



GeForce NOW SDK: Supported Titles

API Reference

Document History

SDK-GFN-002_v1.0

| Version | Date | Description of Change |
|---------|------------|-----------------------|
| 0.1 | 05/10/2019 | Initial version |
| | | |
| | | |

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GeForce NOW SDK: Supported Titles API

Introduction

The Supported Titles API is part of the GeForce NOW (GFN) SDK and allows clients to perform a web query and receive a complete list of games and applications supported by GeForce NOW for the specific end user.

Please note that the APIs described in this document are initial versions, and are expected to change in terms of parameters and consolidation in a near-future release.

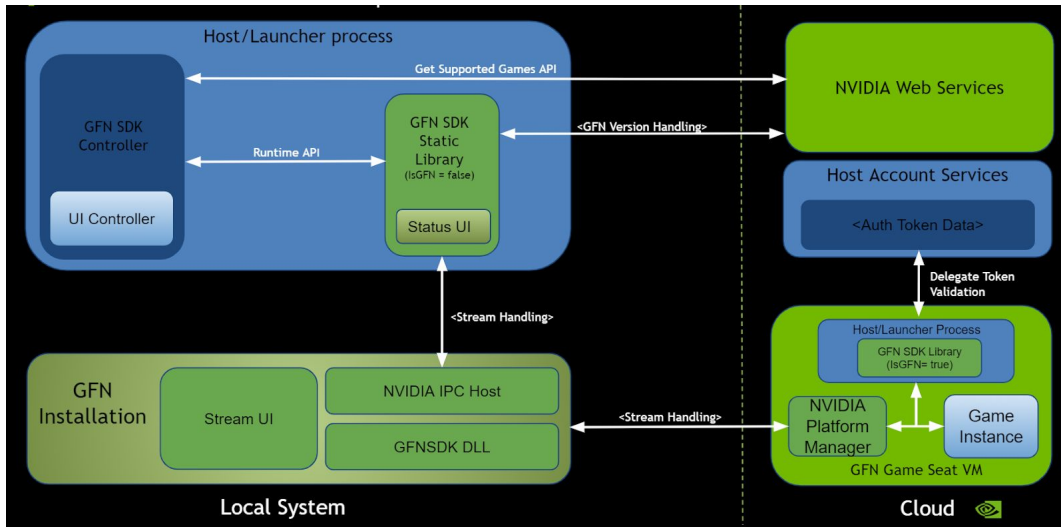
Audience

This document is directed towards Publishers, those that are game launcher/store application developers leveraging GeForce NOW in their application to stream content via seamless UI and account management integration between the Publisher and NVIDIA.

The APIs defined in this document provide Publishers the ability to query the full list of titles associated with the end user. The returned list of games allows includes details not only for starting a game stream session, but also supporting assets for correctly displaying in a launcher UI.

Overview

This document contains a high-level overview of the API, as well as the format of the request endpoints and the definition schemas of the responses.

