

# Project Analysis Report

## apiguardwrapper

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

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# Table of Contents

|  |    |
|--|----|
| 1. Project Information .....                           | 3  |
| 1.1 Project Details .....                              | 3  |
| 1.2 POM Details .....                                  | 3  |
| 1.3 Mule-artifact.json .....                           | 4  |
| 2. Flow Diagrams .....                                 | 5  |
| 2.1 Mule Project Flow Integration .....                | 5  |
| 2.1.1 cleanup-workspace-flow .....                     | 5  |
| 2.1.2 common-send-registration-notification-flow ..... | 6  |
| 2.1.3 common-static-resource-flow .....                | 6  |
| 2.1.4 create-anonymous-session-subflow .....           | 6  |
| 2.1.5 main-landing-page-flow .....                     | 7  |
| 2.1.6 main-page-flow .....                             | 7  |
| 2.1.7 muleguard-root-flow .....                        | 7  |
| 2.1.8 raks-create-anonymous-session-subflow .....      | 9  |
| 2.1.9 raks-send-launch-notification-flow .....         | 9  |
| 2.1.10 raksanalyzer-api-flow .....                     | 9  |
| 2.1.11 raksanalyzer-root-flow .....                    | 10 |
| 2.1.12 raksanalyzer-ui-flow .....                      | 11 |
| 2.1.13 registration-page-flow .....                    | 12 |
| 2.1.14 registration-success-flow .....                 | 12 |
| 2.1.15 root-redirect-flow .....                        | 13 |
| 2.1.16 send-launch-notification-flow .....             | 13 |
| 2.1.17 send-registration-notification-flow .....       | 14 |
| 2.1.18 send-usage-notification-flow .....              | 14 |
| 2.1.19 serve-report-flow .....                         | 15 |
| 2.1.20 session-validation-flow .....                   | 16 |
| 2.1.21 static-resource-flow .....                      | 17 |
| 2.1.22 static-resources-flow .....                     | 17 |
| 2.1.23 user-registration-flow .....                    | 17 |
| 2.1.24 validation-trigger-flow .....                   | 18 |
| 2.2 Mule Project Flow Diagram .....                    | 20 |
| 2.2.1 cleanup-workspace-flow .....                     | 20 |
| 2.2.2 common-send-registration-notification-flow ..... | 22 |
| 2.2.3 common-static-resource-flow .....                | 23 |
| 2.2.4 create-anonymous-session-subflow .....           | 23 |

|   |    |
|---|----|
| 2.2.5 main-landing-page-flow .....                        | 25 |
| 2.2.6 main-page-flow .....                                | 25 |
| 2.2.7 muleguard-root-flow .....                           | 26 |
| 2.2.8 raks-create-anonymous-session-subflow .....         | 28 |
| 2.2.9 raks-send-launch-notification-flow .....            | 28 |
| 2.2.10 raksanalyzer-api-flow .....                        | 29 |
| 2.2.11 raksanalyzer-root-flow .....                       | 31 |
| 2.2.12 raksanalyzer-ui-flow .....                         | 32 |
| 2.2.13 registration-page-flow .....                       | 33 |
| 2.2.14 registration-success-flow .....                    | 33 |
| 2.2.15 root-redirect-flow .....                           | 34 |
| 2.2.16 send-launch-notification-flow .....                | 35 |
| 2.2.17 send-registration-notification-flow .....          | 36 |
| 2.2.18 send-usage-notification-flow .....                 | 37 |
| 2.2.19 serve-report-flow .....                            | 38 |
| 2.2.20 session-validation-flow .....                      | 39 |
| 2.2.21 static-resource-flow .....                         | 40 |
| 2.2.22 static-resources-flow .....                        | 40 |
| 2.2.23 user-registration-flow .....                       | 41 |
| 2.2.24 validation-trigger-flow .....                      | 43 |
| 3. Global Configuration .....                             | 44 |
| 3.1 src\main\resources\mule-app.properties .....          | 44 |
| 4. Connector Configurations .....                         | 47 |
| 4.1. Email_SMTP (email:smtp-config) .....                 | 47 |
| 4.1.1 email:smtp-connection .....                         | 47 |
| 4.1.1.1 email:properties .....                            | 47 |
| 4.1.1.1.1 email:property .....                            | 47 |
| 4.2. File_Config (file:config) .....                      | 47 |
| 4.2.1 file:connection .....                               | 47 |
| 4.3. HTTP_Listener_config (http:listener-config) .....    | 47 |
| 4.3.1 http:listener-connection .....                      | 48 |
| 4.4. ObjectStore_Config (os:config) .....                 | 48 |
| 4.5. Self_HTTP_Request_Config (http:request-config) ..... | 48 |
| 4.5.1 http:request-connection .....                       | 48 |
| 5. Mule Flows .....                                       | 49 |
| 5.1 common-send-registration-notification-flow .....      | 49 |
| 5.1.1 logger .....  | 49 |

|                                       |    |
|---------------------------------------|----|
| 5.1.2 ee:transform .....              | 50 |
| 5.1.2.1 ee:message .....              | 50 |
| 5.1.2.1.1 ee:set-payload .....        | 50 |
| 5.1.3 try .....                       | 51 |
| 5.1.3.1 email:send .....              | 51 |
| 5.1.3.1.1 email:body .....            | 51 |
| 5.1.3.1.1.1 email:content .....       | 51 |
| 5.1.3.2 error-handler .....           | 51 |
| 5.1.3.2.1 on-error-continue .....     | 51 |
| 5.1.3.2.1.1 logger .....              | 52 |
| 5.2 common-static-resource-flow ..... | 52 |
| 5.2.1 http:listener .....             | 52 |
| 5.2.2 http:load-static-resource ..... | 52 |
| 5.3 root-redirect-flow .....          | 52 |
| 5.3.1 http:listener .....             | 52 |
| 5.3.2 choice .....                    | 53 |
| 5.3.2.1 when .....                    | 53 |
| 5.3.2.1.1 set-payload .....           | 53 |
| 5.3.2.2 otherwise .....               | 53 |
| 5.3.2.2.1 set-payload .....           | 53 |
| 5.4 registration-page-flow .....      | 53 |
| 5.4.1 http:listener .....             | 53 |
| 5.4.2 file:read .....                 | 53 |
| 5.4.3 set-payload .....               | 54 |
| 5.5 main-page-flow .....              | 54 |
| 5.5.1 http:listener .....             | 54 |
| 5.5.2 set-variable .....              | 54 |
| 5.5.3 set-variable .....              | 55 |
| 5.5.4 set-variable .....              | 55 |
| 5.5.5 file:read .....                 | 55 |
| 5.5.6 set-payload .....               | 55 |
| 5.6 user-registration-flow .....      | 55 |
| 5.6.1 http:listener .....             | 55 |
| 5.6.2 set-variable .....              | 56 |
| 5.6.3 set-variable .....              | 56 |
| 5.6.4 set-variable .....              | 56 |
| 5.6.5 set-variable .....              | 56 |

|                                       |    |
|---------------------------------------|----|
| 5.6.6 set-variable .....              | 57 |
| 5.6.7 set-variable .....              | 57 |
| 5.6.8 set-variable .....              | 57 |
| 5.6.9 set-variable .....              | 58 |
| 5.6.10 os:store .....                 | 58 |
| 5.6.10.1 os:value .....               | 58 |
| 5.6.11 async .....                    | 58 |
| 5.6.11.1 flow-ref .....               | 58 |
| 5.6.12 ee:transform .....             | 58 |
| 5.6.12.1 ee:message .....             | 58 |
| 5.6.12.1.1 ee:set-payload .....       | 58 |
| 5.7 registration-success-flow .....   | 59 |
| 5.7.1 http:listener .....             | 59 |
| 5.7.2 set-variable .....              | 59 |
| 5.7.3 file:read .....                 | 59 |
| 5.7.4 set-variable .....              | 59 |
| 5.7.5 set-payload .....               | 59 |
| 5.8 static-resources-flow .....       | 60 |
| 5.8.1 http:listener .....             | 60 |
| 5.8.2 http:load-static-resource ..... | 60 |
| 5.9 muleguard-root-flow .....         | 60 |
| 5.9.1 http:listener .....             | 60 |
| 5.9.2 set-variable .....              | 61 |
| 5.9.3 choice .....                    | 61 |
| 5.9.3.1 when .....                    | 61 |
| 5.9.3.1.1 logger .....                | 61 |
| 5.9.3.1.2 os:contains .....           | 61 |
| 5.9.3.1.3 choice .....                | 61 |
| 5.9.3.1.3.1 when .....                | 61 |
| 5.9.3.1.3.1.1 logger .....            | 61 |
| 5.9.3.1.3.1.2 flow-ref .....          | 61 |
| 5.9.3.1.3.2 otherwise .....           | 62 |
| 5.9.3.1.3.2.1 logger .....            | 62 |
| 5.9.3.2 otherwise .....               | 62 |
| 5.9.3.2.1 logger .....                | 62 |
| 5.9.3.2.2 flow-ref .....              | 62 |
| 5.9.4 async .....                     | 62 |

|  |    |
|--|----|
| 5.9.4.1 flow-ref .....                   | 63 |
| 5.9.5 set-variable .....                 | 63 |
| 5.9.6 set-payload .....                  | 63 |
| 5.10 send-launch-notification-flow ..... | 64 |
| 5.10.1 os:retrieve .....                 | 64 |
| 5.10.1.1 os:default-value .....          | 64 |
| 5.10.2 email:send .....                  | 64 |
| 5.10.2.1 email:body .....                | 64 |
| 5.10.2.1.1 email:content .....           | 64 |
| 5.10.3 error-handler .....               | 64 |
| 5.10.3.1 on-error-continue .....         | 64 |
| 5.10.3.1.1 logger .....                  | 64 |
| 5.11 main-landing-page-flow .....        | 65 |
| 5.11.1 http:listener .....               | 65 |
| 5.11.1.1 http:response .....             | 65 |
| 5.11.1.1.1 http:headers .....            | 65 |
| 5.11.2 set-variable .....                | 65 |
| 5.11.3 set-variable .....                | 65 |
| 5.11.4 parse-template .....              | 65 |
| 5.12 static-resource-flow .....          | 66 |
| 5.12.1 http:listener .....               | 66 |
| 5.12.1.1 http:response .....             | 66 |
| 5.12.1.1.1 http:headers .....            | 66 |
| 5.12.2 set-variable .....                | 66 |
| 5.12.3 set-variable .....                | 66 |
| 5.12.4 set-payload .....                 | 66 |
| 5.13 session-validation-flow .....       | 67 |
| 5.13.1 http:listener .....               | 67 |
| 5.13.2 set-variable .....                | 67 |
| 5.13.3 try .....                         | 67 |
| 5.13.3.1 os:retrieve .....               | 67 |
| 5.13.3.2 ee:transform .....              | 67 |
| 5.13.3.2.1 ee:message .....              | 67 |
| 5.13.3.2.1.1 ee:set-payload .....        | 67 |
| 5.13.3.3 error-handler .....             | 67 |
| 5.13.3.3.1 on-error-continue .....       | 67 |
| 5.13.3.3.1.1 ee:transform .....          | 68 |

|                                       |    |
|---------------------------------------|----|
| 5.13.3.3.1.1.1 ee:message .....       | 69 |
| 5.13.3.3.1.1.1.1 ee:set-payload ..... | 69 |
| 5.14 validation-trigger-flow .....    | 69 |
| 5.14.1 http:listener .....            | 69 |
| 5.14.2 set-variable .....             | 69 |
| 5.14.3 choice .....                   | 69 |
| 5.14.3.1 when .....                   | 69 |
| 5.14.3.1.1 logger .....               | 69 |
| 5.14.3.1.2 logger .....               | 70 |
| 5.14.3.1.3 ee:transform .....         | 70 |
| 5.14.3.1.3.1 ee:message .....         | 70 |
| 5.14.3.1.3.1.1 ee:set-payload .....   | 70 |
| 5.14.3.1.4 set-variable .....         | 70 |
| 5.14.3.1.5 set-variable .....         | 70 |
| 5.14.3.1.6 set-variable .....         | 70 |
| 5.14.3.1.7 set-variable .....         | 71 |
| 5.14.3.1.8 set-variable .....         | 71 |
| 5.14.3.1.9 set-variable .....         | 71 |
| 5.14.3.1.10 set-variable .....        | 71 |
| 5.14.3.1.11 set-variable .....        | 71 |
| 5.14.3.1.12 set-variable .....        | 71 |
| 5.14.3.1.13 set-variable .....        | 71 |
| 5.14.3.1.14 set-variable .....        | 72 |
| 5.14.3.1.15 logger .....              | 72 |
| 5.14.3.2 when .....                   | 72 |
| 5.14.3.2.1 logger .....               | 72 |
| 5.14.3.2.2 set-variable .....         | 72 |
| 5.14.3.2.3 set-variable .....         | 72 |
| 5.14.3.2.4 set-variable .....         | 72 |
| 5.14.3.2.5 set-variable .....         | 73 |
| 5.14.3.2.6 set-variable .....         | 73 |
| 5.14.3.2.7 set-variable .....         | 73 |
| 5.14.3.3 otherwise .....              | 73 |
| 5.14.3.3.1 logger .....               | 73 |
| 5.14.3.3.2 raise-error .....          | 73 |
| 5.14.4 choice .....                   | 73 |
| 5.14.4.1 when .....                   | 73 |

|  |    |
|--|----|
| 5.14.4.1.1 logger .....                    | 74 |
| 5.14.4.1.2 raise-error .....               | 75 |
| 5.14.4.2 otherwise .....                   | 75 |
| 5.14.4.2.1 logger .....                    | 75 |
| 5.14.5 choice .....                        | 75 |
| 5.14.5.1 when .....                        | 75 |
| 5.14.5.1.1 set-variable .....              | 75 |
| 5.14.5.1.2 set-variable .....              | 75 |
| 5.14.5.1.3 choice .....                    | 75 |
| 5.14.5.1.3.1 when .....                    | 75 |
| 5.14.5.1.3.1.1 set-variable .....          | 75 |
| 5.14.5.1.3.1.2 file:create-directory ..... | 76 |
| 5.14.5.1.3.1.3 file:write .....            | 76 |
| 5.14.5.1.3.1.3.1 file:content .....        | 76 |
| 5.14.5.1.3.1.4 set-variable .....          | 76 |
| 5.14.5.1.3.2 otherwise .....               | 76 |
| 5.14.5.1.3.2.1 set-variable .....          | 76 |
| 5.14.5.2 when .....                        | 76 |
| 5.14.5.2.1 choice .....                    | 76 |
| 5.14.5.2.1.1 when .....                    | 76 |
| 5.14.5.2.1.1.1 set-variable .....          | 77 |
| 5.14.5.2.1.1.2 file:create-directory ..... | 77 |
| 5.14.5.2.1.1.3 set-variable .....          | 77 |
| 5.14.5.2.1.1.4 file:write .....            | 77 |
| 5.14.5.2.1.1.4.1 file:content .....        | 77 |
| 5.14.5.2.1.1.5 file:read .....             | 77 |
| 5.14.5.2.1.1.6 java:invoke-static .....    | 77 |
| 5.14.5.2.1.1.6.1 java:args .....           | 77 |
| 5.14.5.2.1.1.7 set-variable .....          | 78 |
| 5.14.5.2.1.1.8 set-variable .....          | 78 |
| 5.14.5.2.1.1.9 set-variable .....          | 78 |
| 5.14.5.2.1.1.10 logger .....               | 78 |
| 5.14.5.2.1.1.11 choice .....               | 78 |
| 5.14.5.2.1.1.11.1 when .....               | 78 |
| 5.14.5.2.1.1.11.2 otherwise .....          | 78 |
| 5.14.5.2.1.2 otherwise .....               | 78 |
| 5.14.5.2.1.2.1 logger .....                | 78 |



|                                      |    |
|--------------------------------------|----|
| 5.14.5.2.1.2.2 raise-error .....     | 80 |
| 5.14.5.3 otherwise .....             | 80 |
| 5.14.5.3.1 logger .....              | 80 |
| 5.14.5.3.2 raise-error .....         | 80 |
| 5.14.6 choice .....                  | 80 |
| 5.14.6.1 when .....                  | 80 |
| 5.14.6.1.1 set-variable .....        | 80 |
| 5.14.6.1.2 set-variable .....        | 80 |
| 5.14.6.2 otherwise .....             | 80 |
| 5.14.6.2.1 set-variable .....        | 80 |
| 5.14.7 java:invoke-static .....      | 81 |
| 5.14.7.1 java:args .....             | 81 |
| 5.14.8 set-variable .....            | 81 |
| 5.14.9 set-variable .....            | 81 |
| 5.14.10 set-variable .....           | 81 |
| 5.14.11 choice .....                 | 81 |
| 5.14.11.1 when .....                 | 81 |
| 5.14.11.1.1 set-variable .....       | 81 |
| 5.14.11.2 otherwise .....            | 82 |
| 5.14.11.2.1 logger .....             | 82 |
| 5.14.12 logger .....                 | 82 |
| 5.14.13 os:store .....               | 82 |
| 5.14.13.1 os:value .....             | 82 |
| 5.14.14 async .....                  | 82 |
| 5.14.14.1 flow-ref .....             | 82 |
| 5.14.15 ee:transform .....           | 82 |
| 5.14.15.1 ee:message .....           | 82 |
| 5.14.15.1.1 ee:set-payload .....     | 82 |
| 5.14.16 error-handler .....          | 83 |
| 5.14.16.1 on-error-propagate .....   | 83 |
| 5.14.16.1.1 ee:transform .....       | 83 |
| 5.14.16.1.1.1 ee:message .....       | 83 |
| 5.14.16.1.1.1.1 ee:set-payload ..... | 83 |
| 5.14.16.2 on-error-propagate .....   | 83 |
| 5.14.16.2.1 logger .....             | 83 |
| 5.14.16.2.2 ee:transform .....       | 83 |
| 5.14.16.2.2.1 ee:message .....       | 83 |

