Licensing & Installation Guide For HighTec Compiler



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Getting Started

To use STW Technic Controller Modules, a licensed copy of the HighTec Compiler must be utilized. This document will detail the various types of HighTec Compiler licensing options and the installation instructions for each.

Compiler License Types

The HighTec Compiler has the following licensing options:



Node-Locked (PN 75588)

Limited to a single machine, assigned by MAC Address.



Network (PN 75589)

Allows multiple computers to access from a central internal network location, but limited in usage to only a single machine at a time. Assigned to server MAC Address.



Network with Roaming (PN 76253)

Same as a Network license, but can be used temporarily outside of an internal network, still limited to a single machine at a time. Assigned to server MAC Address.

Please Note – The HighTec Compiler license for STW Controllers is limited to Windows versions of the compiler. The Linux versions of the compiler are not supported. If a Linux environment must be used, you may run the HighTec Compiler for Windows using emulation software such as Wine for Linux.

Please Note - At this time, compiler licenses are not restricted from running in a virtual machine (VM) environment.

Obtaining a Compiler License

For information on how to order a HighTec Compiler license from STW Technic, please see our guide here: https:// stwtechnic.freshdesk.com/support/solutions/articles/6000257012-how-do-i-obtain-a-controller-compiler-license-

Continue for Installation Instructions: Node-Locked License

Installation Instructions: Node-Locked License

- Copy the archive on the machine which was licensed to run the compiler.
- Host ID must match the MAC address of your machine. Please make sure, that the given license is bound to the MAC address of your machine.
- **O** Unpack the archive to a user-defined directory
- Install the compiler (default folder is C:\HIGHTEC)
- Copy the license delivered by HighTec to the licenses folder under the compiler installation directory (default is C:\ HIGHTEC \licenses)
- Use the Environment Variables dialog to set the RLM_LICENSE environment variable to be the licenses folder (default RLM_LICENSE=C:\HIGHTEC\licenses)

Control Panel Home	View basic information about your computer	e ^
Device Manager	Windows edition	
Remote settings	Windows 7 Professional	
System protection	Copyright © 2009 Microsoft Corporation, All rights reserved.	
Advanced system settings	Service Pack 1 Get more features with a new edition of Windows 7	
	System Properties 23	Environment Variables
See also Action Center Windows Update Performance Information and Tools	Sys Computer Name Hardware Advanced System Protection Remote You must be logged on as an Administrator to make most of these changes. Performance Visual effects, processor scheduling, memory usage, and virtual memory Visual effects, processor scheduling, memory usage, and virtual memory Settings User Profiles Desktop settings related to your logon Dee Settings Startup and Recovery System startup, system failure, and debugging information Settings Environment Variables	User variables for bkandetzki Variable Value PATH C: \Python27;C: \WinGW\bin;C: \Program TEMP %USERPROFILE%\AppData\Loca\Temp TSIM_CONFIG C: \Program Files (x86) \HIGHTEC\tsim\1 * New Edit Delete System variables Variable Value PSModulePath C: \Windows\system32\WindowsPowerS RIM_LICENSE C:\Windows\system32\WindowsPowerS RIM_LICENSE C:\Windows\TEMP TMP C: \Windows\TEMP TMP C: \Windows\TEMP Wark Delete New Edit Delete
	OK Cancel Apply	

 \checkmark

Continue for Installation Instructions: Network License

Installation Instructions: Network License [Server Installation]

Download administrative instructions here: <u>http://www.reprisesoftware.com/RLM_License_Administration.pdf</u>

Per Page 13 of RLM License Administration

• You can only install RLM as a service in a command window. To do this, use the rlm program itself (in a command window), with special arguments:

rlm -install_service -dlog [+]logfile [-service_name sname] [-user username] [-password password]

Where

- [logfile] is the pathname for the server debug log. This parameter is required. If preceded by the '+' character, the logfile will be appended, rather than created.
- [sname] is an optional name for the installed service. If not specified, sname defaults to "rlm". If sname contains embedded whitespace, it must be enclosed in double quotes.
- Are any other command line arguments to be passed to rlm when it is started.

