when the server does not) will open, get to the splash screen, and then close.



#### **TECHNICAL ADVISORY BULLETIN**



Additionally, in an Enterprise environment (Master Application Server (MAS), Satellite Application Servers (SAS)), when you update a global personnel record from a SAS (e.g. when adding a credential), the following error message appears:

Error: The formatter threw an exception while trying to deserialize the message: There was an error while trying to deserialize parameter SoftwareHouse.CrossFire.Common.ClientInterfaceLayer:args. The InnerException message was 'Member '\_compareInfo' was not found.'. Please see InnerException for more details.

You can also view this error message in the Windows Event Application log for the CrossFire Framework Service:

## **ROOT CAUSE**

Starting with the May 2018 release of the Preview of Quality Rollups, Microsoft released a fix for the deserializer within the .NET Framework which broke client-to-server and server-to-server communication in victor. Unless you install the Windows Update that contains this fix on all victor clients and servers, the client connections will fail.

The August 2018 Preview of Quality Rollup from Microsoft will include another update to the deserializer for the .NET Framework which will again require the update to be installed on all clients and servers. Once applied, it will not have to be done again for subsequent releases of Windows Updates. Microsoft has stated that the specific updates that contain this fix will be delayed until the August 28th release. Microsoft has posted this advisory, explaining the issue:

Advisory serializing/deserializing a CultureAwareComparer with .NET Framework 4.6+ #81

#### QUALITY AND RELIABILITY IMPROVEMENTS

- Fixes an issue in **Windowsldentity.Impersonate** in which handles were not being explicitly cleaned up.
- Fixes an issues in descrialization that occurs when a **CultureAwareComparer** is used by a collection type, for example, a **ConcurrentDictionary**.
- Fixes an issue in a floating-point overflow in the thread pool's hill-climbing algorithm.
- Fixes an issue in which you observe high CPU usage that is consumed.





## **SOLUTION**

The forthcoming August 28th release of Windows Updates containing the latest deserializer fix will have the KB numbers referenced in the following table:

Note: The Windows Updates Table in this TAB is not an exhaustive list.

**Table 1- Windows Updates (August 2018)** 

Table 1- Windows Opdates (August 2018)						
Operating Systems	Parent KB (Windows Update offering)	Child KBs (shows in "Installed Updates")	.NET Version			
Windows Server 2008	<u>4246083</u>	4342319	4.5.2			
	<u>4246083</u>	4342316	4.6.x / 4.7.x			
Windows 7 / Server 2008 R2	4346080	4342319	4.5.2			
	<u>4346080</u>	4342316	4.6.x / 4.7.x			
Windows Server 2012	<u>4346081</u>	4342318	4.5.2			
	<u>4346081</u>	4342314	4.6.x / 4.7.x			
Windows 8.1 / Server 2012 R2	4346082	4342317	4.5.2			
	<u>4346082</u>	4342315	4.6.x / 4.7.x			
Windows 10 RS1 (1607) / Server 2016	4343884	4343884	N/A			
Window 10 RS2 (1703)	<u>4343889</u>	4343889	N/A			
Windows 10 RS3 (1709)	<u>4343893</u>	4343893	N/A			
Windows 10 RS4 (1803)	<u>4346783</u>	4346783	N/A			

Johnson Controls escalated this issue to Microsoft in May 2018. Currently, Microsoft's recommendation is to make sure the equivalent specific update is installed on both the servers and the clients. Uninstalling the specific update so that it doesn't exist anywhere will also allow the clients to reconnect.





The following tables list the specific July 2018 updates needed for the given operating systems and .NET versions. Click the direct link to go to the needed update.

**NOTE:** There is no fix for Windows 10 1511 or earlier. Microsoft recommends that you upgrade to a newer version of Windows 10 for access to the deserializer fix.

Table 2 – Windows Updates (July 2018)

Operating Systems	Update Package	Package KB (Link)	Specific KB needed	.NET Version
Windows 8.1 / RT 8.1 / Server 2012 R2 (x64)	Security and Quality Rollup	<u>4340558</u>	4338424	3.5 SP1
			4338415	4.5.2
			4338419	4.6 – 4.7.2
Windows 8.1 (x86)	Security and Quality Rollup	<u>4340558</u>	4338424	3.5 SP1
			4338415	4.5.2
			4338419	4.6 – 4.7.2
Windows Server 2012 (x64)	Security Only Rollup	4340005	4338610	3.5 SP1
			4338601	4.5.2
			4338604	4.6 – 4.7.2
Windows 8 Embedded Standard (x64)	Security Only Rollup	<u>4340005</u>	4338610	3.5 SP1
			4338601	4.5.2
			4338604	4.6 – 4.7.2
Windows 8 Embedded Standard (x86)	Security Only Rollup	<u>4340005</u>	4338610	3.5 SP1
			4338601	4.5.2
			4338604	4.6 – 4.7.2



