



SMS Gateway V2 User Guide



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1 Document information

1.1 Purpose

Purpose This document describes the usage of the SMS Gateway Standard & Public Editions. The latest version of this User Guide is publicly available at http://interactive.ringring.be/public/documentation/SMS_Gateway_STD_V2.0.pdf

1.2 Change history

Changes

Version	Release date	Changes
V2.0	2009-09-15	Major upgrade to comply with new SMS Platform (EMMA)

1.3 Release notes

Versions

Version 2.0

- Support of Validity Period
- Introducing Flexible Data Structure
- Added SMS Gateway Supervisor

1.4 Contact

Contact

The Ring Ring Company
Culliganlaan 2F
1831 - Diegem

Coordination@ringring.be

Tel (During Business Hours) : +32(0)25028500

Tel (Outside Business hours) : 080093092 (only accessible from Belgium)



2 Terms & acronyms

Terms & acronyms

DMZ: DeMilitarized Zone is a physical or logical subnetwork that contains and exposes an organization's external services to a larger, untrusted network, usually the Internet. The purpose of a DMZ is to add an additional layer of security to an organization's Local Area Network (LAN); an external attacker only has access to equipment in the DMZ, rather than the whole of the network.

FTP: File Transfer Protocol (FTP) is a standard network protocol used to exchange and manipulate files over an Internet Protocol computer network, such as the Internet. FTP is built on a client-server architecture and utilizes separate control and data connections between the client and server applications.

FTPS: FTPS (also known as FTP Secure and FTP-SSL) is an extension to the commonly used File Transfer Protocol (FTP) that adds support for the Transport Layer Security (TLS) and the Secure Sockets Layer (SSL) cryptographic protocols.

HTTP: Hypertext Transfer Protocol (HTTP) is an application-level protocol for distributed, collaborative, hypermedia information systems.

HTTPS: Hypertext Transfer Protocol Secure with the SSL protocol to provide encryption and secure identification of the server

MSISDN: Mobile Subscriber ISDN (Mobile Phone number)

Message Status: An internal status providing information about the Delivery Notification Code received from the mobile provider. This information indicates if the message was delivered or not to the mobile phone number and the reason of the failure if any.

SOAP: SOAP, originally defined as Simple Object Access Protocol, is a protocol specification for exchanging structured information in the implementation of Web Services in computer networks. It relies on Extensible Markup Language (XML) as its message format, and usually relies on other Application Layer protocols (most notably Remote Procedure Call (RPC) and HTTP) for message negotiation and transmission.

SFTP: SSH File Transfer Protocol (sometimes called Secure File Transfer Protocol or SFTP) is a network protocol that provides file transfer and manipulation functionality over any reliable data stream. It is typically used with version two of the SSH protocol (TCP port 22) to provide secure file transfer, but is intended to be usable with other protocols as well.

WAP:

Wireless Application Protocol (commonly referred to as WAP) is an open international standard for application layer network communications in a wireless communication



environment. Its main use is to enable access to the Mobile Web from a mobile phone or PDA.

XML: XML (Extensible Markup Language) is a set of rules for encoding documents electronically. It is defined in the XML 1.0 Specification produced by the W3C and several other related specifications; all are fee-free open standards.



3 Introduction

3.1 Overview

Overview

SMS Gateway Standard Edition is a product developed by The Ring Ring Company (TRRC) to facilitate the transmission of SMS Messages between the end-user (mobile subscriber) and the customer.

The SMS Gateway Standard Edition acts as a bridge to connect the customer directly to the end-user.

In this model, the actions required to manage the incoming SMS messages (MO) must be developed by the customer.

The Public Edition is identical to the Standard Edition, the only difference is that the Public Edition is available without any security (IP restriction) but is limited in the number of messages that can be sent per day.

To use the public gateway, just replace the URL `gateway.ringring.be` by `publicgateway.ringring.be`

3.2 Main features

Features

The SMS Gateway Standard Edition is a set of processes and allows:

- Receiving SMS MO from end-user (**MO API**).
- Sending SMS MT or MTR to end-user (**MT API**).
- Receiving Message Status of SMS (**DLR API**).

