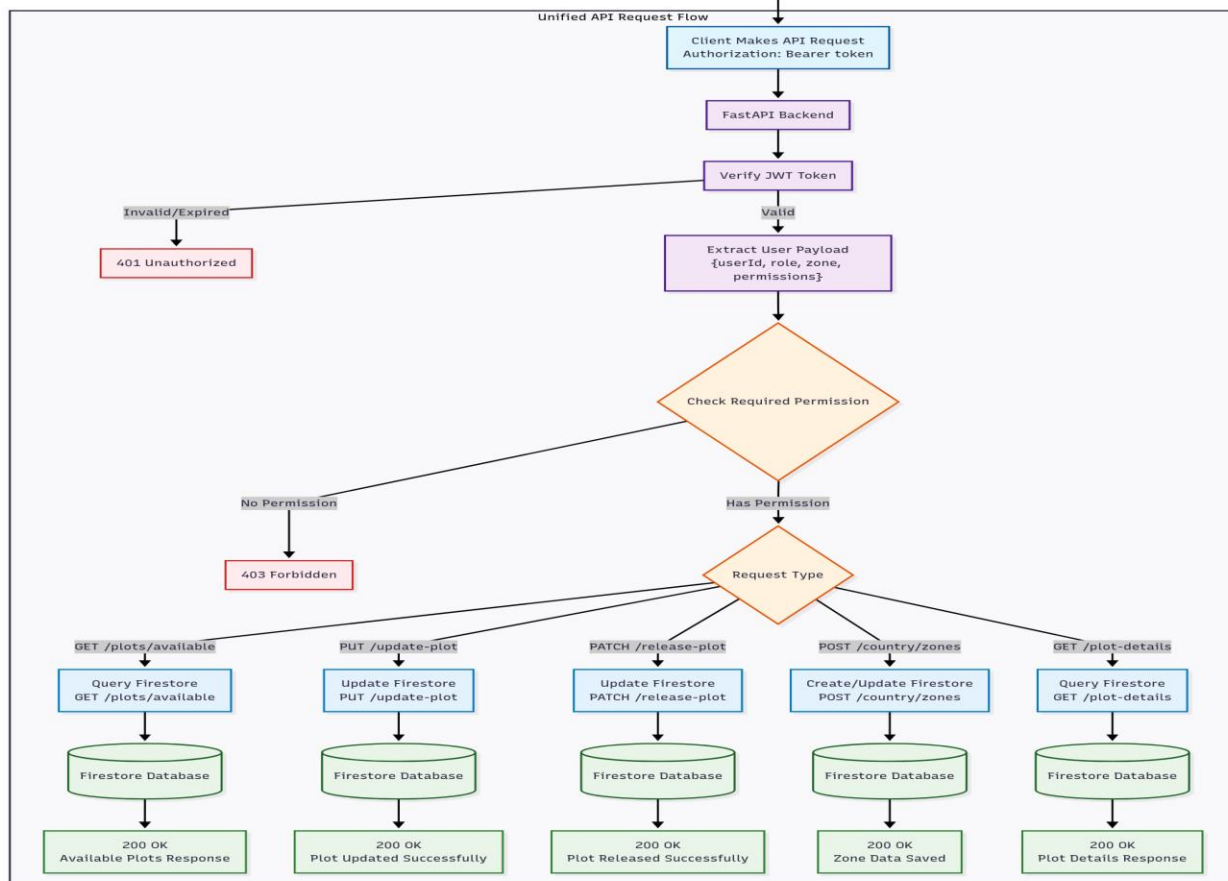
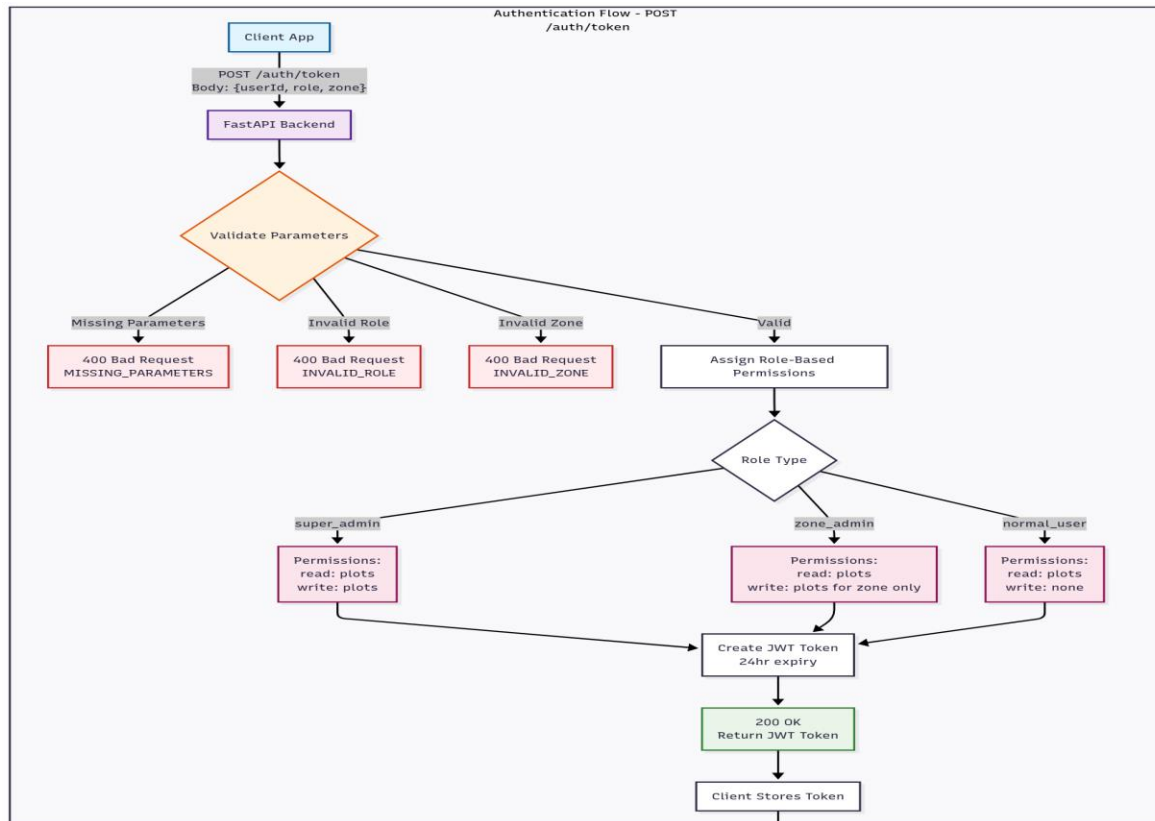