|   |    |
|---|----|
| 5.14.16.2.2.1.1 ee:set-payload .....    | 84 |
| 5.15 send-usage-notification-flow ..... | 85 |
| 5.15.1 os:retrieve .....                | 85 |
| 5.15.1.1 os:default-value .....         | 85 |
| 5.15.2 set-variable .....               | 85 |
| 5.15.3 set-variable .....               | 85 |
| 5.15.4 set-variable .....               | 85 |
| 5.15.5 set-variable .....               | 86 |
| 5.15.6 logger .....                     | 86 |
| 5.15.7 set-variable .....               | 86 |
| 5.15.8 set-variable .....               | 86 |
| 5.15.9 set-variable .....               | 86 |
| 5.15.10 logger .....                    | 86 |
| 5.15.11 set-variable .....              | 87 |
| 5.15.12 java:invoke-static .....        | 87 |
| 5.15.12.1 java:args .....               | 87 |
| 5.15.13 choice .....                    | 87 |
| 5.15.13.1 when .....                    | 87 |
| 5.15.13.1.1 try .....                   | 87 |
| 5.15.13.1.1.1 file:read .....           | 87 |
| 5.15.13.1.1.2 set-variable .....        | 87 |
| 5.15.13.1.1.3 set-variable .....        | 88 |
| 5.15.13.1.1.4 set-variable .....        | 88 |
| 5.15.13.1.1.5 logger .....              | 88 |
| 5.15.13.1.1.6 error-handler .....       | 88 |
| 5.15.13.1.1.6.1 on-error-continue ..... | 88 |
| 5.15.13.1.1.6.1.1 logger .....          | 88 |
| 5.15.13.2 otherwise .....               | 88 |
| 5.15.13.2.1 logger .....                | 88 |
| 5.15.14 choice .....                    | 88 |
| 5.15.14.1 when .....                    | 88 |
| 5.15.14.1.1 try .....                   | 89 |
| 5.15.14.1.1.1 file:read .....           | 89 |
| 5.15.14.1.1.2 set-variable .....        | 89 |
| 5.15.14.1.1.3 set-variable .....        | 89 |
| 5.15.14.1.1.4 set-variable .....        | 89 |
| 5.15.14.1.1.5 logger .....              | 89 |

|   |    |
|---|----|
| 5.15.14.1.1.6 error-handler .....       | 90 |
| 5.15.14.1.1.6.1 on-error-continue ..... | 90 |
| 5.15.14.1.1.6.1.1 logger .....          | 90 |
| 5.15.14.2 otherwise .....               | 91 |
| 5.15.14.2.1 logger .....                | 91 |
| 5.15.15 choice .....                    | 91 |
| 5.15.15.1 when .....                    | 91 |
| 5.15.15.1.1 logger .....                | 91 |
| 5.15.15.2 otherwise .....               | 91 |
| 5.15.15.2.1 set-variable .....          | 91 |
| 5.15.15.2.2 logger .....                | 91 |
| 5.15.16 ee:transform .....              | 91 |
| 5.15.16.1 ee:message .....              | 91 |
| 5.15.16.1.1 ee:set-payload .....        | 91 |
| 5.15.17 choice .....                    | 92 |
| 5.15.17.1 when .....                    | 92 |
| 5.15.17.1.1 email:send .....            | 93 |
| 5.15.17.1.1.1 email:body .....          | 93 |
| 5.15.17.1.1.1.1 email:content .....     | 93 |
| 5.15.17.1.1.2 email:attachments .....   | 93 |
| 5.15.17.2 otherwise .....               | 93 |
| 5.15.17.2.1 email:send .....            | 93 |
| 5.15.17.2.1.1 email:body .....          | 93 |
| 5.15.17.2.1.1.1 email:content .....     | 93 |
| 5.15.18 logger .....                    | 94 |
| 5.15.19 try .....                       | 94 |
| 5.15.19.1 file:delete .....             | 94 |
| 5.15.19.2 logger .....                  | 94 |
| 5.15.19.3 error-handler .....           | 94 |
| 5.15.19.3.1 on-error-continue .....     | 94 |
| 5.15.19.3.1.1 logger .....              | 94 |
| 5.15.20 error-handler .....             | 94 |
| 5.15.20.1 on-error-continue .....       | 94 |
| 5.15.20.1.1 logger .....                | 94 |
| 5.16 serve-report-flow .....            | 95 |
| 5.16.1 http:listener .....              | 95 |
| 5.16.2 set-variable .....               | 95 |

|                                    |     |
|------------------------------------|-----|
| 5.16.3 set-variable .....          | 96  |
| 5.16.4 set-variable .....          | 96  |
| 5.16.5 logger .....                | 96  |
| 5.16.6 os:retrieve .....           | 96  |
| 5.16.7 set-variable .....          | 96  |
| 5.16.8 set-variable .....          | 97  |
| 5.16.9 logger .....                | 97  |
| 5.16.10 set-variable .....         | 97  |
| 5.16.11 file:read .....            | 97  |
| 5.16.12 error-handler .....        | 97  |
| 5.16.12.1 on-error-propagate ..... | 97  |
| 5.16.12.1.1 logger .....           | 97  |
| 5.16.12.1.2 set-payload .....      | 98  |
| 5.16.12.2 on-error-propagate ..... | 98  |
| 5.16.12.2.1 logger .....           | 98  |
| 5.16.12.2.2 set-payload .....      | 98  |
| 5.17 cleanup-workspace-flow .....  | 98  |
| 5.17.1 scheduler .....             | 98  |
| 5.17.1.1 scheduling-strategy ..... | 98  |
| 5.17.1.1.1 cron .....              | 98  |
| 5.17.2 logger .....                | 98  |
| 5.17.3 choice .....                | 99  |
| 5.17.3.1 when .....                | 99  |
| 5.17.3.1.1 set-variable .....      | 99  |
| 5.17.3.1.2 set-variable .....      | 99  |
| 5.17.3.1.3 set-variable .....      | 99  |
| 5.17.3.1.4 set-variable .....      | 99  |
| 5.17.3.1.5 logger .....            | 99  |
| 5.17.3.1.6 file:list .....         | 99  |
| 5.17.3.1.7 foreach .....           | 100 |
| 5.17.3.1.7.1 set-variable .....    | 100 |
| 5.17.3.1.7.2 set-variable .....    | 100 |
| 5.17.3.1.7.3 choice .....          | 100 |
| 5.17.3.1.7.3.1 when .....          | 100 |
| 5.17.3.1.7.3.1.1 logger .....      | 100 |
| 5.17.3.1.7.3.1.2 try .....         | 100 |
| 5.17.3.1.7.3.2 otherwise .....     | 100 |

|  |     |
|--|-----|
| 5.17.3.1.7.3.2.1 logger .....                  | 101 |
| 5.17.3.1.8 logger .....                        | 101 |
| 5.17.3.2 otherwise .....                       | 102 |
| 5.17.3.2.1 logger .....                        | 102 |
| 5.17.4 error-handler .....                     | 102 |
| 5.17.4.1 on-error-continue .....               | 102 |
| 5.17.4.1.1 logger .....                        | 102 |
| 5.18 send-registration-notification-flow ..... | 102 |
| 5.18.1 choice .....                            | 102 |
| 5.18.1.1 when .....                            | 102 |
| 5.18.1.1.1 logger .....                        | 102 |
| 5.18.1.1.2 set-variable .....                  | 102 |
| 5.18.1.1.3 ee:transform .....                  | 103 |
| 5.18.1.1.3.1 ee:message .....                  | 103 |
| 5.18.1.1.3.1.1 ee:set-payload .....            | 103 |
| 5.18.1.1.4 email:send .....                    | 104 |
| 5.18.1.1.4.1 email:body .....                  | 105 |
| 5.18.1.1.4.2 email:attachments .....           | 105 |
| 5.18.1.1.5 logger .....                        | 105 |
| 5.18.1.2 otherwise .....                       | 105 |
| 5.18.1.2.1 logger .....                        | 105 |
| 5.18.2 error-handler .....                     | 105 |
| 5.18.2.1 on-error-continue .....               | 105 |
| 5.18.2.1.1 logger .....                        | 105 |
| 5.19 raksanalyzer-root-flow .....              | 105 |
| 5.19.1 http:listener .....                     | 106 |
| 5.19.2 set-variable .....                      | 106 |
| 5.19.3 choice .....                            | 106 |
| 5.19.3.1 when .....                            | 106 |
| 5.19.3.1.1 logger .....                        | 106 |
| 5.19.3.1.2 os:contains .....                   | 106 |
| 5.19.3.1.3 choice .....                        | 106 |
| 5.19.3.1.3.1 when .....                        | 106 |
| 5.19.3.1.3.1.1 logger .....                    | 106 |
| 5.19.3.1.3.1.2 flow-ref .....                  | 107 |
| 5.19.3.1.3.2 otherwise .....                   | 107 |
| 5.19.3.1.3.2.1 logger .....                    | 107 |

|   |     |
|---|-----|
| 5.19.3.2 otherwise .....                      | 108 |
| 5.19.3.2.1 logger .....                       | 108 |
| 5.19.3.2.2 flow-ref .....                     | 108 |
| 5.19.4 async .....                            | 108 |
| 5.19.4.1 flow-ref .....                       | 108 |
| 5.19.5 set-variable .....                     | 108 |
| 5.19.6 set-payload .....                      | 108 |
| 5.20 raks-send-launch-notification-flow ..... | 109 |
| 5.20.1 os:retrieve .....                      | 109 |
| 5.20.1.1 os:default-value .....               | 109 |
| 5.20.2 email:send .....                       | 109 |
| 5.20.2.1 email:body .....                     | 109 |
| 5.20.2.1.1 email:content .....                | 109 |
| 5.20.3 error-handler .....                    | 110 |
| 5.20.3.1 on-error-continue .....              | 110 |
| 5.20.3.1.1 logger .....                       | 110 |
| 5.21 raksanalyzer-ui-flow .....               | 110 |
| 5.21.1 http:listener .....                    | 110 |
| 5.21.1.1 http:response .....                  | 110 |
| 5.21.1.1.1 http:headers .....                 | 110 |
| 5.21.2 set-variable .....                     | 110 |
| 5.21.3 set-variable .....                     | 111 |
| 5.21.4 choice .....                           | 111 |
| 5.21.4.1 when .....                           | 111 |
| 5.21.4.1.1 file:read .....                    | 111 |
| 5.21.4.2 when .....                           | 111 |
| 5.21.4.2.1 file:read .....                    | 111 |
| 5.21.4.3 when .....                           | 111 |
| 5.21.4.3.1 set-variable .....                 | 112 |
| 5.21.4.3.2 http:request .....                 | 112 |
| 5.21.4.3.2.1 http:uri-params .....            | 112 |
| 5.21.4.4 otherwise .....                      | 112 |
| 5.21.4.4.1 logger .....                       | 112 |
| 5.21.4.4.2 file:read .....                    | 112 |
| 5.22 raksanalyzer-api-flow .....              | 112 |
| 5.22.1 http:listener .....                    | 112 |
| 5.22.1.1 http:response .....                  | 113 |

|  |     |
|--|-----|
| 5.22.1.1.1 http:headers .....              | 114 |
| 5.22.2 set-variable .....                  | 114 |
| 5.22.3 choice .....                        | 114 |
| 5.22.3.1 when .....                        | 114 |
| 5.22.3.1.1 set-variable .....              | 114 |
| 5.22.3.1.2 set-variable .....              | 114 |
| 5.22.3.1.3 file:create-directory .....     | 114 |
| 5.22.3.1.4 ee:transform .....              | 115 |
| 5.22.3.1.4.1 ee:message .....              | 115 |
| 5.22.3.1.4.2 ee:variables .....            | 115 |
| 5.22.3.1.4.2.1 ee:set-variable .....       | 115 |
| 5.22.3.1.4.2.2 ee:set-variable .....       | 115 |
| 5.22.3.1.5 file:write .....                | 115 |
| 5.22.3.1.5.1 file:content .....            | 115 |
| 5.22.3.1.6 set-payload .....               | 115 |
| 5.22.3.2 when .....                        | 116 |
| 5.22.3.2.1 java:invoke-static .....        | 116 |
| 5.22.3.2.1.1 java:args .....               | 116 |
| 5.22.3.2.2 ee:transform .....              | 116 |
| 5.22.3.2.2.1 ee:message .....              | 116 |
| 5.22.3.2.2.1.1 ee:set-payload .....        | 116 |
| 5.22.3.3 when .....                        | 116 |
| 5.22.3.3.1 set-payload .....               | 117 |
| 5.22.3.4 when .....                        | 117 |
| 5.22.3.4.1 set-payload .....               | 117 |
| 5.22.3.5 when .....                        | 117 |
| 5.22.3.5.1 set-payload .....               | 117 |
| 5.22.3.6 otherwise .....                   | 117 |
| 5.22.3.6.1 set-payload .....               | 117 |
| 5.22.3.6.2 set-variable .....              | 117 |
| 6. Mule Sub-Flows .....                    | 118 |
| 6.1 create-anonymous-session-subflow ..... | 118 |
| 6.1.1 set-variable .....                   | 118 |
| 6.1.2 set-variable .....                   | 118 |
| 6.1.3 os:store .....                       | 118 |
| 6.1.3.1 os:value .....                     | 118 |
| 6.1.4 logger .....                         | 119 |

|   |     |
|---|-----|
| 6.2 raks-create-anonymous-session-subflow ..... | 120 |
| 6.2.1 set-variable .....                        | 120 |
| 6.2.2 set-variable .....                        | 120 |
| 6.2.3 os:store .....                            | 120 |
| 6.2.3.1 os:value .....                          | 120 |
| 6.2.4 logger .....                              | 121 |
| 7. DataWeave Files .....                        | 122 |
| 8. Other Resources .....                        | 123 |
| 9. References .....                             | 126 |



# 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

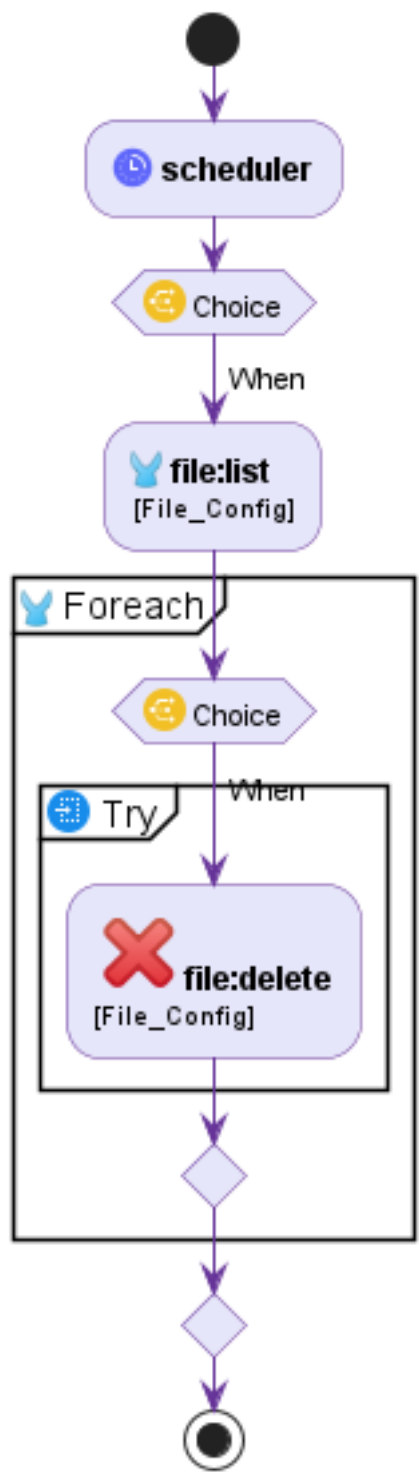
```
{
  "minMuleVersion": "4.9.1",
  "javaSpecificationVersions": [
    "17"
  ],
  "classLoaderModelLoaderDescriptor": {
    "id": "mule",
    "attributes": {
      "exportedPackages": [
        "javax.activation",
        "com.raks.muleguard.wrapper"
      ]
    }
  }
}
```

