# Technical Bulletin

Model: RC Gate	Nodel: RC Gate S Pro @Remote (Uz-S1 @Remote) Date: 26-Jun-				No.: RM371001
Subject: How to disable ping sweep on Uz-S1 @Remote					ed by: A. Ishiyama
From: Service BPR Promotion Sec. Service Support Dept.					
Classification:	☐ Troubleshooting	Part in	formation [	Actio	n required
	Mechanical	🗌 Electri	cal [	] Servi	ce manual revision
	Paper path	Transr	nit/receive [	Retrofit information	
	Other ( )				

## Workaround for Disabling ICMP (Ping Sweep) on Uz-S1 @Remote

### Note:

- With Uz-S1 Onsite, this ping sweep can be enabled/disabled from the GUI. However, with Uz-S1 @Remote, the following procedure is necessary.
- Uz-S1 @Remote performs a ping sweep in the following cases:
  - > When searching for devices via Auto Discovery (AD)
  - > When searching for lost devices via Device Connect Check

### How to disable the ping sweep

- 1. Install the Uz-S1 program in the normal way, and then reboot the PC.
- 2. Perform the Program Activations for both Uz-S1 Onsite and Uz-S1 @Remote.

#### **IMPORTANT:**

At this point, **DO NOT** execute the "**atremote\_start\_auto.bat**" file yet. If you do, in order to disable the ping sweep, you will need to remove (uninstall) the entire Uz-S1 program from the PC, reinstall it, and then perform the Program Activations again.

- 3. Open the following file using Notepad or other text editor: **File name:** C:\\.....RMWSDMEX\atremote\conf\**ars\_capability.properties** 
  - To disable the ping sweep for **Auto Discovery:** Find the "device.discovery.auto.existencecheck=true" string and change "true" to "**false**".

ars_capability.properties - Notepad	
<u>File Edit Format View Help</u>	
!AutoDiscovery(Broadcast)で使用するスレッド数 device.discovery.auto.broadcast.threads=1	
<del>AutoDiscovery<sub>0000</sub>/7117197018 device.discovery.auto.existencecheck=true</del>	
!AutoDiscovery他社機シリアル番号取得OID数 device.discovery.maxSerialNoScoop=10	
•	▼ ♪ ↓



## Technical Bulletin

PAGE: 2/2

Model: RC Gate S Pro @Remote (Uz-S1 @Remote)Date: 26-Jun-09No.: RM371001

- To disable the ping sweep for **Device Connect Check:** Find the "integrate.device.tracker.find.algorithm=0" string and change "0" to "1" or "2".
  - "1": Broadcast
  - "2": SNMP sweep

For example, to disable ICMP and enable the SNMP sweep, edit the string as follows: "integrate.device.tracker.find.algorithm=2"



### **BEFORE YOU DO THE NEXT STEP:**

Once you execute the "**atremote\_start\_auto.bat**" file, if you need to re-enable the ping sweep later for some reason, you will need to do the following:

- Uninstall the entire Uz-S1 program from the PC, and
- Remove the Uz-S1 from the @Remote Center registration list (if it has already been registered with the @Remote center)
- 4. Double click on the "atremote\_start\_auto.bat" file to start the @Remote service. Note: This file is located under C:\\.....RMWSDMEX\tool.
- 5. Continue with the Uz-S1 @Remote registration procedure in the usual way.

# Technical Bulletin

Vodel: RC Gate S Pro @Remote (Uz-S1 @Remote) Date: 31-Mar-				10 No.: RM371002	
Subject: Recovery Procedure from Server Crash Problem					ed by: A. Ishiyama
From: 2nd Overse	eas Tech Support Sec., 2nd Po	QM Dept.			
Classification:	Troubleshooting	🗌 Part in	formation	<ul> <li>Action required</li> <li>Service manual revis</li> <li>Retrofit information</li> </ul>	
	Mechanical	🗌 Electri	cal [		
	Paper path	🗌 Transr	mit/receive		
	Other ()				

## Recovery Procedure for crashed @Remote databases on the server PC

### Overview

- This RTB contains a new procedure for recovering databases on the server PC that crashes when an error occurs with the RC Gate S Pro @Remote Connector (herein referred to as "the @Remote Connector"). See pages 2-3 below for the procedure.
- Up to now, if any of the common @Remote Connector errors (listed below) cannot be cleared with a stop/start batch file or rebooting the server, the Service Manual instructs you to uninstall/reinstall the entire program, do the reactivation, and then do an Appliance Replacement (Restoration). However, with the new procedure in this RTB, you can fix these common @Remote Connector errors without having to uninstall/reinstall the entire program or doing any re-activations.

Common @Remote Connector errors:

- SC700/900 occurs repeatedly
- Pink screen
- Cannot login to the @Remote Connector UI

Causes: Database files damaged, data discrepancy with the @Remote database, other

• To do the procedure below, you must save a batch file to the server PC (atremote\_recover\_db.bat). This file is attached to the procedure itself below.

Technical Bulletin

**PAGE: 2/8** 

Model: RC Gate S Pro @Remote (Uz-S1 @Remote)

Date: 31-Mar-10

No.: RM371002

## Procedure





Model: RC Gate S Pro @Remote (Uz-S1 @Remote)Date: 31-Mar-10No.: RM371002

### Stopping At Remote Processes using the Task Manager (Steps 1-2, 1-3 above)





Model: RC Gate S Pro @Remote (Uz-S1 @Remote) Date: 31-Mar-10 No.: RM371002

## APPENDIX

Please see the following for supplementary background information on this issue.