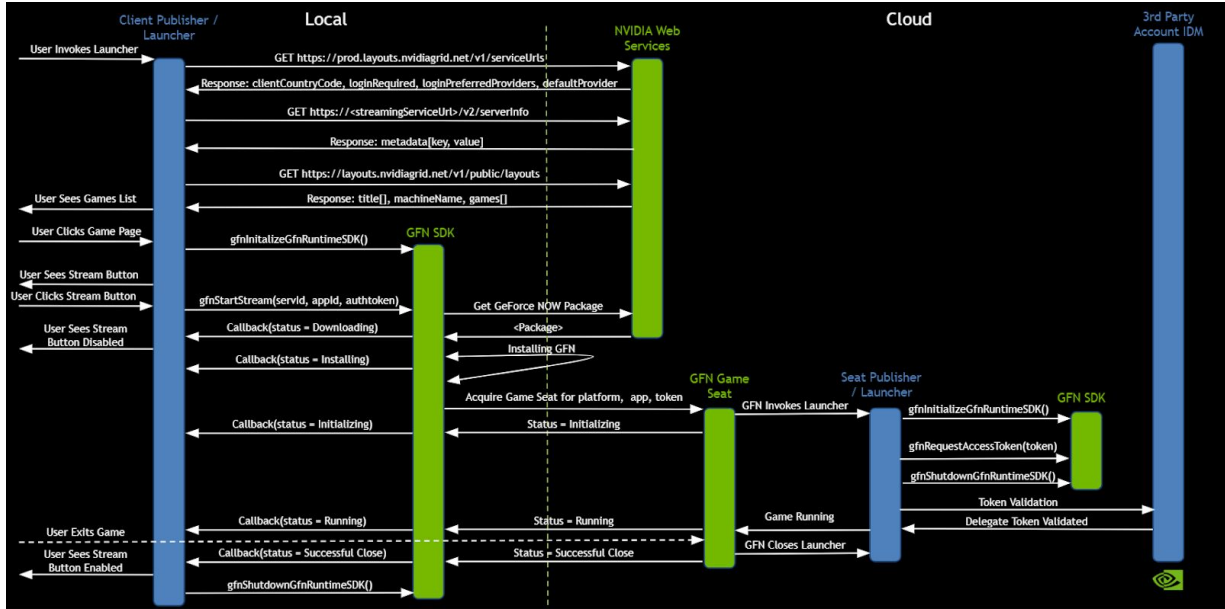


Key Concepts

The API consists of three web endpoints, with some dependent on data from other endpoints, that culminate in a response that contains information about all titles supported for a particular user.

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While the endpoints do not require any type of authentication, these endpoints should be called after the end user is logged in and authenticated, as they provide the end user with information about titles they can stream only if they are authenticated.

API Reference

This details the HTTP GET endpoint as well as the JSON schema of the response

The table below lists all endpoints of the Supported Titles interface.

| Method | Description |
|----------------------|---|
| Get Service URLs | Queries GeForce NOW data center for the URLs for all supported services. |
| Set Server Info | Queries a GeForce NOW service for information about all the servers for that service. |
| Get Supported Titles | Queries GeForce NOW server for all titles the user can have access to stream. |

Get Service URLs

Queries the GeForce NOW data center for all the services supported and their respective domain URLs. In addition to the list of services, the response also includes the country information for the source IP, and the preferred service to use for that IP.

See Notes section for additional info.

Common Use Cases

The table below lists the common use cases for this method.

| Use Case | Description |
|----------------------------|--|
| Get Affiliate Service Info | Get the base URL for the services to gather info about a particular service. |

| | |
|---------------------|---|
| Get IP Source Info | Get country code for source IP of the request |
| Get Default Service | Get the GFN-preferred service to use as the default from all services |

Request

HTTP Request

```
GET https://stg.layouts.nvidiagrid.net/v1/serviceUrls
```

Authentication

None

Parameters

None

Request Body

None

Notes

- 1.) A “service” is defined as a specific set of servers for a particular affiliate. This could be NVIDIA’s GeForce NOW servers, or those of an affiliate telco that is hosting their own.
- 2.) This endpoint reflects staging environment for now, and will move to production in the near future.

Success Response

HTTP 200 with JSON data. Schema:

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```

{
  "loginPreferredProviders": {
    "type": "array",
    "items": {
      "type": "string"
    }
  },
  "defaultProvider": {
    "type": "string"
  },
  "clientCountryCode": {
    "type": "string"
  },
  "loginRequired": {
    "type": "boolean"
  },
  "gfnServiceEndpoints": {
    "type": "array",
    "items": {
      "$ref": "#/definitions/service"
    }
  },
  "definitions": {
    "service": {
      "type": "object",
      "required": ["loginProvider", "loginProviderCode",
        "streamingServiceUrl"
      ],
      "properties": {
        "loginProvider": {
          "type": "string"
        },
        "loginProviderCode": {
          "type": "string"
        },
        "streamingServiceUrl": {

```



