

[From [WS-RM WD 12](#)]

Insert after line 286 [wsmr:Offer/wsmr:Endpoint]:

When an anonymous address is used for the endpoint, the server cannot initiate communication with the client for the Offered sequence. Communication is only possible on a backchannel when the client initiates a connection. In this case <wsmr:GetMessage> (see below) MAY be sent to trigger the transmission of other application or protocol messages on the backchannel.

Insert after line 349 [wsmr:Accept]:

If the endpoint of the offered sequence is anonymous, the service will not be able to initiate communication with the client. Communication will only be possible on a backchannel when the client initiates a connection.

[Insert as new section after section 3]

4 GetMessage

There are a number of messaging scenarios where one side of the communication, in particular the client, is not directly addressable by the other side. Examples can include clients behind NAT firewalls, and systems where IP addresses are dynamically allocated. Reliable messaging is important in these situations, because such environments can be inherently less reliable than infrastructures where both ends have permanently available endpoints.

This specification only addresses the issue of non-addressable endpoints within the scope of a Sequence and in the context of reliable messaging.

In the case where reliability is required only for client-initiated messages (e.g. reliable-in/unreliable-out), this specification MAY be used. If reliability is required on the response leg (out message), the client MAY Offer a Sequence, where the client acts as an RM Destination. Where the client acts as an RM Destination it MAY use the <wsmr:GetMessage> request to provide a connection for the server (acting as an RM Source) to return un-transmitted application or protocol messages. This message MUST flow from an RM Destination to an RM Source. For example, a client is acting as a reliable RM Destination for receiving responses, and initiates a connection to the server which is acting as an RM Source.

The following exemplar defines the <wsmr:GetMessage> syntax:

```
<wsmr:GetMessage ...>
  <wsmr:Identifier>...</wsmr:Identifier>
  ...
</wsmr:GetMessage>
```

/wsmr:GetMessage

This element requests a message for a given Sequence that matches the specified correlation criteria specified in the child elements.

/wsmr:GetMessage/wsmr:Identifier

This REQUIRED element specifies the Sequence Identifier of the Sequence. When the RM Source receives this message it MUST respond with either a <wsmr:NoMessage/> element (see below) or a message for the given sequence. The message MUST be either an application message associated with the Identifier or a WSRM protocol message associated with the Identifier. If the

Identifier does not match any known Sequence then the receiver MUST generate a `wsrn:UnknownSequence` Fault.

`/wsrm:GetMessage/{any}`

This is an extensibility mechanism to allow different (extensible) types of information, based on a schema, to be passed. The extensibility elements SHOULD specify criteria that used to identify messages to be returned for the given sequence.

`/wsrm:GetMessage/@{any}`

This is an extensibility mechanism to allow additional attributes, based on schemas, to be added to the element.

The response message MAY include a `wsa:RelatesTo` Header referencing the `wsrn:GetMessage` message.

If a message matching all the specified criteria is available then the response MUST contain that message. If no message matching all the specified criteria is available then a `wsrn:NoMessage` is returned.

The following exemplar defines the `<wsrm:NoMessage>` element syntax:

```
<wsrm:NoMessage ...> ... </wsrm:NoMessage>
```

`/wsrm:NoMessage`

This element indicates that no matching message was found.

`/wsrm:NoMessage/{any}`

This is an extensibility mechanism to allow different (extensible) types of information, based on a schema, to be passed.

`/wsrm:NoMessage/@{any}`

This is an extensibility mechanism to allow additional attributes, based on schemas, to be added to the element.