## 2. Flow Diagrams

### 2.1 Mule Project Flow Integration

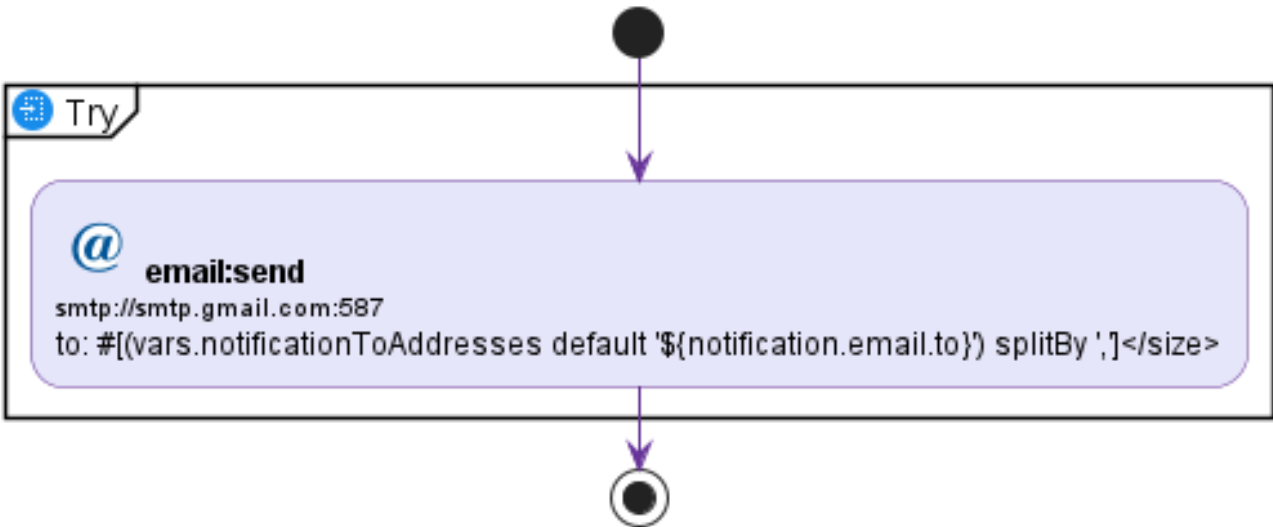
#### 2.1.1 cleanup-workspace-flow

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



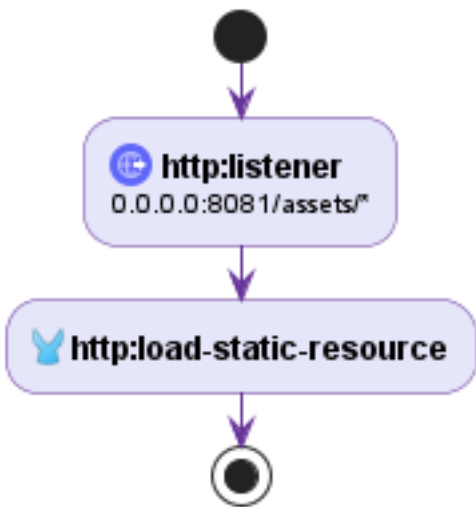
2.1.2 common-send-registration-notification-flow

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



2.1.3 common-static-resource-flow

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



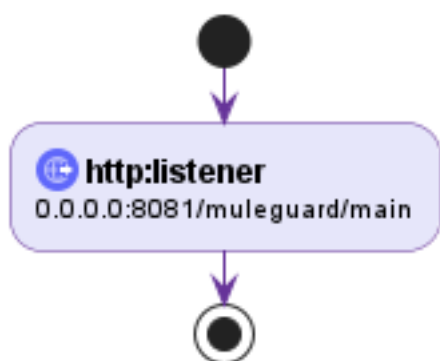
2.1.4 create-anonymous-session-subflow

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



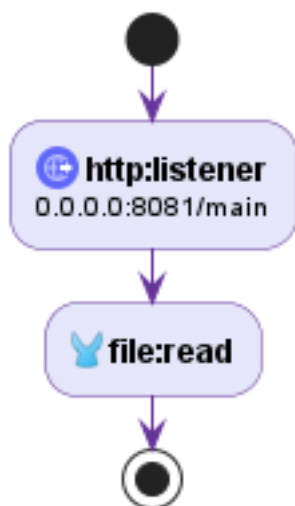
### 2.1.5 main-landing-page-flow

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



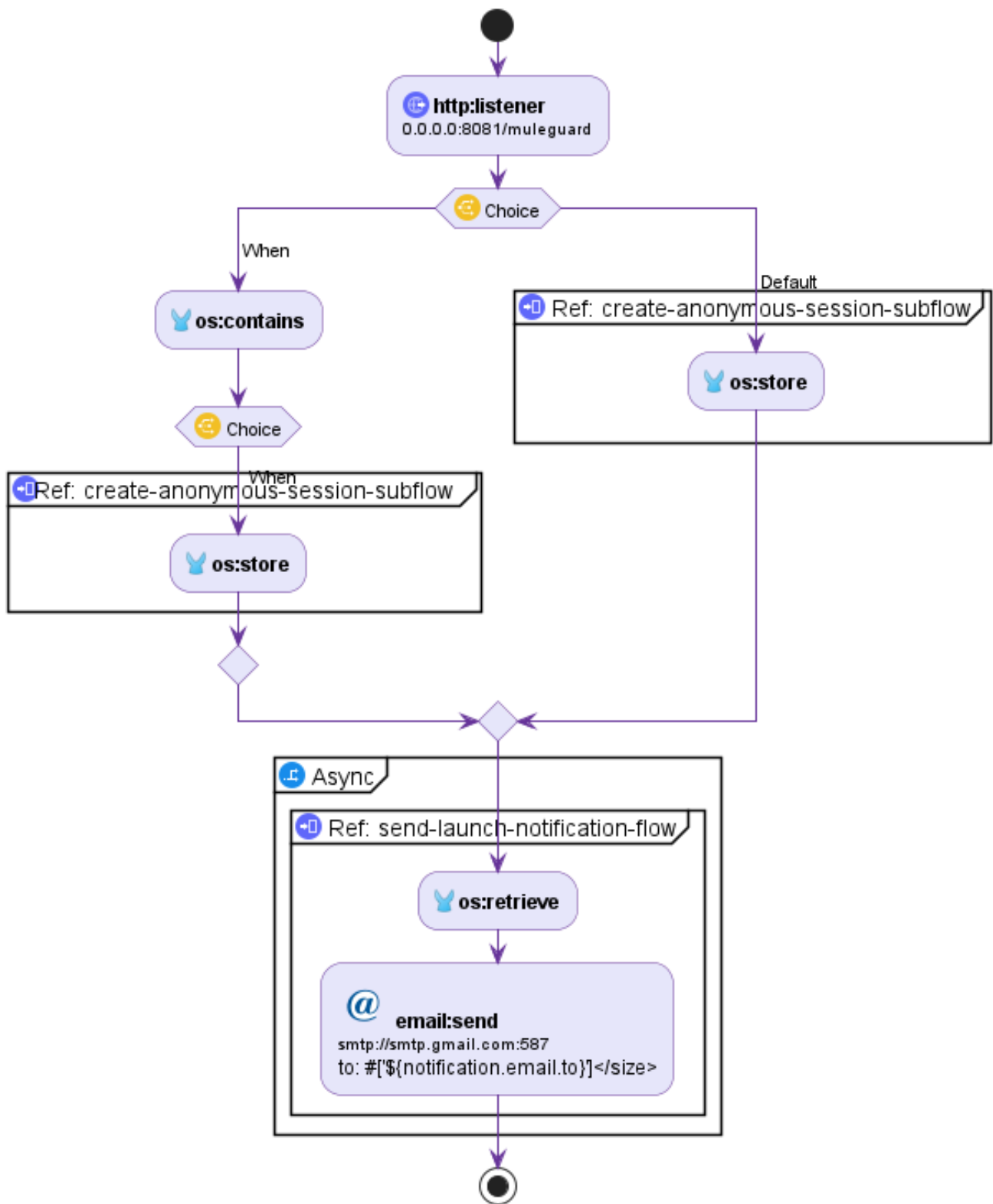
### 2.1.6 main-page-flow

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



### 2.1.7 muleguard-root-flow

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



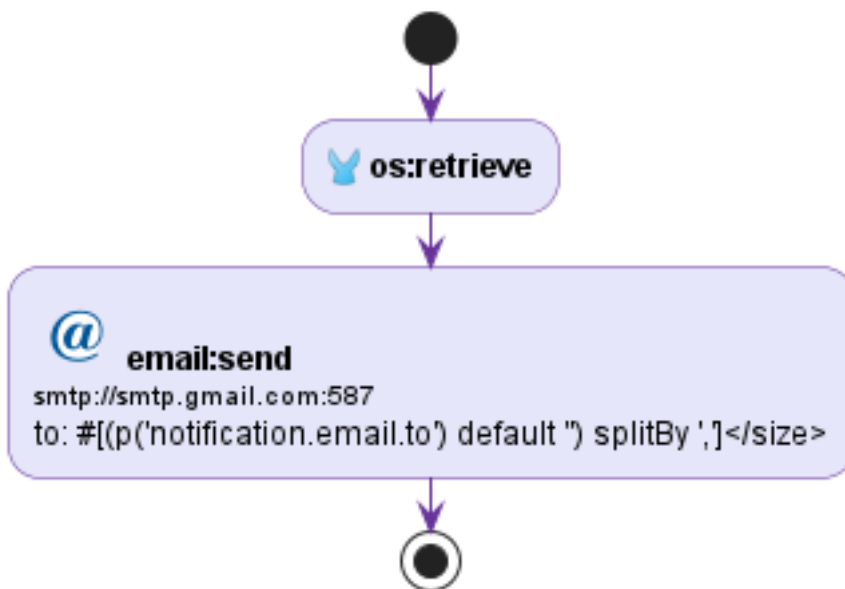
### 2.1.8 raks-create-anonymous-session-subflow

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



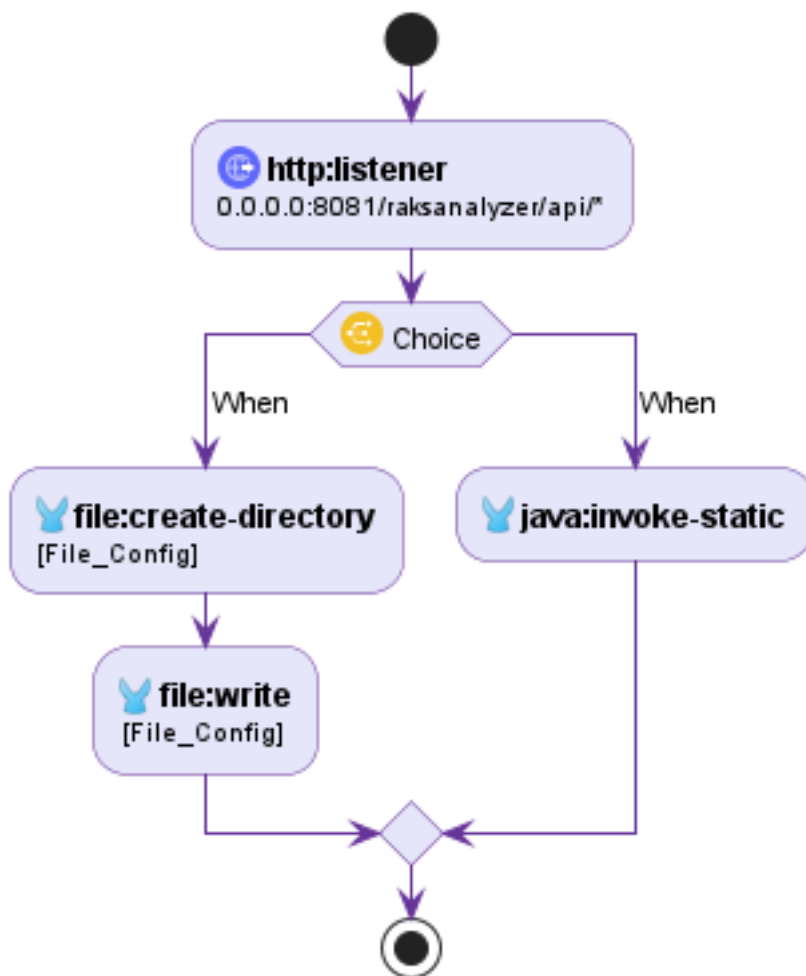
### 2.1.9 raks-send-launch-notification-flow

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



### 2.1.10 raksanalyzer-api-flow

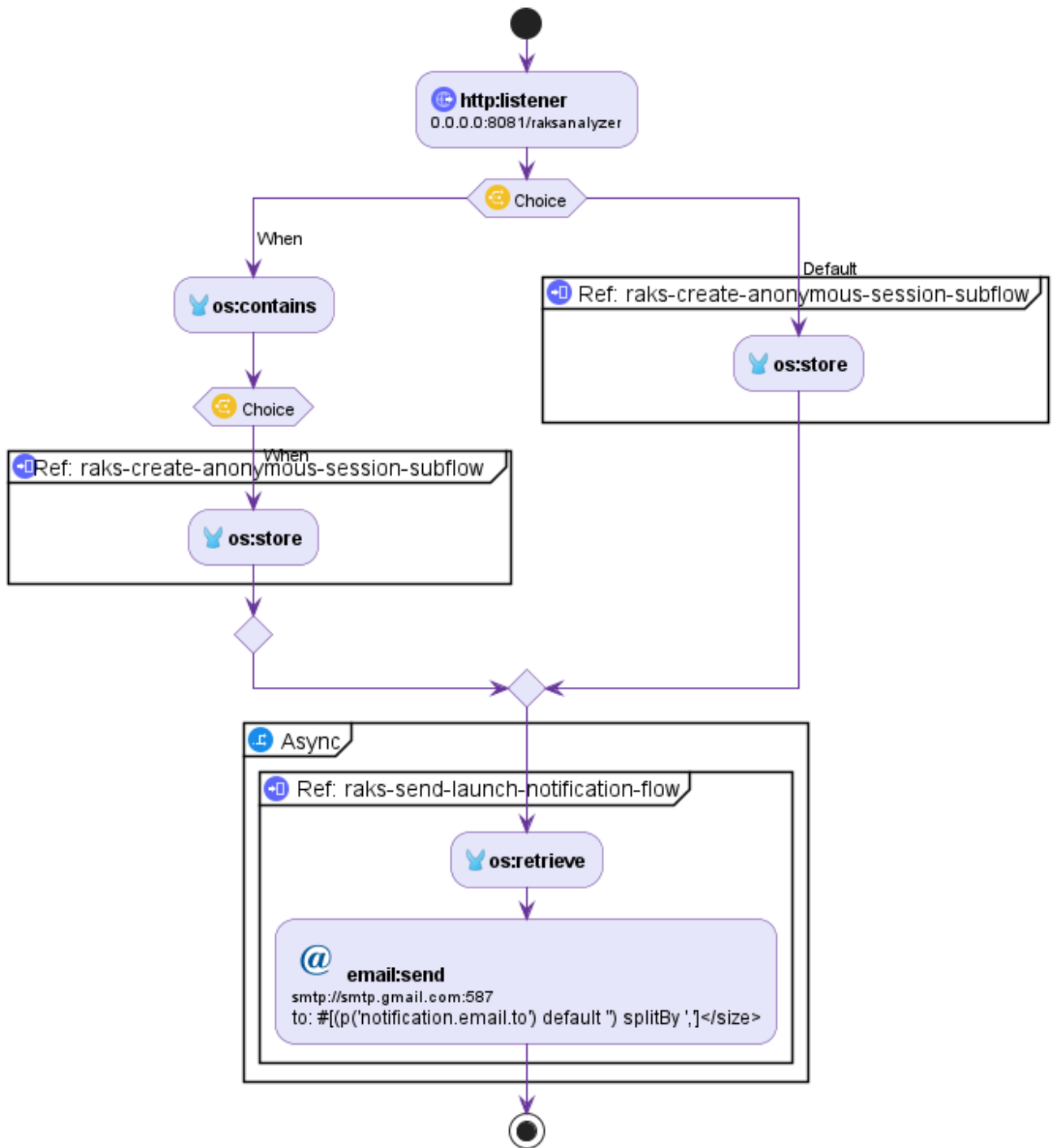
Path: src\main\mule\raksanalyzer-wrapper.xml



### 2.1.11 raksanalyzer-root-flow

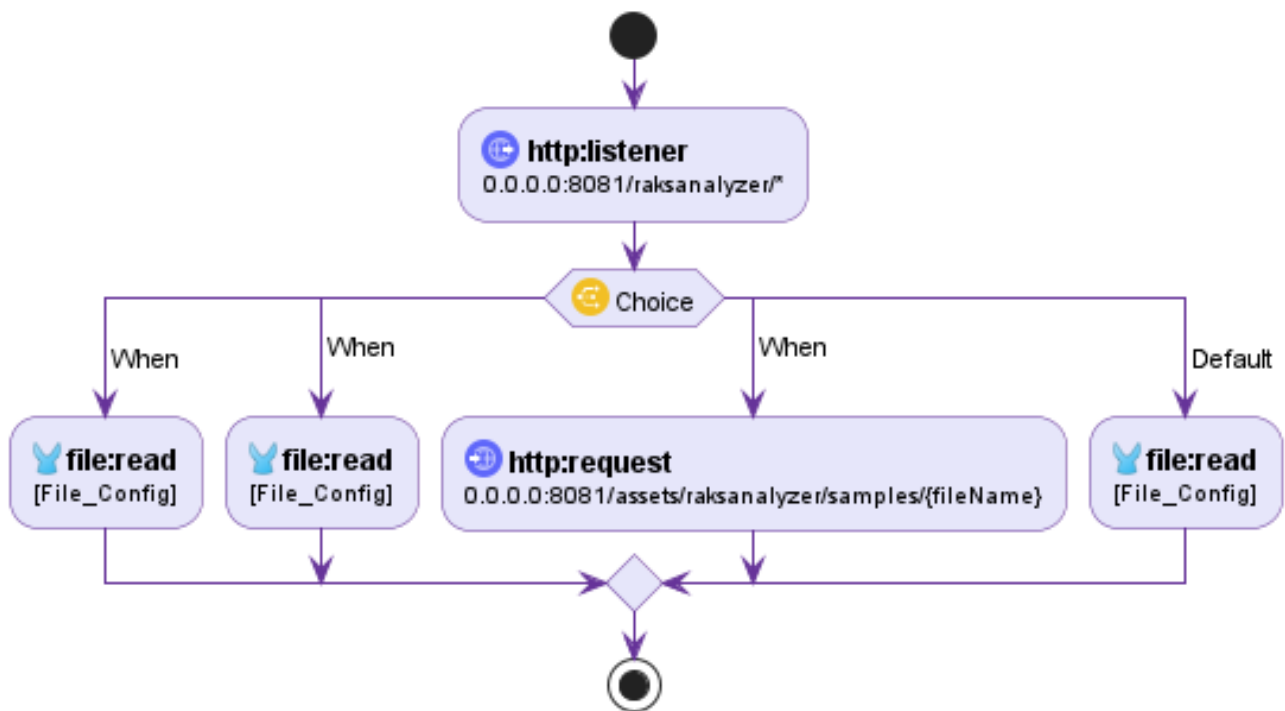
Path: src\main\mule\raksanalyzer-wrapper.xml





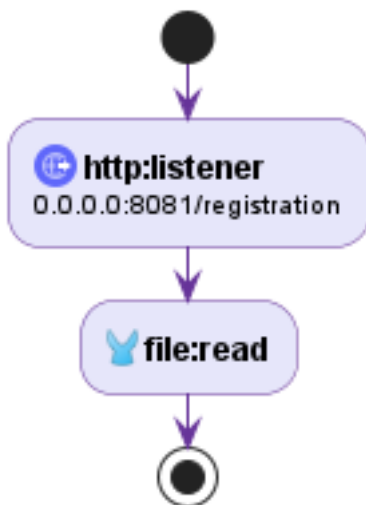
## 2.1.12 raksanalyzer-ui-flow

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



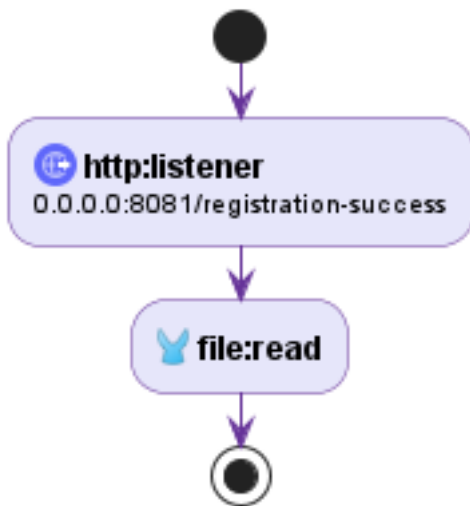
### 2.1.13 registration-page-flow

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



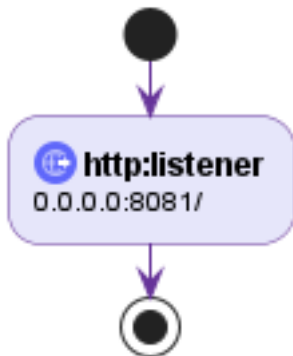
### 2.1.14 registration-success-flow

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



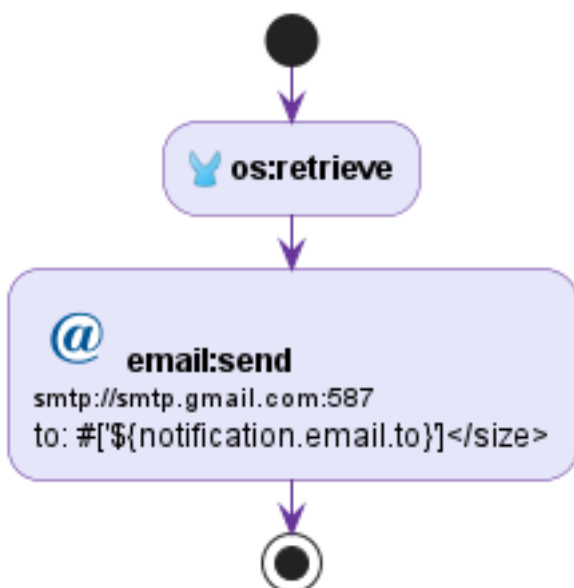
### 2.1.15 root-redirect-flow

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



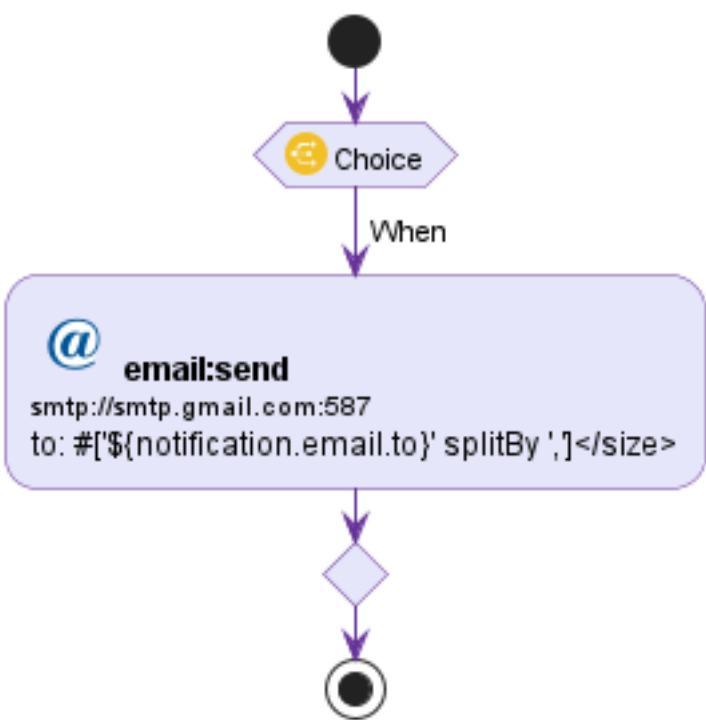
### 2.1.16 send-launch-notification-flow

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



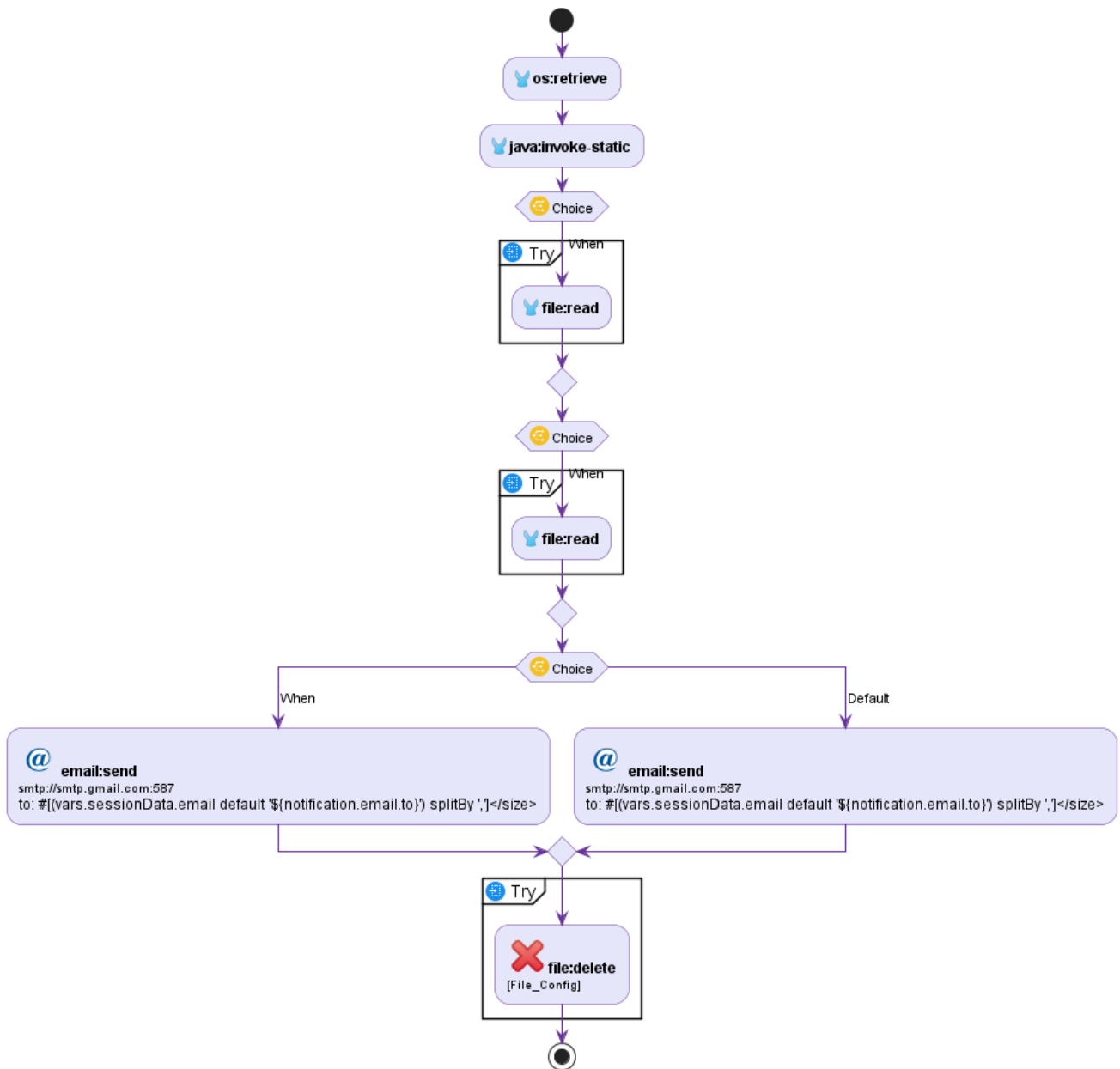
2.1.17 send-registration-notification-flow