This Standard version of SMS Gateway cannot be customized and must be used with all constraints related to the product.

As The Ring Ring Company already implemented hundreds of SMS Gateways, this Standard Edition comes with a lot of flexible parameters unlocking the possibility to connect in a few minutes with a minimal of effort.

If for any reason, this SMS Gateway Standard is not matching your expectations, The Ring Ring Company can setup and develop any type of SMS Gateway.



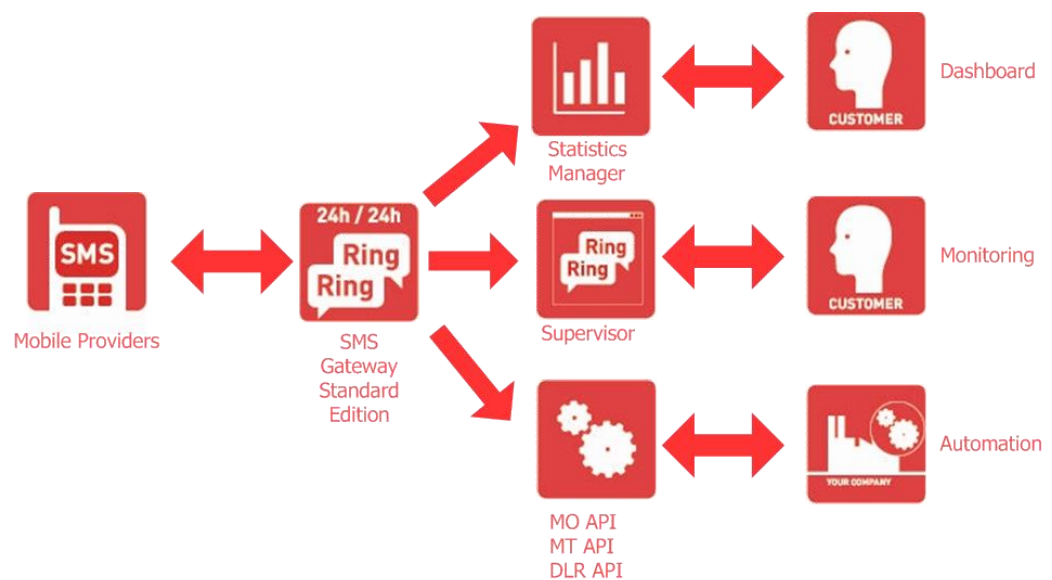
3.3 High-Level description

High-Level

The SMS Gateway Standard Edition is acting as 3 independent processes working to exchange SMS messages and Message Status and comes with a unique interface on the market to consult the SMS messages exchanged, thanks the SMS Gateway Supervisor.

Exchanging SMS messages are done via HTTP(S) protocol using the Get or Post methods. Message status can be exchanged by HTTP(S) or (S)FTP(S).

SMS Gateway Supervisor is available from anywhere (see chapter 7 SMS Gateway Supervisor).





3.4 Security

Accessing services of The Ring Ring Company is restricted; several policies are set to protect the infrastructure.

IP restriction

Connecting to the SMS Gateway Standard Edition for sending outgoing messages (MT or MTR) is restricted on the IP. Performing HTTP request from any computer not included in our access list is rejected.

If for any reason, your HTTP requests are performed using a dynamic IP as origin (using a ADSL, GPRS...), the Ring Ring Company provides a specific version of the SMS Gateway called "SMS Gateway Public Edition". This Public Edition is more restricted on the number of messages that can be sent per day and the speed of processing...

This restriction is only applicable to the Standard Edition

HTTPS

The Ring Ring Company can implement a HTTPS version of the SMS Gateway to increase the security.

FTPS / SFTP

Message Status can be delivered by HTTP(S) but also via FTP and the secure versions SFTP and FTPS.

