

Licensing & Installation Guide

For HighTec Compiler

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

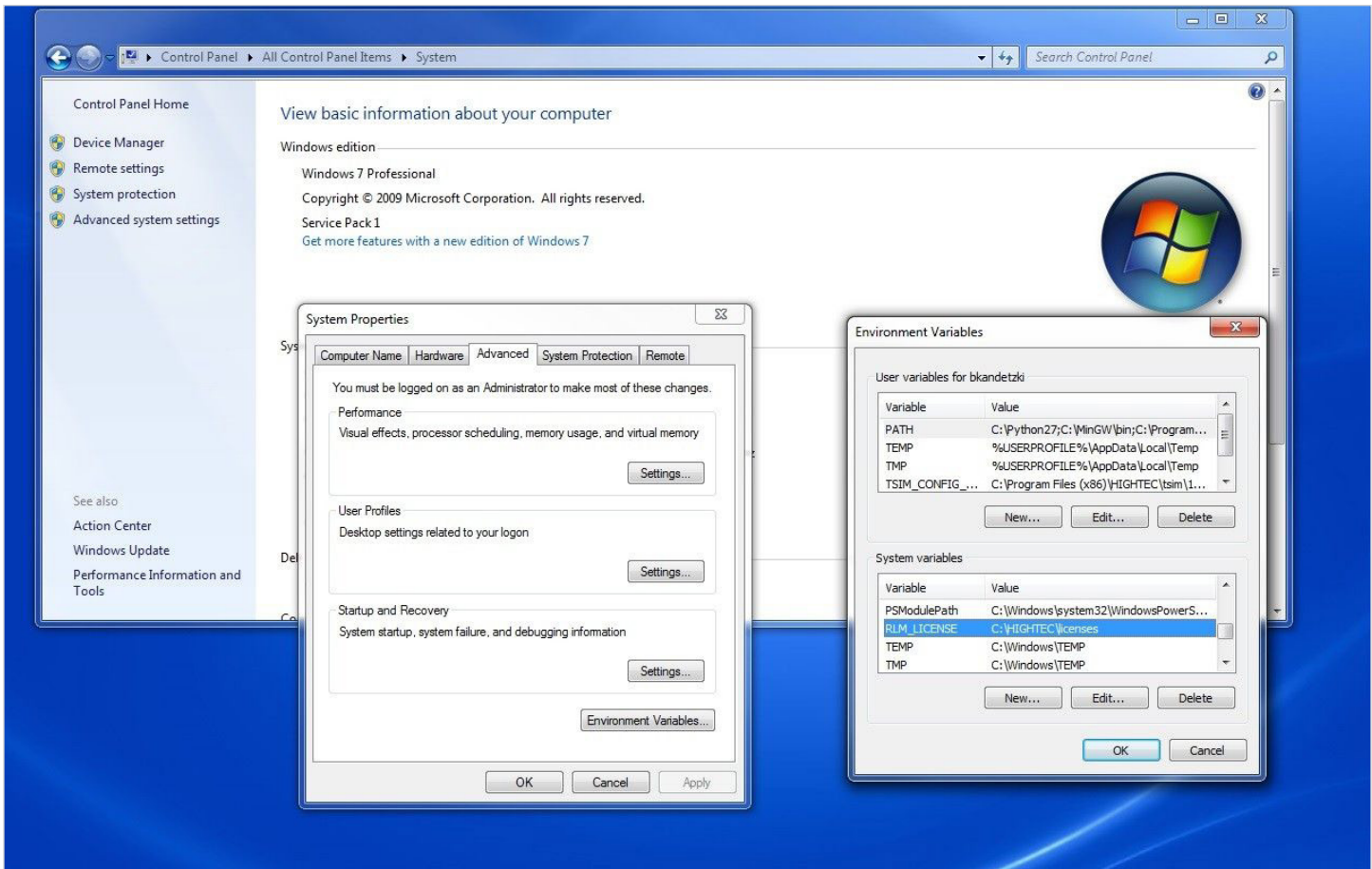
For information on how to order a HighTec Compiler license from STW Technic, please see our guide here: <https://stwtechnic.freshdesk.com/support/solutions/articles/6000257012-how-do-i-obtain-a-controller-compiler-license->



Continue for **Installation Instructions: Node-Locked License**

Installation Instructions: Node-Locked License

- ❶ Copy the archive on the machine which was licensed to run the compiler.
- ❷ 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.
- ❸ Unpack the archive to a user-defined directory
- ❹ Install the compiler (default folder is C:\HIGHTEC)
- ❺ Copy the license delivered by HighTec to the licenses folder under the compiler installation directory (default is C:\HIGHTEC\licenses)
- ❻ Use the Environment Variables dialog to set the RLM_LICENSE environment variable to be the licenses folder (default RLM_LICENSE=C:\HIGHTEC\licenses)



Continue for **Installation Instructions: Network License**

Installation Instructions: Network License [Server Installation]

- ❶ Download administrative instructions here: http://www.reprisesoftware.com/RLM_License_Administration.pdf

