

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"
```

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
customiseworkflow	Modify workflow definitions
clone	Duplicate existing resources
export	Export resource data
import	Import resource data

Resource Types

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

Error Handling

Common HTTP Status Codes

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