

# ASSESSMENT - 03

Agateeswaran K

ACE11689

Custom logs task:

Configure the log file in way that a log file must log the specific Proxy Service and API

EmployeeDetails.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<api context="/empdata" name="EmployeeDetails" xmlns="http://ws.apache.org/ns/synapse">
  <resource methods="POST">
    <inSequence>
      <log level="custom">
        <property name="Varun" value="ACE12239"/>
      </log>
    </inSequence>
    <outSequence/>
    <faultSequence/>
  </resource>
</api>
```

EmployeeProxy.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<proxy name="EmployeeProxy" startOnLoad="true" transports="http https"
xmlns="http://ws.apache.org/ns/synapse">
  <target>
    <inSequence>
      <log level="full"/>
    </inSequence>
    <outSequence/>
    <faultSequence/>
  </target>
</proxy>
```

Adding the appenders for both api and proxy

```
appenders = SQ_PROXY_APPENDER, API_APPENDER, CARBON_CONSOLE, CARBON_LOGFILE, AUDIT_LOGFILE, A
#, syslog
```

## Api Appender:

```
# API_APPENDER is set to be a DailyRollingFileAppender using a PatternLayout.
appender.API_APPENDER.type = RollingFile
appender.API_APPENDER.name = API_APPENDER
appender.API_APPENDER.fileName = ${sys:carbon.home}/repository/logs/CustomAPILog.log
appender.API_APPENDER.filePattern = ${sys:carbon.home}/repository/logs/CustomAPILog-%d{MM-dd-yyyy}.log
appender.API_APPENDER.layout.type = PatternLayout
appender.API_APPENDER.layout.pattern = TID: [%d] %5p [%c] [%logger] - %m%n
appender.API_APPENDER.policies.type = Policies
appender.API_APPENDER.policies.time.type = TimeBasedTriggeringPolicy
appender.API_APPENDER.policies.time.interval = 1
appender.API_APPENDER.policies.time.modulate = true
appender.API_APPENDER.policies.size.type = SizeBasedTriggeringPolicy
appender.API_APPENDER.policies.size.size=10MB
appender.API_APPENDER.strategy.type = DefaultRolloverStrategy
appender.API_APPENDER.strategy.max = 20
appender.API_APPENDER.filter.threshold.type = ThresholdFilter
appender.API_APPENDER.filter.threshold.level = INFO
```

### Proxy Service Appender:

```
# SQ_PROXY_APPENDER is set to be a DailyRollingFileAppender using a PatternLayout.
appender.SQ_PROXY_APPENDER.type = RollingFile
appender.SQ_PROXY_APPENDER.name = SQ_PROXY_APPENDER
appender.SQ_PROXY_APPENDER.fileName = ${sys:carbon.home}/repository/logs/CustomProxyLog.log
appender.SQ_PROXY_APPENDER.filePattern = ${sys:carbon.home}/repository/logs/CustomProxyLog-%d{MM-dd-yyyy}.log
appender.SQ_PROXY_APPENDER.layout.type = PatternLayout
appender.SQ_PROXY_APPENDER.layout.pattern = TID: [%d] %p [%c] [%logger] - %m%n
appender.SQ_PROXY_APPENDER.policies.type = Policies
appender.SQ_PROXY_APPENDER.policies.time.type = TimeBasedTriggeringPolicy
appender.SQ_PROXY_APPENDER.policies.time.interval = 1
appender.SQ_PROXY_APPENDER.policies.time.modulate = true
appender.SQ_PROXY_APPENDER.policies.size.type = SizeBasedTriggeringPolicy
appender.SQ_PROXY_APPENDER.policies.size.size=10MB
appender.SQ_PROXY_APPENDER.strategy.type = DefaultRolloverStrategy
appender.SQ_PROXY_APPENDER.strategy.max = 20
appender.SQ_PROXY_APPENDER.filter.threshold.type = ThresholdFilter
appender.SQ_PROXY_APPENDER.filter.threshold.level = DEBUG
```

