
CCSS Gateway

Integration Interface

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31 May 2018	1.0	xxxxx	First write-up.		
10 Jun 2018	1.1	xxxxx	Added Authenticate API Access method.		
17 Jun 2018	1.2	xxxxx	Modified error detail for return codes. Further modification as per highlighted in yellow color. Added Section 5: PSF API.		
30 Jun 2018	1.3	xxxxx	Change in request message structure for Create Applicant with First Level Info. Added request details for Request Second Level Info.		
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1 Introduction

CCSS Gateway is an integration layer between CCSS platform and PSF platform. PSF platform will capture and process its Visa applications and then send the relevant info to CCSS via API integration.

1.1 Purpose

This document explains the available interfaces in the CCSS Gateway module for external integration purpose. It shall serve as the only agreed communication protocol as per whatever stated in this document.

1.2 Audience

This is a highly restricted document. It shall be circulated internally to the authorized persons only with prior consent always required from xxxxx International.

1.3 Terminology

Abbreviation	Description
API	Application programming interface.
Id	An identification which could be in a form of string or number.



2 Data Type Definition

Below is the list of data types.

Data Type	Description	Min Value	Max Value
String	System.String	Empty string i.e. ""	Depend on the database storage size.
Integer	System.Integer	-2147483648	2147483647



3 Return Code

Below is the list of common return codes.

Code	Error Type	Error Detail	Remarks
200			OK
400	param_error	A required parameter was missing or a parameter was malformed. This could be also due to resource cannot be returned.	BAD_REQUEST
401	invalid_auth	OAuth token was not provided or was invalid.	UNAUTHORIZED
403	not_authorized	Access is denied.	FORBIDDEN
500	server_error	Operation failed unexpectedly.	INTERNAL_SERVER_ERROR

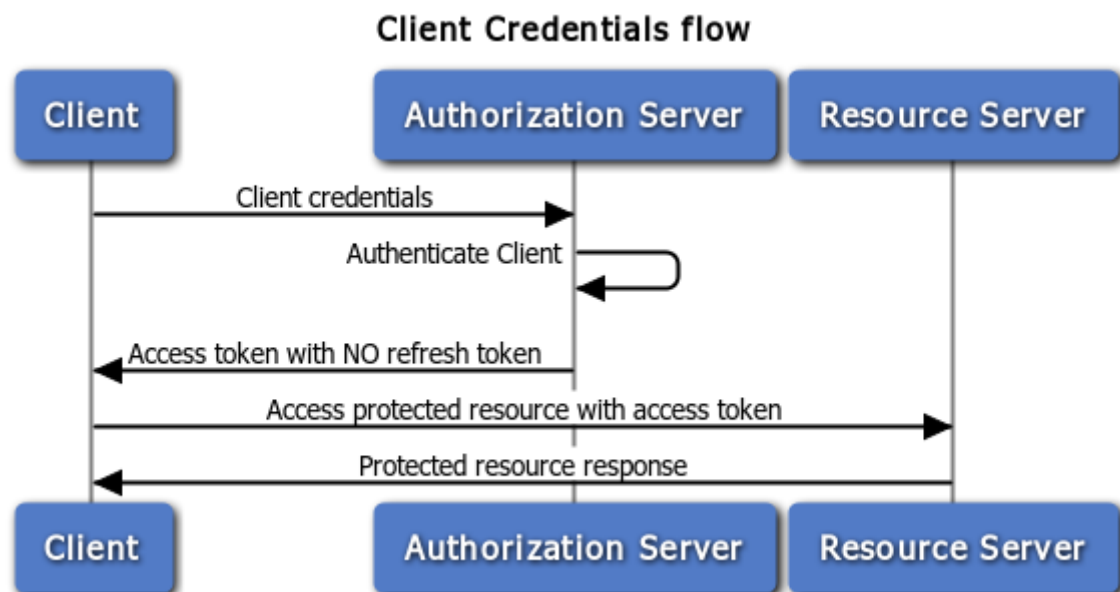


4 CCSS API

4.1 Authenticate API Access

4.1.1 Functional Description

In order to gain access to CCSS APIs, client application must request an access token according to the OAuth 2.0 protocol. This access token must be inserted into the HTTP Request Header as Bearer Token during each API call to CCSS.