The Ring Ring Company can also let files containing the Message Status on its own FTP server, and then the customer doesn't need any FTP server.

User Password

When sending the data to the SMS Gateway Standard Edition, Customer must provide a username and a password. This pair of data in combination with the appid (application Id) defined is used to validate the permission of using the SMS Gateway.

*The official external IP of The Ring Ring Company is 194.78.45.194
Customer must allow this IP for receiving MO and Delivery Notifications*



4 Receiving SMS Messages (MO API)

Overview

Receiving SMS messages from end-user is managed by the **MO API**. When receiving a SMS message from an end-user (MO), the message is forwarded via HTTP(S) to the customer.

Flow

The flow of data can be schematized as follow.



The SMS MO is sent from the mobile provider to the infrastructure of The Ring Ring Company using SMS protocols (SMPP, UCP,...), this message is forwarded to the customer via a HTTP request.

When performing the HTTP requests to the customer, the SMS Gateway is able to manage for each Gateway a specific behavior:

- can retry a maximum number of times.
- can wait a maximum of seconds between each retry.
- can check for HTTP status code 200 on customer's side
- can check for specific text in the response of the customer

These specifics parameters are configured for each SMS Gateway at the setup after analyzing your requirements.

Flexible Data Structure

The Ring Ring Company introduced from the version 2.0, the Flexible Data Structure (FDS) concept.

FDS is used to allow a flexible exchange of the data between The Ring Ring Company and the customer.

The data can be forwarded to customer using a Post or Get method; the data can be encapsulated into simple variables or in a XML.

By default, The Ring Ring Company recommends the usage of the Post method with data encapsulated into a XML.

Flexible Data Structure accelerates the migration process of existing gateway and decreases the development effort.



Parameters FDS can pass a set of data related to the SMS message.

Parameter	Description	Data Type
InboxId	The inboxid is the unique identifier of a SMS message.	Int
Msisdn	The msisdn is the mobile phone number of the end-user sending the message	String
Shortcode	The destination shortcode of the SMS	String
Message	The SMS message itself	String
ProviderId	A unique identifier of the provider	Int
IsRealMo	Indicates if the message is a real SMS or not.	Bit (True/False)
AppId	Unique identifier of the application	Int
CustomerId	Unique identifier of the customer	Int

Detailed Parameters

InboxId :

The unique identifier of the SMS.
When sending back a message to the end-user using the MT API, you can use the inboxId value and put it in the “reference” parameter.
By doing this, you can “link” the incoming and outgoing message in the SMS Gateway Supervisor.

MSISDN :

The mobile phone number of the end-user.
The format used is the international format (32478123456).

Shortcode:

The destination shortcode of the SMS.

Message:

The content of the SMS.

ProviderId:

The unique identifier of the mobile provider.

ProviderId	Provider Name
1	Proximus
2	Mobistar
3	Base (KPN Group Belgium)
4	Belgacom (Fixed Line)

The latest version of the list can be found at <http://interactive.ringring.be/public/documentation/ProvidersList.pdf>

**IsRealMo:**

This field indicates if the message is a real SMS or not.

The Ring Ring Company provides to its customers a specific tool named “*SMS Simulator*” allowing customer to test any applications without sending a real SMS message from a mobile device.

If the SMS is a real SMS then the value of IsRealMO equals “True”

AppId:

The Application identifier in the system of The Ring Ring Company.

This can be used for your own applications/stats when having more than one application.

CustomerId:

The Customer identifier linked to the application (Gateway).

This information is useful for third parties working with several customers of the Ring Ring Company.



Examples

Here is the example of the default FDS using by The Ring Ring Company to post SMS messages to the customer.

