

# **Project Analysis Report**

## **apiguardwrapper**

Comprehensive analysis and documentation of Mule project configuration, flows, and resources

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# 1. Project Information

## 1.1 Project Details

| Property     | Value                            |
|--------------|----------------------------------|
| Project Name | apiguardwrapper                  |
| Version      | 1.0.0                            |
| Project Path | C:\raks\apiguard\apiguardwrapper |

## 1.2 POM Details

Path: pom.xml

### 1.2.1 Basic Information

| Property      | Value             |
|---------------|-------------------|
| Model Version | 4.0.0             |
| Group ID      | com.raks.apiguard |
| Artifact ID   | apiguardwrapper   |
| Version       | 1.0.0             |
| Packaging     | mule-application  |
| Name          | apiguardwrapper   |

### 1.2.2 Properties

| Key                              | Value |
|----------------------------------|-------|
| mule.maven.plugin.version        | 4.5.3 |
| maven.compiler.target            | 17    |
| maven.compiler.source            | 17    |
| project.build.sourceEncoding     | UTF-8 |
| app.runtime                      | 4.9.1 |
| project.reporting.outputEncoding | UTF-8 |

### 1.2.3 Plugins

| Group ID                 | Artifact ID        | Version                       |
|--------------------------|--------------------|-------------------------------|
| org.apache.maven.plugins | maven-clean-plugin | 3.0.0                         |
| org.mule.tools.maven     | mule-maven-plugin  | \${mule.maven.plugin.version} |

## 1.2.4 Dependencies

| Group ID             | Artifact ID                               | Version |
|----------------------|---|---------|
| org.mule.connectors  | mule-http-connector                       | 1.9.2   |
| org.mule.connectors  | mule-sockets-connector                    | 1.2.2   |
| org.mule.connectors  | mule-file-connector                       | 1.5.2   |
| org.mule.connectors  | mule-email-connector                      | 1.7.3   |
| org.mule.connectors  | mule-objectstore-connector                | 1.2.4   |
| org.mule.module      | mule-java-module                          | 2.0.0   |
| org.mule.modules     | mule-compression-module                   | 2.2.3   |
| com.mulesoft.modules | mule-secure-configuration-property-module | 1.2.6   |
| org.jsoup            | jsoup                                     | 1.17.2  |
| com.raks             | raksanalyzer                              | 1.0.0   |
| com.raks             | muleguard                                 | 1.0.0   |

## 1.3 Mule-artifact.json

Path: mule-artifact.json

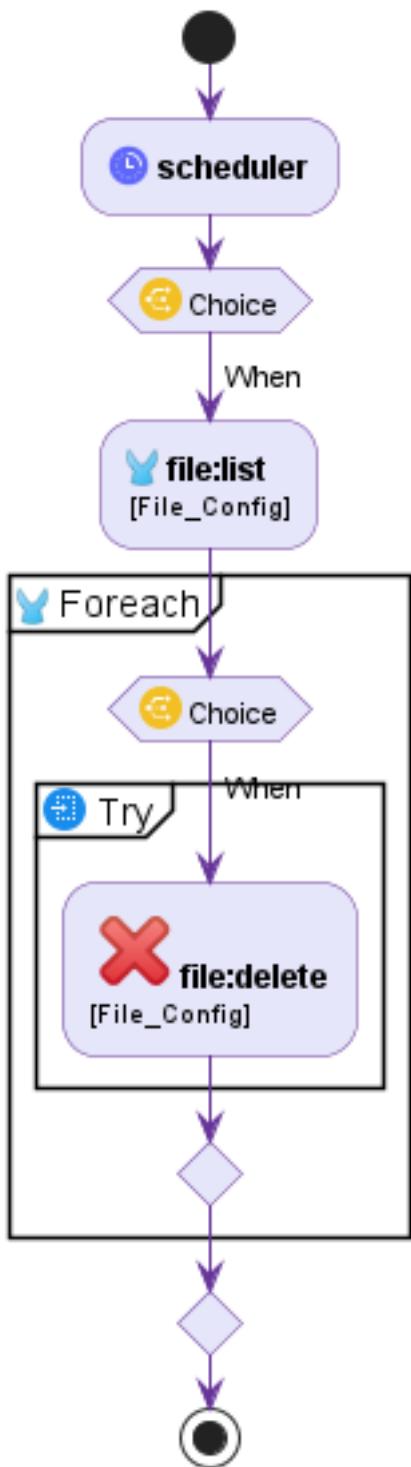
```
{
    "minMuleVersion": "4.9.1",
    "javaSpecificationVersions": [
        "17"
    ],
    "classLoaderModelLoaderDescriptor": {
        "id": "mule",
        "attributes": {
            "exportedPackages": [
                "javax.activation",
                "com.raks.muleguard.wrapper"
            ]
        }
    }
}
```

## 2. Flow Diagrams

### 2.1 Mule Project Flow Integration

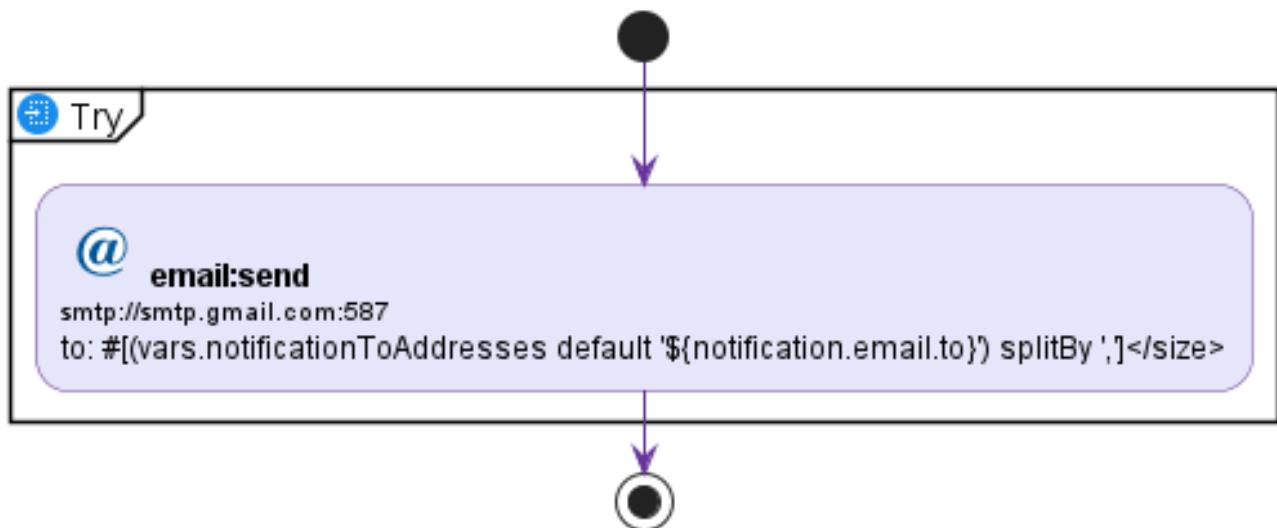
#### 2.1.1 cleanup-workspace-flow

Path: src\main\mule\muleguard-wrapper.xml



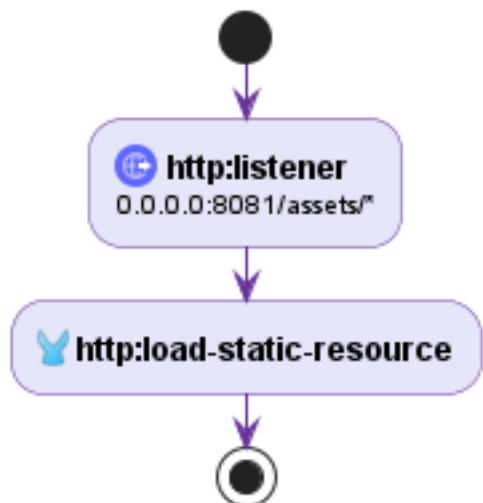
## 2.1.2 common-send-registration-notification-flow

Path: src\main\mule\apiguard-common.xml



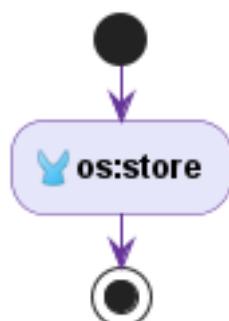
## 2.1.3 common-static-resource-flow

Path: src\main\mule\apiguard-common.xml



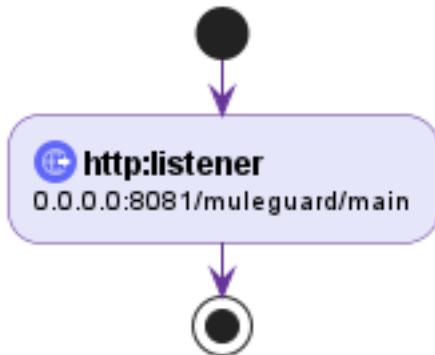
## 2.1.4 create-anonymous-session-subflow

Path: src\main\mule\muleguard-wrapper.xml



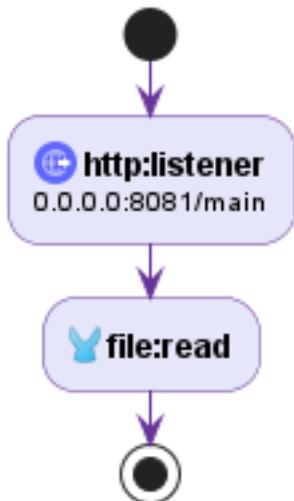
## 2.1.5 main-landing-page-flow

Path: src\main\mule\muleguard-wrapper.xml



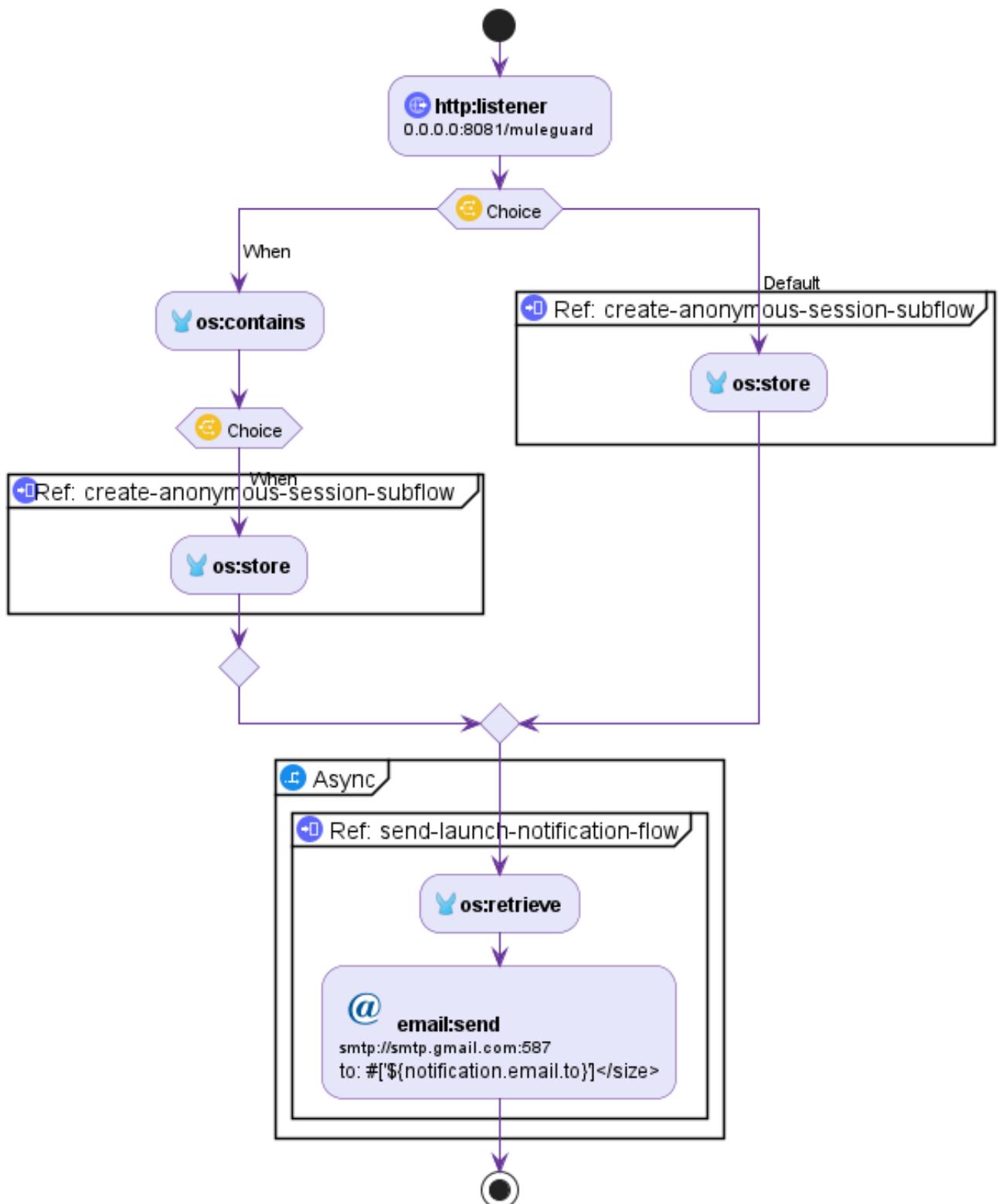
## 2.1.6 main-page-flow

Path: src\main\mule\apiguard-portal.xml



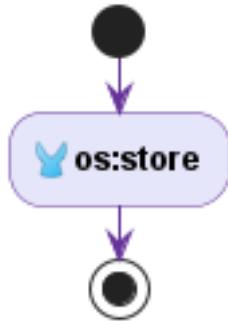
## 2.1.7 muleguard-root-flow

Path: src\main\mule\muleguard-wrapper.xml



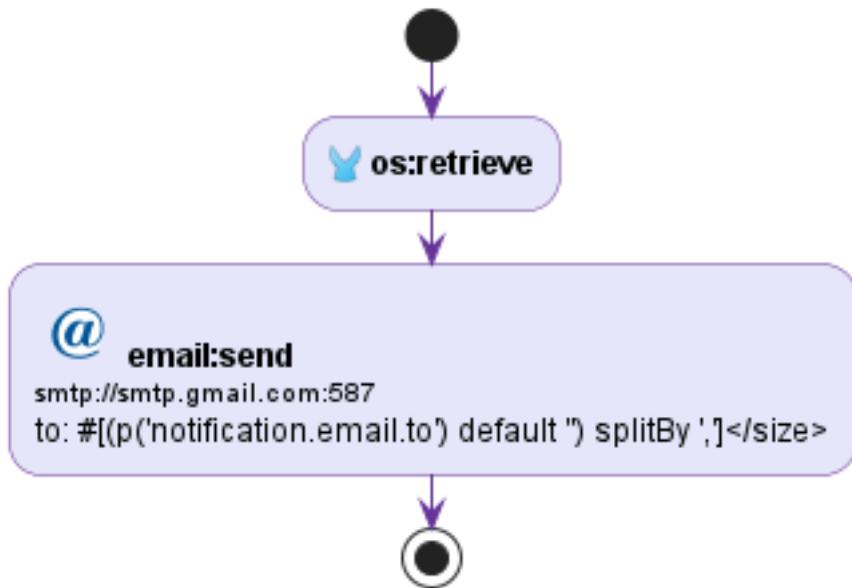
## 2.1.8 raks-create-anonymous-session-subflow

Path: src\main\mule\raksanalyzer-wrapper.xml



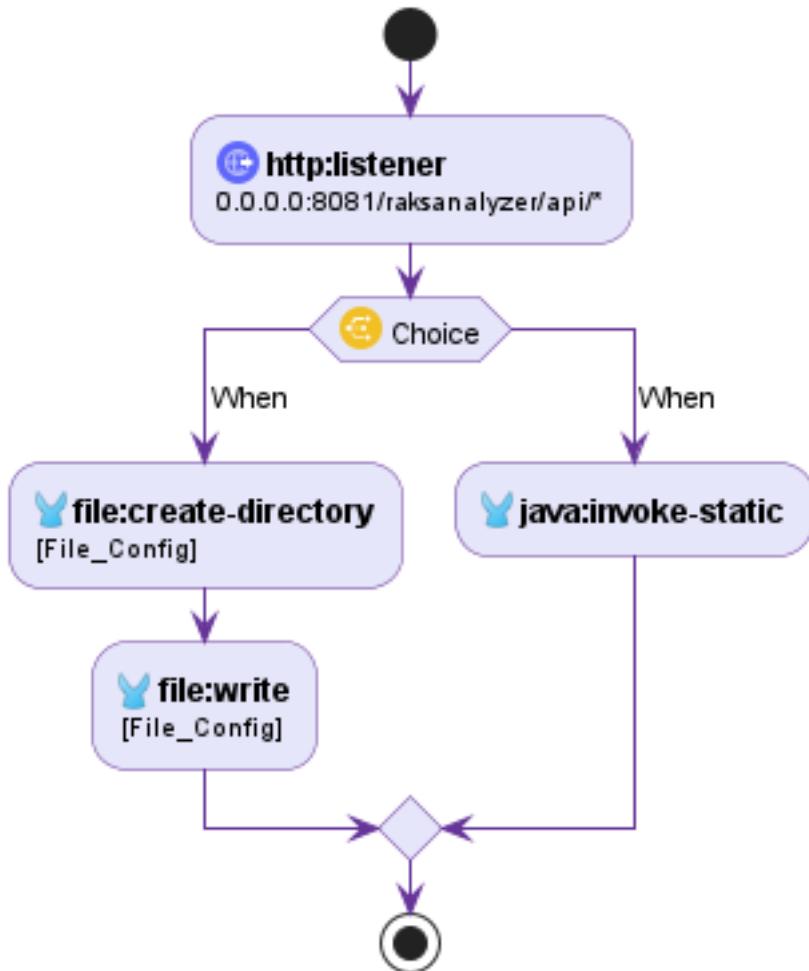
## 2.1.9 raks-send-launch-notification-flow

