

LEARNING wso2esb

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#wso2esb

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About

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Chapter 1: Getting started with wso2esb

Remarks

The WSO2 Enterprise Service Bus (ESB) is a fast, lightweight, 100% open source, and user-friendly ESB distributed under the Apache Software License v2.0. WSO2 ESB allows system administrators and developers to conveniently configure message routing, mediation, transformation, logging, task scheduling, failover routing, load balancing, and more. It also supports transport switching, eventing, rule-based mediation, and priority-based mediation for advanced integration requirements. The ESB runtime is designed to be completely asynchronous, non-blocking, and streaming based on the Apache Synapse mediation engine.

WSO2 ESB is developed on top of the revolutionary WSO2 Carbon platform, an OSGi-based framework that provides seamless modularity to your SOA via componentization. This release also contains many new features and a range of optional components (add-ons) that can be installed to customize the behavior of the ESB. Further, any existing features of the ESB that are not required in your environment can be easily removed using the underlying provisioning framework of Carbon. In brief, WSO2 ESB can be fully customized and tailored to meet your exact SOA needs.

Examples

Installation or Setup

To setup WSO2 ESB do the following:

- Download WSO2 ESB from http://wso2.com/products/enterprise-service-bus/ and extract the archive
- 2. Set the JAVA_HOME and PATH environment variables as per your OS
- 3. Navigate to [ESB_HOME]/bin. If on Windows run wso2server.bat. If on Linux run wso2server.sh.

More details can be found at https://docs.wso2.com/display/ESB490/Installing+the+Product

Read Getting started with wso2esb online: https://riptutorial.com/wso2esb/topic/4178/getting-started-with-wso2esb

Chapter 2: Logging in WSO2 ESB

Examples

Separate log files for each proxy service

All proxy services events are logged in the wso2carbon log file (located in %CARBON_HOME%/repository/logs).

If you want, you can have separate log files for each proxy service. Keep in mind, though, that they will still be logged in wso2carbon log file as well.

To do so, you should change the log4j.properties file, located in the %CARBON_HOME%/repository/conf folder.

For logs rolling on **time basis**, add the following lines at the bottom of the log4j.properties file:

```
log4j.category.SERVICE_LOGGER.Name_Of_Your_Proxy=INFO, YOUR_PROXY_SERVICE_APPENDER
log4j.additivity.SERVICE_LOGGER.Name_Of_Your_Proxy=false
log4j.appender.YOUR_PROXY_SERVICE_APPENDER=org.apache.log4j.DailyRollingFileAppender
log4j.appender.YOUR_PROXY_SERVICE_APPENDER.File=logs/Name_Of_Your_Proxy.log
log4j.appender.YOUR_PROXY_SERVICE_APPENDER.datePattern='.'yyyyy-MM-dd
log4j.appender.YOUR_PROXY_SERVICE_APPENDER.layout=org.apache.log4j.PatternLayout
log4j.appender.YOUR_PROXY_SERVICE_APPENDER.layout.ConversionPattern=%d{ISO8601} \[%X{ip}-%X{host}\] \[%t\] %5p %c{180} %m%n
```

Note that the <code>datePattern</code> determines how often a new file will be created. <code>yyyy-MM-dd</code> means that a new log file will be created daily and the old one will be renamed with the respective date. If you want to roll the file hourly, the pattern should also include the hours: <code>yyyy-MM-dd-HH</code>. Note that the colon character: should not be used anywhere in the <code>datePattern</code>.

For logs rolling on **size basis**, use the following:

```
log4j.category.SERVICE_LOGGER.Name_Of_Your_Proxy=INFO, YOUR_PROXY_SERVICE_APPENDER
log4j.additivity.SERVICE_LOGGER.Name_Of_Your_Proxy=false
log4j.appender.YOUR_PROXY_SERVICE_APPENDER=org.apache.log4j.RollingFileAppender
log4j.appender.YOUR_PROXY_SERVICE_APPENDER.File=logs/Name_Of_Your_Proxy.log
log4j.appender.YOUR_PROXY_SERVICE_APPENDER.MaxFileSize=10MB
log4j.appender.YOUR_PROXY_SERVICE_APPENDER.MaxBackupIndex=100
log4j.appender.YOUR_PROXY_SERVICE_APPENDER.layout=org.apache.log4j.PatternLayout
log4j.appender.YOUR_PROXY_SERVICE_APPENDER.layout.ConversionPattern=%d{ISO8601} \[%X{ip}-%X{host}\] \[%t\] %5p %c{180} %m%n
```

You can set the max file size and the back up index to the desired values.

Note that YOUR_PROXY_SERVICE_APPENDER is an alias and should be different for each proxy service.

```
The location of the log files: logs/Name_Of_Your_Proxy.log can be changed. logs/Name_Of_Your_Proxy.log leads to %CARBON_HOME%/logs/Name_Of_Your_Proxy.log.
```

Read Logging in WSO2 ESB online: https://riptutorial.com/wso2esb/topic/4937/logging-in-wso2esb

Chapter 3: WSO2 ESB - Local entries

Remarks

In WSO2 registry is a content store and a metadata repository.

In WSO2 products and particularly WSO2 ESB uses registry to store metadata, artifacts (WSDL, XSD etc.,) and other service configurations like endpoints, sequences etc.,

Registry in WSO2 ESB has three flavours.

- Local registry
- Configuration registry
- · Governance registry

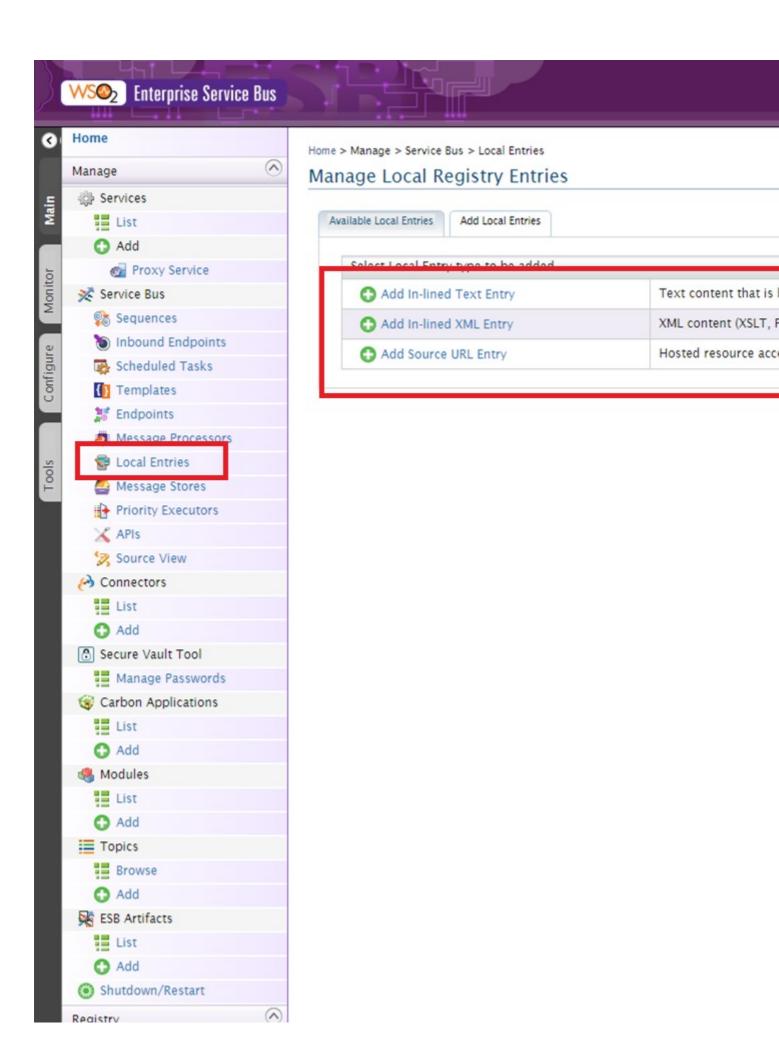
Local Registry: It can be used to store configurations and metadata that is specific to the ESB node. This cannot be shared across all ESB nodes in the cluster or peer ESB nodes.

```
The mount path of local registry is /_system/local
```

The local registry entries or local entries are very useful to store Strings, URLs, XSD / XSLT which can be easily retrieved from a mediator. These local entries can be accessed from the mediators / sequences by the following entry.

```
<localEntry key="validate_schema">
```

The local entries can be accessed from the ESB management console by the following way and artifacts can be added easily.



Examples

Example to retrieve local entry from sequences

In WSO2 registry is a content store and a metadata repository.

In WSO2 products and particularly WSO2 ESB uses registry to store metadata, artifacts (WSDL, XSD etc.,) and other service configurations like endpoints, sequences etc.,

Registry in WSO2 ESB has three flavours.

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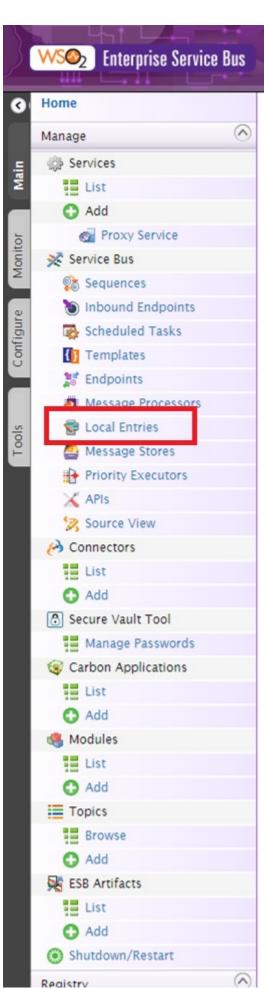
Local Registry: It can be used to store configurations and metadata that is specific to the ESB node. This cannot be shared across all ESB nodes in the cluster or peer ESB nodes.

The mount path of local registry is /_system/local

The local registry entries or local entries are very useful to store Strings, URLs, XSD / XSLT which can be easily retrieved from a mediator. These local entries can be accessed from the mediators / sequences by the following entry.

```
<localEntry key="validate_schema_XSLT">
```

The local entries can be accessed from the ESB management console by the following way and artifacts can be added easily.



Home > Manage > Service Bus > Local Entries

Manage Local Registry Entries

Available Local Entries

Add Local Entries

Select Local Entry bypo to be added

Add In-lined Text Entry

Add In-lined XML Entry

Add Source URL Entry

Hosted resource access

Read WSO2 ESB - Local entries online: https://riptutorial.com/wso2esb/topic/7453/wso2-esblocal-entries	

Credits

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