The data is posted using a Post variable named xml.

```
xml=<?xml version="1.0"?>
<GW SMS MO xmlns:xsi=http://www.w3.org/2001/XMLSchema-instance
xsi:noNamespaceSchemaLocation="http://interactive.ringring.be/pub
lic/XMLSchema/smsgatewaystd/GW_SMS_MO.xsd">
<MO>
  <InboxId>2377567</InboxId>
  <MSISDN>32478345604</MSISDN>
  <Shortcode>3810</Shortcode>
  <Message>This is my message</Message>
  <Timestamp>2009-09-15 13:56:34</Timestamp>
  <ProviderId>1</ProviderId>
  <isRealMo>true</isRealMo>
</MO>
<INFO>
  <AppId>567</AppId>
  <CustomerId>131</CustomerId>
</INFO>
</GW_SMS_MO>
```

Here is a basic example using a basic Post method when the customer wants to use a specific XML format without a Post variable.

```
<?xml version="1.0"?>
<ringring>
  <origin>32478345604</origin >
  <destination>3810</destination>
  <msg>This is my message</msg>
  <time>2009-09-15 13:56:34</time>
</ringring>
```

Here is now an example using a Get method.

```
http://www.mycompany.com/SMSin.asp?Id=2377567&phone=32478345604&s
hort=3810&msg=This%20is%20my%20message
```



5 Sending SMS messages (MT API)

Overview

Sending SMS messages from customer to end-user is managed by the **MT API**. When receiving a SMS message from a customer (MT or MTR), this message is forwarded to the mobile provider to be delivered to the end-user.

Flow

The flow can be schematized as follow.



The customer sends a HTTP request to the infrastructure of The Ring Ring Company. Then the SMS Gateway connects to the correct mobile provider to send the SMS message

URL access

The Standard **MT API** is a web service running on the DMZ infrastructure of The Ring Ring Company. The Ring Ring Company offers 2 distinct environments for its services: Production and Test.

Test URL for the Standard Edition:

[http\(s\)://pregateway.ringring.be/MT/MTServiceStd.aspx](http(s)://pregateway.ringring.be/MT/MTServiceStd.aspx)

Production URL for the Standard Edition:

[http\(s\)://gateway.ringring.be/MT/MTServiceStd.aspx](http(s)://gateway.ringring.be/MT/MTServiceStd.aspx)

Production URL for the Public Edition:

[http\(s\)://publicgateway.ringring.be/MT/MTServiceStd.aspx](http(s)://publicgateway.ringring.be/MT/MTServiceStd.aspx)



Calling MT API

Calling the **MTAPI** can be done using POST, GET or SOAP.

For a Get method, use

<http://gateway.ringring.be/MT/MTServiceStd.asmx/sendMT?xml=<XML>>

Where **<XML>** contains the XML Structure defined below.

For a XML Post method, use

<http://gateway.ringring.be/MT/MTServiceStd.asmx/sendMT>

And post the data **<XML>** defined below

For SOAP 1.1, use

<http://gateway.ringring.be/MT/MTServiceStd.asmx/sendMT>

And post the SOAP data where **<XML>** contains the XML Structure defined below.

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <sendMT xmlns="http://gateway.ringring.be/MT/">
      <xml><![CDATA[<XML>]]></xml>
    </sendMT>
  </soap:Body>
</soap:Envelope>
```

For SOAP 1.2, use

<http://gateway.ringring.be/MT/MTService.asmx/sendMT>

And post the SOAP data where **<XML>** contains the XML Structure defined below.

```
<?xml version="1.0" encoding="utf-8"?>
<soap12:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap12="http://www.w3.org/2003/05/soap-envelope">
  <soap12:Body>
    <sendMT xmlns="http://gateway.ringring.be/MT/">
      <xml><![CDATA[<XML>]]></xml>
    </sendMT>
  </soap12:Body>
</soap12:Envelope>
```



XML Data

The XML Structure **<XML>** to pass to the MT API has the following structure.