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



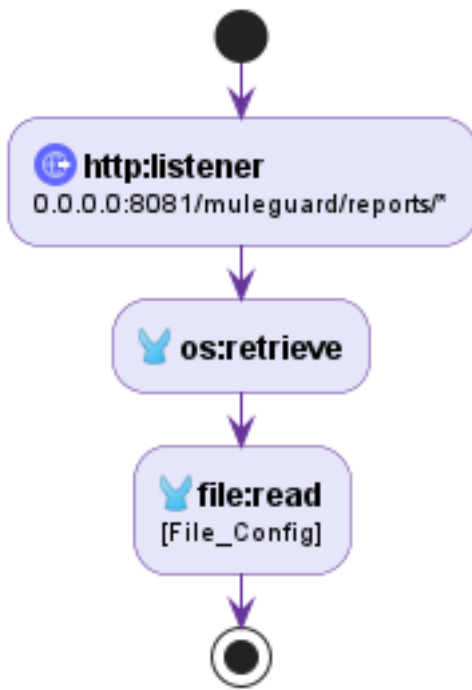
2.1.18 send-usage-notification-flow

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



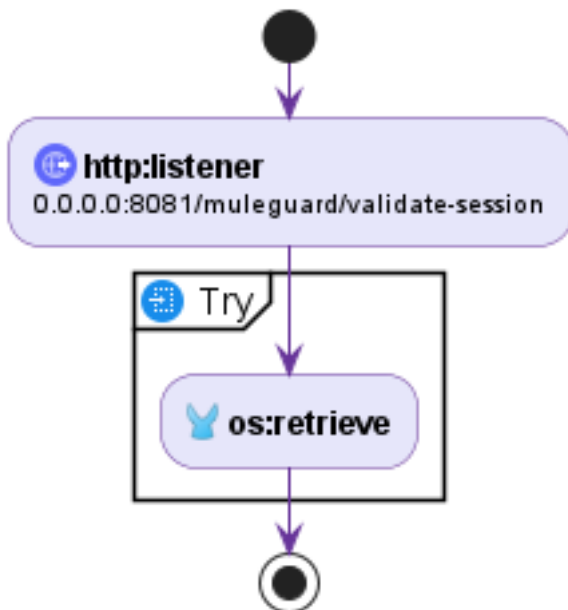
## 2.1.19 serve-report-flow

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



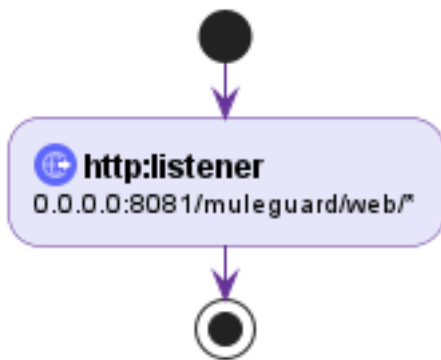
## 2.1.20 session-validation-flow

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



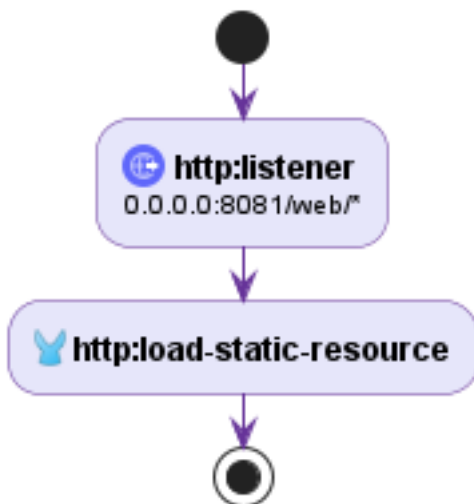
### 2.1.21 static-resource-flow

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



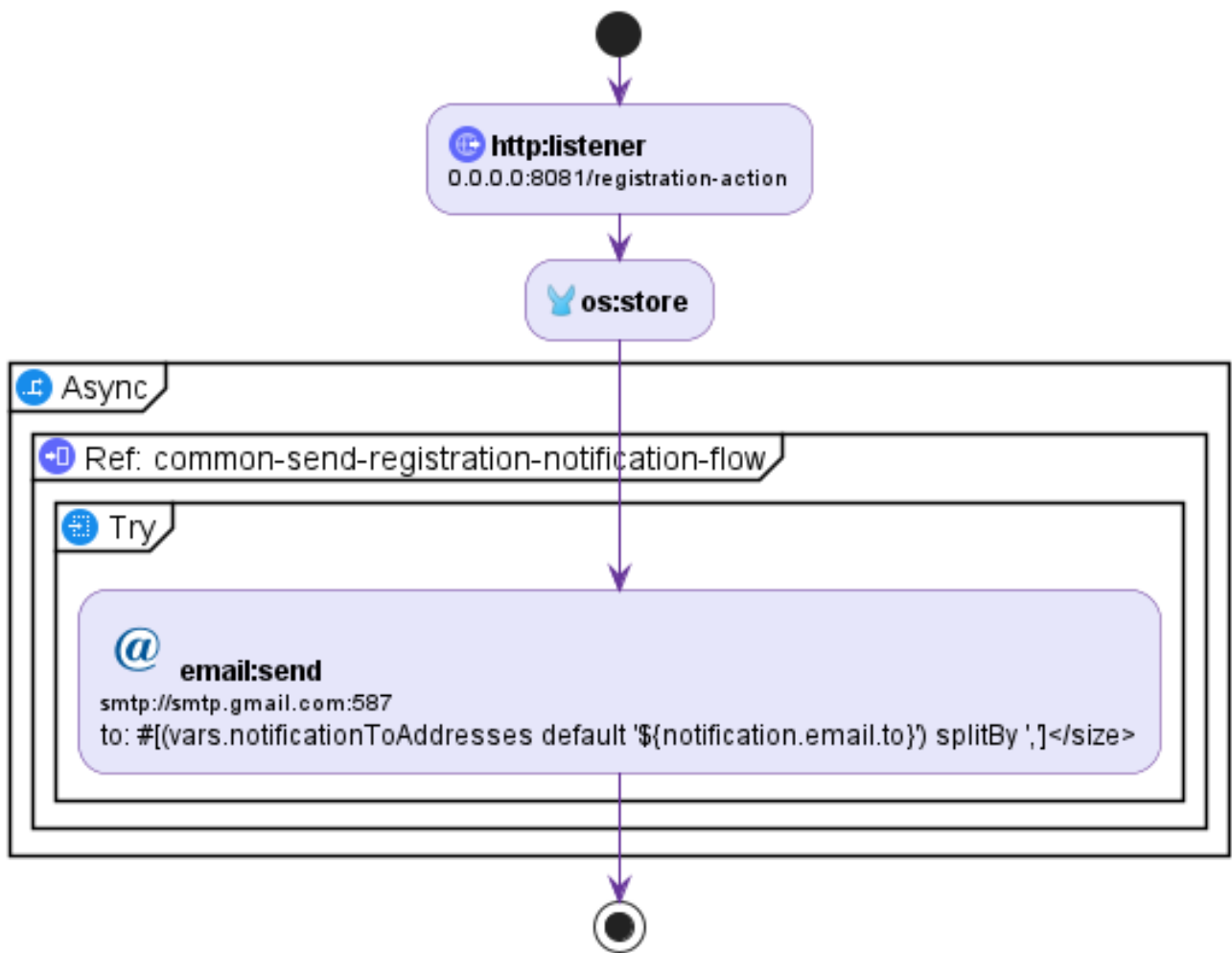
### 2.1.22 static-resources-flow

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



### 2.1.23 user-registration-flow

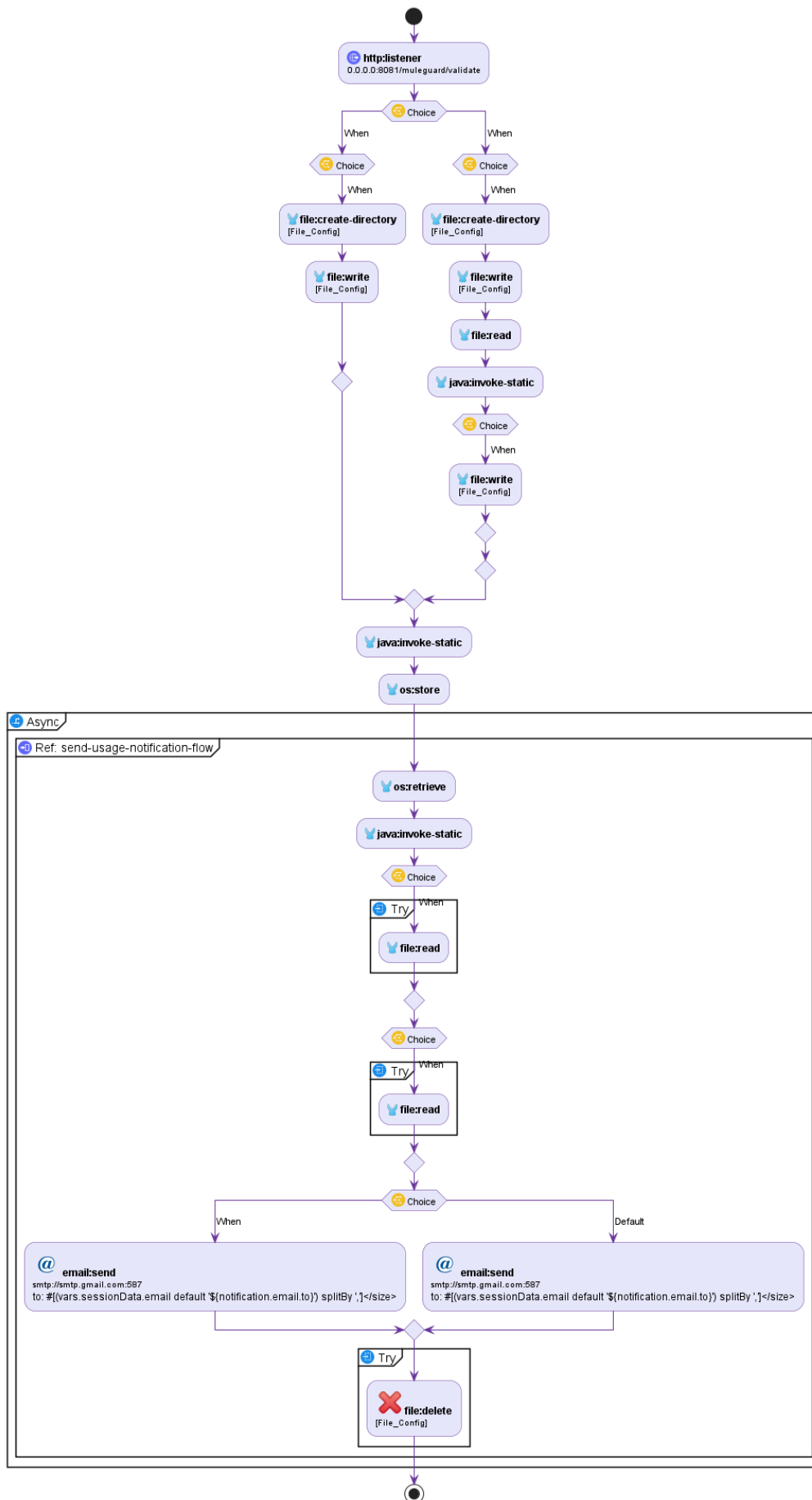
Path: src\main\mule\apiguard-portal.xml



### 2.1.24 validation-trigger-flow

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



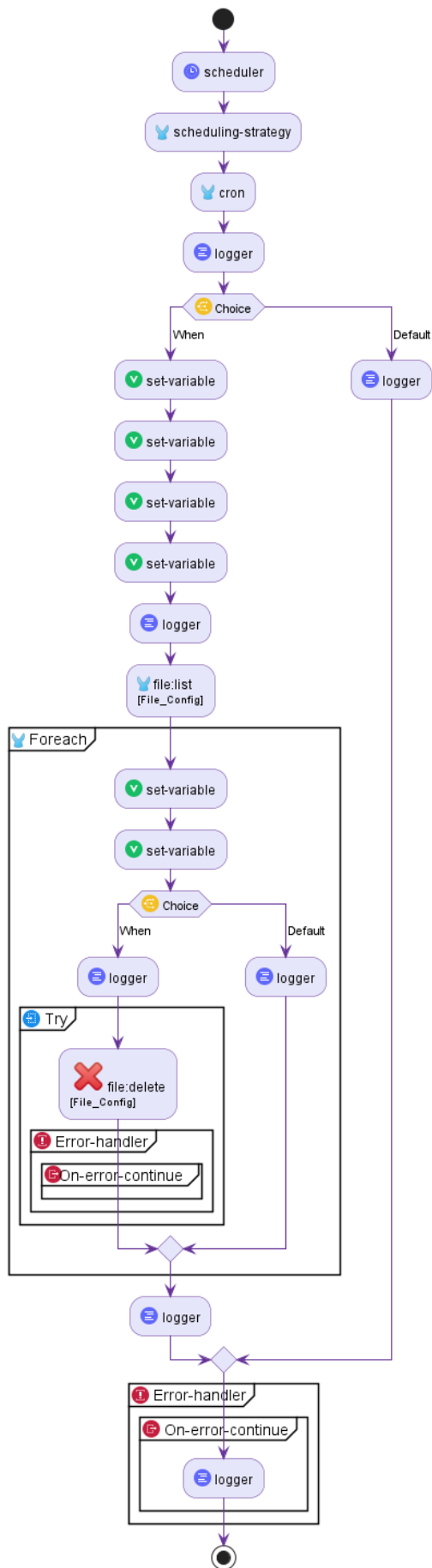


(Diagram scaled to fit page)

## 2.2 Mule Project Flow Diagram

### 2.2.1 cleanup-workspace-flow

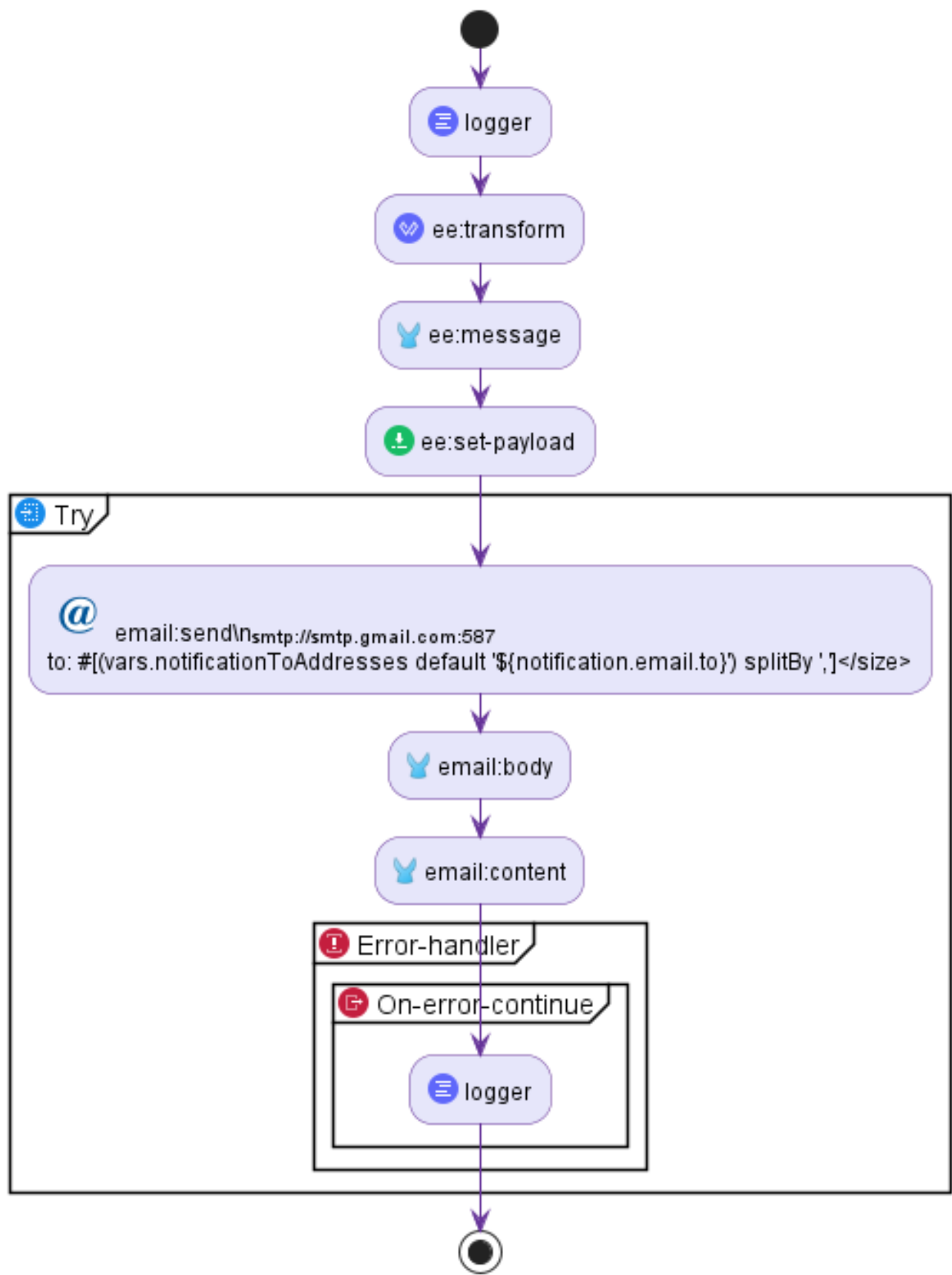
*Path: src\main\mule\muleguard-wrapper.xml*



(Diagram scaled to fit page)

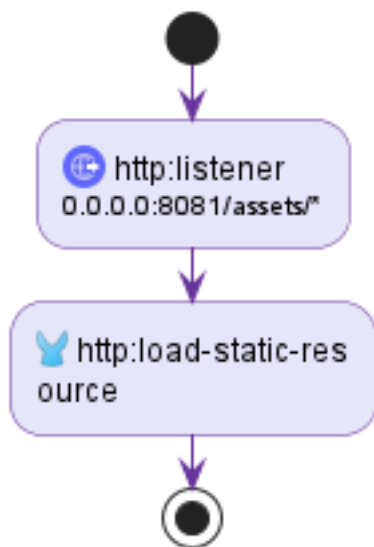
2.2.2 common-send-registration-notification-flow

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



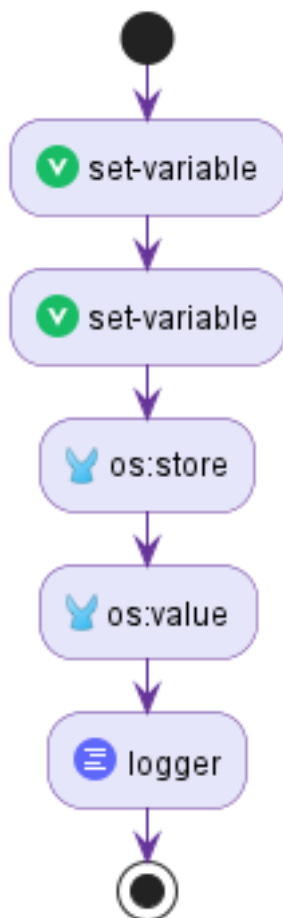
### 2.2.3 common-static-resource-flow

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



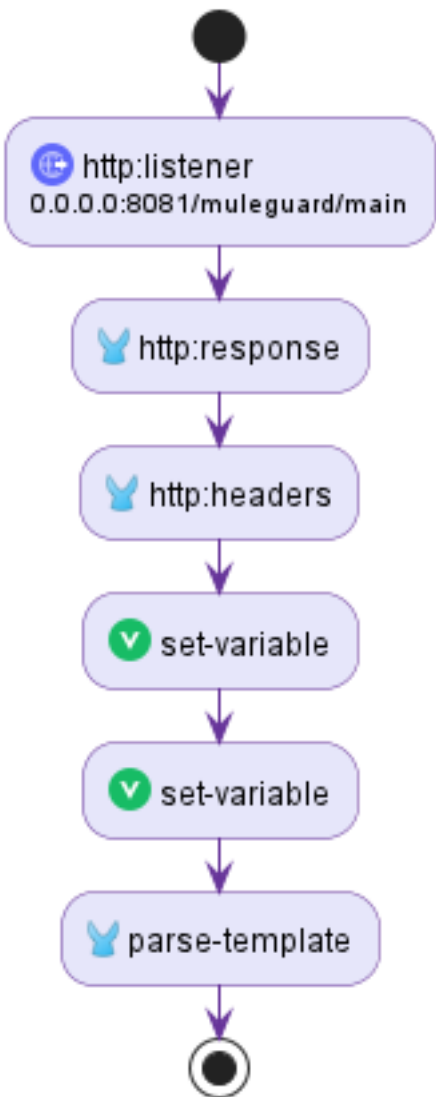
### 2.2.4 create-anonymous-session-subflow