## Adding loggers for both Api and Proxy service

```
loggers = StockQuoteProxy, API_LOG, AUDIT_LOG, SERVICE_LOGGER, API_LOGGER, trace-messages, org-apache-coyote, com-hazelcast, Owsap-Csrfguard,
org-apache-axis2-wsdl-codegen-writer-PrettyPrinter, org-apache-axis2-clustering, org-apache-catalina, \
org-apache-tomcat, org-wso2-carbon-apacheds, org-apache-directory-server-ldap, \
org-apache-directory-server-core-event, com-atomikos, org-quartz, org-apache-jackrabbit-webdav, org-apache-juddi, \
org-apache-commons-digester-Digester, org-apache-jasper-compiler-TldLocationsCache, org-apache-gpid, \
org-apache-gpid-server-Main, qpid-message, qpid-message-broker-listening, org-apache-tiles, \
```

```
# Custom Logs for Proxy
logger.StockQuoteProxy.name = SERVICE_LOGGER.EmployeeProxy
logger.StockQuoteProxy.level = INFO
logger.StockQuoteProxy.appenderRef.SQ_PROXY_APPENDER.ref = SQ_PROXY_APPENDER
logger.StockQuoteProxy.additivity = false

# Custom Logs for API
logger.API_LOG.name=API_LOGGER.EmployeeDetails
logger.API_LOG.level=INFO
logger.API_LOG.appenderRef.API_APPENDER.ref = API_APPENDER
logger.API_LOG.additivity=false
```

Output:

API logs:

```
CustomAPILog - Notepad
File Edit Format View Help
TID: [2024-03-18 16:08:37,415] INFO {API_LOGGER.EmployeeDetails} [API_LOGGER.EmployeeDetails] - Initializing API: EmployeeDetails
TID: [2024-03-18 16:08:57,103] INFO {API_LOGGER.EmployeeDetails} [API_LOGGER.EmployeeDetails] - Varun = ACE12239
TID: [2024-03-18 16:16:06,987] INFO {API_LOGGER.EmployeeDetails} [API_LOGGER.EmployeeDetails] - Initializing API: EmployeeDetails
TID: [2024-03-18 22:00:32,879] INFO {API_LOGGER.EmployeeDetails} [API_LOGGER.EmployeeDetails] - Initializing API: EmployeeDetails
TID: [2024-03-18 22:48:35,087] INFO {API_LOGGER.EmployeeDetails} [API_LOGGER.EmployeeDetails] - Destroying API: EmployeeDetails
```

## Proxy logs:

```
CustomProxyLog - Notepad
File Edit Format View Help
TID: [2024-03-18 16:16:06,974] INFO {SERVICE_LOGGER.EmployeeProxy} [SERVICE_LOGGER.EmployeeProxy] - Building Axis service for Proxy service : EmployeeProxy
TID: [2024-03-18 16:16:06,975] INFO {SERVICE_LOGGER.EmployeeProxy} [SERVICE_LOGGER.EmployeeProxy] - Adding service EmployeeProxy to the Axis2 configuration
TID: [2024-03-18 16:16:06,977] INFO {SERVICE_LOGGER.EmployeeProxy} [SERVICE_LOGGER.EmployeeProxy] - Successfully created the Axis2 service for Proxy service
TID: [2024-03-18 22:00:32,862] INFO {SERVICE_LOGGER.EmployeeProxy} [SERVICE_LOGGER.EmployeeProxy] - Building Axis service for Proxy service : EmployeeProxy
TID: [2024-03-18 22:00:32,866] INFO {SERVICE_LOGGER.EmployeeProxy} [SERVICE_LOGGER.EmployeeProxy] - Adding service EmployeeProxy to the Axis2 configuration
TID: [2024-03-18 22:00:32,867] INFO {SERVICE_LOGGER.EmployeeProxy} [SERVICE_LOGGER.EmployeeProxy] - Successfully created the Axis2 service for Proxy service
TID: [2024-03-18 22:48:35,095] INFO {SERVICE_LOGGER.EmployeeProxy} [SERVICE_LOGGER.EmployeeProxy] - Stopped the proxy service : EmployeeProxy
```

Task on Iterate and Aggregate:

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<api context="/votingverificationapi" name="VotingAgeValidatorApi"
xmlns="http://ws.apache.org/ns/synapse">
```

```
  <resource methods="POST" uri-template="/iterator">
```

```
    <inSequence>
```

```
      <iterate expression="//*[local-name()='VotersData']" id="VoterDetails"
sequential="true">
```

```

<target>
  <sequence>
    <property expression="//*[local-name()='Name']" name="votername"
scope="default" type="STRING"/>
    <property expression="//*[local-name()='Age']" name="voterage"
scope="default" type="STRING"/>
    <property expression="//*[local-name()='Gender']" name="votergender"
scope="default" type="STRING"/>
    <property expression="//*[local-name()='City']" name="votercity"
scope="default" type="STRING"/>
    <filter regex="(1[89]|[2-9]\d|100)$" source="$ctx:voterage">
      <then>
        <payloadFactory media-type="xml">
          <format>
            <VoterDetails>
              <Name>$1</Name>
              <Age>$2</Age>
              <AgeValidationResponse>Eligible to
Vote</AgeValidationResponse>
            </VoterDetails>
          </format>
          <args>
            <arg evaluator="xml" expression="$ctx:votername"/>
            <arg evaluator="xml" expression="$ctx:voterage"/>
          </args>
        </payloadFactory>
      </then>
      <else>
        <payloadFactory media-type="xml">

```

```

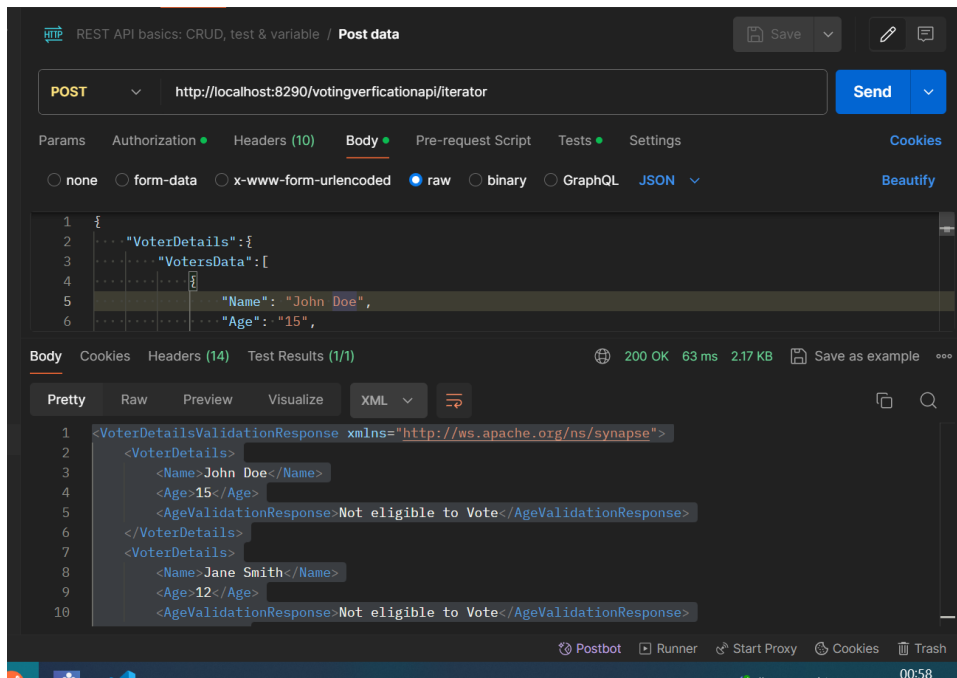
        <format>
            <VoterDetails>
                <Name>$1</Name>
                <Age>$2</Age>
                <AgeValidationResponse>Not eligible to
Vote</AgeValidationResponse>
            </VoterDetails>
        </format>
    </args>
    <arg evaluator="xml" expression="$ctx:votername"/>
    <arg evaluator="xml" expression="$ctx:voterage"/>
</args>
</payloadFactory>
</else>
</filter>
<property name="Aggregated_Responses" scope="default">
    <VoterDetailsValidationResponse/>
</property>
<aggregate id="VoterDetails">
    <completeCondition>
        <messageCount max="-1" min="-1"/>
    </completeCondition>
    <onComplete aggregateElementType="root"
enclosingElementProperty="Aggregated_Responses" expression="$body/*"
xmlns:ns="http://org.apache.synapse/xsd">
        <log level="custom">
            <property expression="//*" name="messageType"/>
        </log>
    </onComplete>
</aggregate>
</property>
</filter>
</else>
</filter>

```

```
        <respond/>
      </onComplete>
    </aggregate>
  </sequence>
</target>
</iterate>
</inSequence>
<outSequence/>
<faultSequence/>
</resource>
</api>
```

Output:

Success Case:



## Error Case:

