

# 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

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Javadoc

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

Defines a message service.

**boolean queueExists(String name)**

Checks if the named queue exists.

*Returns*

*true if queue exists, false otherwise.*

*Parameters*

*name* - *The name of the queue to check.*

**Queue defineQueue(String name) throws APSMessageException**

Defines a queue that lives as long as the queue providing service lives.

If the queue already exist nothing happens. If the queue is of another type an *APSMessageException* could possibly be throws depending on implementation and underlying service used.

*Parameters*

*name* - *The name of the queue to define.*

*Throws*

*APSMessageException* - *(possibly) on trying to redefine type.*

**Queue defineDurableQueue(String name) throws APSMessageException, UnsupportedOperationException**

Defines a queue that lives for a long time.

If the queue already exist nothing happens. If the queue is of another type an *APSMessageException* could possibly be thrown depending on implementation and underlying service used.

*Parameters*

*name* - *The name of the queue to define.*

*Throws*

*APSMessageException* - *(possibly) on trying to redefine type.*

*UnsupportedOperationException* - If this type of queue is not supported by the implementation.

### **Queue defineTemporaryQueue(String name) throws APSMessageException, UnsupportedOperationException**

Defines a queue that is temporary and gets deleted when no longer used.

If the queue already exist nothing happens. If the queue is of another type an *APSMessageException* could possibly be thrown depending on implementation and underlying service used.

#### *Parameters*

*name* - The name of the queue to define.

#### *Throws*

*APSMessageException* - (possibly) on trying to redefine type.

*UnsupportedOperationException* - If this type of queue is not supported by the implementation.

### **Queue getQueue(String name)**

Returns the named queue or null if no such queue exists.

#### *Parameters*

*name* - The name of the queue to get.

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

This represents a specific named queue.

### **String getName()**

Returns the name of the queue.

### **Message createMessage()**

Creates a new message.

### **Message createMessage(byte[] content)**

Creates a new message.

#### *Parameters*

*content* - The content of the message.

### **void sendMessage(Message message) throws APSMessageException**

Sends a message.

#### *Parameters*

*message* - The message to send.

*Throws*

*APSMessagesException*

**void addMessageListener(Message.Listener listener)**

Adds a listener to received messages.

*Parameters*

*listener* - The listener to add.

**void removeMessageListener(Message.Listener listener)**

Removes a listener from receiving messages.

*Parameters*

*listener* - The listener to remove.

**void delete() throws APSMessagesException, UnsupportedOperationException**

Deletes this queue.

*Throws*

*APSMessagesException* - on failure.

*UnsupportedOperationException* - if this is not allowed by the implementation.

**void clear() throws APSMessagesException, UnsupportedOperationException**

Clears all the messages from the queue.

*Throws*

*APSMessagesException* - on failure.

*UnsupportedOperationException* - If this is not allowed by the implementation.

public interface **Message** [se.natusoft.osgi.aps.api.net.messaging.service] {

This represents a message to send/receive.

**void setBytes(byte[] content)**

Sets the message content bytes overwriting any previous content.

*Parameters*

*content* - The content to set.

**byte[] getBytes()**

Returns the message content bytes.

**OutputStream getOutputStream()**

Returns an OutputStream for writing message content. This will replace any previous content.

**InputStream getInputStream()**

Returns an InputStream for reading the message content.

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

This needs to be implemented to receive messages.

**void receiveMessage(String queueName, Message message)**

Called when a message is received.

*Parameters*

*queueName* - The name of the queue that delivered the message.

*message* - The received message.

```
public class Provider implements Message [se.natusoft.osgi.aps.api.net.messaging.service] {
```

A simple default implementation of message.

**public Provider()**

Creates a new Provider.

```
public static class APSMessagesException extends APSRuntimeException  
[se.natusoft.osgi.aps.api.net.messaging.service] {
```

Thrown on sendMessage(). Please note that this is a runtime exception!

**public APSMessagesException(String message)**

Creates a new *APSMessagesException*.

*Parameters*

*message* - The exception message.

**public APSMessagesException(String message, Throwable cause)**

Creates a new *APSMessagesException*.

**Parameters**

*message* - The exception message.

*cause* - The cause of this exception.

}

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