



QuickStart Guide
DOI via WEB/WAP API
2015

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Version History

Version	Author	Contact	Date	Notes
1.0	Martin de Jager	martin@intarget.mobi	9/11/2015	Initial draft version for internal review
1.1	Martin de Jager	martin@intarget.mobi	12/11/2015	Final release version

1. Introduction

The purpose of the quick start manual is to provide a high level overview of how the WEB/WAP API works for subscribing a user and following the Networks DOI process.

The WEB/AP API works by redirecting the subscriber to the Intarget detection page which attempts to detect the MSISDN and then passes the subscriber to the respective telco page for subscription confirmation, thereby bypassing the need to trigger the DOI process by SMS.

If the MSISDN is not detected, then the subscriber can be redirected to a manual entry page or alternatively back to the client hosted page. The drawback of this is that the DOI process must then be triggered as per normal (SMS) via the Higate XML API.

This guide should be used in conjunction with the main API documentation for the Higate XML API as this guide focuses on the WEB/WAP process. OBS requests should be handled according to the main Higate API instructions and is available on the client support page.

Additional resources are available from the Intarget Support Page at:

<http://integrat.freshdesk.com/solution/categories/4000003081>

Alternatively, our support desk is available for assistance by logging a ticket with:

ticketman@intarget.mobi

Please include as much information including your account name, logins and description of the problem that is been faced and our Service Delivery team will assist you further.

The DOI process was introduced by the South African Telco's to address the issue of unauthorised billing of its subscribers and was effectively enforced from 2013. All online billing must pass through this system and must adhere to the respective Telco's billing rules. More information on this topic can be retrieved from the above support page. Alternatively, you can contact our compliance team who can assist you with any compliance related queries on:

compliance@intarget.mobi

2. Acronyms & Abbreviations

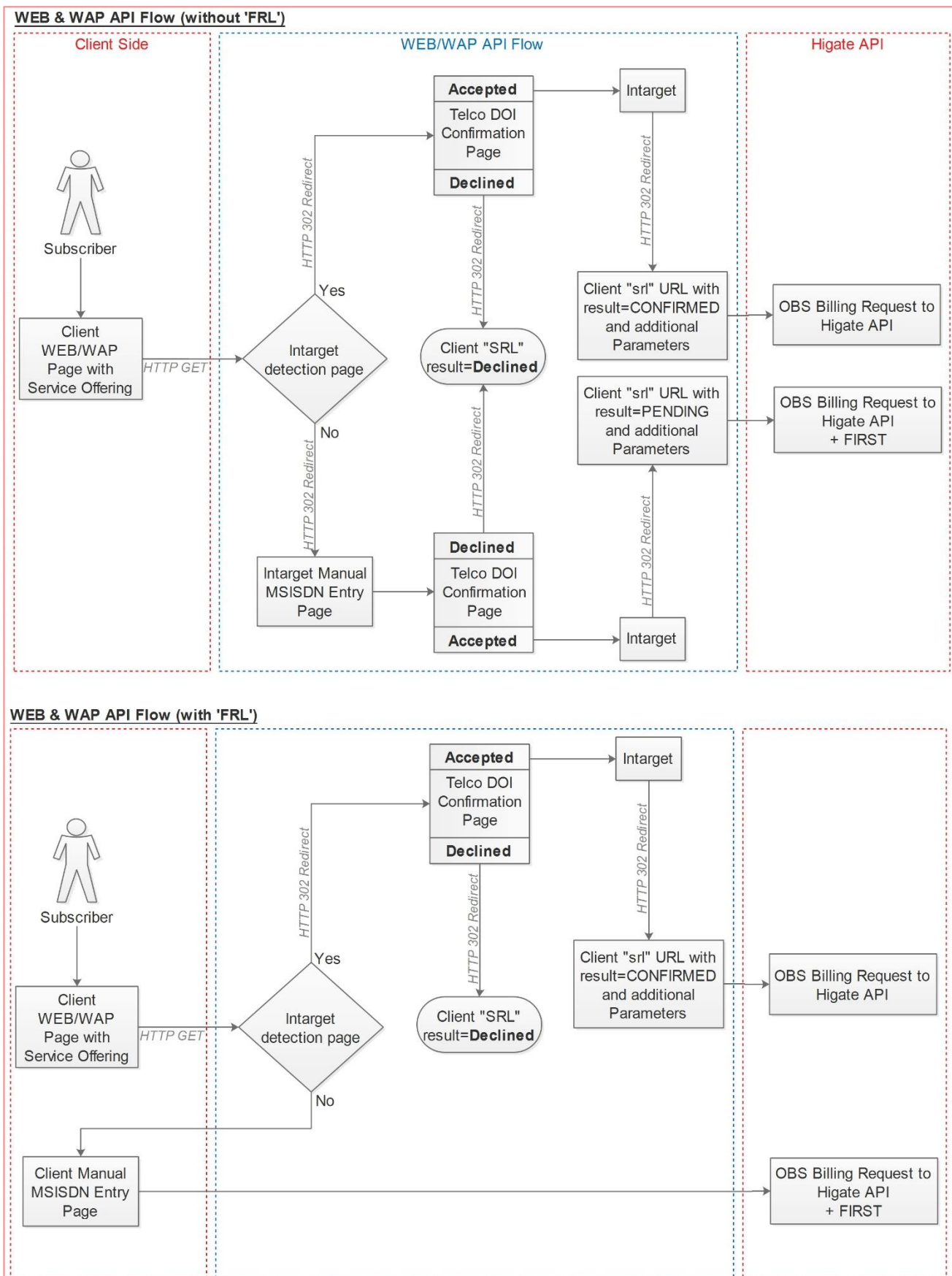
Acronym / Abbreviation	Description
DOI	Double Opt-In Text based SMS and USSD Channel
MSISDN	Mobile Station International Subscriber Directory Number (Cell phone Number)
API	Application Programming Interface
URL	Uniform Resource Locator

