

Subscription Management API User Manual

Overview

This manual provides guidance for third-party developers on managing subscriptions within the Diana ecosystem. The subscription system operates on two levels:

1. **Ecosystem Subscriptions (Plans)** - Templates defined at the ecosystem level that specify available features and resources
2. **Company Subscriptions** - Active subscriptions assigned to specific companies based on ecosystem plans

Core Concepts

Ecosystem Subscriptions (Plans)

Ecosystem subscriptions serve as templates that define:

- Available features and permissions
- Accessible resources (flows, assets, etc.)
- Default configurations
- Resource-specific permissions

Plans are managed through the **EnvironmentController** and exist at the ecosystem level, independent of any specific company.

Company Subscriptions

Company subscriptions are active instances of ecosystem plans assigned to specific companies. They include:

- Reference to the parent plan (`PlanId`)
- Company identifier (`CompanyId`)
- Validity period (`ValidFrom` , `ValidTo`)
- Current status (Active, Archived, etc.)

Company subscriptions are managed through the **DianaSubscriptionController**.

Data Structures

DianaSubscriptionPoco_v2

The primary data transfer object for subscriptions:

```
{
  "id": "123e4567-e89b-12d3-a456-426614174000",
  "planId": "987fcdeb-51a2-43d7-9876-543210fedcba",
  "companyId": "456e7890-e89b-12d3-a456-426614174000",
  "environmentId": "789abcde-e89b-12d3-a456-426614174000",
  "displayName": "Standard Plan",
  "description": "Basic access to all flows",
  "status": "Active",
  "validFrom": "2024-01-01T00:00:00Z",
  "validTo": "2024-12-31T23:59:59Z",
  "revision": 1,
  "signature": "base64-encoded-signature",
  "features": {
    "baseFeatures": ["workflow", "assets", "reporting"],
    "advancedFeatures": []
  },
  "resources": [
    {
      "resourceId": "111e4567-e89b-12d3-a456-426614174000",
      "resourceType": "Flow",
      "permissions": ["read", "execute", "update"]
    },
    {
      "resourceId": "222e4567-e89b-12d3-a456-426614174000",
      "resourceType": "Asset",
      "permissions": ["read", "create", "update", "delete"]
    }
  ]
}
```

Key Properties:

- `id` - Unique subscription identifier
- `planId` - Reference to the source ecosystem plan
- `companyId` - Company this subscription is assigned to
- `environmentId` - The ecosystem this subscription belongs to
- `displayName` - Human-readable name for the subscription
- `description` - Detailed description of subscription features
- `status` - Current status: `Active` , `Archived` , `Expired`
- `validFrom` - Subscription start date (ISO 8601 format)
- `validTo` - Subscription expiration date (ISO 8601 format)
- `revision` - Version number for tracking updates
- `signature` - Digital signature for validation (optional)
- `features` - Feature flags and permissions object
- `resources` - Array of accessible resources with permissions

SubscriptionResource

Defines resource-level permissions:

```
{
  "resourceId": "111e4567-e89b-12d3-a456-426614174000",
  "resourceType": "Flow",
  "permissions": ["read", "execute", "update"]
}
```

Properties:

- `resourceId` - Unique identifier for the resource
- `resourceType` - Type of resource: `Flow` , `Asset` , `Feature` , `Report` , `Dashboard`
- `permissions` - Array of permission strings (see Permission Model section)

PlanRequest

Request object for creating subscriptions from plans:

```
{
  "planId": "987fcdeb-51a2-43d7-9876-543210fedcba",
  "companyId": "456e7890-e89b-12d3-a456-426614174000",
  "durationDays": 365
}
```

Properties:

- `planId` - The ecosystem plan to instantiate
- `companyId` - Target company for the subscription
- `durationDays` - Subscription duration in days (e.g., 30, 365)

GetSubscriptionsRequest

Query parameters for filtering subscriptions:

```
{
  "companyId": "456e7890-e89b-12d3-a456-426614174000",
  "companyName": "Acme Corporation"
}
```

Properties:

- `companyId` (optional) - Filter by company ID (requires Ecosystem Orchestrator role)
- `companyName` (optional) - Filter by company name (requires Ecosystem Orchestrator role)

API Operations

Managing Ecosystem Plans

Get All Plans for Ecosystem

Retrieves all plans available in the current ecosystem.

