

Channel Mobile USSD API Document

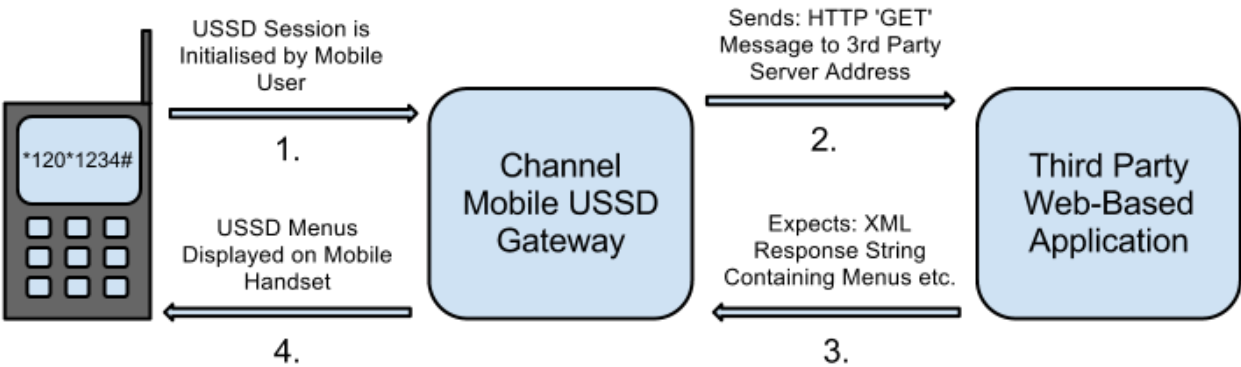
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Author: Steven Conrad Ellis

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Process Flow:

Channel Mobile's Platform receives initial USSD menu request from the mobile subscriber (1) and starts the USSD menu session with the application server using this API specification. It sends HTTP GET request message containing request data to predefined server address (2) and waits for XML response (3). HTTP response contains USSD menu information that is sent back to the mobile subscriber (4).



HTTP GET Request Data (sent from Channel Mobile to 3rd Party Application Server on USSD session initiation).

msisdn - the user's cellphone number

provider - indicates which service provider the msisdn is contracted to.

The possible values are:

- Vodacom
- MTN
- CellC
- Telkom_8t

ussdSessionId - this is a 10-digit number, unique to every USSD session.

request - the value input by the user on their mobile telephone.

requestid - this represents at what stage the user is in the USSD session. When a user first initiates a USSD session, this parameter's value is '0'. On subsequent steps, it is the value as specified by the 3rd party application in their XML response string.

XML Response String (Sent by 3rd party back to Channel Mobile)

request tag

This tag encapsulates the entire XML structure.

It has no attributes.

It has the following subtags: <displaytext> and <requestid>. Both subtags are mandatory, and each may only appear ONCE in the XML.

displaytext tag

This tag contains the message that will be displayed on the mobile user's handset.

Please note that all text must be XML encoded.

It has no attributes.

It has no subtags.

requestid tag

This tag represents the **requestid** identifier that is returned back to the 3rd party, which allows you can determine at what stage the user is in the USSD session (step 1, 2, 3 etc.).

It makes sense to set this value to '1' for the first menu item, and increment it by 1 for each menu option thereafter, but it is up to the 3rd party application what value they wish to store here.

When you wish to end the session, make the requestid 99

PHP Example

```
<?php
header('content-type: application/xml'); //return XML document

$theMsisdn           = $_GET["msisdn"]; //the user's cell number
$theProvider         = $_GET["provider"]; //the provider (vodacom, cellc etc)
$theUserResponse     = trim(urldecode($_GET["request"])); //the user's response text
$theRequestid       = (int)trim(urldecode($_GET["requestid"])); //the requestid
$theSessionID       = $_GET["ussdSessionId"]; //the sessionid
$returnMessage       = "";
$returnID            = "";

//STEP 1 - session being initiated by end-user
if ($theRequestid == 0){

    $returnMessage = "Welcome, this is step1!\n1. Option A\n2. Option B\n3. Option C";
    $returnID       = "1";

} else if ($theRequestid == 1){

    $returnMessage = "Welcome back, this is step2!\n1. Option 1\n2. Option 2\n3. Option 3";
    $returnID       = "2";

} else if ($theRequestid == 2){

    $returnMessage = "Welcome back, this is step3!\nLorem ipsum dolor sit amet, consectetur adipiscing
elit. Donec ut erat auctor odio dictum volutpat quis ut nibh.";
    $returnID       = "3";

} else if ($theRequestid == 3){

    $returnMessage = "This is the last step, thank you!";
    $returnID       = "99";

}

$xml = "<?xml version='1.0' encoding='utf-8' ?><request><displaytext>" .
    htmlentities($returnMessage) . "</displaytext><requestid>" .
    $returnID . "</requestid></request>";

echo $xml; ?>
```

USSD Timeouts and Character Limitations

MT (Mobile Terminating) Traffic

Network	First Menu Characters	Remaining Menus
Vodacom	182	182
MTN	140	160
CellC	160	160
8ta	160	160

MO (Mobile Originating) Traffic

Network	First Return Characters	Subsequent Return Characters
Vodacom	160	182
MTN	160	160
CellC	160	160
8ta	160	160

Session Timeouts

Network	Minutes
Vodacom	3
MTN	4
CellC	2
8ta	3

Charge Periods

Network	Minutes/Seconds
Vodacom	60c per minute
MTN	20c per 20 seconds
CellC	No charge
8ta	No charge