Example

rlm -install_service -service_name rlm-xyz -dlog c:\logs\server.log -c c:\licenses\xyz.lic

• The server web interface is available at [SERVER-NAME]:5054

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🗰 Apps 📙 STW 💽 H	Brent Kandetzki - O 🧕 Mail - Brent Kandet 📀 Support : STW Tech 💠 System dashboard 🔘 Toggl 📙 Imported From IE ★ Bookmarks 🧕 Amazon.com: Onlin	>>	🔝 Reading list
Reprise	Reprise License Server Administration Copyright (c) 2006-2015, Reprise Software, Inc. All Rights Reserved.		
Logins disabled	RLM License Server Administration, v12.1		
RLM	This web interface is an integral part of the <i>rIm</i> server.		
Administration Commands	If rim is started without any parameters, the web interface runs on port 5054. rim can also be started with the <i>-nows</i> option to disable this web interface. rim can be started with the <i>-ws port#</i> option to specify another port number.		
Choose a command from the list below	This tool allows you to perform status and administration functions on the RLM server. Choose a command from the list on the left-hand side of the window.		
Status Shutdown	Reprise Software, Inc. 1530 Meridian Ave Suite 290 San.Jose CA 95125		
Reread/Restart Servers	www.reprisesoftware.com info@reprisesoftware.com		
Switch Reportlog New Reportlog Switch Debuglog	RLM contains software developed by the OpenSSL Project for use in the OpenSSL Tooliki (http://www.openssl.org) Copyright (c) 1998-2008 The OpenSSL Project. All rights reserved. Copyright (c) 1995-1998 Eric Young (eavj@cryptsoft.com) All rights reserved.		
Edit License Files Activate License	Webserver Copyright (c) 2006-2016 GoAhead Software, Inc. All Rights Reserved. http://embedthis.com/goahead		
Diagnostics	WEBSERVER		
RLM Manual System Info			
About			

Continued on next page



Installation Instructions: Network License [Server Installation]

• The Status button will show runtime information and installed licenses.

bk-dt-8d0mhs1:5054/home	e.asp × +										~	
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		o seppe	• •,		• • • • • • • • • •	- mponto						
Reprise License Server Administration Copyright (c) 2006-2015, Reprise Software, Inc. All Rights Reserved.												
Logins disabled	Status for "rim" on BK-DT-8D0MHS1 (port 5053)											
RLM Administration Commands			RLM software version	1	v	12.1 (build:2)						
			debug log file	C:\Progr	am Files (x86)\F	HIGHTEC\licens	emanager\serve	r.log				
Choose a command from the list below	license files C:\Program Files (x86)\HIGHTEC\licenses\acc592_lic_network_sen1877.lic											
Status			rim	Statistics Since	e Start Since	Midnight	Recent					
Shutdown			Me	ssages 0 (0	/sec) 0((0/sec) (0	(0/sec)					
Reread/Restart Servers			Con	nections 0 (0	/sec) 0 ((0/sec) () (O/sec)					
Switch Reportlog				E	DIT rlm Optio	ons						
New Reportlog	SHOW rlm Debug Log											
Switch Debuglog	ISV Servers	1									1	
Edit License Files	Name	port Running R	estarts Server Status	License Usage	Debug Log	REREAD	OPTIONS	TRANSFER	SHUTDOWN	ACTIVATE	1	
Activate License	hightec-rt	6004 Yes	0 hightec-rt	hightec-rt	hightec-rt	hightec-rt	hightec-rt	hightec-rt	hightec-rt	hightec-rt		
Diagnostics												
RLM Manual												
System Info												
About												

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Installation Instructions: Network License [Server Installation]

Select hightec-rt under Server Status to see more information about the HighTec license install.