```
<?xml version="1.0" encoding="utf-8"?>
<GW SMS MT>
<INFO>
  <TimeValidity>24</TimeValidity>
  <IsRealMt>1</IsRealMt>
  <MessageType>SMS</MessageType>
  <Oadc>8128</Oadc>
  <TimeToSend>2009-09-30 15:01:01</TimeToSend>
  <Reference>MYREF_001</Reference>
</INFO>
<MT>
  <Message>My first SMS sent by Ring Ring</Message>
  <Shortcode>8658</Shortcode>
  <Msisdn>32478345604</Msisdn>
</MT>
<SESSION>
  <Login>MyLogin</Login>
  <Password>MyPassword</Password>
  <AppId>17</AppId>
</SESSION>
</GW SMS MT>
```



Request Parameters

Parameters are used to construct the SMS message to send.

Parameters	Mandatory	Default value	Short description
TimeValidity	No	24	The validity period in hour for the message.
IsRealMt	No	1	Indicates if the message is a real SMS message to send (1 for real message, 0 for simulation)
MessageType	No	SMS	Indicates the type of message (SMS or WAP)
Oadc	No		Used to overwrite the origin shortcode.
TimeToSend	No		Used to schedule the sending of the message
Reference	No		The reference id of the customer.
Message	Yes		The content of the SMS (maximum 160 characters)
WapTitle	No	“WAP Push”	The WAP Title (subject) to display on the mobile device.
Shortcode	Yes		The Shortcode to use
Msisdn	Yes		The phone number of the recipient
Login	Yes		Your Login Name
Password	Yes		Your Password
Appld	Yes		The Application Id to use

Request Parameters Detailed

TimeValidity:

The validity period in hour of the message, by default the SMS Gateway is using 24 hours for the validity of the message.

The period is an amount of time relative to the TimeToSend value; if the TimeToSend is not specified, the current datetime when the gateway received the message is used as TimeToSend.

The TimeValidity is passed to the mobile providers; only Mobistar and KPN Group Belgium are using the TimeValidity.

If the valid period expired at the SMS Gateway side, the SMS message will have a Delivery Notification Code equal to 802.

When mobile providers are not able to deliver the message after the validity period, the latest Delivery Notification Code is returned.

Example:

Sending a message to an end-user who switches off his mobile phone will return a Delivery Notification Code equal to 301 at the end of the validity period.

By knowing the validity period used, the Delivery Notification Code and the Delivery Notification Timestamp, you can assume the validity period expired.

**IsRealMt :**

This indicates to the EMMA platform (Environment for Mobile Messaging Applications) if the message is a real SMS Message or not.

With the new platform of TRRC, it's possible to simulate SMS Messages for testing purpose.

Testing applications and gateways without real SMS messages is now available.

MessageType :

Two types of SMS are supported:

- Simple SMS text message (with value "SMS")
- Wap Push message (with value "WAP")

For Wap push messages, the customer must pass the URL into the **Message** field and the Title or subject into the **WapTitle** field.

Oadc :

The field is used to replace the sender ID (the origin shortcode) by the value of the oadc. The oadc is only working for Mobistar.

For numerical values, only a shortcode owned by the customer can be used.

For non numerical values, any string up to 11 characters can be used.

TimeToSend:

The TimeToSend field is used to schedule messages in the future.

If not used, the Gateway is sending the message directly.

Reference:

This field can be used by the customer to identify the SMS message using its own identification.

Reference field can be used to link a SMS MO message with a SMS MT Message.

When receiving a MO message, an inboxId provide the unique identifier of the sms message in the system. And when replying to this message by using the MT API, the reference field can be used to pass the inboxId.

The SMS Gateway Standard Web Manager tries to link automatically a MT with a MO message by linking the reference of the MT with the inboxId of the MO.

This enables the possibility to see Request (MO)/Response (MT) together in the Web Interface.

Message:

The SMS Message to send is limited to 160 chars. If more than 160 chars are passed to the API, the status in the response will be 9 (see Appendix 2 : STATUS CODE IN XML Response for MT(R) API).

When using a **MessageType equal to "WAP"** then the **Message** must contain the URL destination for the WAP content.

The SMS Message must contain only characters of the 7-bit GSM Alphabet (see 9 GSM Alphabet):



WapTitle:

The WAP title (subject) that will appear on the mobile device.
The **WapTitle** cannot exceed 25 characters.
By default, the text “WAP Push” is used as **WapTitle** value.

Shortcode:

The shortcode to use when sending the message.

Msisdn:

The mobile handset destination number (must be in international format).
The Gateway is automatically trying to convert national format to International format.

Login:

The login of your account (provided by TRRC).

Password:

The password of your account (provided by TRRC).

Appid:

An **Appid** to identify the gateway to use, this information is provided by TRRC.
By using multiple **Appid**, you can manage different destination for your Delivery Notifications Report and statistics can be computed for each application.



Response of MT API

The MT API will respond back to the request providing the acknowledgment or not of your message.

