

# System Service API Documentation

## Overview

The System Service provides endpoints for managing system-related functionalities, such as logging, monitoring, and rate limiting.

## Endpoints

### Log Event [POST /api/system/log]

Log an event or message to the system log.

#### Request

```
POST /api/system/log
Content-Type: application/json

{
  "level": "info",
  "message": "User 'user123' logged in successfully."
}
```

- **level**: (Required) The log level (e.g., "info", "warn", "error").
- **message**: (Required) The log message.

#### Response

Upon successful logging of the event, the server responds with a status code of **204 No Content**.

```
HTTP/1.1 204 No Content
Content-Length: 0
```

### Monitor System [GET /api/system/monitor]

Monitor the system health and performance.

#### Request

```
GET /api/system/monitor
```

- No request parameters are required.

## Response

Upon successful monitoring request, the server responds with a status code of **200 OK** and returns system health and performance metrics.

```
HTTP/1.1 200 OK
Content-Type: application/json

{
  "cpuUsage": "35%",
  "memoryUsage": "50%",
  "diskUsage": "70%",
  "networkTraffic": {
    "incoming": "1000KB/s",
    "outgoing": "800KB/s"
  }
}
```

## Rate Limit [POST /api/system/rate-limit]

Apply rate limiting to a specific endpoint or operation.

### Request

```
POST /api/system/rate-limit
Content-Type: application/json

{
  "endpoint": "/api/content/create",
  "limit": 100,
  "interval": "1h"
}
```

- **endpoint**: (Required) The endpoint or operation to apply rate limiting to.
- **limit**: (Required) The maximum number of requests allowed within the specified interval.
- **interval**: (Required) The duration of the rate limiting interval (e.g., "1h" for 1 hour).

## Response

Upon successful application of rate limiting, the server responds with a status code of **204 No Content**.

```
HTTP/1.1 204 No Content
```

Content-Length: 0