

RLM管理器超时回收license办法

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概述

- 基于网络的浮动（floating）license受制于网络连接状态，有时计算已终止但未反馈给RLM管理器，导致license始终处于占用状态。
- 通过附加时间限制，服务器在超过一定时间后未收到客户端的占用信息将强制收回license。

查看占用情况

- 通过网页<server ip>:5054可以查看license的使用情况。譬如服务器的ip是192.168.1.208，则输入<http://192.168.1.208:5054>查看Status信息。

Product	Pool	Ver	Expires	count	soft lim	inuse	res	timeout	share	transactions	Show License Usage
converge	1	1.0	25-feb-2016	10	10	1	0	3600	None	11	<input type="button" value="usage..."/>
converge_child	2	1.0	25-feb-2016	128	128	3	0	3600	None	11	<input type="button" value="usage..."/>
converge_gui	3	1.0	25-feb-2016	55	55	0	0	3600	None	2	<input type="button" value="usage..."/>
converge_super	4	1.0	25-feb-2016	1	1	0	0	3600	None	0	<input type="button" value="usage..."/>

- 上图可以看到，已被占用1个converge（求解器），以及3个converge_child（并行）
- 通过usage按钮可以查看具体被哪台客户端占用

Product	Pool	Ver	user	host	PID	req ver	# lic	# res	Out time	Click to REMOVE
converge	1	1.0	idaj-z800	idaj-z800-pc	16632	1.0	1	0	10/29 23:55	<input type="button" value="Remove"/>
converge_child	2	1.0	idaj-z800	idaj-z800-pc	16632	1.0	3	0	10/29 23:55	<input type="button" value="Remove"/>

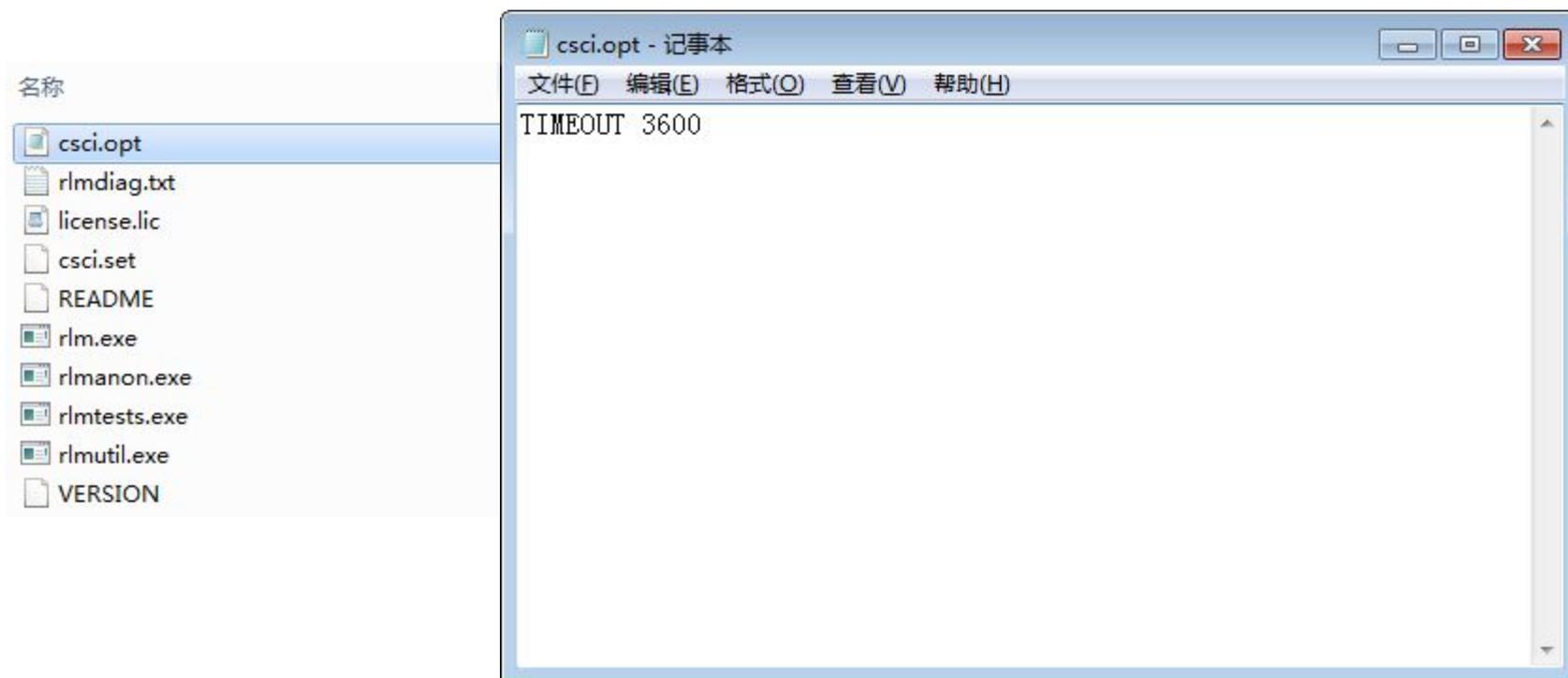
强制解除占用

- 通过点击Remove可以强制解除占用

Product	Pool	Ver	user	host	PID	req ver	# lic	# res	Out time	Click to REMOVE
converge	1	1.0	idaj-z800	idaj-z800-pc	16632	1.0	1	0	10/29 23:55	<input type="button" value="Remove"/>
converge_child	2	1.0	idaj-z800	idaj-z800-pc	16632	1.0	3	0	10/29 23:55	<input type="button" value="Remove"/>

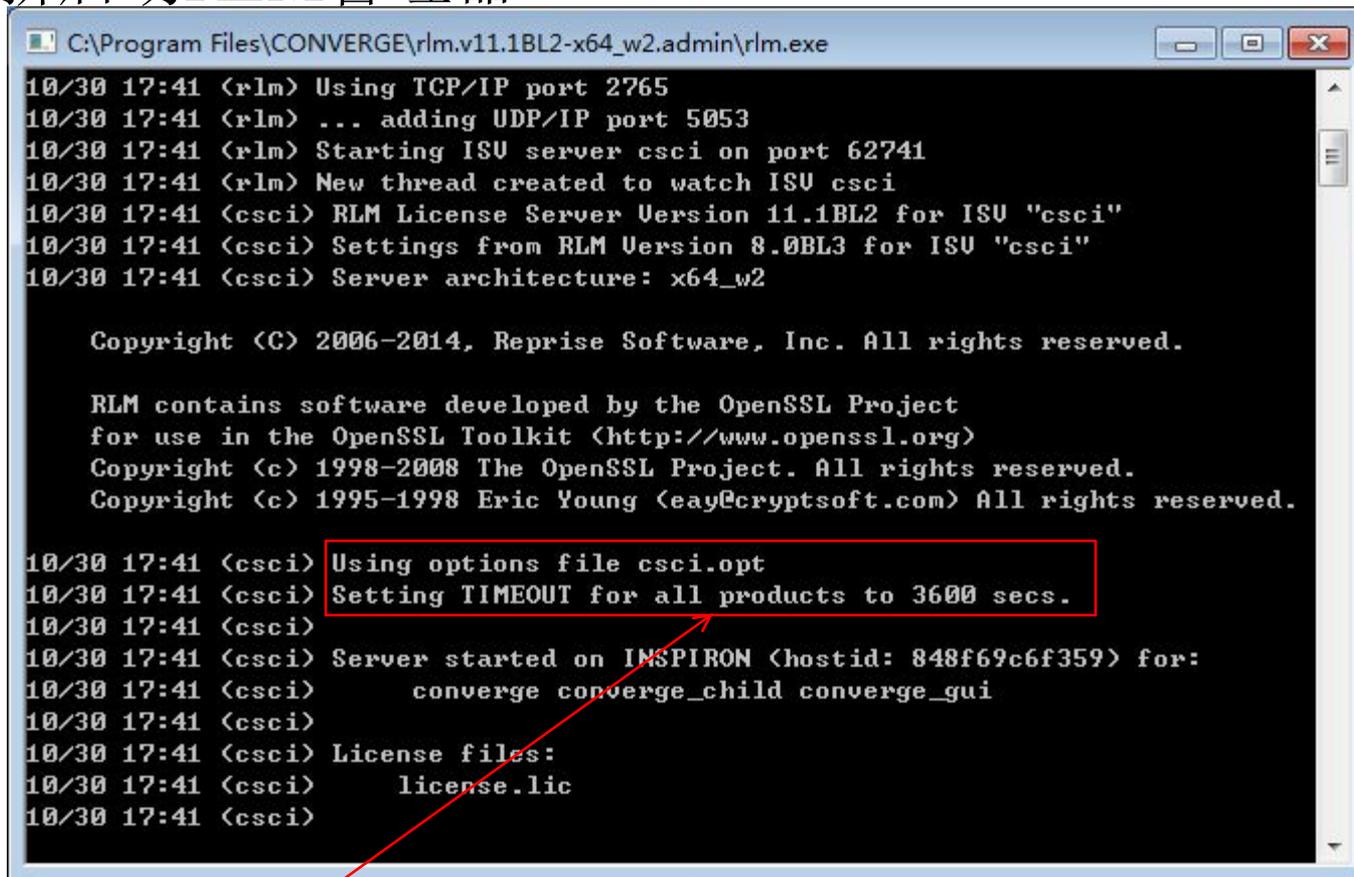
设置超时回收

- 在RLM管理器安装目录下，新建空白文件，命名为csci.opt。右击编辑其内容“TIMEOUT 3600”
 - 3600指秒数，可以改为其它数字，但最少是3600秒，即1小时。



设置超时回收（续）

重新启动RLM管理器



```
C:\Program Files\CONVERGE\rlm.v11.1BL2-x64_w2.admin\rlm.exe
10/30 17:41 <rlm> Using TCP/IP port 2765
10/30 17:41 <rlm> ... adding UDP/IP port 5053
10/30 17:41 <rlm> Starting ISU server csci on port 62741
10/30 17:41 <rlm> New thread created to watch ISU csci
10/30 17:41 <csci> RLM License Server Version 11.1BL2 for ISU "csci"
10/30 17:41 <csci> Settings from RLM Version 8.0BL3 for ISU "csci"
10/30 17:41 <csci> Server architecture: x64_w2

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RLM contains software developed by the OpenSSL Project
for use in the OpenSSL Toolkit (http://www.openssl.org)
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Copyright (c) 1995-1998 Eric Young (eay@cryptsoft.com) All rights reserved.

10/30 17:41 <csci> Using options file csci.opt
10/30 17:41 <csci> Setting TIMEOUT for all products to 3600 secs.
10/30 17:41 <csci>
10/30 17:41 <csci> Server started on INSPIRON (hostid: 848f69c6f359) for:
10/30 17:41 <csci>         converge converge_child converge_gui
10/30 17:41 <csci>
10/30 17:41 <csci> License files:
10/30 17:41 <csci>         license.lic
10/30 17:41 <csci>
```

出现以上语句说明超时设置已启用

设置超时回收（续）

- 在网页管理界面中也能看到启用

Product	Pool	Ver	Expires	count	soft lim	inuse	res	timeout	share	transactions	Show License Usage
converge	1	1.0	25-feb-2016	10	10	1	0	3600	None	11	usage...
converge_child	2	1.0	25-feb-2016	128	128	3	0	3600	None	11	usage...
converge_gui	3	1.0	25-feb-2016	55	55	0	0	3600	None	2	usage...
converge_super	4	1.0	25-feb-2016	1	1	0	0	3600	None	0	usage...

- 作为对比，以下是未启用的状态

Product	Pool	Ver	Expires	count	soft lim	inuse	res	timeout	share	transactions	Show License Usage
converge	1	1.0	25-feb-2016	30	30	0	0	0	None	16	usage...
converge_child	2	1.0	25-feb-2016	128	128	0	0	0	None	14	usage...
converge_gui	3	1.0	25-feb-2016	155	155	0	0	0	None	5	usage...
converge_super	4	1.0	25-feb-2016	1	1	0	0	0	None	1	usage...

设置超时回收（续）

- CONVERGE的求解器每半小时会与RLM管理器通信一次，以确认是否仍有正常启用的license可以调用。
- 当通信中断，超过设置的时间，则RLM强制回收license。
- 当通信中断，在设置的时间以内与服务器重新接通，则原先被调用的license被回收，重新再获取一遍license。

设置超时回收（续）

- 以下是当通信中断，超过设置的时间，RLM强制回收license的日志信息。（关键词是timed out）

Recent Debug Log Entries

ISV csci Debug Log, last 20 lines

```
10/29 22:24 (csci) OUT: converge v1.0 by idaj-z800@idaj-z800-pc
10/29 22:24 (csci) OUT: converge_child v1.0 by idaj-z800@idaj-z800-pc (3
licenses)
10/29 22:28 (csci) OUT: converge v1.0 by idaj-z800@idaj-z800-pc
10/29 22:28 (csci) OUT: converge_child v1.0 by idaj-z800@idaj-z800-pc (3
licenses)
10/29 23:25 (csci) IN: (timed out) converge v1.0 by idaj-z800@idaj-z800-pc
10/29 23:25 (csci) IN: (timed out) converge_child v1.0 by idaj-z800@idaj-z800-
pc (3 licenses)
10/29 23:28 (csci) IN: (timed out) converge v1.0 by idaj-z800@idaj-z800-pc
10/29 23:28 (csci) IN: (timed out) converge_child v1.0 by idaj-z800@idaj-z800-
pc (3 licenses)
10/29 23:29 (csci) OUT: converge v1.0 by idaj-z800@idaj-z800-pc
10/29 23:29 (csci) OUT: converge_child v1.0 by idaj-z800@idaj-z800-pc (3
licenses)
10/29 23:30 (csci) IN: (client exit) converge v1.0 by idaj-z800@idaj-z800-pc
10/29 23:30 (csci) IN: (client exit) converge_child v1.0 by idaj-z800@idaj-
z800-pc (3 licenses)
10/29 23:55 (csci) OUT: converge v1.0 by idaj-z800@idaj-z800-pc
10/29 23:55 (csci) OUT: converge_child v1.0 by idaj-z800@idaj-z800-pc (3
licenses)
```

设置超时回收（续）

- 以下是当通信中断，在设置的时间以内与服务器重新接通后，计算日志中可以看到重新获取license的描述。



```
log.txt - 记事本
文件(F) 编辑(E) 格式(O) 查看(V) 帮助(H)

ncyc= 31, time= 5.302249950e-006, dt= 1.242924105e-007, time-step
limit =dt_cfl

ncyc= 32, time= 5.424070643e-006, dt= 1.218206934e-007, time-step
limit =dt_cfl

ncyc= 33, time= 5.542924881e-006, dt= 1.188542380e-007, time-step
limit =dt_cfl

ncyc= 34, time= 5.658790677e-006, dt= 1.158657963e-007, time-step
limit =dt_cfl
WARNING: the license is no longer valid. Attempting to recheckout licenses
Successfully rechecked out licenses.

ncyc= 35, time= 5.772396017e-006, dt= 1.136053402e-007, time-step
limit =dt_cfl
```

谢谢大家！