## 1. Old procedure for dealing with this issue in the field





## Technical Bulletin

Model: RC Gate S Pro @Remote (Uz-S1 @Remote) Date: 31-Mar-10 No.: RM371002

### 2. Temporary solution





## Technical Bulletin

Model: RC Gate S Pro @Remote (Uz-S1 @Remote) Date: 31-Mar-10

No.: RM371002

3. Permanent solution, to be applied from Mk2 (successor to the @Remote Connector)

Mk2: Automatic DB Restore (Permanent solution)



# Technical Bulletin

**PAGE: 7/8** 

Model: RC Gate S Pro @Remote (Uz-S1 @Remote)Date: 31-Mar-10No.: RM371002

#### 3. Examples of when to use the new recovery procedure



Shortly after starting the At Remote Service with "atremote_start_auto.bat", "DH AtRemoteService" switches to OFF	. Services (Local)	D.			
	DH AtRemoteService	Name 🗡	Description	Status	Startup T 🔺
		Application Layer Gatewa	Provides s	Started	Manual
	Start the service	Application Management	Processes i		Manual
		ASP.NET State Service	Provides s		Manual —
		Automatic Updates	Enables th	Started	Automatic
		Background Intelligent Tra	Transfers f		Manual
		ClipBook	Enables Cli		Disabled
		COM+ Event System	Supports S	Started	Automatic
		COM+ System Application	Manages t		Manual
		Computer Browser	Maintains a	Started	Automatic
		Cryptographic Services	Provides th	Started	Automatic
		DCOM Server Process Lau	Provides la	Started	Automatic
		DH AtRemoteService			Manual
		🖏 DH LogCollecting Service		Started	Automatic
		🖏 DH LogManagement Service		Started	Automatic
		Core ManagementCore		Started	Automatic
		Service 🖓 DH Trap Daemon Service		Started	Automatic 🕳
				1	) (
	Extended Standard	xinda.			

## Technical Bulletin

Model: RC Gate S Pro @Remote (Uz-S1 @Remote)

Date: 31-Mar-10

No.: RM371002

4. Additional information about DB file crashes



# Technical Bulletin

## **Reissued: 7-July-10**

Model: RC Gate S Pro with @Remote Connector (Mk2) Date: 2-June-10 No.: RM371003b

#### **RTB** Reissue

The items in *bold italics* were corrected or added.

Subject: Field Se	Prepared by: A. Ishiyama		
From: 2nd Overs			
Classification:	Troubleshooting	Part information	Action required
	Mechanical	Electrical	imes Service manual revision
	Paper path	Transmit/receive	Retrofit information
	Other ()		

### As the revision up of RC Gate S Pro with @Remote Connector option, RC Gate S Pro mk2 will be released.

This RTB contains the Field Service Manual (FSM) corrections.

#### Equivalence and Abbreviation:

- The current version: Version IS01.01.00-00
- Mk2 version: Version IS01.02.00-00

## Different points from predecessor products

#### [1. Improved from the current IS01.01 version]

i) Start/Stop.b	at files to start/stop @Remote service is not necessary	Remarks
Ver IS01.02.	Mk2 does not require to execute Start/Stop.bat files to start/stop the @Remote service by hand before shutdown and/or after start up OS.	
	Also, it is not necessary to add a script of Local Computer Policy beforehand for turning on and off the @Remote service.	
	Mk2 suspends the @Remote service automatically when shutting down OS, and starts the @Remote service automatically after starting up OS.	
Ver IS01.01.	When starting/stopping the @Remote service, it is necessary to execute start batch file (atremote_start_auto.bat) to start @Remote service, and/or to execute stop batch file (atremote_stop_manual.bat) to stop @Remote service.	
	Or, it is necessary to add a script of Local Computer Policy to synchronize turning on and off the @Remote service with starting up and shutting down OS.	
RC Gate A	When shut down the box, press Shutdown button, or select Shut Down by operating the web UI. When start up the box, plug in the power cord.	

Technical Bulletin

PAGE: 2/10

Reissued: 7-July-10

Model: RC Gate S Pro with @Remote Connector (Mk2) Date: 2-June-10 No.: RM371003b

ii) When a DB	crash problem occurs, Mk2 recovers automatically.	Remarks
Ver IS01.02.	When a DB crash problem occurs, recovery procedure is not necessary anymore.	RTB RM371002
	When a DB file corrupted accidentally at the current IS01.01 version, it is necessary to perform the recovery procedure by using a batch file manually. However, if a DB file is crashed when starting up the @Remote service, Mk2 automatically recovers the DB file without manual procedure.	
	By the above improvement, Mk2 recovers DB file(s) in the two cases described below. In case of the current IS01.01 version, server replacement is required to fix the failure.	
	* Server replacement means backup onsite data, uninstall/reinstall the entire program of RC Gate S Pro, and re-activate and then perform Appliance replacement.	
	[Mk2 can recover automatically (= Server replacement is not required)] 1. In case when DB crashed due to Windows being shut down without using the stop batch.	
	2. In case when DB crashed due to Windows being shut down while the stop batch does not function (@Remote processing was still in progress).	
	Please note that even Mk2 may not recover in the following case: [Mk2 cannot recover automatically (= Server replacement is required)]	
	In case when DB crashed due to the PC being unplugged without doing the shutdown process (internal recovery process does not work in this case).	
Ver IS01.01.	When a DB crash problem occurs, recovery procedure is required. See RTB RM371002 for details.	
RC Gate A	When a DB crash problem occurs, recovery procedure is not necessary. Instead, initialize the box by changing a dipswitch and then performing A to A replacement.	