```
<?xml version="1.0" encoding="utf-8"?>
<MTResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns="http://gateway.ringring.be/MT/">
<Status>0</Status>
<Description>OK</Description>
<OutboxId>256782</OutboxId>
<AppId>17</AppId>
</MTResponse>
```

Response Parameters

The XML Response sent back to the customer is providing 3 parameters.

Parameter	Data Type	Description
Status	Int	The error status code returned by the gateway
Description	String	The textual description of the error code
OutboxId	Int	The unique identifier of the message, the value is empty when the Status is not equal to 0.
Appid	Int	The AppId used to send the Message

Response Parameters Detailed

Status & Description:

The **Status** returned provides a numerical status code of your request and the Description provides the textual information. Status codes are listed below.

Status	Description
0	OK (your request is accepted by the Gateway)
1	Unknown login
2	Invalid login / password pair.
3	Unauthorized shortcode
4	Invalid MSISDN value
5	Invalid Validity Period
6	Invalid IsRealMT parameter
7	Unauthorized Oadc value
8	Invalid TimeToSend
9	SMS message too long
10	Invalid GatewayId
11	Invalid XML
12	Internal Error
13	Number of MT per day exceeds the authorized limit (ONLY for the Public edition)
14	Custom Error



OutboxId:

This value contains the unique identifier of the SMS Message. Value can be empty if the status value is not equal to 0.

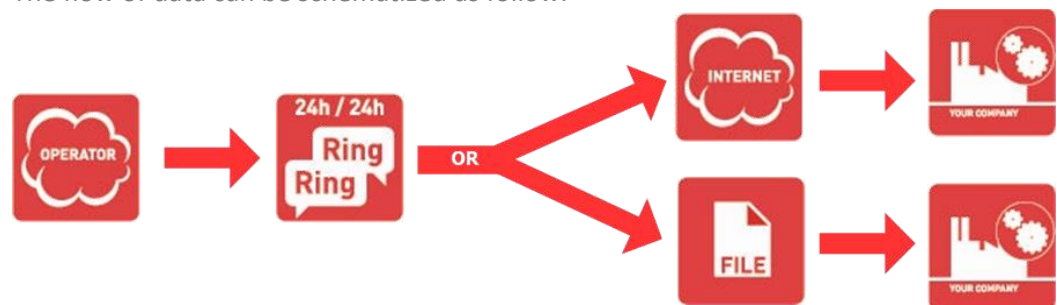
OutboxId is used to create a link with the Message Status received by the DLR API.



6 Receiving Message Status (DLR API)

Overview Receiving Message Status from the mobile provider is managed by the **DLR API**. When sending a SMS message to an end-user (MT), the mobile provider is sending back the Delivery Notification code related to this SMS. Delivery Notification Codes from mobile providers are aggregated by The Ring Ring Company and transformed to a Message Status. The Message Status is forwarded via HTTP(S) or stored in a file sent by FTP.

Flow The flow of data can be schematized as follow.



Mobile providers are sending the Delivery Notification Codes to The Ring Ring Company using the SMS protocols (SMPP, UCP,...).

Then The Ring Ring Company delivers to the customer the Message Status to the customers using 2 ways of working : direct by HTTP or a daily file posted on a FTP site.

When performing the HTTP requests to the customer, the SMS Gateway is able to manage for each Gateway a specific behavior:

- can retry a maximum number of retries and wait between each retry.
- can check for HTTP status code 200 on customer's side
- can check for specific text in the response of the customer

These specifics parameters are configured for each SMS Gateway at the setup after analyzing your requirements.

FTP files can be pushed to the FTP site of the customer or the FTP site of The Ring Ring Company.

The SMS Gateway Standard Edition is able to send several "Message Status" for the same SMS.

Customers must handle this case and use the latest "Message Status" received.



Flexible Data Structure

The **DLR API** is using the Flexible Data Structure allowing exchanging data in any format supported by the customer, The FDS is explained in the chapter 4 Receiving SMS Messages (MO API).

Flexible Data Structure accelerates the migration process of existing gateway and decreases the development effort.

Parameters

The FDS used by the **DLR API** exposes different parameters than the MO API.

Parameter	Description	Data Type
OutboxId	The OutboxId is the unique identifier of a SMS message. This information was previously received by the MT API in the XML Response.	Int
Reference	This is your own Reference identifier passed when you have sent the message through the MT API	String
Message Status	The Message Status of your SMS, indicates if the message was delivered and the reason of the failure if any (see chapter 8 Message Status)	Int
DeliveryTime	Provides the Timestamp when the message was delivered	String
AppId	Unique identifier of the application that was used to send the SMS.	Int
CustomerId	Unique identifier of the customer that was used to send the SMS.	Int

Note that some mobile providers don't send back the timestamp of the delivery, in this case DeliveryTime parameter will contain the timestamp when The Ring Ring Company received the report itself.



6.1 HTTP version of DLR API

Examples

Using the HTTP version of the **DLR API** is similar to the **MO API**.

Each time a Message Status is updated with a final status code then the Message Status is sent back to the customer using HTTP request.

Here is the example of the default FDS using by The Ring Ring Company to post SMS messages to the customer.

The data is posted using a Post variable named XML.