4.1.2 Request Description

- Request method: POST
- Request content type: application/x-www-form-urlencoded
- Response content type: application/json

URL format:

`http://getaway.com/api/token`

URL format for testing purpose only (Non-production):

`http://getaway.com/api/token`



4.1.3 Request Message

Field Name	Data Type	Length	Optional	Example	Remarks
client_id	String	Min: 0 char Max: Max length of System.String	No	"123456"	Client Id as per provided to authenticate the client for this request.
client_secret	String	Min: 0 char Max: Max length of System.String	No	"123abc"	Client secret as per provided to authenticate the client for this request.

Request Example:

```
POST /api/token HTTP/1.1
Content-Type: application/x-www-form-urlencoded

client_id=123456&client_secret=123abc
```

4.1.4 Response Message

Field Name	Data Type	Length	Optional	Example	Remarks
access_token	String	Min: 0 char Max: Max length of System.String	No	"eyJhbGciOiI..."	The access token string as issued by the authorization server.
expires_in	Integer	-	No	3600	Validity of the access token in seconds.
error	String	Min: 0 char Max: Max length of System.String	Yes	"invalid_request"	Error responses are returned with an HTTP 400 status code (unless specified otherwise).
client_id	String	Min: 0 char Max: Max length of System.String	No	"123456"	Client Id as per provided to authenticate the client for this request.



Response Example (Successful):

```

HTTP/1.1 200 OK
Cache-Control: no-store, no-cache, max-age=0
Pragma: no-cache
Content-Type: application/json; charset=UTF-8

{
  "access_token":
"eyJhbGciOiJSUzI1NiIsImtpZCI6ImY2NjYwYWE5YTkyNWEzYjRiMGJlNmFhMTNmNjlkY2Y2IiwidHlwIjoiSldUIn0.e
yJuYmYiOiE1Mjg2MTkwMjEsImV4cCI6MTUyODYyMjYyMSwiaXNzIjoiaHR0cHM6Ly9sb2NhbgHvc3Q6NTAwMSIsImF1ZCI6
WjYodHRwczovL2xvY2FsaG9zdDolMDAxL3Jlc291cmNlcyIsImdhdGV3YXkiXSwiY2xpZW50X2lkIjoieY2Nzcy5lbmRwb
2ludCIsInNjb3BlIjpbImdhdGV3YXkiXX0.Qt19ByUgYxqvdrDwvvt2jXmoaV4tds qlwpt16i3DQsVwYpEyjJQ2xXsEuEg
60-xrZLrSte_qLqt-ZIbJW9l3KtQwxkuEAUaJFcPAbFal4HBSiY-
jTotHu2ikM876gMVC5rHpLALOyTrH2oJMIJRVNL5QIm_Lj_v60kp0st98E1Wk2vBe9UStQiVQhSRKcn0rZoGvgDqh6K3Cc
aONJbzQTc3W-
zpUX7NV7a6wOMKJLLygbYL9U5c2Kkf547Px_GS0sWp_2UB0TT2eW4WZQVJBDpYhAvYeqvWEFUX_1WTlgPwDee_qMxqS4bL
_cegWiOk4cVSda9WS_6wjB4v6gOTOGA",
  "expires_in": 3600,
  "client_id": "123456",
  "error": null
}

```

Response Example (Unsuccessful):

```

HTTP/1.1 400 Bad Request
Content-Type: application/json; charset=UTF-8
Cache-Control: no-store, no-cache, max-age=0
Pragma: no-cache

{
  "access_token": null,
  "expires_in": null,
  "client_id": null,
  "error": "appkey或secret不能为空"
}

```

4.1.5 Return Error

Error	Error Description
invalid_request	The request is missing a parameter, so the server can't proceed with the request. This may also be returned if the request includes an unsupported parameter or repeats a parameter.
invalid_client	Client authentication failed, such as if the request contains an invalid client ID or secret. Send an HTTP 401 response in this case.
invalid_grant	The authorization code (or user's password for the password grant type) is invalid or expired. This is also the error that would be returned if the redirect URL given in the authorization grant does not match the URL provided in this access token request.
unauthorized_client	This client is not authorized .