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



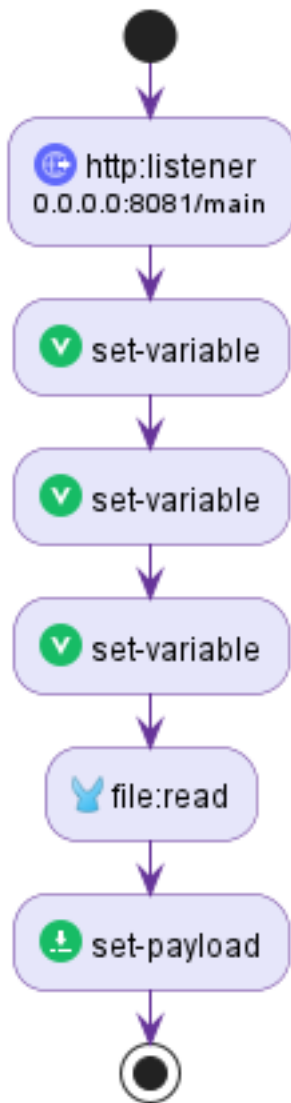
2.2.5 main-landing-page-flow

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



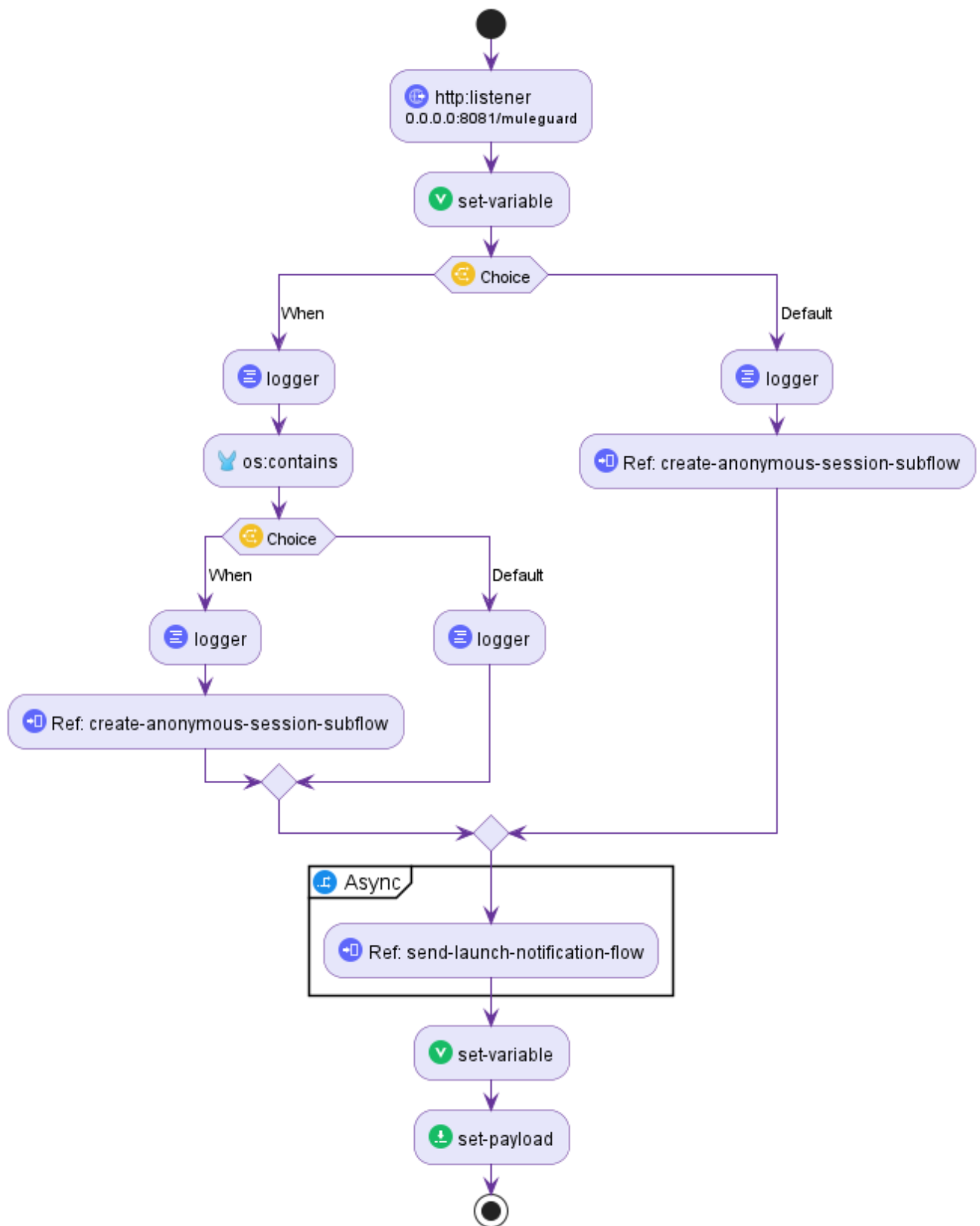
2.2.6 main-page-flow

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



### 2.2.7 muleguard-root-flow

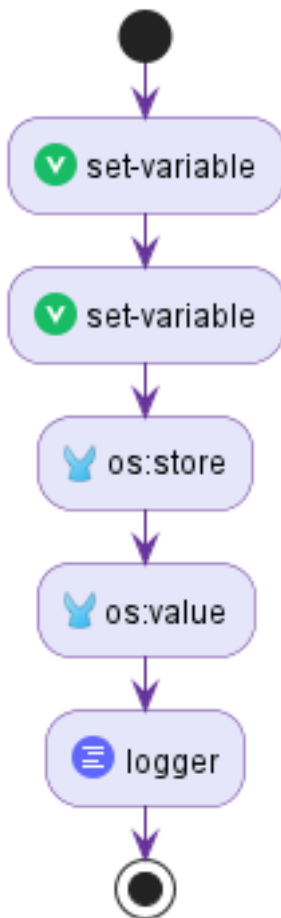
*Path: src\main\mule\muleguard-wrapper.xml*





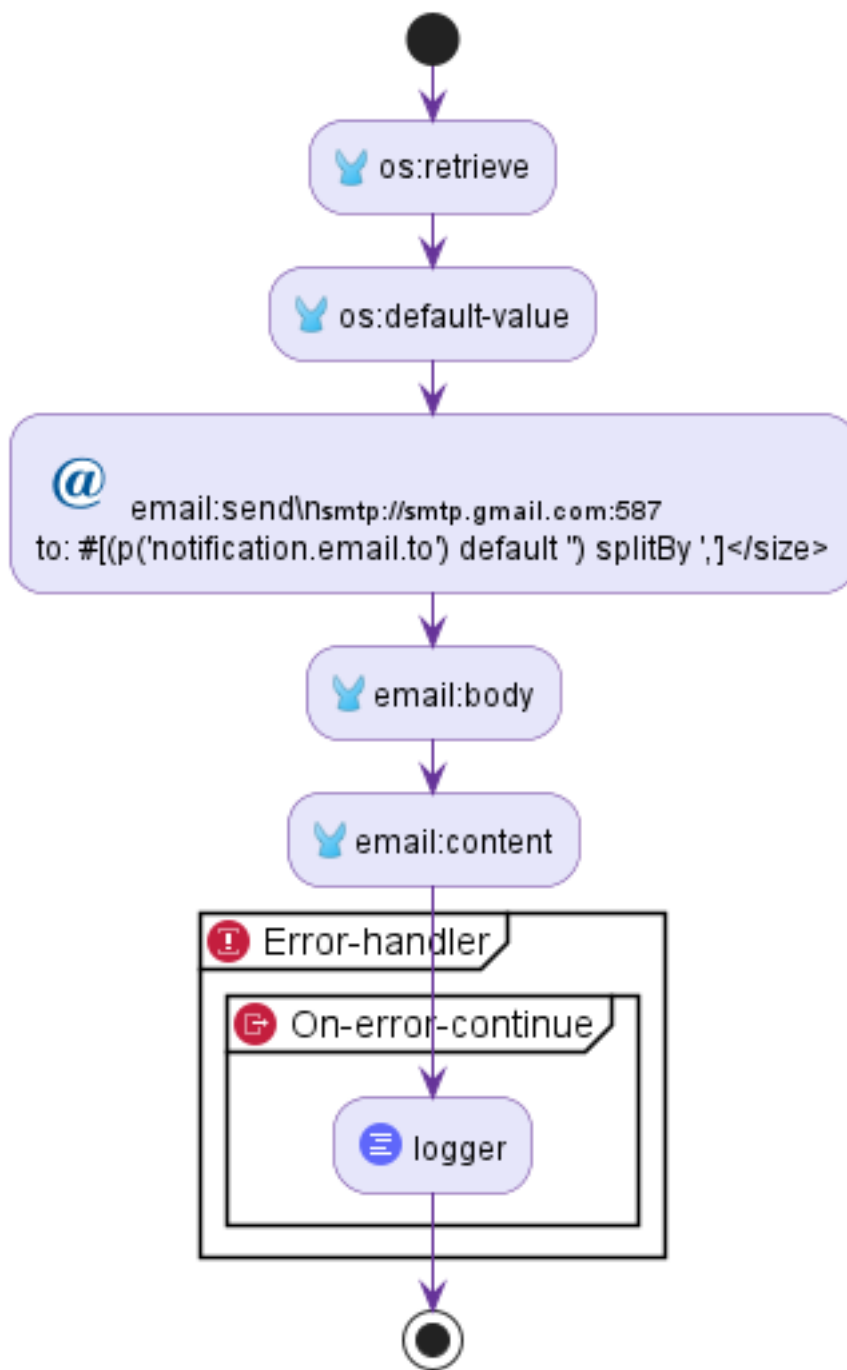
## 2.2.8 raks-create-anonymous-session-subflow

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



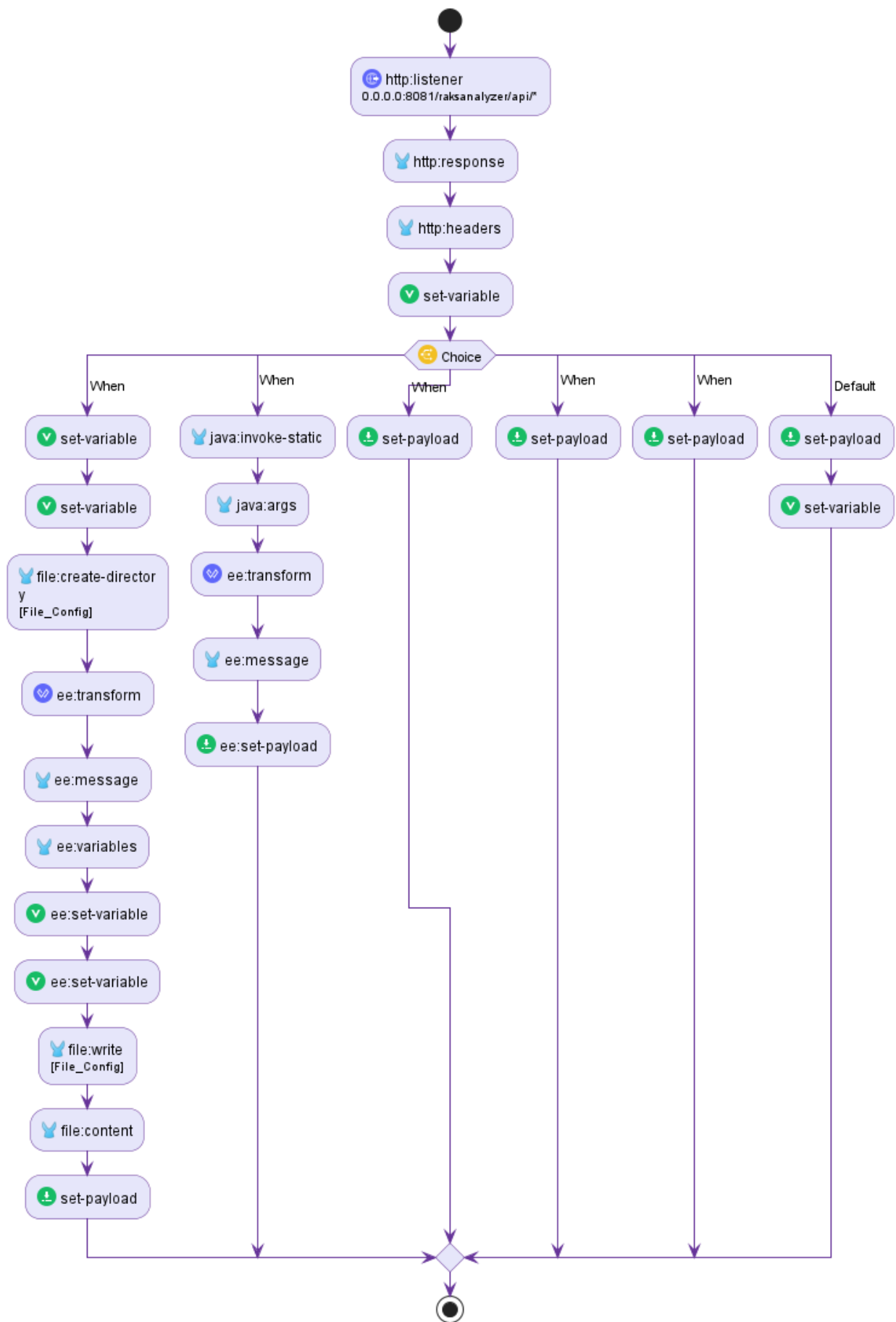
## 2.2.9 raks-send-launch-notification-flow

