



สำนักคอมพิวเตอร์
Computer Center



Intermediate Certificate Authority API Server For Digital Signature Usage

API Documentation

Date

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Version

0.1

Innovative Co., Ltd
contact@innovative.co.th

1. Issue Certificate API

Web Services: RESTful JSON

HTTP Method: **POST**

Content Type: x-www-form-urlencoded

Character Encoding: UTF-8

URL: <http://<docker-host>:8080/api/v1/issue>

Request Header

No.	Parameter	Type	Size	Mandatory	Description	Example Values
1	X-INNOVASIVE-API-KEY	String	-	Y	API Key Configure in Docker ENV	developmentkey

Request Body

No.	Parameter	Type	Size	Mandatory	Description	Example Values
1	cn	String	64	Y	Common Name of Certificate	Somchai Jaidee
2	email	String	64	Y	Email of Certificate	somchai@example.ac.th
3	password	String	64	Y	PKCS12 Encryption Password	P@ssw0rd
4	days	Integer	3	Y	Certificate Validity Periods in days	90

Response Body

No.	Parameter	Type	Size	Mandatory	Description	Example Values
1	success	Boolean	1	Y	Response Success Indicator	true
2	code	Integer	3	Y	Response Code	200
3	serial	String	20	N	Certificate Serial Number	1000
4	certificate_file	String	-	N	Certificate File Full Path In univ-ca Folder	/univ-ca/certs/1000.cert.pem
5	private_key_file	String	-	N	Private Key File Full Path In univ-ca Folder	/univ-ca/private/1000.key.pem
6	pkcs12_file	String	-	N	PKCS12 File Full Path In univ-ca Folder	/univ-ca/pkcs12/1000.p12
7	errors	Array of String	-	N	Array Content of Strings for Error Details	-

Example Response

CA Server API / Issue

POST {{ENDPOINT}}/issue

Params Auth Headers (8) **Body** Pre-req. Tests Settings Cookies

x-www-form-urlencoded

	Key	Value	Description	...	Bulk Edit
<input checked="" type="checkbox"/>	cn	Somchai Jaidee			
<input checked="" type="checkbox"/>	email	somchai@example.ac.th			
<input checked="" type="checkbox"/>	password	test1234			
<input checked="" type="checkbox"/>	days	30			

Body 200 OK 914 ms 378 B Save as Example

Pretty Raw Preview Visualize JSON

```
1  {
2    "success": true,
3    "code": 200,
4    "serial": "01",
5    "certificate_file": "/univ-ca/certs/01.cert.pem",
6    "private_key_file": "/univ-ca/private/01.key.pem",
7    "pkcs12_file": "/univ-ca/pkcs12/01.p12"
8  }
```

2. Revoke Certificate API

Web Services: RESTful JSON

HTTP Method: **POST**

Content Type: x-www-form-urlencoded

Character Encoding: UTF-8

URL: <http://<docker-host>:8080/api/v1/revoke>

Request Header

No.	Parameter	Type	Size	Mandatory	Description	Example Values
1	X-INNOVASIVE-API-KEY	String	-	Y	API Key Configure in Docker ENV	developmentkey

Request Body

No.	Parameter	Type	Size	Mandatory	Description	Example Values
1	cn	String	64	Y	Common Name of Certificate	Somchai Jaidee
2	serial	String	64	Y	Certificate Serial Number	1000

Response Body

No.	Parameter	Type	Size	Mandatory	Description	Example Values
1	success	Boolean	1	Y	Response Success Indicator	true
2	code	Integer	3	Y	Response Code	200
3	errors	Array of String	-	N	Array Content of Strings for Error Details	-

Example Response

HTTP CA Server API / Revoke Save Edit

POST ▼ `{{ENDPOINT}}/revoke` Send ▼

Params Auth Headers (8) **Body** • Pre-req. Tests Settings Cookies

x-www-form-urlencoded ▼

	Key	Value	Description	...	Bulk Edit
<input checked="" type="checkbox"/>	serial	01			
<input checked="" type="checkbox"/>	cn	Somchai Jaidee			

Body Cookies Headers (5) Test Results 200 OK 55 ms 195 B Save as Example ⋮

Pretty Raw Preview Visualize JSON ▼ ≡

```
1 ⌵  
2   "success": true,  
3   "code": 200  
4 ⌵
```

3. Download PKCS12 By Certificate Serial Number

Web Services: File Download

HTTP Method: GET

Character Encoding: UTF-8

URL: http://<docker-host>:8080/api/v1/download

Request Header

No.	Parameter	Type	Size	Mandatory	Description	Example Values
1	X-INNOVASIVE-API-KEY	String	-	Y	API Key Configure in Docker ENV	developmentkey

Request Parameter

No.	Parameter	Type	Size	Mandatory	Description	Example Values
1	serial	String	64	Y	Certificate Serial Number	1000

Response Body

In case of success (Certificate Found)

HTTP Reponse Code: 200

Request will Return PKCS12 File as File Download

In case of fail (Certificate Not Found)

HTTP Reponse Code: 404

Example Response

CA Server API / Download PKCS12 By Certificate Serial

GET `{{ENDPOINT}}/download?serial=01` Send

Params Auth Headers (6) Body Pre-req Tests Settings Cookies

Query Params

	Key	Value	Description	...	Bulk Edit
<input checked="" type="checkbox"/>	serial	01			

Body Cookies Headers (11) Test Results 200 OK 31 ms 6.17 KB Save as Example

Key	Value
Server	nginx
Date	Tue, 04 Jul 2023 13:30:51 GMT
Content-Type	application/octet-stream
Content-Length	5957
Connection	keep-alive
Content-Description	File Transfer
Content-Disposition	attachment; filename=01.p12
Content-Transfer-Encoding	binary
Expires	0
Cache-Control	must-revalidate, post-check=0, pre-check=0
Pragma	public

4. List Certificates from CA Index Database

Web Services: RESTful JSON

HTTP Method: **GET**

Character Encoding: UTF-8

URL: <http://<docker-host>:8080/api/v1/listCertificate>

Request Header

No.	Parameter	Type	Size	Mandatory	Description	Example Values
1	X-INNOVASIVE-API-KEY	String	-	Y	API Key Configure in Docker ENV	developmentkey

Response Body

Contains Array for Certificate Data, each item contains

No.	Parameter	Type	Size	Mandatory	Description	Example Values
1	status	String	-	Y	Certificate Status	Valid, Revoked, Expired
2	expiration_date	String	-	Y	Certificate Expiration Date	230803094143Z
3	revocation_date	String	-	N	Certificate Revocation Date	230704095756Z, superseded
4	serial_number	String	-	Y	Certificate Serial Number	1000
5	subject	String	-	Y	Certificate Subject	/C=TH/O=Example University/CN=Somchai Jaidee/emailAddress=somchai@example .ac.th

Example Response

CA Server API / List Certificates Save Send

GET ▼ `{{ENDPOINT}}/listCertificate` Send ▼

Params Auth Headers (6) Body Pre-req. Tests Settings Cookies

Query Params

Key	Value	Description	...	Bulk Edit
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Body Cookies Headers (5) Test Results 200 OK 38 ms 909 B Save as Example ...

Pretty Raw Preview Visualize JSON ▼ ↻ 📄 🔍

```
1  [
2  {
3      "status": "Valid",
4      "expiration_date": "230803133146Z",
5      "revocation_date": "",
6      "serial_number": "02",
7      "subject": "/C=TH/O=Example University/CN=Somchai Jaidee/
8          emailAddress=somchai@example.ac.th"
9  },
10 {
11     "status": "Revoked",
12     "expiration_date": "230803132907Z",
13     "revocation_date": "230704133003Z,superseded",
14     "serial_number": "01",
15     "subject": "/C=TH/O=Example University/CN=Somchai Jaidee/
16         emailAddress=somchai@example.ac.th"
17 },
18 {
19     "status": "Valid",
20     "expiration_date": "240429132844Z",
21     "revocation_date": "",
22     "serial_number": "00",
23     "subject": "/C=TH/O=Example University/CN=OCSP Signer Certificate"
24 }
```