Path: src\main\mule\raksanalyzer-wrapper.xml



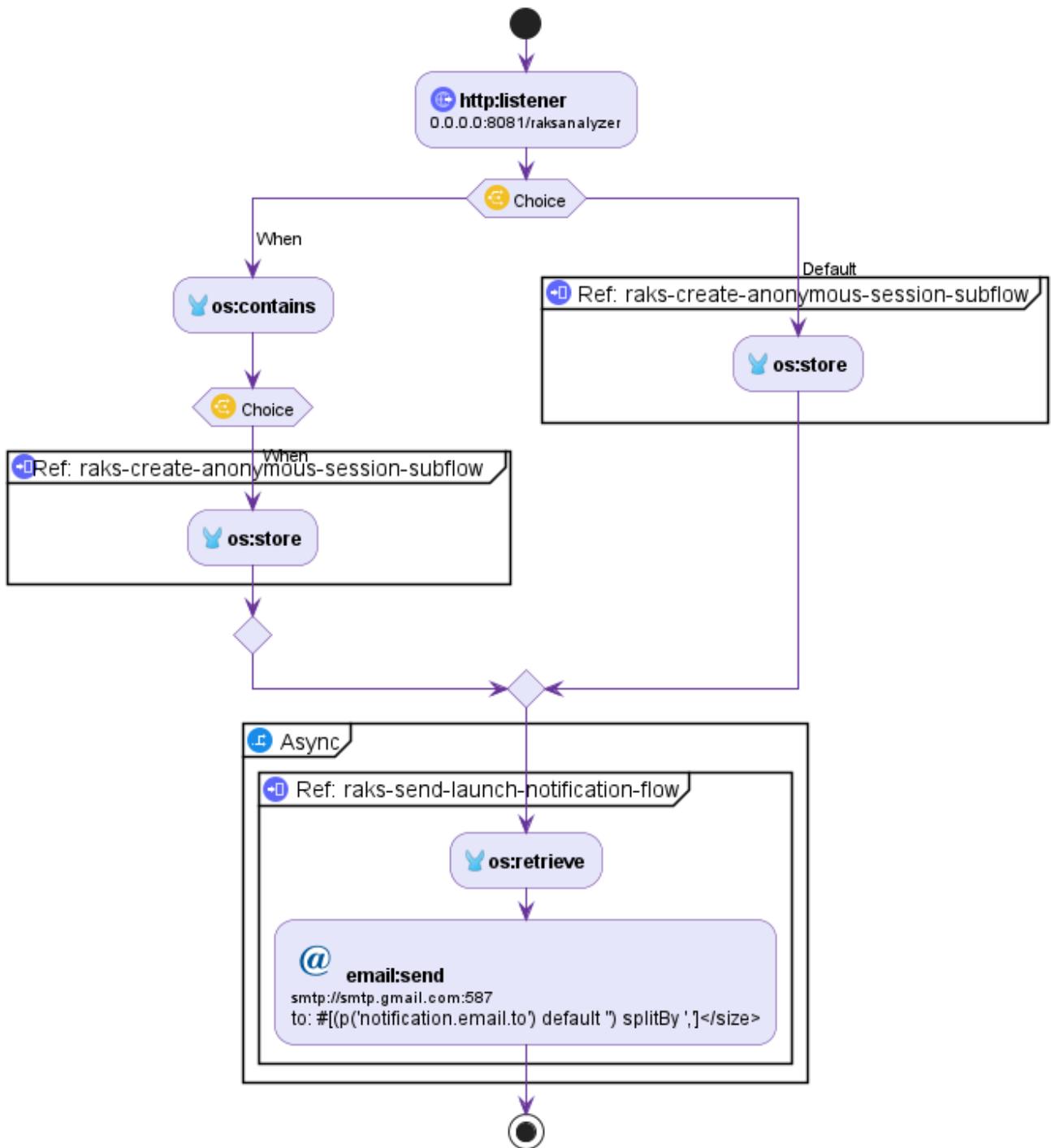
## 2.1.10 raksanalyzer-api-flow

Path: src\main\mule\raksanalyzer-wrapper.xml



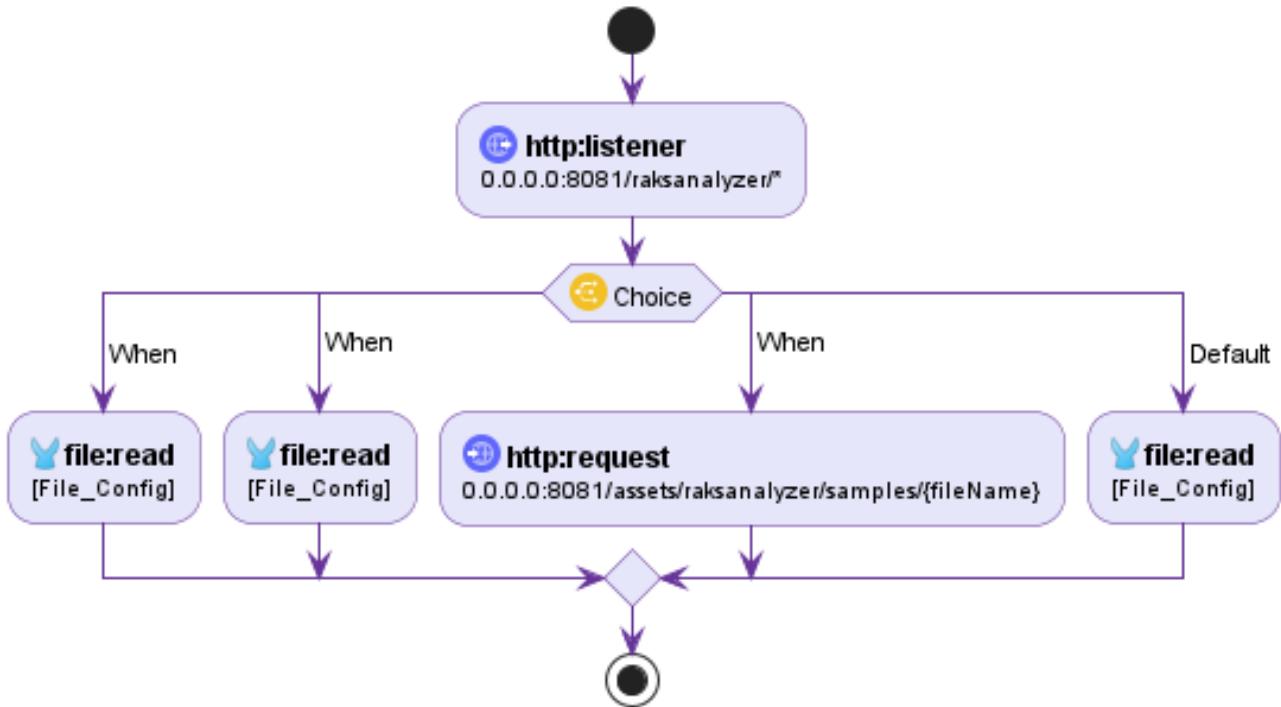
### 2.1.11 raksanalyzer-root-flow

Path: src\main\mule\raksanalyzer-wrapper.xml



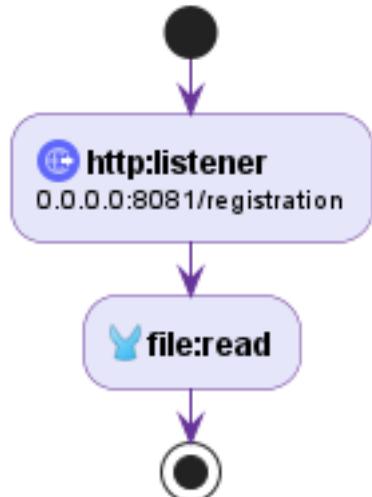
## 2.1.12 raksanalyzer-ui-flow

Path: `src\main\mule\raksanalyzer-wrapper.xml`



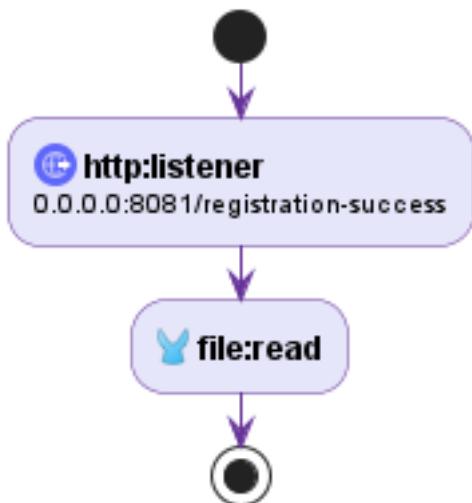
### 2.1.13 registration-page-flow

*Path: src\main\mule\apiguard-portal.xml*



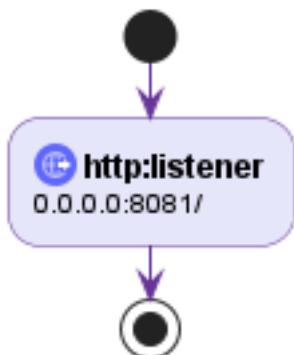
### 2.1.14 registration-success-flow

*Path: src\main\mule\apiguard-portal.xml*



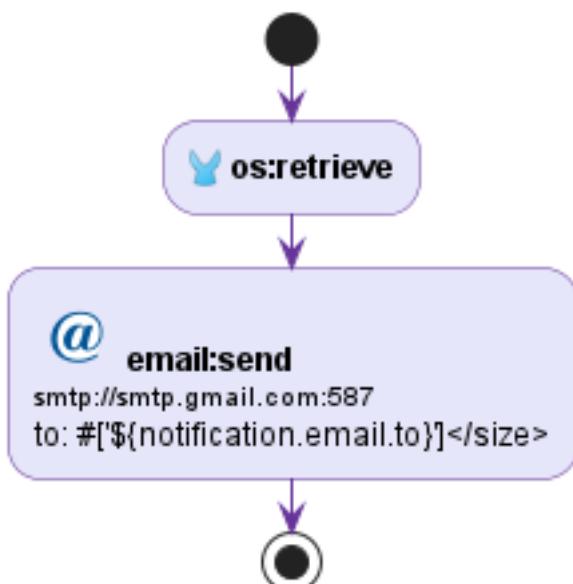
### 2.1.15 root-redirect-flow

Path: `src\main\mule\apiguard-portal.xml`



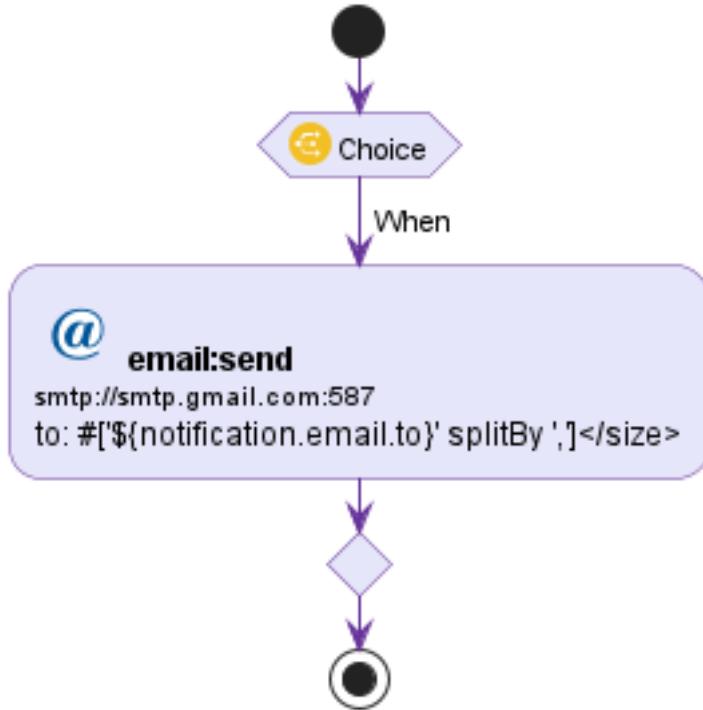
### 2.1.16 send-launch-notification-flow

Path: `src\main\mule\muleguard-wrapper.xml`



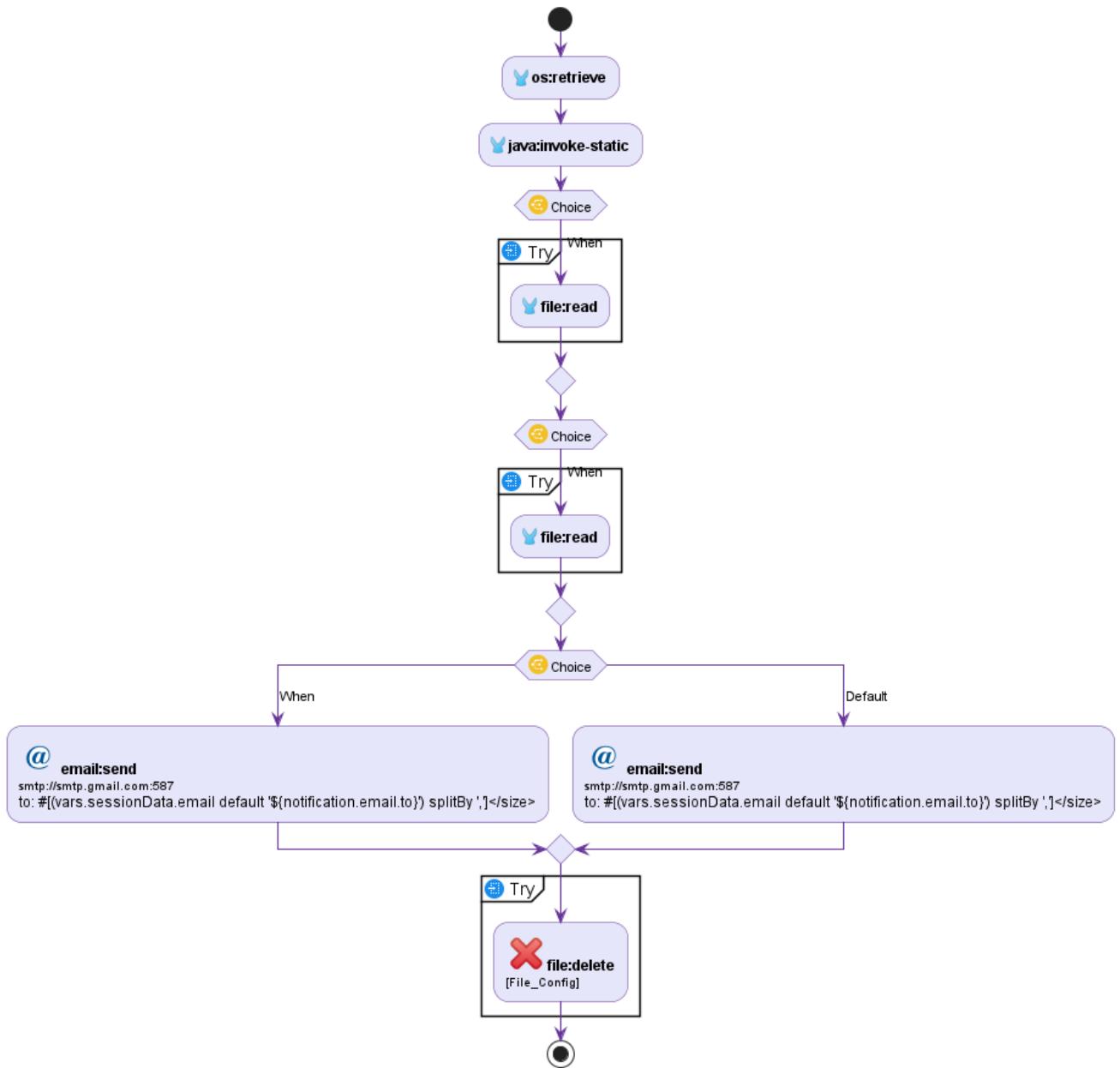
### 2.1.17 send-registration-notification-flow

Path: src\main\mule\muleguard-wrapper.xml



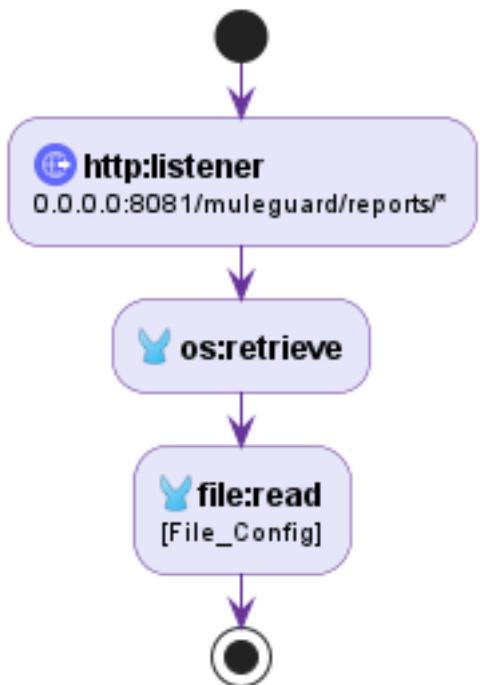
### 2.1.18 send-usage-notification-flow

Path: src\main\mule\muleguard-wrapper.xml



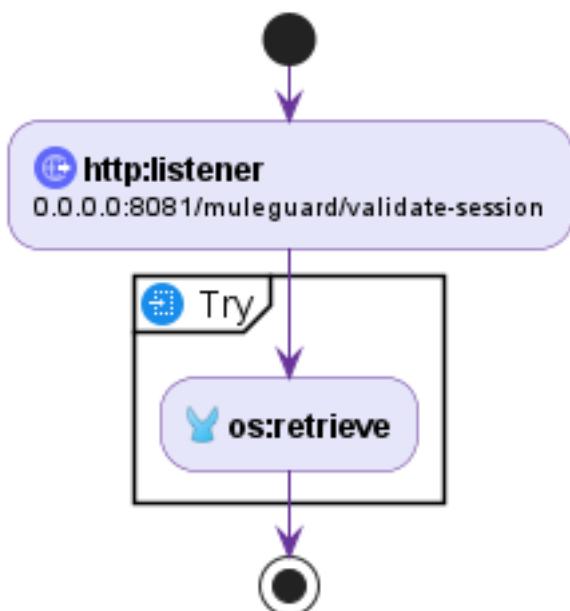
## 2.1.19 serve-report-flow

Path: `src\main\mule\muleguard-wrapper.xml`



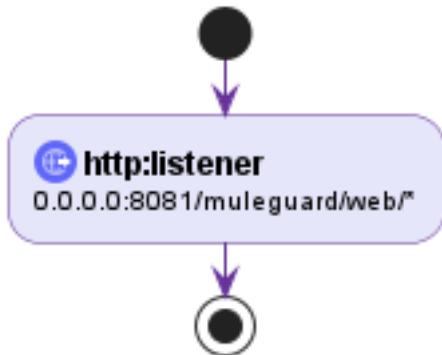
### 2.1.20 session-validation-flow

Path: `src\main\mule\muleguard-wrapper.xml`



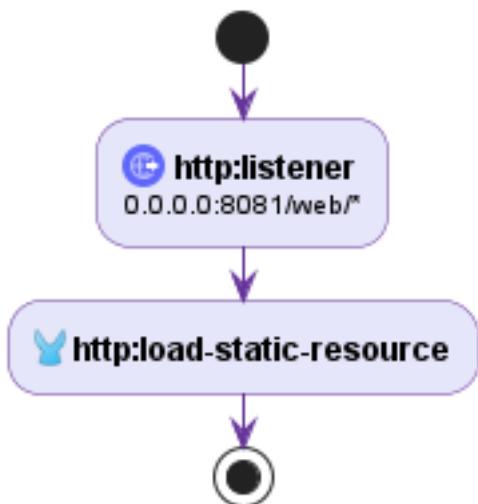
### 2.1.21 static-resource-flow

Path: `src\main\mule\muleguard-wrapper.xml`



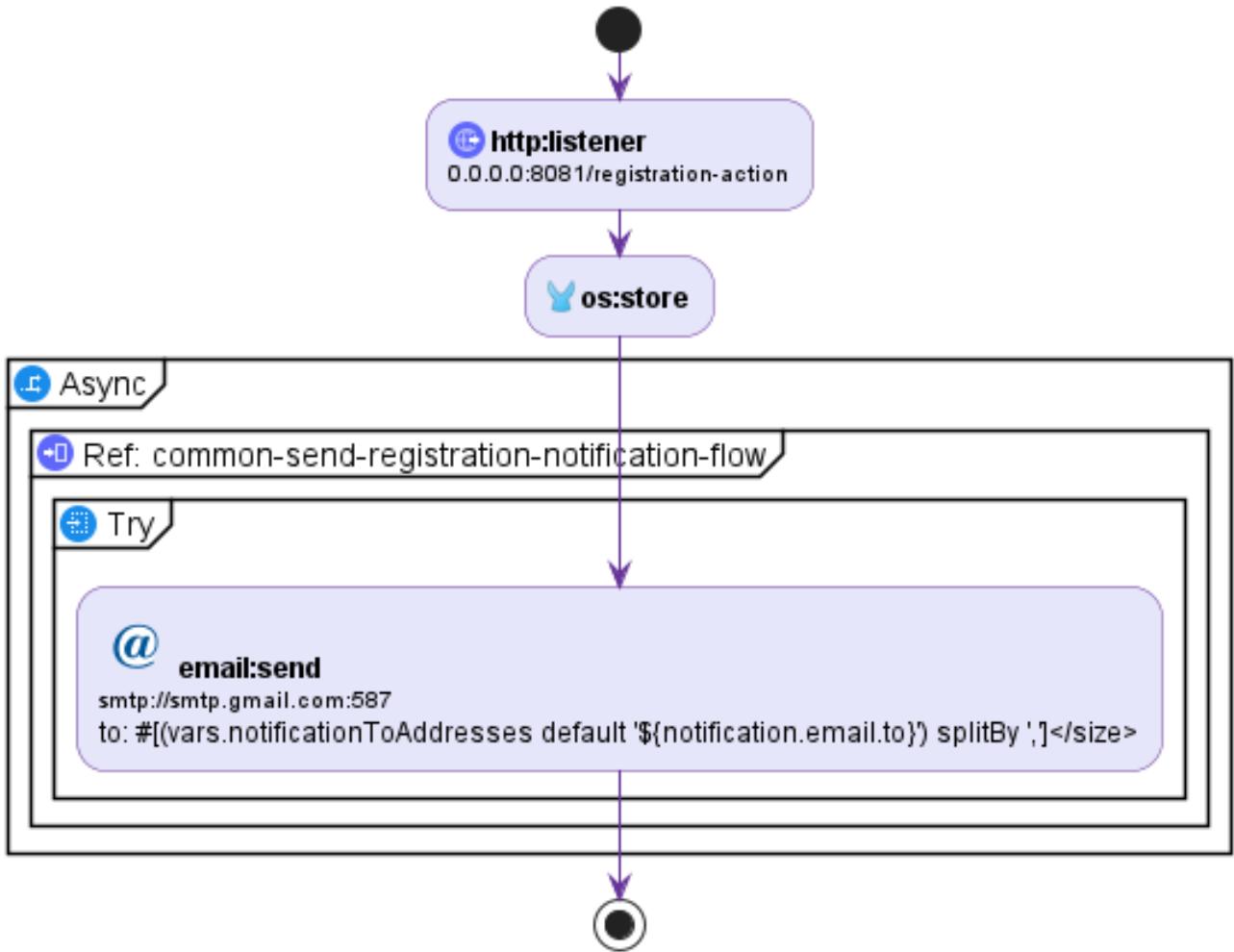
### 2.1.22 static-resources-flow

Path: `src\main\mule\apiguard-portal.xml`



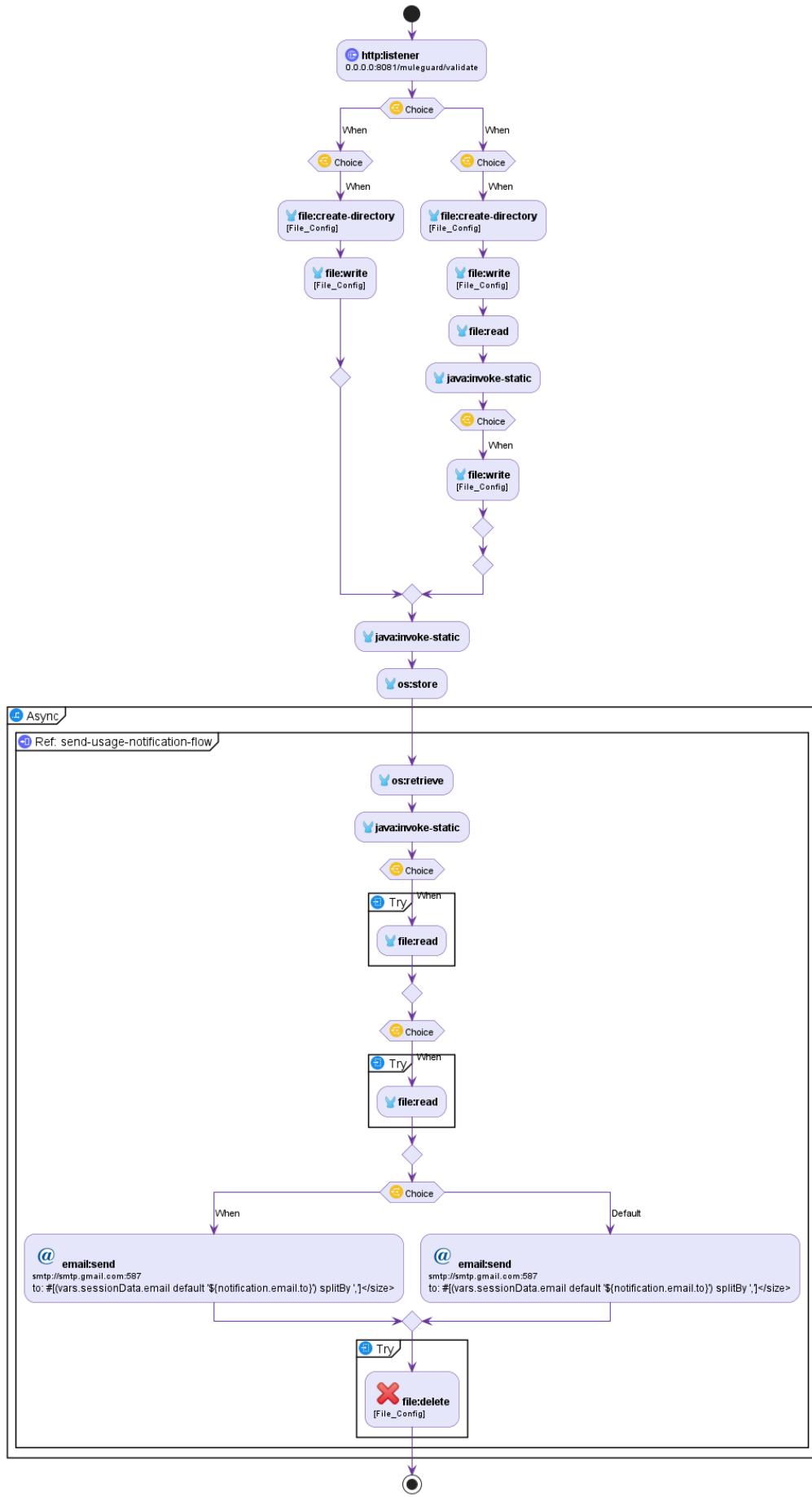
### 2.1.23 user-registration-flow

Path: `src\main\mule\apiguard-portal.xml`



#### 2.1.24 validation-trigger-flow

Path: `src\main\mule\muleguard-wrapper.xml`

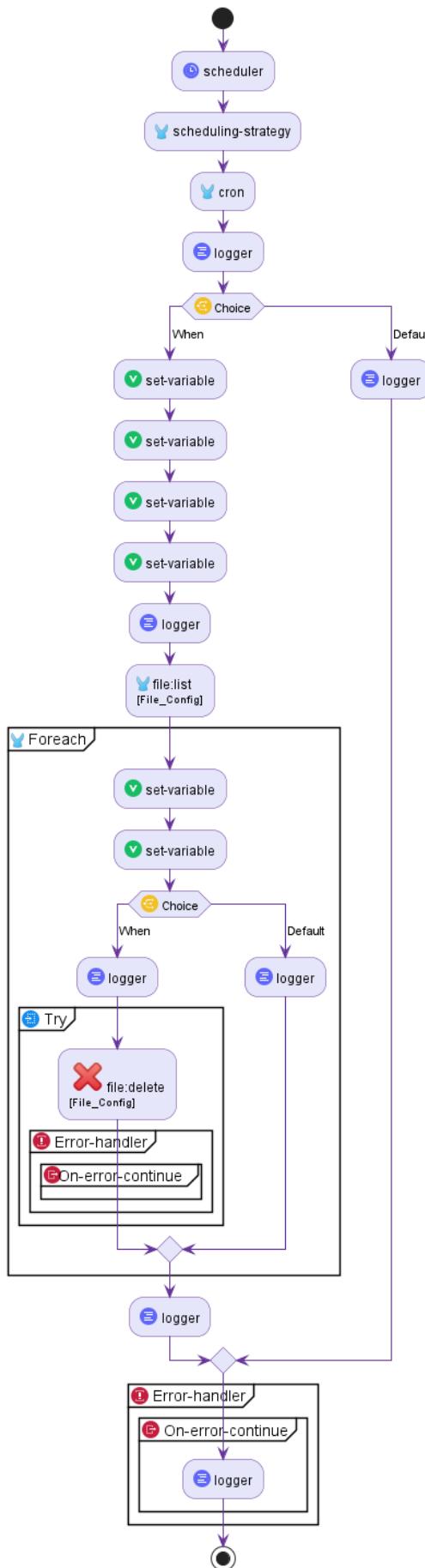


(Diagram scaled to fit page)

## 2.2 Mule Project Flow Diagram

### 2.2.1 cleanup-workspace-flow

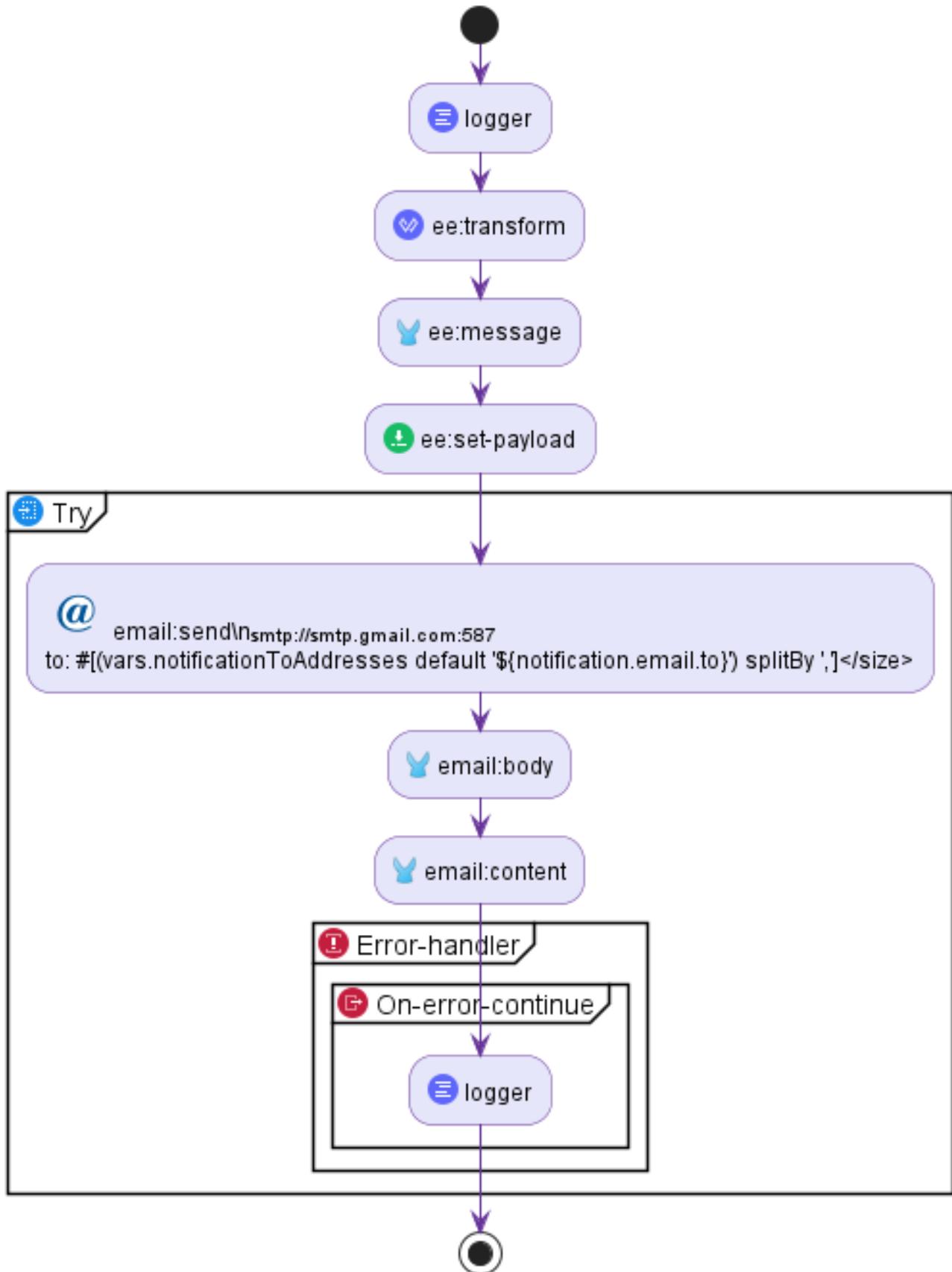
*Path: src\main\mule\muleguard-wrapper.xml*