Endpoint: `GET /api/v3/environment/{ecosystem}/subscriptions`

cURL Example:

```
curl -X GET "<https://api.rise-x.io/api/v3/environment/my-ecosystem/subscriptions>" \\  
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \\  
-H "Content-Type: application/json"
```

Response:

```
{  
  "plans": [  
    {  
      "id": "987fcdeb-51a2-43d7-9876-543210fedcba",  
      "environmentId": "789abcde-e89b-12d3-a456-426614174000",  
      "displayName": "Standard Plan",  
      "description": "Basic access to all flows",  
      "status": "Active",  
      "features": {  
        "baseFeatures": ["workflow", "assets"]  
      },  
      "resources": [  
        {  
          "resourceId": "111e4567-e89b-12d3-a456-426614174000",  
          "resourceType": "Flow",  
          "permissions": ["read", "execute"]  
        }  
      ]  
    },  
    {  
      "id": "111fcdeb-51a2-43d7-9876-543210fedcba",  
      "environmentId": "789abcde-e89b-12d3-a456-426614174000",  
      "displayName": "Premium Plan",  
      "description": "Full access with advanced features",  
      "status": "Active",  
      "features": {  
        "baseFeatures": ["workflow", "assets", "reporting"],  
        "advancedFeatures": ["analytics", "customization"]  
      },  
      "resources": [  
        {
```

```
    "resourceId": "111e4567-e89b-12d3-a456-426614174000",
    "resourceType": "Flow",
    "permissions": ["read", "execute", "update", "delete"]
  }
]
}
]
```

Managing Company Subscriptions

Get All Subscriptions

Retrieves subscriptions based on user permissions.

Endpoint: `GET /api/v3/subscription`

Query Parameters:

- `companyId` (optional) - Filter by company ID (requires Ecosystem Orchestrator role)
- `companyName` (optional) - Filter by company name (requires Ecosystem Orchestrator role)

cURL Examples:

Get subscriptions for current user's company:

```
curl -X GET "<https://api.rise-x.io/api/v3/subscription>" \\  
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \\  
-H "Content-Type: application/json"
```

Get subscriptions for specific company (Orchestrator only):

```
curl -X GET "<https://api.rise-x.io/api/v3/subscription?companyId=456e78  
90-e89b-12d3-a456-426614174000>" \\  
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \\  
-H "Content-Type: application/json"
```

Filter by company name (Orchestrator only):

```
curl -X GET "<https://api.rise-x.io/api/v3/subscription?companyName=Acme%20Corporation>" \\  
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \\  
-H "Content-Type: application/json"
```

Response:

```
[  
  {  
    "id": "123e4567-e89b-12d3-a456-426614174000",  
    "planId": "987fcdeb-51a2-43d7-9876-543210fedcba",  
    "companyId": "456e7890-e89b-12d3-a456-426614174000",  
    "environmentId": "789abcde-e89b-12d3-a456-426614174000",  
    "displayName": "Standard Plan",  
    "description": "Basic access",  
    "status": "Active",  
    "validFrom": "2024-01-01T00:00:00Z",  
    "validTo": "2024-12-31T23:59:59Z",  
    "revision": 1,  
    "features": {  
      "baseFeatures": ["workflow", "assets"]  
    },  
    "resources": [  
      {  
        "resourceId": "111e4567-e89b-12d3-a456-426614174000",  
        "resourceType": "Flow",  
        "permissions": ["read", "execute"]  
      }  
    ]  
  }  
]
```

Permissions:

- Regular users: Returns subscriptions for their own company
- Ecosystem Orchestrators: Can query any company's subscriptions

Get Subscription by ID

Retrieves a specific subscription by its ID.

Endpoint: `GET /api/v3/subscription/{subscriptionId}`

cURL Example:

```
curl -X GET "<https://api.rise-x.io/api/v3/subscription/123e4567-e89b-12d3-a456-426614174000>" \\  
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \\  
-H "Content-Type: application/json"
```

Response:

```
{  
  "id": "123e4567-e89b-12d3-a456-426614174000",  
  "planId": "987fcdeb-51a2-43d7-9876-543210fedcba",  
  "companyId": "456e7890-e89b-12d3-a456-426614174000",  
  "environmentId": "789abcde-e89b-12d3-a456-426614174000",  
  "displayName": "Standard Plan",  
  "description": "Basic access to all flows",  
  "status": "Active",  
  "validFrom": "2024-01-01T00:00:00Z",  
  "validTo": "2024-12-31T23:59:59Z",  
  "revision": 1,  
  "features": {  
    "baseFeatures": ["workflow", "assets"]  
  },  
  "resources": [  
    {  
      "resourceId": "111e4567-e89b-12d3-a456-426614174000",  
      "resourceType": "Flow",  
      "permissions": ["read", "execute"]  
    }  
  ]  
}
```

Required Role: Ecosystem Orchestrator

Get Subscription by Name

Retrieves a subscription by its display name.