iii) Timeout pi	rocess is added on Mk2 in case of device registration	Remarks
Ver IS01.02.	<b>Reported symptom on the current IS01.01 version:</b> When RC Gate S Pro @Remote does not receive any response from Gateway at device registration, RC Gate S Pro maintains the waiting status until a response is received (no timer is used).	
	After modification applied: When performing a device registration, RC Gate S Pro waits for a response from Gateway only for a specified period of time (determined by the timer). If no response comes from Gateway before the timer expires, RC Gate S pro will detect a time-out and show an error (connection failure) on the web UI. Gateway will also cancel the registration process according to the time-out. It is possible to perform device registration again after this.	
Ver IS01.01.	Fixed by Version IS01.01.04.	
RC Gate A	Not occur	

Reissued: 7-July-10

Technical Bulletin

PAGE: 3/10

Model: RC Gat	te S Pro with @Remote Connector (Mk2	2)	Date: 2-June-10	No.: RM3	371003b
		-			
iv) When SQL Connector	. server restarted, Mk2 does not term	inat	e the service of @Remo	te	Remarks
Ver IS01.02.	Reported symptom and cause on the When SQL server restarted because of @Remote Connector was terminated, accesses SQL server, but without response SC900 occurring within one hour, @R service. If this occurs, it is necessary to	ne c of W bec pons lemo to re	urrent IS01.01 version: findows Update, the servic cause @Remote Connector se. After 5 times of retry, v ote Connector suspended start the OS to resume the	ce of the or vith the e service.	
	SQL Server		@Remote Connecto	or	
	<ul> <li>SQL server updated and restarted by Windows Update</li> </ul>	• • • •	Cannot access SQL serve Generate SC900, then re- service Cannot access SQL serve Generate SC900, then re- service : : : (Retries up to 5 times : Terminate the service	er start er start s)	
	<ul> <li>SQL server restarted</li> </ul>				
	After modification applied: When Mk2 @Remote Connector does server, Mk2 monitors the SQL server If Mk2 is able to access SQL server, it	s no evei i res	t receive a response from y 30 minutes for a total of umes the service automat	SQL 3 hours. tically.	
	SQL Server	1	@Remote Connecto	or	
	<ul> <li>SQL server updated and restarted by Windows Update</li> </ul>	•	Cannot access SQL serve Generate SC900, then res service	er start	
			(Monitoring)		
	<ul> <li>SQL server restarted</li> </ul>		Can access SQL server		
		:•	Resume the service		
Ver IS01.01.	When SQL server restarted, the service	ce m	ay stop. It is necessary to	restart	<u> </u>
RC Gate A	Not applicable				

Reissued: 7-July-10

	a C Dra with @Domata Connector (MIC)	Data: 0 luna 10		071000h	
MODEL RC Gale S Pro with @Remote Connector (Mk2) Date. 2-June-10 NO RM3/			87 TUU3D		
[2. Fixed Limitation Items from Ver IS01.01.]					
i) When performing an Appliance replacement, a message about "It may take some time to complete replacement" is shown					
Ver IS01.02.	When performing an Appliance Replacem 'When there are many devices the server to complete and the browser might timeou If this happens restart the browser and co Registration Wizard" on the top page is gr make sure that the replacement has been	ent for an appliance, a me replacement function may it. nfirm that the "@Remote s ayed down.' is shown, in c completed or is still in pro	essage / take time Service order to ogress.		
Ver IS01.01.	When performing an Appliance Replacem a large number of devices, sometimes, the replacement is not completed within the 1 However, the replacement process contine Therefore, this may confuse the operator a replacement is performed.	ent for an appliance that r > UI declares a login time 5-minute limit. Jes internally without any as to whether or not the	manages out if the sign.		
RC Gate A	Not applicable				

ii) Mk2 acquir Center	es the device data from only devices that are managed in the @Remote	Remarks
Ver IS01.02.	Mk2 acquires the device data from only devices that are managed in the	
	@Remote Center, and then sent to the center.	
Ver IS01.01.	The current IS01.01 version acquires the device data from all devices that it discovers onsite, regardless of which of these devices are actually included in the @Remote Center's Managed Device List.	
RC Gate A	Not applicable.	

## [3. New Features]

i) "Center Connect Check" function is newly added in the menu of Web UI.		
Ver IS01.02.	"Center Connect Check" function is newly applied. This is the same feature as in RC Gate A.	
Ver IS01.01.	Not available	
RC Gate A	Available	

ii) RFU Prohibition Interval feature is newly applied.		Remarks
Ver IS01.02.	RFU Prohibition Interval feature is newly applied. This is the same feature as	
	in RC Gate A.	
Ver IS01.01.	Not available	
RC Gate A	Available	

iii) Enhanced registration).	device registration from the center remotely (Enhanced remote	Remarks
Ver IS01.02.	<ul> <li>When performing remote registration, the IP address and MAC address are used, which are normally one day old.</li> <li>If the IP address has changed due to DHCP (because the data at the center is one day old), registration may fail.</li> <li>However, if there is no device at the IP address or a different device responds to the IP address, Mk2 searches again within the same segment for a device that has the MAC address in question.</li> <li>This only works within the same segment. So, if the device was moved to another room, it may be in another segment, and will not be found.</li> </ul>	
Ver IS01.01.	Normal remote registration	
RC Gate A	Available	

