

**PRODUCT NOTICE****Notice of Potential Product Concern**

Rockwell Automation issues a Product Notice when it identifies a product(s) anomaly that may cause commercial or customer satisfaction concerns.

AADvance Workbench Versions 1.x and 2.x Compiler Verification Tool Warnings

Reference: 2020-08-001

Date: August 2020

This Product Notice informs you of a potential anomaly that exists with AADvance® Workbench 1.x and 2.x. The Compiler Verification Tool (CVT) generates warnings if a mismatch is found between the generated application and the original. If the mismatches are not resolved and the project is subsequently recompiled, the warnings are not reported.

– Product Identification –

The affected product is AADvance Workbench, versions 1.x and 2.x.

– Description –

An anomaly exists with AADvance Workbench 1.x and 2.x. The Compiler Verification Tool (CVT) generates warnings if a mismatch is found between the generated application and the original. If the mismatches are not resolved and the project is subsequently recompiled, the warnings are not reported.

– Temporary Workarounds –

Workarounds for this anomaly have been documented in the following two Rockwell Automation Knowledgebase articles:

- BF25438 - https://rockwellautomation.custhelp.com/app/answers/answer_view/a_id/1126103
- BF25455 - https://rockwellautomation.custhelp.com/app/answers/answer_view/a_id/1126175

Copies of these articles have been attached as Appendix B and Appendix C to this notification. A Rockwell Automation TechConnect contract is required to access the Knowledgebase articles directly.

– Correction –

Correction requires updating to SISW 1.1 or later. Rockwell Automation is currently working on this release and is expected to have SISW 1.1 available for download and installation on or around the end of calendar 2020. If you'd like to receive an email notification when SISW 1.1 is available, use the link provided at the end of the Knowledgebase article for this Product Notice.

Rockwell Automation will make this release available for at least 18 months following its publication to the Rockwell Automation Product Compatibility and Download Center (PCDC).

– Requested Customer Action –

Rockwell Automation requests you take the following actions:

- Check if you have a product affected by this Product Notice. Refer to the Product Identification and Description sections of this document for product identification assistance.
- Customers under support contract are automatically eligible for software updates. Customers not under a support contract should contact Rockwell Automation for further instructions.
- If you need additional assistance, please contact Rockwell Automation Technical Support. See Appendix A for local telephone numbers. Customers without TechConnectSM support contracts should reference this Product Notice when calling.
- Customers with TechConnect support contracts may be able to [chat online](#) with support representatives. Reference this Product Notice when connected to a support engineer.

The most current version of this Product Notice is posted on the Rockwell Automation Support Center, <http://www.rockwellautomation.com/knowledgebase>, as ID number [PN1524 / 1127371](#). Additional languages may also be available at the end of this article attached as downloadable PDF documents.



If this Product Notice does not affect you because you do not have the products any longer, or if you are a Distributor, Rockwell Automation asks that you forward a copy of this notice, with any identifying documentation, immediately to the person or company that now has the product. We also ask that you contact Rockwell Automation Technical Support and provide the location of the affected units.

We appreciate your immediate cooperation. If you have any questions, please contact us.

Sincerely,

ROCKWELL AUTOMATION

You can register for Automatic Product Safety Advisories and Product Notices from Rockwell Automation by email. Go to the Support web page at <http://www.rockwellautomation.com/support> and click the *Search Knowledgebase – Get Answers* link. Sign in with your TechConnect Account or free Rockwell Automation Member Account and you can subscribe to important product updates, including Product Safety Advisories and Product Notices.

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Appendix A Regional Technical Support Information

The following list can help you to contact the correct technical support center for your location. If your country is not listed, you can find a customer support number for your location by going to the Rockwell Automation Knowledgebase as <https://rockwellautomation.custhelp.com>. Click on *Contact Us* → *Phone*, and then enter your location information. If you have a TechConnectSM support contract, please use the telephone number supplied to you with the contract.