Per Page 13 of RLM License Administration

- ❷ 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]
```

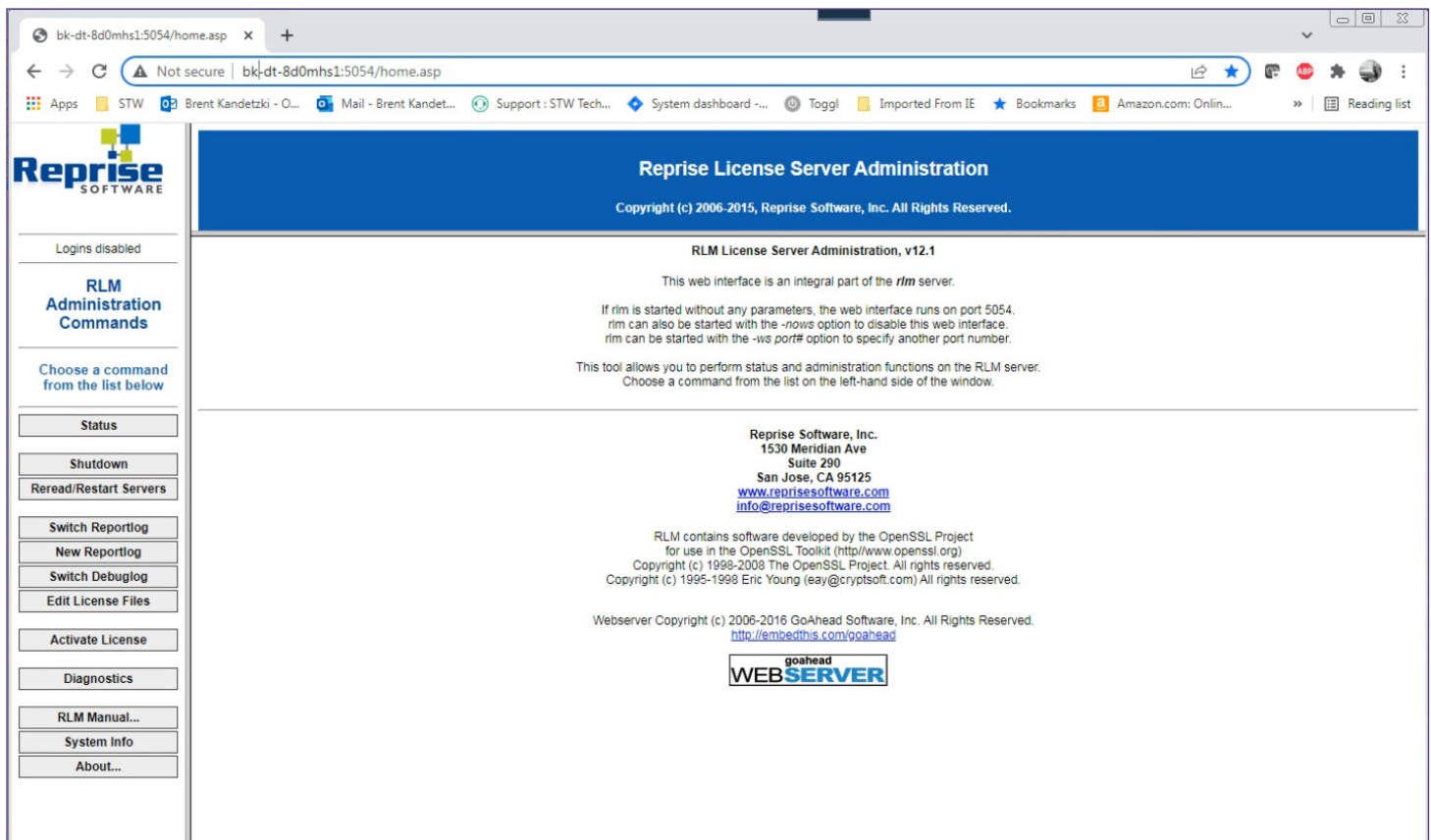
Where

- [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
```