Endpoint: `GET /api/v3/subscription/name/{subscriptionName}`

cURL Example:

```
curl -X GET "<https://api.rise-x.io/api/v3/subscription/name/Standard%20Plan>" \\  
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \\  
-H "Content-Type: application/json"
```

Response:

```
{  
  "id": "123e4567-e89b-12d3-a456-426614174000",  
  "planId": "987fcdeb-51a2-43d7-9876-543210fedcba",  
  "companyId": "456e7890-e89b-12d3-a456-426614174000",  
  "environmentId": "789abcde-e89b-12d3-a456-426614174000",  
  "displayName": "Standard Plan",  
  "description": "Basic access to all flows",  
  "status": "Active",  
  "validFrom": "2024-01-01T00:00:00Z",  
  "validTo": "2024-12-31T23:59:59Z",  
  "revision": 1,  
  "features": {  
    "baseFeatures": ["workflow", "assets"]  
  },  
  "resources": []  
}
```

Required Role: Ecosystem Orchestrator

Assign Subscription to Company

Creates a new company subscription from an ecosystem plan.

Endpoint: `POST /api/v3/subscription/assign`

Request Body:

```
{  
  "planId": "987fcdeb-51a2-43d7-9876-543210fedcba",  
}
```

```
"companyId": "456e7890-e89b-12d3-a456-426614174000",
"durationDays": 365
}
```

cURL Example:

```
curl -X POST "<https://api.rise-x.io/api/v3/subscription/assign>" \\  
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \\  
-H "Content-Type: application/json" \\  
-d '{  
  "planId": "987fcdeb-51a2-43d7-9876-543210fedcba",  
  "companyId": "456e7890-e89b-12d3-a456-426614174000",  
  "durationDays": 365  
'
```

Response:

```
{  
  "id": "new-subscription-id",  
  "planId": "987fcdeb-51a2-43d7-9876-543210fedcba",  
  "companyId": "456e7890-e89b-12d3-a456-426614174000",  
  "environmentId": "789abcde-e89b-12d3-a456-426614174000",  
  "displayName": "Standard Plan",  
  "description": "Basic access to all flows",  
  "status": "Active",  
  "validFrom": "2024-10-23T00:00:00Z",  
  "validTo": "2025-10-23T23:59:59Z",  
  "revision": 1,  
  "features": {  
    "baseFeatures": ["workflow", "assets"]  
  },  
  "resources": [  
    {  
      "resourceId": "111e4567-e89b-12d3-a456-426614174000",  
      "resourceType": "Flow",  
      "permissions": ["read", "execute"]  
    }  
  ]  
}
```

```
]
}
```

Behavior:

- Validates the plan exists in the ecosystem
- Archives any existing active subscription for the same plan
- Creates new subscription with validity period based on `durationDays`
- Sets `validFrom` to current date and `validTo` to current date + duration

Required Role: Ecosystem Orchestrator

Update Subscription

Updates an existing company subscription.

Endpoint: `PATCH /api/v3/subscription/{subscriptionId}`

Request Body:

```
{
  "id": "123e4567-e89b-12d3-a456-426614174000",
  "displayName": "Updated Plan Name",
  "description": "Updated description",
  "status": "Active",
  "features": {
    "baseFeatures": ["workflow", "assets", "reporting"]
  },
  "resources": [
    {
      "resourceId": "111e4567-e89b-12d3-a456-426614174000",
      "resourceType": "Flow",
      "permissions": ["read", "execute", "update"]
    },
    {
      "resourceId": "222e4567-e89b-12d3-a456-426614174000",
      "resourceType": "Asset",
      "permissions": ["read", "create"]
    }
  ]
}
```

```
]
}
```

cURL Example:

```
curl -X PATCH "<https://api.rise-x.io/api/v3/subscription/123e4567-e89b-1
2d3-a456-426614174000>" \
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \
-H "Content-Type: application/json" \
-d '{
  "id": "123e4567-e89b-12d3-a456-426614174000",
  "displayName": "Premium Plan",
  "description": "Updated with premium features",
  "resources": [
    {
      "resourceId": "111e4567-e89b-12d3-a456-426614174000",
      "resourceType": "Flow",
      "permissions": ["read", "execute", "update", "delete"]
    }
  ]
}'
```