### **USEFUL LINKS:**

How to Upgrade to Windows 10 Version 1803 Spring Creators Update Using ISO File from Versions 1709, 1703, 1607, 1511 or 1507

How to Install Windows 10 1803 (Spring Creators Update) Using Windows Update

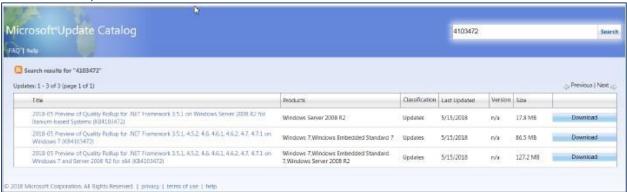
How to: Determine which .NET Framework versions are installed View in Control Panel > Programs and Features

<u>How to: Determine which .NET Framework security updates and hotfixes are installed</u> View in Control Panel > Programs and Features > View Installed Updates

## Example - Downloading a KB for Windows 7 64-bit client / Windows Server 2012 R2

Use the Windows Updates tables in this document to find the required KB files for your victor Client PCs and your victor Application Servers.

1 In the Windows Updates table, click the direct link to the Microsoft Catalog Site. This link leads to the rollup package for the indicated operating system (4103472 for a Windows 7 64-bit client).



- 2 Click the Download button for "Windows 7, Windows Embedded Standard 7, Windows Server 2008 R2".
- 3 Check the Windows Updates Table in this document to confirm the specific KB that you need to download. In this example, we need KB **4096234**.
- 4 In the **Download** window, click that KB's link to download that KB.

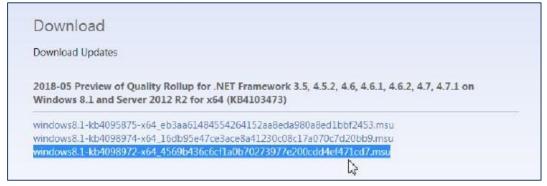




For the Windows Server 2012 R2 victor server, click the direct link in the Windows Updates Table to the Microsoft Catalog site for the rollup package **(4103473)**.



- 6 Click the **Download** button for Windows 8.1 and Server 2012 R2.
- 7 Check the Windows Updates Table in this document to confirm the specific KB that you need to download. In this example, we need KB 4098972.
- In the **Download** window, click that KB's link to download that KB.









**Note:** The Windows Updates Table in this TAB is not an exhaustive list.

The .NET deserialization fix may be included in updates with different KB numbers, as subsequent updates are released. Additionally, the descriptions for some updates may not specify the .NET deserialization fix but may include it as part of a cumulative rollup or Security Update.

For example, the description for **KB4284835** for Windows 10 (1803) does not mention the .NET descrialization fix. However, either removing this from the client or adding the equivalent to the server has resolved the connectivity issue. Generally, on Windows 10, the recommendation is to check updates that were applied starting in May 2018 and to add the equivalent to the server.

#### **EXAMPLE SCENARIO**

In this example, the victor system comprises the following devices:

- Windows 2008 R2 SP1 server
- Multiple Windows 7 clients connecting
- One Windows 10 Client NOT connecting

Although the Windows 10 client did have a KB noted in the Windows Updates Table (**KB4284835**), removing it did not resolve the connectivity issue (suggesting that another update not specified in the Windows Updates Table was applied that included the .NET deserialization fix).

The server and Windows 7 clients, in this example, did not have any recent updates that included the .NET deserialization fix. Applying **KB4096234** (which is specified in the Windows Updates Table for Windows 2008 R2 and Windows 7) to the server resolved the connectivity issue on the Windows 10 client.

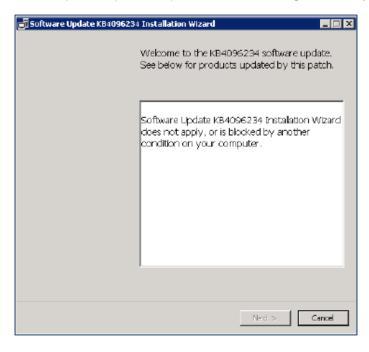
However, since the Windows 7 clients did not have **KB4096234** installed, the victor clients could no longer connect to the Victor Application Server. After applying **KB4096234** to the Windows 7 clients, connectivity was restored.





## **ADDITIONAL INFORMATION**

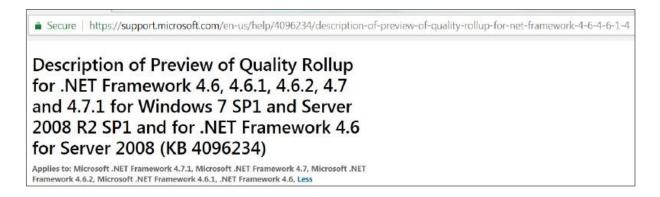
When trying to install the required specific update, the following error may occur:



This occurs when the .NET version installed on the computer is not supported with the *specific* update being installed.

For example, KB4096234 is for .NET Framework versions 4.6, 4.6.1, 4.6.2, 4.7, and 4.7.1. If the computer has .NET 4.5.2 or 4.7.2 installed, the error occurs.