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

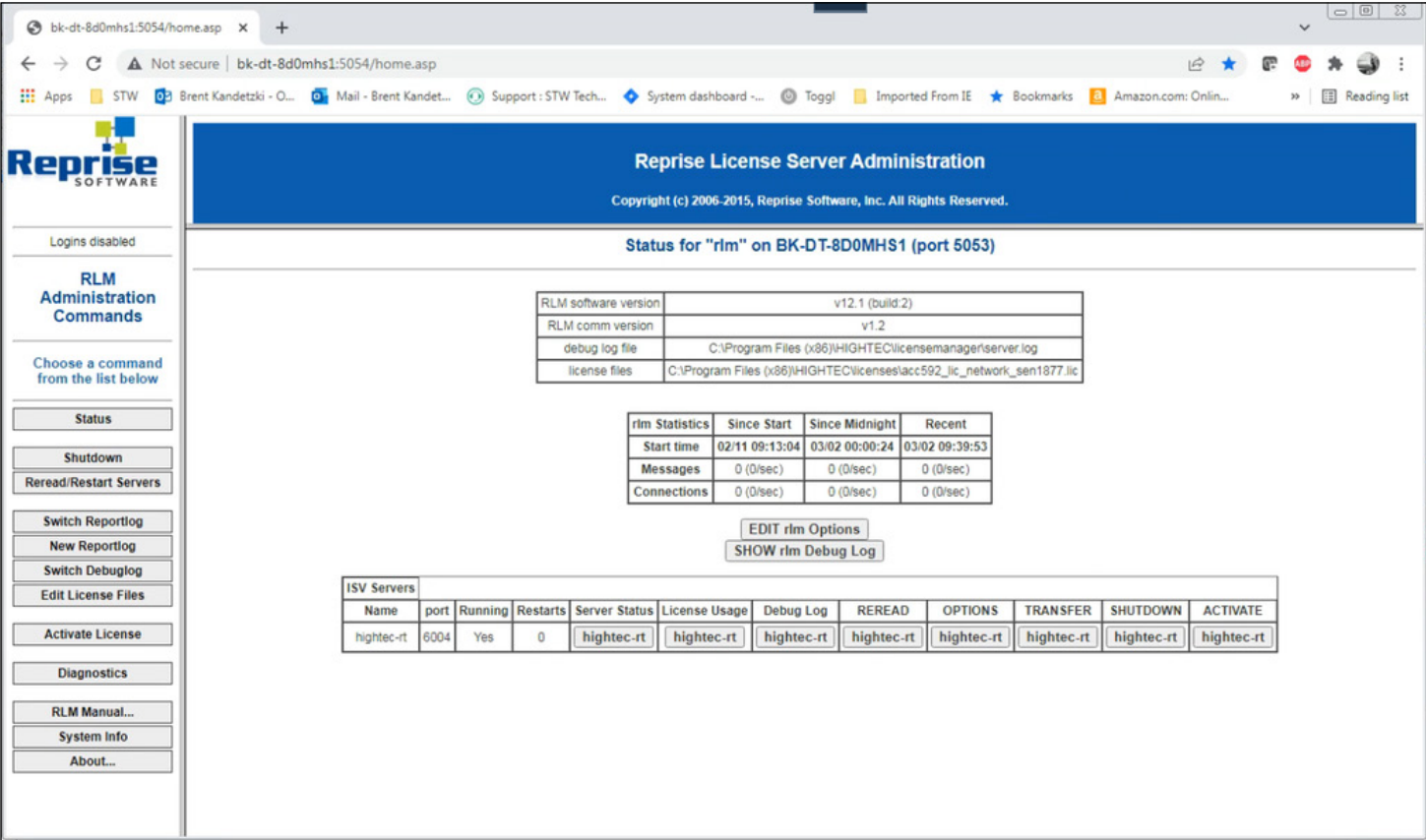


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Installation Instructions: Network License [Server Installation]

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



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Installation Instructions: Network License [Server Installation]

- ③ Select **hightec-rt** under **Server Status** to see more information about the HighTec license install.

Reprise License Server Administration
Copyright (c) 2006-2015, Reprise Software, Inc. All Rights Reserved.

ISV hightec-rt status on BK-DT-8D0MHS1 (port 6004)

hightec-rt software version	v12.1 (build:2)
hightec-rt comm version	v1.2
debug log file	C:\Program Files (x86)\HIGHTEC\licensemanager\hightec-rt.dlog
report log file	_n/a_

hightec-rt Statistics	Since Start	Since Midnight	Recent
Start Time	02/11 09:13:05	03/02 00:00:24	03/02 09:39:53
Messages	117 (0/sec)	7 (0/sec)	5 (0/sec)
Connections	38 (0/sec)	3 (0/sec)	2 (0/sec)
Checkouts	17 (0/sec)	0 (0/sec)	0 (0/sec)
Denials	0 (0/sec)	0 (0/sec)	0 (0/sec)
License Removals	0 (0/sec)	0 (0/sec)	0 (0/sec)
Current Connections	0		

License pool status

Product	Pool	Ver	Expires	count	soft lim	inuse	res	timeout	share	checkouts	Show Usage
tricare-gcc	1	2017.06	permanent	1	1	0	0	0	User	17	usage...


Enter license password to select license results. Only licenses with
exclusive password (or with no password) will be displayed about.

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.

- 1 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.

- 2 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]>
```

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Installation Instructions: Network License [Client Configuration]

- ③ 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
Today's 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 00:14:58	Today's Stats 12:26:57	Total Stats 48d 23:23:20
Messages:	8 (0/sec)	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

- 1 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

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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.**

- 2 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)
```

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Installation Instructions: Roaming License

Please Note – The hold time is more than 24 hours.

Product	Pool	Ver	user	host	PID	req ver	# lic	#	Out time	In (hold) 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)"
[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
checkin information:
-----
server: [SERVER-NAME]@5053
product-key: tricore-gcc
build-date: 2016.03

License Information:
-----
License name: tricore-gcc
Status: No license for product (-1)
Roam data read error (-125)
No such file or directory (errno: 2)
Host ID: 50465d2f1a04
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