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RLM Administration			ISV hightec-r	t status	on BK-	DT-8D0MHS	1 (port (5004)						I
		hightec-	t software version			v12.1 (build:	2)		_					1
Choose a command		debug log file C:\Program Files (x86)\HIGHTEC\licensemanager\highter						rVhightec-rt.d	log					1
from the list below		report log file				_n/a_								1
Status														1
Shutdown		hightec-rt Sta						nt						1
Reread/Restart Servers			Messages	117	7 (0/sec)	7 (0/sec)	5 (0/s	ec)						1
Switch Reportlog			Connections	38	(0/sec)	3 (0/sec)	2 (0/s	ec)						1
New Reportlog			Checkouts	17	(0/sec)	0 (0/sec)	0 (0/s	ec)						1
Switch Debuglog			License Remov	als 0	(0/sec)	0 (0/sec)	0 (0/s	ec)						1
Edit License Files			Current Connect	ions	0									1
Activate License														1
Diagnostics				Lice	nse poo	ol status								I
RLM Manual		Product Pool	Ver Expires	count s	soft lim in	use res timeo	ut share	checkouts	Show Usage					
System Info		tricore-gcc 1	2017.06 permaner	nt 1	1	0 0 0	User	17	usage					
About														
		-	Enter license p	assword to	select licer	nse results. Only	licenses wi	th						-

Continue for Installation Instructions: Network License [Client Configuration]

Installation Instructions: Network License [Client Configuration]

In order to confirm that the Network License has been properly installed on the server, a test via the command line should be performed to confirm compiler operation.

RLM_LICENSE must be set to the IP address of your server. If a hostname is used, please make sure the hostname resolves to the license server.

👂 Please Note – See the Node-Locked installation instructions section for how to set a permanent Environment Variable.

• Create a simple hello.c file (shown below) to use as a test. a.out will be generated on successful test.

```
C:\Users\[YOUR-USERNAME]>echo %RLM_LICENSE%
6004@[SERVER-NAME]
C:\Users\[YOUR-USERNAME]>type hello.c
#include <stdio.h>
main(void)
{
printf("HelloWorld!\n");
}
C:\Users\[YOUR-USERNAME]>C:\"Program Files (x86)"\HIGHTEC\toolchains\tricore\v4.6.6.1\bin\tricore-gcc.exe hello.c
C:\Users\[YOUR-USERNAME]>dir a.out
Volume in drive C is OS
Volume Serial Number is F676-2FF7
Directory of C:\Users\[YOUR-USERNAME]
09/29/2020 09:48 AM 200,741 a.out
1 File(s) 200,741 bytes
0 Dir(s) 65,262,743,552 bytes free
C:\Users\[YOUR-USERNAME]>
```



Installation Instructions: Network License [Client Configuration]

Additional tests can be performed using status tools (detailed below).

```
C:\Program Files (x86)\HIGHTEC\licensemanager>rlmutil.exe rlmstat -c
5053@[SERVER-NAME]
Setting license file path to 5053@[SERVER-NAME]
rlmutil v12.1
Copyright (C) 2006-2016, Reprise Software, Inc. All rights reserved.
         rlm status on localhost (port 5053), up 48d 23:23:20
         rlm software version v12.1 (build:2)
         rlm comm version: v1.2
         Startup time: Fri Oct 29 14:04:15 2021
         Todays Statistics (12:26:57), init time: Fri Dec 17 00:00:38 2021
         Recent Statistics (00:14:58), init time: Fri Dec 17 12:12:37 2021
                        Recent Stats
                                              Todays Stats
                                                                        Total Stats

        12:26:57
        48d 23:23:20

        (0/sec)
        8 (0/sec)

        00:14:58
        12:26:57

        Messages:
        8 (0/sec)
        8 (0/sec)

        Connections:
        5 (0/sec)
        5 (0/sec)

                                                                  5 (0/sec)
         ----- ISV servers -----
            Name Port Running Restarts
         hightec-rt
                            6004 Yes
                                                0
C:\Program Files (x86)\HIGHTEC\licensemanager>rlmutil.exe rlmstat -av
ail -c 5053@[SERVER-NAME]
Setting license file path to 5053@[SERVER-NAME]
rlmutil v12.1
Copyright (C) 2006-2016, Reprise Software, Inc. All rights reserved.
License availability for all products from all ISVs
    ISV: hightec-rt
    server host: localhost (port 5053)
         tricore-gcc v2017.06 available: 1
Error connecting to server for isv "hightec-rt"
Connection attempted to host: "[SERVER-NAME]" on port 5053
No error
C:\Program Files (x86)\HIGHTEC\licensemanager>
```

Please Note – Once server operation is confirmed, you may need to restart any IDEs to update RLM_LICENSE values into the tool.