Region / Country	Phone Number () International Code
Asia/Pacific	
Australia	1 800 762 593
China	400 620 6620
Hong Kong	+852 2887 4666
India	1 800 2000 121
Japan	03 3206 2785
Korea	(82) 2 2188 4400
Malaysia	1 800 80 4851
New Zealand	0800 27 27 25
Taiwan	080 902 0908
Thailand	(66) 2936 1500
Caribbean	
All Countries (English)	(1) 440 646 3223
All Countries (Español)	(1) 440 646 3650
Central America	
Argentina	800.666.0320
Belize	(1) 440 646 3650
Bolivia	(54) 800 10 0632
Brazil	(55) 11 5189 9500
Chile	800.53.0012
Colombia	01.800.700.2107
Costa Rica	0800.013.1215
Ecuador	58.212.949.0611
El Salvador	(52) 55 5246 2010
Guatemala	1.800.288.0108
Honduras	(52) 55 5246 2010
Mexico	001.888.365.8677
Nicaragua	(52) 55 5246 2010
Panama	001.800.203.3475
Paraguay	(54) 11 5554 4000
Peru	0800.535.36
Suriname	(1) 440 646 3650
Uruguay	(54) 11 5554 4000
Venezuela	800.1.00.3062

Region / Country	Phone Number () International Code
Europe	
Austria	(49) 211 41553 664
Belgium	(32) 2 716 8411
Czech Republic	(420) 28401 5911
Denmark	(45) 43 466 006
Finland	(358) 958 447 419
France	(33) 825303132
Germany	(49) 211 41553 664
Hungary	(420) 28401 5911
Ireland	(44) 01908 635245
Italy (Brescia, Milano e Padova)	(39) 199 11 99 00
Italy (Bologna, Firenze, Napoli, Roma e Torino)	(39) 199 11 99 22
Morocco	(33) 825303132
Netherlands	(31) 10 266 55 80
Poland	(48) 22 32 60 707
Portugal	(1) 440 646 3223
Slovakia	(420) 284015911
Spain	(34) 902 30 93 30
Sweden	(46) 46 19 93 91
Switzerland (German)	(41) 0844 84 84 11
Switzerland (French)	(41) 0844 84 84 12
Switzerland (Italian)	(41) 0844 84 84 13
United Kingdom	(44) 01908 635245
North America	
Canada	(1) 440-646-3223
United States	(1) 440-646-3223

Appendix B

Rockwell Automation Knowledgebase Article BF25435

AADvance CVT warnings may not be reported for subsequent Build All operations

Summary

After a Build All operation that resulted in CVT warnings, subsequent Build All operations may not report the existing CVT warnings, unless the affected component has been modified between Build All operations or a complete rebuild has been triggered.

Original Build:

```
XMLCompare Done
  8 warning(s)
CVT Analysis Done
SAFETYSYSTEMAAD:    0 error(s), 8 warning(s)
----- Build End -----
===== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped =====
```

Subsequent Build:

```
----- Compiler Verification Analysis Resource : CONFIG1    Configuration : CONFIG1 -----
CVT Analysis
CVT Analysis Done
SAFETYSYSTEMAAD:    0 error(s), 0 warning(s)
----- Build End -----
===== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped =====
```

Environment

All versions of AADvance Workbench 1.X and AADvance Workbench 2.X. Affects all safety-related applications that must have the Compiler Verification option enabled as per the AADvance controller Safety Manual.

Cause

The Build All is an incremental operation, it only rebuilds what is flagged internally as modified. The compiler does not keep track of previously reported CVT warnings. If the result of a Build All operation contains CVT warnings and no modifications are made to the application, subsequent Build All operations will not report the existing CVT warnings.

Solution

The following solutions can be implemented to ensure that all CVT warnings are reported during a Build All operation:

Solution 1: Online Updates/Online Monitoring are not required: Clean All

Doing a Clean All will force the compiler to check the entire application for CVT warnings.

Important Note: After a Clean All, it will not be possible to perform an Online Update or to Debug the application by doing online monitoring. A full download will be required for all the controllers in the application (stopping the application from running temporarily).

Warning: Do not do a Clean All on an application of a running system if you cannot do full download afterwards.

- To do a Clean All in AADvance Workbench 1.X, go to Project > Clean Project/Library.
- To do a Clean All in AADvance Workbench 2.X, go to Build > Clean All.