```

        "type": "string"
      }
    }
  }
}

```

Error Responses

Standard HTTP error responses

Expected Response Time

Response to query will be within 1 second.

Examples

The following JSON data includes an example response from a GET request originating in the United States, with three services defined, and the NVIDIA service being the preferred default:

```

{
  "loginPreferredProviders": [],
  "defaultProvider": "NVIDIA",
  "clientCountryCode": "US",
  "gfnServiceEndpoints":
  [
    {
      "loginProvider": "Affiliate1",
      "loginProviderCode": "AF1",
      "streamingServiceUrl":
        "https://gfn.af1.net"
    },
    {
      "loginProvider": "Affiliate2",

```

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```

        "loginProviderCode": "AF2",
        "streamingServiceUrl":
            "https://gfn.af2.com"
    },
    {
        "loginProvider": "Nvidia",
        "loginProviderCode": "NVIDIA",
        "streamingServiceUrl":
            "https://prod.cloudmatchbeta.nvidiagrid.net"
    }
],
"loginRequired": false
}

```

Get Server Info

Queries a particular service for information for all the servers in the service. The domain part of the URL is the “streamingServiceUrl” attribute in the response from the Get Service URLs endpoint.

Common Use Cases

The table below lists the common use cases for this method.

| Use Case | Description |
|-------------|---|
| Get Servers | Get information about all the servers in a service. |

Request

HTTP Request

```
GET https://<streamingServiceUrl>/v2/serverInfo
```

Authentication

None

Parameters

The domain part of the URL is retrieved by calling the Service URLs endpoint, then selecting a service from the array in the response, and then retrieving the string of `streamingServiceUrl` attribute.

Notes

The response data contains a large amount of information, some of it is not relevant to the purpose of this API endpoint. The response schema and example focus only on the relevant information to this overall API.

Success Response

HTTP 200 with JSON data. Schema:

```
{
  "authType": {
    "type": "integer"
  },
  "metaData": {
    "type": "object",
    "properties": {
      "key": {
        "type": "string"
      },
      "value": {
        "type": "array",
        "items": {
```

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```

        "type": "string"
      }
    }
  },
  "requestStatus": {
    "type": "object",
    "properties": {
      "statusCode": {
        "type": "integer"
      },
      "serverId": {
        "type": "string"
      },
      "unifiedErrorCode": {
        "type": "integer"
      },
      "statusDescription": {
        "type": "string"
      },
      "requestId": {
        "type": "string"
      }
    }
  }
}

```

Error Responses

Standard HTTP error responses

Expected Response Time

Response to query will be within 1 second.

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Example

The following JSON data includes a snippet of an example response from a GET request to <https://prod.cloudmatchbeta.nvidiagrid.net/v2/serverInfo>:

```
{
  "authType": [7],
  "serverType": 1,
  "metaData": [
    {
      "key": "gfn-regions",
      "value": "US West 2,US Southwest,US Northwest,US
Midwest,US Midwest 2,US Central,US East 2,US Northeast,US South,US
South 2,EU West,EU West 2,EU Northwest,EU Central,EU Central 2,EU
Central 3,EU Central 4"
    },
    {
      "key": "local-region",
      "value": "US West 2"
    },
    {
      "key": "US Southwest",
      "value":
        "https://us-southwest.cloudmatchbeta.nvidiagrid.net"
    },
    ...
  ]
},
"requestStatus": {
  "statusCode": 1,
  "serverId": "NP-SJC6-01",
  "unifiedErrorCode": 0,
  "statusDescription": "SUCCESS_STATUS",
  "requestId": "799b4955-4900-4c2b-a807-bc1a02f410a2"
}
}
...
```

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Get Supported Titles

Queries a specific server in a GeForce NOW service for all titles the user can have access to stream, including localized text based on a localeId. This catalog includes all partner and standard GFN titles

Common Use Cases

The table below lists the common use cases for this method.

| Use Case | Description |
|------------|---|
| Get Titles | Get all the titles available on a specific server |

Request

HTTP Request