Arise One Platform (AOP) API Documentation



1. Auth Api (Authentication Token Generation)

Purpose: Generate JWT token for API access based on user credentials

Method: POST

Endpoint: /auth/token

Request Body (all required):

- userId (string): User identifier
- role (string): User role (super_admin, zone_admin, normal_user)
- zone (string): Zone/Country name

Request Example

```
{  
  "userId": "user_001",  
  "role": "zone_admin",  
  "zone": "Gabon"  
}
```

Authorization: None required

Response (200 OK)

```
{  
  "token":  
  "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpYXQiOiJlE3MTkwMDAwMDAsImV4cCI6MTcxO  
  TAwMzYwMCwidXNlcklkIjoidXNlcl8wMDEiLCJyb2xlIjoiem9uZV9hZG1pbilSnvbmUiOiJHY  
  WJvbilSnBlcm1pc3Npb25zIjpw7InJlYWQiOiIscGxvdHMiLCJ6b25lcylsInJlcG9ydHMiXSwid3Jp  
  dGUiOiIscGxvdHMiLCJ6b25lcylJdfX0.signature_here"  
}
```

Response (400 Bad Request)

```
{  
  "error": "INVALID_ROLE",  
  "message": "Role must be: super_admin, zone_admin, or normal_user"
```

```
}
```

Response (400 Bad Request)

```
{  
  "error": "INVALID_ZONE",  
  "message": "Invalid zone provided"  
}
```

Response (400 Bad Request)

```
{  
  "error": "MISSING_PARAMETERS",  
  "message": "userId, role, and zone are required"  
}
```

Message Elements - Request Body

Element	Data Type	Length	Mandatory/Optional	Description
userId	String	N/A	Mandatory	User identifier
role	String	N/A	Mandatory	User role (super_admin, zone_admin, normal_user)
zone	String	N/A	Mandatory	Zone/Country name

Message Elements - Response (Success)

Element	Data Type	Length	Mandatory/Optional	Description
token	String	N/A	Mandatory	JWT authentication token