The description of the specific update states which versions of the .NET Framework it applies to. In this example, we can do an internet search on KB4096234 and read the description.



https://support.microsoft.com/en-us/help/4096234/description-of-preview-of-quality-rollup-for-net-framework-4-6-4-6-1-4



Use Windows Update to download the appropriate version of the .NET Framework. If the installed version of the .NET Framework is newer than the version applicable to the KB, uninstall the newer version and then download and install the target version. Finally, install the applicable *specific* KB update.

- 1. Click the Check online for updates from Microsoft Update link.
- 2. Install any **Important Updates**, first, if the target .NET Framework is not in the list of available updates. The .NET Framework may be listed under **Optional Updates**.
- 3. Download and install the target version of the .NET Framework.
- 4. Install the applicable specific KB update.

#### **IMPORTANT:**

- Review the Important and Known Issues (if applicable) sections of the update description.
- All updates for Windows RT 8.1, Windows 8.1, and Windows Server 2012 R2 require update 2919355 to be installed. We recommend that you install update 2919355 on your Windows RT 8.1-based, Windows 8.1-based or Windows Server 2012 R2-based computer so that you receive updates in the future.
- If you install a language pack after you install this update, you must reinstall this
  update. Therefore, we recommend that you install any language packs that you
  need before you install this update. For more information, see <a href="Add Language Packs">Add Language Packs</a>
  to Windows.

#### KNOWN ISSUES IN THIS UPDATE:

 Users receive a "0x80092004" error when they try to install the July 2018 Security and Quality Rollup update KB4340558 on Windows 8.1, Windows Server 2012 R2, or Windows Server 2012 after they install the June 2018 .NET Framework Preview of Quality Rollup updates KB4291497 or KB4291495 on systems that are running on .NET Framework 4.7.2, 4.7.1, 4.7, 4.62, 4.6.1, or 4.6.

## **Continuous Improvement Statement**

As with all processes defined by the American Dynamics Technical Services Group, this document is intended to be a work in progress. Further refinements and suggestions are welcome and should be sent in writing to the e-mail address listed below.

Contact Address: video-support@jci.com

Initial publication 11 September 2018



#### TECHNICAL ADVISORY BULLETIN

#### **Contact Information**

If you have any questions regarding this bulletin, please contact American Dynamics Technical Services at:

Website: www.americandynamics.net Email: video-support@jci.com

In Europe, Middle East and Africa, contact Technical Support at:

Toll Free: +800 CALLTYCO or +800-2255 8926 Website: www.tycosecurityproductsemea.com

Direct: +31 475 352 722 Video Technical Support: video-support@jci.com

Hours: 08:00 – 18:00 CET Technical Training Inquiries: emea.training@tycoint.com

All license Inquiries: tspemealicense@tycoint.com

#### Local Direct dial numbers:

UK	+44-330 777 1300	Ireland	1800 943570	Turkey	00800-31923007
France	0800 90 79 72	Nordic	04494 9001	<b>United Arab Emirates</b>	800-03107123
Spain	900 99 31 61	Denmark	+45-4494 9001	Israel	+972-772 201 350
Germany	0800 1806 757	Bahrain	800-04127	South Africa	0211 003 882
Italy	+39-0230 510 112	Greece	00800-312 294 53	Qatar	00800-100841
Belgium	0800 76 452	Russia	81080020521031	Kuwait	0220-62915

In Latin America and Caribbean, contact Technical Support at:

# Northern Latin America & Caribbean

Contact: Wilson Aguilar Phone: +57-1-7026316 / +1-561-409-0866 Cell: +57-316-876-0732 Email: wilson.aguilar@jci.com

#### **Southern Latin America**

 Argentina: +54-11-5128-4653 Brazil: +55-113-042-2838

Chile: +56-2-2938-2100 Colombia: +57-1-344-1422 Colombia: +57-2-620-7321 Costa Rica: +506-4000-1655

El Salvador: +503-2136-7709 Panama: +507-836-6265 Peru: +51-1-705-2267

Venezuela: +58-212-720-2340

## **Brazil (North)**

Contact: Wagner Soares
Phone: +55 (21) 2108-6016 x.250
Cell: +55 (21) 99153-3519
Email: wagner.soares@jci.com

#### **Brazil (South)**

Contact: Dani Hissnauer Miguel Phone: +55 (11) 2172 9224 Cell: +55 (11) 97663-2653 Email: danimiguel@tycoint.com

## Mexico

Contact: Marco Antonio Salguero Phone: +52-55-5488-8092 Cell: +52-55-1473-4946 Email: msalguero@tycoint.com

In Asia Pacific, contact Technical Support at:

Information furnished by American Dynamics is believed to be accurate and reliable. However, no responsibility is assumed by American Dynamics for its use, nor any infringements of other rights of third parties which may result from its use. No license is granted by implications or otherwise under any patent rights of American Dynamics.