(Diagram scaled to fit page)

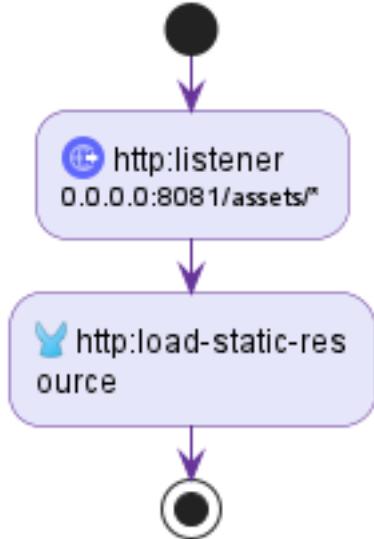
## 2.2.2 common-send-registration-notification-flow

Path: src\main\mule\apiguard-common.xml



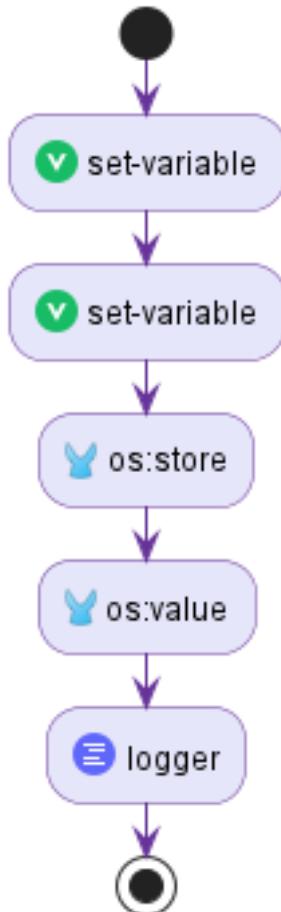
### 2.2.3 common-static-resource-flow

Path: src\main\mule\apiguard-common.xml



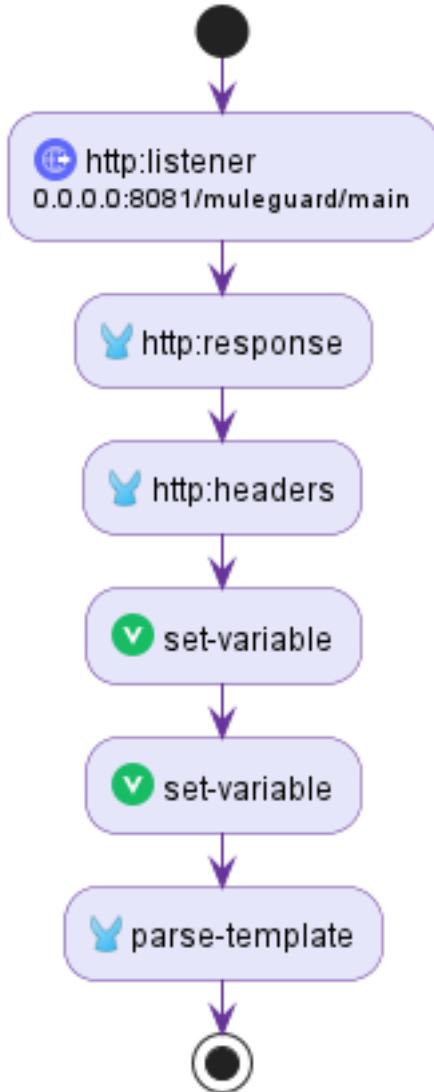
### 2.2.4 create-anonymous-session-subflow

Path: src\main\mule\muleguard-wrapper.xml



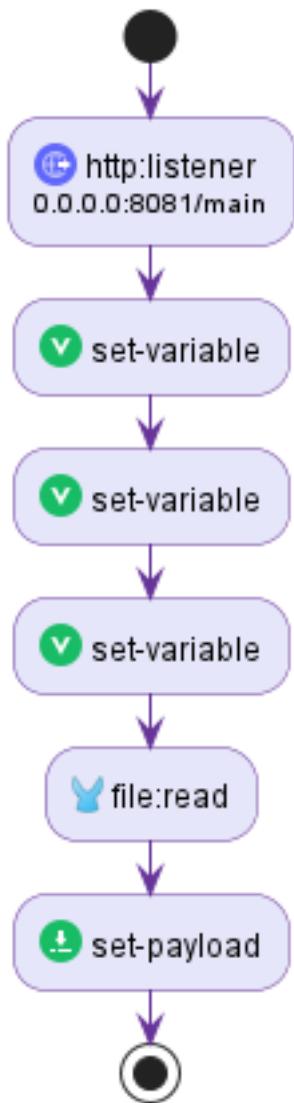
## 2.2.5 main-landing-page-flow

Path: src\main\mule\muleguard-wrapper.xml



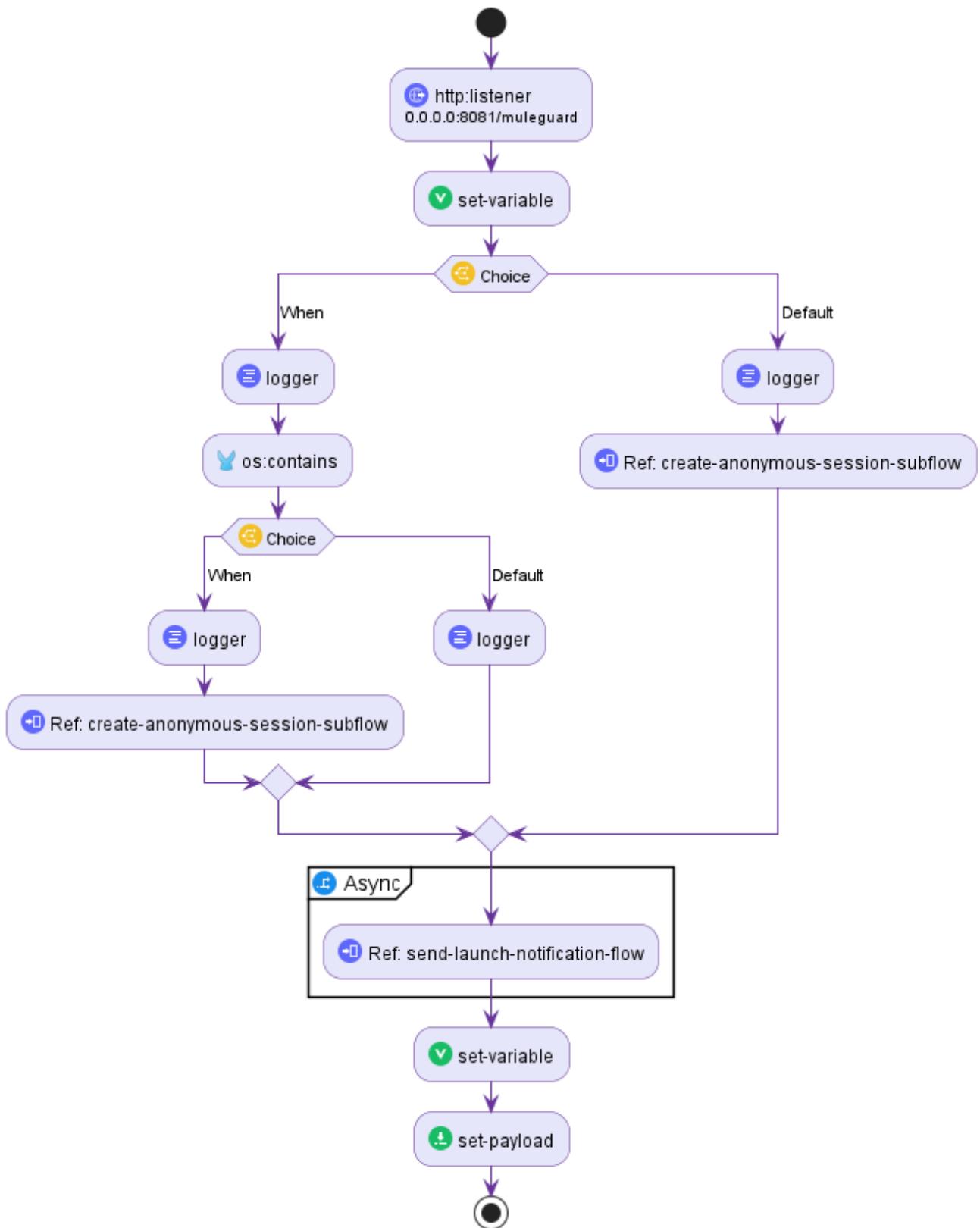
## 2.2.6 main-page-flow

Path: src\main\mule\apiguard-portal.xml



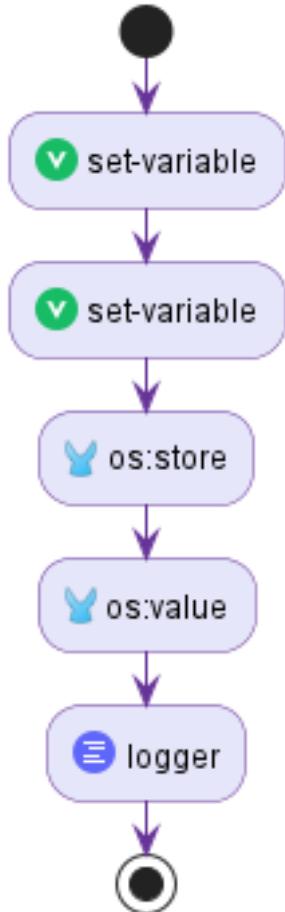
## 2.2.7 muleguard-root-flow

*Path: src\main\mule\muleguard-wrapper.xml*



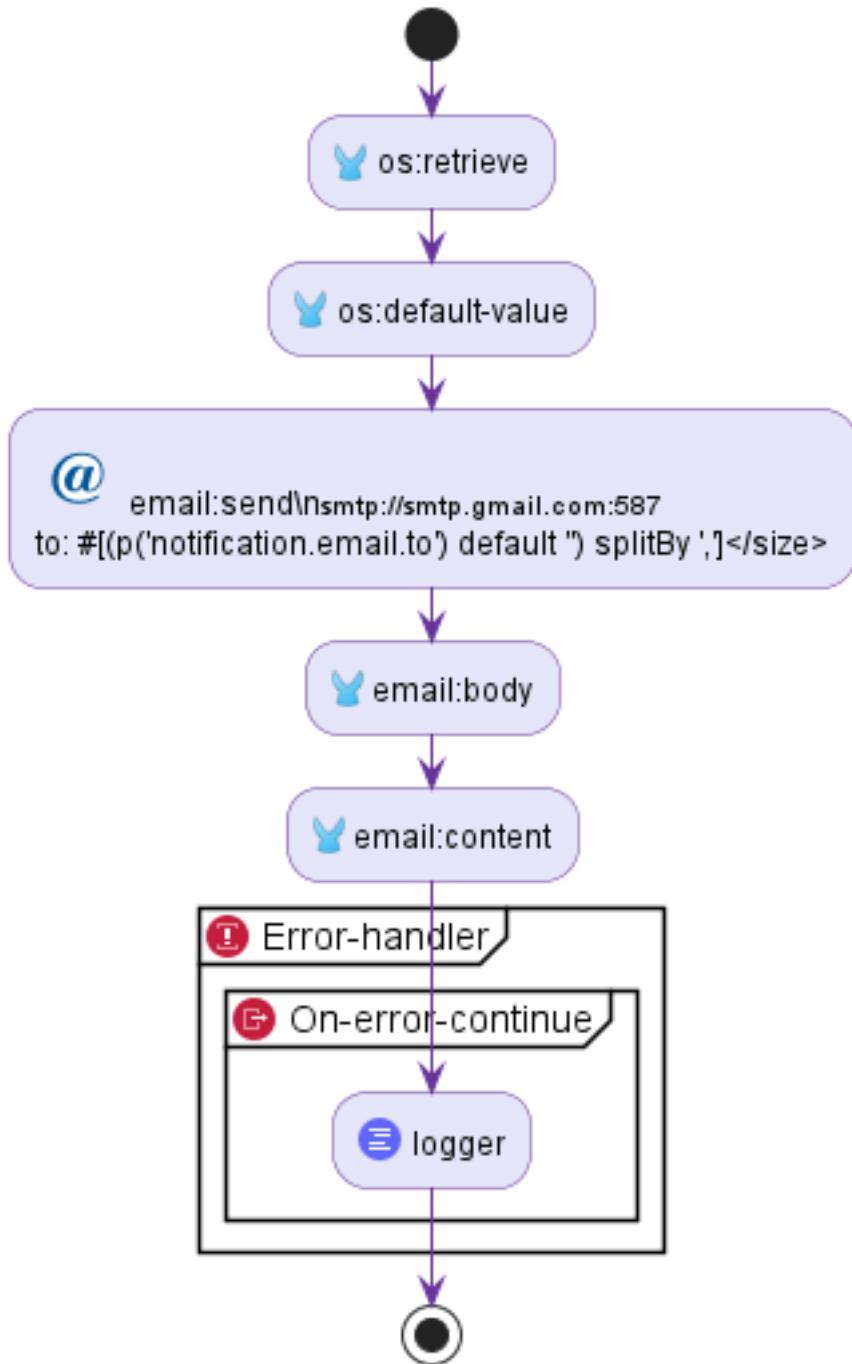
## 2.2.8 raks-create-anonymous-session-subflow

Path: src\main\mule\raksanalyzer-wrapper.xml



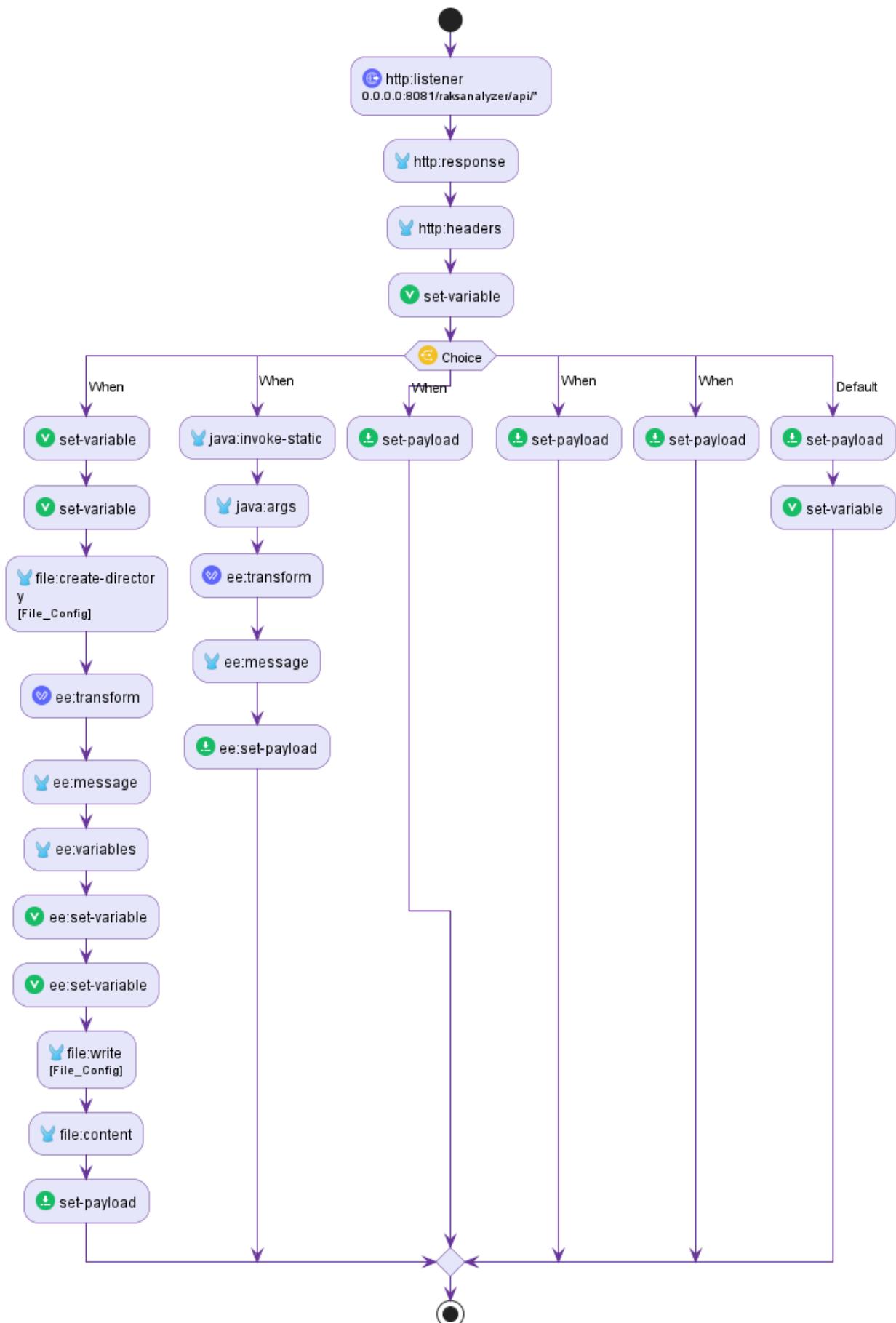
## 2.2.9 raks-send-launch-notification-flow