```
xml=<?xml version="1.0"?>
<GW_SMS_DLR xmlns:xsi=http://www.w3.org/2001/XMLSchema-instance
xsi:noNamespaceSchemaLocation="http://interactive.ringring.be/public/XMLschema/smsgatewaystd/GW_SMS_DLR.xsd">
<DLR>
  <OutboxId>256782</OutboxId>
  <Reference>001</Reference>
  <MessageStatus>200</MessageStatus>
  <DeliveryTime>2009-09-30 16:45:00.789</DeliveryTime>
</DLR>
<INFO>
  <AppId>340</AppId>
  <CustomerId>185</CustomerId>
</INFO>
</GW_SMS_DLR>
```

Here is a second example where only your reference and the Message Status are sent back in a simple XML structure without any parameter.

```
<?xml version="1.0"?>
<DLR>
  <Reference>001</Reference>
  <MessageStatus>200</MessageStatus>
</DLR>
```

The last example is sending the same information but using a Get method

```
http://www.mycompany.com/Delivery.php?Ref=001&Status=200
```



6.2 FTP version of DLR API

Overview

The FTP version is working differently than the HTTP version.

The HTTP version is sending for each Message Status update a HTTP Request, the FTP version is generating a file per day containing all Message Status updated the day before.

The process is running during the night between 1AM and 6AM and generates for each Gateway a specific file that will be sent to a FTP site.

Output File

The file generated is a plain text file delimited by a character (comma, semi-colon,...).

As for the HTTP version, the data contained in the file can be flexible to match your requirements. All parameters defined for **DLR API** are available for the FTP version.

By default, The Ring Ring Company produces this format of file (semi-colon separated).