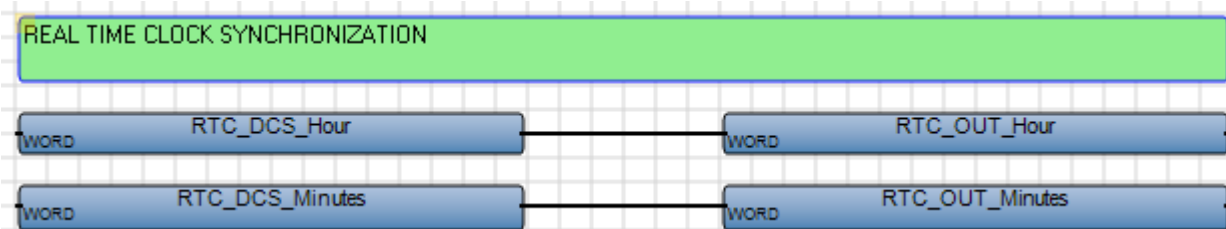
Solution 2: Online Updates/Online Monitoring are required, and you are troubleshooting a POU with known CVT warnings: Non-functional edit to the POU.

Making a non-functional edit to a POU forces the compiler to check the POU for CVT warnings.

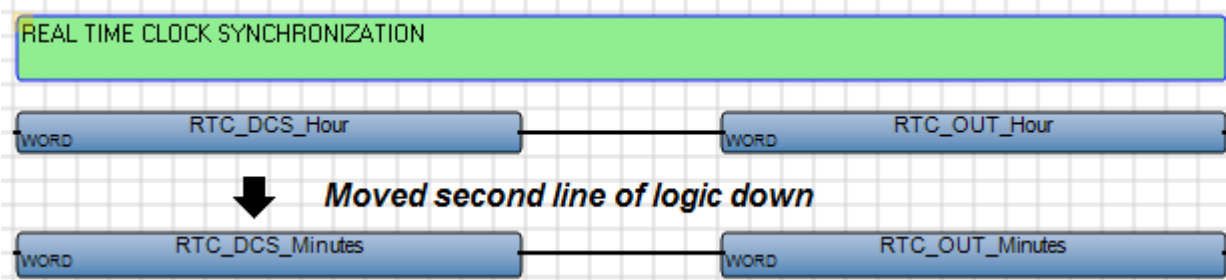
To make a non-functional edit to a POU, use one of the following:

- Change the position of a variable box, a function, or a function block slightly; without affecting the execution order or causing connecting lines to overlap.

Original logic:

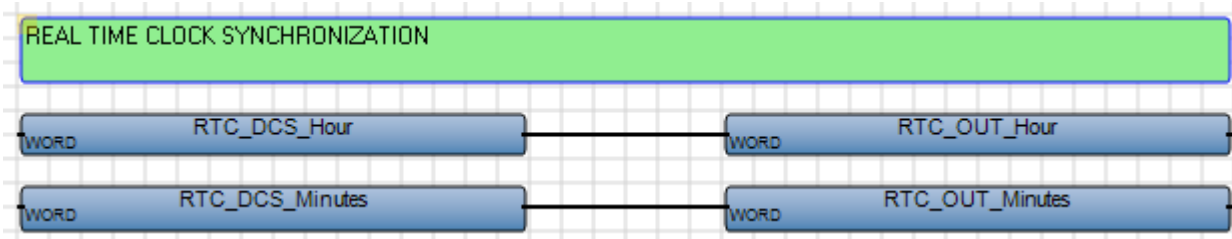


Non-functional change:

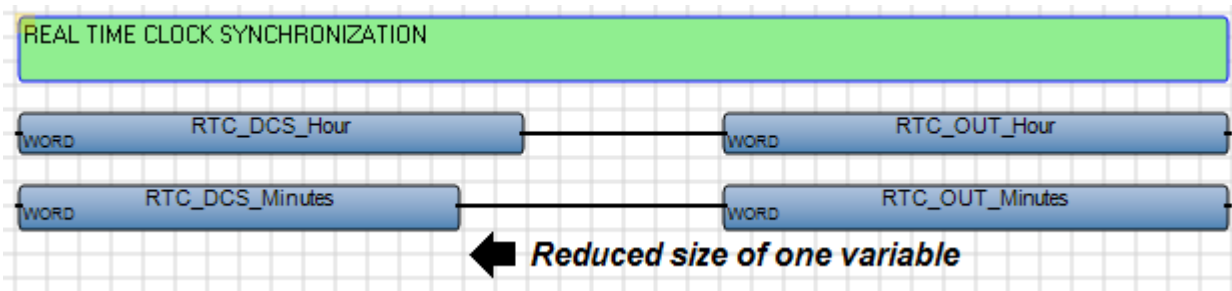


- Change the size of a variable box, a function, or a function block slightly.