Path: src\main\mule\raksanalyzer-wrapper.xml



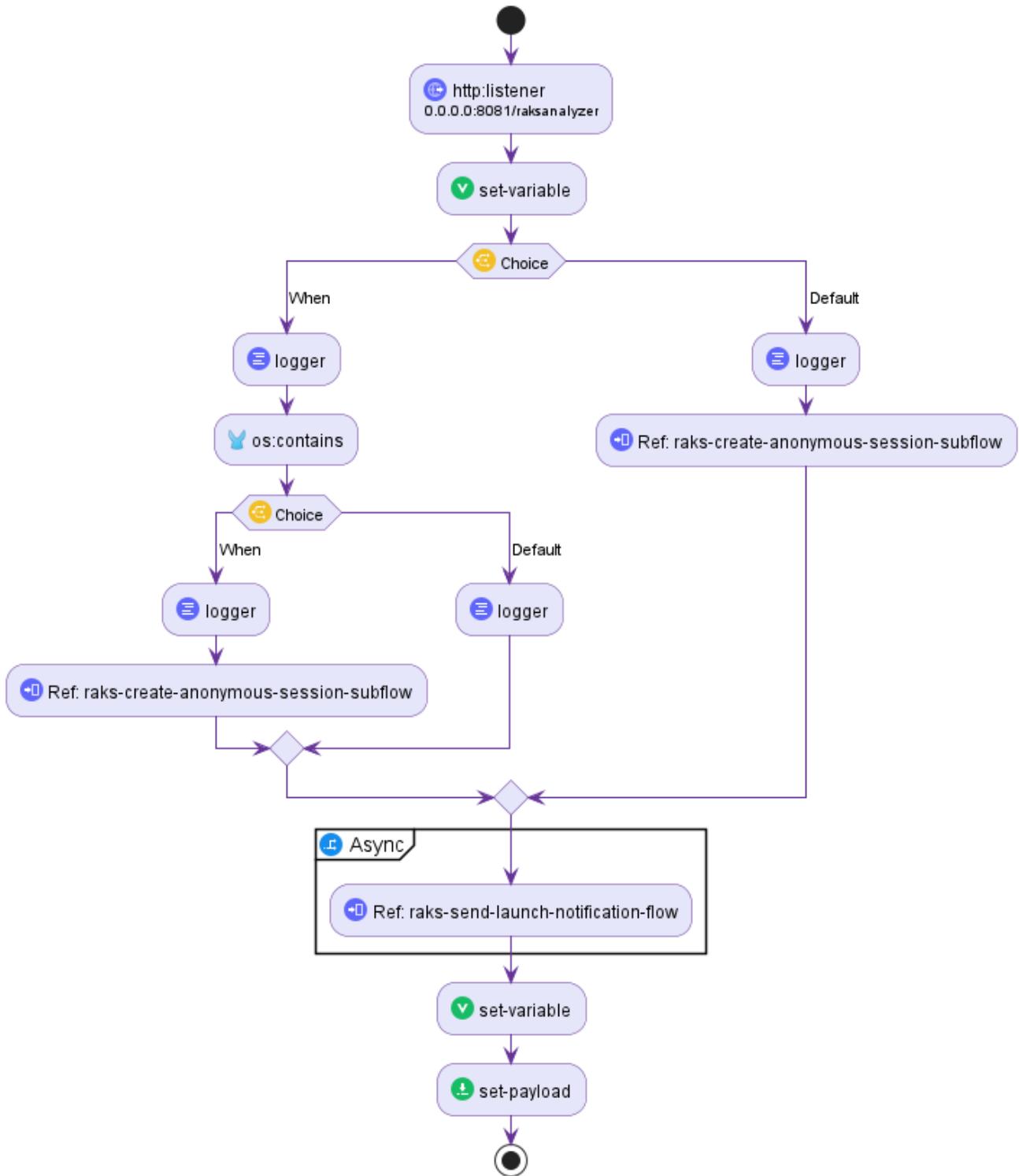
## 2.2.10 raksanalyzer-api-flow

Path: `src\main\mule\raksanalyzer-wrapper.xml`



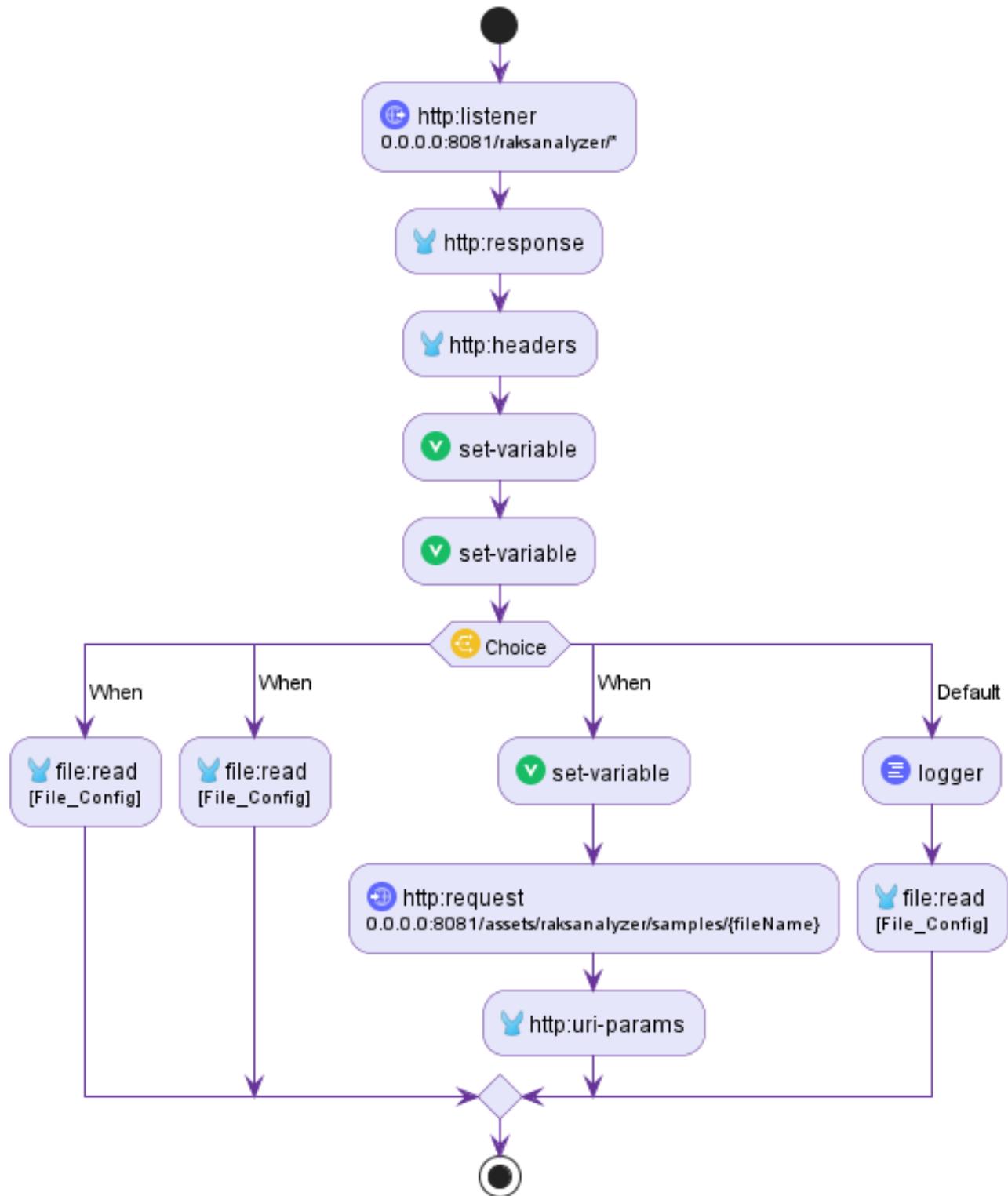
## 2.2.11 raksanalyzer-root-flow

Path: src\main\mule\raksanalyzer-wrapper.xml



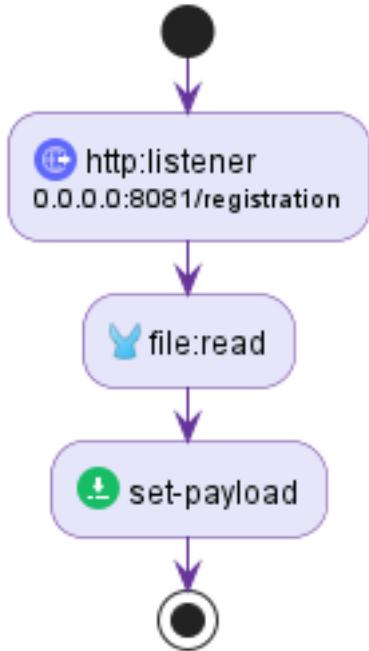
## 2.2.12 raksanalyzer-ui-flow

Path: src\main\mule\raksanalyzer-wrapper.xml



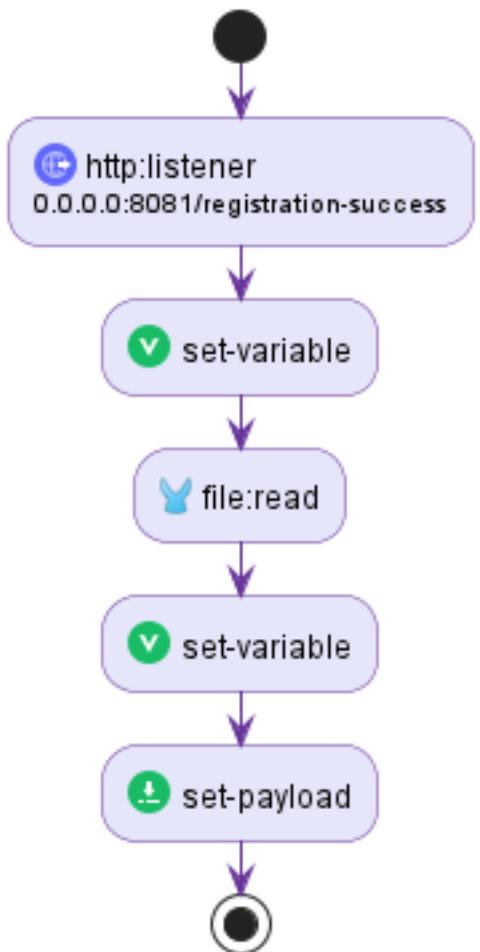
### 2.2.13 registration-page-flow

Path: src\main\mule\apiguard-portal.xml



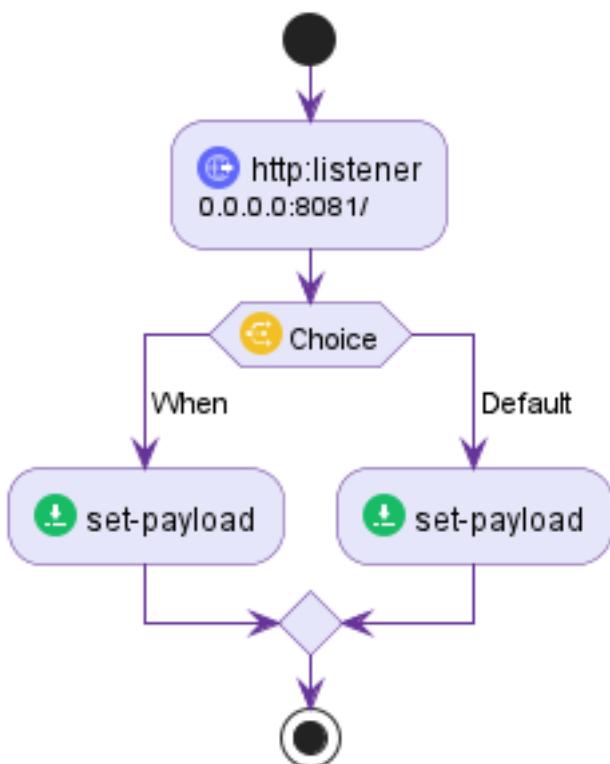
### 2.2.14 registration-success-flow

Path: src\main\mule\apiguard-portal.xml



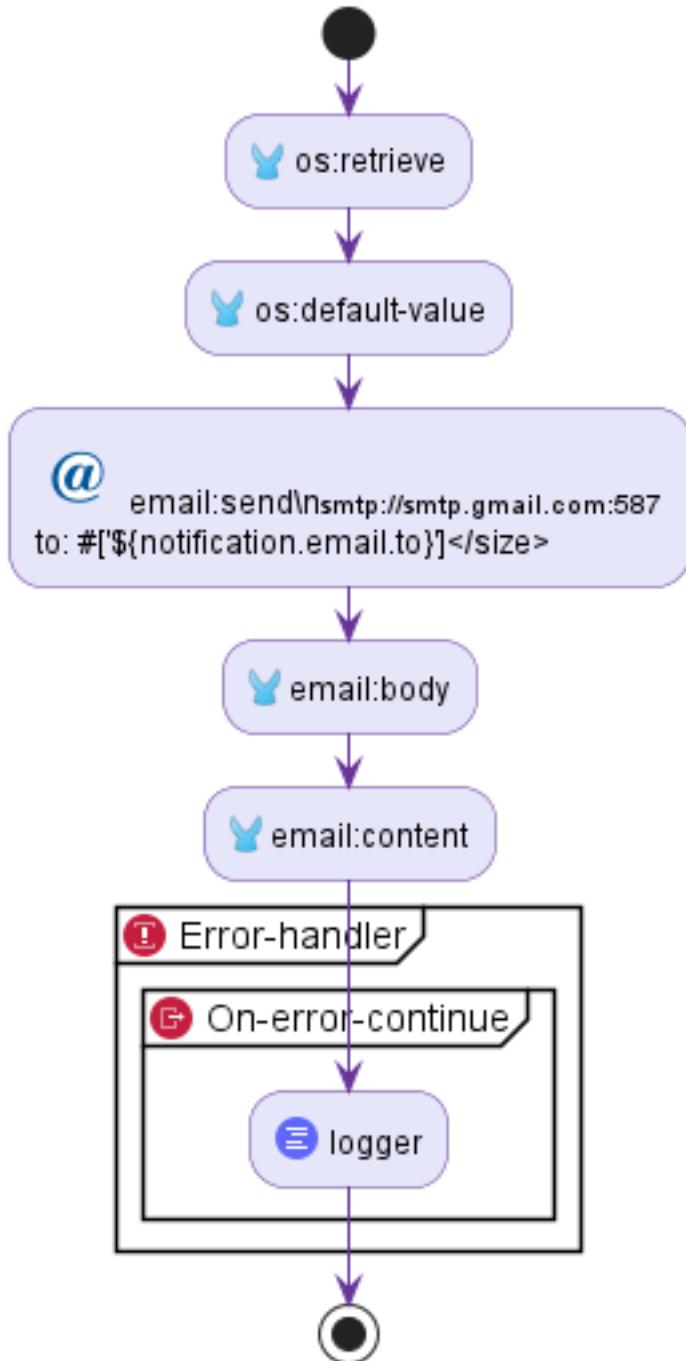
### 2.2.15 root-redirect-flow

*Path: src\main\mule\apiguard-portal.xml*



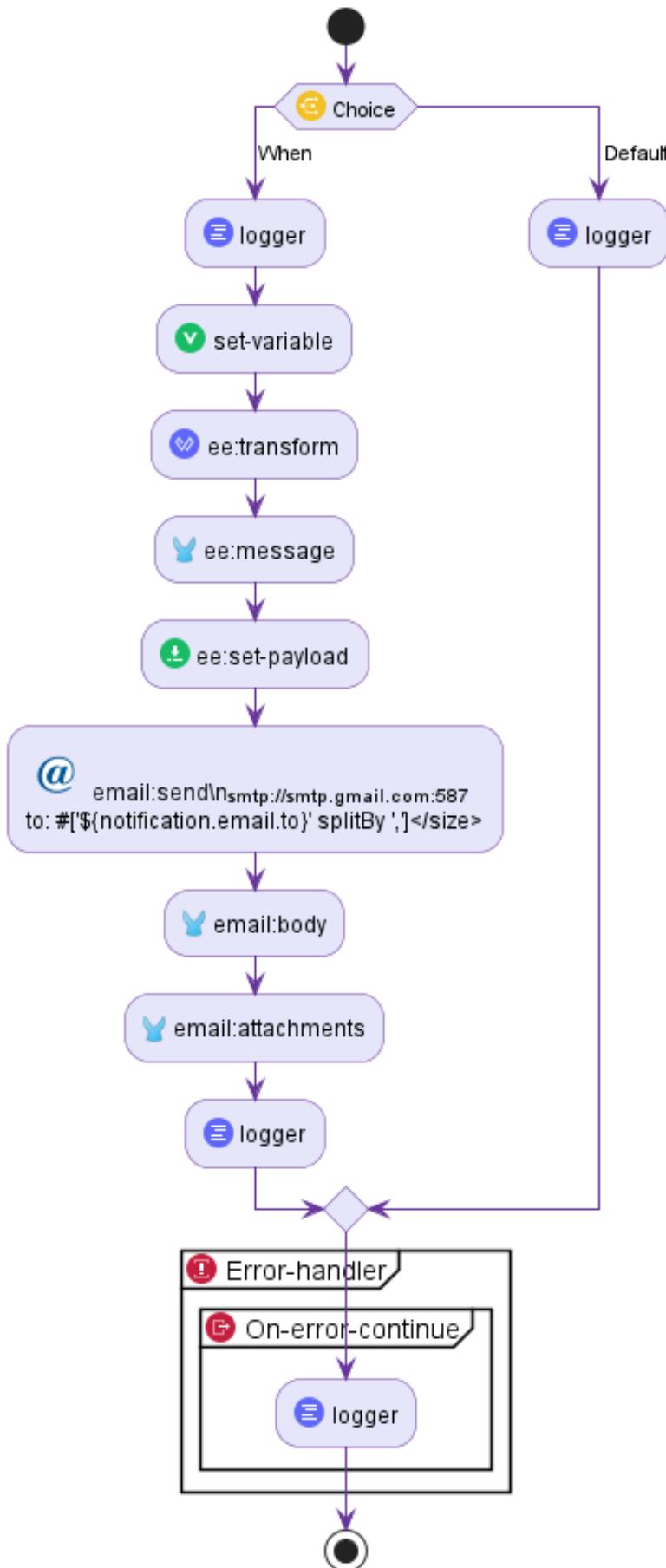
## 2.2.16 send-launch-notification-flow

Path: src\main\mule\muleguard-wrapper.xml



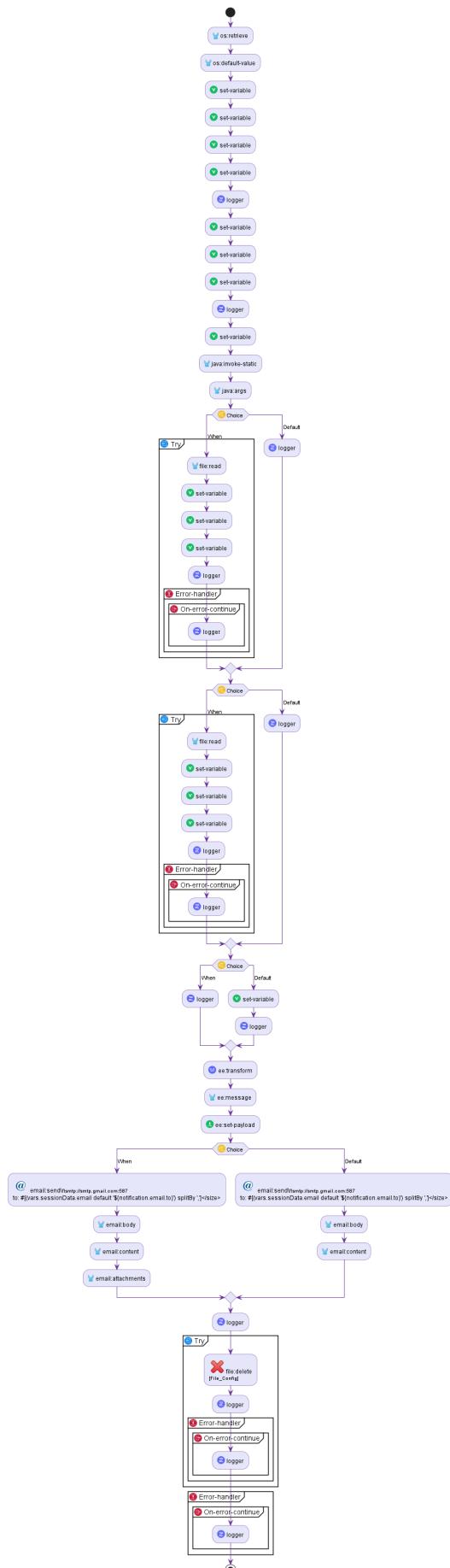
## 2.2.17 send-registration-notification-flow

Path: src\main\mule\muleguard-wrapper.xml



## 2.2.18 send-usage-notification-flow

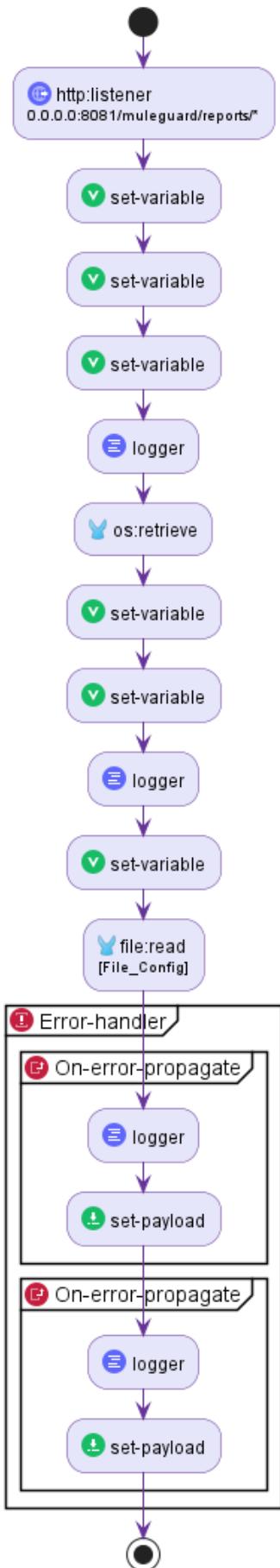
Path: src\main\mule\muleguard-wrapper.xml



(Diagram scaled to fit page)

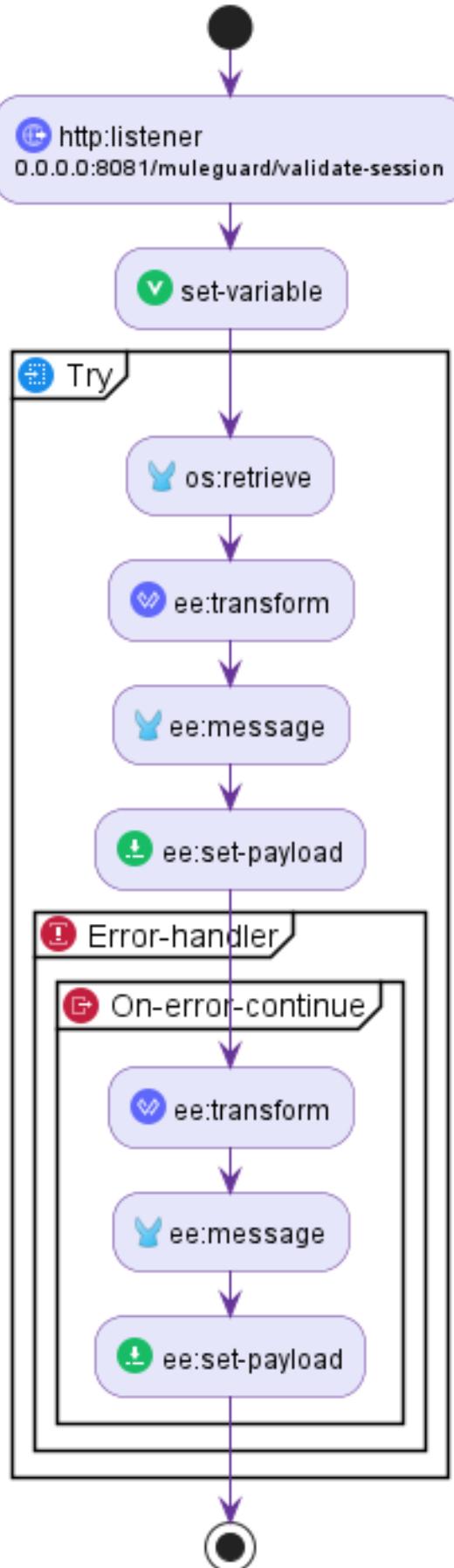
## 2.2.19 serve-report-flow

Path: src\main\mule\muleguard-wrapper.xml



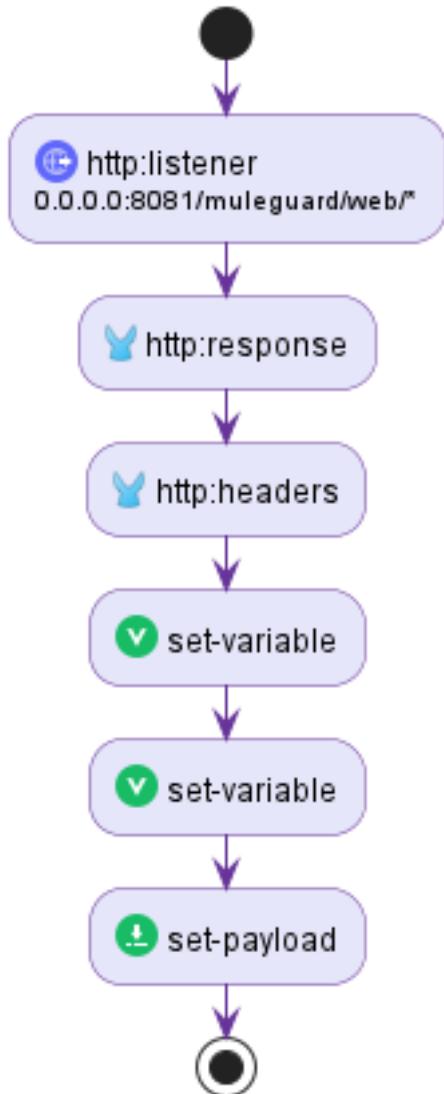
## 2.2.20 session-validation-flow

Path: src\main\mule\muleguard-wrapper.xml



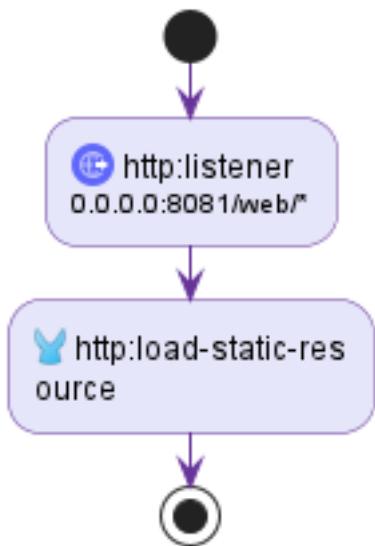
## 2.2.21 static-resource-flow

Path: src\main\mule\muleguard-wrapper.xml



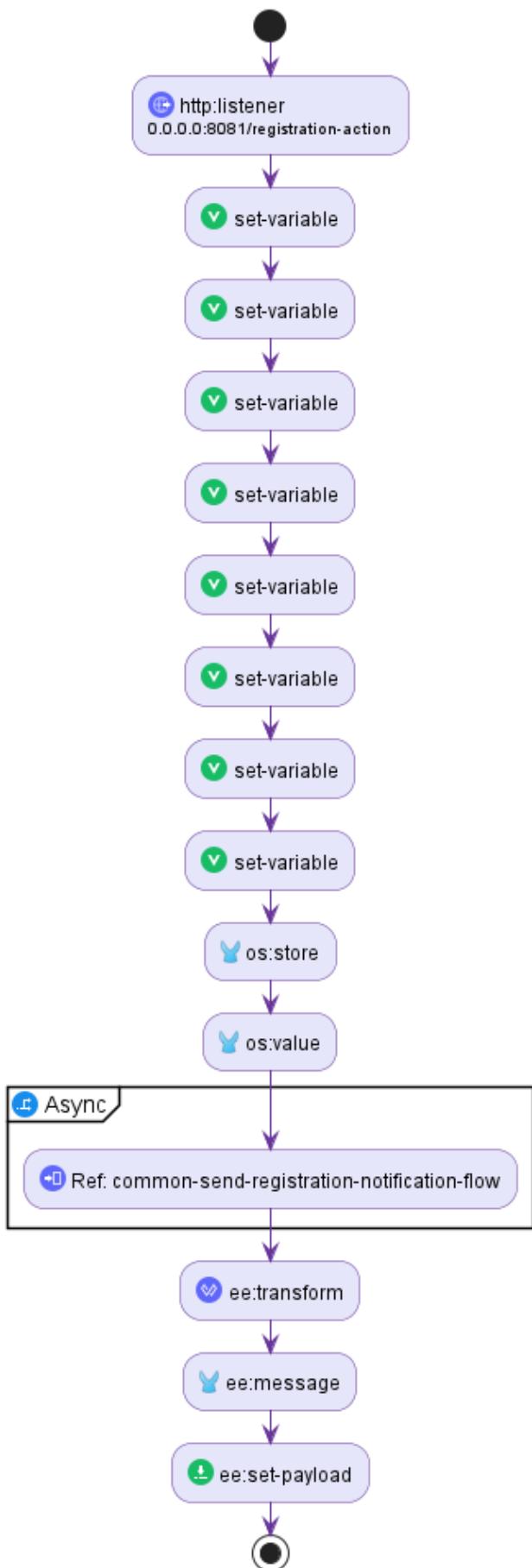
## 2.2.22 static-resources-flow

Path: src\main\mule\apiguard-portal.xml



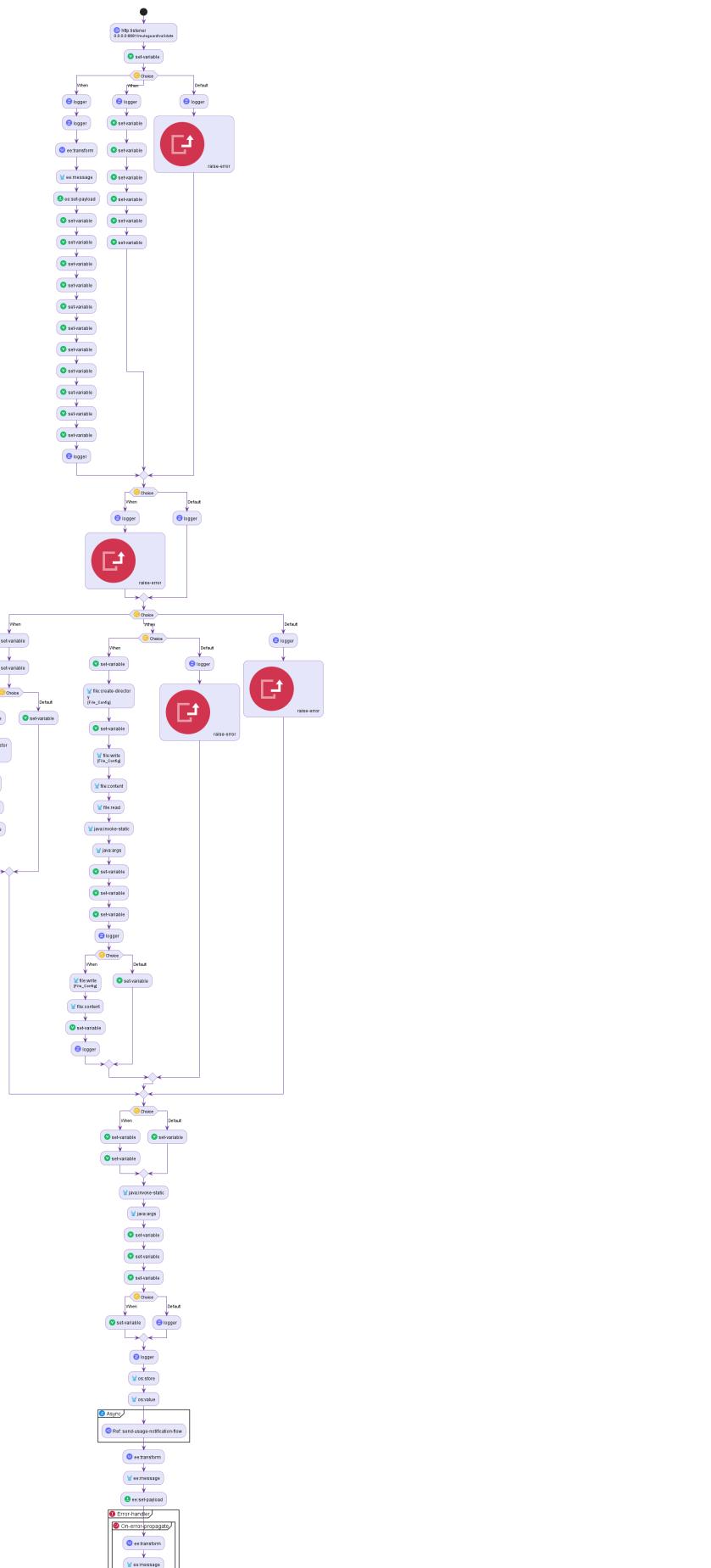
### 2.2.23 user-registration-flow

*Path: src\main\mule\apiguard-portal.xml*



## 2.2.24 validation-trigger-flow

Path: src\main\mule\muleguard-wrapper.xml



(Diagram scaled to fit page)