Error Responses

Response (400 Bad Request)

```
{  
  "error": "INVALID_ROLE",  
  "message": "Role must be: super_admin, zone_admin, or normal_user"  
}
```

Response (400 Bad Request)

```
{  
  "error": "INVALID_ZONE",  
  "message": "Invalid zone provided"  
}
```

Response (400 Bad Request)

```
{  
  "error": "MISSING_PARAMETERS",  
  "message": "userId, role, and zone are required"  
}
```

1.2 JWT Token Structure

Header

```
{  
  "alg": "HS256",  
  "typ": "JWT"  
}
```

Payload (decoded content)

```
{  
  "iat": 1719000000,
```

```
"exp": 1719003600,  
"userId": "user_001",  
"role": "zone_admin",  
"zone": "Gabon",  
"permissions": {  
  "read": ["plots", "zones"],  
  "write": ["plots", "zones"]  
}  
}
```

Claims Description

- iat: Token issued at time (Unix timestamp)
- exp: Token expiration time (Unix timestamp) - 24 hour from issue
- userId: User identifier from request
- role: User role from request
- zone: Zone/Country from request
- permissions: Auto-assigned based on role

1.3 Role-Based Permissions

super_admin

- read: ["plots"]
- write: ["plots"]

zone_admin

- read: ["plots"]
- write: ["plots"] // for particular zone only

normal_user

- read: ["plots"]
- write: []

1.4. Using Generated Token

For subsequent API calls, include token in Authorization header:

Header Format

Authorization: Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9...

Example API Call

GET /plots/available?country=Gabon&zoneCode=GSEZ&category=Residential
Authorization: Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9...

2. Available Plots Retrieval

Purpose: Populate the "Available Plots" dropdown during customer lead registration.

Method: GET

Endpoint: /plots/available

Query Parameters (all required):

- country (string): country name - Code
- zoneCode (string): Zone identifier
- category (string): Plot category (e.g., Residential, Commercial)
- phase (string): Development phase (currently don't have)

Request Example

/plots/available?country=Gabon&zoneCode=GSEZ&category=Residential&phase=2

Authorization:

Bearer <token>

Response (200 OK)

```
{
  "plots": [
    {
      "plot": "Block A-12",
      "plotStatus": "Available",
      "category": "Residential",
      "phase": "2",
      "areaInSqm": 250.5,
      "areaInHa": 0.025
    }
  ]
}
```

Message Elements - Query Parameters

Element	Data Type	Length	Mandatory/Optional	Description
country	String	N/A	Mandatory	Country name/code
zoneCode	String	N/A	Mandatory	Zone identifier
category	String	N/A	Mandatory	Plot category (Residential, Commercial)
phase	String	N/A	Mandatory	Development phase

Message Elements - Response (Success)

Element	Data Type	Length	Mandatory/Optional	Description
plot	String	N/A	Mandatory	Plot identifier
plotStatus	String	N/A	Mandatory	Current plot status
category	String	N/A	Mandatory	Plot category
phase	String	N/A	Mandatory	Development phase
areaInSqm	Number (Float)	N/A	Mandatory	Area in square meters
areaInHa	Number (Float)	N/A	Mandatory	Area in hectares

Error Responses

Response (401 Unauthorized)

```
{
  "error": "UNAUTHORIZED",
  "message": "Invalid or missing authorization token"
}
```



```
}
```

Response (400 Bad Request)

```
{  
  "error": "INVALID_PARAMETERS",  
  "message": "Missing required query parameters"  
}
```

Response (404 Not Found)

```
{  
  "error": "NOT_FOUND",  
  "message": "No plots found for specified criteria"  
}
```

3. Plot Update

Purpose: Synchronize plot metadata and reflect in UI

Method: PUT

Endpoint: /update-plot

Request Body

```
{  
  "country": "Gabon",  
  "zoneCode": "GSEZ",  
  "phase": "2",  
  "plotName/plotNumber": "Block A-12",  
  "companyName": "",  
  "sector": "Timber",  
  "activity": "furniture",  
  "plotStatus": "Occupied",  
}
```

```
"operationalStatus": "Active",  
"remark": "East facing plot", // optional  
"logo": "url"           // optional  
}
```

Authorization:

Bearer <token>

Responses

- 200 OK: { "message": "Plot A-12 updated successfully." }

Message Elements - Request Body

Element	Data Type	Length	Mandatory/Optional	Description
country	String	N/A	Mandatory	Country name
zoneCode	String	N/A	Mandatory	Zone identifier
phase	String	N/A	Mandatory	Development phase
plotName/plotNumber	String	N/A	Mandatory	Plot name or number
companyName	String	N/A	Mandatory	Company name
sector	String	N/A	Mandatory	Business sector
activity	String	N/A	Mandatory	Business activity
plotStatus	String	N/A	Mandatory	Plot status
operationalStatus	String	N/A	Mandatory	Operational status
remark	String	N/A	Optional	Additional remarks
logo	String (URL)	N/A	Optional	Company logo URL

Message Elements - Response (Success)

Element	Data Type	Length	Mandatory/Optional	Description
message	String	N/A	Mandatory	Success confirmation message

Error Responses

Response (401 Unauthorized)

```
{  
  "error": "UNAUTHORIZED",  
  "message": "Invalid or missing authorization token"  
}
```

Response (403 Forbidden)

```
{  
  "error": "FORBIDDEN",  
  "message": "Insufficient permissions to update plot"  
}
```

Response (400 Bad Request)

```
{  
  "error": "INVALID_PLOT",  
  "message": "Plot not found or invalid plot identifier"  
}
```

Response (400 Bad Request)

```
{  
  "error": "MISSING_PARAMETERS",  
  "message": "Required parameters missing"  
}
```

Response (400 Bad Request)

```
{  
  "error": "VALIDATION_ERROR",  
  "message": "Invalid data format or values"  
}
```

4. Plot Release

Purpose: Mark a plot as Available when released

Method: PATCH

Endpoint: /release-plot

Request Body

```
{  
  "country": "Benin",  
  "zoneCode": "GDIZ",  
  "plotStatus": "available",  
  "plotNumber/plotName": "Block A-12"  
}
```

Authorization:

Bearer <token>

Behavior

- Sets plotStatus to 'Available'

Response

- 200 OK: { "message": "Block Plot A-12 released and marked Available." }

Message Elements - Request Body

Element	Data Type	Length	Mandatory/Optional	Description
country	String	N/A	Mandatory	Country name
zoneCode	String	N/A	Mandatory	Zone identifier
plotStatus	String	N/A	Mandatory	Plot status (should be 'available')
plotNumber/plotName	String	N/A	Mandatory	Plot number or name

Message Elements - Response (Success)

Element	Data Type	Length	Mandatory/Optional	Description
message	String	N/A	Mandatory	Success confirmation message

Error Responses

Response (401 Unauthorized)

```
{  
  "error": "UNAUTHORIZED",  
  "message": "Invalid or missing authorization token"  
}
```

Response (403 Forbidden)

```
{  
  "error": "FORBIDDEN",  
  "message": "Insufficient permissions to release plot"  
}
```

Response (400 Bad Request)

```
{
  "error": "INVALID_PLOT",
  "message": "Plot not found or invalid plot identifier"
}
```

Response (400 Bad Request)

```
{
  "error": "MISSING_PARAMETERS",
  "message": "Required parameters missing"
}
```

Response (400 Bad Request)

```
{
  "error": "INVALID_STATUS",
  "message": "Invalid plot status for release operation"
}
```

5. Zone Master

Purpose: Single source of truth for zone metadata

Method: POST

Endpoint: /country/zones

Request Body:

```
{
  "country": "Gabon",
  "zoneCode": "GSEZ",
  "phase": "1",
}
```

```
"landArea": "120 Ha"
}
```

Responses

- 200 OK:

```
{
  "country": "Gabon",
  "zoneCode": "GSEZ",
  "phase": "1",
  "landArea": "120 Ha"
}
```

Message Elements - Request Body

Element	Data Type	Length	Mandatory/Optional	Description
country	String	N/A	Mandatory	Country name
zoneCode	String	N/A	Mandatory	Zone identifier
phase	String	N/A	Mandatory	Development phase
landArea	String	N/A	Mandatory	Land area (with unit, e.g., "120 Ha")

Message Elements - Response (Success)

Element	Data Type	Length	Mandatory/Optional	Description
country	String	N/A	Mandatory	Country name
zoneCode	String	N/A	Mandatory	Zone identifier
phase	String	N/A	Mandatory	Development phase
landArea	String	N/A	Mandatory	Land area with unit