Original logic:



Non-functional change:



Solution 3: Online Updates/Online Monitoring are required, and you need to check the entire application for CVT warnings: Add a Global variable per controller.

Adding a Global variable in a specific controller triggers a full compilation of the controller, forcing the compiler to check the controller for CVT warnings. For a multi-controller application, a new Global variable is required in each controller to check the entire application for CVT warnings. After the Build All operation is complete, the Global variable(s) can be deleted. Removing the Global variables will also trigger a full compilation.

To add a Global variable in AADvance Workbench 1.X, go to the Dictionary under Project > Variables and create a temporary variable of any elementary Data Type and of Global Scope.

All variables							
Name	Type	Direction	Attribute	Scope	Retain	Write Access	Alias
TempVariable	BOOL	Internal	Free	Global	No	False	

To add a Global variable in AADvance Workbench 2.X, go to the Application View > Variables > Controller Variables and create a temporary variable of any elementary Data Type.

Name	Data Type	Direction	Attribute	Dimension	String Size	Initial Value	Retained
TempVariable	BOOL	Var	Read/Write				<input type="checkbox"/>

Appendix C

Rockwell Automation Knowledgebase Article BF25455

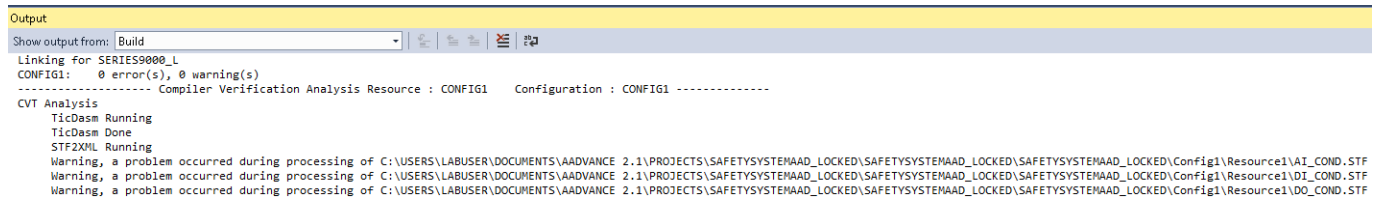
A problem occurred during processing of STF AADvance CVT warning

Summary

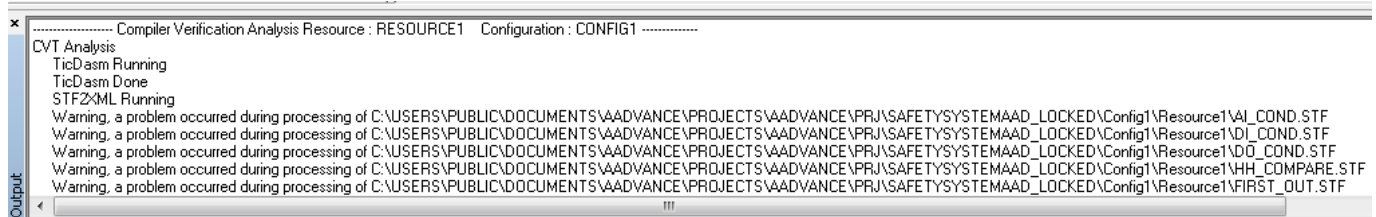
After a Build All operation the following CVT warning can be seen for all Programs, Functions and Function Blocks in the application:

```
Warning, a problem occurred during processing of  
C:\USERS\USERNAME\DOCUMENTS\AADVANCE  
2.X\PROJECTS\\<ProjectName>\<ProjectName>\<ConfigNam  
e>\<ResourceName>\<POUName>.STF
```

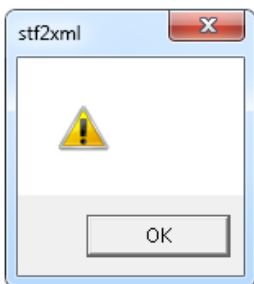
AADvance Workbench 2.X:



AADvance Workbench 1.X:



In addition to the warning, AADvance Workbench 1.X will display a blank stf2xml warning pop-up during the CVT Analysis for each Program, Function and Function Blocks in the application.