### 3. Global Configuration

#### Property Files Found: 2

- src\main\resources\web\muleguard\sample-rules.yaml
- src\main\resources\mule-app.properties

Total Properties: 92

#### 3.1 src\main\resources\mule-app.properties (92 properties)

| Key                                      | Value  |
|--|--|
| registration.field.3.name                | company  |
| report.timestamp.format                  | yyyyMMdd-HHmmss  |
| workspace.cleanup.retention.days         | 1  |
| notification.attach.localproject.enabled | true   |
| registration.page.title                  | ApiGuard Portal - Registration                                     |
| http.listener.host                       | 0.0.0.0  |
| registration.success.page.header         | ApiGuard Portal  |
| registration.field.1.placeholder         | Enter your full name   |
| registration.field.2.placeholder         | your.email@company.com   |
| workspace.cleanup.enabled                | true   |
| notification.attach.localproject.default | false  |
| http.listener.staticResourcesPath        | /web/*   |
| registration.field.3.required            | false  |
| registration.enabled                     | true   |
| notification.email.username              | rakkuma8@gmail.com   |
| zip.extraction.ignore.folders            | target,bin,build,.git,.idea,.vscode,node_modules,muleguard-reports |
| email.header.background                  | #f9f4ff  |
| notification.email.password              | fjuqjxckvosjummv   |
| workspace.cleanup.schedule               | 0 0 2 * * ?  |
| portal.page.header                       | ApiGuard Portal  |
| tool.1.url                               | /apiguard/muleguard  |
| muleguard.work.dir                       | \${mule.home}/apps/apiguardwrapper/working                         |
| http.listener.port                       | 8081   |
| report.timestamp.enabled                 | true   |
| registration.page.footer                 | &copy; 2018 RAKS - Enterprise API Solution Suite - ApiGuard        |
| registration.success.message             | Registration Successful!   |
| registration.field.3.placeholder         | Your organization (optional)                                       |
| registration.field.1.label               | Name   |
| muleguard.workspace.dir                  | \${mule.home}/apps/apiguardwrapper/workspace                       |
| registration.field.1.name                | name   |
| notification.email.host                  | smtp.gmail.com   |
| registration.page.subtitle               | Please provide your details to continue.                           |

### 3.1 src\main\resources\mule-app.properties (92 properties)

| Key                                     | Value   |
|---|---|
| notification.email.from                 | apiguard-noreply@raks.com                                   |
| registration.field.2.required           | true  |
| http.listener.startPath                 | /   |
| notification.attach.reports.default     | true  |
| tool.3.name                             | TibcoGuard  |
| registration.success.redirect.text      | Redirecting to portal in a few seconds...                   |
| notification.attach.reports.enabled     | true  |
| http.listener.basePath                  | /apiguard   |
| raksanalyzer.work.dir                   | \${mule.home}/apps/apiguardwrapper/working/raks             |
| notification.email.to                   | raksjnu@gmail.com   |
| session.timeout.minutes                 | 30  |
| tool.3.url                              | #   |
| registration.button.text                | Open ApiGuard Portal  |
| registration.field.2.type               | email   |
| notification.registration.email.enabled | true  |
| notification.email.port                 | 587   |
| tool.4.description                      | Compare API Responses                                       |
| notification.max.attachment.size.mb     | 10  |
| registration.field.2.label              | Email   |
| tool.1.description                      | Mule Code Review & Validation Suite                         |
| registration.success.redirect.delay     | 5000  |
| muleguard.input.local.enabled           | true  |
| tool.3.description                      | Tibco Code Analysis   |
| portal.page.footer                      | &copy; 2018 RAKS - Enterprise API Solution Suite - ApiGuard |
| registration.field.1.required           | true  |
| tool.2.name                             | RaksAnalyzer  |
| notification.registration.email.to      | raksjnu@gmail.com   |
| tool.2.description                      | Automated Documentation & Analysis                          |
| registration.page.header                | ApiGuard Portal   |
| tool.2.url                              | /apiguard/raksanalyzer                                      |
| portal.templates.dir                    | \${mule.home}/apps/apiguardwrapper/templates                |
| notification.registration.email.from    | apiguard-noreply@raks.com                                   |
| notification.email.subject              | MuleGuard Tool Used by {name} ({emailId})                   |
| registration.success.page.footer        | &copy; 2018 RAKS - Enterprise API Solution Suite - ApiGuard |
| app.name                                | ApiGuard Portal   |
| tool.4.name                             | API Comparison  |
| notification.attach.zipproject.default  | false   |
| registration.required                   | false   |
| registration.field.1.type               | text  |
| tool.1.name                             | MuleGuard   |
| portal.web.dir                          | \${mule.home}/apps/apiguardwrapper/web                      |
| registration.field.2.name               | email   |
| registration.success.page.title         | ApiGuard Portal - Registration Successful                   |
| email.header.color                      | #663399   |
| muleguard.web.templates.path            | web/muleguard   |

### 3.1 src\main\resources\mule-app.properties (92 properties)

| Key                                     | Value   |
|---|---|
| muleguard.reports.dir.name              |   |
| registration.button.processing          | Please wait..   |
| registration.field.3.type               | text  |
| encryption.key                          | rakspassphrase  |
| email.footer.background                 | #f9f4ff   |
| email.footer.color                      | #663399   |
| tool.4.url                              | #   |
| app.organization                        | RAKS  |
| email.footer.text                       | &copy; 2018 RAKS - Enterprise API Solution Suite - ApiGuard     |
| portal.page.subtitle                    | Select a tool from the catalog below to launch it in a new tab. |
| registration.field.3.label              | Company   |
| portal.page.title                       | ApiGuard Portal   |
| notification.registration.email.subject | \${app.name} Registration - {name} ({email}) - {company}        |
| notification.attach.zipproject.enabled  | true  |
| raksanalyzer.web.dir                    | \${mule.home}/apps/apiguardwrapper/web/raksanalyzer             |

## 4. Connector Configurations

Total Configurations: 5

### 4.1. Email\_SMTp (email:smtp-config)

Path: src\main\mule\apiguard-common.xml

| Attribute | Value      |
|-----------|------------|
| doc:name  | Email SMTP |
| name      | Email_SMTp |

#### 4.1.1 email:smtp-connection

| Attribute | Value              |
|-----------|--------------------|
| password  | fjuqjxckvosjummv   |
| port      | 587                |
| host      | smtp.gmail.com     |
| user      | rakkuma8@gmail.com |

##### 4.1.1.1 email:properties

###### 4.1.1.1.1 email:property

| Attribute | Value                     |
|-----------|---------------------------|
| value     | true                      |
| key       | mail.smtp.starttls.enable |

## 4.2. File\_Config (file:config)

Path: src\main\mule\apiguard-common.xml

| Attribute | Value       |
|-----------|-------------|
| doc:name  | File Config |
| name      | File_Config |

#### 4.2.1 file:connection

| Attribute  | Value         |
|------------|---------------|
| workingDir | \${mule.home} |

## 4.3. HTTP\_Listener\_config (http:listener-config)

Path: src\main\mule\apiguard-common.xml

| Attribute | Value                |
|-----------|----------------------|
| doc:name  | HTTP Listener config |
| basePath  | /apiguard            |
| name      | HTTP_Listener_config |

#### 4.3.1 http:listener-connection

| Attribute | Value   |
|-----------|---------|
| port      | 8081    |
| host      | 0.0.0.0 |

### 4.4. ObjectStore\_Config (os:config)

Path: src\main\mule\apiguard-common.xml

| Attribute | Value              |
|-----------|--------------------|
| name      | ObjectStore_Config |

### 4.5. Self\_HTTP\_Request\_Config (http:request-config)

Path: src\main\mule\apiguard-common.xml

| Attribute | Value                           |
|-----------|---------------------------------|
| doc:name  | Self HTTP Request configuration |
| name      | Self_HTTP_Request_Config        |

#### 4.5.1 http:request-connection

| Attribute | Value   |
|-----------|---------|
| port      | 8081    |
| host      | 0.0.0.0 |

## 5. Mule Flows

Total Flows: 22

### 5.1. common-send-registration-notification-flow

Path: src\main\mule\apiguard-common.xml

Type: flow

Components: 11

#### 5.1.1 logger

| Attribute | Value   |
|-----------|---|
| level     | INFO  |
| message   | Sending registration notification email (Common Flow) |

#### 5.1.2 ee:transform

| Attribute | Value                  |
|-----------|------------------------|
| doc:name  | Prepare Reg Email Body |

##### 5.1.2.1 ee:message

###### 5.1.2.1.1 ee:set-payload

| Attribute         | Value   |
|-------------------|---|
| <![CDATA[#[...]]> | <pre>%dw 2.0 output text/html --- "&lt;html&gt; &lt;body style='font-family: Arial, sans-serif;'&gt; &lt;div style='background-color: #f8f9fa; padding: 20px;'&gt;     &lt;h2 style='color: #663399;'&gt;? New User Registration&lt;/h2&gt; &lt;div style='background-color: white; padding: 20px; border-radius: 5px; border-left: 5px solid #663399;'&gt;         &lt;p&gt;&lt;strong&gt;Name:&lt;/strong&gt; " ++ vars.userName ++ "&lt;/p&gt;         &lt;p&gt;&lt;strong&gt;Email:&lt;/strong&gt; " ++ vars.userEmail ++ "&lt;/p&gt;         &lt;p&gt;&lt;strong&gt;Company:&lt;/strong&gt; " ++ vars.userCompany ++ "&lt;/p&gt; &lt;p&gt;&lt;strong&gt;Tool:&lt;/strong&gt; " ++ (vars.currentTool default 'ApiGuard Portal') ++ "&lt;/p&gt;         &lt;p&gt;&lt;strong&gt;Time:&lt;/strong&gt; " ++ now() ++ "&lt;/p&gt;     &lt;/div&gt; &lt;p style='color: #666; font-size: 12px; margin-top: 20px;'&gt;ApiGuard Notification System&lt;/p&gt; &lt;/div&gt; &lt;/body&gt; &lt;/html&gt;"</pre> |

### 5.1.3 try

| Attribute | Value          |
|-----------|----------------|
| doc:name  | Try Send Email |

#### 5.1.3.1 email:send

| Attribute   | Value   |
|-------------|---|
| doc:name    | Send Registration Email   |
| config-ref  | Email_SMTPL   |
| subject     | ApiGuard Registration: #[vars.userName]   |
| fromAddress | \${notification.email.from}   |
| toAddresses | #[(vars.notificationToAddresses default '\${notification.email.to}') splitBy ','] |

##### 5.1.3.1.1 email:body

| Attribute   | Value     |
|-------------|-----------|
| contentType | text/html |

##### 5.1.3.1.1.1 email:content

| Attribute         | Value   |
|-------------------|---------|
| <![CDATA[#[...]]> | payload |

#### 5.1.3.2 error-handler

##### 5.1.3.2.1 on-error-continue

| Attribute           | Value             |
|---------------------|-------------------|
| doc:name            | On Error Continue |
| logException        | true              |
| enableNotifications | true              |

#### 5.1.3.2.1.1 logger

| Attribute | Value   |
|-----------|---|
| doc:name  | Log Email Error   |
| level     | ERROR   |
| message   | Failed to send registration email: #[error.description] |

### 5.2. common-static-resource-flow

Path: src\main\mule\apiguard-common.xml

Type: flow

Components: 2

#### 5.2.1 http:listener

| Attribute      | Value                |
|----------------|----------------------|
| path           | /assets/*            |
| config-ref     | HTTP_Listener_config |
| allowedMethods | GET                  |

#### 5.2.2 http:load-static-resource

| Attribute        | Value                    |
|------------------|--------------------------|
| resourceBasePath | \${app.home}/web/assets/ |

### 5.3. root-redirect-flow

Path: src\main\mule\apiguard-portal.xml

Type: flow

Components: 6

#### 5.3.1 http:listener

| Attribute  | Value                       |
|------------|-----------------------------|
| doc:name   | Listener                    |
| path       | \${http.listener.startPath} |
| doc:id     | start-listener-id           |
| config-ref | HTTP_Listener_config        |

## 5.3.2 choice

### 5.3.2.1 when

| Attribute  | Value                                   |
|------------|---|
| expression | #['\${registration.enabled}' == 'true'] |

#### 5.3.2.1.1 set-payload

| Attribute | Value  |
|-----------|--|
| mimeType  | text/html  |
| value     | #['<html><head><meta http-equiv="refresh" content="0;url=/apiguard/registration"></head><body>Redirecting...</body></html>'] |

### 5.3.2.2 otherwise

#### 5.3.2.2.1 set-payload

| Attribute | Value  |
|-----------|--|
| mimeType  | text/html  |
| value     | #['<html><head><meta http-equiv="refresh" content="0;url=/apiguard/main"></head><body>Redirecting...</body></html>'] |

## 5.4. registration-page-flow

Path: src\main\mule\apiguard-portal.xml

Type: flow

Components: 3

### 5.4.1 http:listener

| Attribute  | Value                |
|------------|----------------------|
| doc:name   | Listener             |
| path       | /registration        |
| config-ref | HTTP_Listener_config |

### 5.4.2 file:read

| Attribute | Value   |
|-----------|---|
| doc:name  | Read registration template  |
| path      | \${mule.home}/apps/apiguardwrapper/templates/registration.template.html |

#### 5.4.3 set-payload

| Attribute | Value  |
|-----------|--|
| doc:name  | Replace placeholders   |
| mimeType  | text/html  |
| value     | <pre>#[%dw 2.0 output text/plain --- payload replace '{{registration.page.title}}' with p('registration.page.title') replace '{{registration.page.header}}' with p('registration.page.header') replace '{{registration. page.subtitle}}' with p('registration.page.subtitle') replace '{{registration.button.text}}' with p('registration.button.text') replace '{{registration.button.processing}}' with p('registration.button.processing') replace '{{registration.field.1.name}}' with p('registration.field.1.name') replace '{{registration.field.1.label}}' with p('registration. field.1.label') replace '{{registration.field.1.type}}' with p('registration.field.1.type') replace '{{registration.field.1.required}}' with p('registration.field.1.required') replace  '{{registration.field.1.placeholder}}' with p('registration.field.1.placeholder') replace '{{registration.field.2.name}}' with p('registration.field.2.name') replace '{{registration. field.2.label}}' with p('registration.field.2.label') replace '{{registration.field.2.type}}' with p('registration.field.2.type') replace '{{registration.field.2.required}}' with p('registration.field.2.required') replace '{{registration.field.2.placeholder}}' with p('registration.field.2.placeholder') replace '{{registration.field.3.name}}' with p('registration.field.3.name') replace '{{registration.field.3.label}}' with p('registration. field.3.label') replace '{{registration.field.3.type}}' with p('registration.field.3.type') replace '{{registration.field.3.required}}' with p('registration.field.3.required') replace '{{registration.field.3.placeholder}}' with p('registration.field.3.placeholder') replace '{{registration.page.footer}}' with p('registration.page.footer')]</pre> |

#### 5.5. main-page-flow

Path: src\main\mule\apiguard-portal.xml

Type: flow

Components: 6

##### 5.5.1 http:listener

| Attribute  | Value                |
|------------|----------------------|
| doc:name   | Listener             |
| path       | /main                |
| doc:id     | index-listener-id    |
| config-ref | HTTP_Listener_config |

##### 5.5.2 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | sessionId                                      |
| value        | #[\$attributes.queryParams.session default ""] |

### 5.5.3 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | tool1Url  |
| value        | #[\$p('tool.1.url') ++ (if (vars.sessionId != "") '?session=' ++ vars.sessionId else "")] |

### 5.5.4 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | tool2Url  |
| value        | #[\$p('tool.2.url') ++ (if (vars.sessionId != "") '?session=' ++ vars.sessionId else "")] |

### 5.5.5 file:read

| Attribute | Value                                       |
|-----------|---|
| doc:name  | Read portal template                        |
| path      | #{portal.templates.dir}/index.template.html |

### 5.5.6 set-payload

| Attribute | Value   |
|-----------|---|
| doc:name  | Replace placeholders  |
| mimeType  | text/html   |
| value     | <pre>#[%dw 2.0 output text/plain --- payload replace '{{portal.page.title}}' with p('portal.page.title') replace '{{portal.page.header}}' with p('portal.page.header') replace '{{portal.page.subtitle}}' with p('portal.page.subtitle') replace '{{portal.page.footer}}' with p('portal.page.footer') replace '{{tool.1.name}}' with p('tool.1.name') replace '{{tool.1.description}}' with p('tool.1.description') replace '{{tool.1.url}}' with vars.tool1Url replace '{{tool.2.name}}' with p('tool.2.name') replace '{{tool.2.description}}' with p('tool.2.description') replace '{{tool.2.url}}' with vars.tool2Url replace '{{tool.3.name}}' with p('tool.3.name') replace '{{tool.3.description}}' with p('tool.3.description') replace '{{tool.3.url}}' with p('tool.3.url') replace '{{tool.4.name}}' with p('tool.4.name') replace '{{tool.4.description}}' with p('tool.4.description') replace '{{tool.4.url}}' with p('tool.4.url')]</pre> |

## 5.6. user-registration-flow

Path: src\main\mule\apiguard-portal.xml

Type: flow

Components: 16

### 5.6.1 http:listener

| Attribute      | Value                |
|----------------|----------------------|
| path           | /registration-action |
| config-ref     | HTTP_Listener_config |
| allowedMethods | POST                 |

## 5.6.2 set-variable

| Attribute    | Value             |
|--------------|-------------------|
| variableName | userName          |
| value        | #[\$payload.name] |

## 5.6.3 set-variable

| Attribute    | Value              |
|--------------|--------------------|
| variableName | userEmail          |
| value        | #[\$payload.email] |

## 5.6.4 set-variable

| Attribute    | Value                              |
|--------------|------------------------------------|
| variableName | userCompany                        |
| value        | #[\$payload.company default 'N/A'] |

## 5.6.5 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | userIpAddress   |
| value        | #[\$attributes.headers['x-forwarded-for'] default attributes.remoteAddress] |

## 5.6.6 set-variable

| Attribute    | Value                                 |
|--------------|---------------------------------------|
| variableName | userAgent                             |
| value        | #[\$attributes.headers['user-agent']] |

## 5.6.7 set-variable

| Attribute    | Value            |
|--------------|------------------|
| variableName | sessionStartTime |
| value        | #[\$now()]       |

## 5.6.8 set-variable

| Attribute    | Value               |
|--------------|---------------------|
| variableName | currentTool         |
| value        | Portal Registration |

### 5.6.9 set-variable

| Attribute    | Value     |
|--------------|-----------|
| variableName | sessionId |
| value        | #[uuid()] |

### 5.6.10 os:store

| Attribute   | Value              |
|-------------|--------------------|
| objectStore | User_Session_Store |
| key         | #[vars.sessionId]  |

### 5.6.10.1 os:value

| Attribute           | Value  |
|---------------------|--|
| <![CDATA[# [...]]]> | <pre>output application/java --- {     name: vars.userName,     email: vars.userEmail,     company: vars.userCompany,     ipAddress: vars.userIpAddress,     userAgent: vars.userAgent,     startTime: vars.sessionStartTime }</pre> |

### 5.6.11 async

#### 5.6.11.1 flow-ref

| Attribute | Value                                      |
|-----------|--|
| name      | common-send-registration-notification-flow |

### 5.6.12 ee:transform

#### 5.6.12.1 ee:message

##### 5.6.12.1.1 ee:set-payload

| Attribute         | Value   |
|-------------------|---|
| <![CDATA[#[...]]> | %dw 2.0<br>output application/json indent=false<br>---<br>{status: "success", message: "Registration successful", redirectUrl: "/apiguard/registration-success?session=" ++ vars.sessionId} |

## 5.7. registration-success-flow

Path: src\main\mule\apiguard-portal.xml

Type: flow

Components: 5

### 5.7.1 http:listener

| Attribute      | Value                 |
|----------------|-----------------------|
| path           | /registration-success |
| config-ref     | HTTP_Listener_config  |
| allowedMethods | GET                   |

### 5.7.2 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | sessionId                                    |
| value        | #@[attributes.queryParams.session default "] |

### 5.7.3 file:read

| Attribute | Value  |
|-----------|--|
| doc:name  | Read success template                                      |
| path      | #{portal.templates.dir}/registration-success.template.html |

### 5.7.4 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | redirectLink   |
| value        | #/apiguard/main' ++ (if (vars.sessionId != "") '?session=' ++ vars.sessionId else "")] |

### 5.7.5 set-payload

| Attribute | Value   |
|-----------|---|
| doc:name  | Replace placeholders  |
| mimeType  | text/html   |
| value     | <pre>#[%dw 2.0 output text/plain --- payload replace '{{registration.success.page.title}}' with p('registration.success.page.title') replace '{{registration.success.page.header}}' with p('registration.success.page.header') replace '{{registration.success.message}}' with p('registration.success.message') replace '{{registration.success.redirect.text}}' with p('registration.success.redirect.text') replace '{{registration.success.redirect.delay}}' with p('registration.success.redirect.delay') replace '{{registration.button.text}}' with p('registration.button.text') replace '{{registration.success.page.footer}}' with p('registration.success.page.footer') replace '{{registration.success.redirect.link}}' with vars.redirectLink]</pre> |

## 5.8. static-resources-flow

Path: src\main\mule\apiguard-portal.xml

Type: flow

Components: 2

### 5.8.1 http:listener

| Attribute  | Value                                 |
|------------|---------------------------------------|
| doc:name   | Listener                              |
| path       | \${http.listener.staticResourcesPath} |
| doc:id     | static-listener-id                    |
| config-ref | HTTP_Listener_config                  |

### 5.8.2 http:load-static-resource

| Attribute        | Value                |
|------------------|----------------------|
| doc:name         | Load static resource |
| doc:id           | load-static-id       |
| resourceBasePath | \${app.home}/web/    |

## 5.9. muleguard-root-flow

Path: src\main\mule\muleguard-wrapper.xml

Type: flow

Components: 19

### 5.9.1 http:listener

| Attribute      | Value                |
|----------------|----------------------|
| path           | /muleguard           |
| config-ref     | HTTP_Listener_config |
| allowedMethods | GET                  |

## 5.9.2 set-variable

| Attribute    | Value                             |
|--------------|-----------------------------------|
| variableName | sessionId                         |
| value        | #[attributes.queryParams.session] |

## 5.9.3 choice

### 5.9.3.1 when

| Attribute  | Value                     |
|------------|---------------------------|
| expression | #[vars.sessionId != null] |

#### 5.9.3.1.1 logger

| Attribute | Value  |
|-----------|--|
| level     | INFO   |
| message   | #['Existing session detected: ' ++ vars.sessionId] |

#### 5.9.3.1.2 os:contains

| Attribute   | Value              |
|-------------|--------------------|
| objectStore | User_Session_Store |
| key         | #[vars.sessionId]  |
| target      | sessionExists      |

#### 5.9.3.1.3 choice

##### 5.9.3.1.3.1 when

| Attribute  | Value                  |
|------------|------------------------|
| expression | #![vars.sessionExists] |

##### 5.9.3.1.3.1.1 logger

| Attribute | Value   |
|-----------|---|
| level     | WARN  |
| message   | Session ID provided but not found in store. Creating new anonymous session. |

##### 5.9.3.1.3.1.2 flow-ref

| Attribute | Value                            |
|-----------|----------------------------------|
| name      | create-anonymous-session-subflow |

### 5.9.3.1.3.2 otherwise

#### 5.9.3.1.3.2.1 logger

| Attribute | Value          |
|-----------|----------------|
| level     | DEBUG          |
| message   | Session valid. |

### 5.9.3.2 otherwise

#### 5.9.3.2.1 logger

| Attribute | Value  |
|-----------|--|
| level     | INFO   |
| message   | No session provided. Creating anonymous session. |

#### 5.9.3.2.2 flow-ref

| Attribute | Value                            |
|-----------|----------------------------------|
| name      | create-anonymous-session-subflow |

### 5.9.4 async

#### 5.9.4.1 flow-ref

| Attribute | Value                         |
|-----------|-------------------------------|
| name      | send-launch-notification-flow |

### 5.9.5 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | redirectLocation   |
| value        | #['/apiguard/muleguard/main?session=' ++ vars.sessionId] |

### 5.9.6 set-payload

| Attribute | Value   |
|-----------|---|
| mimeType  | text/html   |
| value     | #['<html><head><meta http-equiv="refresh" content="0;url=' ++ vars.redirectLocation ++ '"></head><body>Redirecting...</body></html>'] |

## 5.10. send-launch-notification-flow

Path: src\main\mule\muleguard-wrapper.xml

Type: flow

Components: 8

### 5.10.1 os:retrieve

| Attribute   | Value               |
|-------------|---------------------|
| objectStore | User_Session_Store  |
| key         | #[{vars.sessionId}] |
| target      | sessionData         |

#### 5.10.1.1 os:default-value

| Attribute         | Value   |
|-------------------|---|
| <![CDATA[#[...]]> | {<br>name: 'Unknown',<br>email: '\${notification.email.to}',<br>company: 'N/A'<br>} |

### 5.10.2 email:send

| Attribute   | Value   |
|-------------|---|
| config-ref  | Email_SMTPh   |
| subject     | #[\${notification.email.subject}] replace '{name}' with vars.sessionData.name replace '{emailld}' with vars.sessionData.email ++ '- Launched MuleGuard' |
| fromAddress | #{notification.email.from}  |
| toAddresses | #[\${notification.email.to}]  |

#### 5.10.2.1 email:body

| Attribute   | Value     |
|-------------|-----------|
| contentType | text/html |

#### 5.10.2.1.1 email:content

| Attribute         | Value   |
|-------------------|---|
| <![CDATA[#[...]]> | output text/plain --- "User " ++ vars.sessionData.name ++ " (" ++ vars.sessionData.email ++ ") from " ++ vars.sessionData.company ++ " launched MuleGuard." |

### 5.10.3 error-handler

#### 5.10.3.1 on-error-continue

##### 5.10.3.1.1 logger

| Attribute | Value                              |
|-----------|------------------------------------|
| level     | WARN                               |
| message   | Failed to send launch notification |

## 5.11. main-landing-page-flow

Path: src\main\mule\muleguard-wrapper.xml

Type: flow

Components: 6

### 5.11.1 http:listener

| Attribute      | Value                |
|----------------|----------------------|
| path           | /muleguard/main      |
| config-ref     | HTTP_Listener_config |
| allowedMethods | GET                  |

#### 5.11.1.1 http:response

##### 5.11.1.1.1 http:headers

| Attribute         | Value   |
|-------------------|---|
| <![CDATA[#[...]]> | #{{<br>"Content-Type": "text/html; charset=UTF-8"<br>}} |

### 5.11.2 set-variable

| Attribute    | Value                            |
|--------------|----------------------------------|
| variableName | localInputEnabled                |
| value        | #{muleguard.input.local.enabled} |

### 5.11.3 set-variable

| Attribute    | Value                    |
|--------------|--------------------------|
| variableName | registrationRequired     |
| value        | #{registration.required} |

### 5.11.4 parse-template

| Attribute | Value                                      |
|-----------|--|
| location  | #{muleguard.web.templates.path}/index.html |

## 5.12. static-resource-flow

Path: src\main\mule\muleguard-wrapper.xml

Type: flow

Components: 6

### 5.12.1 http:listener

| Attribute      | Value                |
|----------------|----------------------|
| path           | /muleguard/web/*     |
| config-ref     | HTTP_Listener_config |
| allowedMethods | GET                  |

#### 5.12.1.1 http:response

##### 5.12.1.1.1 http:headers

| Attribute         | Value  |
|-------------------|--|
| <![CDATA[#[...]]> | output application/java<br>---<br>{<br>"Content-Type": vars.mimeType default "application/octet-stream"<br>} |

### 5.12.2 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | resourcePath   |
| value        | #[@attributes.relativePath replace '/muleguard/web/' with "] |

### 5.12.3 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | mimeType  |
| value        | #[<br>if (vars.resourcePath endsWith '.html') 'text/html; charset=UTF-8'<br>else if (vars.resourcePath endsWith '.css') 'text/css; charset=UTF-8'<br>else if (vars.resourcePath endsWith '.js') 'application/javascript; charset=UTF-8'<br>else if (vars.resourcePath endsWith '.svg') 'image/svg+xml'<br>else if (vars.resourcePath endsWith '.png') 'image/png'<br>else if (vars.resourcePath endsWith '.jpg') 'image/jpeg'<br>else if (vars.resourcePath endsWith '.json') 'application/json; charset=UTF-8'<br>else 'application/octet-stream'<br>] |

### 5.12.4 set-payload

| Attribute | Value   |
|-----------|---|
| value     | #[readUrl('classpath://web/muleguard/' ++ vars.resourcePath, 'application/octet-stream')] |

## 5.13. session-validation-flow

Path: src\main\mule\muleguard-wrapper.xml

Type: flow

Components: 12

### 5.13.1 http:listener

| Attribute      | Value                       |
|----------------|-----------------------------|
| path           | /muleguard/validate-session |
| config-ref     | HTTP_Listener_config        |
| allowedMethods | GET                         |

### 5.13.2 set-variable

| Attribute    | Value                             |
|--------------|-----------------------------------|
| variableName | sessionId                         |
| value        | #[attributes.queryParams.session] |

### 5.13.3 try

#### 5.13.3.1 os:retrieve

| Attribute   | Value              |
|-------------|--------------------|
| objectStore | User_Session_Store |
| key         | #[vars.sessionId]  |

#### 5.13.3.2 ee:transform

##### 5.13.3.2.1 ee:message

###### 5.13.3.2.1.1 ee:set-payload

| Attribute        | Value   |
|------------------|---|
| <![CDATA[#...]]> | %dw 2.0<br>output application/json<br>---<br>{valid: true, sessionId: vars.sessionId} |

#### 5.13.3.3 error-handler

##### 5.13.3.3.1 on-error-continue

| Attribute | Value            |
|-----------|------------------|
| type      | OS:KEY_NOT_FOUND |

#### 5.13.3.3.1.1 ee:transform

##### 5.13.3.3.1.1.1 ee:message

###### 5.13.3.3.1.1.1.1 ee:set-payload

| Attribute         | Value  |
|-------------------|--|
| <![CDATA[#[...]]> | %dw 2.0<br>output application/json<br>---<br>{valid: false, message: "Session expired or not found"} |

### 5.14. validation-trigger-flow

Path: src\main\mule\muleguard-wrapper.xml

Type: flow

Components: 114

#### 5.14.1 http:listener

| Attribute      | Value                |
|----------------|----------------------|
| path           | /muleguard/validate  |
| config-ref     | HTTP_Listener_config |
| allowedMethods | POST                 |

#### 5.14.2 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | contentType   |
| value        | #[attributes.headers['content-type'] default 'unknown'] |

#### 5.14.3 choice

##### 5.14.3.1 when

| Attribute  | Value  |
|------------|--|
| expression | #[vars.contentType contains 'multipart/form-data'] |

###### 5.14.3.1.1 logger

| Attribute | Value                                  |
|-----------|--|
| level     | INFO                                   |
| message   | Processing multipart/form-data request |

#### 5.14.3.1.2 logger

| Attribute | Value  |
|-----------|--|
| level     | INFO   |
| message   | #['Available multipart parts: ' ++ (payload.parts pluck \$\$ joinBy ', ')] |

#### 5.14.3.1.3 ee:transform

##### 5.14.3.1.3.1 ee:message

###### 5.14.3.1.3.1.1 ee:set-payload

| Attribute         | Value   |
|-------------------|---|
| <![CDATA[#[...]]> | %dw 2.0<br>output application/java<br>---<br>{<br>userSessionId: payload.parts.session.content default null,<br>validationMode: payload.parts.mode.content default null,<br>pathContent: payload.parts.path.content default null,<br>zipFileContent: payload.parts.zipFile.content default null,<br>zipFilename: payload.parts.zipFile.headers['Content-Disposition'].filename default<br>"Uploaded ZIP File",<br>customRulesContent: payload.parts.customRules.content default null,<br>attachReports: payload.parts.attachReports.content default null,<br>attachInput: payload.parts.attachInput.content default null,<br>attachProject: payload.parts.attachProject.content default null<br>} |

#### 5.14.3.1.4 set-variable

| Attribute    | Value                                     |
|--------------|---|
| variableName | userSessionId                             |
| value        | #[trim(payload.userSessionId default "")] |

#### 5.14.3.1.5 set-variable

| Attribute    | Value                                      |
|--------------|--|
| variableName | validationMode                             |
| value        | #[trim(payload.validationMode default "")] |

#### 5.14.3.1.6 set-variable

| Attribute    | Value                                   |
|--------------|---|
| variableName | pathContent                             |
| value        | #[trim(payload.pathContent default "")] |

#### 5.14.3.1.7 set-variable

| Attribute    | Value                     |
|--------------|---------------------------|
| variableName | zipFileContent            |
| value        | #[payload.zipFileContent] |

#### 5.14.3.1.8 set-variable

| Attribute    | Value                  |
|--------------|------------------------|
| variableName | zipFilename            |
| value        | #[payload.zipFilename] |

#### 5.14.3.1.9 set-variable

| Attribute    | Value                         |
|--------------|-------------------------------|
| variableName | customRulesContent            |
| value        | #[payload.customRulesContent] |

#### 5.14.3.1.10 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | baseUrl  |
| value        | #[(attributes.headers['x-forwarded-proto'] default 'http') ++ ':' ++ (attributes.headers['x-forwarded-host'] default attributes.headers.host)] |

#### 5.14.3.1.11 set-variable

| Attribute    | Value       |
|--------------|-------------|
| variableName | isMultipart |
| value        | #[true]     |

#### 5.14.3.1.12 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | userWantsReportAttachment                      |
| value        | #[trim(payload.attachReports default 'false')] |

#### 5.14.3.1.13 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | userWantsInputAttachment                     |
| value        | #[trim(payload.attachInput default 'false')] |

#### 5.14.3.1.14 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | userWantsProjectAttachment                     |
| value        | #[trim(payload.attachProject default 'false')] |

#### 5.14.3.1.15 logger

| Attribute | Value   |
|-----------|---|
| level     | INFO  |
| message   | #{'Extracted - sessionId: ' ++ (vars.userSessionId default 'null') ++ ', mode: ' ++ (vars.validationMode default 'null') ++ ', path: ' ++ (vars.pathContent default 'N/A') ++ ', zipFile: ' ++ (vars.zipFileContent != null) ++ ', customRules: ' ++ (vars.customRulesContent != null) ++ ', Attach[Report=' ++ vars.userWantsReportAttachment ++ ', Input=' ++ vars.userWantsInputAttachment ++ ', LocalProject=' ++ vars.userWantsProjectAttachment ++ ']'} |

#### 5.14.3.2 when

| Attribute  | Value   |
|------------|---|
| expression | #[vars.contentType contains 'application/json'] |

#### 5.14.3.2.1 logger

| Attribute | Value                               |
|-----------|-------------------------------------|
| level     | INFO                                |
| message   | Processing application/json request |

#### 5.14.3.2.2 set-variable

| Attribute    | Value                           |
|--------------|---------------------------------|
| variableName | userSessionId                   |
| value        | #[payload.session default null] |

#### 5.14.3.2.3 set-variable

| Attribute    | Value                        |
|--------------|------------------------------|
| variableName | validationMode               |
| value        | #[payload.mode default null] |

#### 5.14.3.2.4 set-variable

| Attribute    | Value                        |
|--------------|------------------------------|
| variableName | pathContent                  |
| value        | #[payload.path default null] |

#### 5.14.3.2.5 set-variable

| Attribute    | Value          |
|--------------|----------------|
| variableName | zipFileContent |
| value        | #[null]        |

#### 5.14.3.2.6 set-variable

| Attribute    | Value              |
|--------------|--------------------|
| variableName | customRulesContent |
| value        | #[null]            |

#### 5.14.3.2.7 set-variable

| Attribute    | Value       |
|--------------|-------------|
| variableName | isMultipart |
| value        | #[false]    |

#### 5.14.3.3 otherwise

##### 5.14.3.3.1 logger

| Attribute | Value   |
|-----------|---|
| level     | ERROR   |
| message   | #['Unsupported content type: ' ++ vars.contentType] |

##### 5.14.3.3.2 raise-error

| Attribute   | Value                              |
|-------------|------------------------------------|
| description | Unsupported content type           |
| type        | MULEGUARD:UNSUPPORTED_CONTENT_TYPE |

#### 5.14.4 choice

##### 5.14.4.1 when

| Attribute  | Value  |
|------------|--|
| expression | #[vars.userSessionId == null or vars.validationMode == null] |

##### 5.14.4.1.1 logger

| Attribute | Value   |
|-----------|---|
| level     | ERROR   |
| message   | #['Missing required fields - userSessionId: ' ++ (vars.userSessionId != null) ++ ', validationMode: ' ++ (vars.validationMode != null)] |

#### 5.14.4.1.2 raise-error

| Attribute   | Value  |
|-------------|--|
| description | Missing required fields: session and/or mode |
| type        | MULEGUARD:MISSING_REQUIRED_FIELDS            |

#### 5.14.4.2 otherwise

##### 5.14.4.2.1 logger

| Attribute | Value   |
|-----------|---|
| level     | DEBUG   |
| message   | Required fields present, proceeding with validation |

#### 5.14.5 choice

##### 5.14.5.1 when

| Attribute  | Value   |
|------------|---|
| expression | #[trim(vars.validationMode as String) == 'local'] |

##### 5.14.5.1.1 set-variable

| Attribute    | Value               |
|--------------|---------------------|
| variableName | projectPath         |
| value        | #[vars.pathContent] |

##### 5.14.5.1.2 set-variable

| Attribute    | Value               |
|--------------|---------------------|
| variableName | displayPath         |
| value        | #[vars.pathContent] |

##### 5.14.5.1.3 choice

###### 5.14.5.1.3.1 when

| Attribute  | Value                              |
|------------|------------------------------------|
| expression | #[vars.customRulesContent != null] |

###### 5.14.5.1.3.1.1 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | tempWorkspaceDir                                |
| value        | #[\${muleguard.workspace.dir} ++ '/' ++ uuid()] |

#### 5.14.5.1.3.1.2 file:create-directory

| Attribute     | Value                    |
|---------------|--------------------------|
| directoryPath | #[vars.tempWorkspaceDir] |
| config-ref    | File_Config              |

#### 5.14.5.1.3.1.3 file:write

| Attribute  | Value                                     |
|------------|---|
| mode       | OVERWRITE                                 |
| path       | #[vars.tempWorkspaceDir ++ '/rules.yaml'] |
| config-ref | File_Config                               |

#### 5.14.5.1.3.1.3.1 file:content

| Attribute       | Value                      |
|-----------------|----------------------------|
| <![CDATA[...]]> | #[vars.customRulesContent] |

#### 5.14.5.1.3.1.4 set-variable

| Attribute    | Value                                     |
|--------------|---|
| variableName | customRulesPath                           |
| value        | #[vars.tempWorkspaceDir ++ '/rules.yaml'] |

#### 5.14.5.1.3.2 otherwise

##### 5.14.5.1.3.2.1 set-variable

| Attribute    | Value           |
|--------------|-----------------|
| variableName | customRulesPath |
| value        | #[null]         |

#### 5.14.5.2 when

| Attribute  | Value   |
|------------|---|
| expression | #[trim(vars.validationMode as String) == 'zip'] |

#### 5.14.5.2.1 choice

##### 5.14.5.2.1.1 when

| Attribute  | Value  |
|------------|--|
| expression | #![vars.isMultipart and vars.zipFileContent != null] |

#### 5.14.5.2.1.1.1 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | workingDir  |
| value        | #[\${muleguard.work.dir}' ++ '/' ++ vars.userSessionId] |

#### 5.14.5.2.1.1.2 file:create-directory

| Attribute     | Value              |
|---------------|--------------------|
| directoryPath | #[vars.workingDir] |
| config-ref    | File_Config        |

#### 5.14.5.2.1.1.3 set-variable

| Attribute    | Value                              |
|--------------|------------------------------------|
| variableName | zipFilePath                        |
| value        | #[vars.workingDir ++ '/input.zip'] |

#### 5.14.5.2.1.1.4 file:write

| Attribute  | Value               |
|------------|---------------------|
| path       | #[vars.zipFilePath] |
| config-ref | File_Config         |

#### 5.14.5.2.1.1.4.1 file:content

| Attribute        | Value                  |
|------------------|------------------------|
| <![CDATA[#...]]> | #[vars.zipFileContent] |

#### 5.14.5.2.1.1.5 file:read

| Attribute | Value               |
|-----------|---------------------|
| path      | #[vars.zipFilePath] |
| target    | savedZipContent     |

#### 5.14.5.2.1.1.6 java:invoke-static

| Attribute | Value                                   |
|-----------|---|
| method    | extractZip(java.io.InputStream, String) |
| class     | com.raks.muleguard.wrapper.ZipExtractor |

#### 5.14.5.2.1.1.6.1 java:args

| Attribute         | Value   |
|-------------------|---|
| <![CDATA[#[...]]> | #{{<br>arg0: vars.savedZipContent,<br>arg1: vars.workingDir ++ '/extracted'<br>}} |

#### 5.14.5.2.1.1.7 set-variable

| Attribute    | Value         |
|--------------|---------------|
| variableName | extractedPath |
| value        | #[payload]    |

#### 5.14.5.2.1.1.8 set-variable

| Attribute    | Value                 |
|--------------|-----------------------|
| variableName | projectPath           |
| value        | #[vars.extractedPath] |

#### 5.14.5.2.1.1.9 set-variable

| Attribute    | Value               |
|--------------|---------------------|
| variableName | displayPath         |
| value        | #[vars.zipFilename] |

#### 5.14.5.2.1.1.10 logger

| Attribute | Value                                      |
|-----------|--|
| level     | INFO                                       |
| message   | #[ZIP extracted to: ' ++ vars.projectPath] |

#### 5.14.5.2.1.1.11 choice

##### 5.14.5.2.1.1.11.1 when

| Attribute  | Value                              |
|------------|------------------------------------|
| expression | #[vars.customRulesContent != null] |

##### 5.14.5.2.1.1.11.2 otherwise

#### 5.14.5.2.1.2 otherwise

##### 5.14.5.2.1.2.1 logger

| Attribute | Value   |
|-----------|---|
| level     | ERROR   |
| message   | ZIP mode requires multipart/form-data with a ZIP file |

#### 5.14.5.2.1.2.2 raise-error

| Attribute   | Value   |
|-------------|---|
| description | ZIP upload mode requires multipart/form-data content type with a ZIP file |
| type        | MULEGUARD:ZIP_REQUIRES_MULTIPART  |

#### 5.14.5.3 otherwise

##### 5.14.5.3.1 logger

| Attribute | Value   |
|-----------|---|
| level     | ERROR   |
| message   | #['Invalid validation mode: ' ++ vars.validationMode] |

##### 5.14.5.3.2 raise-error

| Attribute   | Value   |
|-------------|---|
| description | #['Invalid validation mode: ' ++ vars.validationMode ++ '. Must be local or zip'] |
| type        | MULEGUARD:INVALID_MODE  |

#### 5.14.6 choice

##### 5.14.6.1 when

| Attribute  | Value                                       |
|------------|---|
| expression | #['\${report.timestamp.enabled}' == 'true'] |

##### 5.14.6.1.1 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | reportTimestamp  |
| value        | #[now() as String {format: '\${report.timestamp.format}'}] |

##### 5.14.6.1.2 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | reportDirName                                   |
| value        | #['muleguard-reports-' ++ vars.reportTimestamp] |

##### 5.14.6.2 otherwise

##### 5.14.6.2.1 set-variable

| Attribute    | Value             |
|--------------|-------------------|
| variableName | reportDirName     |
| value        | muleguard-reports |

#### 5.14.7 java:invoke-static

| Attribute | Value                                       |
|-----------|---|
| method    | validate(String, String, String, String)    |
| class     | com.raks.muleguard.wrapper.MuleGuardInvoker |

##### 5.14.7.1 java:args

| Attribute         | Value  |
|-------------------|--|
| <![CDATA[#[...]]> | #{           arg0: vars.projectPath,           arg1: vars.customRulesPath,           arg2: vars.displayPath,           arg3: vars.reportDirName         }] |

#### 5.14.8 set-variable

| Attribute    | Value             |
|--------------|-------------------|
| variableName | validationResults |
| value        | #[payload]        |

#### 5.14.9 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | reportPath  |
| value        | #[vars.projectPath ++ '/' ++ vars.reportDirName ++ '/CONSOLIDATED-REPORT.html'] |

#### 5.14.10 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | reportsFolderPath                                |
| value        | #[vars.projectPath ++ '/' ++ vars.reportDirName] |

#### 5.14.11 choice

##### 5.14.11.1 when

| Attribute  | Value   |
|------------|---|
| expression | #[vars.validationMode == 'zip' and vars.zipWorkspace != null] |

##### 5.14.11.1.1 set-variable

| Attribute    | Value                                |
|--------------|--------------------------------------|
| variableName | zipFilePath                          |
| value        | #[vars.zipWorkspace ++ '/input.zip'] |

#### 5.14.11.2 otherwise

##### 5.14.11.2.1 logger

| Attribute | Value   |
|-----------|---|
| level     | DEBUG   |
| message   | Not using zip mode or zip workspace not set, skipping input zip path assignment |

#### 5.14.12 logger

| Attribute | Value  |
|-----------|--|
| level     | INFO   |
| message   | #['DEBUG: Attachment Prefs - Report: ' ++ (vars.userWantsReportAttachment default 'null') ++ ', Input: ' ++ (vars.userWantsInputAttachment default 'null') ++ ', Project: ' ++ (vars.userWantsProjectAttachment default 'null')]'] |

#### 5.14.13 os:store

| Attribute   | Value                 |
|-------------|-----------------------|
| objectStore | Report_Path_Store     |
| key         | #[vars.userSessionId] |

##### 5.14.13.1 os:value

| Attribute        | Value   |
|------------------|---|
| <![CDATA[#...]]> | #[vars.projectPath ++ '  ' ++ vars.reportDirName] |

#### 5.14.14 async

##### 5.14.14.1 flow-ref

| Attribute | Value                        |
|-----------|------------------------------|
| name      | send-usage-notification-flow |

#### 5.14.15 ee:transform

##### 5.14.15.1 ee:message

###### 5.14.15.1.1 ee:set-payload

| Attribute         | Value  |
|-------------------|--|
| <![CDATA[#[...]]> | <pre>%dw 2.0 output application/json indent=false --- {     status: "success",     sessionId: vars.validationSessionId default vars.userSessionId,     mode: vars.validationMode,     reportsPath: vars.projectPath ++ "/" ++ vars.reportDirName,     customRules: vars.customRulesPath != null,     baseUrl: vars.baseUrl }</pre> |

## 5.14.16 error-handler

### 5.14.16.1 on-error-propagate

| Attribute | Value                              |
|-----------|------------------------------------|
| type      | MULEGUARD:UNSUPPORTED_CONTENT_TYPE |

#### 5.14.16.1.1 ee:transform

##### 5.14.16.1.1.1 ee:message

###### 5.14.16.1.1.1.1 ee:set-payload

| Attribute         | Value   |
|-------------------|---|
| <![CDATA[#[...]]> | <pre>%dw 2.0 output application/json indent=false --- {status: "error", message: "Unsupported content type. Use multipart/form-data or application/json"}</pre> |

### 5.14.16.2 on-error-propagate

| Attribute | Value |
|-----------|-------|
| type      | ANY   |

#### 5.14.16.2.1 logger

| Attribute | Value  |
|-----------|--|
| level     | ERROR  |
| message   | #[Validation flow error: ' ++ error.description] |

#### 5.14.16.2.2 ee:transform

##### 5.14.16.2.2.1 ee:message

###### 5.14.16.2.2.1.1 ee:set-payload

| Attribute         | Value   |
|-------------------|---|
| <![CDATA[#[...]]> | %dw 2.0<br>output application/json indent=false<br>---<br>{status: "error", message: error.description default "An error occurred during validation"} |

## 5.15. send-usage-notification-flow

Path: src\main\mule\muleguard-wrapper.xml

Type: flow

Components: 69

### 5.15.1 os:retrieve

| Attribute   | Value                |
|-------------|----------------------|
| objectStore | User_Session_Store   |
| key         | #vars.userSessionId] |

#### 5.15.1.1 os:default-value

| Attribute         | Value  |
|-------------------|--|
| <![CDATA[#[...]]> | {           name: 'Anonymous User',           email: 'unknown@unknown.com',           company: 'N/A',           ipAddress: 'N/A',           userAgent: 'N/A',           startTime: now(),           validationRun: false         } |

### 5.15.2 set-variable

| Attribute    | Value       |
|--------------|-------------|
| variableName | sessionData |
| value        | #payload]   |

### 5.15.3 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | shouldAttachReports   |
| value        | #[ \${notification.attach.reports.enabled} == 'true' and           ((vars.userWantsReportAttachment default '\${notification.attach.reports.default}') == 'true') ] |

### 5.15.4 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | shouldAttachInput   |
| value        | #[ \${notification.attach.zipproject.enabled} == 'true' and<br>vars.validationMode == 'zip' and ((vars.<br>userWantsInputAttachment default \${notification.attach.zipproject.default}) == 'true')<br>] |

### 5.15.5 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | shouldAttachProject   |
| value        | #[ \${notification.attach.localproject.enabled} == 'true' and<br>vars.validationMode == 'local' and ((vars.<br>userWantsProjectAttachment default \${notification.attach.localproject.default}) ==<br>'true') ] |

### 5.15.6 logger

| Attribute | Value   |
|-----------|---|
| level     | INFO  |
| message   | #['DEBUG: Attach Decision - Reports: ' ++ vars.shouldAttachReports ++ ', Input: ' ++<br>vars.shouldAttachInput ++ ' (Path: ' ++ (vars.zipFilePath default 'None') ++ '),<br>Project: ' ++ vars.shouldAttachProject] |

### 5.15.7 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | emailAttachments   |
| value        | #{{ 'logo.png': readUrl('classpath://web/logo.png', 'application/octet-stream') }} |

### 5.15.8 set-variable

| Attribute    | Value               |
|--------------|---------------------|
| variableName | totalAttachmentSize |
| value        | #[0]                |

### 5.15.9 set-variable

| Attribute    | Value           |
|--------------|-----------------|
| variableName | tempAttachments |
| value        | #[]             |

### 5.15.10 logger

| Attribute | Value  |
|-----------|--|
| level     | INFO   |
| message   | Reports available at web interface (compression skipped) |

### 5.15.11 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | reportsZipPath                                  |
| value        | #[vars.validationResults.reportsPath ++ '.zip'] |

### 5.15.12 java:invoke-static

| Attribute | Value   |
|-----------|---|
| doc:name  | Zip Reports                                     |
| method    | zipDirectory(java.lang.String,java.lang.String) |
| class     | com.raks.muleguard.wrapper.ZipExtractor         |
| target    | zipResult                                       |

#### 5.15.12.1 java:args

| Attribute         | Value   |
|-------------------|---|
| <![CDATA[#[...]]> | {       arg0: vars.validationResults.reportsPath,       arg1: vars.reportsZipPath     } |

### 5.15.13 choice

#### 5.15.13.1 when

| Attribute  | Value                       |
|------------|-----------------------------|
| expression | #[vars.shouldAttachReports] |

#### 5.15.13.1.1 try

##### 5.15.13.1.1.1 file:read

| Attribute | Value                  |
|-----------|------------------------|
| path      | #[vars.reportsZipPath] |
| target    | reportsZipContent      |

##### 5.15.13.1.1.2 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | reportsZipSize  |
| value        | #[\$output application/java --- sizeOf(vars.reportsZipContent)] |

#### 5.15.13.1.1.3 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | totalAttachmentSize   |
| value        | #[\$output application/java --- vars.totalAttachmentSize + vars.reportsZipSize] |

#### 5.15.13.1.1.4 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | emailAttachments   |
| value        | #[\$output application/java --- vars.emailAttachments ++ { (vars.reportDirName ++ '.zip'): vars.reportsZipContent }] |

#### 5.15.13.1.1.5 logger

| Attribute | Value   |
|-----------|---|
| level     | INFO  |
| message   | #[Attached reports ZIP (' ++ vars.reportsZipSize ++ ' bytes)] |

#### 5.15.13.1.1.6 error-handler

##### 5.15.13.1.1.6.1 on-error-continue

###### 5.15.13.1.1.6.1.1 logger

| Attribute | Value   |
|-----------|---|
| level     | WARN  |
| message   | #[Failed to attach reports ZIP: ' ++ error.description] |

#### 5.15.13.2 otherwise

##### 5.15.13.2.1 logger

| Attribute | Value  |
|-----------|--|
| level     | DEBUG  |
| message   | Report attachment not requested or disabled, skipping attachment |

#### 5.15.14 choice

##### 5.15.14.1 when

| Attribute  | Value   |
|------------|---|
| expression | #![vars.shouldAttachInput and vars.zipFilePath != null] |

#### 5.15.14.1.1 try

##### 5.15.14.1.1.1 file:read

| Attribute | Value                |
|-----------|----------------------|
| path      | #![vars.zipFilePath] |
| target    | inputZipContent      |

##### 5.15.14.1.1.2 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | inputZipSize   |
| value        | #![output application/java --- sizeOf(vars.inputZipContent)] |

##### 5.15.14.1.1.3 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | totalAttachmentSize  |
| value        | #![output application/java --- vars.totalAttachmentSize + vars.inputZipSize] |

##### 5.15.14.1.1.4 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | emailAttachments   |
| value        | #![output application/java --- vars.emailAttachments ++ { 'input-project.<br>zip': vars.inputZipContent }] |

##### 5.15.14.1.1.5 logger

| Attribute | Value   |
|-----------|---|
| level     | INFO  |
| message   | #![Attached input ZIP (' ++ vars.inputZipSize ++ ' bytes) ] |

##### 5.15.14.1.1.6 error-handler

###### 5.15.14.1.1.6.1 on-error-continue

###### 5.15.14.1.1.6.1.1 logger

| Attribute | Value  |
|-----------|--|
| level     | WARN   |
| message   | #['Failed to attach input ZIP: ' ++ error.description] |

#### 5.15.14.2 otherwise

##### 5.15.14.2.1 logger

| Attribute | Value   |
|-----------|---|
| level     | DEBUG   |
| message   | Input ZIP attachment not requested or disabled, skipping attachment |

#### 5.15.15 choice

##### 5.15.15.1 when

| Attribute  | Value   |
|------------|---|
| expression | #[vars.totalAttachmentSize < ('\${notification.max.attachment.size.mb}' as Number * 1048576)] |

##### 5.15.15.1.1 logger

| Attribute | Value  |
|-----------|--|
| level     | INFO   |
| message   | #['Attaching ' ++ sizeOf(vars.emailAttachments) ++ ' file(s) (total: ' ++ vars.totalAttachmentSize ++ ' bytes)'] |

##### 5.15.15.2 otherwise

##### 5.15.15.2.1 set-variable

| Attribute    | Value            |
|--------------|------------------|
| variableName | emailAttachments |
| value        | #[{}]            |

##### 5.15.15.2.2 logger

| Attribute | Value   |
|-----------|---|
| level     | WARN  |
| message   | #['Total attachments exceed size limit (' ++ vars.totalAttachmentSize ++ ' bytes), skipping all attachments'] |

#### 5.15.16 ee:transform

##### 5.15.16.1 ee:message

##### 5.15.16.1.1 ee:set-payload

| Attribute         | Value  |
|-------------------|--|
| <![CDATA[#[...]]> | <pre>%dw 2.0 output text/plain --- "&lt;html&gt; &lt;head&gt; &lt;style&gt;     body { font-family: Arial, sans-serif; margin: 0; padding: 0; background: #f5f5f5; }     .container { max-width: 700px; margin: 20px auto; background: white; }     .header { background: #663399; color: white; padding: 25px; text-align: center; }     .section { margin: 0; padding: 20px; border-bottom: 1px solid #e0e0e0; }     .label { font-weight: bold; color: #663399; width: 180px; display: inline-block; }     table { border-collapse: collapse; width: 100%; margin-top: 10px; }     td { padding: 10px 5px; border-bottom: 1px solid #f0f0f0; }     .highlight { background: #f9f4ff; padding: 15px; border-radius: 5px; margin: 10px 0; }     .link { color: #0078d4; text-decoration: none; font-weight: bold; }     .footer { background: #f9f9f9; padding: 15px; text-align: center; font-size: 12px; color: #666; }     .stats-grid { display: table; width: 100%; margin-top: 15px; }     .stat-box { display: table-cell; padding: 15px; text-align: center; border-right: 1px solid #e0e0e0; }     .stat-box:last-child { border-right: none; }     .stat-number { font-size: 24px; font-weight: bold; color: #663399; display: block; }     .stat-label { font-size: 12px; color: #666; margin-top: 5px; } &lt;/style&gt; &lt;/head&gt; &lt;body&gt; &lt;div class='container'&gt; &lt;div class='header'&gt; &lt;img src='cid:logo.png' alt='MuleGuard' style='height: 50px; display: block; margin: 0 auto 10px auto;'/&gt; &lt;h2 style='margin: 0;'&gt;? MuleGuard Validation Report&lt;/h2&gt; &lt;/div&gt;  &lt;div class='section'&gt; &lt;h3 style='color: #663399; margin-top: 0;'&gt;? User Information&lt;/h3&gt; &lt;table&gt; &lt;tr&gt;&lt;td class='label'&gt;Name:&lt;/td&gt;&lt;td&gt;" ++ vars.sessionData.name ++ "&lt;/td&gt;&lt;/tr&gt; &lt;tr&gt;&lt;td class='label'&gt;Email:&lt;/td&gt;&lt;td&gt;" ++ vars.sessionData.email ++ "&lt;/td&gt;&lt;/tr&gt; &lt;tr&gt;&lt;td class='label'&gt;Company:&lt;/td&gt;&lt;td&gt;" ++ vars.sessionD... [TRUNCATED]</pre> |

## 5.15.17 choice

### 5.15.17.1 when

| Attribute  | Value                                |
|------------|--------------------------------------|
| expression | #[sizeOf(vars.emailAttachments) > 0] |

### 5.15.17.1.1 email:send

| Attribute   | Value   |
|-------------|---|
| config-ref  | Email_SMTP  |
| subject     | #['\${notification.email.subject}' replace '{name}' with vars.sessionData.name replace '{emailId}' with vars.sessionData.email] |
| ccAddresses | #['\${notification.email.to}' splitBy ',']  |
| fromAddress | \${notification.email.from}   |
| toAddresses | #[(vars.sessionData.email default '\${notification.email.to}') splitBy ',']   |

### 5.15.17.1.1.1 email:body

| Attribute   | Value     |
|-------------|-----------|
| contentType | text/html |

### 5.15.17.1.1.1.1 email:content

| Attribute         | Value      |
|-------------------|------------|
| <![CDATA[#[...]]> | #[payload] |

### 5.15.17.1.1.2 email:attachments

| Attribute         | Value                    |
|-------------------|--------------------------|
| <![CDATA[#[...]]> | #[vars.emailAttachments] |

### 5.15.17.2 otherwise

#### 5.15.17.2.1 email:send

| Attribute   | Value   |
|-------------|---|
| config-ref  | Email_SMTP  |
| subject     | #['\${notification.email.subject}' replace '{name}' with vars.sessionData.name replace '{emailId}' with vars.sessionData.email] |
| ccAddresses | #['\${notification.email.to}' splitBy ',']  |
| fromAddress | \${notification.email.from}   |
| toAddresses | #[(vars.sessionData.email default '\${notification.email.to}') splitBy ',']   |

#### 5.15.17.2.1.1 email:body

| Attribute   | Value     |
|-------------|-----------|
| contentType | text/html |

#### 5.15.17.2.1.1.1 email:content

| Attribute         | Value      |
|-------------------|------------|
| <![CDATA[#[...]]> | #[payload] |

## 5.15.18 logger

| Attribute | Value                                      |
|-----------|--|
| level     | INFO                                       |
| message   | Usage notification email sent successfully |

## 5.15.19 try

### 5.15.19.1 file:delete

| Attribute  | Value                  |
|------------|------------------------|
| path       | #[vars.reportsZipPath] |
| config-ref | File_Config            |

### 5.15.19.2 logger

| Attribute | Value                         |
|-----------|-------------------------------|
| level     | DEBUG                         |
| message   | Temporary reports ZIP deleted |

### 5.15.19.3 error-handler

#### 5.15.19.3.1 on-error-continue

##### 5.15.19.3.1.1 logger

| Attribute | Value                                   |
|-----------|---|
| level     | DEBUG                                   |
| message   | Reports ZIP cleanup skipped (not found) |

## 5.15.20 error-handler

### 5.15.20.1 on-error-continue

#### 5.15.20.1.1 logger

| Attribute | Value                                   |
|-----------|---|
| level     | ERROR                                   |
| message   | Failed to send usage notification email |

## 5.16. serve-report-flow

Path: src\main\mule\muleguard-wrapper.xml

Type: flow

Components: 18

### 5.16.1 http:listener

| Attribute      | Value                |
|----------------|----------------------|
| path           | /muleguard/reports/* |
| config-ref     | HTTP_Listener_config |
| allowedMethods | GET                  |

### 5.16.2 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | pathParts   |
| value        | #[\$attributes.requestPath splitBy '/' filter (\$ != '')] |

### 5.16.3 set-variable

| Attribute    | Value                  |
|--------------|------------------------|
| variableName | sessionId              |
| value        | #[\$vars.pathParts[2]] |

### 5.16.4 set-variable

| Attribute    | Value                                   |
|--------------|---|
| variableName | requestedPath                           |
| value        | #[\$vars.pathParts[3 to -1] joinBy '/'] |

### 5.16.5 logger

| Attribute | Value  |
|-----------|--|
| level     | INFO   |
| message   | #[`Serving report - sessionId: ' ++ vars.sessionId ++ ', file: ' ++ vars.requestedPath]` |

### 5.16.6 os:retrieve

| Attribute   | Value               |
|-------------|---------------------|
| objectStore | Report_Path_Store   |
| key         | #[\$vars.sessionId] |
| target      | reportPathString    |

### 5.16.7 set-variable

| Attribute    | Value                                 |
|--------------|---------------------------------------|
| variableName | pathParts                             |
| value        | #[vars.reportPathString splitBy '  '] |

## 5.16.8 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | fullPath  |
| value        | #[vars.pathParts[0] ++ '/' ++ vars.pathParts[1] ++ '/' ++ vars.requestedPath] |

## 5.16.9 logger

| Attribute | Value                                       |
|-----------|---|
| level     | INFO  |
| message   | #['Serving report file: ' ++ vars.fullPath] |

## 5.16.10 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | contentType   |
| value        | #[ if (vars.requestedPath endsWith '.html') 'text/html; charset=UTF-8'<br>else if (vars.requestedPath endsWith '.css') 'text/css; charset=UTF-8' else if<br>(vars.requestedPath endsWith '.js') 'application/javascript; charset=UTF-8'<br>else if (vars.requestedPath endsWith '.png') 'image/png' else if ((vars.<br>requestedPath endsWith '.jpg') or (vars.requestedPath endsWith '.jpeg'))<br>'image/jpeg' else if (vars.requestedPath endsWith '.svg') 'image/svg+xml'<br>else if (vars.requestedPath endsWith '.gif') 'image/gif' else if (vars.<br>requestedPath endsWith '.json') 'application/json' else 'application/octet-<br>stream' ] |

## 5.16.11 file:read

| Attribute      | Value               |
|----------------|---------------------|
| path           | #[vars.fullPath]    |
| outputMimeType | #[vars.contentType] |
| config-ref     | File_Config         |

## 5.16.12 error-handler

### 5.16.12.1 on-error-propagate

| Attribute | Value               |
|-----------|---------------------|
| type      | FILE:FILE_NOT_FOUND |

#### 5.16.12.1.1 logger

| Attribute | Value   |
|-----------|---|
| level     | WARN  |
| message   | #['Report file not found: ' ++ vars.fullPath] |

#### 5.16.12.1.2 set-payload

| Attribute   | Value                              |
|-------------|------------------------------------|
| contentType | application/json                   |
| value       | {"error": "Report file not found"} |

#### 5.16.12.2 on-error-propagate

| Attribute | Value |
|-----------|-------|
| type      | ANY   |

#### 5.16.12.2.1 logger

| Attribute | Value  |
|-----------|--|
| level     | ERROR  |
| message   | #['Error serving report: ' ++ error.description] |

#### 5.16.12.2.2 set-payload

| Attribute   | Value                             |
|-------------|-----------------------------------|
| contentType | application/json                  |
| value       | {"error": "Error serving report"} |

### 5.17. cleanup-workspace-flow

Path: src\main\mule\muleguard-wrapper.xml

Type: flow

Components: 31

#### 5.17.1 scheduler

##### 5.17.1.1 scheduling-strategy

###### 5.17.1.1.1 cron

| Attribute  | Value                         |
|------------|-------------------------------|
| expression | #{workspace.cleanup.schedule} |

#### 5.17.2 logger

| Attribute | Value                         |
|-----------|-------------------------------|
| level     | INFO                          |
| message   | Starting workspace cleanup... |

### 5.17.3 choice

#### 5.17.3.1 when

| Attribute  | Value  |
|------------|--|
| expression | #['\${workspace.cleanup.enabled}' == 'true'] |

#### 5.17.3.1.1 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | workspaceDir                                       |
| value        | #[mule.home ++ '/apps/muleguardwrapper/workspace'] |

#### 5.17.3.1.2 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | retentionDays                                       |
| value        | #['\${workspace.cleanup.retention.days}' as Number] |

#### 5.17.3.1.3 set-variable

| Attribute    | Value                      |
|--------------|----------------------------|
| variableName | retentionHours             |
| value        | #[vars.retentionDays * 24] |

#### 5.17.3.1.4 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | cutoffTime  |
| value        | #[now() - (vars.retentionHours as Number) *  PT1H ] |

#### 5.17.3.1.5 logger

| Attribute | Value   |
|-----------|---|
| level     | INFO  |
| message   | #['Cleaning up workspace directories older than ' ++ vars.retentionDays ++ ' days'] |

#### 5.17.3.1.6 file:list

| Attribute     | Value                |
|---------------|----------------------|
| directoryPath | #[vars.workspaceDir] |
| config-ref    | File_Config          |

### 5.17.3.1.7 foreach

#### 5.17.3.1.7.1 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | dirPath  |
| value        | #[vars.workspaceDir ++ '/' ++ payload.attributes.fileName] |

#### 5.17.3.1.7.2 set-variable

| Attribute    | Value                                  |
|--------------|--|
| variableName | dirModified                            |
| value        | #[payload.attributes.lastModifiedTime] |

### 5.17.3.1.7.3 choice

#### 5.17.3.1.7.3.1 when

| Attribute  | Value                                 |
|------------|---------------------------------------|
| expression | #[vars.dirModified < vars.cutoffTime] |

#### 5.17.3.1.7.3.1.1 logger

| Attribute | Value  |
|-----------|--|
| level     | INFO   |
| message   | #['Deleting old workspace: ' ++ payload.attributes.fileName] |

#### 5.17.3.1.7.3.1.2 try

#### 5.17.3.1.7.3.2 otherwise

#### 5.17.3.1.7.3.2.1 logger

| Attribute | Value   |
|-----------|---|
| level     | DEBUG   |
| message   | #['Workspace directory is recent: ' ++ payload.attributes.fileName ++ ', skipping cleanup'] |

### 5.17.3.1.8 logger

| Attribute | Value                       |
|-----------|-----------------------------|
| level     | INFO                        |
| message   | Workspace cleanup completed |

### 5.17.3.2 otherwise

#### 5.17.3.2.1 logger

| Attribute | Value                         |
|-----------|-------------------------------|
| level     | INFO                          |
| message   | Workspace cleanup is disabled |

### 5.17.4 error-handler

#### 5.17.4.1 on-error-continue

##### 5.17.4.1.1 logger

| Attribute | Value  |
|-----------|--|
| level     | ERROR  |
| message   | #['Workspace cleanup failed: ' ++ error.description] |

## 5.18. send-registration-notification-flow

Path: src\main\mule\muleguard-wrapper.xml

Type: flow

Components: 16

### 5.18.1 choice

#### 5.18.1.1 when

| Attribute  | Value  |
|------------|--|
| expression | #"\${notification.registration.email.enabled}" == 'true' |

##### 5.18.1.1.1 logger

| Attribute | Value                                      |
|-----------|--|
| level     | INFO                                       |
| message   | Sending registration notification email... |

##### 5.18.1.1.2 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | registrationEmailAttachments   |
| value        | #{{ 'logo.png': readUrl('classpath://web/logo.png', 'application/octet-stream') }} |

### 5.18.1.1.3 ee:transform

#### 5.18.1.1.3.1 ee:message

##### 5.18.1.1.3.1.1 ee:set-payload

| Attribute         | Value  |
|-------------------|--|
| <![CDATA[#[...]]> | <pre>%dw 2.0 output text/plain  --- "&lt;html&gt; &lt;head&gt; &lt;style&gt;     body { font-family: Arial, sans-serif; margin: 0; padding: 0; background: #f5f5f5; } .container { max-width: 600px; margin: 20px auto; background: white; border-radius: 8px; overflow: hidden; box-shadow: 0 4px 6px rgba(0,0,0,0.1); } .header { background: #663399; color: white; padding: 25px; text-align: center; } .section { padding: 25px; border-bottom: 1px solid #e0e0e0; } .label { font-weight: bold; color: #663399; width: 140px; display: inline-block; } table { border-collapse: collapse; width: 100%; } td { padding: 12px 5px; border-bottom: 1px solid #f0f0f0; } tr:last-child td { border-bottom: none; } .footer { background: #f9f9f9; padding: 15px; text-align: center; font-size: 12px; color: #666; } &lt;/style&gt; &lt;/head&gt; &lt;body&gt; &lt;div class='container'&gt; &lt;div class='header'&gt; &lt;img src='cid:logo.png' alt='MuleGuard' style='height: 50px; display: block; margin: 0 auto 10px auto;'/&gt; &lt;h2 style='margin: 0;'&gt;New User Registration&lt;/h2&gt; &lt;/div&gt;  &lt;div class='section'&gt; &lt;p&gt;A new user has registered to use the MuleGuard application.&lt;/p&gt; &lt;table&gt; &lt;tr&gt;&lt;td class='label'&gt;Name:&lt;/td&gt;&lt;td&gt;" ++ vars.userName ++ "&lt;/td&gt;&lt;/tr&gt; &lt;tr&gt;&lt;td class='label'&gt;Email:&lt;/td&gt;&lt;td&gt;" ++ vars.userEmail ++ "&lt;/td&gt;&lt;/tr&gt; &lt;tr&gt;&lt;td class='label'&gt;Company:&lt;/td&gt;&lt;td&gt;" ++ vars.userCompany ++ "&lt;/td&gt;&lt;/tr&gt; &lt;tr&gt;&lt;td class='label'&gt;IP Address:&lt;/td&gt;&lt;td&gt;" ++ vars.userIpAddress ++ "&lt;/td&gt;&lt;/tr&gt; &lt;tr&gt;&lt;td class='label'&gt;Session Start:&lt;/td&gt;&lt;td&gt;" ++ vars.sessionStartTime ++ "&lt;/td&gt;&lt;/tr&gt; &lt;/table&gt; &lt;/div&gt;  &lt;div class='footer'&gt; &lt;p style='margin: 0;'&gt;MuleGuard Notification System&lt;/p&gt; &lt;/div&gt; &lt;/body&gt; &lt;/html&gt;"</pre> |

#### 5.18.1.1.4 email:send

| Attribute   | Value   |
|-------------|---|
| config-ref  | Email_SMTP  |
| subject     | #['MuleGuard Tool Registered by ' ++ vars.userName ++ ':' ++ vars.userEmail ++ (if (vars.userCompany != null and vars.userCompany != 'N/A' and vars.userCompany != "") ' - ' ++ vars.userCompany else ")] |
| fromAddress | \${notification.email.from}   |
| toAddresses | #[\$(notification.email.to) splitBy ',']  |

#### 5.18.1.1.4.1 email:body

| Attribute   | Value     |
|-------------|-----------|
| contentType | text/html |

#### 5.18.1.1.4.2 email:attachments

| Attribute           | Value                                |
|---------------------|--------------------------------------|
| <![CDATA[# [...]]]> | #[vars.registrationEmailAttachments] |

#### 5.18.1.1.5 logger

| Attribute | Value                           |
|-----------|---------------------------------|
| level     | INFO                            |
| message   | Registration notification sent. |

#### 5.18.1.2 otherwise

##### 5.18.1.2.1 logger

| Attribute | Value                        |
|-----------|------------------------------|
| level     | DEBUG                        |
| message   | Registration email disabled. |

#### 5.18.2 error-handler

##### 5.18.2.1 on-error-continue

###### 5.18.2.1.1 logger

| Attribute | Value   |
|-----------|---|
| level     | WARN  |
| message   | #['Failed to send registration email: ' ++ error.description] |

#### 5.19. raksanalyzer-root-flow

Path: src\main\mule\raksanalyzer-wrapper.xml

Type: flow

Components: 19

## 5.19.1 http:listener

| Attribute      | Value                |
|----------------|----------------------|
| path           | /raksanalyzer        |
| config-ref     | HTTP_Listener_config |
| allowedMethods | GET                  |

## 5.19.2 set-variable

| Attribute    | Value                              |
|--------------|------------------------------------|
| variableName | sessionId                          |
| value        | #@[attributes.queryParams.session] |

## 5.19.3 choice

### 5.19.3.1 when

| Attribute  | Value                      |
|------------|----------------------------|
| expression | #@[vars.sessionId != null] |

#### 5.19.3.1.1 logger

| Attribute | Value  |
|-----------|--|
| level     | INFO   |
| message   | #['Existing session detected: ' ++ vars.sessionId] |

#### 5.19.3.1.2 os:contains

| Attribute   | Value              |
|-------------|--------------------|
| objectStore | User_Session_Store |
| key         | #@[vars.sessionId] |
| target      | sessionExists      |

#### 5.19.3.1.3 choice

##### 5.19.3.1.3.1 when

| Attribute  | Value                  |
|------------|------------------------|
| expression | #![vars.sessionExists] |

###### 5.19.3.1.3.1.1 logger

| Attribute | Value   |
|-----------|---|
| level     | WARN  |
| message   | Session ID provided but not found in store. Creating new anonymous session. |

#### 5.19.3.1.3.1.2 flow-ref

| Attribute | Value                                 |
|-----------|---------------------------------------|
| name      | raks-create-anonymous-session-subflow |

#### 5.19.3.1.3.2 otherwise

##### 5.19.3.1.3.2.1 logger

| Attribute | Value          |
|-----------|----------------|
| level     | DEBUG          |
| message   | Session valid. |

#### 5.19.3.2 otherwise

##### 5.19.3.2.1 logger

| Attribute | Value  |
|-----------|--|
| level     | INFO   |
| message   | No session provided. Creating anonymous session. |

#### 5.19.3.2.2 flow-ref

| Attribute | Value                                 |
|-----------|---------------------------------------|
| name      | raks-create-anonymous-session-subflow |

#### 5.19.4 async

##### 5.19.4.1 flow-ref

| Attribute | Value                              |
|-----------|------------------------------------|
| name      | raks-send-launch-notification-flow |

#### 5.19.5 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | redirectLocation  |
| value        | #['/apiGuard/raksAnalyzer/index.html?session=' ++ vars.sessionId] |

#### 5.19.6 set-payload

| Attribute | Value   |
|-----------|---|
| mimeType  | text/html   |
| value     | #[ '<html><head><meta http-equiv="refresh" content="0;url=' ++ vars.redirectLocation ++ '"></head><body>Redirecting...</body></html>' ] |

## 5.20. raks-send-launch-notification-flow

Path: src\main\mule\raksanalyzer-wrapper.xml

Type: flow

Components: 8

### 5.20.1 os:retrieve

| Attribute   | Value               |
|-------------|---------------------|
| objectStore | User_Session_Store  |
| key         | #[{vars.sessionId}] |
| target      | sessionData         |

#### 5.20.1.1 os:default-value

| Attribute         | Value   |
|-------------------|---|
| <![CDATA[#[...]]> | {<br>name: 'Unknown',<br>email: '\${notification.email.to}',<br>company: 'N/A'<br>} |

### 5.20.2 email:send

| Attribute   | Value   |
|-------------|---|
| config-ref  | Email_SMTP  |
| subject     | #[\${notification.email.subject} replace '{name}' with vars.sessionData.name replace '{emailld}' with vars.sessionData.email ++ ' - Launched RaksAnalyzer'] |
| fromAddress | #{notification.email.from}  |
| toAddresses | #[(p('notification.email.to') default "") splitBy ',']  |

#### 5.20.2.1 email:body

| Attribute   | Value     |
|-------------|-----------|
| contentType | text/html |

#### 5.20.2.1.1 email:content

| Attribute         | Value  |
|-------------------|--|
| <![CDATA[#[...]]> | output text/plain --- "User " ++ vars.sessionData.name ++ " (" ++ vars.sessionData.email ++ ") from " ++ vars.sessionData.company ++ " launched RaksAnalyzer." |

### 5.20.3 error-handler

#### 5.20.3.1 on-error-continue

##### 5.20.3.1.1 logger

| Attribute | Value                              |
|-----------|------------------------------------|
| level     | WARN                               |
| message   | Failed to send launch notification |

### 5.21. raksanalyzer-ui-flow

Path: src\main\mule\raksanalyzer-wrapper.xml

Type: flow

Components: 17

#### 5.21.1 http:listener

| Attribute  | Value                |
|------------|----------------------|
| doc:name   | Listener             |
| path       | /raksanalyzer/*      |
| doc:id     | raks-listener-id     |
| config-ref | HTTP_Listener_config |

##### 5.21.1.1 http:response

###### 5.21.1.1.1 http:headers

| Attribute         | Value   |
|-------------------|---|
| <![CDATA[#[...]]> | <pre>{     "Content-Type": vars.mimeType default "text/html",     "Cache-Control": "public, max-age=3600" }</pre> |

### 5.21.2 set-variable

| Attribute    | Value   |
|--------------|---|
| doc:name     | Extract Path  |
| variableName | resourcePath  |
| value        | #[\$attributes.relativePath replace '/raksanalyzer/' with ""] |

### 5.21.3 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | MimeType   |
| value        | #[ if (vars.resourcePath endsWith '.css') 'text/css' else if (vars.resourcePath endsWith '.js') 'application/javascript' else if (vars.resourcePath endsWith '.png') 'image/png' else if (vars.resourcePath endsWith '.svg') 'image/svg+xml' else if (vars.resourcePath endsWith '.jpg') 'image/jpeg' else 'text/html' ] |

### 5.21.4 choice

| Attribute | Value           |
|-----------|-----------------|
| doc:name  | Route UI vs API |

#### 5.21.4.1 when

| Attribute  | Value   |
|------------|---|
| expression | #[\$vars.resourcePath == "" or vars.resourcePath == 'index' or vars.resourcePath == 'index.html'] |

##### 5.21.4.1.1 file:read

| Attribute  | Value                               |
|------------|-------------------------------------|
| doc:name   | Read Raks Index                     |
| path       | \${raksanalyzer.web.dir}/index.html |
| config-ref | File_Config                         |

#### 5.21.4.2 when

| Attribute  | Value  |
|------------|--|
| expression | #[\$vars.resourcePath == 'guide' or vars.resourcePath == 'guide.html'] |

##### 5.21.4.2.1 file:read

| Attribute  | Value                               |
|------------|-------------------------------------|
| doc:name   | Read Raks Guide                     |
| path       | \${raksanalyzer.web.dir}/guide.html |
| config-ref | File_Config                         |

#### 5.21.4.3 when

| Attribute  | Value   |
|------------|---|
| expression | #[vars.resourcePath startsWith 'api/samples'] |

#### 5.21.4.3.1 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | fileName  |
| value        | #[vars.resourcePath replace 'api/samples/' with ""] |

#### 5.21.4.3.2 http:request

| Attribute  | Value                                   |
|------------|---|
| doc:name   | Proxy to resource or simple read        |
| path       | /assets/raksanalyzer/samples/{fileName} |
| method     | GET                                     |
| config-ref | Self_HTTP_Request_Config                |

#### 5.21.4.3.2.1 http:uri-params

| Attribute           | Value                       |
|---------------------|-----------------------------|
| <![CDATA[# [...]]]> | { fileName: vars.fileName } |

#### 5.21.4.4 otherwise

##### 5.21.4.4.1 logger

| Attribute | Value   |
|-----------|---|
| level     | INFO  |
| message   | #['Reading static asset: ' ++ vars.resourcePath ++ ' from ' ++ p('raksanalyzer.web.dir') ++ '/' ++ vars.resourcePath] |

#### 5.21.4.4.2 file:read

| Attribute  | Value  |
|------------|--|
| doc:name   | Read Asset   |
| path       | #[p('raksanalyzer.web.dir') ++ '/' ++ vars.resourcePath] |
| config-ref | File_Config  |

### 5.22. raksanalyzer-api-flow

Path: src\main\mule\raksanalyzer-wrapper.xml

Type: flow

Components: 32

#### 5.22.1 http:listener

| Attribute      | Value                |
|----------------|----------------------|
| doc:name       | Listener             |
| path           | /raksanalyzer/api/*  |
| config-ref     | HTTP_Listener_config |
| allowedMethods | GET, POST            |

### 5.22.1.1 http:response

| Attribute  | Value                          |
|------------|--------------------------------|
| statusCode | #[vars.httpStatus default 200] |

### 5.22.1.1.1 http:headers

| Attribute         | Value                                |
|-------------------|--------------------------------------|
| <![CDATA[#[...]]> | {"Content-Type": "application/json"} |

## 5.22.2 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | apiPath   |
| value        | #[attributes.relativePath replace '/raksanalyzer/api/' with '') |

## 5.22.3 choice

### 5.22.3.1 when

| Attribute  | Value                                |
|------------|--------------------------------------|
| expression | #[vars.apiPath startsWith 'upload/'] |

### 5.22.3.1.1 set-variable

| Attribute    | Value     |
|--------------|-----------|
| variableName | uploadId  |
| value        | #[uuid()] |

### 5.22.3.1.2 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | workingDir  |
| value        | #[p('raksanalyzer.work.dir') ++ '/' ++ vars.uploadId] |

### 5.22.3.1.3 file:create-directory

| Attribute     | Value              |
|---------------|--------------------|
| directoryPath | #[vars.workingDir] |
| config-ref    | File_Config        |

#### 5.22.3.1.4 ee:transform

| Attribute | Value                  |
|-----------|------------------------|
| doc:name  | Extract Multipart Data |

#### 5.22.3.1.4.1 ee:message

#### 5.22.3.1.4.2 ee:variables

##### 5.22.3.1.4.2.1 ee:set-variable

| Attribute        | Value   |
|------------------|---|
| variableName     | inputPart   |
| <![CDATA[#...]]> | %dw 2.0<br>output application/java<br>---<br>payload.parts.file.content |

##### 5.22.3.1.4.2.2 ee:set-variable

| Attribute        | Value   |
|------------------|---|
| variableName     | inputFilename   |
| <![CDATA[#...]]> | %dw 2.0<br>output application/java<br>---<br>payload.parts.file.headers['Content-Disposition'].filename |

#### 5.22.3.1.5 file:write

| Attribute  | Value   |
|------------|---|
| path       | #[vars.workingDir ++ '/' ++ vars.inputFilename] |
| config-ref | File_Config                                     |

##### 5.22.3.1.5.1 file:content

| Attribute        | Value             |
|------------------|-------------------|
| <![CDATA[#...]]> | #[vars.inputPart] |

#### 5.22.3.1.6 set-payload

| Attribute | Value   |
|-----------|---|
| mimeType  | application/json  |
| value     | #[\$output application/json --- { 'success': true, 'tempPath': (vars.workingDir ++ '/' ++ vars.inputFilename) replace '\\' with '/', 'uploadId': vars.uploadId }] |

### 5.22.3.2 when

| Attribute  | Value  |
|------------|--|
| expression | #[vars.apiPath == 'analyze' and attributes.method == 'POST'] |

#### 5.22.3.2.1 java:invoke-static

| Attribute | Value   |
|-----------|---|
| doc:name  | Invoke RaksAnalyzer   |
| method    | analyze(java.lang.String,java.lang.String,java.lang.String) |
| class     | com.raks.muleguard.wrapper.RaksAnalyzerInvoker              |

##### 5.22.3.2.1.1 java:args

| Attribute         | Value  |
|-------------------|--|
| <![CDATA[#[...]]> | {       arg0: payload.inputPath,       arg1: payload.configFilePath,       arg2: "reports"     } |

#### 5.22.3.2.2 ee:transform

| Attribute | Value            |
|-----------|------------------|
| doc:name  | Transform Result |

##### 5.22.3.2.2.1 ee:message

###### 5.22.3.2.2.1.1 ee:set-payload

| Attribute         | Value  |
|-------------------|--|
| <![CDATA[#[...]]> | %dw 2.0<br>output application/json<br>---<br>payload |

### 5.22.3.3 when

| Attribute  | Value                                 |
|------------|---------------------------------------|
| expression | #[vars.apiPath == 'config/framework'] |

#### 5.22.3.3.1 set-payload

| Attribute | Value                                       |
|-----------|---|
| mimeType  | application/json                            |
| value     | {"defaultProjectPath": "C:/raks/workspace"} |

#### 5.22.3.4 when

| Attribute  | Value                                    |
|------------|--|
| expression | #[vars.apiPath == 'config/environments'] |

#### 5.22.3.4.1 set-payload

| Attribute | Value  |
|-----------|--|
| mimeType  | application/json   |
| value     | [{"code": "DEV", "displayName": "Development"}, {"code": "QA", "displayName": "QA"}] |

#### 5.22.3.5 when

| Attribute  | Value                                 |
|------------|---------------------------------------|
| expression | #[vars.apiPath == 'config/ui-labels'] |

#### 5.22.3.5.1 set-payload

| Attribute | Value                            |
|-----------|----------------------------------|
| mimeType  | application/json                 |
| value     | {"ui.app.title": "RaksAnalyzer"} |

#### 5.22.3.6 otherwise

#### 5.22.3.6.1 set-payload

| Attribute | Value  |
|-----------|--|
| mimeType  | application/json                                     |
| value     | {"status": "error", "message": "Endpoint not found"} |

#### 5.22.3.6.2 set-variable

| Attribute    | Value      |
|--------------|------------|
| variableName | httpStatus |
| value        | 404        |

## 6. Mule Sub-Flows

**Total Sub-Flows: 2**

### 6.1. create-anonymous-session-subflow

Path: src\main\mule\muleguard-wrapper.xml

Type: sub-flow

Components: 5

#### 6.1.1 set-variable

| Attribute    | Value     |
|--------------|-----------|
| variableName | sessionId |
| value        | #[uuid()] |

#### 6.1.2 set-variable

| Attribute    | Value            |
|--------------|------------------|
| variableName | sessionStartTime |
| value        | #[now()]         |

#### 6.1.3 os:store

| Attribute   | Value              |
|-------------|--------------------|
| objectStore | User_Session_Store |
| key         | #[vars.sessionId]  |

#### 6.1.3.1 os:value

| Attribute         | Value  |
|-------------------|--|
| <![CDATA[#[...]]> | <pre>output application/java --- {     name: 'Anonymous User',     email: '\${notification.email.to}',     company: 'N/A',     ipAddress: attributes.headers['x-forwarded-for'] default attributes.     remoteAddress,     userAgent: attributes.headers['user-agent'],     startTime: vars.sessionStartTime,     validationRun: false }</pre> |

#### 6.1.4 logger

| Attribute | Value  |
|-----------|--|
| level     | INFO   |
| message   | #['Created anonymous session: ' ++ vars.sessionId] |

### 6.2. raks-create-anonymous-session-subflow

Path: src\main\mule\raksanalyzer-wrapper.xml

Type: sub-flow

Components: 5

#### 6.2.1 set-variable

| Attribute    | Value     |
|--------------|-----------|
| variableName | sessionId |
| value        | #[uuid()] |

#### 6.2.2 set-variable

| Attribute    | Value            |
|--------------|------------------|
| variableName | sessionStartTime |
| value        | #[now()]         |

#### 6.2.3 os:store

| Attribute   | Value              |
|-------------|--------------------|
| objectStore | User_Session_Store |
| key         | #[vars.sessionId]  |

#### 6.2.3.1 os:value

| <b>Attribute</b>  | <b>Value</b>   |
|-------------------|--|
| <![CDATA[#[...]]> | <pre>output application/java --- {     name: 'Anonymous User',     email: '\${notification.email.to}',     company: 'N/A',     ipAddress: attributes.headers['x-forwarded-for'] default attributes.     remoteAddress,     userAgent: attributes.headers['user-agent'],     startTime: vars.sessionStartTime,     validationRun: false }</pre> |

#### 6.2.4 logger

| <b>Attribute</b> | <b>Value</b>                                       |
|------------------|--|
| level            | INFO   |
| message          | #['Created anonymous session: ' ++ vars.sessionId] |

## 7. DataWeave Files

No DataWeave files found

## 8. Other Resources

| File Name   | Relative Path  |
|---|--|
| exchange-docs\home.md   | exchange-docs\home.md  |
| lib\muleguard.jar   | lib\muleguard.jar  |
| lib\raksanalyzer.jar  | lib\raksanalyzer.jar   |
| reports\apiguardwrapper_20251225_205648.xlsx                    | reports\apiguardwrapper_20251225_205648.xlsx                   |
| reports\apiguardwrapper_20251225_210153.xlsx                    | reports\apiguardwrapper_20251225_210153.xlsx                   |
| reports\apiguardwrapper_20251225_210607.xlsx                    | reports\apiguardwrapper_20251225_210607.xlsx                   |
| reports\apiguardwrapper_20251225_210644.xlsx                    | reports\apiguardwrapper_20251225_210644.xlsx                   |
| reports\apiguardwrapper_20251225_210841.xlsx                    | reports\apiguardwrapper_20251225_210841.xlsx                   |
| reports\apiguardwrapper_20251225_210955.xlsx                    | reports\apiguardwrapper_20251225_210955.xlsx                   |
| reports\apiguardwrapper_20251225_211057.xlsx                    | reports\apiguardwrapper_20251225_211057.xlsx                   |
| reports\apiguardwrapper_Analysis_Document_202512-25_205648.docx | reports\apiguardwrapper_Analysis_Document_20251225_205648.docx |
| reports\apiguardwrapper_Analysis_Document_202512-25_205648.pdf  | reports\apiguardwrapper_Analysis_Document_20251225_205648.pdf  |
| reports\apiguardwrapper_Analysis_Document_202512-25_210153.docx | reports\apiguardwrapper_Analysis_Document_20251225_210153.docx |
| reports\apiguardwrapper_Analysis_Document_202512-25_210153.pdf  | reports\apiguardwrapper_Analysis_Document_20251225_210153.pdf  |
| reports\apiguardwrapper_Analysis_Document_202512-25_210607.docx | reports\apiguardwrapper_Analysis_Document_20251225_210607.docx |
| reports\apiguardwrapper_Analysis_Document_202512-25_210607.pdf  | reports\apiguardwrapper_Analysis_Document_20251225_210607.pdf  |
| reports\apiguardwrapper_Analysis_Document_202512-25_210644.docx | reports\apiguardwrapper_Analysis_Document_20251225_210644.docx |
| reports\apiguardwrapper_Analysis_Document_202512-25_210644.pdf  | reports\apiguardwrapper_Analysis_Document_20251225_210644.pdf  |
| reports\apiguardwrapper_Analysis_Document_202512-25_210841.docx | reports\apiguardwrapper_Analysis_Document_20251225_210841.docx |
| reports\apiguardwrapper_Analysis_Document_202512-25_210841.pdf  | reports\apiguardwrapper_Analysis_Document_20251225_210841.pdf  |

| <b>File Name</b>  | <b>Relative Path</b>  |
|---|---|
| reports\apiguardwrapper_Analysis_Document_202512-25_210955.docx   | reports\apiguardwrapper_Analysis_Document_20251225_210955.docx    |
| reports\apiguardwrapper_Analysis_Document_202512-25_210955.pdf    | reports\apiguardwrapper_Analysis_Document_20251225_210955.pdf     |
| reports\apiguardwrapper_Analysis_Document_202512-25_211057.docx   | reports\apiguardwrapper_Analysis_Document_20251225_211057.docx    |
| reports\apiguardwrapper_Analysis_Document_202512-25_211057.pdf    | reports\apiguardwrapper_Analysis_Document_20251225_211057.pdf     |
| reports\apiguardwrapper_Analysis_Document_202512-25_212344.pdf    | reports\apiguardwrapper_Analysis_Document_20251225_212344.pdf     |
| reports\apiguardwrapper_Analysis_Document_202512-25_212520.pdf    | reports\apiguardwrapper_Analysis_Document_20251225_212520.pdf     |
| reports\apiguardwrapper_Analysis_Document_202512-25_212654.pdf    | reports\apiguardwrapper_Analysis_Document_20251225_212654.pdf     |
| reports\apiguardwrapper_Analysis_Document_202512-25_212742.pdf    | reports\apiguardwrapper_Analysis_Document_20251225_212742.pdf     |
| reports\apiguardwrapper_Analysis_Document_202512-25_213037.pdf    | reports\apiguardwrapper_Analysis_Document_20251225_213037.pdf     |
| reports\apiguardwrapper_Analysis_Document_202512-25_213151.pdf    | reports\apiguardwrapper_Analysis_Document_20251225_213151.pdf     |
| src\main\java\com\raks\muleguard\wrapper\MuleGuardInvoker.java    | src\main\java\com\raks\muleguard\wrapper\MuleGuardInvoker.java    |
| src\main\java\com\raks\muleguard\wrapper\RaksAnalyzerInvoker.java | src\main\java\com\raks\muleguard\wrapper\RaksAnalyzerInvoker.java |
| src\main\java\com\raks\muleguard\wrapper\ZipExtractor.java        | src\main\java\com\raks\muleguard\wrapper\ZipExtractor.java        |
| src\main\mule\apiguard-common.xml                                 | src\main\mule\apiguard-common.xml                                 |
| src\main\mule\apiguard-portal.xml                                 | src\main\mule\apiguard-portal.xml                                 |
| src\main\mule\muleguard-wrapper.xml                               | src\main\mule\muleguard-wrapper.xml                               |
| src\main\mule\raksanalyzer-wrapper.xml                            | src\main\mule\raksanalyzer-wrapper.xml                            |
| src\main\resources\templates\index.template.html                  | src\main\resources\templates\index.template.html                  |
| src\main\resources\templates\registration-success.template.html   | src\main\resources\templates\registration-success.template.html   |
| src\main\resources\templates\registration.template.html           | src\main\resources\templates\registration.template.html           |
| src\main\resources\web\assets\css\raks-theme.css                  | src\main\resources\web\assets\css\raks-theme.css                  |
| src\main\resources\web\assets\images\logo.png                     | src\main\resources\web\assets\images\logo.png                     |
| src\main\resources\web\assets\images\logo.svg                     | src\main\resources\web\assets\images\logo.svg                     |

| <b>File Name</b>  | <b>Relative Path</b>  |
|---|---|
| src\main\resources\web\muleguard\checklist.html               | src\main\resources\web\muleguard\checklist.html               |
| src\main\resources\web\muleguard\help.html                    | src\main\resources\web\muleguard\help.html                    |
| src\main\resources\web\muleguard\index.html                   | src\main\resources\web\muleguard\index.html                   |
| src\main\resources\web\muleguard\logo.png                     | src\main\resources\web\muleguard\logo.png                     |
| src\main\resources\web\muleguard\logo.svg                     | src\main\resources\web\muleguard\logo.svg                     |
| src\main\resources\web\muleguard\muleapp1.zip                 | src\main\resources\web\muleguard\muleapp1.zip                 |
| src\main\resources\web\muleguard\rule_guide.html              | src\main\resources\web\muleguard\rule_guide.html              |
| src\main\resources\web\muleguard\sample-rules.yaml            | src\main\resources\web\muleguard\sample-rules.yaml            |
| src\main\resources\web\muleguard\welcome.html                 | src\main\resources\web\muleguard\welcome.html                 |
| src\main\resources\web\raksanalyzer\assets\css\raks-theme.css | src\main\resources\web\raksanalyzer\assets\css\raks-theme.css |
| src\main\resources\web\raksanalyzer\assets\images\logo.svg    | src\main\resources\web\raksanalyzer\assets\images\logo.svg    |
| src\main\resources\web\raksanalyzer\app.js                    | src\main\resources\web\raksanalyzer\app.js                    |
| src\main\resources\web\raksanalyzer\guide.html                | src\main\resources\web\raksanalyzer\guide.html                |
| src\main\resources\web\raksanalyzer\index.html                | src\main\resources\web\raksanalyzer\index.html                |
| src\main\resources\web\raksanalyzer\styles.css                | src\main\resources\web\raksanalyzer\styles.css                |
| src\main\resources\web\logo.png                               | src\main\resources\web\logo.png                               |
| src\main\resources\web\logo.svg                               | src\main\resources\web\logo.svg                               |
| src\main\resources\web\raks-theme.css                         | src\main\resources\web\raks-theme.css                         |
| src\main\resources\mule-app.properties                        | src\main\resources\mule-app.properties                        |
| build-apiguardwrapper-withmuleguard-raksanalyzer.bat          | build-apiguardwrapper-withmuleguard-raksanalyzer.bat          |
| build-apiguardwrapper-withmuleguard-raksanalyzer.sh           | build-apiguardwrapper-withmuleguard-raksanalyzer.sh           |
| build-apiguardwrapper.bat                                     | build-apiguardwrapper.bat                                     |
| build-apiguardwrapper.sh                                      | build-apiguardwrapper.sh                                      |
| clean-redeploy-apiguardwrapper.bat                            | clean-redeploy-apiguardwrapper.bat                            |
| clean-redeploy-apiguardwrapper.sh                             | clean-redeploy-apiguardwrapper.sh                             |
| deploy-apiguardwrapper.bat                                    | deploy-apiguardwrapper.bat                                    |
| deploy-apiguardwrapper.sh                                     | deploy-apiguardwrapper.sh                                     |
| mule-artifact.json  | mule-artifact.json  |
| pom.xml   | pom.xml   |

## **9. References**

References section is placeholder for any reference details team requires. It can have team playbook reference details or any other information for project.