iPECS

Lync RCC Gateway

User Guide

Please read this manual carefully before operating your set. Retain it for future reference.

iPECS is an Ericsson-LG Brand

ERICSSON | LG

Document Information

S/W Version	Issue	Changes	Release Date
D.RCW	1.0	New product release	2014-03-10
R2.0.4	1.1	P2 Update and release	2017-05-23

Table of Contents

About This Guide

This section describes the purpose, audience, organization, and conventions that are used in this iPECS Lync RCC Gateway User Guide.

Purpose

This guide introduces the iPECS Lync RCC Gateway and explains how to correctly install and activate services of the RCC Gateway.

Audience

This guide provides installation, configuration, and management information intended for installers and administrators of the iPECS Lync RCC Gateway.

Document Organization

This guide consists of this 'About This Guide' section, three chapters, and the Appendix listed below.

- About This Guide
- Chapter 1: Overview
- Chapter 2: Installation and Set-up
- Chapter 3: RCC Gateway Service
- Appendix: A

Document Conventions

This section describes text formatting conventions and important notice formats used in this guide.

Text formatting

The narrative-text formatting conventions used in this guide are as follows:

Convention	Description
Bold text	Bold text indicates a button, menu item, or dialog box option you can click or select.
Italic text	A cross-reference or an important term.
Code text	A command prompt.

(P, S)	Premium or Standard license to support function.
(LIK, Unified, CM)	Relevant system LIIK, iPECS Unified (UCP/eMG), CM to support function.

Important notices

The following icons and notices are used in this guide to convey important cautions and notes.

CAUTION

A caution statement alerts you to situations that may cause damage to hardware, software, or data.

NOTE

A note provides additional explanations, emphasis on important information, or a reference to related information.

Chapter 1.
Overview

This chapter is an overview of the iPECS RCC Gateway.

1.1 Introduction of RCC Gateway

The RCC Gateway is a Windows based application that is employed with the RCC Client for Lync providing call control for the user's iPECS desk phone from the Lync screen. The Gateway acts as the communications link between the RCC Client and the iPECS host platform. The Gateway interprets client requests and delivers the request to the iPECS host. The iPECS host executes the request informing the Gateway of resulting actions, which the Gateway interprets and informs to the RCC Client.

Additionally, the RCC Gateway monitors the status of other iPECS user devices informing the RCC Client, which, in turn, notifies the Lync Client to maintain appropriate telepresence.

The RCC Gateway is compatible with all iPECS voice platforms including:

- iPECS LIK
- iPECS Unified (UCP and eMG)
- iPECS CM

1.2 Components of program

The RCC Client employs CTI to communicate with the iPECS RCC Gateway, which connects to the iPECS platform. The RCC Gateway also monitors tele-presence from the iPECS, which is provided to Lync through the RCC Client.

Chapter 2.

Installation and Set-up

This chapter explains the RCC Gateway installation process and set-up including the requirements for the hardware and the operating system.

2.1 System requirements

The system requirements for installing and executing the RCC Gateway are as shown below. Note the processing power required increases with the number of users.

The components of the screen or quality characteristics may vary according to the version and characteristics of operating system (OS) as well as the hardware.

2.1.1 Under 1000 users

- **Processor:** Quad Core 2.7G or higher
- **Main Memory:** 4GB RAM minimum
- **OS:** Windows 2008 R2 or later

2.1.2 Over 1000 user

- **Processor:** Quad Core 3.3G or higher
- **Main Memory:** 4GB RAM minimum
- **OS:** Windows 2008 R2 or later

2.1.3 Additional requirements for specific functions

- **.NET Framework** version **4.5.1** or a higher must be installed in the RCC Gateway server.

2.2 Installation RCC Gateway

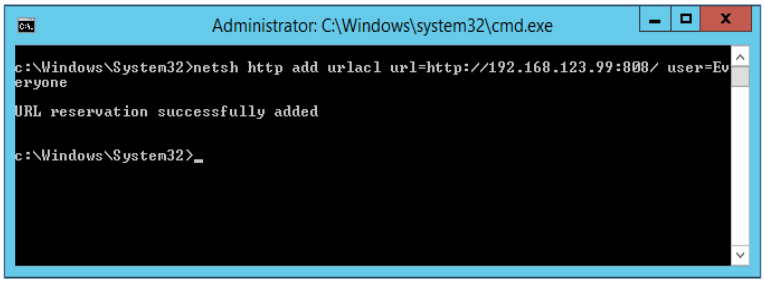
After preparing the installation environment (Section 2.1.1), the RCC Gateway wizard manages installation of the Gateway (Section 2.2.2). Once installed, the Manager is launched (Section 2.3.2) and configured (Section 2.3.3) then the gateway Services are installed (Section 3.1) and started (Section 3.2).

2.2.1 Pre-installation

Prior to installation of the RCC Gateway, the following items should be completed.

- Assure the iPECS platform is installed and operational.
- Assure appropriate RCC Gateway and Client licenses are installed in the iPECS.
- Assure the ELG-E TSP is installed and the iPECS is configured to support CTI with the Gateway server.
- Assure **.Net Framework 4.5.1** or higher is installed on the RCC Gateway server
- Grant permission to all clients to establish a connection with the RCC Client. To grant permission the IP address and port must be reserved as below:
  1. Use the `Ipconfig` command at the Windows command prompt to determine the IP address and port.
  2. Execute the following command using the IP address and port from step 1 above.

```
"netsh http add urlacl url=http://xxx.xxx.xxx.xx:xxx/ user=Everyone"
```



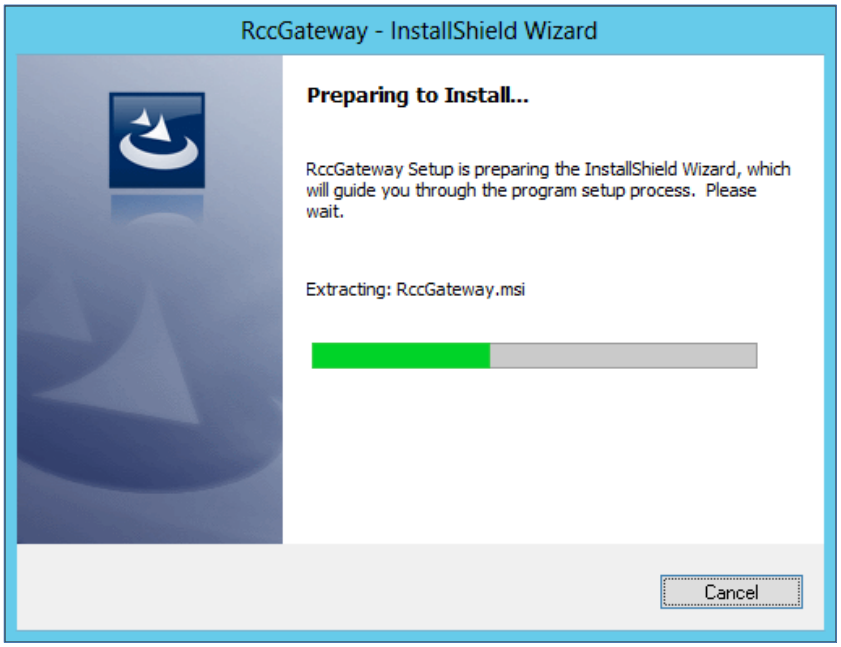
NOTE

It is recommended you record the IP address and port as this data is required when installing the RCC Client.

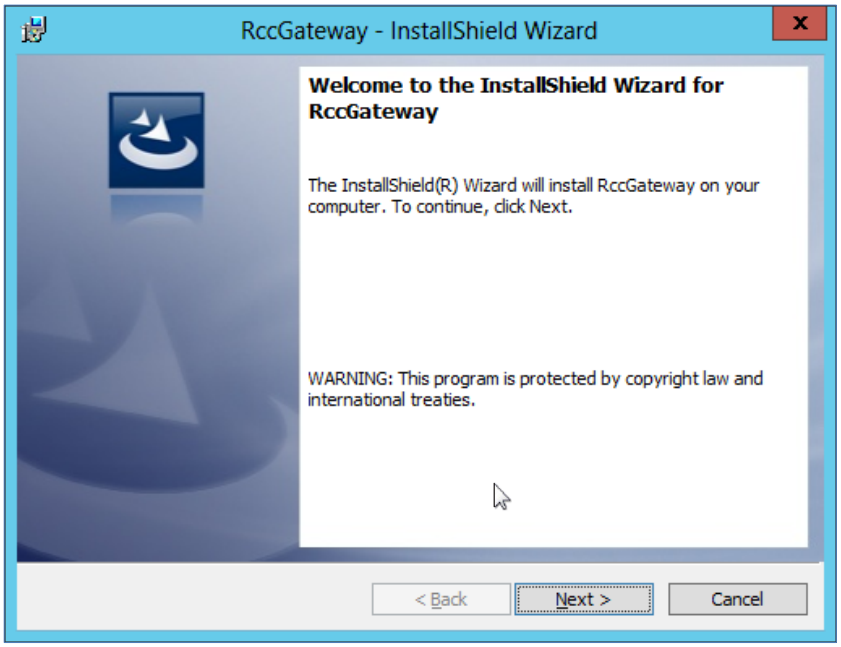
2.2.2 Installation

The RCC Gateway installation is managed by the Install Wizard, which is activated when the setup program in the RCC Gateway software package is opened. To begin the installation,

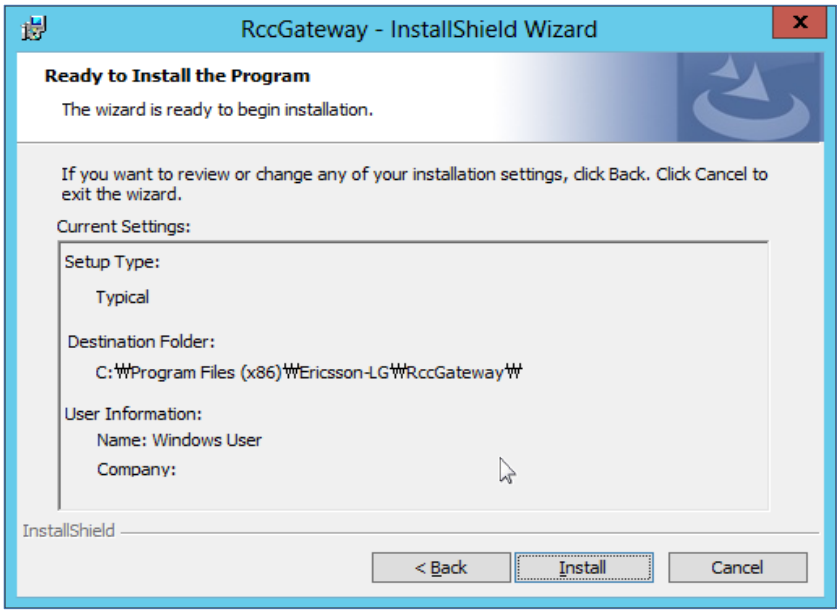
1. Launch ***"/RCCGateway/Setup.exe"*** from the Gateway software package. This will open the Install Wizard.



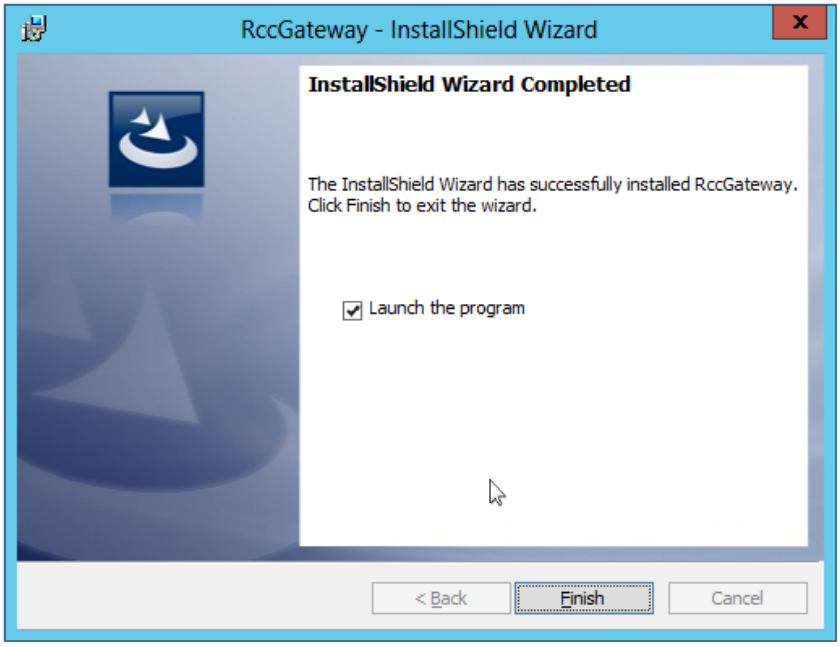
2. After the Install Wizard initializes, click the **Next** button to complete the installation settings.



3 . When all settings are completed, click the **Install** button to begin installation.



4 . When the Wizard indicates the installation is completed, click the **Finish** button to finish the installation and close the Wizard.

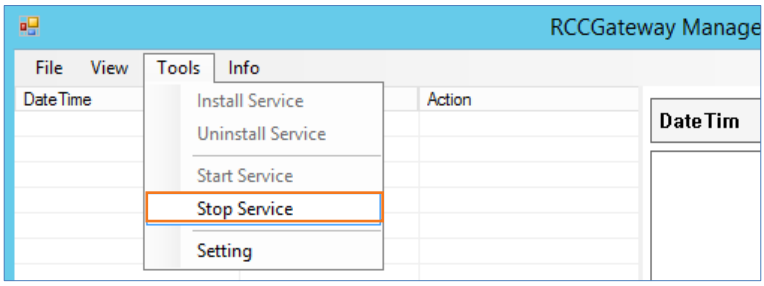


2.2.3 Program re-installation

The steps below explain what you need to do to re-installation or removal depending on the system you are using. If service is on running.

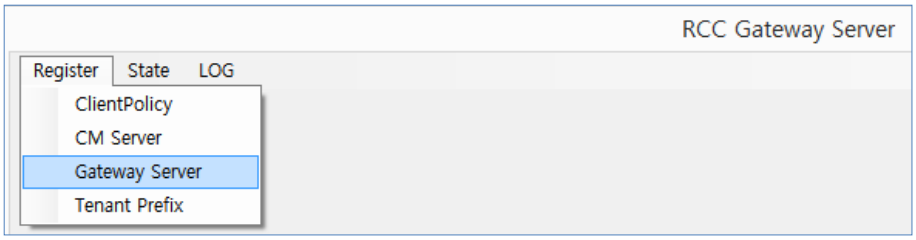
In the UCP System

1 . Click the button of **Tools > Stop service** to terminate service.

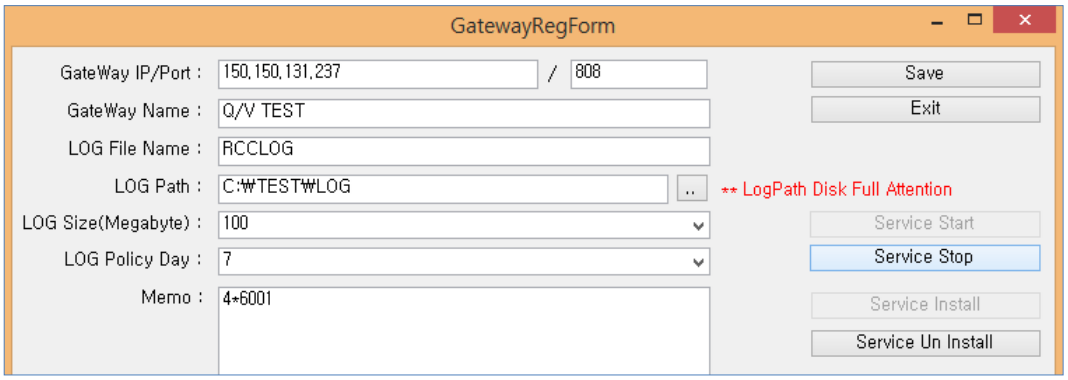


In the CM System

1 . Click the button of **Register >Gateway Server**, configuration window will be displayed.



2 . Click the button of **Service Stop** to close service.



NOTE

If service is on running, it should be closed prior to re-installation or removal.

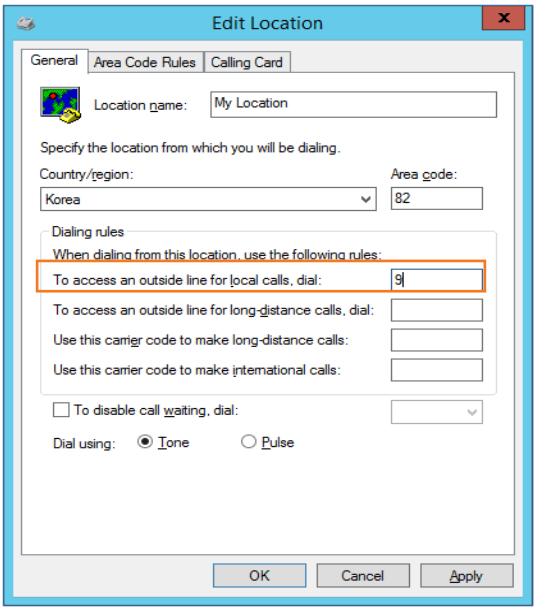
2.3 Initial Set-up

After completing the installation of the Gateway application, the Trunk access code, and the RCC gateway and iPECS PBX platform IP hosts must be configured.

2.3.1 Trunk Access Code – (UCP)

The Trunk Access Code is the digit(s) users must dial to access an outside line for placing a call to a destination external to the iPECS platform. The code is assigned under the 'Dialing rules' of the Windows OS Control Panel '**Phone and Modem'** selection as shown below.

You should also verify and, if needed, modify the Country/region, Area Code etc.



- Typically the digit '9' is employed as the code.

NOTE

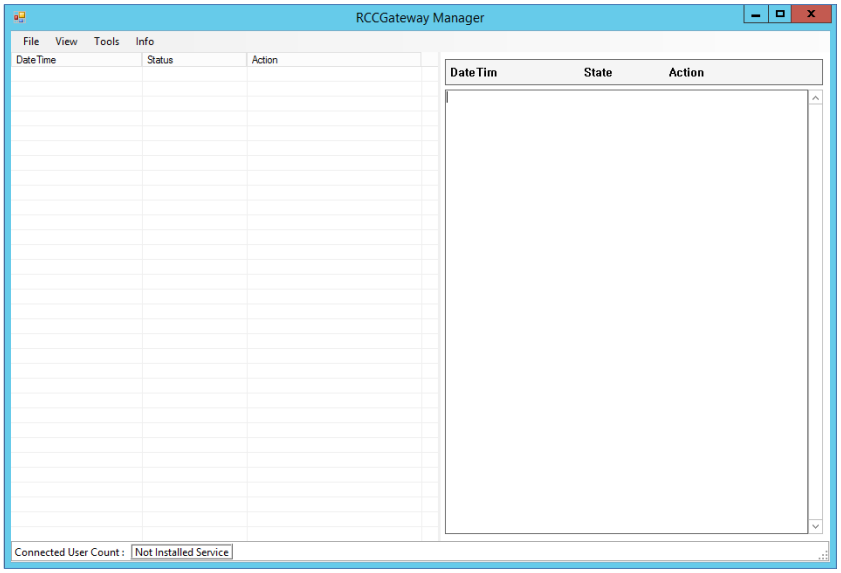
The Phone & Modem settings, including the Trunk Access Code, for the RCC Gateway and RCC Client type must be the same.

If any of the settings are changed, the RCC Gateway must be restarted.

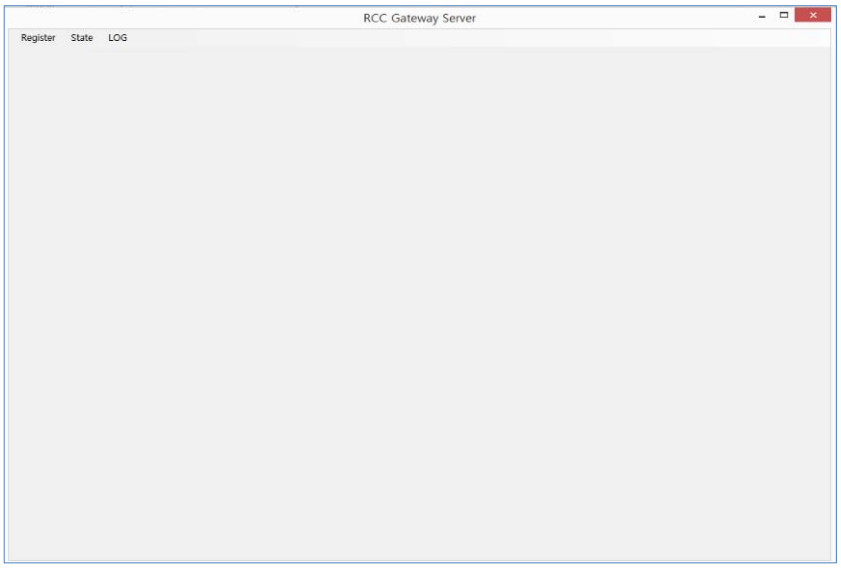
2.3.2 Starting the Gateway Manager

Start the RCC Gateway by launching the **RCC Gateway Manager.exe** file in the install directory used by the Install Wizard. This will open the Gateway Manager shown below.

In the UCP System



In the CM System



NOTE

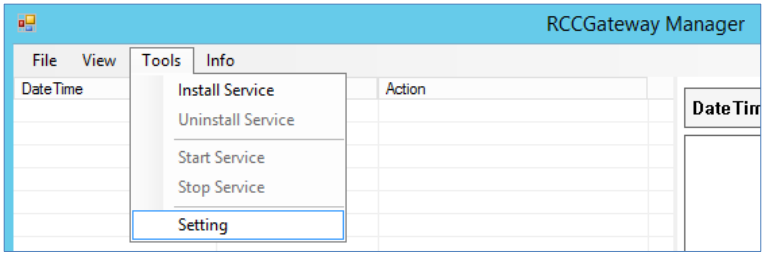
Once the Gateway Service is started as described in Chapter 3, should the server experience a power restart, the Gateway Service will restart as well. However, the Gateway Manager is launched manually to manage the Service and view logs.

2.3.3 Set up the information of PBX

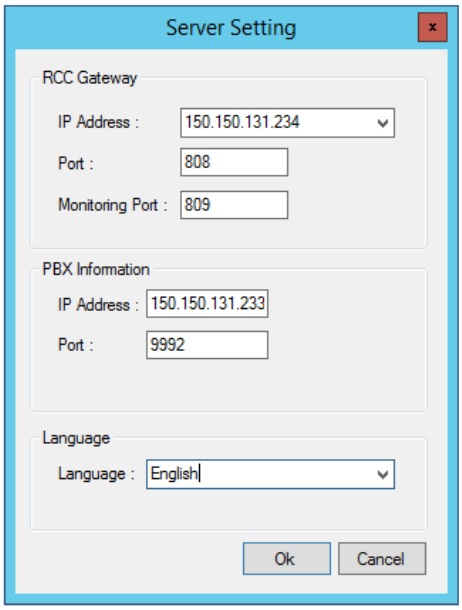
After starting the Manager, the gateway server should be configured with the IP host information for the gateway and the iPECS Platform.

In the UCP System

1. Click **Tools > Setting** to enter the IP host information.
2. Server Setting screen will be displayed.



3. In the Server Setting screen enter the RCC Gateway and iPECS PBX IP host information, which allows the Gateway to communicate with the RCC Client and iPECS.



RCC Gateway

- **IP Address—**The IP address of the RCC Gateway for communication with the Client.
- **Port—**The TCP port employed for gateway/client communications.
- **Monitoring Port—**The TCP port employed for communications between the RCC Gateway Service and the Manager.

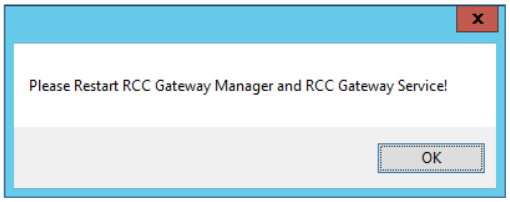
PBX (iPECS Platform)

- **IP Address—**The IP address of the iPECS platform for communication with the iPECS.
- **Port—**The TCP port employed for iPECS/gateway communications.

Language

- **Language—**The UI text language can be selected as English or Korean.

4. After entering or modifying data, click **OK**.



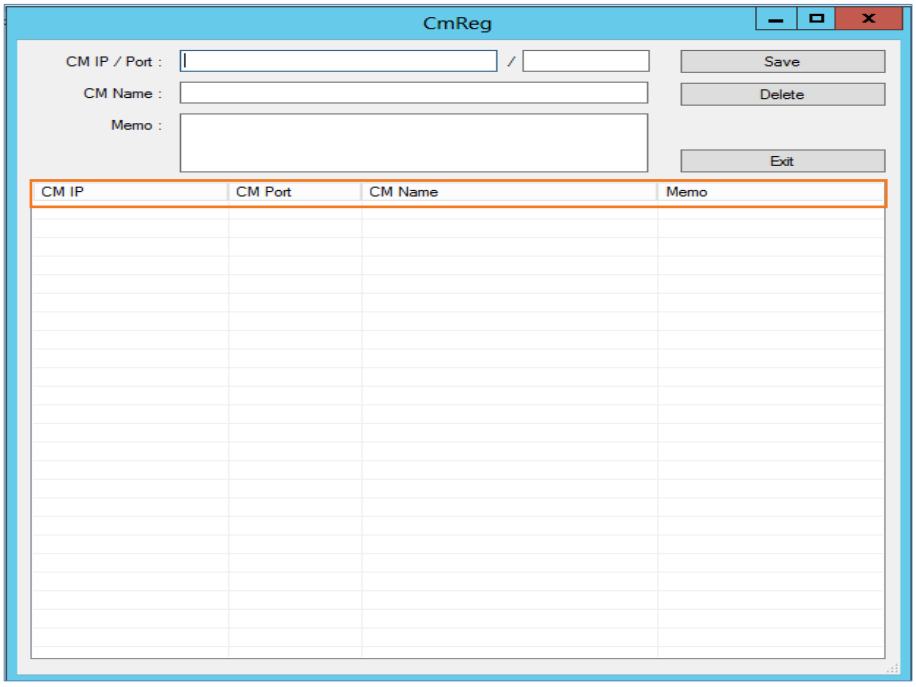
NOTE

If any of the host data is altered, the RCC Gateway Manager and RCC Gateway Service must be restarted.

In the CM System

1. Click **Register > CM Server** to display the setting menu.

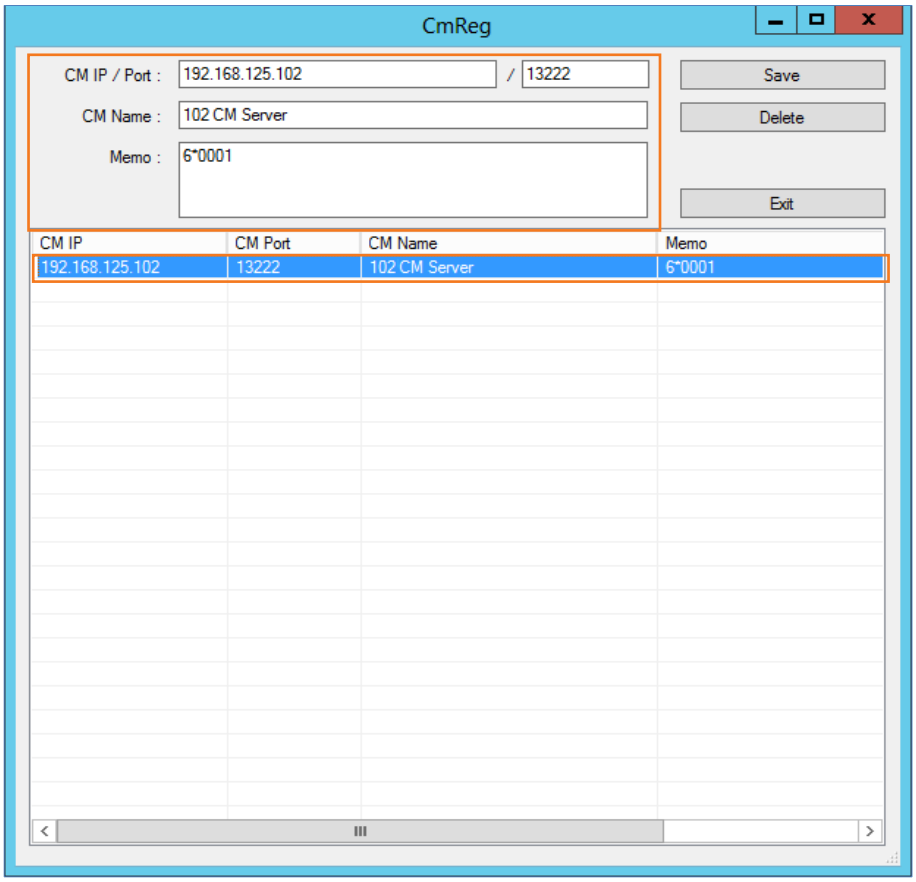
2. On this menu, set all of information of RCC Gateway Servers to connect CM Server.



- Related information is as below

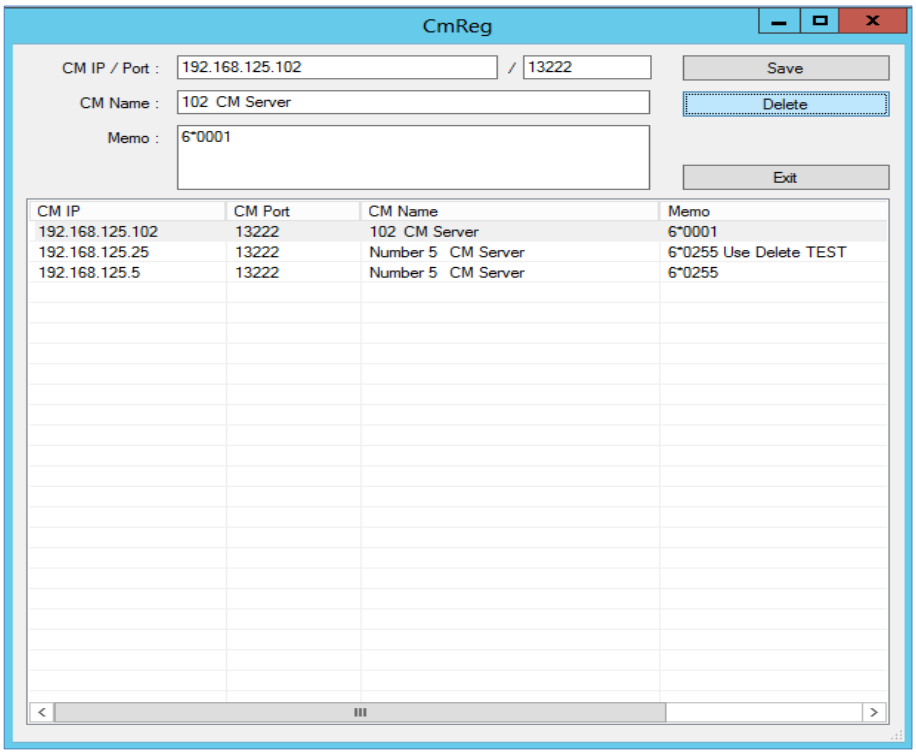
Setting information		
CM REG	CM IP / Port	• Put in IP and port of CM Server. • Basic port of CM is 13222.
	CM Name	• Put in the name of CM Server. • It is not mandatory.
	Memo	• If there is specific things related to CM, put in.

3. If all articles done and click the button of **save**, these will be displayed or updated at the bottom of screen.

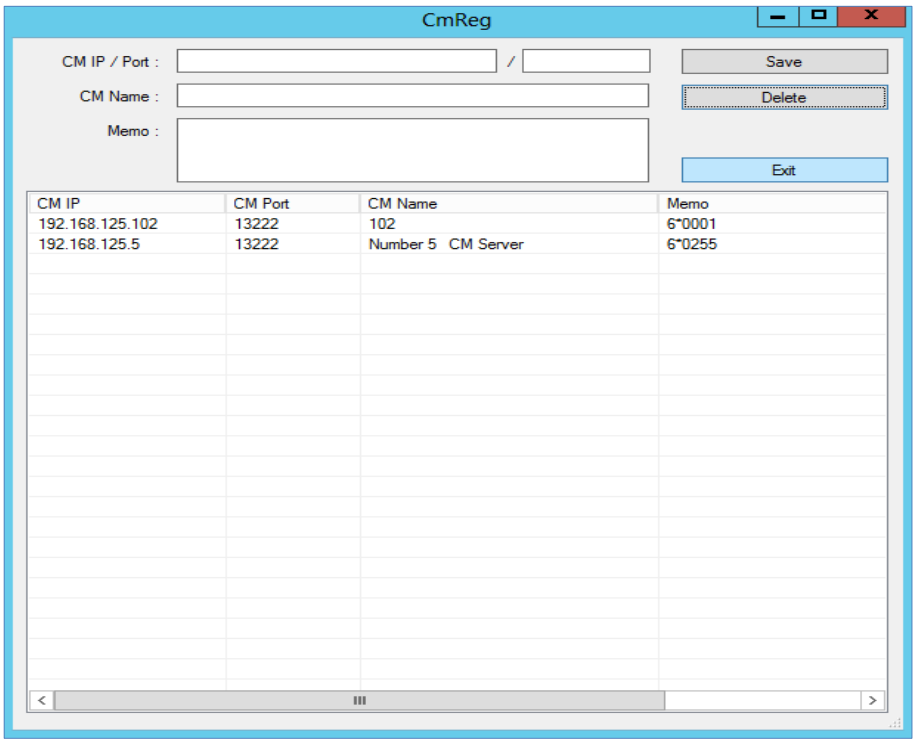


- If click the contents of bottom side, these will be displayed at upper side.

4. Select the CM Server you want to delete from the bottom of the screen and click the **Delete** button. Selected CM Server will be removed.



