Symverse
Citizen Alliance API document
Protocol Specification

Contact Information

2

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Revision History

Version	Description	Author	Date
0.1	initial	hsryus	19/05/07
0.4	Translation	jskim	19/05/21

Contents

1. CA API SERVER

CA Api Server generate and manage SymVerse accounts

[origin]
Production URL= https://ca.symverse.com

1.   Terms and Conditions Request

Request Terms and Conditions to the CA Server

- CA server provides the latest Terms and Conditions Agreement.

■   **[Precondition]**

Request Type	Response Type	End User Auth Required	SSL Required
application/json	application/json	N	Y

■

■   **[Request]**
HOST= original
URL_PAGE= ca/v1/policy/service

Method=GET
Parameters

Name	Data Type	Devision	Description

[Response]
■   **Payload**

Name	Data Type	Description
message:	string	Result message
result:	object	
:ver	string	T&C version
:type	string	T&C type
:header	string	Title
:content	string	Content

Response Code
- **Success Code**

Http Response Code	Description
200	OK

- **Fault Code**

Http Response Code	Fault Code	Description

- **Example**

```
GET ca/v1/policy/service

Host : https://ca.symverse.com

Content-Type:  application/ json; charset=utf-8 Content-Length: X

Accept: application/json

https://ca.symverse.com/ca/v1/policy/service

Content-Type: Application/JSON
```

```
HTTP/1.1 200 OK

Content-Type: Application/JSON

{

  {

    "message": "success",

    "result": {

        "ver": 1,

        "type": "service",

        "header": "Terms and Conditions",

        "content": "contents..."

    }

  }

}
```

▪

2. Privacy Policies Request

Request Privacy policies to the CA Server

- CA server provides the latest Privacy Policies Agreement.

▪ **[Precondition]**

Request Type	Response Type	End User Auth Required	SSL Required
application/json	application/json	N	Y

■

■ **[Request]**
HOST= original
URL_PAGE= ca/v1/policy/privacy

Method=GET
Parameters

Name	Data Type	Devision	Description

[Response]
■ **Payload**

Name	Data Type	Description
message:	string	Result message
result:	object	
:ver	string	PP version
:type	string	PP type
:header	string	Title
:content	string	Content

Response Code

– **Success Code**

Http Response Code	Description
200	OK

– **Fault Code**

Http Response Code	Fault Code	Description

- **Example**

> GET ca/v1/policy/privacy
>
> Host : https://ca.symverse.com
>
> Content-Type: application/ json; charset=utf-8 Content-Length: X
>
> Accept: application/json
>
> https://ca.symverse.com/ca/v1/policy/privacy
>
> Content-Type: Application/JSON

```
HTTP/1.1 200 OK

Content-Type: Application/JSON

{

 {

   "message": "success",

   "result": {

      "ver": 1,

      "type": "privacy",

      "header": "Privacy policies",

      "content": "contents…"

   }

  }

}
```

▪

1.3 SMS Verification Code Request

 Request a verification code to SMS server

    –   Sending a verification code to the cellphone when requested.

[Precondition]

Request Type	Response Type	End User Auth Required	SSL Required
application/json	application/json	N	Y

▪   **[Request]**
    HOST= original
    URL_PAGE= /ca/v1/verification/sms/{PHONE_NUM}

Method=GET

Parameters

Name	Data Type	Devision	Description
Phone number	string	mandatory	Phone number to a receive verification code - in format of "01011112222"

[Response]

- **Payload**

Name	Data Type	Description
message :	string	Result message
Result:	object	
:id:	string	Verification ID

Response Code

– **Success Code**

Http Response Code	Description
200	OK

– **Fault Code**

Http Response Code	Fault Code	Description

- **Example**

```
POST  /ca/v1/verification/sms/{PHONE_NUM}

Host : https://ca.symverse.com

Content-Type:  application/ json; charset=utf-8 Content-Length: X

Accept: application/json

https://ca.symverse.com//ca/v1/verification/sms/01012345678

Content-Type: Application/JSON

{

  " deviceversion ": "1.0

}
```

```
HTTP/1.1 200 OK

Content-Type: Application/JSON

{

  "message": "success",

  "result": {

        " id": "1"

   }

}
```

-

1.4 Email verification code request

Request a verification code via Email

- Sending a verification code to the email address for confirmation.

