

Prerequisite Application Requirement:

- CRP Gateway v2.1.0 or above

Prerequisite Material Requirement:

- **Client ID & Client Secret** for *One Connect* Realtime Credit Report Enquiry
- **Message Signing Secret** for *One Connect* Realtime Credit Report Enquiry
- **Server SSL Certificate** of *One Connect* Realtime Channel for API Connection

CRP Gateway Configuration for One Connect Realtime Channel:

One Connect Integration Configuration:

1. Login CRP Gateway Portal and go to “Gateway Configuration > ICL CRP Configuration”

The screenshot displays the CRP Gateway Portal interface. On the left, a sidebar menu lists various services, with 'Gateway Configuration' selected and highlighted by a red box. The main content area is titled 'Gateway Configurations' and contains several input fields. A red box highlights the 'CRAOC Realtime' section, which includes the following fields:

- CRAOC Realtime Host/IP:
- CRAOC Realtime Client ID:
- CRAOC Realtime Client Secret:
- CRAOC Realtime Signing Secret:

Buttons for 'Preview and Submit Change' and 'Export All Categories Gateway Configurations' are visible at the bottom right of the configuration area.

2. Enter the “Host/IP”, “Client ID”, “Client Secret” and “Signing Secret” for **CRAOC Realtime**.

Host/IP:

Production: <https://rt-craoc.crp.iclnet2.hk>

Member Test: <https://rt-craoc-mem.crp.iclnet2.hk>

3. Click “**Preview and Submit Change**” and then “**Submit Changes**”.

Preview Change

Name	Action	Original Value	Modified Value
CRAOC Realtime Host/IP	Update	https://crp-emulator	https://rt-cr-mem.crp.icl
CRAOC Realtime Client ID	Update	client-id1	client-id
CRAOC Realtime Client Secret	Update	**MASKED**[SHA-1] a0281cd072cea8e80e7868b05dc124815760b6c9	client-secre

Submit Changes Close

4. Go to “Account Management > Certificates”

CRP Gateway Portal Demo (v2.1.1)

CRP Service

Data Submission / Amendment

Credit Report Enquiry

Positive Mortgage Data Sharing

CRP System Report

File Management

Notification Centre

Business Notification

System Notification

Approval

Account Management

User Management

User

User Group

Department

Gateway Configuration

Activity Log

AA111-DEMOBank-20334913

CRP Gateway Portal > Account Management

OAuth2 Credentials

Signing Secret

Certificates

Add New Certificate

CRP_SERVER_CERTIFICATE GATEWAY_SERVER_CERTIFICATE ENCRYPTION_CERTIFICATE

Common Name	Organization Name	Issuer	Serial Number
api-00000.crp.icl.net2.hk	CashDirect Technology Limited	api-00000.crp.icl.net2.hk	4f8d8951
Valid From	Valid Until	Status	
06/06/2022	03/06/2032	Active Deactivate	

Common Name	Organization Name	Issuer	Serial Number
crp-emulator		crp-emulator	c334e7d788b69fc1
Valid From	Valid Until	Status	

5. Add the Server SSL Certificate for **CRAOC Realtime**

Add Item

Certificate Type: CRP_SERVER_CERTIFICATE

*Required

Public Certificate: Browse... No file selected.

*Required

Submit Close

6. Activate the uploaded Server Certificate for CRAOC

Certificates

Add New Certificate

CRP_SERVER_CERTIFICATE

GATEWAY_SERVER_CERTIFICATE

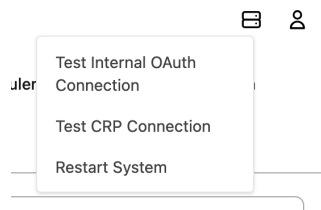
ENCRYPTION_CERTIFICATE

Common Name	Organization Name	Issuer	Serial Number
api-00000.crp.iclnet2.hk	CashDirect Technology Limited	api-00000.crp.iclnet2.hk	4f8d8951
Valid From	Valid Until	Status	
06/06/2022	03/06/2032	Active	Deactivate

Common Name	Organization Name	Issuer	Serial Number
crp-emulator		crp-emulator	c334e7d788b69fc1
Valid From	Valid Until	Status	
09/02/2025	07/02/2035	Inactive	Activate

7. Restart the System

- If only one CRP Gateway instance is running, restart with “Soft Restart” in CRP Gateway Portal or perform “Hard Restart”.



- If multiple CRP Gateway instances are running, restart ALL instances with “Hard Restart”

CRP Gateway API Key Configuration:

1. Login CRP Gateway Portal and go to “Gateway Configuration > Gateway Integration Configuration”

The screenshot shows the CRP Gateway Portal interface. On the left is a sidebar menu with options like 'CRP Service', 'Notification Centre', 'Approval', 'Account Management', 'User Management', 'Gateway Configuration', and 'Activity Log'. The 'Gateway Configuration' option is highlighted. The main content area shows the 'Gateway Integration Authentication' configuration page. It includes fields for 'Inward API Key', 'OAuth2 Token URL', 'OAuth2 Verify URL', and 'Whitelisted IP Subnet(s)'. The 'Inward API Key' field is highlighted with a red box and contains the value: `**MASKED**[SHA-1]8cb2237d0679ca88db6464eac60da96345513964`. Below the fields are buttons for 'Preview and Submit Change' and 'Export All Categories Gateway Configurations'.

2. Enter the “Inward API Key”. The API key will be used as authentication for API invocation to CRP Gateway (apiKey: <api_key>)
3. Click “**Preview and Submit Change**” and then “**Submit Changes**”.

The screenshot shows a 'Preview Change' dialog box. It contains a table with the following data:

Name	Action	Original Value	Modified Value
Inward API Key	Update	<code>**MASKED**[SHA-1]8cb2237d0679ca88db6464eac60da96345513964</code>	<code>12345</code>

At the bottom of the dialog are two buttons: 'Submit Changes' and 'Close'.

4. Restart the System
 - a. If only one CRP Gateway instance is running, restart with “Soft Restart” in CRP Gateway Portal or perform “Hard Restart”.

The screenshot shows a dialog box with the title 'Test Internal OAuth Connection'. It contains three buttons: 'Test Internal OAuth Connection', 'Test CRP Connection', and 'Restart System'.

- b. If multiple CRP Gateway instances are running, restart ALL instances with “Hard Restart”

Submit Realtime Credit Report Enquiry Request to One Connect:

Connection Information	
URL	<CRP_Gateway_Host/IP>/api/v1/crp-service/credit-report/enquiry/realtime/craoc
Method	POST
Request Content-Type	application/json
Response Content-Type	application/json
Encoding	UTF-8
Authentication	
Header Name	Value
apiKey	<api_key>

Request Body		
Name	Type	Description
enquiryFile	String	The enquiry file in plain text to submit for credit report enquiry
enquiryFileFormat	String(4)	The file format of the enquiry file submitting Supported values: - TUEF - CDEF
departmentCode	String(10)	(Internal) Department Code to be used in CRP Gateway only. The enquiry request will be retrievable by the Portal Users with same department code
remark	String(140)	(Internal) Remark for the enquiry request, will be displayed in CRP Gateway Portal.

Request Example:

```
{  
  "enquiryFile": "<TUEF_plain_text>",  
  "enquiryFileFormat": "TUEF",  
  "departmentCode": "017",  
  "remark": "Remark is Nullable"  
}
```

Response Body		
Name	Type	Description
result	String	API triggering result (Success / Error)
resp_code	String	Response Code from CRP Gateway Success = 0000, Error = others
resp_msg	String	Response message from CRP Gateway, mainly used when result is Error
requestMessageld	String	Message ID that submitted for the credit report enquiry request
responseMessageld	String	Message ID of the credit report enquiry request response
responseReturnCode	String	Return Code of the credit report enquiry request response
responseReturnDescription	String	Return Description of the credit report enquiry request response
fileName	String	File name of the credit report enquiry result
fileChecksum	String	Checksum of the result file

fileSize	String	File size in bytes of the result file
dataCompression	String	Compression algorithm used on the result file
supplementaryFileInfos	Array(Object)	Supplementary information of archive files returned by CRA
+<fileName>	String	File name of credit report in archive file generated by file uploader
+<fileChecksum>	String	Checksum value of Credit Report archive file
+<dataFormat>	String	File format of Credit Report in archive file.
+<fileSize>	Integer	File Size of credit report (by byte)
+<recordNumber>	Integer	Only one record is in the credit report
lastUpdatedTime	ISO Datetime (HKT)	Last updated time for this file ID
rpt_generator	String	Report generator

Response Example:

```
{
  "requestMessageId": "MAA111202506021506225405daa38e36",
  "responseMessageId": "MCRAOC20250602150622",
  "responseReturnCode": "CRA00000",
  "responseReturnDescription": null,
  "fileName": "FCRPTA123420250602150622",
  "fileChecksum":
"5725c1ee6604f5a91f37204b73f292321f6f24f1f2f0d35eedff8fa29cf3fdb7",
  "fileSize": "800",
  "dataCompression": "ZIP",
  "supplementaryFileInfos": null,
  "lastUpdatedTime": "2025-06-02T15:06:22",
  "generatedBy": "CRAOC",
  "encodedResultFile":
"1g+JMBNm7xb5sHM8wpEsARD1KCoddWBbcYNxMgBX+NFB7H2Ruy864oeesKMqw/6o23fWK1AsxGV4yIRqyR
8sC2kzf2FzftjiiUCVoYUHoh1wbG4rzzMatxziTK4Qw3jJoLHrVdbNIaLxaGT/yxvtxqG+dg13RwFTIw9kd
mLhLMX/PvkvQ2w4vLGuBmjs63uNdrWZpgFqteTmIHJ2V/k16+Uyi/e75Sm+v3K86zo9iWweAPSTUq9n+oQ
XhqmF94xZrUIKGxghVqJe2zi/qhKNHXekcJZLse7hnAt00zMAvSowqnDeoB55027MQj02oYxzQDw8tt1cDD
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dW/Wt997sWUdyB1JJNluYGB3IMMY/ayW+CJ6zyAbRrZCAXCvFhDMN61Xy30Au0cxD5zfPZ/JghFsn32QLE8
B6ogNXDSXkJHdGSPN3Fkuiv0adQ3V0oJWpzrsuszgBp7wLFwdnS9xuEHxv37tTWxJP6HpMV3dlbZvkMMGaL
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Yg2V7jLqu3LFBLTia9z4gQLibzUAQV/my4o2g6zVNLgAN9//1mG45Ahr6wVc3wvKdz15RggQVzRdnf5qKBg
HVhbnk105QwkaVmoZGna3BRMPG6Ki0JekHTTAT5PCURHFRIJmik1zSoQeZpz4cUfZtsdCEW8=",
  "result": "Success",
  "resp_code": "0000",
  "resp_msg": null
}
```