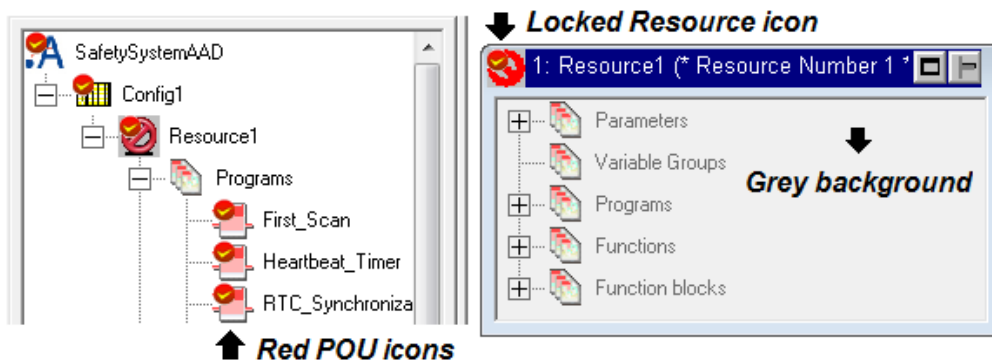
Environment

- All versions of AADvance Workbench 1.X and AADvance Workbench 2.X.
- Affects all safety-related applications that must have the Compiler Verification option enabled as per the AADvance controller Safety Manual.

Cause

The affected Resource is locked.

In an AADvance Workbench 1.X application, a Resource can be locked when the project folder is copied with the AADvance Workbench 1.X open. The Resource appears to be in use by another user that cannot be accessed. There are multiple visual indications of a locked Resource:



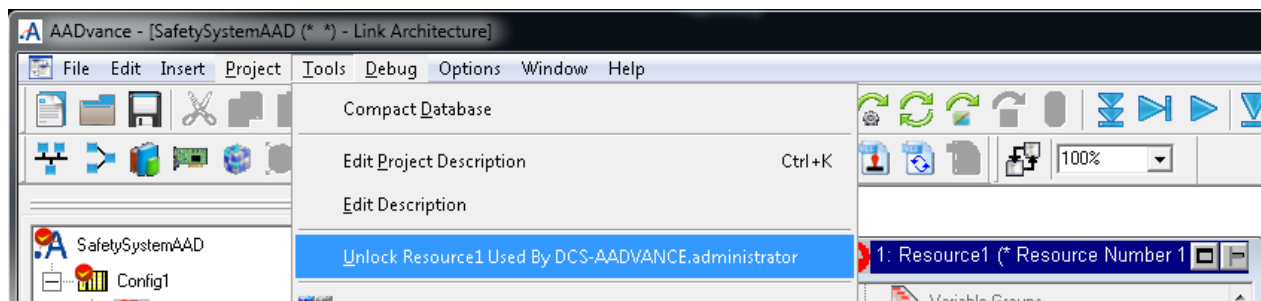
An AADvance Workbench 2.X application can have a locked Resource when the application has been imported from an AADvance Workbench 1.X application where the Resource was locked.

Important Note: There are no visual indications for a locked Resource in AADvance Workbench 2.X.

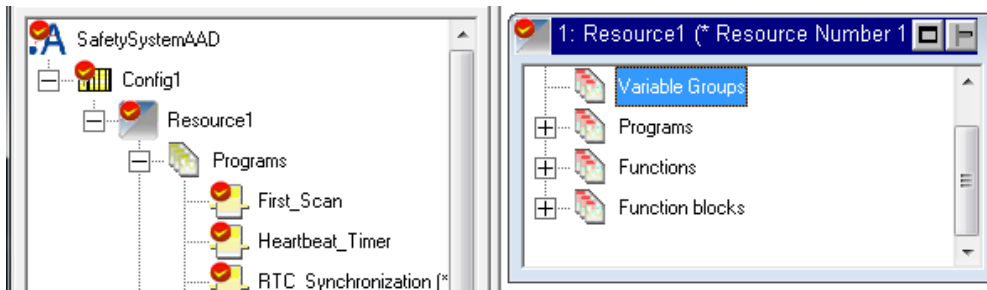
Solution

Unlock the Resource in AADvance Workbench 1.X.

To unlock a Resource in AADvance Workbench 1.X, click on the locked Resource to select it and then go to *Tools > Unlock Resource* used by User.



The unlocked Resource should look like this:



To prevent importing a locked Resource into AADvance Workbench 2.X, verify that all the Resources are unlocked in the AADvance Workbench 1.X application before importing it.

Important Note: It is not possible to unlock a Resource in AADvance Workbench 2.X.