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



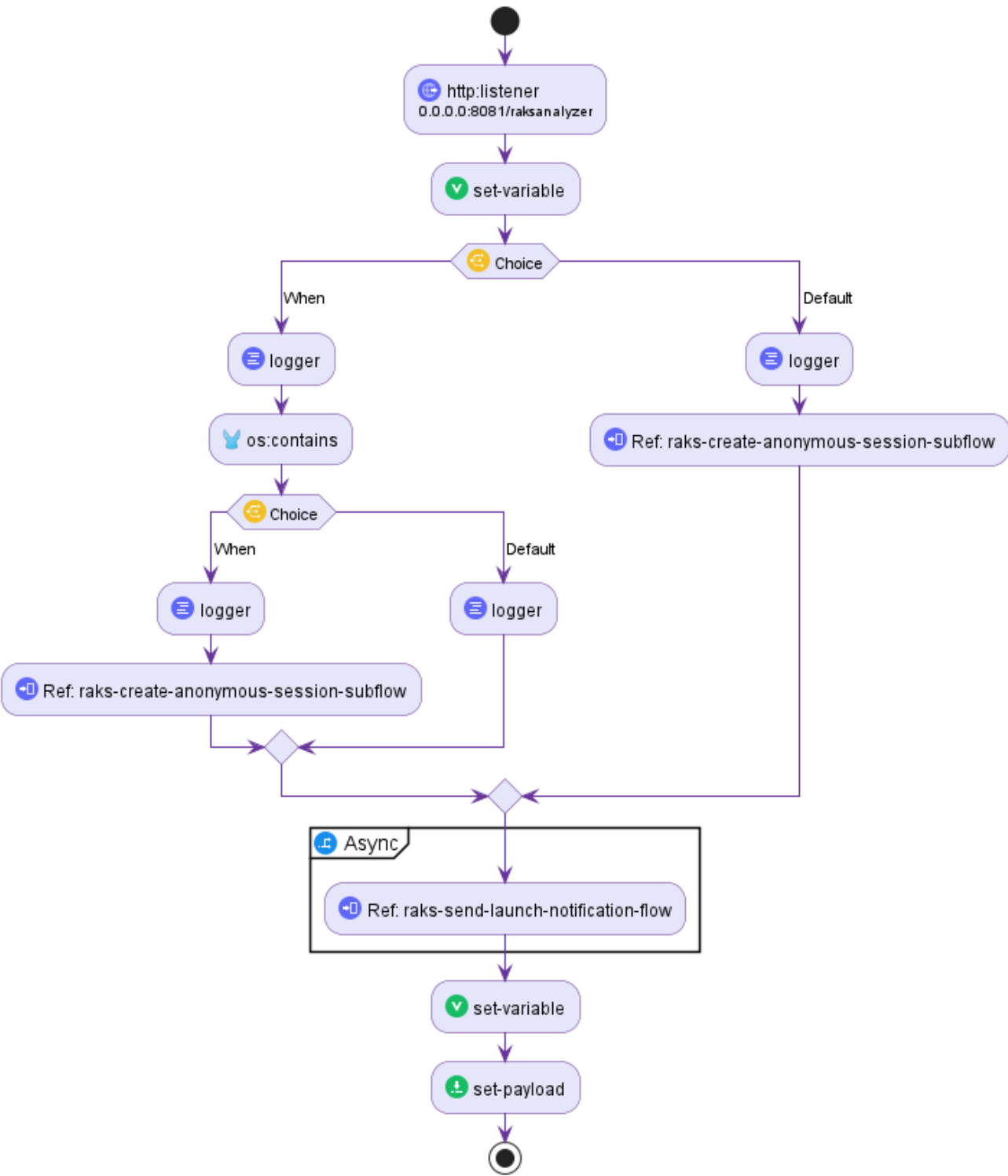
## 2.2.10 raksanalyzer-api-flow

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



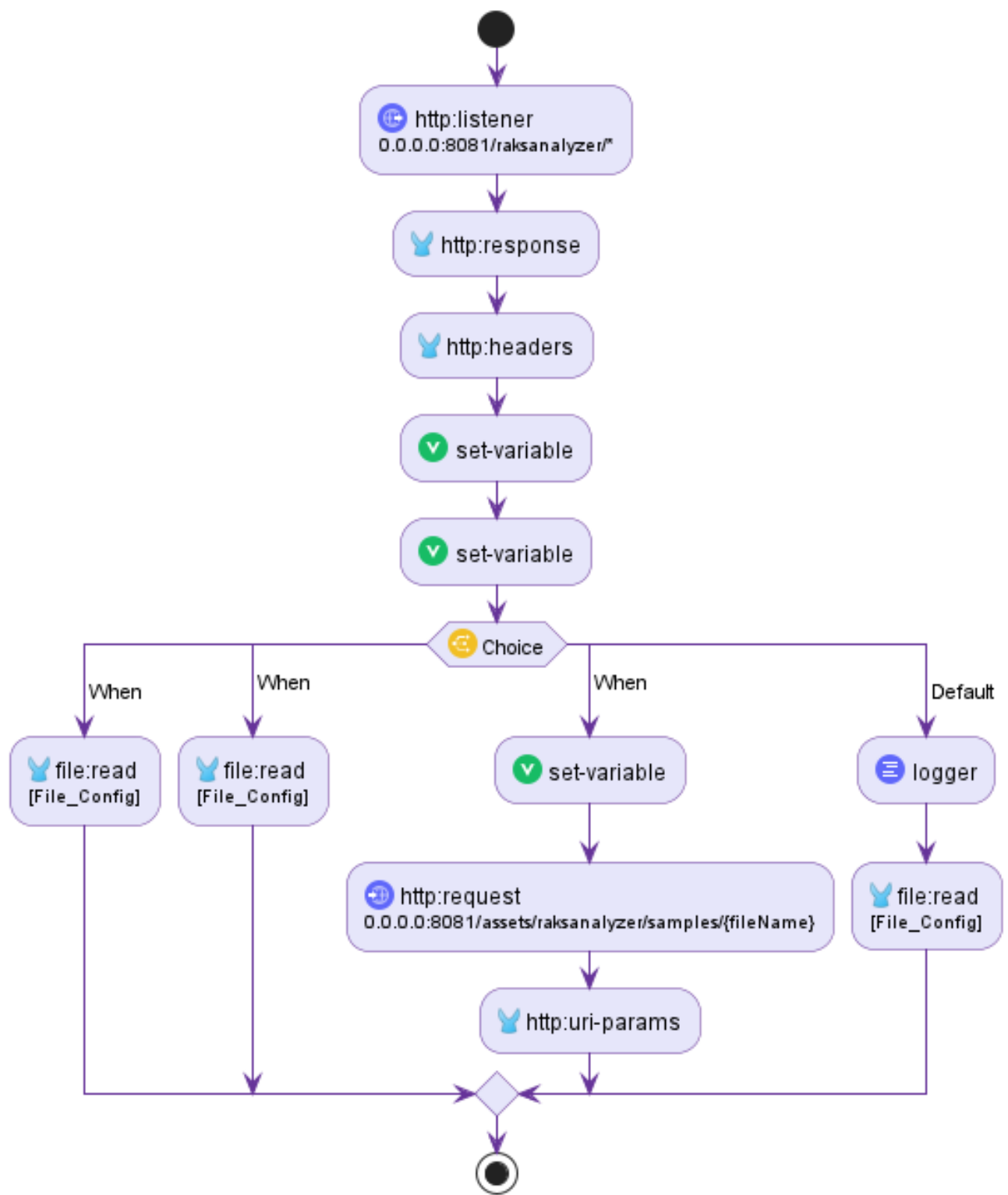
2.2.11 raksanalyzer-root-flow

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



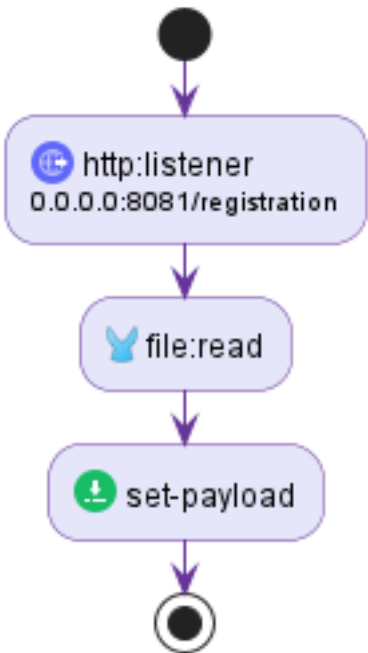
2.2.12 raksanalyzer-ui-flow

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



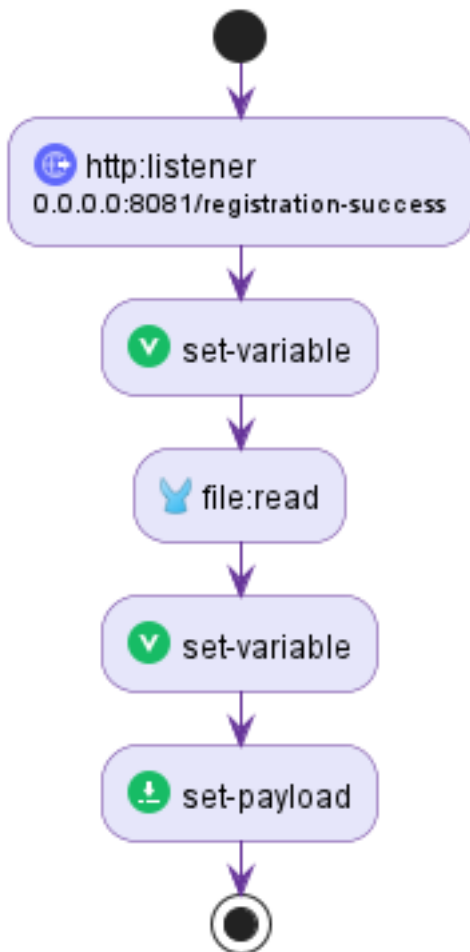
2.2.13 registration-page-flow

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



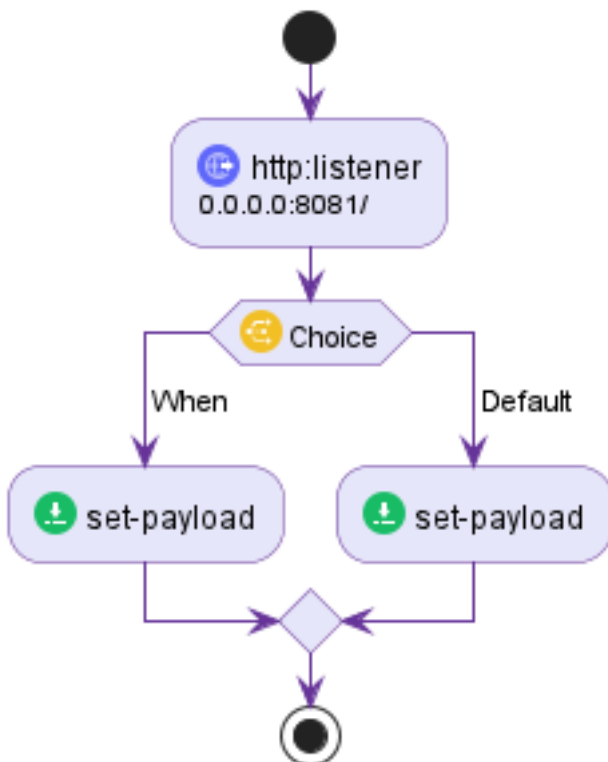
2.2.14 registration-success-flow

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



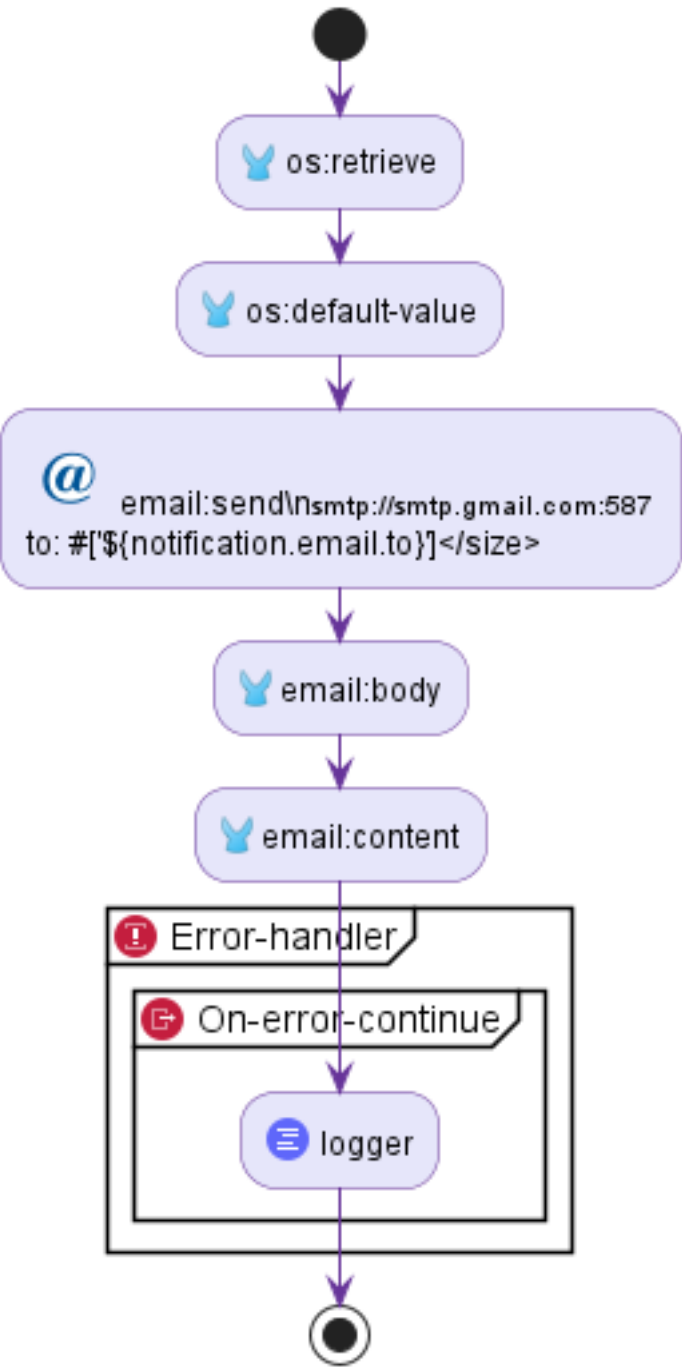
## 2.2.15 root-redirect-flow

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



2.2.16 send-launch-notification-flow

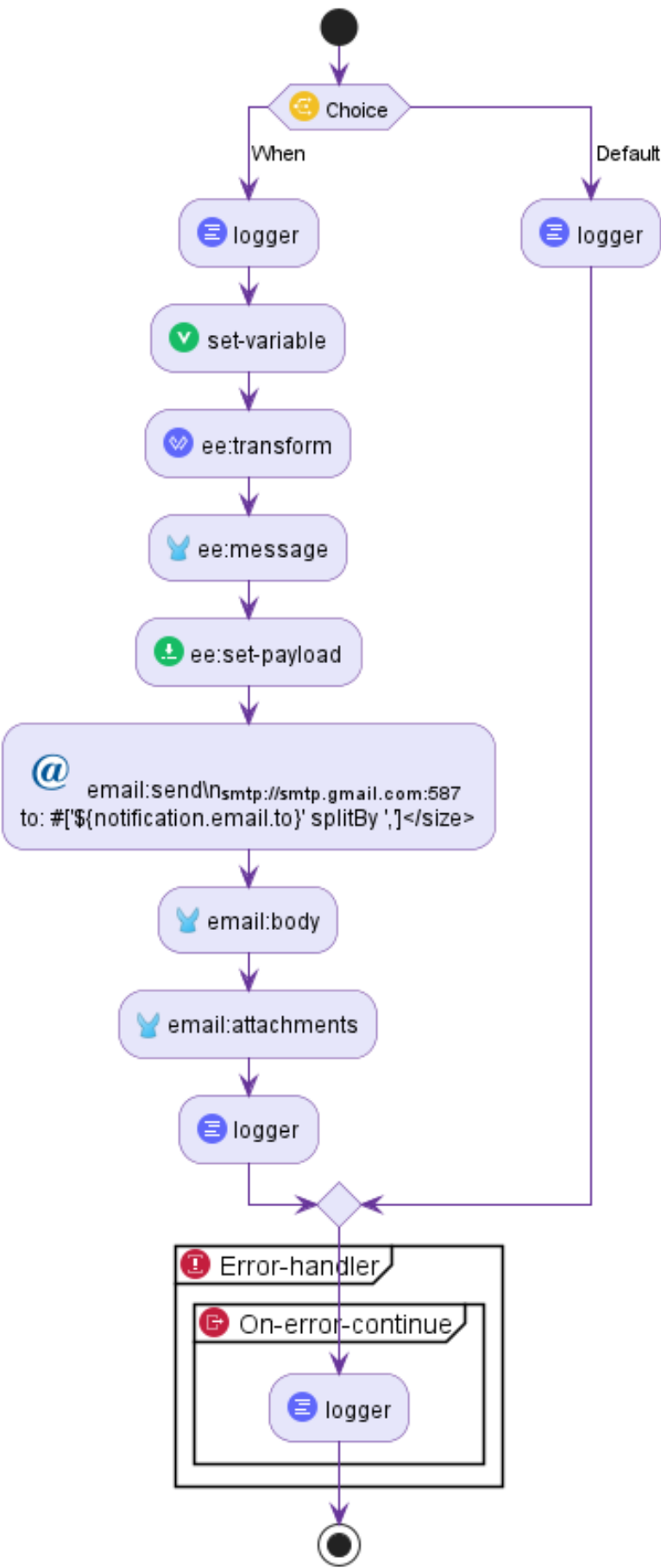
Path: src\main\mule\muleguard-wrapper.xml





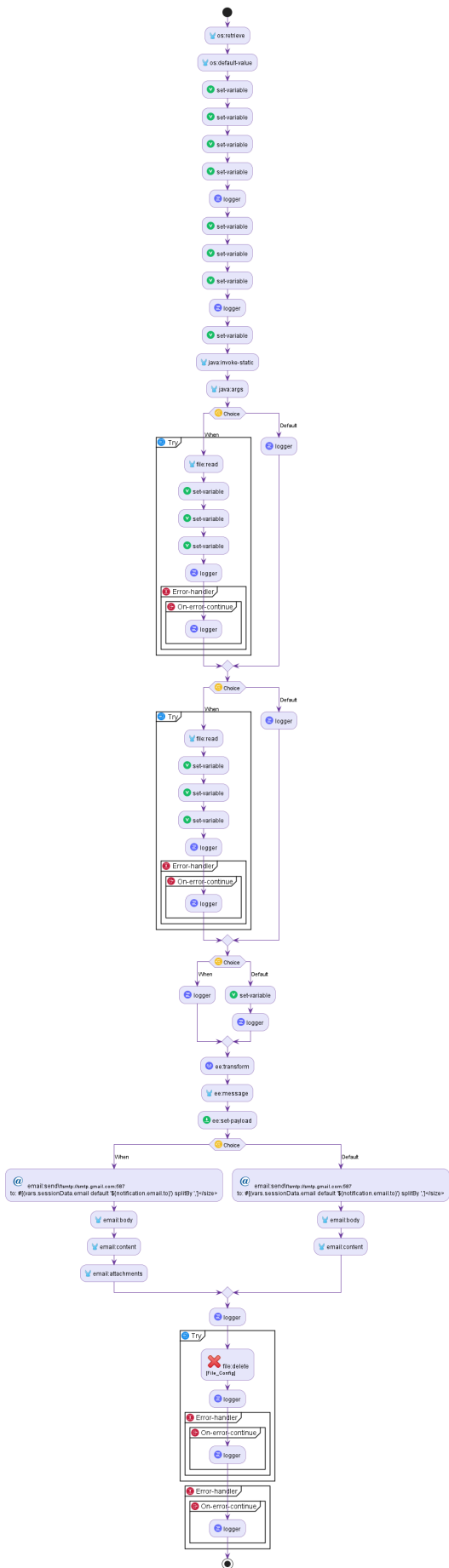
2.2.17 send-registration-notification-flow

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



2.2.18 send-usage-notification-flow

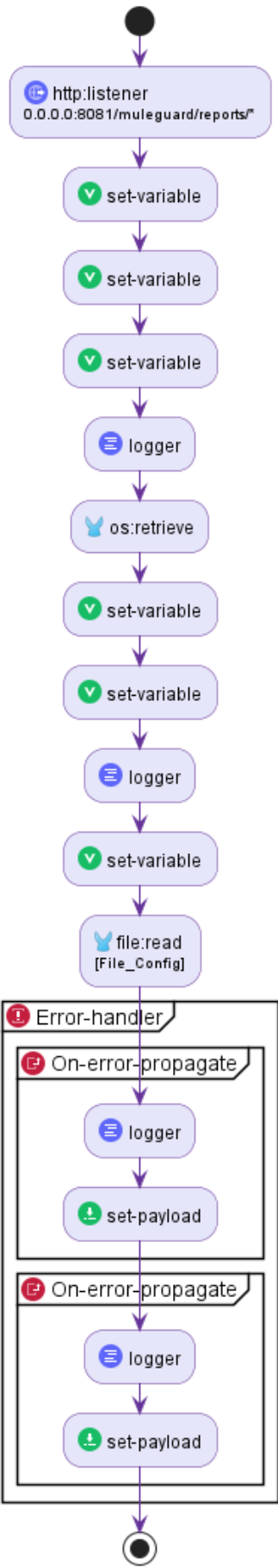
Path: src\main\mule\muleguard-wrapper.xml



(Diagram scaled to fit page)

