SailPoint

Developer Days2023

# Documentation Generator for IdentityIQ

Speaker: Menno Pieters;
title: Principal Solution Architect;
company: SailPoint;

# Why?

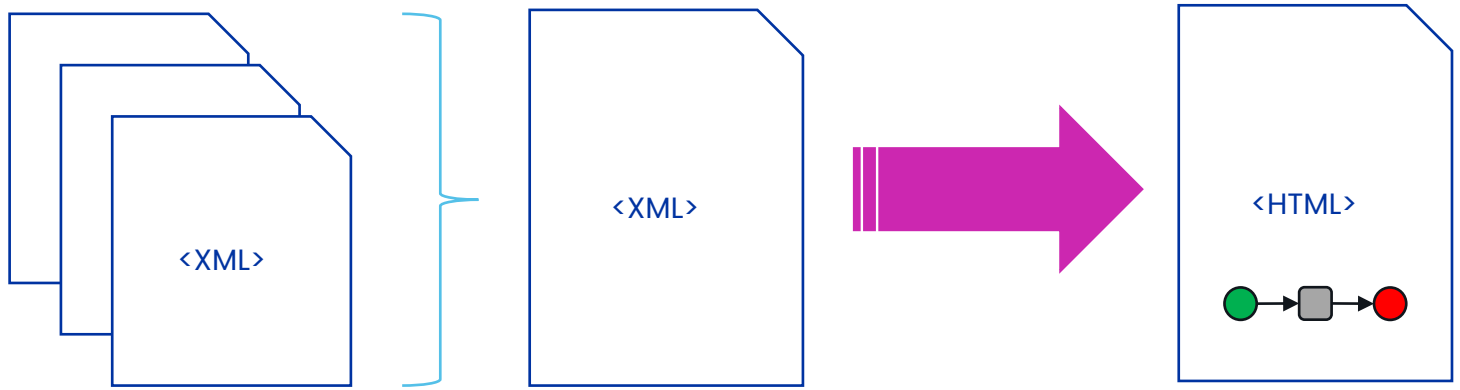
Documentation

- Isn’t exactly everyone’s biggest hobby
- Takes time
- Needs maintenance
- Is very important!

© 2023 SailPoint Technologies, Inc. All Rights Reserved.

# What Is It?

- A tool set to turn configuration into documentation




© 2023 SailPoint Technologies, Inc. All Rights Reserved.

# Features

- Create HTML document using XML-based configuration
- Document many IdentityIQ object types
  - Configurable: enable/disable types and change detail level
- Table of Contents
- Clickable links between related objects
- Generated, embedded SVG Images
  - Workflows: click on step for documentation
- Extensible

© 2023 SailPoint Technologies, Inc. All Rights Reserved.

# Objects Supported

- Application
- AuditConfig
- Bundle
- Configuration
- EmailTemplate
- Filter
- Form
- GroupFactory
- IdentitySelector
- IntegrationConfig
- LifeCycleEvent
- ManagedAttribute
- ObjectConfig
- PasswordPolicy
- Policy
- Population
- ProvisioningPlan
- QuickLink
- Rule
- CertificationDefinition
- TaskDefinition
- TaskSchedule
- Workflow
- Workgroup (Identity)

© 2023 SailPoint Technologies, Inc. All Rights Reserved.

# Examples - Applications

1. System Configuration
2. Object Configuration ▶
3. Applications ▼
    1. Application Statistics
    2. Contractors
    3. Employees
    4. SAP HR
4. Roles ▶
5. Workgroups ▶
6. Populations ▶
7. Group Factories ▶
8. Certifications ▶
9. Policies ▶
10. Business Processes ▶
11. Rules ▶
12. Email Templates ▶
13. Forms ▶

## 3.3. Application - Employees

| | |
|---|---|
| **Name** | Employees |
| **Type** | DelimitedFile |
| **Connector** | sailpoint.connector.DelimitedFileConnector |
| **Owner** | The Administrator |
| **Remediators** | |
| **Proxy Application** | |
| **Profile Class** | |
| **Description** | |
| **Authoritative Application** | Yes |
| **Case Insensitive** | |
| **Native Change Detection** | |

### 3.3.1. Extended Attributes

| Category | Name | Value |
|---|---|---|
| Account Management | Business Application Name | |
| Account Management | Personal Privileged Account Prefix | |
| Account Management | Service Account Identity Prefix | |
| Approval Configuration | Approval Workflow | |
| Approval Configuration | Approval Group | |
| Manual Work Items | Manual Work Item Owner | |
| Leaver Configuration | Leaver Termination Operation | |
| Password Management | Allow Password Change Request | false |

© 2023 SailPoint Technologies, Inc. All Rights Reserved.