4.2 Create Applicant with First Level Info

4.2.1 Functional Description

This method is for PSF to call CCSS upon each applicant record to be sent over to CCSS. This record will contain the first-level information only; whereas second-level information will be requested by CCSS to PSF on demand basis.

4.2.2 Request Description

- Request method: POST
- Request content type: application/json
- Response content type: application/json

URL format:

```
http://getaway.com/api/applicants/
```

URL format for testing purpose only (Non-production):

```
http://getaway.com/api/applicants/
```

4.2.3 Request Message

Field Name	Data Type	Length	Optional	Example	Remarks
client_id	String	Min: 0 char Max: Max length of System.String	Yes	"123456"	Client Id as per provided to authenticate the client for this request.
access_token	String	Min: 0 char Max: Max length of System.String	Yes	"eyJhbGciOi..."	The access token string as issued by the authorization server.
title	String		Yes	"test"	Business title
content	String	Min: 0 char Max: Max length of System.String	Yes	"jsonObject"	Business entity



Request Example:

POST /api/applications HTTP/1.1

Content-Type: application/json

```
{
  "client_id": "123456",
  "access_token": "ffdb07f492c74fa9b1058c55dc4931cb",
  "title": "test",
  "content": {
    "firstNameEnglish": "Xiu Lian",
    "lastNameEnglish": "Lee",
    "firstNameChinese": "秀莲",
    "lastNameChinese": "李",
    "formerFirstNameEnglish": "Xiu Lian",
    "formerLastNameEnglish": "Li",
    "formerFirstNameChinese": "绣莲",
    "formerLastNameChinese": "李",
    "gender": "Female",
    "dateOfBirth": "1980-12-31",
    "placeOfBirth": "Shenzhen",
    "maritalStatus": "Married",
    "identityNumber": "622825199303180010",
    "nationality": "Chinese",
    "ethnicity": "Han",
```



```

"ancestralHome": "Suzhou",
"domicile": "1881 Bao'an S Rd, CaiWuWei, Luohu Qu, Shenzhen Shi, Guangdong Sheng ,China, 518000",
"photoUrl": "",
"passport": {
  "number": "G05473471",
  "type": "P - Ordinary",
  "placeOfIssue": "Beijing",
  "pictureUrl": ""
},
"visa": {
  "category": "Tourist Visa",
  "type": "Single Entry Visa"
},
"phoneNumber": 86 13522568027,
"email": "xiulian@qq.com"
}

```

4.2.4 Response Message

Field Name	Data Type	Length	Optional	Example	Remarks
meta.code	Integer	-	No	200	Refer to section 4.1.5.
meta.errorType	String	Min: 1 char Max: Max length of System.String	Yes	"server_error"	Refer to section 4.1.5.
meta.errorDetail	String	Min: 1 char Max: Max length of System.String	Yes	"Operation failed unexpectedly"	Refer to section 4.1.5.
meta.requestId	String	Min: 1 char Max: Max length of System.String	No	"0HLE9NJNTGF37:00000001"	Tracking Identifier generated per request call.
response	String	Min: 1 char Max: Max length of System.String	No	"{}"	Result will be always empty in JSON format.

Response Example (Successful):

```

HTTP/1.1 200 OK
Content-Type: application/json; charset=UTF-8

{
  "data":null,
  "errorCode":null,
  "errorMsg":null,
  "success":true
}

```



Response Example (Unsuccessful):

```
HTTP/1.1 500 Internal Server Error
Content-Type: application/json; charset=UTF-8

{

  "data":null,
  "errorCode":"10003",
  "errorMsg":"token过期",
  "success":false

}
```

4.2.5 Return Code

Code	Error Type	Error Detail	Remarks
200			OK
400	param_error	A required parameter was missing or a parameter was malformed. This could be also due to resource cannot be returned.	BAD_REQUEST
401	invalid_auth	OAuth token was not provided or was invalid.	UNAUTHORIZED
403	not_authorized	Access is denied.	FORBIDDEN
500	server_error	Operation failed unexpectedly.	INTERNAL_SERVER_ERROR