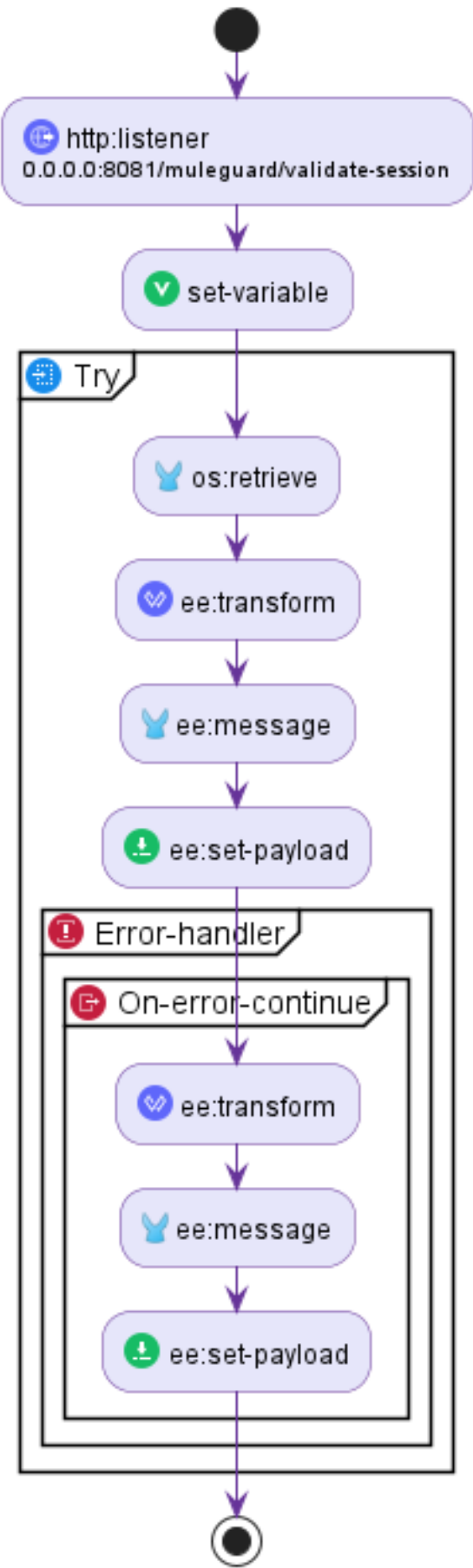
2.2.19 serve-report-flow

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



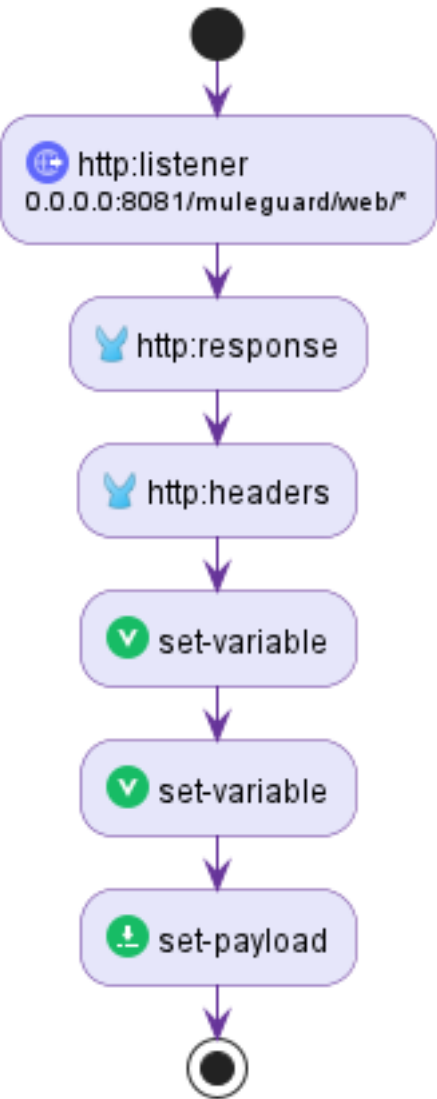
2.2.20 session-validation-flow

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



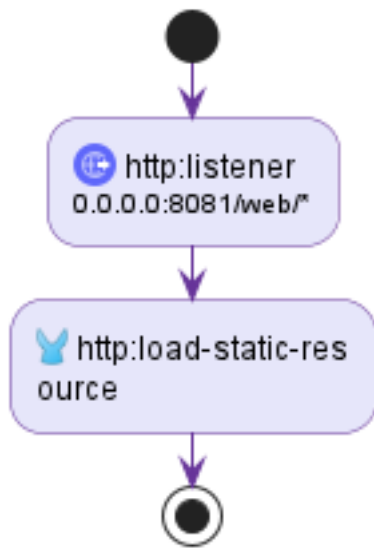
2.2.21 static-resource-flow

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



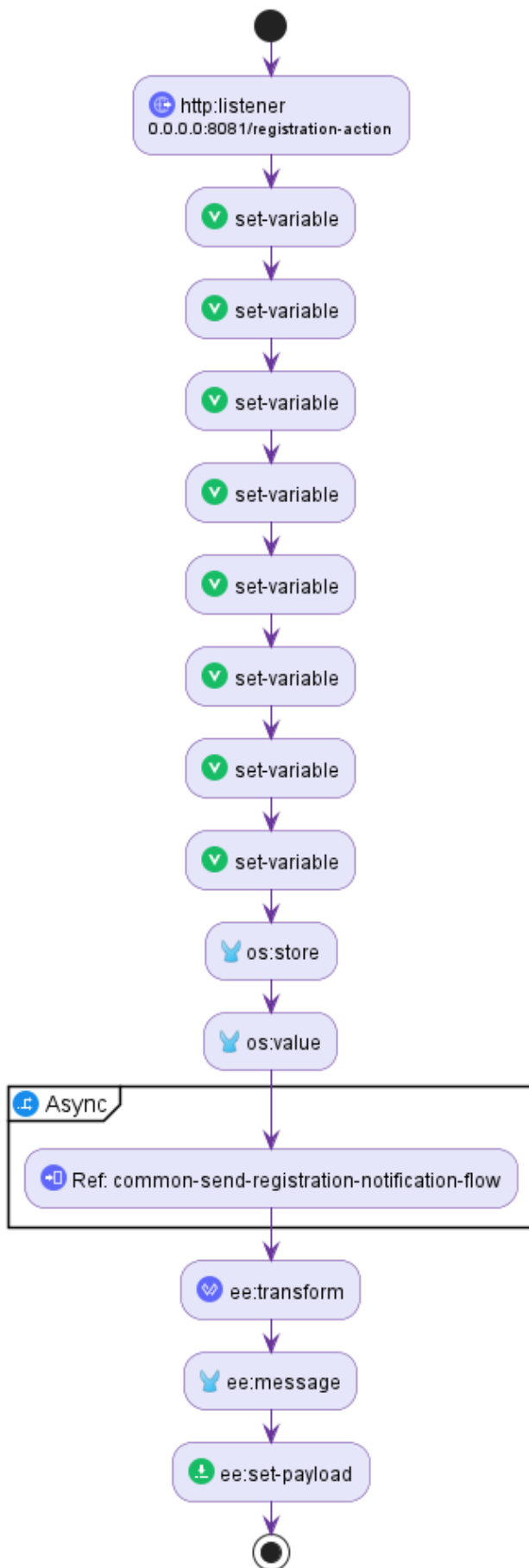
2.2.22 static-resources-flow

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



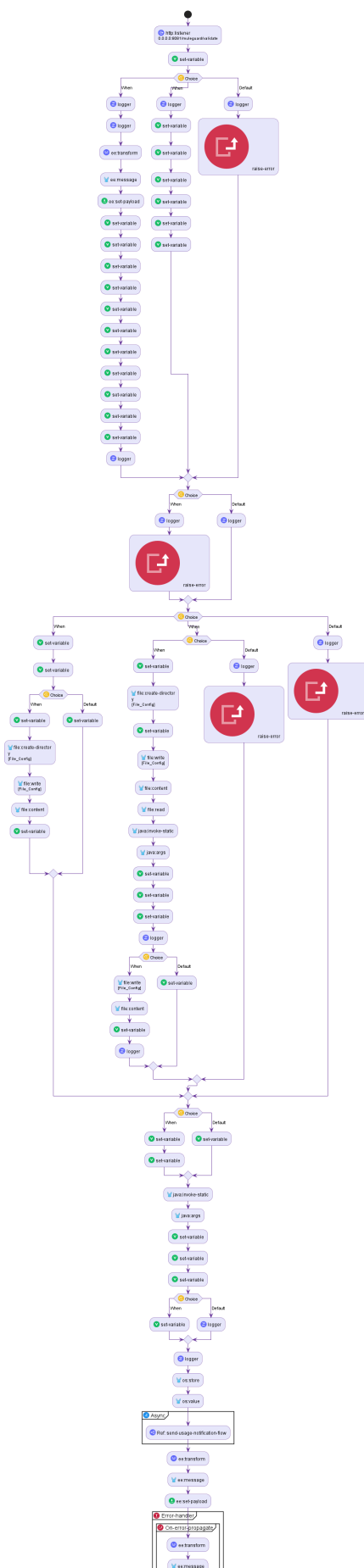
### 2.2.23 user-registration-flow

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

### 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_SMTP  |
| 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  |
|-------------|--|
| contentType | 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  |
|-------------|--|
| contentType | 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   |
| contentType | 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  |
| contentType | 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:<br>"/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  |
| contentType | 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   |
|-------------|---|
| contentType | 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_SMTP   |
| subject     | #[`\${notification.email.subject}` replace '{name}' with vars.sessionData.name replace '{emailId}' 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><div> "Content-Type": "text/html; charset=UTF-8" </div> }] |

### 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[#[...]]> | <pre>output application/java --- {   "Content-Type": vars.mimeType default "application/octet-stream" }</pre> |

### 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' else if<br>(vars.resourcePath endsWith '.js') 'application/javascript; charset=UTF-8'<br>else if (vars.resourcePath endsWith '.svg') 'image/svg+xml' else if (vars.<br>resourcePath endsWith '.png') 'image/png' else if (vars.resourcePath<br>endsWith '.jpg') 'image/jpeg' else if (vars.resourcePath endsWith '.json')<br>'application/json; charset=UTF-8' else 'application/octet-stream' ] |

### 5.12.4 set-payload

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

### 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        | <code>#[attributes.queryParams.session]</code> |

#### 5.13.3 try

##### 5.13.3.1 os:retrieve

| Attribute   | Value                          |
|-------------|--------------------------------|
| objectStore | User_Session_Store             |
| key         | <code>#[vars.sessionId]</code> |

##### 5.13.3.2 ee:transform

##### 5.13.3.2.1 ee:message

##### 5.13.3.2.1.1 ee:set-payload

| Attribute                            | Value   |
|--------------------------------------|---|
| <code>&lt;![CDATA[#[...]]&gt;</code> | <pre>%dw 2.0 output application/json --- {valid: true, sessionId: vars.sessionId}</pre> |

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

#### 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.userId == null or vars.validationMode == null] |

#### 5.14.4.1.1 logger

| Attribute | Value  |
|-----------|--|
| level     | ERROR  |
| message   | #['Missing required fields - sessionId: ' ++ (vars.sessionId != null) ++ ',<br>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 | <code>#[vars.isMultipart and vars.zipFileContent != null]</code> |

#### 5.14.5.2.1.1.1 set-variable

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

#### 5.14.5.2.1.1.2 file:create-directory

| Attribute     | Value                           |
|---------------|---------------------------------|
| directoryPath | <code>#[vars.workingDir]</code> |
| config-ref    | File_Config                     |

#### 5.14.5.2.1.1.3 set-variable

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

#### 5.14.5.2.1.1.4 file:write

| Attribute  | Value                            |
|------------|----------------------------------|
| path       | <code>#[vars.zipFilePath]</code> |
| config-ref | File_Config                      |

#### 5.14.5.2.1.1.4.1 file:content

| Attribute                           | Value                               |
|-------------------------------------|-------------------------------------|
| <code>&lt;![CDATA#[...]]&gt;</code> | <code>#[vars.zipFileContent]</code> |

#### 5.14.5.2.1.1.5 file:read

| Attribute | Value                            |
|-----------|----------------------------------|
| path      | <code>#[vars.zipFilePath]</code> |
| target    | savedZipContent                  |

#### 5.14.5.2.1.1.6 java:invoke-static

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

#### 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[#[...]]> | #{<br>arg0: vars.projectPath,<br>arg1: vars.customRulesPath,<br>arg2: vars.displayPath,<br>arg3: vars.reportDirName<br>}] |

#### 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.userId]    |

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

### 5.15.2 set-variable

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

### 5.15.3 set-variable

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

### 5.15.4 set-variable

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

#### 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[#[...]]> | {<br>arg0: vars.validationResults.reportsPath,<br>arg1: vars.reportsZipPath<br>} |

#### 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 ++ {<br>reportDirName ++ '.zip'): vars.reportsZipContent (vars.<br>}] |

#### 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 ++ {<br>zip': vars.inputZipContent                      }]                      'input-project. |

##### 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        | <code>#[attributes.requestPath splitBy '/' filter (\$ != "")]</code> |

### 5.16.3 set-variable

| Attribute    | Value                             |
|--------------|-----------------------------------|
| variableName | sessionId                         |
| value        | <code>#[vars.pathParts[2]]</code> |

### 5.16.4 set-variable

| Attribute    | Value  |
|--------------|--|
| variableName | requestedPath                                      |
| value        | <code>#[vars.pathParts[3 to -1] joinBy '/']</code> |

### 5.16.5 logger

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

### 5.16.6 os:retrieve

| Attribute   | Value                          |
|-------------|--------------------------------|
| objectStore | Report_Path_Store              |
| key         | <code>#[vars.sessionId]</code> |
| target      | reportPathString               |

### 5.16.7 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | pathParts   |
| value        | <code>#[vars.reportPathString splitBy ' ']</code> |

#### 5.16.8 set-variable

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

#### 5.16.9 logger

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

#### 5.16.10 set-variable

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

#### 5.16.11 file:read

| Attribute      | Value                            |
|----------------|----------------------------------|
| path           | <code>#[vars.fullPath]</code>    |
| outputMimeType | <code>#[vars.contentType]</code> |
| 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;/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 ++<br>(if (vars.userCompany != null and vars.userCompany != 'N/A' and vars.<br>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   |
|-------------|---|
| contentType | 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 '{emailId}' 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        | <code>#[attributes.relativePath replace '/raksanalyzer/' with '']</code> |

### 5.21.3 set-variable

| Attribute    | Value   |
|--------------|---|
| variableName | contentType   |
| value        | <code>#[ 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' ]</code> |

### 5.21.4 choice

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

#### 5.21.4.1 when

| Attribute  | Value  |
|------------|--|
| expression | <code>#[vars.resourcePath == '' or vars.resourcePath == 'index' or vars.resourcePath == 'index.html']</code> |

##### 5.21.4.1.1 file:read

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

#### 5.21.4.2 when

| Attribute  | Value   |
|------------|---|
| expression | <code>#[vars.resourcePath == 'guide' or vars.resourcePath == 'guide.html']</code> |

##### 5.21.4.2.1 file:read

| Attribute  | Value  |
|------------|--|
| doc:name   | Read Raks Guide                                  |
| path       | <code>\${raksanalyzer.web.dir}/guide.html</code> |
| 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  |
|-------------|--|
| contentType | application/json   |
| value       | <pre>#[output application/json --- {     'success': true,     'tempPath':     (vars.workingDir ++ '/' ++ vars.inputFilename) replace '\\' with '/',     'uploadId': vars.uploadId }]</pre> |

### 5.22.3.2 when

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

#### 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[#[...]]> | <pre>{     arg0: payload.inputPath,     arg1: payload.configFilePath,     arg2: "reports" }</pre> |

##### 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[#[...]]> | <pre>%dw 2.0 output application/json --- payload</pre> |

### 5.22.3.3 when

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

#### 5.22.3.3.1 set-payload

| Attribute   | Value  |
|-------------|--|
| contentType | application/json   |
| value       | <code>{"defaultProjectPath": "C:/raks/workspace"}</code> |

#### 5.22.3.4 when

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

#### 5.22.3.4.1 set-payload

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

#### 5.22.3.5 when

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

#### 5.22.3.5.1 set-payload

| Attribute   | Value   |
|-------------|---|
| contentType | application/json                              |
| value       | <code>{"ui.app.title": "RaksAnalyzer"}</code> |

#### 5.22.3.6 otherwise

#### 5.22.3.6.1 set-payload

| Attribute   | Value   |
|-------------|---|
| contentType | application/json  |
| value       | <code>{"status": "error", "message": "Endpoint not found"}</code> |

#### 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



| 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> |

#### 6.2.4 logger

| Attribute | Value  |
|-----------|--|
| 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  |

| File Name   | Relative Path   |
|---|---|
| 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     |
| 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                     |
| 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                     |

| File Name   | Relative Path   |
|---|---|
| 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.