GeForce NOW SDK: How to Obtain GeForce NOW IP Addresses

API Reference

SDK-GFN-001_v1.2 | 01 2024

Document History

SDK-GFN-001_v1.0

Version	Date	Description of Change
0.1	*05/09/2019*	*Initial version*
1.0	*07/17/2019*	*First release version*
1.1	11/23/2021	Updated to reflect use of CIDR, as well as some rewording/formating
1.2	01/29/2024	Document title rename and doc rewording for clarification

Introduction

The GeForce NOW SDK's IP Address API allows clients to perform a web query and receive a complete list of v4-based IPs associated with GeForce NOW.

Audience

This document is directed towards Publishers and Game Developers that need to know which game and application traffic originates from GeForce NOW servers, and allows decisions associated with runtime features such as:

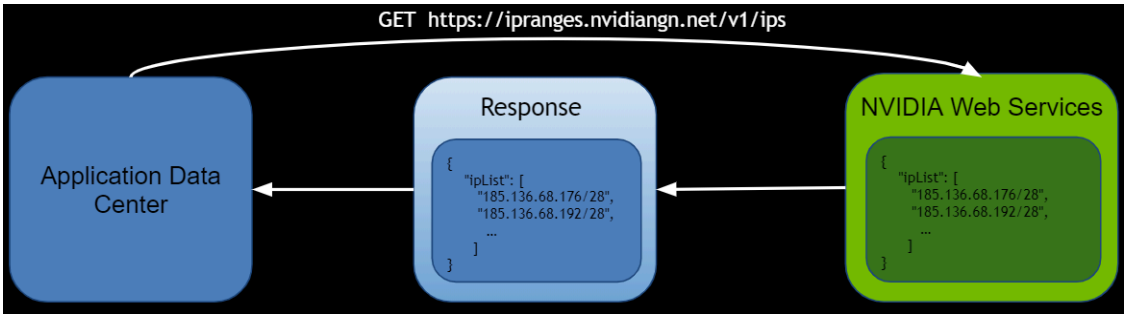
- Game matchmaking rules
- QoS rules for prioritizing the traffic
- Player banning based on IP heuristics
- Relaxing certain in-game anti-cheat or game-install detection mechanisms

Overview

This document contains a high-level overview of the API, as well as the format of the API query and the definition schema of the response.

Key Concepts

The API is a simple single HTTP GET query, which provides a response in the form of a JSON string list of all the GFN-specific IPs.



This API should be called on initialization of any applications or systems that rely on the IPs for proper traffic handling, or routines that attempt to detect and block any traffic that might look suspicious. For example:

- A group of gamers playing a specific game that phones home with data in GFN on the same server could be interpreted as a DDoS attack, triggering traffic blocking rules.
- A single gamer playing a specific game frequently in GFN could be playing on different server instances each time, resulting in the game's source IP changing frequently, and triggering certain account protection rules.

Instead of treating these scenarios as potential threats and degrading the gamer's experience in playing the game, these source IPs and the traffic from them can be assumed to be valid and thus ignored by any threat detection algorithms and software.

As GFN servers are routinely added to improve users' experiences with the service, new IPs are constantly added to the returned data. As such, to limit cases of missed association of a game session to GFN because of a brand new server, it is advised that the IP data be cached for no more than 24 hours at a time.

API Reference

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

The table below lists all methods of the NGN Endpoint interface.

Method	Description
GET IPs	Get a list of all GeForce NOW NGN IPs

Get IPs

Queries the GeForce NOW data center for all GFN-related IPs via a JSON-based response.

Common Use Cases

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

Use Case	Description
QoS Rules	Prioritizing traffic from GFN IPs
Multiple IPs from account	Allowing a game account to be used from multiple GFN IPs in a short span of time
Multiple accounts from IP	Allowing multiple game accounts from a single GFN service IP to be used at once

Request

HTTP Request

```
GET https://ipranges.nvidiangn.net/v1/ips
```

Authentication

None

Parameters

None

Request Body

None

Success Response

HTTP 200 with JSON data utilizing Classless Inter-Domain Routing (CIDR) format. Schema:

```
{
    “ipList: {
        “type”:”array”,
        “items”: {
            “type”:”string”
        }
    }
}
```

Error Responses

Standard HTTP error responses

Expected Response Time

Response to the query will be within 1 second.

Examples

```
{
    {
      "ipList": [
          "185.136.68.176/28",
          "209.66.87.160/27",
          "8.7.235.176/28",
      ...
    }
}
```

CIDR is used to greatly reduce the amount of data transmitted by covering a range of sequential IPs in a single entry.. This means it is up to the caller to process an entry for its entire range. For example, the single entry:

```
      "185.136.68.176/28"
```

Covers all IPs in the range of 185.136.68.176 to 185.136.68.191 inclusively.