```
GET
https://layouts.nvidiagrid.net/v1/public/layouts?layout-type=GfnPcHome&vpc-id=<serverId>&country-code=<clientCountryCode>&language-code=<localeId>
```

Authentication

None

Parameters

The serverId is retrieved via the Get Server Info endpoint's metadata. For example, if the metadata has:

```
"key": "local-region",
"value": "US West 2"
```

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Then the serverId is a hyphenated and lowercase version of value's data. For example, "US West 2" becomes "us-west-2".

The clientCountryCode is a two-character, as seen in the Service URLs web API.

The localeId uses the standard region-language definition.

See below for example query with data.

Success Response

HTTP 200 with JSON data. Schema:

```
{
  "assertUrl": {
    "type": "string",
  },
  "minTilesRequired": {
    "type": "integer",
  },
  "title": {
    "type": "string",
  },
  "machineName": {
    "type": "string",
  },
  "games": {
    "type": "array",
    "items": {
      "$ref": "#/definitions/game"
    }
  },
  "definitions": {
    "game": {
      "type": "object",
      "required": ["publisher", "genres",
        "isInLibrary", "keyArtUrl", "title",
        "tileType", "isInstalled", "maxControllersForSingleSession",
```

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```

"wideArtUrl", "featureArtUrl", "keywords", "appStore", "shortName",
"boxArtUrl", "shortDescription", "id", "isEntitled"
],
"properties": {
    "publisher": {
        "type": "string"
    },
    "genres": {
        "type": "array",
        "items": {
            "type": "string"
        }
    },
    "isInLibrary": {
        "type": "boolean"
    },
    "keyArtUrl": {
        "type": "string"
    },
    "title": {
        "type": "string"
    },
    "tileType": {
        "type": "integer"
    },
    "isInstalled": {
        "type": "boolean"
    },
    "maxControllersForSingleSession": {
        "type": "integer"
    },
    "wideArtUrl": {
        "type": "string"
    },
    "featureArtUrl": {
        "type": "string"
    },
}

```



```

        "keywords": {
            "type": "array",
            "items": {
                "type": "string"
            }
        },
        "appStore": {
            "type": "integer"
        },
        "shortName": {
            "type": "string"
        },
        "boxArtUrl": {
            "type": "string"
        },
        "shortDescription": {
            "type": "string"
        },
        "isEntitled": {
            "type": "boolean"
        },
        "id": {
            "type": "integer"
        },
    },
}

}

}

},
...

```

Error Responses

Standard HTTP error responses

Expected Response Time

Response to query will be within 1 second.

Example

The following JSON data includes a snippet title data of the response from a query to:

```
https://layouts.nvidiagrid.net/v1/public/layouts?layout-type=GfnPcHome&vpc-id=us-west-2&country-code=US&language-code=en-us
```

```
[
  {
    "assertUrl": null,
    "minTilesRequired": 1,
    "title": "Most Popular",
    "machineName": "Most Popular - v2 - new app",
    "games": [
      {
        "publisher": "Epic Games, Inc.",
        "genres": [
          "Action", "Free To Play", "Massively Multiplayer
Online"
        ],
        "isInLibrary": false,
        "keyArtUrl":
          "https://img.nvidiagrid.net/appimg/100013311/US/14",
        "title": "Fortnite",
        "tileType": 12,

```

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```

        "isInstalled": false,
        "maxControllersForSingleSession": 1,
        "wideArtUrl":
"https://img.nvidiagrid.net/appimg/100013311/US/23",
        "featureArtUrl":
"https://img.nvidiagrid.net/appimg/100013311/US/19",
        "keywords": [
            "survival",
            "open world", "f2p"
        ],
        "appStore": 9,
        "shortName": "fortnite_gfn_pc",
        "boxArtUrl":
"https://img.nvidiagrid.net/appimg/100013311/US/3",
        "shortDescription": "Don't take shelter.  Make it.",
        "id": 100013311,
        "isEntitled": false
    },
    ...

```