

WS RM Fault Codes

This proposal lists the RM Fault Codes (xsd:Qname).

SOAP 1.1 disallows using the <fault:detail> element to send processing specific faults that happen during the processing of Headers. Such faults should be send in SOAP Headers itself. So for SOAP 1.1 messages we will be sending RM faults using the **(RM) Fault** SOAP Header.

For SOAP 1.2, we can either use the above Header to send RM specific fault or use the optional SubCode sub element under the Fault:Code element.

Invalid Msg. Format Faults:

- **InvalidMessageId:** This fault is sent in any of the following cases:
 - If *groupId* attribute (for MessageId or RefToMessageIds) doesn't exist, or if exists, value is wrong or invalid.
 - If *number* attribute in SequenceNumber element doesn't exist, or if exist, the value is invalid or wrong.
 - Attributes (*from* and *to*) of SequenceNumberRange doesn't exist, or if exists, the values are invalid or wrong.
- **InvalidExpiryTime:** This fault is sent if the ExpiryTime format is wrong or invalid or expired.
- **InvalidReplyPattern:** This fault is sent if the ReplyPattern format is wrong or invalid or when the replyTo attribute is missing for the Callback pattern.
- **InvalidMessageParameters:** This fault is sent for any of these cases:
 - groupExpiryTime is wrong or invalid
 - groupMaxIdleDuration is wrong or invalid
 - when both group parameters are present
 - when groupExpiryTime decreases for a subsequent msgs. in an ordered group
 - If the *status* attribute of SequenceNumber element exist and is not one of begin/continuelend.
- **InvalidMessageHeader:** This fault is sent when the MessageHeader element is wrong or invalid. Examples are:
 - When one of the mandatory elements (GroupId, ExpiryTime, ReplyPattern) are missing
- **InavlidRequestHeader**
 - When duplicate ARIDEIMO elements appear.
- **InvalidPollRequest**
 - When RefToMessageIds element is missing

For 1.1 SOAP Faults, faultcode for all the above faults MUST be **soap11:Client**.

For 1.2 SOAP Faults, Value of the Code MUST be **soap12:Sender**

P.S.: We may even get rid of InvalidExpiryTime and InvalidReplyPattern and collapse them into either InvalidMessageHeader or InvalidMessageParameters

Request Processing Faults:

NonSupportedFeatureFault: This fault is thrown by the receiving RMP when it receives a message with a RM feature that it doesn't support

Request Processing Faults: These faults are thrown by the receiving RMP when it cannot process the request for any of the following cases:

- Persistence problems
- Delivery operation problem
- Resource limitations

There are 2 types of processing faults depending upon the failure nature.

- a) **PermannentProcessingFailureFault:** This fault is sent for permanent/fatal failures.
- b) **MessageProcessingFault:** This fault is sent for transient failures.

For 1.1 SOAP Faults, faultcode for all the above faults MUST be **soap11:Server**.

For 1.2 SOAP Faults, Value of the Code MUST be **soap12:Receiver**