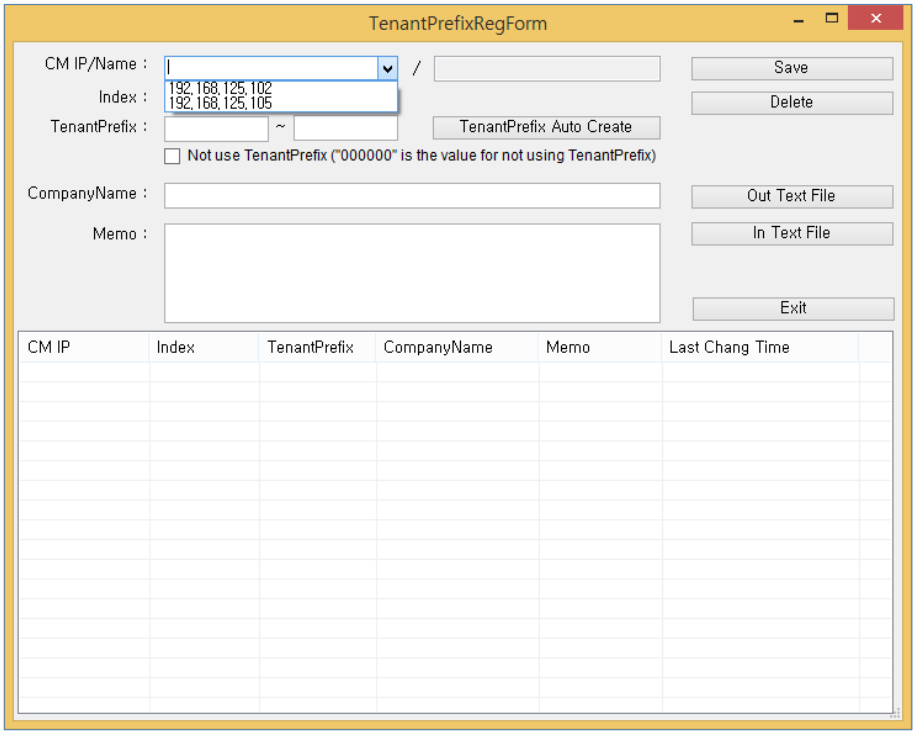
5. If removed normally, it will be disappeared at upper and bottom side. If all of configuration done, click the button of **Exit** to close Registration of CM Server.



2.3.4 Set up TenantPrefix – (CM)

1 . Click **Register >TenantPrefix** to display the setting menu.

2 . This menu is to set up the information of tenant prefix for Client routing to proper



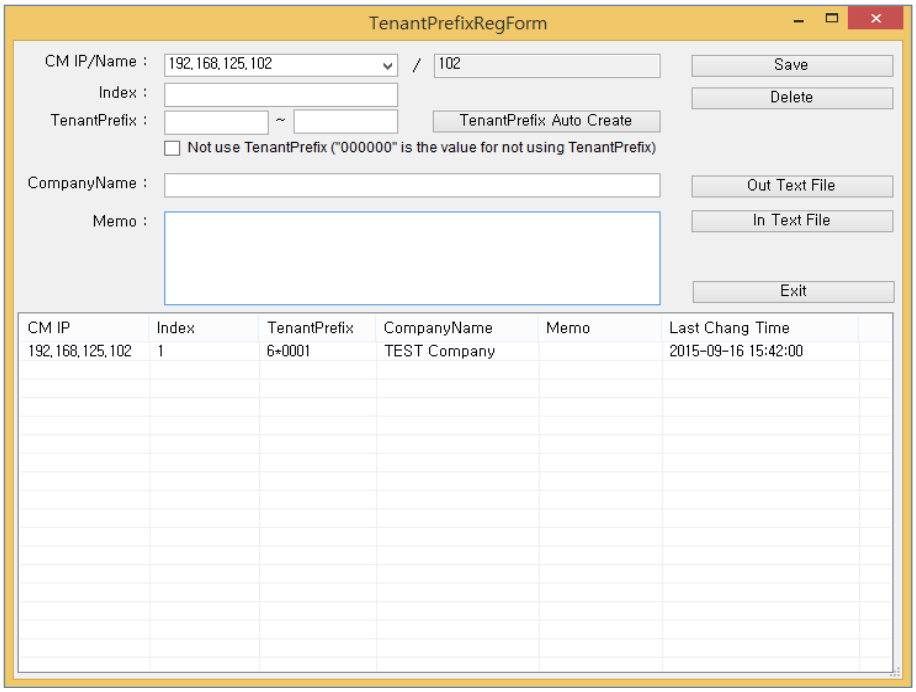
- Related information is as below.

Setting information		
TenantPrefixForm	CM IP / Name	• Selection with click the button of in CM Server list which set up at CM REG. • Name copied automatically from that of CM REG.
	Index	• Each CM Server has totally 254 number assigned and index is one of them.
	TenantPrefix	• 6 digit provided per one index
	CompanyName	• Company name of tenant.
	Memo	• Specific things

NOTE

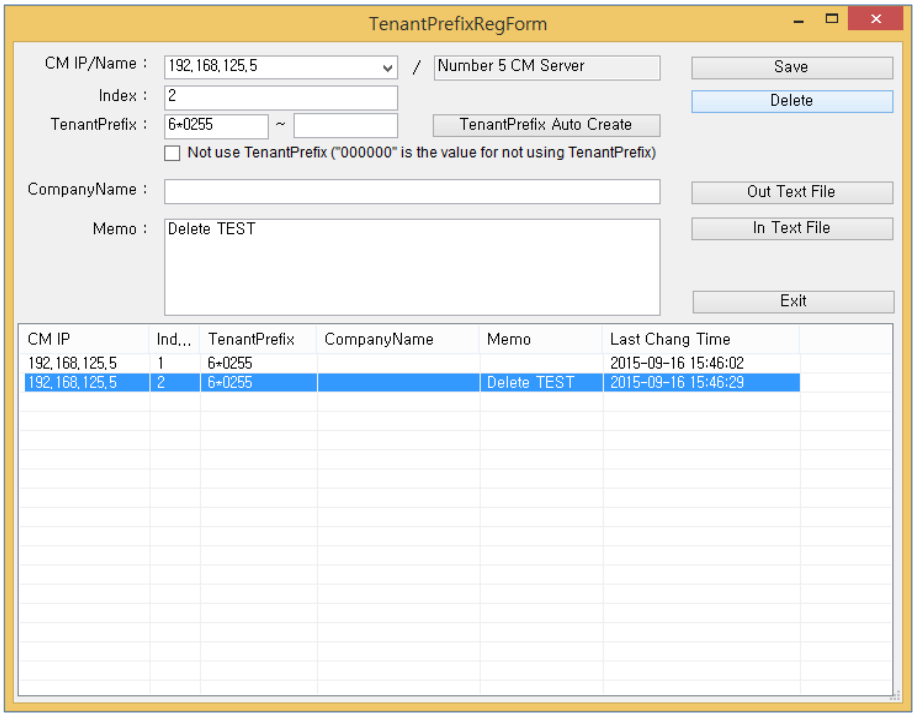
In running status, if TenantPrefix updated, it takes around 5 minutes to apply at client.

3. If click the button of **Save**, it will be displayed at the bottom of screen.

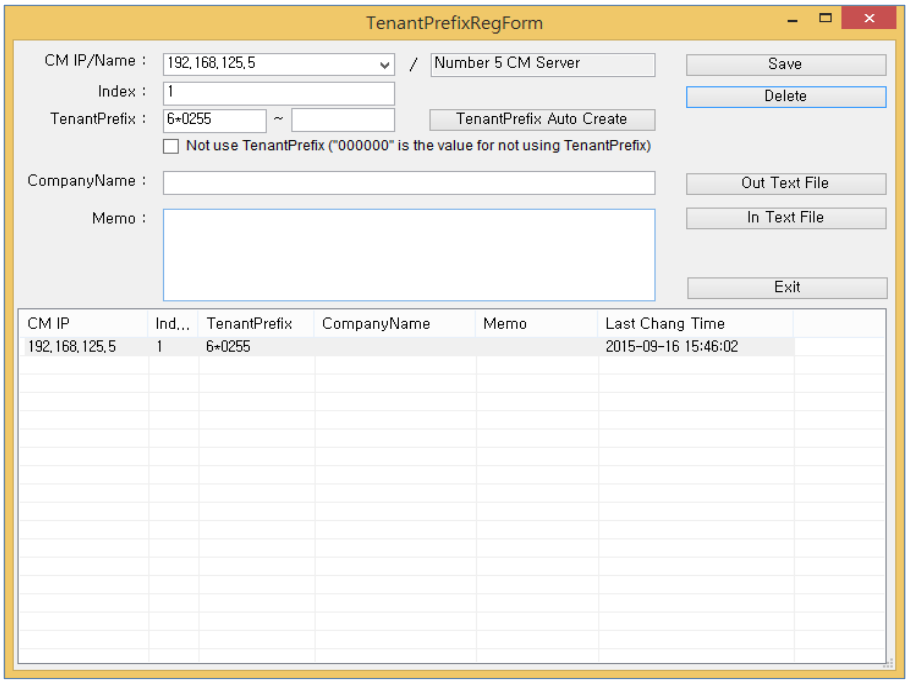


- All of items which have already TenantPrefix will be updated.

4. For elimination, TenantPrefix selected and then click the button of **Delete**.



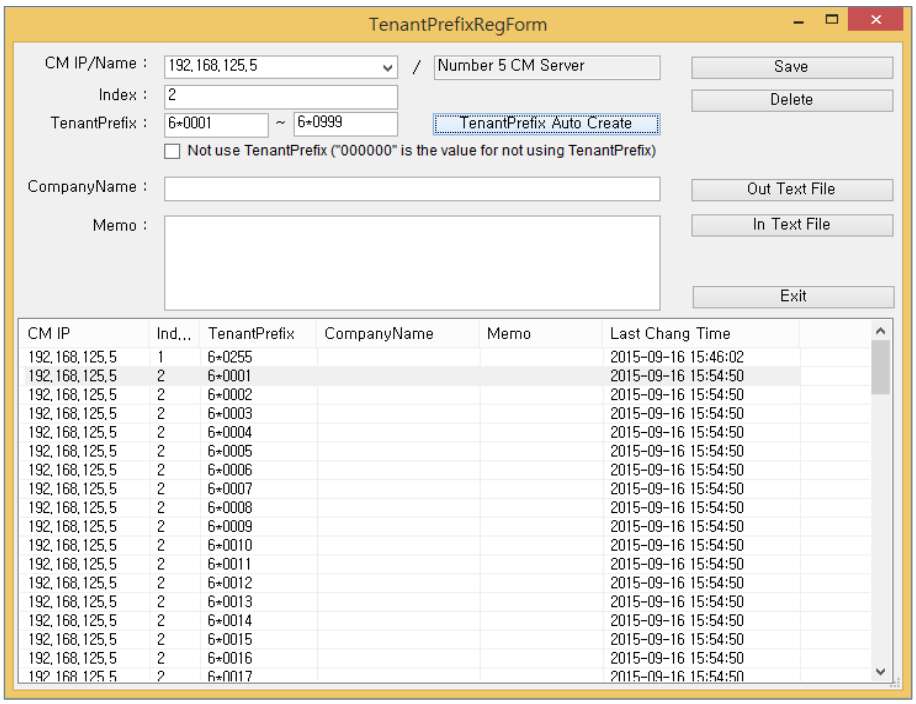
5. If deleted normally, selected TenantPrefix will be disappeared at upper and bottom sides.



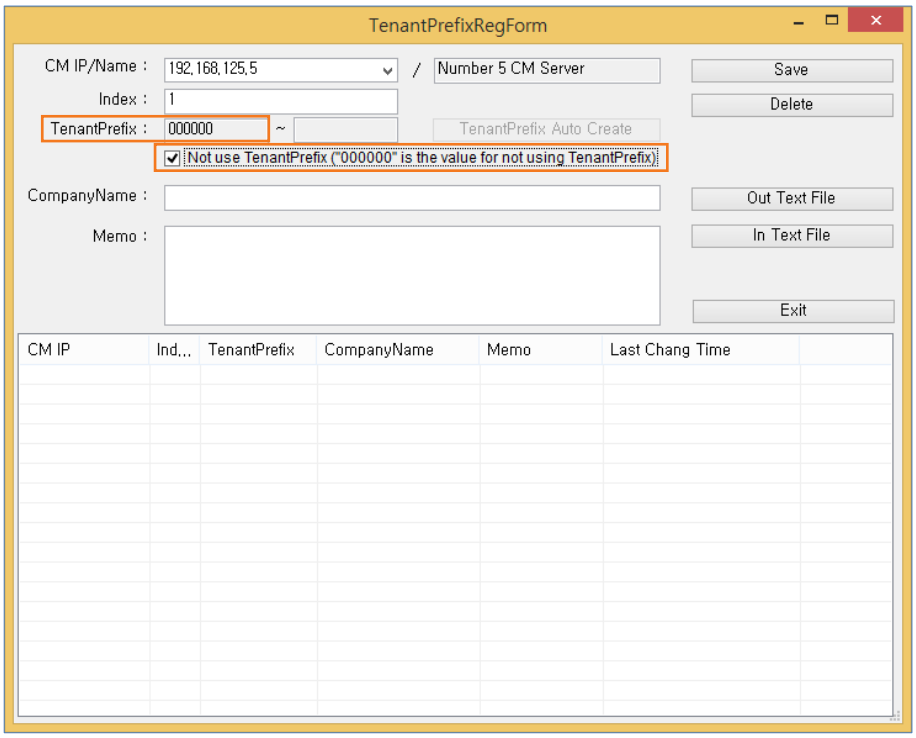
NOTE

All of contents in bottom of screen show that of CM server IP which selected in CM IP/Name.

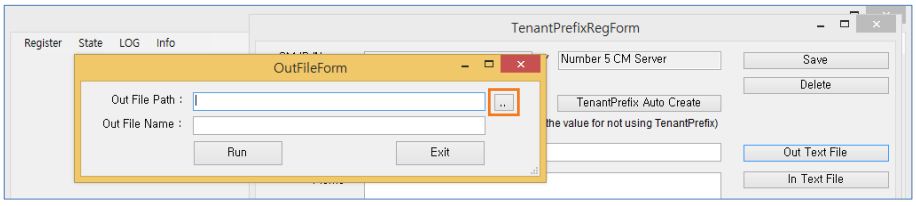
6. For auto-generation of TenantPrefix, first put in index, the first and second items of TenantPrefix and then click the button of **TenantPrefix Auto Create**. TenantPrefix will be generated with repeating the first and second items.



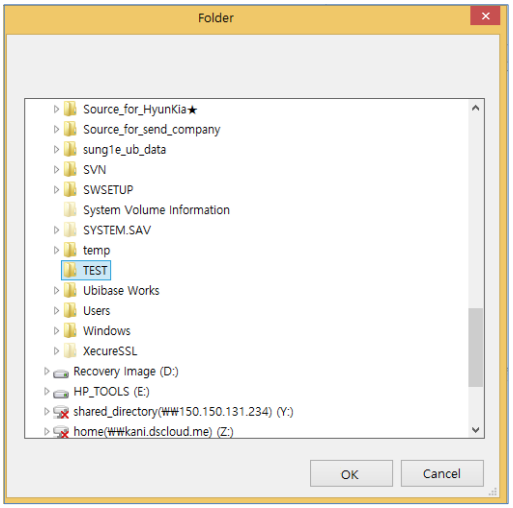
7 . If not used TenantPrefix, put in “000000” in the field of TenantPrefix or check “**Not use TenantPrefix**” (In case of single iPECS CM System.)



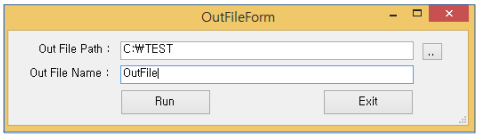
8 . In case of saving as Text File about all configured data, click the button of **Out Text File** and select Out File path.



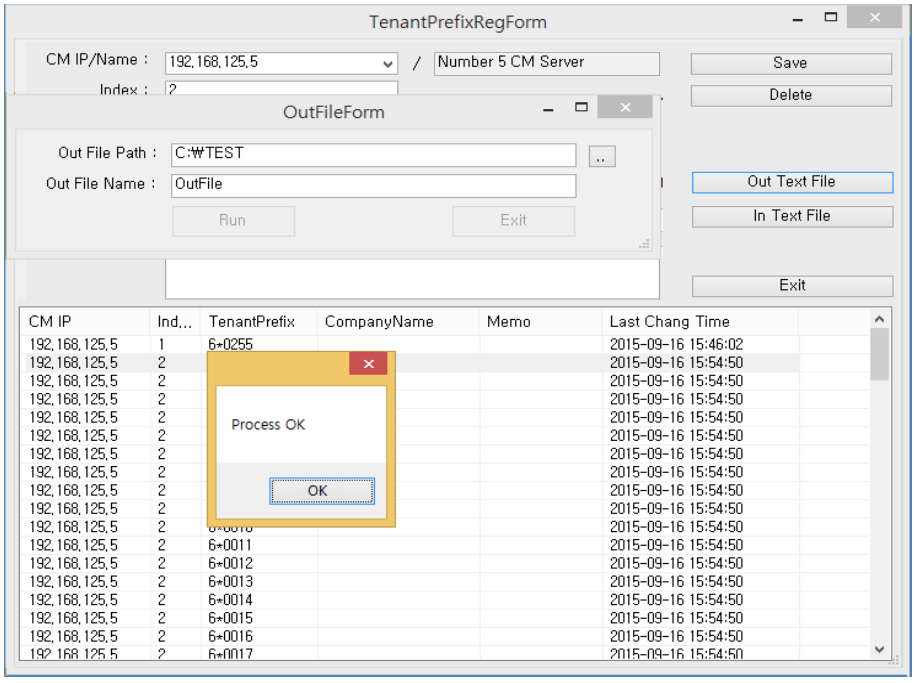
► Click the .. button to select the Out File Path item and click the **OK** button.



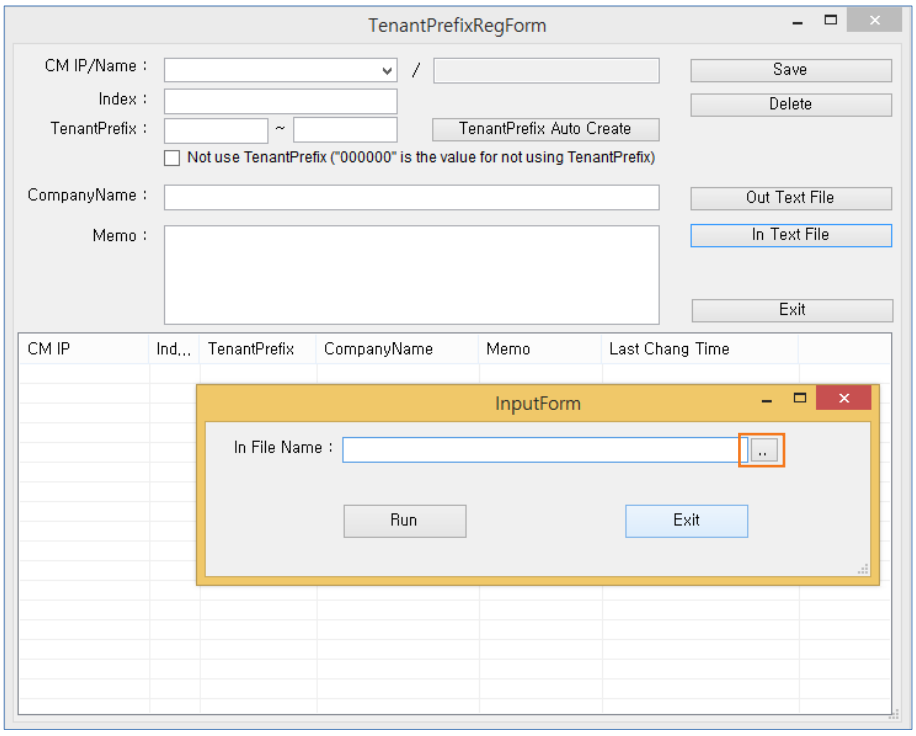
► Put in File Name and click the button of **Run**.



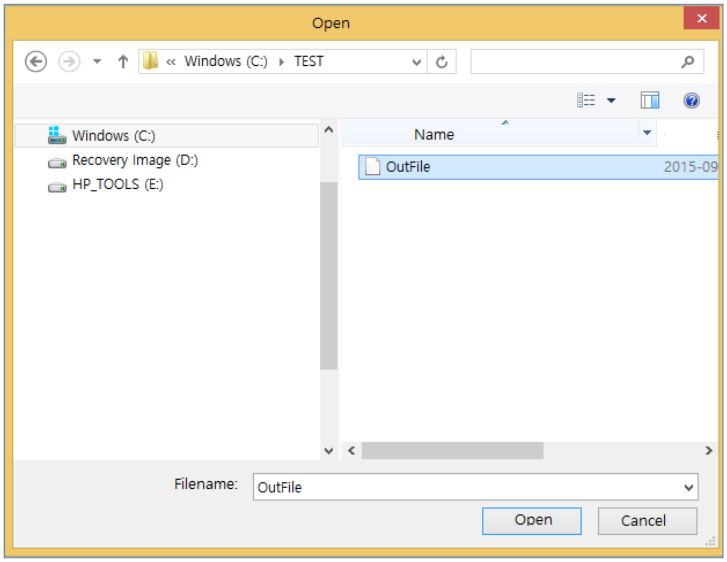
► File export is complete, click the **OK** button.



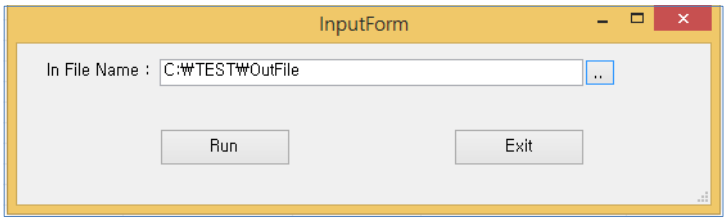
9 . For saving text file, click to the button of **In Text file** and go process as below.



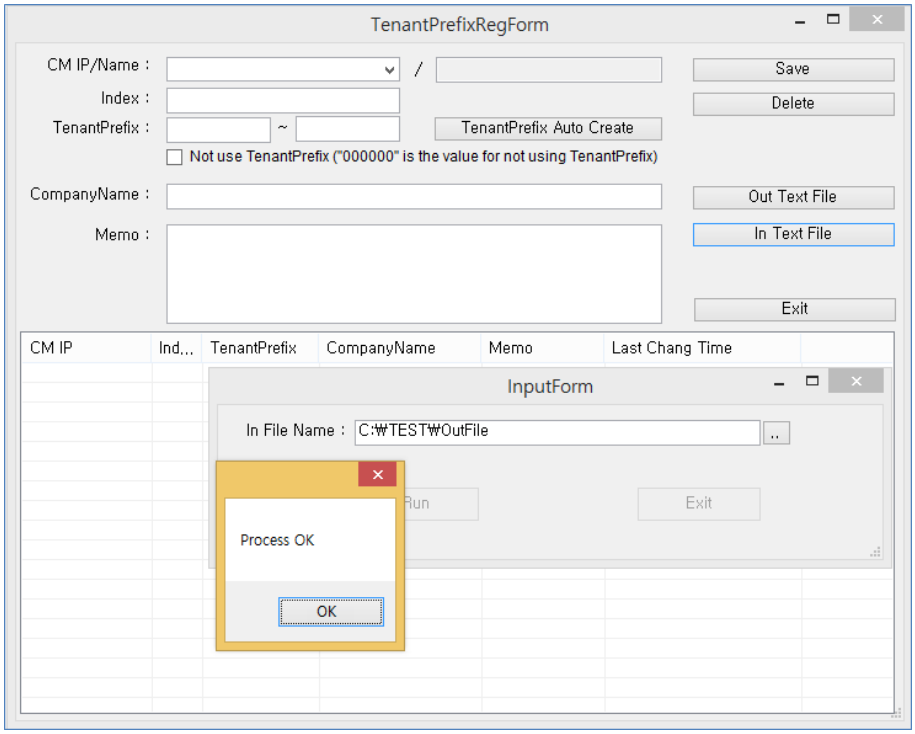
► Click the In File Name [..] button to select the file to read.



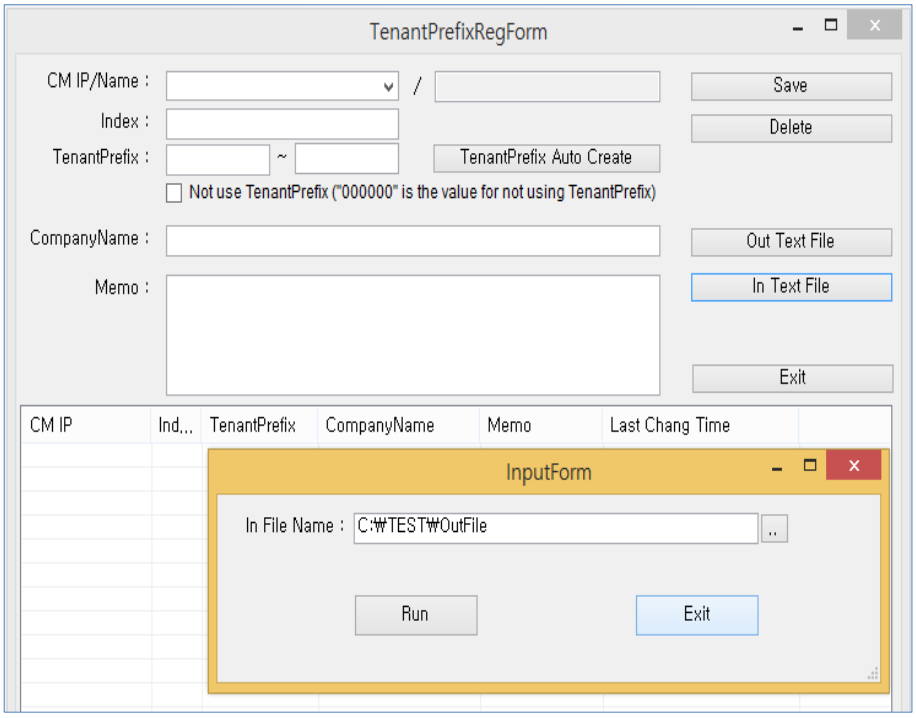
► Click the **Run** button.



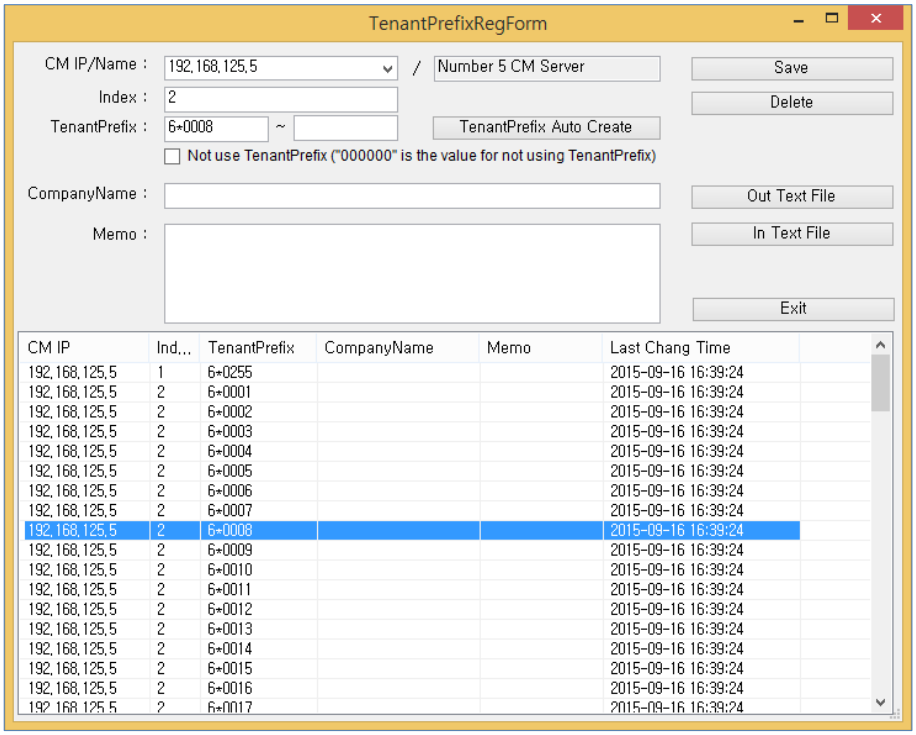
► Click the **OK** button.



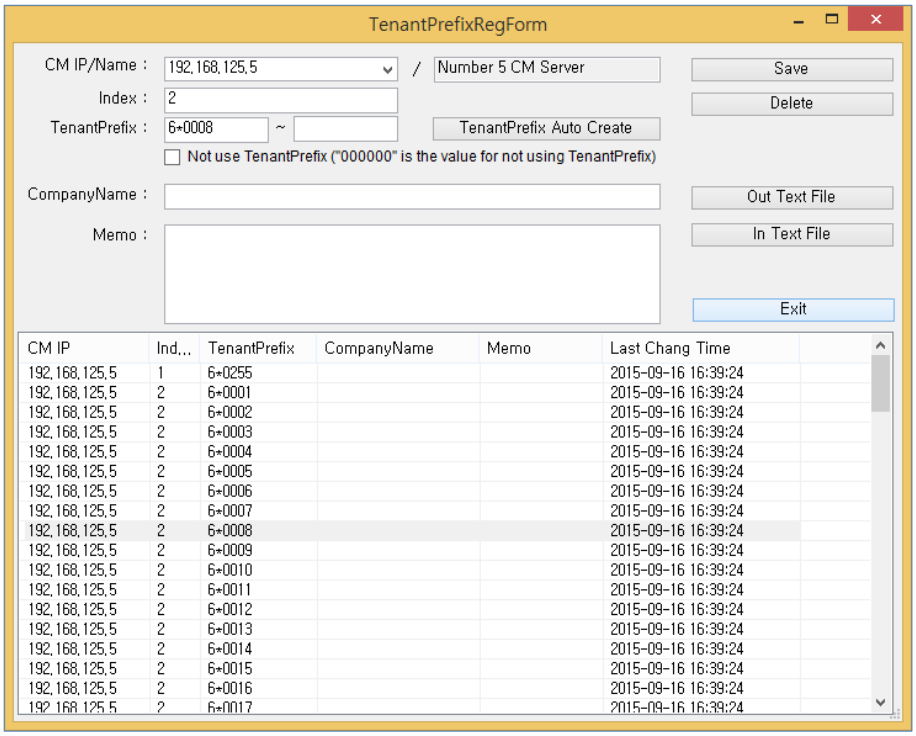
► Click the **Exit** button.



► To confirm contents, select the item **of CM IP/Name.**



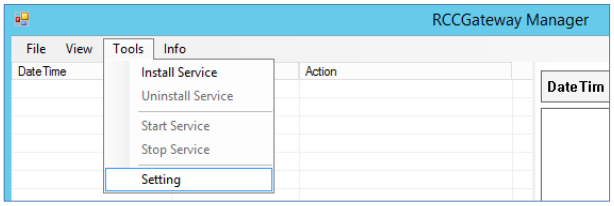
10. If all configuration done, click the button of **Exit** for termination of TenantPrefix setting.



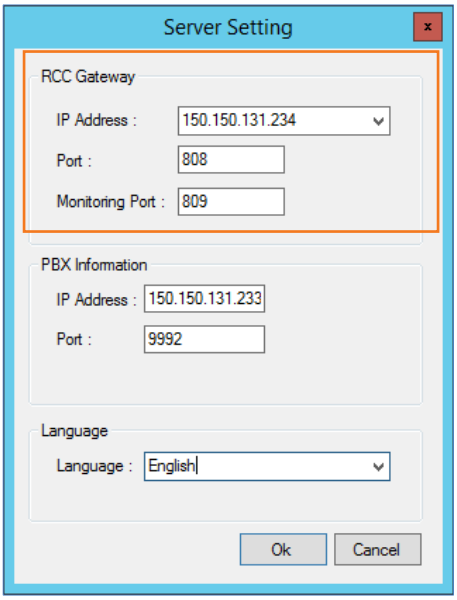
2.3.5 Set up RCC Gateway server

In the UCP System

1. Click the **Tools > Setting** to open the Server Setting window.



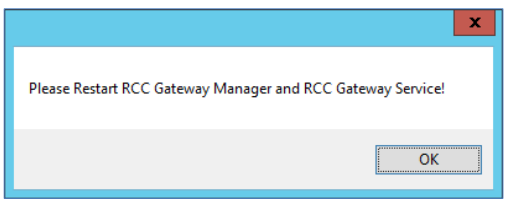
2. As below, the window of server setting will be displayed.



3. In this window, set up the information for RCC Gateway connection to PBX(UCP), Client connection to RCC Gateway and language information.

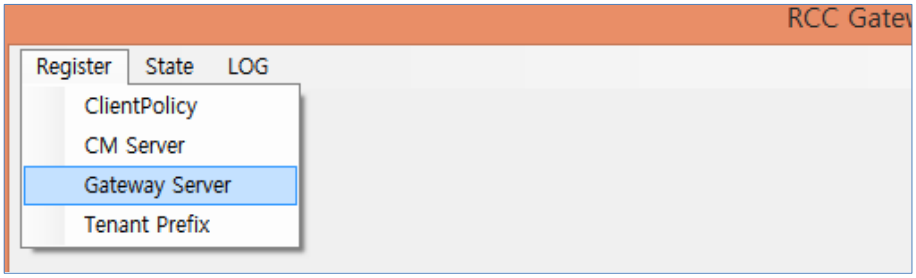
Setting Information		
RCC Gateway	IP address	• Put in the IP address of PC installed with RCC Gateway. Using this, client can connect RCC Gateway.
	Port	• For connection of client and RCC Gateway..
	Monitoring port	• For exchange of monitoring information between RCC Gateway service and administrator.

4. After done, restart as below.

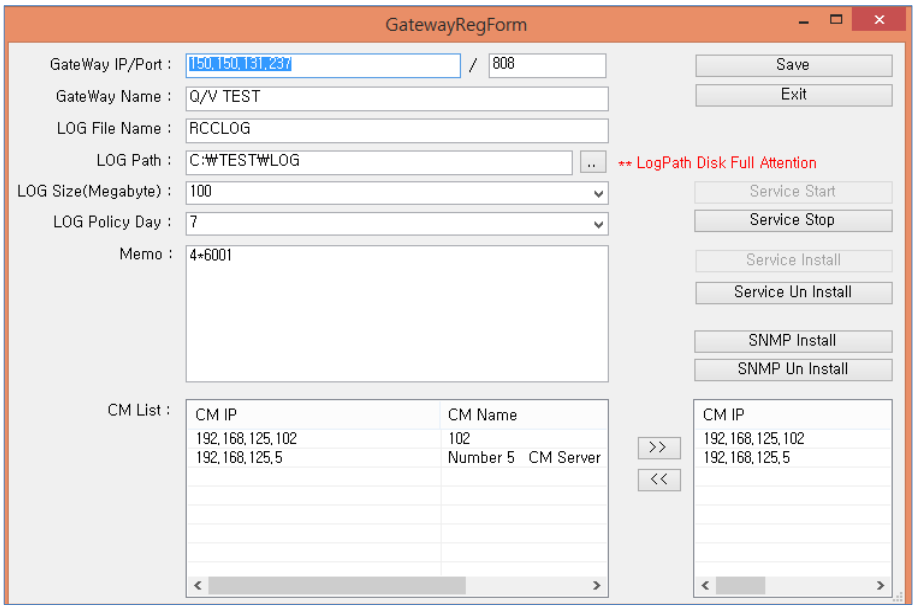


In the CM System

1 . Click the **Register >Gateway Serve**r, window of set-up displayed



2 . This is for putting in critical items of RCC Gateway Server management and service control (Install/Uninstall/start/stop of service and Install/Uninstall of SNMP)



- This is for putting in critical items of RCC Gateway Server management and service control (Install/Uninstall/start/stop of service and Install/Uninstall of SNMP)
- Configuration information is as below.

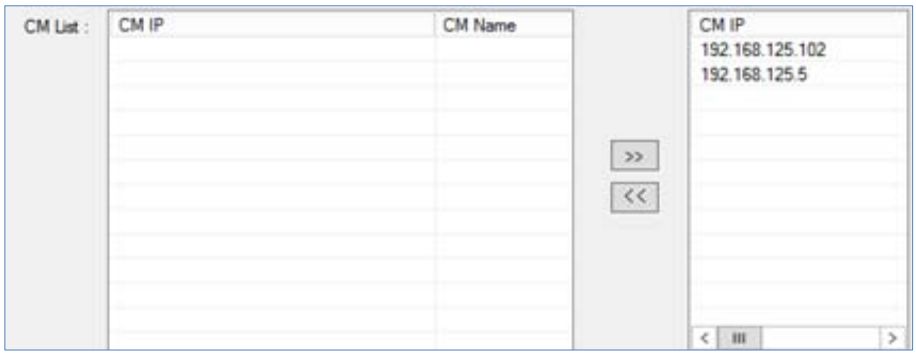
Setting Inforamtion		
GatewayRegForm	GateWay IP/Port	• Put in the IP and port of RCC Gateway Server for operation. • Port is basically 808.
	GateWay Name	• Enter a name in RCC Gateway Server.
	LOG File name	• Enter a log file name that occurs during operation.
	LOG Path	• Click the button of .. and select Log path.
	LOG Size	• Unit is Megabyte.
	LOG	• If log file is over assigned date, it will be erased. If 7 days

	Policy Day	assigned as LOG Policy Day, It will be saved till 7 days further from now.
	Memo	• Enter the peculiarity or note.

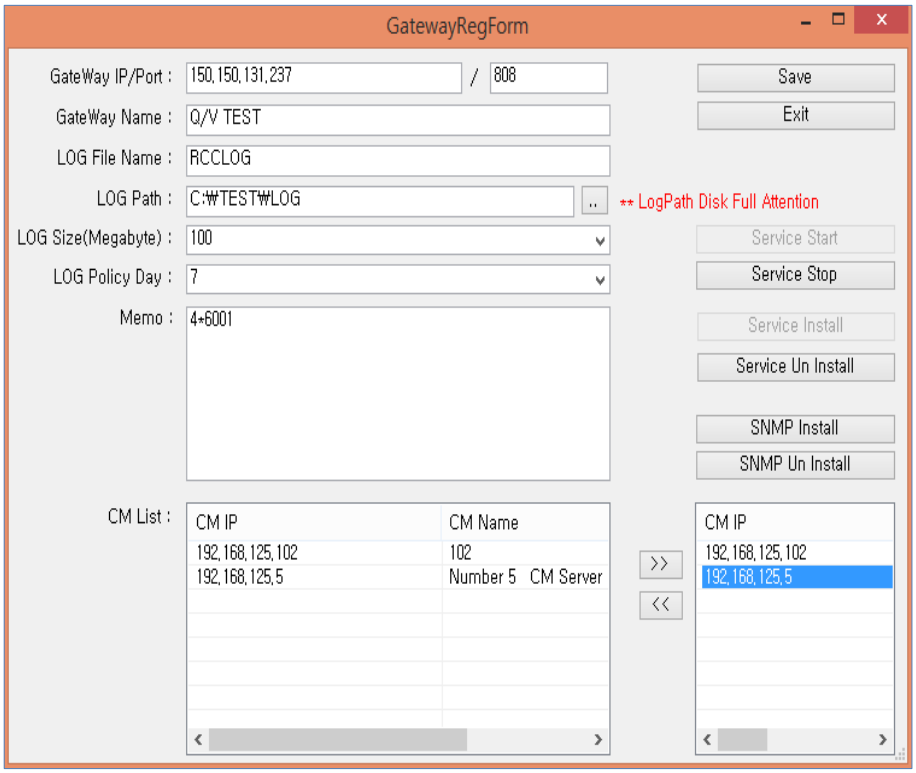
NOTE

If there is changed contents after running of RCC Gateway Server, It could be applied after rebooting of RCC Gateway Server.

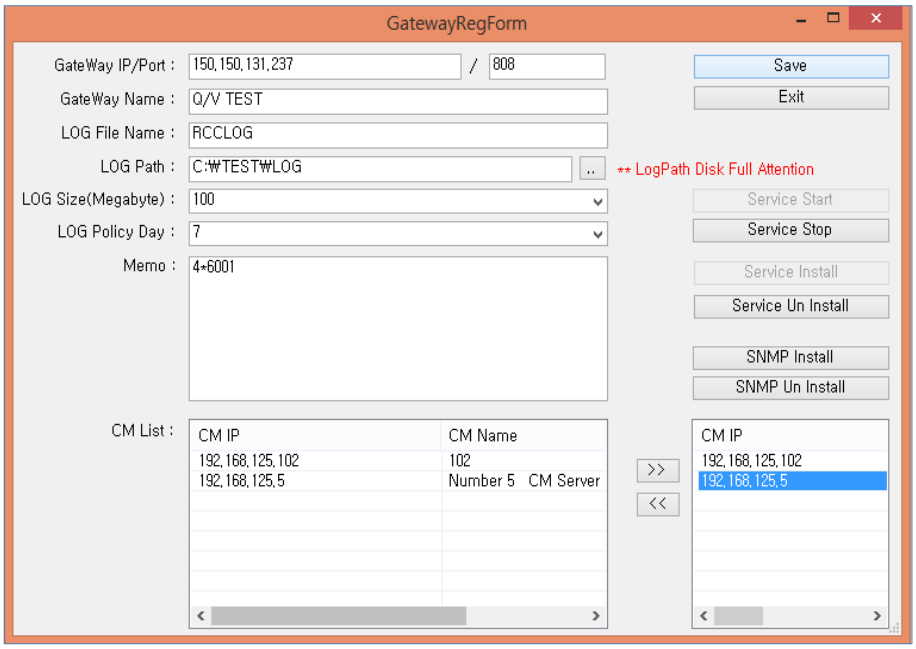
► If select one of CM IP and click the << button, it will move to CM List.



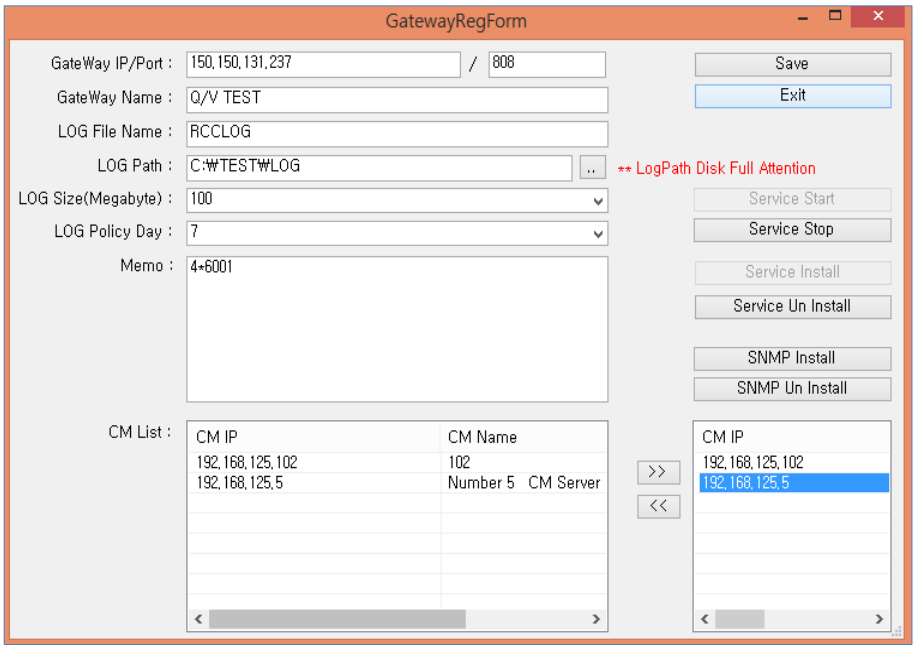
► CM Server registered in CM List can interwork with RCC Gateway Server.



► For elimination, select one of CM List and click the >> button.



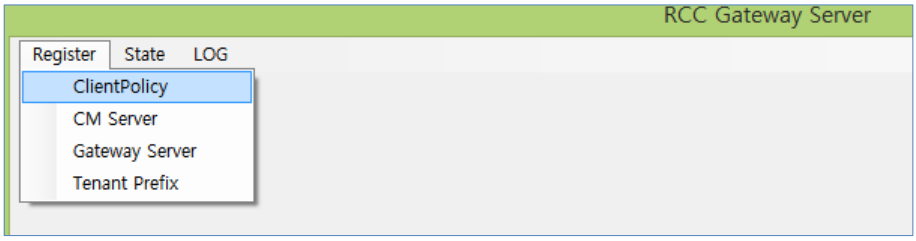
3 . If all configuration done, Click the **Save** button.



4 . Click the **Exit** button for termination of GatewayRegForm setting.

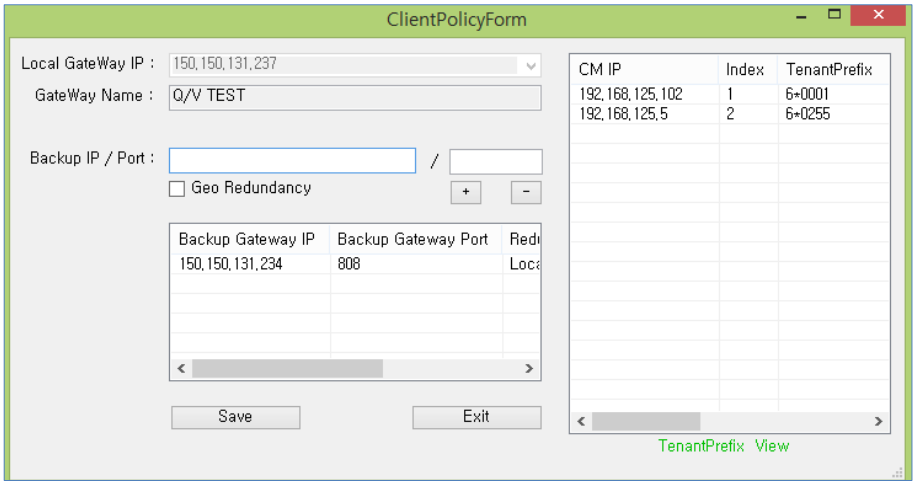
2.3.6 Set up client policy – (CM)

1. If click the button of Register->ClientPolicy, screen of set-up displayed.



2. This ClientPolicyForm is for local or geographical redundancy of RCC Gateway Server.

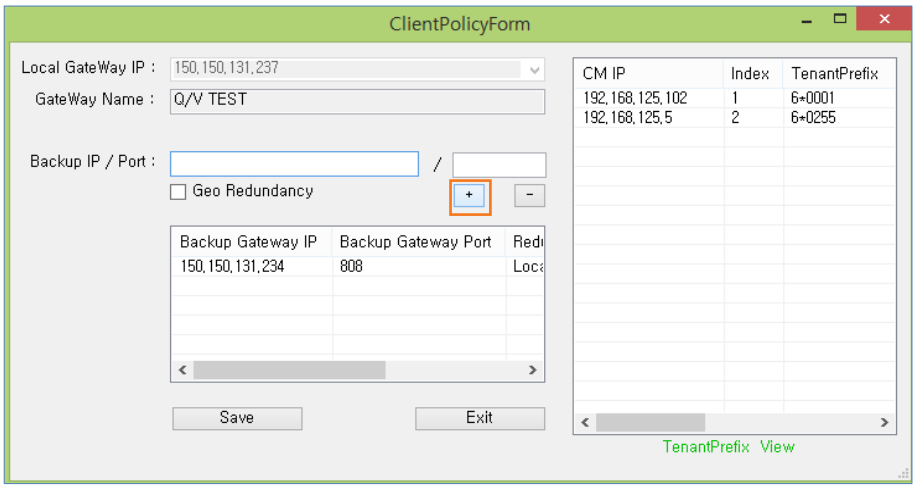
3. Client can send certain signal to RCC Gateway Server periodically and RCC Gateway Server deliver backup IP to client as below configuration. If incident situation happened, client can connect RCC Gateway server registered in backup IP and keep normal operation.



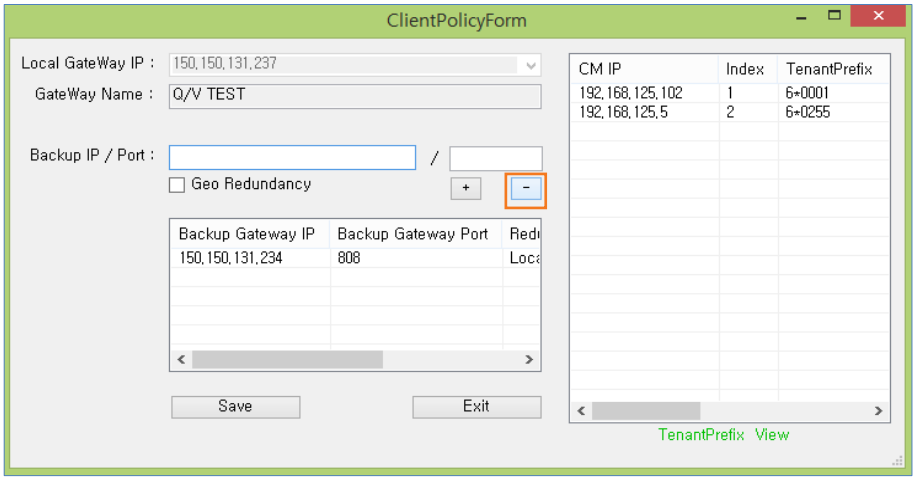
- Configuration information is as below.

Setting Information		
GatewayRegForm	Local GateWay IP	• RCC Gateway Server IP for Client connection. • Read only.
	GateWay Name	• Name of RCC Gateway Server. • Read only.
	Backup IP /Port	• Put in IP and Port of RCC Gateway Server for incident situation..
	Geo Redundancy	• Enter multiple values separated by local and geographical redundancy. • Checked Backup IP in here will be set as lower priority.
	Backup IP List	• All inputted item list by clicking + button.
	TenantPrefix View	• Output of TenantPrefix that registered in RCC Gateway Server for reference.

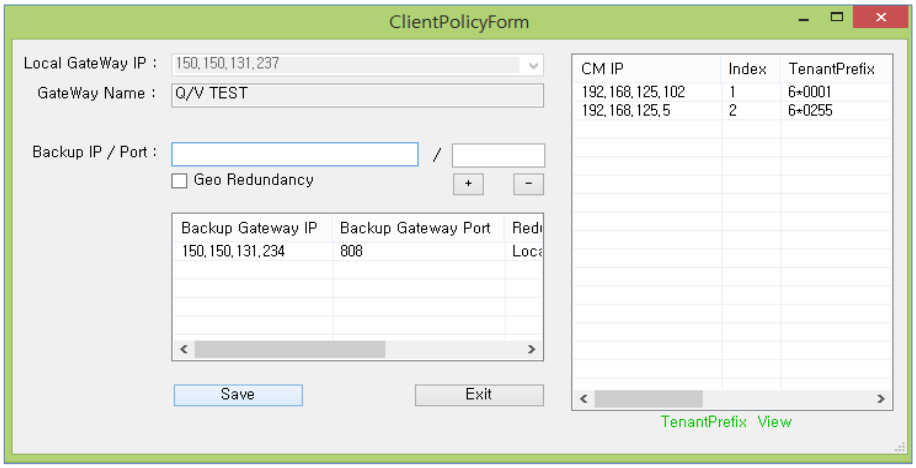
4. To add at list, put in or select IP and port of Backup and Geo. Redundancy and click the + button.



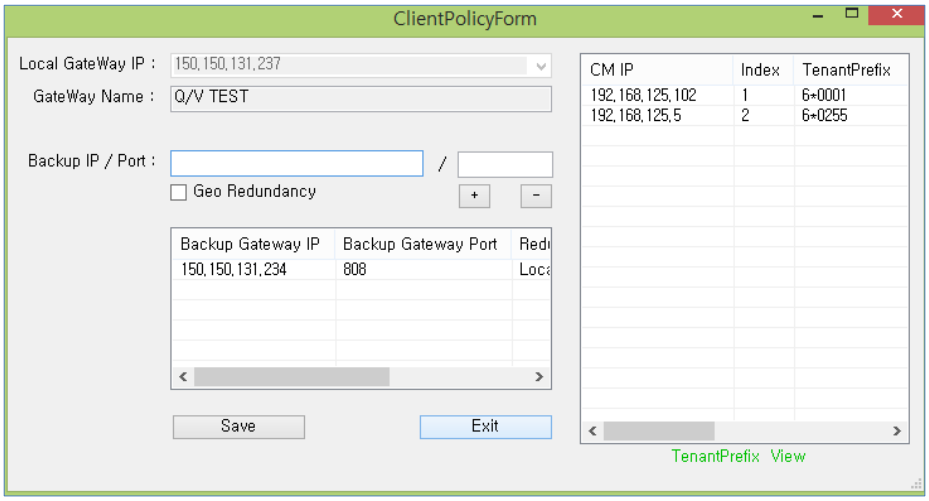
5. For elimination, select one of list and click the - button.



6. If all configuration done, Click the **Save** button.



7 . Click the **Exit** button for termination of ClientPolicyForm setting.



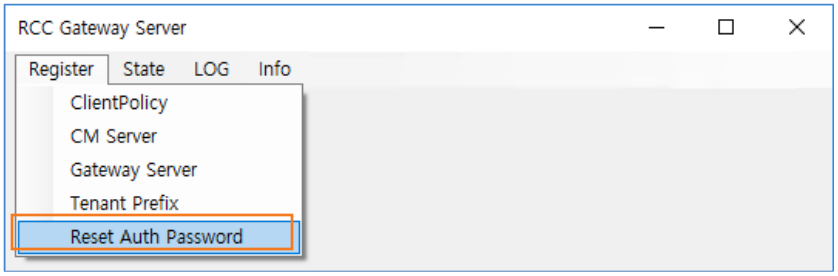
NOTE

If clientpolicy updated in normal operation, it takes around 5 minutes for implementation of client.

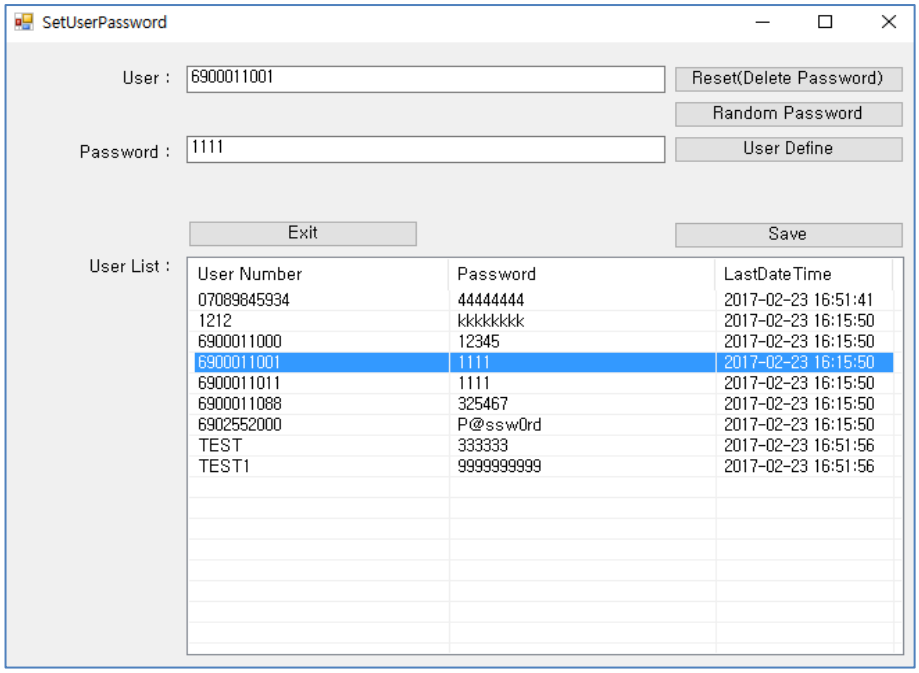
2.3.7 Set up password preventing dual registration – (CM)

From the version R1.0.21 of client software, new feature of password management in Client software added. If password forgotten, it can be found out or updated in RCC Gateway Server and informed to user as below.

1. Click the **Register > Reset Auth Password,** below menu will be displayed.



2. All list will be displayed and for update, select one of users.



3. If click the button of Reset (Delete Password), password of user will be blank.
4. If click the button of Random Password, password of user will be set as 6 digit randomly.
5. If click the button of User Define, User password can be set in Password article.
6. If update done, click the **Save** button for termination.

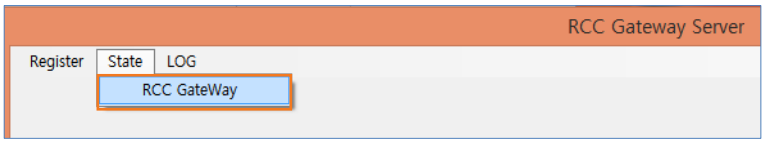
NOTE

Sometimes below message will be displayed.**"Data Save fail Retry !!!"**. This case denote some error happened in database so need to retry till this message disappeared.

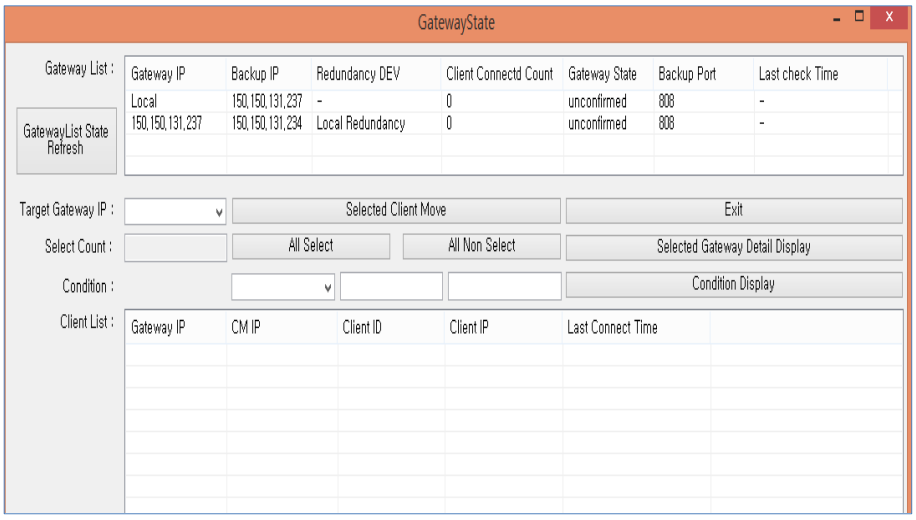
2.3.8 Redundancy of RCC Gateway– (CM)

When certain client needs connection change from A to B Gateway server, proceed as followed.

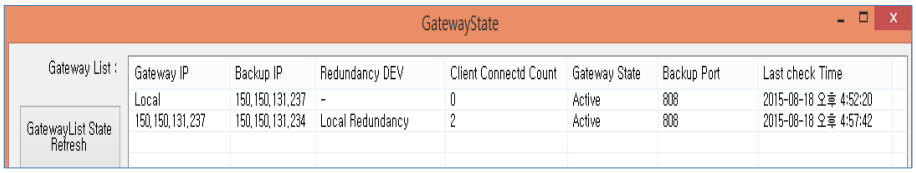
1 . If click the button of State->RCC Gateway, below menu will be displayed.



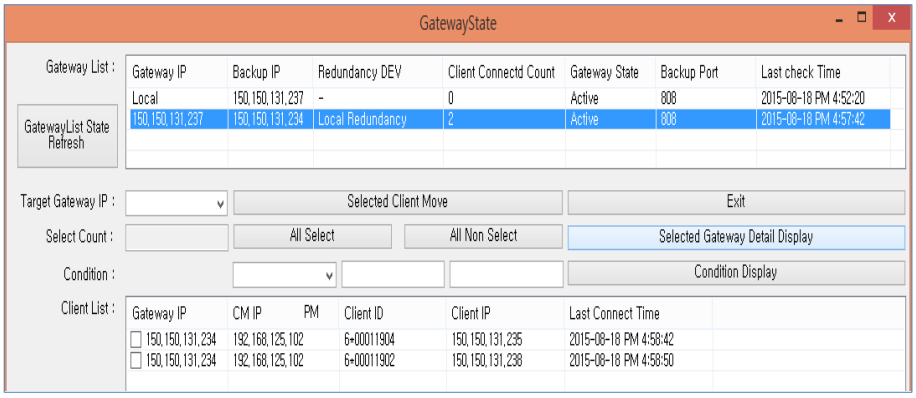
2 . In Gateway List, first thing is Local RCC Gateway Server and others are reserved RCC Gateway Server.



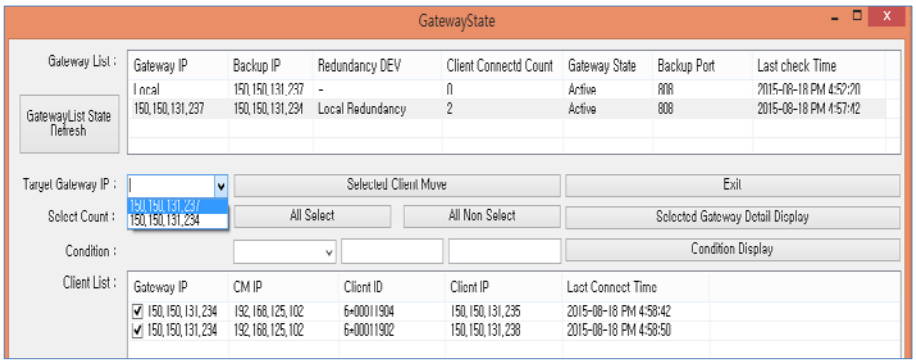
► If click the button of GatewayList State Refresh, keep the status of RCC Gateway Server current.



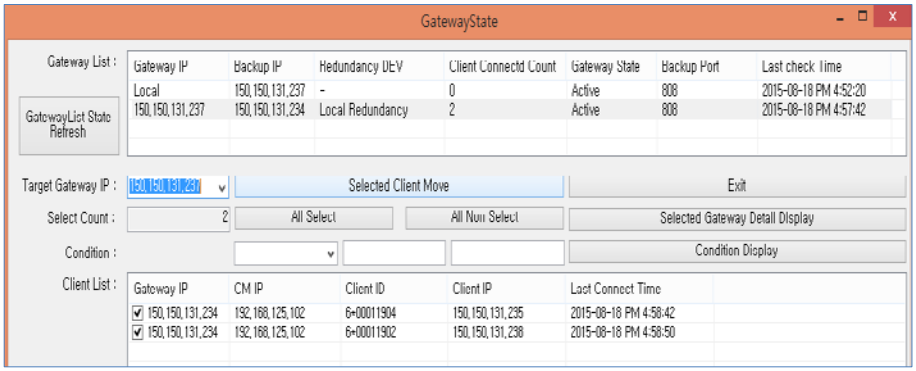
3 . Below example is for both clients relocation to Local RCC Gateway Server from other RCC Gateway Server.



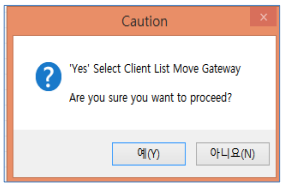
4. Select one of clients and Target Gateway IP. If all of Client selected, click the button of All Select and for clear, click the button of All Non Select.



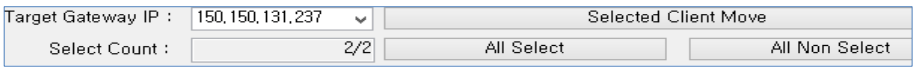
5. Click the button of Selected Client Move and move Client



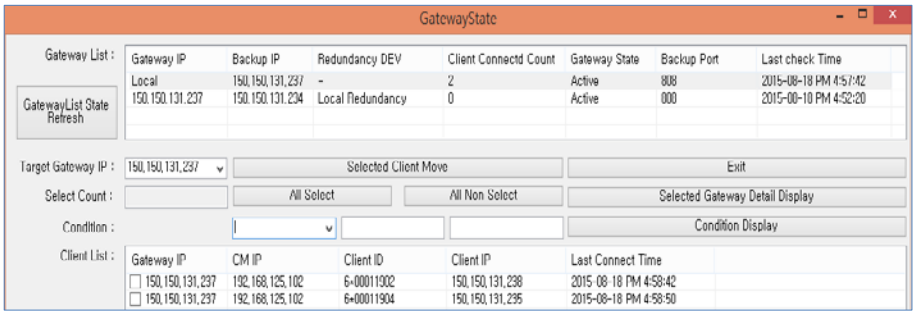
► Decision of execution



6. Execute Selected Client Move, then selected number and related information will be displayed at select count.



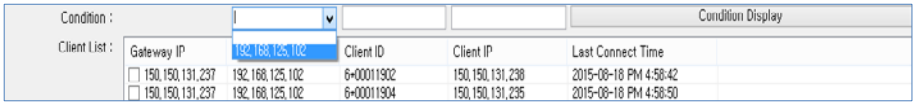
► After waiting around (Maximum) 5 minutes, click the button of GatewayList State Refresh for confirmation.



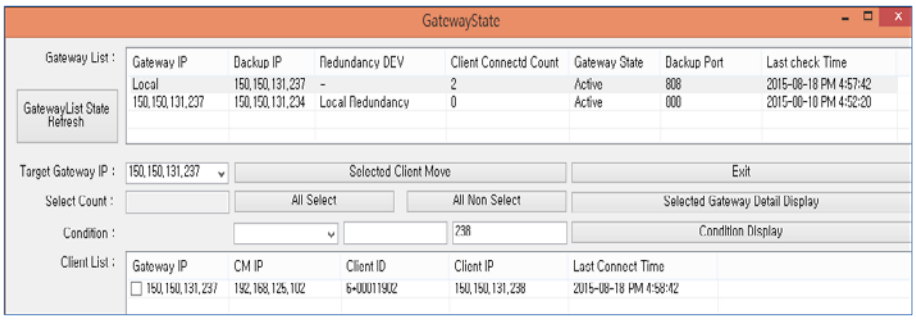
NOTE

If Time synchronization didn't between RCC Gateway Servers, waiting time will be increased.

► Look for Client. Sometimes, there is specific cases that have to search or move particular client. For this, if select CM IP or put in condition of Client ID, Client IP and then click the button of Condition Display, particular client will be moved. (all conditions are "AND")



► Below is example that put in 238 in Client to search a few clients including 238.



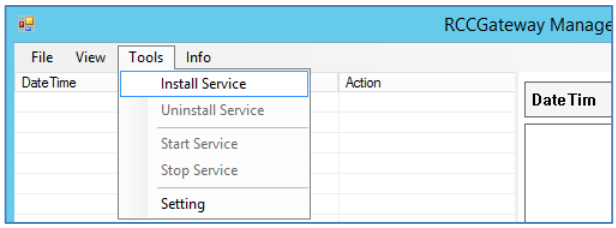
Chapter 3.

RCC Gateway Service

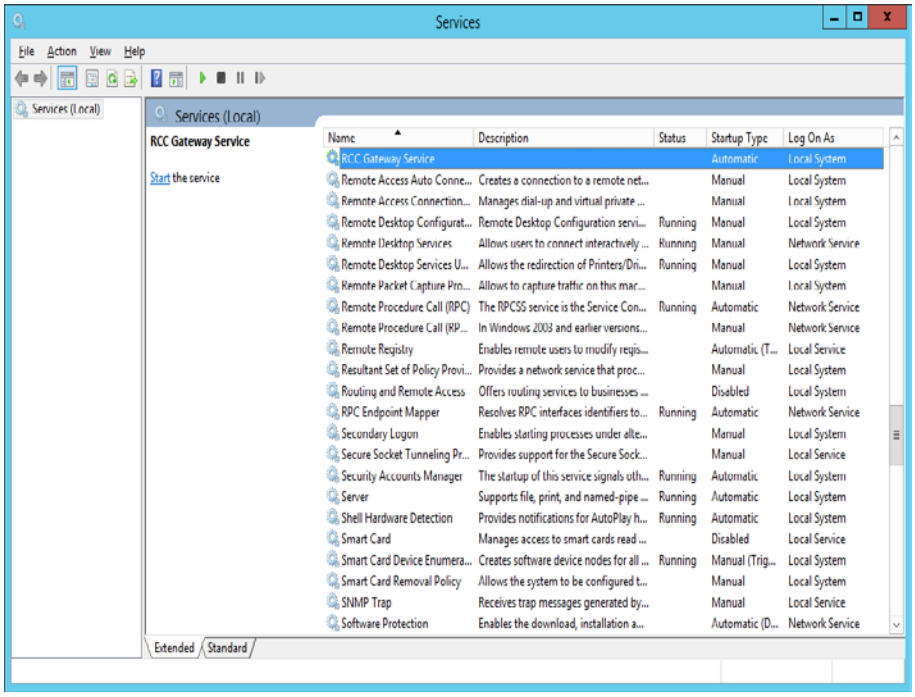
This chapter explains how to install and manage the RCC Gateway Service.

3.1 RCC Gateway Service Installation

1. Install the RCC Gateway Service by clicking **Tools > Install Service**.



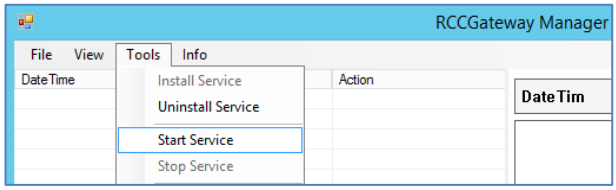
2. To verify the RCC Gateway Service is installed, use the Windows Task Manager Services management tool as below. To access the tool, press CTRL+ALT+DEL then select Start Task Manager. In the Task Manager select the Services tab then highlight the RCC Service item and click the Services button at the bottom right of the Task Manager screen.



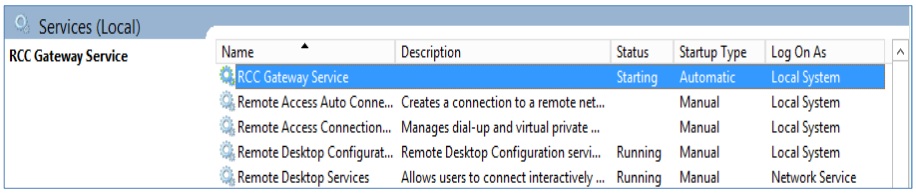
3.2 Managing the RCC Gateway Service

3.2.1 Starting the Service

1. Start the Gateway Service by clicking **Tools > Start Service**. Once started, the RCC Gateway will permit connections to RCC Client types and establish communication with the iPECS platform.

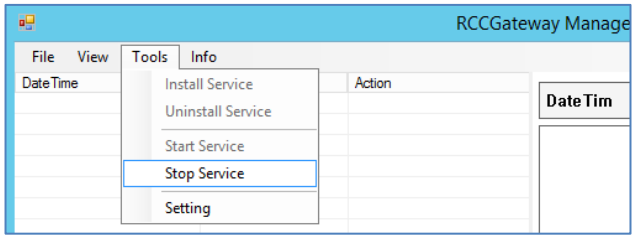


2. You can use the Windows Task Manager Services management tool, see Section 3.1, to verify the RCC Gateway Service status, which should display as Starting or Running.



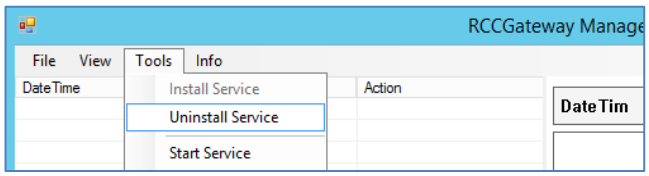
3.2.2 Stopping the Service

1. You can stop the service by clicking **Tools >Stop Service**. When stopped, all client connections are terminated and communications with the iPECS platform stops.



3.2.3 Uninstalling the Service

1. You can uninstall the service by first stopping the service as described in section 3.2.2 then clicking **Tools > Uninstall Service**.



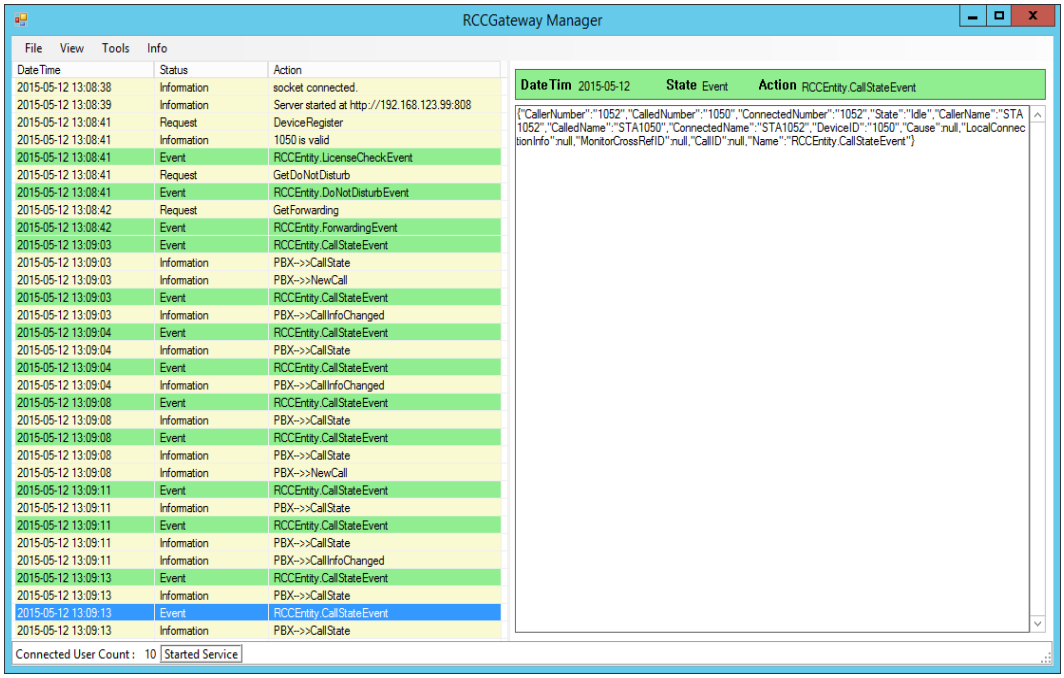
3.3 Monitoring RCC Gateway Service

3.3.1 Gateway Manager Screen

When the Gateway Service starts, communication with the iPECS platform is initiated and RCC Client types can connect with the gateway. The Gateway Manager screen displays log entries as shown below.

On the left side of the screen is a list of active log entries in brief. Each entry includes the date and time, the status or type of entry (Client request, Information, Response, Event or Fault), and an Action. On the right is detailed information on the log entry highlighted in the left screen.

The number of connected clients and the Service status are displayed in the bottom left of the screen.

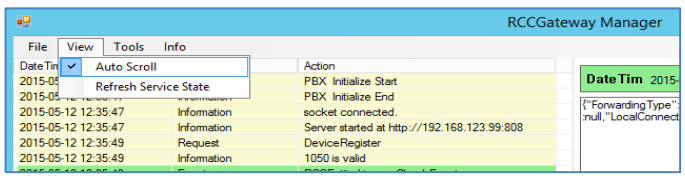


NOTE

The color of the log entries vary based on the status of the log.

3.3.2 Auto Scroll

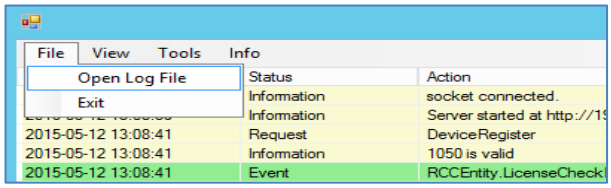
Normally the Gateway Manager refreshes continuously scrolling new entries in at the bottom of the list. You may stop the scrolling to select a specific entry to view by clicking **View > Auto Scroll**.



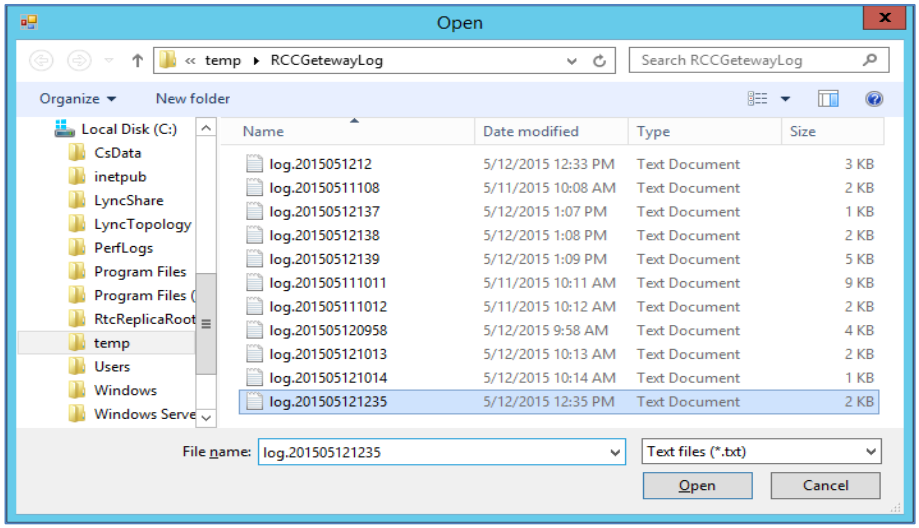
3.3.3 Reading Stored Log Files

The RCC Gateway Manager stores a log file for each minute there is activity. The log files are saved in the **c:\temp\rccgatewaylog** directory.

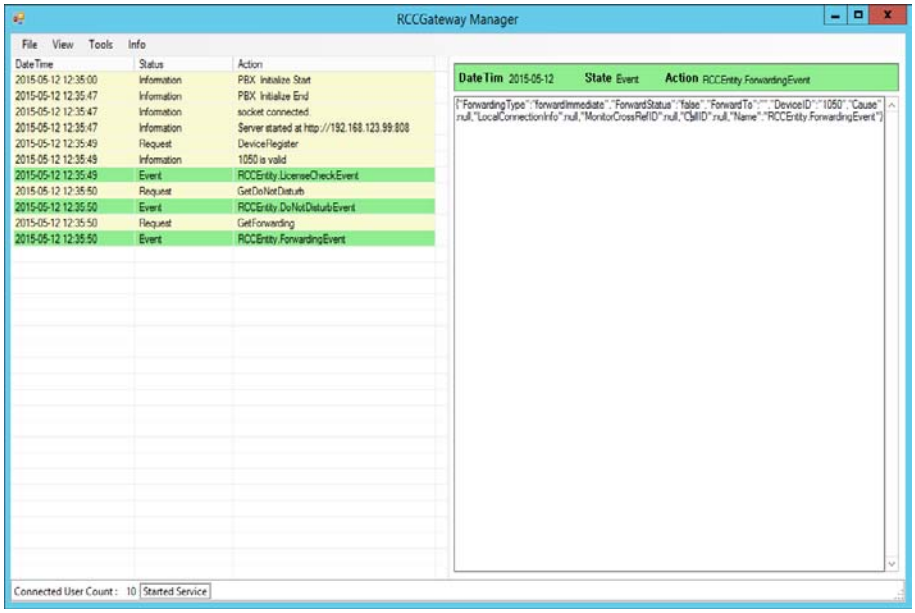
1. To view the logs, click **File > Open Log File**.



2. The list of saved Log files displays.



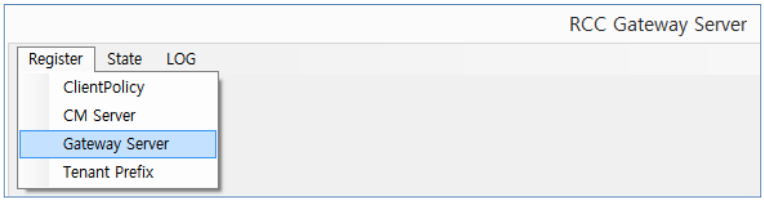
3. When you double click on a log file, the file opens the RCC Manager saved log screen as shown below.



3.4 SNMP of RCC Gateway – (CM)

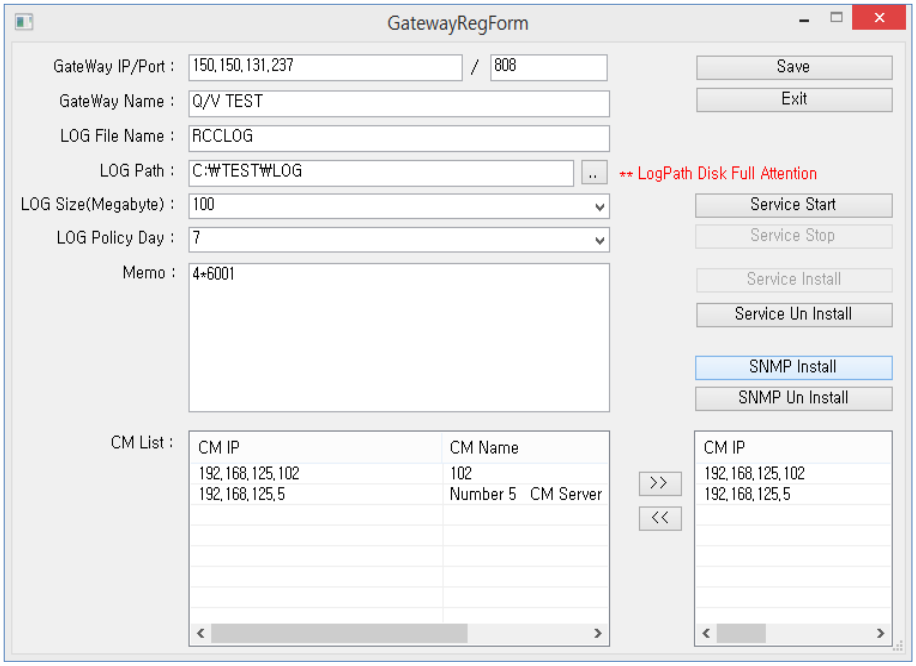
3.4.1 SNMP of RCC Gateway installation

1. If click the button of Register->Gateway Server, below menu will be displayed.

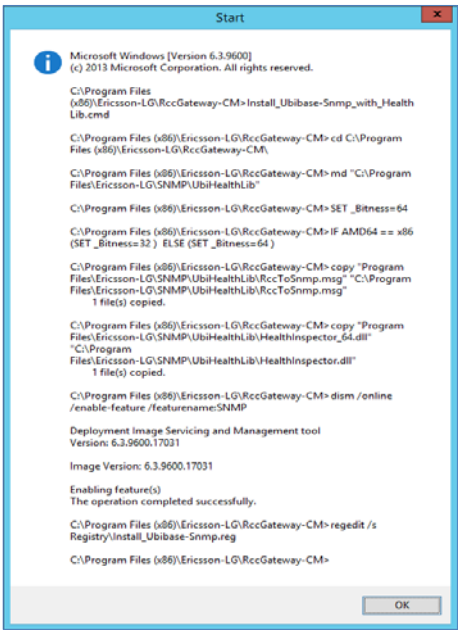


2. The purpose of SNMP installation is to provide the operation of RCC Gateway Server thru. SNMP Service. If click the button of SNMP Install, CMD window appeared and installation will start (Max. around 5 min waiting)

3. If not finished over 5 minutes, close CMD window then root cause will be displayed.

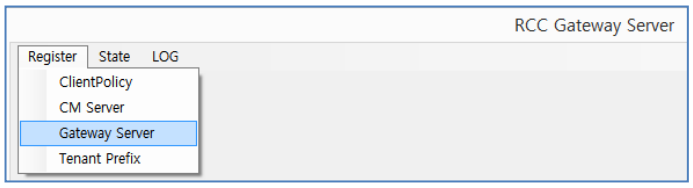


4. If done, the result will be displayed. If certain problem happened, that means that administrator authority or executed again in execution status.

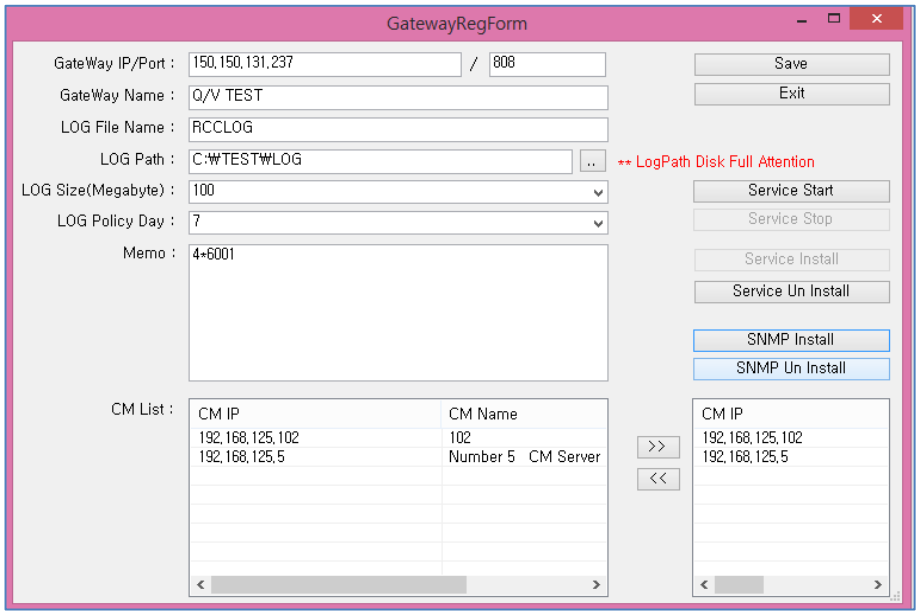


3.4.2 SNMP of RCC Gateway elimination

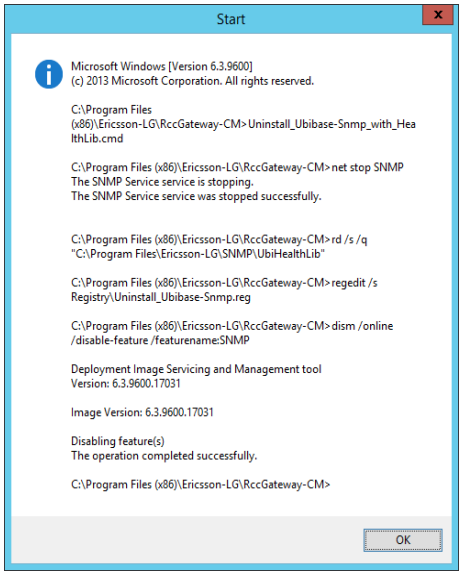
1 . If click the button of Register->Gateway Server, below menu will be displayed.



2 . The purpose of SNMP uninstallation is to stop SNMP Service. If click the button of SNMP Uninstall, CMD window appeared and Uninstallation will start (Maximum around 5 min waiting)



3 . If done, the result will be displayed. If certain problem happened, that means that administrator authority or executed again in execution status.



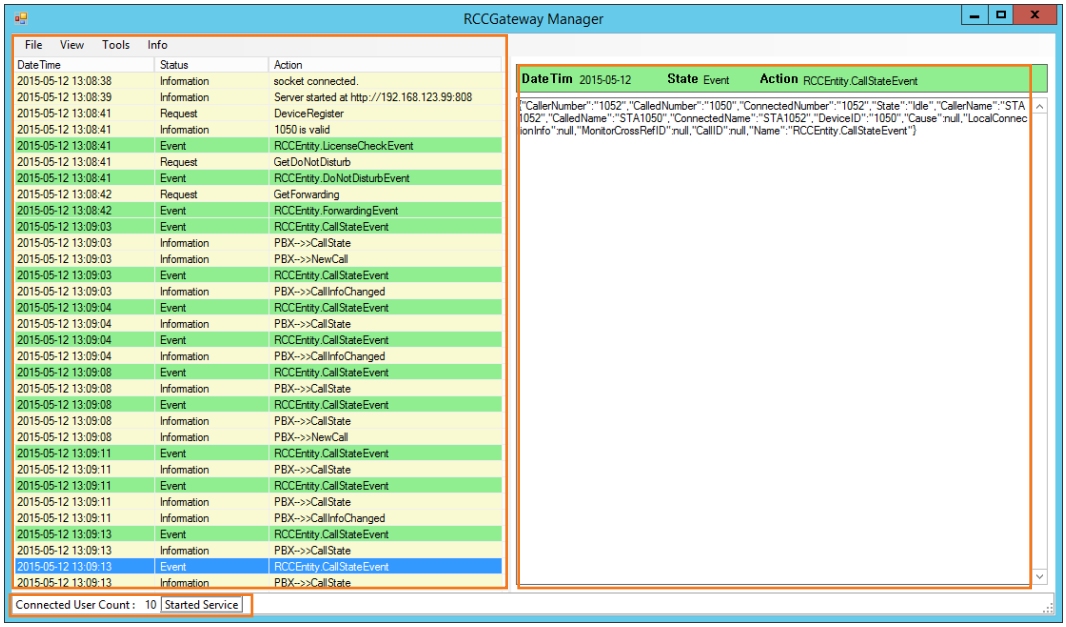
3.5 RCC gateway monitoring

3.5.1 Screen of RCC Gateway monitoring

If service running, the connection of client will be allowed and displayed as below.

In the UCP System

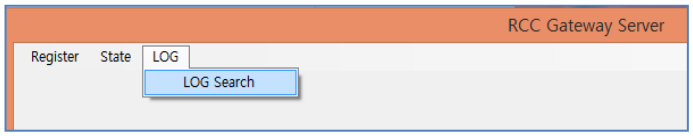
1. If RCC gateway executed, log in main screen will be displayed.
2. You can monitor from the log screen on the main screen.



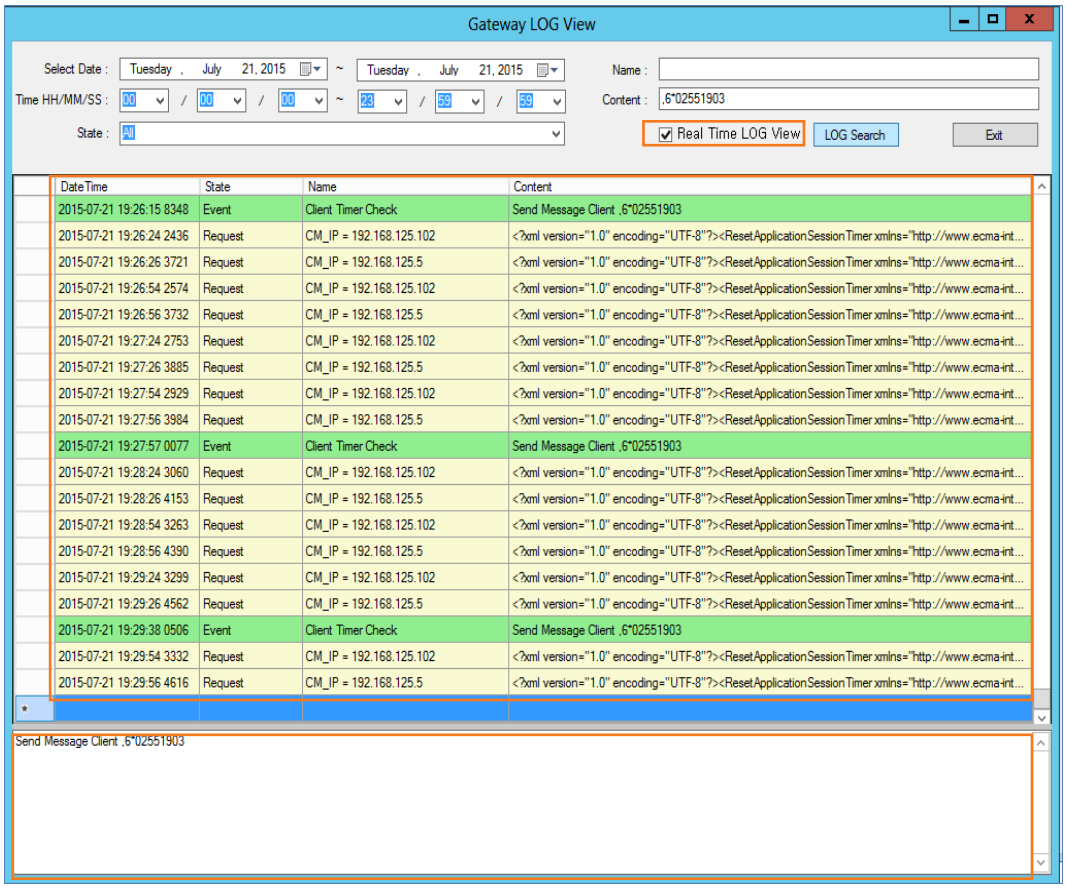
- The left side of above is the log of PBX(UCP) and the right side of above is detail message which selected.
- Each log consist of date, status, operation and detail message and each status value consist of Request, Response, Event, Fault. According to status, the color of log will be different.
- The message of the number of client and service operation will be displayed in bottom side.

In the CM System

1 . If click the button of **LOG >LOG Search**, Gateway Log View will be displayed.



2 . If check Real Time Log View, on-time monitoring will be available.

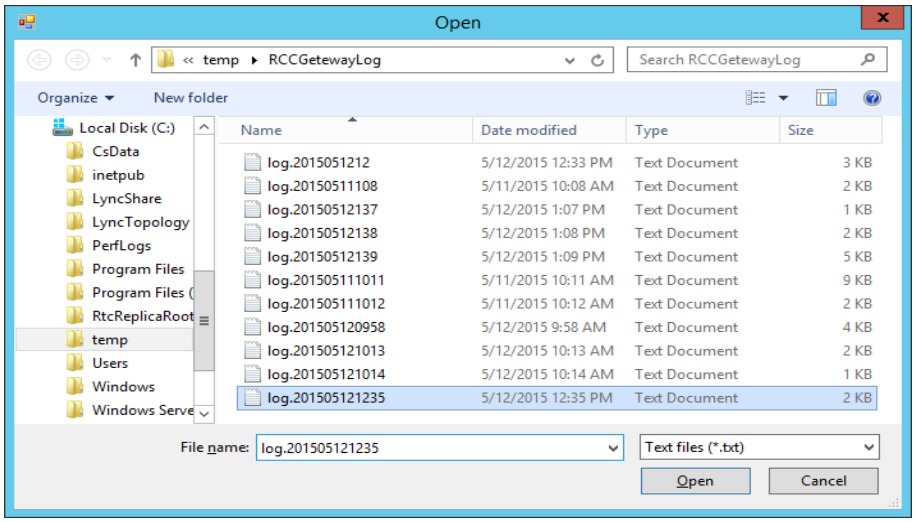


- The left side of above is the log of PBX(UCP) and the right side of above is detail message which selected.
- Each log consist of date, status, operation and detail message and each status value consist of Request, Response, Event, Fault. According to status, the color of log will be different.
- The message of the number of client and service operation will be displayed in bottom side.

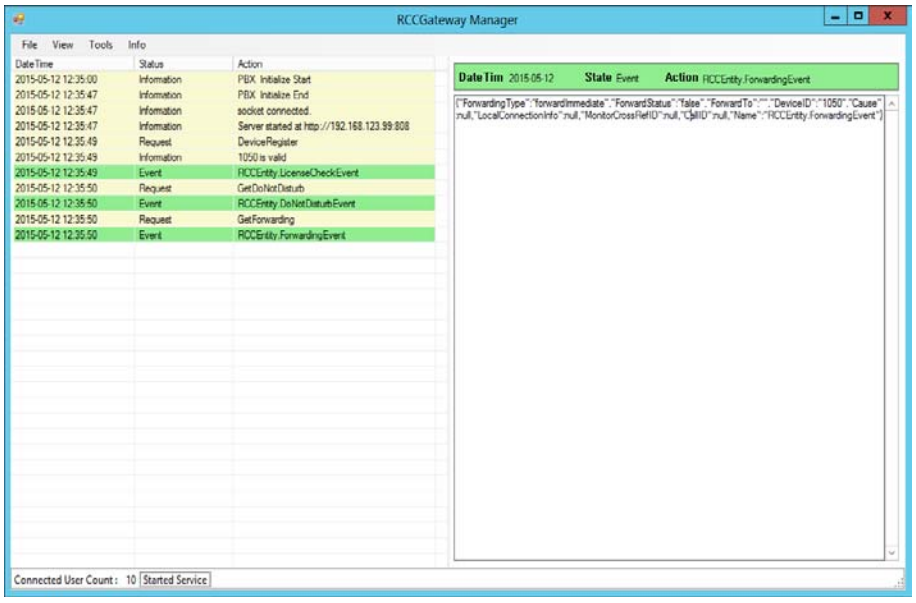
3.6 View a Log

In the UCP System

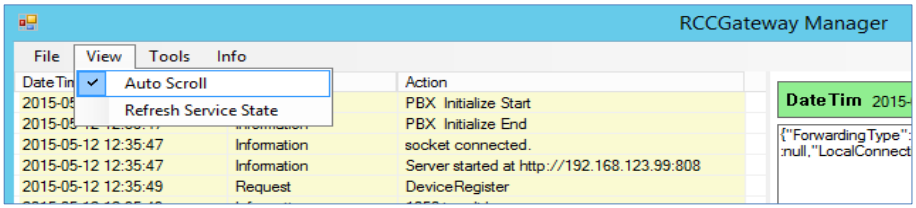
1. Click the **File > Open Log File** to read log available**.** Basically log file will be saved in c:\temp\rccgatewaylog.



2. If inquired log file opened, recorded log in file will be displayed.

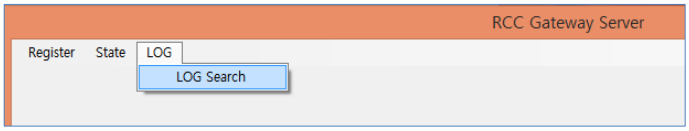


3. Through **View > Auto Scroll**, it can be assigned whether added file displayed continuously or stop auto-scroll.



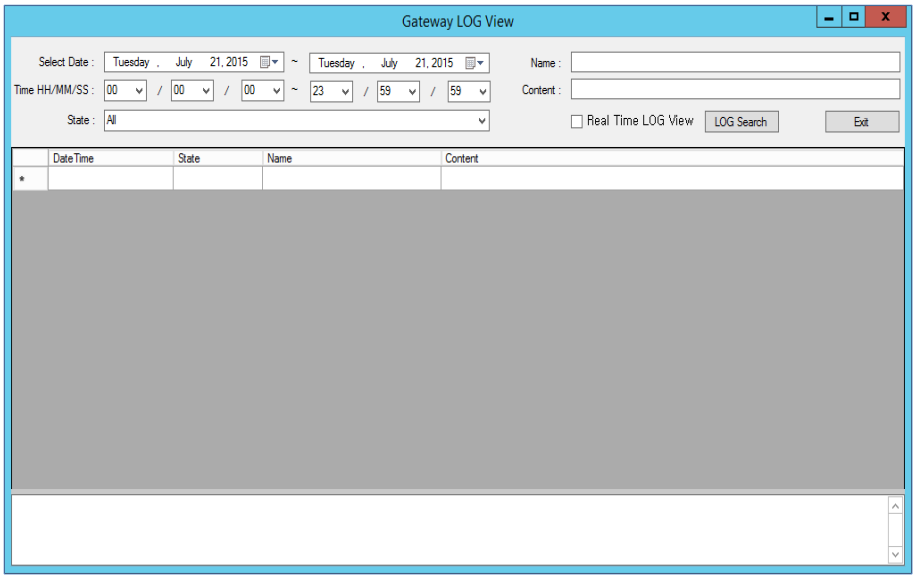
In the CM System

1 . If click the button of **LOG >LOG Search**, window will be displayed.



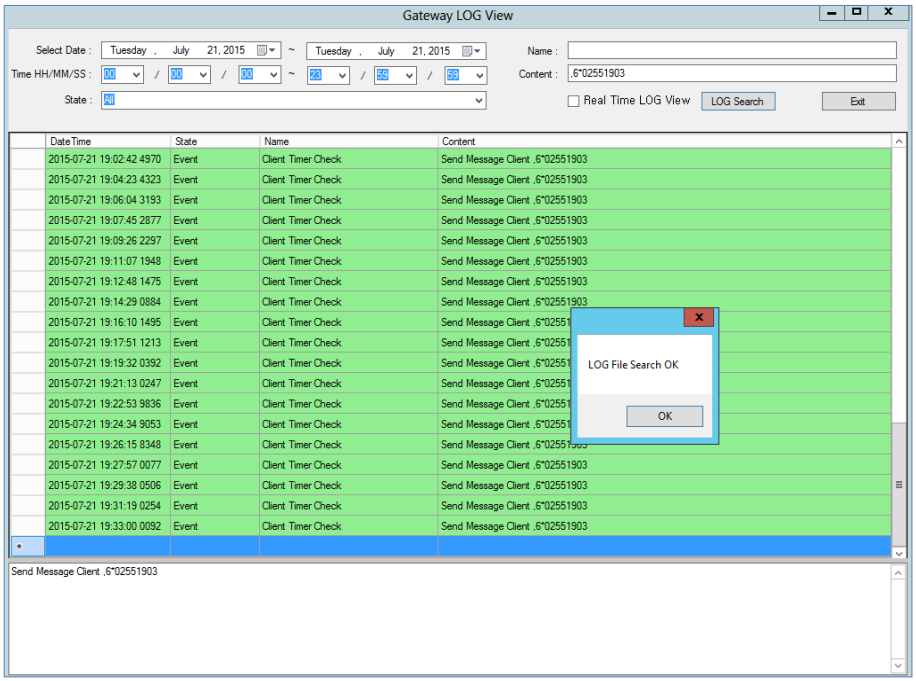
- Multi windows can be displayed and comparison of logs available.

2 . Below window is for searching for on-time log of RCC Gateway Server.



Search Item		
Gateway LOG View	Select Date	• Date range for search.
	Time HH/MM/SS	• Determine the time (HH / MM / SS) you want to start and finish for search.
	State	• Select of request, response, event and error.
	Name	• Searched when a value is entered in the Name.
	Content	• Searched when a value is entered in the Content.

3 . If put in condition in content article and click the button of LOG Search, applicable data will be displayed. If click the button of LOG Search, the check of Real Time LOG View will be terminated.



- Above is a searched example.

Appendix A

Useful Information

This chapter provides information on the use of open source software.

A.1 Open Source Software Notice

Open Source Software used in this product are listed as below. You can obtain a copy of the Open Source Software License from Ericsson-LG Enterprise Web site, http://www.ericssonlg-enterprise.com. Ericsson-LG Enterprise reserves the right to make changes at any time without notice.

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