Error Responses

Response (401 Unauthorized)

```
{  
  "error": "UNAUTHORIZED",  
  "message": "Invalid or missing authorization token"  
}
```

Response (403 Forbidden)

```
{  
  "error": "FORBIDDEN",  
  "message": "Insufficient permissions to create/update zone"  
}
```

Response (409 Conflict)

```
{  
  "error": "DUPLICATE_ZONE",  
  "message": "Zone already exists"  
}
```

Response (400 Bad Request)

```
{  
  "error": "MISSING_PARAMETERS",  
  "message": "Required parameters missing"  
}
```

Response (400 Bad Request)

```
{  
  "error": "VALIDATION_ERROR",  
  "message": "Invalid data format or values"  
}
```


6. Open API

Purpose: Third-party consumable endpoint

Method: GET

Endpoint: /plot-details?country=Gabon&zoneCode=GSEZ

Query Parameters:

- country (string, required)
- zoneCode (string, required)
- phase (string, optional)
- category (string, optional)

Response (200 OK)

```
{
  "metadata": {
    "country": "Gabon",
    "zoneCode": "GSEZ",
    "phase": 1,
    "category": null
  },
  "plots": [
    {
      "plotName": "Block A-12",
      "category": "Residential",
      "areaInHa": 250.5,
      "areaInSqm": 20.5,
      "sector": "Timber",
      "activity": "furniture",
      "plotStatus": "Available",
      "operationalStatus": "Pending",
      "logo": "example.png",
      "remarks": ""
    }
  ]
}
```

```
}
```

Message Elements - Query Parameters

Element	Data Type	Length	Mandatory/Optional	Description
country	String	N/A	Mandatory	Country name
zoneCode	String	N/A	Mandatory	Zone identifier
phase	String	N/A	Optional	Development phase
category	String	N/A	Optional	Plot category filter

Message Elements - Response (Success)

Element	Data Type	Length	Mandatory/Optional	Description
metadata	Object	N/A	Mandatory	Request metadata
metadata.country	String	N/A	Mandatory	Country name
metadata.zoneCode	String	N/A	Mandatory	Zone identifier
metadata.phase	Number	N/A	Mandatory	Development phase or null
metadata.category	String	N/A	Mandatory	Category filter or null
plots	Array	N/A	Mandatory	Array of plot details
plots[].plotName	String	N/A	Mandatory	Plot name
plots[].category	String	N/A	Mandatory	Plot category
plots[].areaInHa	Number (Float)	N/A	Mandatory	Area in hectares
plots[].areaInSqm	Number (Float)	N/A	Mandatory	Area in square meters
plots[].sector	String	N/A	Mandatory	Business sector
plots[].activity	String	N/A	Mandatory	Business activity
plots[].plotStatus	String	N/A	Mandatory	Current plot status
plots[].operationalStatus	String	N/A	Mandatory	Operational status
plots[].logo	String	N/A	Optional	Company logo filename
plots[].remarks	String	N/A	Optional	Additional remarks

Error Responses

Response (400 Bad Request)

```
{  
  "error": "INVALID_PARAMETERS",  
  "message": "Missing required query parameters (country, zoneCode)"
```

```
}
```

Response (404 Not Found)

```
{  
  "error": "NOT_FOUND",  
  "message": "No data found for specified criteria"  
}
```

Response (500 Internal Server Error)

```
{  
  "error": "INTERNAL_ERROR",  
  "message": "Internal server error"  
}
```

Common Authorization Header Format

All authenticated endpoints require:

Authorization: Bearer <JWT_TOKEN>

Common HTTP Status Codes

- **200 OK:** Request successful
- **400 Bad Request:** Invalid request parameters or data
- **401 Unauthorized:** Invalid or missing authentication
- **403 Forbidden:** Insufficient permissions
- **404 Not Found:** Resource not found
- **409 Conflict:** Resource already exists
- **500 Internal Server Error:** Server-side error

User Management Endpoints

7. Add New User

Purpose: Create a new user in the system with specified role and zone access

Method: POST

Endpoint: /create_user

Request Body (all required):

```
{  
  "email": "gabon@user.com",  
  "role": "zone_admin",  
  "zone": "Gabon"  
}
```

Authorization:

Bearer <token>

Response (201 Created)

```
{  
  "message": "User created successfully",  
  "user": {  
    "email": "john.doe@example.com",  
    "role": "zone_admin",  
    "zone": "Gabon",  
    "createdDate": "2025-07-02T10:30:00Z"  
  }  
}
```

Response (400 Bad Request)

```
{  
  "error": "INVALID_ROLE",
```

```
"message": "Role must be: super_admin, zone_admin, or normal_user"
}
```

Response (400 Bad Request)

```
{
  "error": "INVALID_ZONE",
  "message": "Invalid zone provided"
}
```

Response (409 Conflict)

```
{
  "error": "USER_EXISTS",
  "message": "User with this email already exists"
}
```

Response (400 Bad Request)

```
{
  "error": "MISSING_PARAMETERS",
  "message": "email, role, and zone are required"
}
```

Message Elements - Request Body

Element	Data Type	Length	Mandatory/Optional	Description
email	String	N/A	Mandatory	User email address (unique identifier)
role	String	N/A	Mandatory	User role (super_admin, zone_admin, normal_user)
zone	String	N/A	Mandatory	Zone/Country assignment

Message Elements - Response (Success)

Element	Data Type	Length	Mandatory/Optional	Description
message	String	N/A	Mandatory	Success confirmation message

user	Object	N/A	Mandatory	Created user details
user.email	String	N/A	Mandatory	User email address
user.role	String	N/A	Mandatory	User role
user.zone	String	N/A	Mandatory	Zone assignment
user.createdDate	String (ISO 8601)	N/A	Mandatory	User creation timestamp

Error Responses

Response (401 Unauthorized)

```
{
  "error": "UNAUTHORIZED",
  "message": "Invalid or missing authorization token"
}
```

Response (403 Forbidden)

```
{
  "error": "FORBIDDEN",
  "message": "Insufficient permissions to create user. Super admin access required."
}
```

Response (400 Bad Request)

```
{
  "error": "INVALID_EMAIL",
  "message": "Invalid email format"
}
```

8. Update User

Purpose: Update existing user role and zone assignment

Method: PUT

Endpoint: /update_user

Request Body:

```
{  
  "email": "benin@user.com",  
  "role": "normal_user",  
  "zone": "Benin"  
}
```

Authorization:

Bearer <token>

Response (200 OK)

```
{  
  "message": "User benin@user.com updated successfully",  
  "user": {  
    "email": " benin@user.com",  
    "role": "normal_user",  
    "zone": "Benin",  
    "lastModified": "2025-07-02T14:25:00Z"  
  }  
}
```

Response (404 Not Found)

```
{  
  "error": "USER_NOT_FOUND",  
  "message": "User with specified email not found"  
}
```

Response (400 Bad Request)

```
{  
  "error": "MISSING_EMAIL",
```

```
"message": "email is required for update operation"
}
```

Message Elements - Request Body

Element	Data Type	Length	Mandatory/Optional	Description
email	String	N/A	Mandatory	User email address to update
role	String	N/A	Optional	Updated user role
zone	String	N/A	Optional	Updated zone assignment

Message Elements - Response (Success)

Element	Data Type	Length	Mandatory/Optional	Description
message	String	N/A	Mandatory	Success confirmation message
user	Object	N/A	Mandatory	Updated user details
user.email	String	N/A	Mandatory	User email address
user.role	String	N/A	Mandatory	User role
user.zone	String	N/A	Mandatory	Zone assignment
user.lastModified	String (ISO 8601)	N/A	Mandatory	Last modification timestamp

Error Responses

Response (401 Unauthorized)

```
{
  "error": "UNAUTHORIZED",
  "message": "Invalid or missing authorization token"
}
```

Response (403 Forbidden)

```
{
  "error": "FORBIDDEN",
  "message": "Insufficient permissions to update this user"
}
```


Response (400 Bad Request)

```
{  
  "error": "INVALID_ROLE",  
  "message": "Role must be: super_admin, zone_admin, or normal_user"  
}
```

Response (400 Bad Request)

```
{  
  "error": "INVALID_ZONE",  
  "message": "Invalid zone provided"  
}
```

Response (400 Bad Request)

```
{  
  "error": "INVALID_EMAIL",  
  "message": "Invalid email format"  
}
```

Response (400 Bad Request)

```
{  
  "error": "VALIDATION_ERROR",  
  "message": "Invalid data format or values"  
}
```