# Examples - Applications

1. System Configuration
2. Object Configuration ▶
3. Applications ▼
    1. Application Statistics
    2. Contractors
    3. Employees
    4. SAP HR
4. Roles ▶
5. Workgroups ▶
6. Populations ▶
7. Group Factories ▶
8. Certifications ▶
9. Policies ▶
10. Business Processes ▶
11. Rules ▶
12. Email Templates ▶
13. Forms ▶

| account | |
|---|---|
| File Location | [redacted]/Artifacts/data/AuthEmployees.csv |

### 3.3.3. Rules

| Aggregation Rules | |
|---|---|
| Correlation Rule | |
| Creation Rule | Creation Rule - Set Password |
| Manager Correlation Rule | |
| Customization Rule | |
| Managed Entitlement Customization Rule | |
| **Provisioning Rules** | |
| Before Provisioning Rule | |
| After Provisioning Rule | |
| **Connector Rules** | |
| Build Map Rule | |
| Preiterate Rule | |
| Postiterate Rule | |
| Map to ResourceObject Rule | |
| MergeMaps Rule | |

### 3.3.4. Correlation

#### 3.3.4.1. Manager Correlation

| Manager Identity Attribute | Account Attribute |
|---|---|
| empId | managerId |

© 2023 SailPoint Technologies, Inc. All Rights Reserved.

# Examples - Certifications

1. System Configuration
2. Object Configuration ▶
3. Applications ▶
4. Roles ▶
5. Workgroups ▶
6. Populations ▶
7. Group Factories ▶
8. Certifications ▶
9. Policies ▶
10. Business Processes ▶
11. Rules ▶
12. Email Templates ▶
13. Forms ▶

## 8. Certifications

### 8.1. Account Group Permissions Certification [DATE] [3/13/19 4:47 PM]

#### 8.1.1. Basic

##### 8.1.1.1. Certification Properties

| | |
|---|---|
| **Certification Type** | AccountGroupPermissions |
| **Certification Name** | Account Group Permissions Certification [3/13/19 4:47 PM] |
| **Certification Owner** | The Administrator |

##### 8.1.1.2. What to Certify

| | |
|---|---|
| **Applications** | • 389DS |
| **Certify By Object Type** | • **389DS:** group |

##### 8.1.1.3. When to Certify

| | |
|---|---|
| **Schedule** | at 16:52 at 13 day at March month |
| **Next execution** | 2029-03-13 16:52 |

##### 8.1.1.4. Certification Contents

| | |
|---|---|
| **Tags** | |

© 2023 SailPoint Technologies, Inc. All Rights Reserved.

# Examples – Workflows

1. System Configuration
2. Object Configuration ▶
3. Applications ▶
4. Roles ▶
5. Workgroups ▶
6. Populations ▶
7. Group Factories ▶
8. Certifications ▶
9. Policies ▶
10. Business Processes ▼
    1. Alert - Disable Account
    2. Approve and Provision Subprocess
    3. Batch Request Wrapper
    4. Check Status of queued items
    5. Do Manual Actions
    6. Do Provisioning Forms
    7. Entitlement Update
    8. Generic Step Library
    9. Identity Correlation
    10. IdentityProvisioningStepLibrary
    11. Identity Refresh
    12. Identity Request Approve
    13. Identity Request Approve Identity Changes
    14. Identity Request Finalize
    15. Identity Request Initialize
    16. Identity Request Notify
    17. Identity Request Provision
    18. Identity Request Violation Review

## 10.1. Alert - Disable Account

| | |
|---|---|
| **Type** | Alert |
| **Template** | |
| **Disabled** | |
| **Monitored** | |
| **Libraries** | |
| **Owner** | The Administrator |

### 10.1.1. Description

*Disable accounts when alert is triggered.*

*If the alert's targetType is Identity, this will set the Identity inactive.*

*If the alert's targetType is Link, this will disable the account associated to the link.*

### 10.1.2. Variables

© 2023 SailPoint Technologies, Inc. All Rights Reserved.

# How Does It Work?

- Based on XSLT stylesheet
  - eXtensible Stylesheet Language Transformations
  - XSLT is a transformation framework to convert XML into *something* else
  - Powerful, but takes a lot of code
- Configuration based on XSLT-stylesheet
- Generates: HTML, JavaScript, CSS
- Java code for some special features
  - Date conversions
  - Number conversations, Math
- Apache XalanJ extensions used

© 2023 SailPoint Technologies, Inc. All Rights Reserved.

# How Does It Work?

- Requires a single XML document → One HTML page
- To get a single XML document:
  - Export as a single document from IdentityIQ Console
  - Or, use an XML merger to combine multiple documents
    - E.g. to merge all files from SSB's `config` folder

© 2023 SailPoint Technologies, Inc. All Rights Reserved.

```
if localVarHTTPResponse.StatusCode >= 300 {
        newErr := &GenericOpenAPIError{
                body:  localVarBody,
                error: localVarHTTPResponse.Status,
        }
```

# Demo

```
if localVarHTTPResponse.StatusCode == 400 {
                var v ErrorResponseDto
                err = a.client.decode(&v, localVarBody, localVarHTT
                if err != nil {
                        newErr.error = err.Error()
                        return localVarReturnValue, localVarHTTPResp
                }
```

# Room for Improvement and Cooperation

- Styling, Fixes
- Support for application details – lots of connector types
- New IdentityIQ features
- Improvements:
  - Move from Xalan-J to Saxon
  - Parallel processing for different object types
  - Multiple pages
- Code Available

© 2023 SailPoint Technologies, Inc. All Rights Reserved.

# Room for Improvement and Cooperation

## Documentation Tool

https://github.com/menno-pieters-sp/identityiq-documentation-public

## XML Merger

https://github.com/menno-pieters-sp/sailpoint-xml-merger

© 2023 SailPoint Technologies, Inc. All Rights Reserved.

# [Thank you!]

© 2023 SailPoint Technologies, Inc. All rights reserved.