# Router

The router application is used to route USSD and SMS requests to a client application in a number of formats. The client application returns the response using standard XML format. The response from the client can also control the end of session in the response. The client allication is also able to store session variables for the session, that will be returned in the next request. Currently the applications supports REST, but additional protocols will be enabled.

The current REST methods are POST and GET.

For GET the information is passed as part of the query string.

For POST the possible formats are FORM and XML.

The parameters passed to the application are:

| from | The from or source address of the request. This will typically be the mobile number of the person makinh the request. |
|---|---|
| to | The destination address of the request. For SMS requests this will be the MSISDN number the request was sent to, and for USSD requests this will be the request string that initiated the USSD session |
| request | The request text, for a SMS message this will be the text of the message. For USSD request this will be the request string for the initial request, and the response text for all subsequent requests |
| provider | The name of the mobile network the requests was received from is the request originated from a mobile device |
| sessionid | A session identifier that is unique for the specified provider. |
| variable | The session variable that was specified in the last resosponse for this session. For the initial call this will be empty |
| protocol | A string identifying the protocol used to initiate the session, for mobile devices this can be SMS or USSD |

For a GET or POST with FORM format, the query or post variables will be set to the specified parameters.

For a POST request using the XML format, The parameters will be set as attributes, with the exception of the request parameter, The request value will be the value of the request node.

Eg:

```
<?xml version="1.0"?>
<request from="27820000000" to="*120*1#" provider="vodacom" sessionid="1478615508" variable="Step 2" protocol="ussd">Thank you</request>
```

The response from the application must be a standard XML format response.

The reponse message element is response, and must contain the response string as the element text, 2 aditional arributes can be specified to set the session variable and indicate the end of the session.

The attributes are:

| variable | The value of the session variable, this will be returned in the next request as the variable |
|----------|--------------------------------------------------------------------------------------------|
| end | Specify true to end the ussd session, omitting this attribute or setting thevalue to false, will continue the session |

Eg:

```
<?xml version="1.0"?>
<response variable="Step 3" end="true">Thank you</response>
```