# Technical Bulletin

## Reissued: 7-July-10

Model: RC Gate S Pro with @Remote Connector (Mk2) Date: 2-June-10 No.: RM371003b

iv) Ping on/off setting is added in menu of the Web UI.		
Ver IS01.02.	Ping on/off setting is newly added to the menu of the Mk2 UI in the same way	RTB
	as for RC Gate A.	RM371001
Ver IS01.01.	It is only possible to disable sending ping at installation by editing a file. See	
	RTB RM371001 for details.	
RC Gate A	Available	

## [4. Specifications]

i) AES256 support in SSL communication		Remarks
Ver IS01.02.	Enhanced the symmetric key block cipher used for SSL communication from AES128 to AES256.	
Ver IS01.01.	Only AES128 is supported.	
RC Gate A	AES256 is supported.	

# Technical Bulletin

Reissued: 7-July-10

Model: RC Gate S Pro with @Remote Connector (Mk2) Date: 2-June-10 No.: RM371003b

## Installation

### [1. New Installation]

Same as the current IS01.01 version.

# [2. Updating from the current IS01.01 to IS01.02 version <u>in cases where the</u> @Remote Connector option is already installed]

#### Overview:

When updating from the current IS01.01 to Mk2 version, the restoring process to migrate all necessary files in to the database for Mk2 of @Remote Connector will run after restarting the OS after completing the version update.

#### Note:

*Make sure that the IS01.01 version is working properly by checking that the service has correctly started, and troubleshoot any problems that occur.* 

If you perform the update without checking whether the current version works properly, the new version (Mk2) may not work properly.

If the RC Gate S Pro IS01.01 is not working, do not start the update to IS01.02. If you can log in to the UI, the IS01.01 is working and you can go ahead with the update.

(First recover the IS01.01, then log in to the IS01.01, and then start the update procedure to IS01.02.)

#### <Before installation>

First, you must remove the Startup and Shutdown scripts from Local Computer Policy (page 146 in the FSM), if they are included.

i) Click Start > Run, and open gpedit.msc.

📨 Run	×
	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	gpedit.msc 💌
	OK Cancel <u>B</u> rowse

ii) Open "Local Computer Policy" ->"Computer Configuration" ->"Windows Settings" - >Scripts (Startup/Shutdown.

# Technical Bulletin

## Reissued: 7-July-10

Model: RC Gate S Pro with @Ren	note Connector (Mk2)	Date: 2-June-10	No.: RM371003b
VIOCEL. RC Gale S Pro With @ Ren Local Group Policy Editor File Action View Help Action View Help Computer Policy Computer Configuration Software Settings Windows Settings Scripts (Startup/Shutdown) Security Settings Configuration Software Settings Configuration Software Settings Configuration Software Settings Configuration Configu	Scripts (Startup/Shutdown) Select an item to view its description.	Name Startup Shutdown	
	Extended / Standard /		

- iii) Double click to open "Startup".iv) Click "Remove", then "Apply" and "OK".

Startup Prop	erties	11.2		? ×
Scripts				
ĴIĴ	Startup Scripts for L	ocal Compute	r	
Name		Paramet	ers	
C:¥Progra	n Files¥RMWSDME	X		Цр
				Do <u>w</u> n
				Add
•				<u>R</u> emove
To view the	script files stored in t	this Group Pol	licy Object, pre	SS
the button b	elow.			
<u>S</u> how	Files			
		ОК	Cancel	Apply

Repeat steps iii) and iv) for "Shutdown". V)

# Technical Bulletin

#### Reissued: 7-July-10

Model: RC Gate S Pro with @Remote Connector (Mk2)	Date: 2-June-10	No.: RM371003b
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### <Installation (Updating) Procedure>

- Execute the setup. Note: You do not need to stop the service beforehand as the program will terminate the service automatically.
- 2. When you start the program installation, RC Gate S Pro will ask that the installation is for updating from the current version to Mk2 version, click Yes.

Question		×
?	Remote Communication Gate S is already installed. Do you want to update it?	
	Yes No	

3. The program will backup database files and store them locally. The backed up files are used for the restoring process after installation (step 6 below).



Note: If the backup is failed, error message; "Cannot install to the currently installed package. Installation will be cancelled" will be displayed.



4. The program will be installed by overwriting the current program.

# Technical Bulletin

Reissued	: 7-Jul	y-10	

Model: RC Gate S Pro with @Remote Connector (Mk2) Date: 2-June-10 No.: RM371003b

5. Click Finish to restarts the OS after completed the installation.

InstallShield Wizard Complete
The InstallShield Wizard has successfully installed Remote Communication Gate S. Before you can use the program, you must restart your computer.
€ Yes, I want to restart my computer now.
O No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.

6. After the OS is restarted, RC Gate S Pro requires the setting for Authentication Method, password and so on. Then the RC Gate S Pro installation is completed. Click OK.

Remote Communicati	on Gate S - InstallShield Wizard	×
Remote Com	nunication Gate S installation completed.	
	ОК	

- 7. RC Gate S Pro performs the restoring process.
- 8. While the restoring process runs, a Command Prompt window appears to be noticed.



Note: It may take some hours to complete restoring process (the time required

Reissued: 7-July-10	
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Model: RC Gate S Pro with @Remote Connector (Mk2) Date: 2-June-10 No.: RM371003b

depends on number of managed devices and network condition). Do not perform any operations until the Command Prompt Window disappears.

- 9. When the restoring process is completed, the Command Prompt Window disappears, and the service for @Remote Connector will restart and resume automatically. Note: You do not need to start the service manually.
- 10. Login to the UI in CE mode and check that it is working properly.

The procedure after here was cancelled (because it was not necessary).

### <Important>

After reviewing field experiences with the current IS01.01 version support, it is strongly recommended that the server PC be equipped with a **UPS (Uninterruptible Power Supply)**, in order to prevent the @Remote Connector from DB file corruption due to a sudden loss of power (e.g., such as when Windows does not shut down correctly). If the server PC is powered down without going through the normal Windows shutdown process and the DB file becomes corrupted, the entire program may have to be re-installed and re-activated in order to resume using the @Remote Connector.

So please set up the server PC so that the OS automatically shuts down before the **UPS** runs out of power.

# Technical Bulletin

Model: RC Gate S Pro with @Remote Connector Date: 1-July-10					No.: RM371004
Subject: Version IS01.01.04 Patch Installation Guide					ed by: A. Ishiyama
From: 2nd Overseas Tech Support Sec., 2nd PQM Dept.					
Classification:	Troubleshooting Part information			🛛 Actio	n required
	Mechanical     Electrical		cal [	_ Servi	ice manual revision
	Paper path     Transmit/receive		Retrofit information		
	Other ( )				

This patch file can be used with IS version 01.01.xx (the latest version is IS01.01.04). It contains various modifications to fix reported bugs and failures.

Please note that Mk2 (IS01.02.00) has been released. IS01.02.00 already includes all the modifications that are included in this patch file as well as other improvements. Therefore, the best option is to update from IS01.01 to IS01.02 (see RTB RM371003a).

However, if IS01.02 is not available in your region, and the customer needs an update, please install this patch file and use it until IS01.02 is available in your region. It is our strong recommendation that customers be upgraded to IS01.02 as soon as it is available.

Please contact your regional subsidiary via your service section for the release notes and the patch file.

## RC Gate S Pro IS01.01.04 Patch Installation Procedure

### Preparation

- 1. Stop all Onsite Windows Services using the Management Tool.
- 2. Verify that <u>1GB of free space</u> is available on the drive where RC Gate S Pro is installed.
- 3. If @Remote is also installed:
  - Stop the @Remote services using "atremote\_stop\_manual.bat".

**Note:** If you need to verify that the services are stopped, they can be checked using the Server Manager's Services function.

Model: RC Gate S Pro with @Remote Connector

### Installation

- 1. Install the patch data.
  - a. Unzip the patch zip archive, Patch\_for010104\_201006.zip.
  - b. Copy the unzipped files to the RMWSDMEX folder. Overwrite all duplicate files.
- 2. Apply the patch.
  - a. Run the file "updateH2to1.2.bat", which is now located under RMWSDMEX\DBExchange.
    - i. It will take about 3 minutes for the patch to be applied if Uz-S1 has 5,000 devices registered in its database.
    - ii. A command dialog will appear during the patch process. It will close automatically as a part of the process, so please do not close it manually as there could be an error.
  - b. Any errors that appear during the patch installation process should be handled locally.
- 3. Restart Onsite's services using the Management Tool.
- 4. Restart @Remote's services using "atremote\_start\_auto.bat".
  - a. Please verify that the customer is able to login to the @Remote service.
  - b. Please verify that \RMWSDMEX\atremote\permanent\_data\user\database\install\h2 contains the ARS.data.db file. It should have a file size larger than 0kB.
- 5. Delete the RMWSDMEX\DBExchange folder.

### Important

After reviewing field experiences with the current IS01.01 version support, it is strongly recommended that the server PC be equipped with a **UPS (Uninterruptible Power Supply)**, in order to prevent the @Remote Connector from DB file corruption due to a sudden loss of power (e.g., such as when Windows does not shut down correctly). If the server PC is powered down without going through the normal Windows shutdown process and the DB file becomes corrupted, the entire program may have to be reinstalled and re-activated in order to resume using the @Remote Connector.

So please set up the server PC so that the OS automatically shuts down before the **UPS** runs out of power.



Model: RC Gate S Pro with @Remote Connector	Date: 1-July-10	No.: RM371004
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### **Batch File Error**

If the batch file encounters the "Failed to run the script. Please contact Ricoh Japan through your Regional Head Quarter." error message, the patch will have failed to install. Please use the following process to rollback/restore the software to the pre-patch version.



## Technical Bulletin

**PAGE: 1/3** 

Model: Uz-S1 (RC Gate S Pro) IS01.01 and IS01.02 Date

Date: 13-Oct-10

No.: RM371005

Subject: Summa	ry of Uz-S1 crash/SC limitaton	Prepared	d by: T. Takahashi	
From: : Innovation Planning Sec. S S Innovation Dep.				
Classification:	lassification: Troubleshooting Part informa			Action required
	🗌 Mechanical	echanical 🗌 Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety Other (compatible)		arison	⊠ Tier 2

## Summary of the Uz-S1 Crash/SC Limitation for all Uz-S1 versions

This RTB summarizes the probability of a crash or SC error (a production limitation) occurring on each Uz-S1 version.

## • Limitation/Symptom

The Uz-S1 may crash or an SC error may be triggered when a combination of conditions are met, which are shown in detail in the tables below. In each case, the probability of occurrence depends on the specific combination of these conditions and Uz-S1 version.

## • Probability of occurrence, occurrence conditions:

As shown in **Tables 1-3** below, this limitation may occur when the customer performs any of the following "Operations 1, 2, 3" under the following "Conditions A, B, or C".

"Operation 1":	The server main power is cut (main power is turned off, power plug is removed)
"Operation 2":	The OS is shut down manually
"Operation 3":	An SQL update is performed.

"Condition A": Remote registration, removal, or certificate rewrite is being performed

**"Condition B"**: Device search, information collection, or error notification is being performed

"Condition C": The Uz-S1 is in the Standby condition

## Recovery procedure for restoring operation if the crash occurs:

See Table 4 below.

Model: Uz-S1 (RC Gate S Pro) IS01.01 and IS01.02 Date: 13-Oct-10 No.: RM371005

### Table 1: Probability of a crash when Operation 1 is performed:

	IS01.01.04	IS01.01.04+Patch	IS01.02.xx (Any Mk2)	
Condition A	High	Medium-High	Medium	
		<b>Note:</b> The probability can be lowered by updating the source version.	<b>Note:</b> The probability can be lowered by updating the source version.	
Condition B	Medium	Low-medium	Low-medium	
Condition C	Low	Low	Low	

### Table 2: Probability of a crash when Operation 2 is performed:

	IS01.01.04	IS01.01.04+Patch	IS01.02.xx (Any Mk2)
Condition A	<b>100%</b> (Will always occur)	<b>100%</b> (Will always occur)	0%
			Note: However, with this version, a data discrepancy may occur between the Center and Uz. A tool to fix this will be released (release date: TBA).
Condition B	With script: 0%	With script: 0%	0%
	Without script: 100%	Without script: 100%	<b>Note:</b> Script is not required with the Mk2.
Condition C	With script: 0%	With script: 0%	0%
	Without script: 100%	Without script: 100%	Note: Script is not required with the Mk2.

**Note:** The "script" mentioned above is for configuring the start-up/shutdown process, in accordance with local computer policy, so that the "start.bat" file and "stop.bat" file do not have to be manually executed.

### Table 3: Probability of an SC error when Operation 3 is performed:

	IS01.01.04	IS01.01.04+Patch	IS01.02.xx (Any Mk2)
Condition A	100%	100%	0%
	Note: Uz-S1 operations can still be performed.	Note: Uz-S1 operations can still be performed.	
Condition B	Operations stopped if	Operations stopped if SC	100%
	SC occurs 5 times	occurs 5 times within one	
	within one hour.	hour.	Note: Uz-S1 operations can still be performed
	Note: Uz-S1 operations can be restored by using the "start.bat" file.	Note: Uz-S1 operations can be restored by using the "start.bat" file.	
Condition C	0%	0%	0%

Model: Uz-S1 (RC Gate S Pro) IS01.01 and IS01.02 Date: 13-Oct-10 No.: RM371005

Table 4: Recovery procedure for restoring operation if the crash occurs

	Step 1	Step 2	Step 3
IS01.01.04	Reboot service using	Restore operation using	Perform server
	"stop.bat" and "start.bat".	"atremote_recover_db.bat"	replacement
IS01.01.04+Patch Reboot service using		Restore operation using	Perform server
	"stop.bat" and "start.bat".	"atremote_recover_db.bat"	replacement
IS01.02.xx (Any Reboot service using Perfor		Perform server replacement	-
MK2)	"stop.bat" and "start.bat".		

**Important:** See RTB RM371002 for details about restoring operation using the *atremote\_recover\_db.bat* file, and see the Service Manual about performing a server replacement.



# **T**echnical **B**ulletin

**PAGE: 1/1** 

Model: Uz-S1 (RC Gate S Pro) IS01.01 and IS01.02

Date: 13-May-10

No.: RM371006

Subject: A failure	with registration on Uz-S1	Prepared by: T. Takahashi		
From: : Innovation Planning Sec. S S Innovation Dep.				
Classification:	lassification: Troubleshooting Part inform			Action required
	Mechanical     Electrical			Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	Other (comp table)	arison	🛛 Tier 2

## **SYMPTOM**

A device can be registered with RC Gate Pro and the Gateway, but not with the @Remote Center.

Note: This does not occur with the RC Gate or RC Gate A. This is because these appliances do not send the host name to the Gateway or center (see below).

## CAUSE

RC Gate S Pro and the Gateway accept host names that are longer than 15 characters, but the @Remote Center does not.

## SOLUTION

1. Register the device via Remote Registration.

Auto Discovery, the first step of Remote Registration, refers to the IP address (range) and not to the host name.

Or.

2. Use a host name of 15 characters or less.

Note: In some cases, even if the length of the host name is 15 characters or less, the device registration may not succeed. This is because the information that is required by this field originally is the IP address.

# Technical Bulletin

Model: Uz-S1 (RC Gate S Pro) IS01.01 and IS01.02

Date: 28-March-12

No.: RM371007

Subject: Default	Setting Change of Alarm Call N	Prepare	d by: T. Takahashi	
From: : 1st Tech. Service Sec. MFP/P Technical Service Dep				
Classification:	Troubleshooting	roubleshooting 🛛 🗌 Part information		Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	Other (Instal	ation)	🖂 Tier 2

## Important Information:

## Default for Alarm Call Notification will be Changed to "No Send"

## Overview

- The default setting of the Alarm Call notification will be changed from "Every Date" to "No Send" for all appliances newly registered on March 29, 2012 onward. The setting for appliances registered before this date will not change.
- This is because the large volume of Alarm Calls is taxing the Center system. Currently, Alarm Calls make up 25% of the total call volume. If this continues, soon the Center system will be overloaded with high network traffic. In addition, 95% of all Alarm Calls are automatically closed, which means that most Alarm Calls are unnecessary.

## ACTION

- If you want to use Alarm Call notifications on appliances newly registered on or after March 29, change the Alarm setting when you register the appliance.
   <u>See the procedure below</u>.
  - > Examples of when Alarm Call notifications are needed:
    - To remind you about periodic PM visits (PM alarm)
    - To inform you of problems anticipated on PP products (error prediction)
    - To continue using Error Alarms
- If you do not need to use Alarm Call notifications on appliances already installed in the field, change the setting back to "No Send".

Undata

# Technical Bulletin

Model: Uz-S1 (RC Gate S Pro) IS01.01 and IS01.02 Date: 28-March-12 N

No.: RM371007

## Old default setting (before March 29, 2012):

## **Appliance Information For Admin**

<u> </u>	Juure				
	Information	Server	Center	Network	@Remote Service
	Auto Discovery	Common	Notification	Device Auto Allocation	User Code Counter

## Notification Timing

Item Name	Timing Type	Day	Week	Hour	Minute	Second
Alarm	Fixed Time of Every Date			14	30	
Counter Information	Fixed Time of Every Month	1		16	38	
Device Status	Fixed Time of Every Date			1	48	
MIB FSC	On Time					
MIB Supply	On Time					
SC/CC	On Time					
Supply	On Time					

### New default setting (from March 29, 2012):

## **Appliance Information For Admin**

Update									
	Information		Server		Center		Network		@Remote Service
	Auto Discovery		Common		Notification		Device Auto Allocation	E	User Code Counter

Notification Timing								
Item Name	Timing Type	Day	Week	Hour	Minute	Second		
Alarm	No Send							
Counter Information	Fixed Time of Every Month	1		16	38			
Device Status	Fixed Time of Every Date			1	48			
MIB FSC	On Time							
MIB Supply	On Time							
SC/CC	On Time							
Supply	On Time							

Model: Uz-S1 (RC Gate S Pro) IS01.01 and IS01.02 Date: 28-March-12 No.: RM371007

### Procedure

Do the following if you want to enable the Alarm Notification when you register a new appliance on or after March 29, 2012.

**Note:** Although you can see the Alarm Notification setting from the Appliance GUI, this is read only. To change the setting, you must access the Admin menu on the Center GUI.

- 1. Register the new Appliance on-site with the Center System.
- 2. Login to the Center GUI and access the Admin menu.
- 3. Select the appliance from the list displayed.
- 4. Click on the "Notification" box.
- 5. Double-click on the "Alarm" row listed under "Notification Timing".

## **Appliance Information For Admin**

Update									
	Information		Server		Center		Network		@Remote Service
	Auto Discovery		Common		Notification		Device Auto Allocation		User Code Counter

Notification Timing								
Item Name	Timing Type	Day	Week	Hour	Minute	Second		
Alarm	No Send							
Counter Information	Fixed Time of E∨ery Month	1		16	38			
Device Status	Fixed Time of Every Date			1	48			
MIB FSC	On Time							
MIB Supply	On Time							
SC/CC	On Time							
Supply	On Time							

#### 3-4. Select the "Notification Timing Type" and "Notification Date/Interval".



3-5. Click [OK] to complete the procedure.

## Technical Bulletin

PAGE: 1/6

Model: Uz-S1 (RC Gate S Pro)

Date: 24-Sep-12

No.: RM371008

Subject: Security	concern after Microsoft Updat	Prepared by: T. Takahashi		
From: : 1st Tech.	Service Sec. MFP/P Technica	al Service Dep		
Classification:	Troubleshooting	Part informat	tion	Action required
	Mechanical	Electrical		Service manual revision
	Paper path	Transmit/rec	eive	Retrofit information
	Product Safety	Other (Instal	lation)	🛛 Tier 2

### SYMPTOM

RC Gate series appliances (RC Gate, RC Gate A, RC Gate S pro @Remote) cannot be accessed from the Web UI.

**Note:** This has **no effect** on @Remote functionality. Acquisition of counter data, Auto Call Notification, and all other features are completely unaffected.

## CAUSE

The following update released by Microsoft blocks RSA certificates with security keys that are less than 1024 bits long: http://support.microsoft.com/kb/2661254

The RC Gate series (RC Gate/RC Gate A/RC Gate S pro @Remote) uses RSA certificates with a security key that is 512 bits long. As a result, after the Microsoft update is applied, the user will not be able to access an RC Gate series appliance from the Web browser.

**Note:** This update was released by Microsoft on August 14, 2012, and will be included in Windows Updates from October 9.

## SOLUTION

#### **Temporary solution:**

Modify the size of the keys that are blocked by the client PC. **See procedure below.** 

#### **Permanent solution:**

To be announced at a later date.

Model: Uz-S1 (RC Gate S Pro)	Date: 24-Sep-12	No.: RM371008
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### Procedure

Do the following on the **client PC**.

**Important:** This solution is not effective if performed on the server PC that houses the Uz-S1. It must be performed on the client PC.

### Windows 7/Vista:

- 1. Access the DOS command prompt.
- 2. Type the following command, and then press Enter: Certutil -setreg chain\minRSAPubKeyBitLength 512
- 3. Type the following command, and then press Enter: Certutil -setreg chain\EnableWeakSignatureFlag 2

🖬 Administrator: C:¥Windows¥system32¥CMD.exe 📃 🗖 🗙
Microsoft Windows [Version 6.0.6001] Copyright (c) 2006 Microsoft Corporation. All rights reserved.
C:¥Users¥Administrator>Certutil -setreg chain¥minRSAPubKeyBitLength 512 Software¥Microsoft¥Cryptography¥OID¥EncodingType O¥CertDIICreateCertificateChain Engine¥Config¥minRSAPubKeyBitLength:
Old Value: minRSAPubKeyBitLength REG_DWORD = 200 (512)
New Value: minRSAPubKeyBitLength REG_DWORD = 200 (512) CertUtil: -setreg command completed successfully. The CertSvc service may need to be restarted for changes to take effect.
C:¥Users¥Administrator> <u>Certutil -setreg chain¥EnableWeakSignatureFlag 2</u> Software¥Microsoft¥Cryptography¥OID¥EncodingType 0¥CertDIICreateCertificateChain Engine¥Config¥EnableWeakSignatureFlag:
New Value: EnableWeakSignatureFlag REG_DWORD = 2 CertUtil: -setreg command completed successfully. The CertSvc service may need to be restarted for changes to take effect.
C:¥Users¥Administrator>

Technical Bulletin

Model: Uz-S1 (RC Gate S Pro) Date: 24-Sep-12

No.: RM371008

### Windows XP

- 1. Click [Start], then [Run].
- 2. Type "regeit", and then click [OK].

🖅 Run		×				
	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.					
<u>O</u> pen:	regedit					
	🕐 This task will be created with administrative privileges.					
	OK Cancel <u>B</u> rowse					

3. Right-click on the "Encoding Type 0" folder, select "New", and then select "Key". Location of this folder:

HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Cryptography\OID\EncodingType 0

4. Add the key, "CertDllCreateCertificateChainEngine".

e Edit	View	Favorites Help				
	G	Conferencing	^	Name	Туре	Data
		Cryptography Calais CatalogDB CatDBTempFiles CatDBTempFiles Defaults IEDirtyFlags Machine Settings OID		(Default)	REG_SZ	(value not set)
		😟 🧰 EncodingTyp	New	Vau		
		🛨 🛄 Protect 🕀 🦲 Providers	Find	String Value		
		RNG Services	Delete Rename	Binary Value DWORD Value		
	9	DataAccess	Export Permissions	Multi-String Value Expandable String Value		
	e E	- DevliceManager	Copy Key Name			
		Direct3D Direct3D DirectDraw DirectInput DirectInput DirectMusic DirectPlay				
	G	DirectPlayNATHelp	~	<		

RICOH	<b>T</b> echnical	<b>B</b> ulletin	PAGE: 4/6
Model: Uz-S1 (RC Gate S Pro)		Date: 24-Sep-12	No.: RM371008

- 5. In the same way, add the key "Config" under: HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Cryptography\OID\EncodingType 0\CertDIICreateCertificateChainEngine"
- 6. Right click anywhere inside the right part of the window (where files are displayed).
- 7. Select "New", and then select "REG\_DWORD".
- 8. Create by the following file by inputting its name: EnableWeakSignatureFlags
- Repeat Steps 6–8, creating the following file in Step 8: minRSAPubKeyBitLength



RICOH	Technical	Bulletin	PAGE: 5/6	
Model: Uz-S1 (RC Gate S Pro)		Date: 24-Sep-12	No.: RM371008	

10. Single-click on the first file you created ("EnableWeakSignatureFlags"), and then select "Modify" from the Edit menu.

Note: This can also be done by right-clicking on either file and then selecting "Modify".

💣 Registry Editor				
File Edit View Favorites Help				
Modify	<u>^</u>	Name	Туре	Data
Modify Binary Data		••••)(Default)	REG_SZ	(value not set)
New 🕨	8	EnableWeakSignatureFlags	REG_DWORD	0×00000000 (0)
Permissions	iles	minRSAPubKeyBitLength	REG_DWORD	0×00000000 (0)
Delete Del Rename	tings			
Copy Key Name	јТуре О			
Find, Ctrl+F Find Next F3	DilopenStoreProv tSIPDIICreateIndirectData ptSIPDIIGetSignedDataMsg ptSIPDIIIsMyFileType2 ptSIPDIIPutSignedDataMsg ptSIPDIIRemoveSignedDataA ptSIPDIIRemoveSignedDataA ptSIPDIIVerifyIndirectData tDIICreateChainEngine Config ngType 1			
<	>	<		>
Modifies the value's data.				

11. Set the "Value data" to: 2 (Hexadecimal or Decimal).

Edit DWORD Value	? 🔀
Value <u>n</u> ame: EnableWeakSignatureFlag	18
Value data:	Base
2	
	OK Cancel

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Model: Uz-S1 (RC Gate S Pro)	Date: 24-Sep-12	No.: RM371008
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12. Repeat **Steps 10 and 11** for the second file you created ("minRSAPubKeyBitLength"), setting "Value data" to: **512** (decimal).

? 🔀
Base
O <u>H</u> exadecimal
⊙ <u>D</u> ecimal
OK Cancel