Response:

```
{
  "id": "123e4567-e89b-12d3-a456-426614174000",
  "planId": "987fcdeb-51a2-43d7-9876-543210fedcba",
  "companyId": "456e7890-e89b-12d3-a456-426614174000",
  "environmentId": "789abcde-e89b-12d3-a456-426614174000",
  "displayName": "Premium Plan",
  "description": "Updated with premium features",
  "status": "Active",
  "validFrom": "2024-01-01T00:00:00Z",
  "validTo": "2024-12-31T23:59:59Z",
  "revision": 2,
  "features": {
    "baseFeatures": ["workflow", "assets", "reporting"]
  },
}
```

```

"resources": [
  {
    "resourceId": "111e4567-e89b-12d3-a456-426614174000",
    "resourceType": "Flow",
    "permissions": ["read", "execute", "update", "delete"]
  }
]
}

```

Required Role: Ecosystem Orchestrator

Archive Subscription

Archives (soft deletes) a company subscription by changing its status.

Endpoint: `DELETE /api/v3/subscription/{subscriptionId}`

cURL Example:

```

curl -X DELETE "<https://api.rise-x.io/api/v3/subscription/123e4567-e89b-12d3-a456-426614174000>" \
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \
-H "Content-Type: application/json"

```

Response:

```

{
  "id": "123e4567-e89b-12d3-a456-426614174000",
  "planId": "987fcdeb-51a2-43d7-9876-543210fedcba",
  "companyId": "456e7890-e89b-12d3-a456-426614174000",
  "environmentId": "789abcde-e89b-12d3-a456-426614174000",
  "displayName": "Standard Plan",
  "description": "Basic access to all flows",
  "status": "Archived",
  "validFrom": "2024-01-01T00:00:00Z",
  "validTo": "2024-12-31T23:59:59Z",
  "revision": 1,
  "features": {
    "baseFeatures": ["workflow", "assets"]
  },
}

```

```
"resources": []  
}
```

Required Role: Ecosystem Orchestrator

Note: This operation does not permanently delete the subscription; it marks it as archived, preventing further use while maintaining historical data.

Common Workflows

Creating and Assigning a Subscription

Step 1: Retrieve available ecosystem plans

```
curl -X GET "<https://api.rise-x.io/api/v3/environment/my-ecosystem/subscriptions>" \\  
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \\  
-H "Content-Type: application/json"
```

Step 2: Assign plan to company

```
curl -X POST "<https://api.rise-x.io/api/v3/subscription/assign>" \\  
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \\  
-H "Content-Type: application/json" \\  
-d '{  
  "planId": "987fcdeb-51a2-43d7-9876-543210fedcba",  
  "companyId": "456e7890-e89b-12d3-a456-426614174000",  
  "durationDays": 365  
'
```

Step 3: Verify assignment

```
curl -X GET "<https://api.rise-x.io/api/v3/subscription?companyId=456e7890-e89b-12d3-a456-426614174000>" \\  
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \\  
-H "Content-Type: application/json"
```

Updating Company Access

Step 1: Retrieve current subscription

```
curl -X GET "<https://api.rise-x.io/api/v3/subscription/name/Standard%20Plan>" \\  
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \\  
-H "Content-Type: application/json"
```

Step 2: Update resource permissions

```
curl -X PATCH "<https://api.rise-x.io/api/v3/subscription/123e4567-e89b-12d3-a456-426614174000>" \\  
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \\  
-H "Content-Type: application/json" \\  
-d '{  
  "id": "123e4567-e89b-12d3-a456-426614174000",  
  "resources": [  
    {  
      "resourceId": "111e4567-e89b-12d3-a456-426614174000",  
      "resourceType": "Flow",  
      "permissions": ["read", "execute", "update"]  
    }  
  ]  
'
```

Removing Company Access

```
curl -X DELETE "<https://api.rise-x.io/api/v3/subscription/123e4567-e89b-12d3-a456-426614174000>" \\  
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \\  
-H "Content-Type: application/json"
```

This archives the subscription, preventing future access while maintaining audit history.

Renewing an Expiring Subscription

Step 1: Check current subscription status

```
curl -X GET "<https://api.rise-x.io/api/v3/subscription/123e4567-e89b-12d3-a456-426614174000>" \\  
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \\  
-H "Content-Type: application/json"
```

```
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \\
-H "Content-Type: application/json"
```

Step 2: Create new subscription with same plan

```
curl -X POST "<https://api.rise-x.io/api/v3/subscription/assign>" \\
-H "Authorization: Bearer YOUR_ACCESS_TOKEN" \\
-H "Content-Type: application/json" \\
-d '{
  "planId": "987fcdeb-51a2-43d7-9876-543210fedcba",
  "companyId": "456e7890-e89b-12d3-a456-426614174000",
  "durationDays": 365
}'
```

The system will automatically archive the old subscription and create a new one.

