TECHNICAL SPECIFICATION

Recharge Gateway

DOCUMENT DATA

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Providers Support Integration with GWMDB.doc	Technical Specification

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HYSTORY

Version	Date	Author	Description
0	11/03/2010	Fabricio Franco	Initial release
1	17/10/2014	Leandro Cubas	- Added section 2.1 Enviroments - Correction of msisdn example in table in section 2.3.1 input properties

CONTENTS

1   GENERAL INFORMATION

1.1   INTRODUCTION

This document describes the standards whose providers shall be following to integrate with TIM's Notification Gateway.

1.2   SOLUTION INTRODUCTION

TIM provides a platform to sending prepaid recharge events for partners. Every time when a customer performing a recharge, prepaid platform sends an event to the Notification Gateway, which in turn notifies all providers with this information.

2   DETAILED SOLUTION DESCRIPTION

TIM provides a Web Service Client Interface which sends prepaid recharge information using HTTP/SOAP protocol.
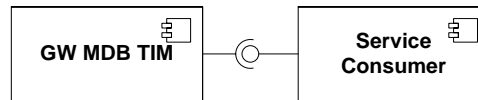
This interface is specified by a WSDL file, following SOA standards. In order to a provider receiving recharge notifications, a server side Web Service shall be developed by the provider in accordance with the WSDL file provided by TIM.

Also, the provider shall be developing the authentication procedure following the instructions in WEB SERVER AUTHENTICATION section.

2.1   ENVIRONMENTS

The provider shall to provide a test environment. The endpoint that will be provided by the provider must be unique, unless that another endpoint is required because some architectural or business exception. The creation of a new endpoint must be agreed between the provider and TIM. The table below shows the addresses (endpoints) to access the WebService descriptors (WSDL) provided by provider:

Ambiente	Endereço do WSDL
Test /Validação	**http://<ip_vpn>:<porta_vpn>/<optional>/NotificacaoRecarga**
Produção	**http://<ip_vpn>:<porta_vpn>/<optional>/NotificacaoRecarga**

2.2   WEB SERVER AUTHENTICATION

The Notification Gateway uses the "BASIC AUTHENTICATION" to authenticate the client web services.
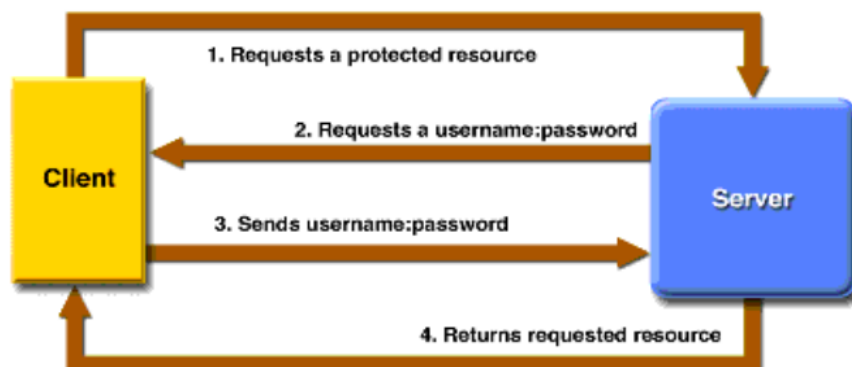
With basic authentication, the following things occur:

     - The client (Notification Gateway) requests access to a protected resource.

     - The client (Notification Gateway) submits the user name and password to the server.

     - The server (Service Provider) validates the credentials and, if successful, returns the requested resource.

To configure the authentication mechanism, the service provider basically must to insert follow code in the web.xml file:

```
<security-role>
    <role-name>'role'</role-name>
</security-role>

<login-config>
    <auth-method>BASIC</auth-method>
      <realm-name>NF Web Service Authentication Area</realm-name>
</login-config>
```

Where:

'role': user level which will give access the Web Services.

Also, the code below shows an example using a Weblogic container, which is necessary including the information below in deployment descriptor (weblogic.xml), whereas the user roles are already created in the container.

```
<security-role-assignment>
    <role-name>Administrator</role-name>
    <principal-name>weblogic</principal-name>
</security-role-assignment>
```

OBS: Once this task done, the provider must send to TIM the username and password parameters to be set in Notification Gateway.

2.3   RECHARGE NOTIFICATION

2.3.1   INPUT PROPERTIES

To identify the response message the consumer can use the following input properties:

Name	Type	Format	Example	Description
event-id	Number		20	EventID from Prepaid Platform. Don't use this number as an ID or a primary key.
msisdn	Number[10 - 11]	10[0-9]	551181112222 or 11981112222	Client mobile number
partner-id	Number		1	Id which identifies a Provider for Notification Gateway
value*	Number		2345.00	Amount of
date*	Date	YYYY-MM-DD	2010-03-28	Date of Recharge
time*	Time	HH24:MIN:SS	18:05:30	Time of Recharge
tariff-id*	Number		23	Number which identify the client plan
Subsys*	String		VVS	Platform of the recharge

* - Submit this content is optional. The field's content does not impact the message structure.

Example:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSc
hema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<soapenv:Body>
<data xmlns="http://webservices.accenture.com/wsnotificacaorecarga/entities">
       <event-id>20</event-id>
       <msisdn>8199999999</msisdn>
       <partner-id>2</partner-id>
       <value>100.00</value>
       <date>2010-03-28</date>
       <time>18:05:45</time>
       <tariff-id>1</tariff-id>
       <subsys>XYK</subsys>
</data>
</soapenv:Body>
</soapenv:Envelope>
```

2.3.2 OUTPUT PROPERTIES

There are no properties to be returned in this transaction. It only expected to return a HTTP 200 if the transaction is successful, if don't, it should return HTTP 400.

Name	Type	Required	Value	Description
None	None	None	None	None

Example:

```
Cabeçalhos da Resposta:
HTTP/1.1 200 OK
Connection: close
Date: Fri, 07 May 2010 18:31:05 GMT
Content-Length: 223
X-Powered-By: Servlet/2.4 JSP/2.0
```

2.4 NOTIFICATION FAILOVER

The Notification Gateway provides a failover procedure if a delivery fails.

When the Notification Gateway receives a failure response from the provider environment (HTTP <> 200), it retries to send the message to the provider. Even after some unsuccessful retries the message cannot be delivered, the message will be discarded by the Notification Gateway platform.

The number of retries and period between each retry can be set with different values. The default values are: 3 retries with 3 minutes between them.

2.5 ADDITIONAL FILES

WSNotificacaoRecarga.wsdl