3. API Requirements

Before integrating WEB/WAP, there are a few important requirements and understandings that must be clarified.

1. You will need a test account or live account with Intarget (A routing configuration sheet will be provided including all necessary credentials and information).
 2. You must have a OBS product registered on the Product Portal (test accounts have 'pre-configured' testing products)
 3. If you are going to use the Intarget manual detection page in oppose to your own, you will need a logo that does not exceed 280x200px and should be in either .png or .jpg format.
 4. If you are going to use your own manual MSISDN entry page, please note that the page will need to checked by the compliance department to ensure that the page is compliant with the Telco and WASPA regulations.
 5. Note that all submission requests needs to be URL encoded and UTF-8 character encoding is recommended.
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4. Technical Process Flow



The above flow highlights two mechanisms for the WEB/WAP API flow. The first is without the 'frl' parameter been set and the second with the 'frl' parameter. The 'frl' parameter is the fail over URL in the event that auto detection has failed to identify the subscribers MSISDN. All submission and response parameters are covered in Submission & Response Parameters (page 8).

Without FRL / Auto-detection Successful

Subscriber arrives on clients hosting page with service offering and button to select to subscribe to service. The subscriber is then redirected to the Intarget detection page using the HTTP GET method and includes the submission parameters (service name, client name, charge amount, logo location) with the 'frl' parameter been set to "Default" as the example below:

<http://wap.integrat.co.za/mAPI.php?cc=ACCOUNTNAME&pw=PASSWORD&srl=http%3A%2F%2Fwww.clientsurlpage.co.za&lrl=http%3A%2F%2Fwww.clientsurlpage.com/logo&frl=default&bf=1&su=yes&sn=PRODUCTNAME&sp=CLIENTNAME&ba=4.99&bc=R&cs=0822350466>

The detection page attempts to detect the MSISDN and if successful, redirects the subscriber to the respective telco DOI confirmation page (hosted by telco) to accept the subscription.

Once the subscriber accepts the DOI confirmation page, they are then redirected back to Intarget who in turn redirects them to the clients success URL page (srl) with the response parameters that include the MSISDN, network ID and the 'confirmed' status result which indicates the number was successfully detected and the DOI was accepted. However, please note that Vodacom does not return the "networkDOI" parameter on both successful and declined attempts, only MTN and CellC. Vodacom also does not send the parameter "networkid", instead, the parameter will be "network".

Please see examples below:

MTN & CellC:

<http://www.clientsurlpage.co.za?msisdn=27831231234&networkid=3&networkDOI=true&result=CONFIRMED>

Vodacom:

<http://www.clientsurlpage.co.za?msisdn=27831231234&network=1&result=CONFIRMED>

The client side application can then submit an OBS request to the Higate API using the XML Request Type: 'OBSRequest'. The XML must include the WAP trigger in the 'trigger' field (please refer to the XML example section on page 10) and the start date of the subscription.

Without FRL / Auto-detection Failed

In the event that detection fails on the Intarget detection page and the 'frl' parameter has been set to default, the subscriber is redirected to the Intarget manual MSISDN entry page and the client's logo is retrieved from the URL provided in the 'lrl' parameter.

The subscriber then enters their MSISDN and is redirected to the Telco confirmation page and accepts the DOI confirmation. The subscriber is then redirected back to Intarget who in turn redirects to the clients success URL (srl) with the response parameters that include the MSISDN, network ID and the 'pending' status result which indicates that the subscriber was not auto-detected. Please see example below:

<http://www.clientsurlpage.co.za?msisdn=27831231234&networkid=3&networkDOI=false&result=PENDING>

The client side application can then submit an OBS request to the Higate API using the XML Request Type: 'OBSRequest'. The XML must include the WAP trigger in the '*trigger*' field and the FIRST parameter in the '*started date*' (please refer to the XML example section on page 10) and the start date of the subscription.

This then triggers the SMS DOI confirmation to the subscriber and once accepted, billing can commence.

This repeated step of accepting the both the Telco page and SMS DOI is a security feature implemented by the Telco's to prevent subscribers numbers from been entered on the WEB/WAP API's without their knowledge and clients may opt to bypass this step by using their own MSISDN capture page (explained in next part).

With FRL / Auto-detection Failed

The auto-detection process is the same with or without the 'frl' parameter been specified.

By specifying a URL in the '*frl*' parameter, should the subscriber's number not be detected, you can have the subscriber redirected back to a manual MSISDN entry page that is hosted by the client instead of Intargets manual entry page.

This is useful as it bypasses the first step of redirecting the subscriber to the Telco confirmation page and allows the client to capture the MSISDN number and submit an OBS request to the Higate API which triggers the DOI process by SMS instead of the Telco confirmation page AND SMS which then shortens the process and subscriber experience.

The OBS request to Higate is done using the XML Request type: 'OBSRequest' and must include the WAP trigger in the '*trigger*' field and the FIRST parameter in the '*started date*' (please refer to the XML example section on page 10) and the start date of the subscription.

DOI Rejected

In any situation where the subscriber rejects the DOI on the Telco page, the subscriber is redirected back to Intarget and in turn redirects to the clients success URL (*srl*) with the response parameters that include the MSISDN, network ID and the '*declined*' status result which indicates that the subscriber has rejected the DOI. Please see example below:

<http://www.clientsurlpage.co.za?networkDOI=false&result=DECLINED>

5. Submission & Response Parameters

Submission Parameters:

Parameter	Parameter Required	Description
cc	Yes	Higate User/Login name
pw	Yes	Higate Password
srl	Yes	Success URL - This is the URL to direct to if the MSISDN was detected and the subscriber accepted the Telco's DOI confirmation page
frl	Yes	Fail URL - This is the URL to direct to if the MSISDN was not detected and redirects to the Intarget manual entry page if ' <i>frl=default</i> ' or the clients manual entry page if a URL is specified.
lrl	Yes	Logo URL - This the URL of your company logo / graphic that will be displayed on the Intarget confirmation page if the MSISDN is redirected to the Intarget manual entry page
bf	Yes	Billing Frequency: 0 = Once-off / EBB 1 = Daily 2 = Every Second Day 3 = Every Third Day 4 = Every Fourth Day 5 = Every Fifth Day 6 = Every Sixth Day w = Every week o = Once a Week t = Twice a Week r = Three Times a Week d = Weekdays s = Every Second Week m = Monthly z = /Message Max 31/month x:w = x times Per Week w:x = Every x Week x:w:x = x Times Every x weeks m:x = Every x Month p = Play
su	Yes	Subscription Service (= yes) or Once-off Charge (= no)
sn	Yes	Service Name (Your Service Name taken from the " Product " field in the Product Portal)
sp	Yes	Service Provider (Your Name)
ba	Yes	Billing Amount (e.g. 10.50)
bc	Optional	Billing Currency (e.g. South African Rands = R)
cs	Optional	Call Centre Number (Default = 0822350400)
dn	Optional	Display Name (If specified, this will be displayed on menu prompts instead of the sn parameter for client)

Submission Example:

http://wap.integrat.co.za/mAPI.php?cc=ACCOUNTNAME&pw=PASSWORD&srl=http%3A%2F%2Fwww.bestcoolmobile.com%2FTOPGAMES%2Fweb%2F%3Fc%3D27%26I%3D6%26channel%3Dweb%26geo%3Dza%26utsm%3D0553884440c17b0%26current_page%3Dconfirmation.html%26current_step%3D4&lrl=http%3A%2F%2Ftimwe.cachefly.net%2Fws%2Fimages%2Fsaf%2Flogo_timwe_320.gif&frl=default&bf=1&su=yes&sn=PRODUCTNAME&sp=CLIENTNAME&ba=4.99&bc=R&cs=0822350466

Response Parameters:

Parameter	Parameter Allowable Input	Description
networkDOI	true/false	True if user clicked 'Yes' on network confirmation page. False if the user clicked 'No'
result	CONFIRM/DECLINED/PENDING	CONFIRMED = subscriber clicked 'yes'. DECLINED = subscriber clicked 'no' PENDING = If user entered MSISDN on Intarget's manual entry page or is redirected to the clients fail URL.
msisdn	11 digit number	Subscribers cell phone number
networkid	-	Cell C = 3 MTN = 2 Telkom mobile = 15
network	-	Vodacom = 1 (Note this parameter is the same as 'networkid', only Vodacom)

Response Example:

<http://www.clienturlpage.co.za/wapoptin/success/sa0/gmcwapoptin?msisdn=27785469328&networkid=3&networkDOI=true&status=CONFIRMED>

6. XML Examples

```
<Message>
  <Version Version="1.0"/>
  <Request Type="OBSRequest" RefNo="1234567989">
    <UserID>USERNAME</UserID>
    <Password>PASSWORD</Password>
    <OBSRequest Validity="00020000"
      Flags="0">
      <Ticket Type="Mobile"
        OBSService=""
        Service=" SERVICECODE"
        SubService=""
        ChargeAddr="27613177895"
        Description="Wallpapers and Tones"
        Value="100"/>
      <Subscr Started="2014-11-27 12:15:52 FIRST"
        Category="OBSPRODUCTNAME"
        Trigger="WAP"/>
    </OBSRequest>
  </Request>
</Message>
```

OBSRequest – OBS Request with FIRST Parameter (for manual entry)

```
<Message>
  <Version Version="1.0"/>
  <Request Type="OBSRequest" RefNo="123456789">
    <UserID>USERNAME</UserID>
    <Password>PASSWORD</Password>
    <OBSRequest Validity="00020000"
      Flags="0">
      <Ticket Type="Mobile"
        OBSService=""
        Service=" SERVICECODE"
        SubService=""
        ChargeAddr="27613177895"
        Description="Wallpapers and Tones"
        Value="100"/>
      <Subscr Started="2014-11-27 12:15:52"
        Category="OBSPRODUCTNAME"
        Trigger="WAP"/>
    </OBSRequest>
  </Request>
</Message>
```

OBSRequest – OBS Request (for auto-detected requests / standard billing)

8. Frequently Asked Questions

Q: Where do I get my account login credentials, service codes, reply tags and etc. that are required for the XML fields?

A: These details are provided to you in the routing configuration that is sent by your account manager or ticketman.

Q: Are there other configurable elements to the XML schema's used?

A: Yes, however, these are only provided in the main HTTP API documentation.

Q: Do we send any auto-renewal?

A: No, auto-renewal does not apply in South Africa. Once a subscriber has been subscribed to your service via the DOI process. Your application must send the billing requests in accordance to your billing interval.

Q: How often may we re-bill on failure?

A: Depending on the reason for failure, no more than 3 attempts per billing interval cycle. Please refer to the error handling guide on the support page for troubleshooting on errors.

Q: How many characters may the reference number in our XML submissions be?

A: Reference numbers should not exceed 10 characters.

Q: Do we have access to a test account?

A: Yes, your account manager will allocate a test account for testing applications.

Q: Do we need a call back URL for testing?

A: Yes, as this is necessary for programming logic on client side.

Q: Is HTTPS supported?

A: No, the Higate platform only supports standard HTTP.

Q: What billing intervals are supported?

A: Daily, Weekly, Monthly or Once-off billing is supported.

Q: Where is the Product Portal located?

A: The Product Portal is accessible through your Higate Web interface. Your login credentials for the Portal will be provided when your main account is activated. A guide is available to assist in registration, please refer to the Reference section (page 12)

Q: Must the URL submission be in the same order as the guide?

A: Yes, it must follow the same sequence as prescribed in this document.

Q: How do we know that a subscriber has accepted the DOI SMS message and is now subscribed to our service?

A: The OBS transaction will change from a "Pending" status to "Receipted" status. This is your confirmation that the process has been completed successfully.

Q: What format must a MSISDN prefix follow for South Africa?

A: The standard normalisation for South African numbers is 27 (removing the zero) and should look like this: 27821239876

Q: What size and format can the logo be if we are using the Intarget manual entry page?

A: The logo should be in either .gif or .png and should not exceed 277x194 pixels as a guideline.

9. References

Client Support Page: <http://integrat.freshdesk.com/solution/categories/4000003081>

API Documentation: <http://integrat.freshdesk.com/solution/folders/4000011469>

Technical Information (Error Codes, Network ID's): <http://integrat.freshdesk.com/solution/folders/4000011470>

Fault Logging & Support: <http://integrat.freshdesk.com/solution/articles/4000054484>

Additional / Advanced Higate Information: <http://integrat.freshdesk.com/solution/articles/4000053161>

South African Telco Business Rules: <http://integrat.freshdesk.com/solution/folders/4000011536>

Compliance / Product Portal Guides: <http://integrat.freshdesk.com/solution/folders/4000011536>

10. Service Testing

Intarget will provide a test account for initial integration and testing while your application is still under development and an allocated Service Delivery Agent will assist in testing the whole process from opt-in to opt-out. Additional testing is done once the account is ready to go live.

Please note that testing requests must be sent to ticketman@intarget.mobi and a testing slot will be allocated for the following day. Also please note that any testing that exceeds more than one service will be chargeable. Your account manager will arrange these costs with you prior testing.

11. Technical Assistance / Escalations

All technical assistance requests must be logged with ticketman@intarget.mobi. Please note that as Intarget handles multiple territories and clients. We will require your account name and details on the issue been experienced. Any failure to do so will prolong the process of assistance to you.

As per your SLA agreement with your account manager, the below is an escalation route for fault logging queries:

Escalation Route	Contact Number	Contact Email
First Line Support / Ticketman	+ 27 82 511 7837	ticketman@intarget.mobi
NOC/Service Delivery Supervisor – Martin de Jager	+ 27 82 310 4136	martin@intarget.mobi
CTO – Marius du Plessis	+ 27 74 485 6025	marius@intarget.mobi

Please note that Intarget does not assist with development or testing queries after 4pm and on weekends/public holidays. Clients are required to always log a support request after hours and on weekends as well as contacting First Line Support and providing the ticket number.