Continue for Installation Instructions: Roaming License

Installation Instructions: Roaming License

• Confirm the date and version of the compiler you are using, as this is the date that you will be using on the checkout batch file.

```
C:\Program Files (x86)\HIGHTEC\toolchains\tricore\v4.6.6.1\bin>.\tricore-gcc.exe
--version
tricore-gcc.exe (HighTec Release HDP-v4.6.6.1-a20ed07) 4.6.4 build on 2016-03-01
Copyright (C) 2011 Free Software Foundation, Inc.
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
```

In this example, RLM_LICENSE = C:\Hightec\licenses;6004@[SERVER-NAME] as this will allow both network and roaming checkout. The roaming license file is contained in C:\Hightec\licenses. The roaming license file must be on the client; it is not necessary on the server.

Perform a roaming checkout.

```
C:\Program Files (x86)\HIGHTEC\licensemanager>echo %RLM_LICENSE%
C:\Program Files (x86)\HIGHTEC\licenses;6004@[SERVER-NAME]
C:\Program Files (x86)\HIGHTEC\licensemanager>roam_checkout.bat
"Enter the license server (e.g. license-server@5053)"
[SERVER-NAME]@5053
"Enter the product key (e.g. TriCore: tricore-gcc | PowerPC: ppc-vle-gcc)"
tricore-gcc
"Enter the product build date (Run the compiler with --version e.g. 2013.01)"
2016.03
"Enter the roaming time (e.g. "1" for one day)"
1
checkout information:
-----
server: [SERVER-NAME]@5053
product-key: tricore-gcc
build-date: 2016.03
days: 1
License Information:
_____
License name: tricore-gcc
Status: License okay
Host ID:
Exp. end date: 5-dec-2019
Exp. days: 2-
-----
Maintenance end date: 2017.06
finish
SUCCESS: Specified value was saved.
C:\Program Files (x86)\HIGHTEC\licensemanager>
```

This is then seen in the server log.

12/04 09:27 (hightec-rt) OUT: tricore-gcc v2016.03 by [YOUR-USERNAME]@[HOST-NAME] (ROAMING for 1 days)

Continued on next page

Installation Instructions: Roaming License

Please Note	— The ho	ld time is mo	ore than 24 h	ours.						
Product	Pool	Vor	usor	host	חום	rog vor	# lio	#	Outtime	In (hold) time
FIOUUCI	FUUI	vei	usei	nost	FID	ieq vei	# IIC	#	outtime	in (noid) time
tricore-gcc	1	2017.06	[USER]	[HOST]	11324	2016.03	1	0	12/04 09:27	12/06 00:00

• Check the license back in when it is no longer needed.

C:\Program Files (x86)\HIGHTEC\licensemanager>roam_checkin.bat
"Enter the license server (e.g. license-server@5053)"
[SERVEK-NAME]@5053 "Enter the product key (e.g. Trifore: tricore-gcc DowerDC: pnc-vle-gcc)"
tricore-gcc
"Enter the product build date (Run the compiler withversion e.g. 2013.01)"
2016.03
checkin information:
server: [SERVER-NAME]@5053
product-key: tricore-gcc
build-date: 2016.03
Liconco Information.
License name: tricore-gcc
Status: No license for product (-1)
Roam data read error (-125)
No such file or directory (errno: 2)
HUSLID: 504650271804 Exp. end date: expired
Exp. days: 0
Maintenance end date: expired
finish
C:\Program Files (x86)\HIGHTEC\licensemanager>

Once complete, this is then seen in the server log.

12/04 09:37 (hightec-rt) IN: tricore-gcc v2016.03 by [YOUR-USERNAME]@[HOST-NAME]

End of Document