Permission Model

User Roles

- **Regular User:** Can view subscriptions for their own company
- **Ecosystem Orchestrator:** Full access to view, create, update, and archive all subscriptions across all companies
- **Plan Owner:** Special permissions for ecosystem-level plan management operations

Resource Permissions

Common permission strings for the `permissions` array in resources:

Permission	Description
<code>read</code>	View resource data and configuration
<code>execute</code>	Run workflows or access functionality
<code>update</code>	Modify resource configuration
<code>delete</code>	Remove resources
<code>create</code>	Create new resource instances
<code>startworkflow</code>	Initiate new workflow instances

Permission	Description
<code>customiseworkflow</code>	Modify workflow definitions
<code>clone</code>	Duplicate existing resources
<code>export</code>	Export resource data
<code>import</code>	Import resource data

Resource Types

Type	Description
<code>Flow</code>	Workflow definitions and instances
<code>Asset</code>	Data entities and business objects
<code>Feature</code>	System features and modules
<code>Report</code>	Reporting and analytics
<code>Dashboard</code>	Visualization dashboards

Error Handling

Common HTTP Status Codes

Status Code	Description
<code>200 OK</code>	Successful request
<code>201 Created</code>	Resource successfully created
<code>400 Bad Request</code>	Invalid request data or missing required fields
<code>401 Unauthorized</code>	Missing or invalid authentication token
<code>403 Forbidden</code>	Insufficient permissions for requested operation
<code>404 Not Found</code>	Requested resource does not exist
<code>409 Conflict</code>	Resource conflict (e.g., duplicate subscription)
<code>500 Internal Server Error</code>	Server-side error occurred

Error Response Format

```
{
  "error": "Subscription not found",
  "code": "SUBSCRIPTION_NOT_FOUND",
  "details": "No active subscription found with ID: 123e4567-e89b-12d3-a4"
```

```
56-426614174000"  
}
```

Common Error Scenarios

Invalid Plan ID:

```
{  
  "error": "Plan does not exist",  
  "code": "INVALID_PLAN_ID",  
  "details": "The specified plan ID does not exist in this ecosystem"  
}
```

Insufficient Permissions:

```
{  
  "error": "Access denied",  
  "code": "FORBIDDEN",  
  "details": "Ecosystem Orchestrator role required for this operation"  
}
```

Expired Token:

```
{  
  "error": "Authentication failed",  
  "code": "TOKEN_EXPIRED",  
  "details": "Access token has expired. Please obtain a new token."  
}
```

Best Practices

1. Plan Design

Structure ecosystem plans with clear feature boundaries and resource groupings:

- Group related resources together
- Use descriptive display names

- Document permission requirements clearly
- Consider hierarchical plan structures (Basic → Standard → Premium)

2. Duration Management

Set appropriate `durationDays` based on licensing agreements:

- **Monthly subscriptions:** 30 days
- **Quarterly subscriptions:** 90 days
- **Annual subscriptions:** 365 days
- **Trial subscriptions:** 7-30 days

3. Status Tracking

Always check subscription status and validity before granting access:

```
# Check if subscription is active and not expired
if subscription.status == "Active" and subscription.validTo > currentDate:
    # Grant access
```

4. Archiving Strategy

Archive expired or replaced subscriptions rather than deleting:

- Maintains audit trails for compliance
- Preserves historical subscription data
- Allows for subscription history analysis

5. Batch Operations

When managing multiple subscriptions, use batch queries:

```
# Get all subscriptions for a company at once
curl -X GET "<https://api.rise-x.io/api/v3/subscription?companyId=456e78
90-e89b-12d3-a456-426614174000>" \
-H "Authorization: Bearer YOUR_ACCESS_TOKEN"
```

6. Error Handling

Implement robust error handling in your integration:

- Check HTTP status codes
- Parse error response bodies
- Implement retry logic for transient failures
- Log errors for troubleshooting

7. Security

- Store access tokens securely (never in source code)
- Use HTTPS for all API calls
- Implement token refresh logic
- Validate subscription signatures when provided

Additional Resources

- **Environment Management:** See [EnvironmentController](#) documentation for ecosystem-level operations
- **Company Management:** See [CompanyController](#) documentation for company data operations
- **Access Control:** See [AccessControlList](#) documentation for permission system details
- **Authentication:** See Authentication API documentation for token management

Support

For technical assistance, please contact:

- **Technical Support:** support@rise-x.io