

Event Notification API Specification

Smart City Infrastructure

Overview

This API allows integration and notification of real-time events across various Smart City infrastructure components, including sensors, cameras, environmental monitors, and emergency services.

Authentication

- API key passed in `X-API-Key` HTTP header.

Endpoints

POST `/api/v1/events/notify`

Submit a new event notification.

Header	Type	Description
X-API-Key	string	API key for authorization

Request JSON body:

```
{
  "eventType": "traffic_incident",
  "timestamp": "2024-06-10T14:30:00Z",
  "location": {
    "latitude": 40.712776,
    "longitude": -74.005974
  },
  "severity": "high",
  "source": "road_sensor_24",
  "description": "Accident detected on Main St and 11th Ave"
}
```

Response: 201 Created

```
{
  "eventId": "evt_9827381",
  "status": "received"
}
```

GET `/api/v1/events/latest`

Retrieve the most recent event notifications.

Query Parameter	Type	Description
limit	integer	Number of events to return (default: 10, max: 50)

Response: 200 OK

```
[
  {
    "eventId": "evt_9827381",
    "eventType": "traffic_incident",
    "timestamp": "2024-06-10T14:30:00Z",
    "location": { "latitude": 40.712776, "longitude": -74.005974 },
    "severity": "high",
    "source": "road_sensor_24",
    "description": "Accident detected on Main St and 11th Ave"
  }
]
```

Event Types

- traffic_incident
- public_alert
- device_failure
- environmental_hazard
- maintenance_required

Errors

Status Code	Message
400	Invalid request
401	Invalid API key
500	Internal server error

Contact

For questions or access, contact: api-support@smartcity.example.com