```
OutboxId;Reference;Message Status;DeliveryTime;AppId;CustomerId
```

This format produces the following content:

```
5432;003;200;2009-09-25 10:15:16.289;340;17;185
5433;004;305;2009-09-30 15:50:17.201;340;17;185
5430;001;301;2009-09-30 15:50:17.457;340;17;185
5439;010;200;2009-09-30 15:50:17.890;340;17;185
5437;008;200;2009-09-30 15:50:18.017;340;17;185
5436;007;400;2009-10-02 08:50:07.289;340;17;185
```

The file is always sorted on the DeliveryTime (ascending) and contains all messages that received an updated Message Status.

SFTP and FTPS site are also supported by the SMS Gateway Standard Edition.



7 SMS Gateway Supervisor

Overview

The Ring Ring Company offers a powerful Web Interface allowing customer to control the messages exchanged with the SMS Gateway Standard Edition.

First of all, the Supervisor Interface displays at your convenience the list of messages handled by the SMS Gateway with the detailed information about the HTTP request status and error if any.

The main features of the SMS Gateway Supervisor are:

- List all messages exchanged (MO & MT)
- Provides, for each SMS MO, the status of the HTTP request performed by the **MO API**.
- Provides, for each SMS MT, the status of the HTTP request performed by the **DLR API**.
- Enable the possibility to reprocess SMS or Message Status.

Login

For accessing the SMS Gateway Supervisor, go to the URL <http://interactive.ringring.be/smsGatewaySupervisor>

Enter your username and password to login.

SMS Gateway Admin Login

Ring
Ring

Login

Password

Enter

Login field required

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Please take note that the user & password are different than the user/password used for the MT API.



Filter

Filtering the view can be applied on several parameters:

- The type of message (MO or MT)
- The application used by the gateway.
- A date range
- The status of the gateway requests

The screenshot shows the SMS Gateway Manager interface. On the left, there is a sidebar with the Ring logo and navigation links for 'Message Overview' and 'Support'. The main area features a 'Filter' dialog box with the following settings:

- Client: The Ring Company s.a.
- Message Type: MO MT
- Application: ALL
- Date: From 2009-10-01, To 2009-10-31
- Gateway Status: OK Error New

Buttons for 'Apply Filter' and 'Reset Filter' are visible. Below the dialog is a table of messages with the following columns: Gateway, Msisdn, Time Stamp, Message, Provider, Retry, LastUrlDestination, Http Status, ExecutionDate, Status, Reset, and Actions.

Gateway	Msisdn	Time Stamp	Message	Provider	Retry	LastUrlDestination	Http Status	ExecutionDate	Status	Reset	Actions
Gateway Mo	32478345604	2009-10-30 01:33:46	message_5	Proximus	5	http://yourwebaddress.be	200	2009-10-30 01:33:46	OK	False	
Gateway Mo	32478345604	2009-10-30 01:33:46	message_1	Proximus	4	http://10.1.1.107/SmsGatewayTests/Test_001.aspx?MSISDN=32478345604&SC=3810&Client=1&app=2280&gw=1&time=30/10/2009 13:33:46&inbox=2&msg=message_1&real=True&provider=1	500	2009-10-30 01:42:25	Error	False	
Gateway Mo	32478345604	2009-10-30 01:33:46	message_2	Proximus	0	http://10.1.1.107/SmsGatewayTests/Test_001.aspx?MSISDN=32478345604&SC=3810&Client=1&app=2280&gw=1&time=30/10/2009 13:33:46&inbox=3&msg=message_2&real=True&provider=1	500	2009-10-30 01:42:26	Error	True	
Gateway Mo	32478345604	2009-10-30 01:33:46	message_3	Proximus	4	http://10.1.1.107/SmsGatewayTests/Test_001.aspx?MSISDN=32478345604&SC=3810&Client=1&app=2280&gw=1&time=30/10/2009 13:33:46&inbox=4&msg=message_3&real=True&provider=1	200	2009-10-30 01:42:26	OK	False	
Gateway Mo	32478345604	2009-10-30 01:33:46	message_4	Proximus	5		0		New	False	
Gateway Mo	32478345604	2009-10-30 01:33:46	message_5	Proximus	5		0		New	False	


Messages are listed in a table with the following information for the MO messages:

- Gateway : The Gateway Name
- