

APS RabbitMQ Message Service Provider

User Guide

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1 APS RabbitMQ Message Service Provider

This service provides an implementation of APSMessageService using RabbitMQ.

1.1 APSMessageService API

Javadoc

```
public interface APSClusterService [se.natusoft.osgi.aps.api.net.messaging.service] {
```

This service defines a synchronized cluster.

void clusterUpdated(String key, JSONValue value)

Receives an updated value.

Parameters

key - The key of the updated value.

value - The actual value.

void update(String key, JSONValue value)

Updates a keyed value to the cluster.

Parameters

key - This uniquely specifies what value this is. How it is used is up to the actual cluster using it.

value - The modified value to update.

void addUpdateListener(UpdateListener updateListener)

Adds an update listener.

Parameters

updateListener - The update listener to add.

void removeUpdateListener(UpdateListener updateListener)

Removes an update listener.

Parameters

updateListener - The listener to remove.

JSONObject getNamedObject(String name)

Gets named cluster-wide object. If it does not exist it will be created.

Parameters

name - The name of the cluster object to get.

Throws

UnsupportedOperationException - if this feature is not supported.

List<JSONValue> getNamedList(String name)

Gets a cluster-wide named list. If it does not exist it will be created.

Parameters

name - The name of the list to get.

Throws

UnsupportedOperationException - if this feature is not supported.

List<UpdateListener> listeners = Collections.synchronizedList(new LinkedList<UpdateListener>())

The listeners.

protected void updateListeners(String key, JSONValue value)

Updates all listeners.

Parameters

key - The key of the update.

value - The value of the update.

protected List<UpdateListener> getListeners()

Returns the listeners.

}

```
public interface APSMessagingService [se.natusoft.osgi.aps.api.net.messaging.service] {
```

This defines a simple message service. Can be implemented by using a message bus like RabbitMQ, Active MQ, etc or just a simple tcpip server or whatever.

Since the actual members are outside of this service API, it doesn't really know who they are and doesn't care, all members are defined by configuration to make a cluster of members.

void addMessageListener(APSMessagingListener listener)

Adds a listener for types.

Parameters

listener - The listener to add.

void removeMessageListener(APSMessagesListener listener)

Removes a messaging listener.

Parameters

listener - The listener to remove.

void sendMessage(JSONObject message) throws APSMessagingException

Sends a message.

Parameters

message - The message to send.

Throws

se.natusoft.osgi.aps.api.net.messaging.exception.APSMessagingException - on failure.

void messageReceived(JSONObject message)

This is called when a message is received.

Parameters

message - The received message.

public static abstract class **AbstractMessageServiceProvider** implements APSMessageService
[se.natusoft.osgi.aps.api.net.messaging.service] {

Provides an abstract implementation of the APSMessageService interface.

protected void sendToListeners(JSONObject message)

Sends a message to the registered listeners.

Parameters

message - The message to send.

protected List<APSMessagesListener> getMessageListeners()

Returns the message listeners.

}