[Precondition]

Request Type	Response Type	End User Auth Required	SSL Required
application/json	application/json	N	Y

- **[Request]**
HOST= original
URL_PAGE= /ca/v1/verification/email/{EMAIL}

Method=POST
Parameters

Name	Data Type	Devision	Description
Email	string	mandatory	Email address to receive a verification code – ″email@email.com″

[Response]
- **Payload**

Name	Data Type	Description
message :	string	Result message
Result:	object	
:id:	string	Verification ID

Response Code
  – **Success Code**

Http Response Code	Description
200	OK

– **Fault Code**

Http Response Code	Fault Code	Description

■ **Example**

```
POST  /ca/v1/verification/email/{EMAIL}

Host                                    :                              https://ca.symverse.com


Content-Type:  application/ json; charset=utf-8 Content-Length: X

Accept: application/json

https://ca.symverse.com//ca/v1/verification/email/test@mail.com

Content-Type: Application/JSON

{

  " deviceversion ": "1.0

}
```
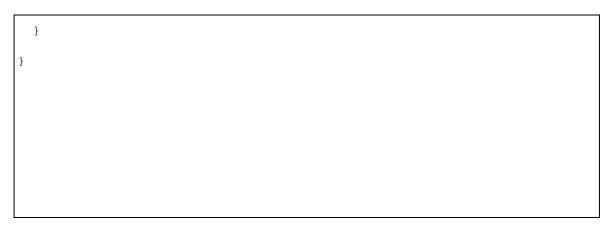
```
HTTP/1.1 200 OK

Content-Type: Application/JSON

{

  "message": "success",

   "result": {

        " id": "1"
```

```
   }

}
```

■

1.5 Validate verification code request

Request to validate the verification code

[Precondition]

Request Type	Response Type	End User Auth Required	SSL Required
application/json	application/json	N	Y

■ **[Request]**
  HOST= original
  URL_PAGE=/ca/v1/confirmVerificationNum

  Method=POST
  Parameters

Name	Data Type	Devision	Description
verificationNum	string	mandatory	Verification code - "1234"
id	string	mandatory	Verification ID

[Response]

- **Payload**

Name	Data Type	Description
message :	string	Result
Result:	String	Result data

Response Code

- **Success Code**

Http Response Code	Description
200	OK

- **Fault Code**

Http Response Code	Fault Code	Description

- **Example**

```
POST  /ca/v1/confirmVerificationNum

Host                              :                              https://ca.symverse.com


Content-Type:  application/ json; charset=utf-8 Content-Length: X

Accept: application/json

https://ca.symverse.com/ca/v1/confirmVerificationNum

Content-Type: Application/JSON

{

  "verificationNum": "12345",

 "id": "1"

}
```

```
HTTP/1.1 200 OK

Content-Type: Application/JSON

{

 "message": "success",

 "result": {

    "message": "success",

    "result": "code verified"

  }

}
```

■

1.6 Create citizen account request

Create a citizen account with the information provided

- Create a citizen account by generating a SymID based on the information provided from the device.

- SymID must be created by 20Bytes of hex code. (Cf. SymID format)

[Precondition]

Request Type	Response Type	End User Auth Required	SSL Required
application/json	application/json	N	Y

- **[Request]**

  HOST= original

  URL_PAGE=/ca/v1/citizenInfo?verificationType={VERIFICATION_TYPE}&id={USER_ID}

  Method=POST

  Parameters

Name	Data Type	Devision	Description
verificationType	string	mandatory	"email" : Email verification "sms" : SMS verification
Id	string	mandatory	Verification ID – "verification"
userNm	string	mandatory	User name
citizenBlockList:	object		
:publicKeyHash	string	mandatory	Publickey hash
mobileNum	string	optional	Phone number – "01012345678"

			Email
email	string	optional	– tset@mail.com

[Response]

■   **Payload**

Name	Data Type	Description
message :	string	Result message
Result::	object	
:symId	string	Sym ID – 0002355a4444323e0002

Response Code

– **Success Code**

Http Response Code	Description
200	OK

– **Fault Code**

Http Response Code	Fault Code	Description
404		Verification failed

■   **Example**

```
POST /ca/v1/citizenInfo?verificationType={VERIFICATION_TYPE}&id={USER_ID}

Host                                    :                                https://ca.symverse.com


Content-Type:  application/ json; charset=utf-8 Content-Length: X

Accept: application/json

https://ca.symverse.com/ca/v1/citizenInfo?verificationType=sms&id=1

Content-Type: Application/JSON

{
          "userNm": "citizen01",

          "citizenBlockList" : [

                    {

                              "publicKeyHash" : "20049564566827079676"

                    }

          ],

          "mobileNum" : "01012345678",

          "email" : "tset@mail.com"

}
```

```
HTTP/1.1 200 OK

Content-Type: Application/JSON

{
  "message": "success",

   "result": {

      "message": "success",

      "result": {

             symId: 0002355a4444323e0002

          }

   }
```

```
}
```

■

1.7 Additional citizen ID request

Create an additional citizen ID

[Precondition]

Request Type	Response Type	End User Auth Required	SSL Required
application/json	application/json	N	Y

■ **[Request]**
HOST= original
URL_PAGE=/ca/v1/citizenBlock/account

Method=POST
Parameters

Name	Data Type	Devision	Description
publicKeyHash	string	mandatory	Publickey hash － "20049564566827079676"

citizenId	string	mandatory	Citizen ID − "0002355a4444323e"

[Response]

▪ **Payload**

Name	Data Type	Description
message :	string	Result message
Result::	object	
:symId	string	Sym ID − "0002355a4444323e0003"

Response Code

− **Success Code**

Http Response Code	Description
200	OK

− **Fault Code**

Http Response Code	Fault Code	Description

▪ **Example**

```
POST /ca/v1/citizenBlock/account

Host                                    :                              https://ca.symverse.com


Content-Type:  application/ json; charset=utf-8 Content-Length: X

Accept: application/json

https://ca.symverse.com/ca/v1/citizenBlock/account

Content-Type: Application/JSON

{

        "publicKeyHash" : "20049564566827079676",

        "citizenId": "0002355a4444323e"

}
```

```
HTTP/1.1 200 OK

Content-Type: Application/JSON

{

  "message": "success",

   "result": {

      "message": "success",

      "result": {

              symId: 0002355a4444323e0003

          }

    }

}
```

.

1.8 Citizen account lockout request

Request to lockout a citizen account

[Precondition]

Request Type	Response Type	End User Auth Required	SSL Required
application/json	application/json	N	Y

- **[Request]**
  HOST= original
  URL_PAGE}/ca/v1/citizenBlock/{CITIZEN_ID}/state/LOCKED

  Method=PUT
  Parameters

Name	Data Type	Devision	Description

[Response]

- **Payload**

Name	Data Type	Description
message :	string	Result
Result::	string	Result data

Response Code
- **Success Code**

Http Response Code	Description
200	OK

– **Fault Code**

Http Response Code	Fault Code	Description

▪ **Example**

POST /ca/v1/citizenBlock/{CITIZEN_ID}/state/LOCKED

Host   :   https://ca.symverse.com

Content-Type: application/ json; charset=utf-8 Content-Length: X

Accept: application/json

https://ca.symverse.com/ca/v1/citizenBlock/0002715a3e656832/state/LOCKED

Content-Type: Application/JSON

{

    "publicKeyHash" : "20049564566827079676",

    "citizenId": "0002355a4444323e"

}

```
HTTP/1.1 200 OK

Content-Type: Application/JSON

{

  "message": "success",

   "result": {

      "message": "success",

      "result": "account status change to LOCKED."

   }

}
```

.

1.9 Modifying citizen informations

Modify the citizen information

[Precondition]

Request Type	Response Type	End User Auth Required	SSL Required
application/json	application/json	N	Y

- **[Request]**
  HOST= original
  URL_PAGE = /ca/v1/citizenInfo

  Method=PUT
  Parameters

Name	Data Type	Description
citizenId	String	Citizen ID to modify

userNm	String	User name

[Response]

- **Payload**

Name	Data Type	Description
message :	string	Result
Result::	string	Result data

Response Code

– **Success Code**

Http Response Code	Description
200	OK

– **Fault Code**

Http Response Code	Fault Code	Description

- **Example**

```
PUT /ca/v1/citizenInfo

Host                                    :                         https://ca.symverse.com


Content-Type:  application/ json; charset=utf-8 Content-Length: X

Accept: application/json

https://ca.symverse.com/ca/v1/citizenInfo

Content-Type: Application/JSON

{

        "citizenId" : "0002355a4444323e",

        "userNm": "citizen88"

}
```

```
HTTP/1.1 200 OK

Content-Type: Application/JSON

{

  "message": "success",

   "result": {

      "message": "success",

      "result": "account information changed"

   }

}
```

■

2. Appendix

2.1 HTTP Status Code

HTTP Status Code	Description
200	reguest succeeded, content found
204	reguest succeeded, content not found
400	request not valid
403	unauthorized request
404	resource not found
500	internal error
600	device network unavailable

3. HTTP RESPONSE CODE

Http Response Code	Fault Code	Description

4.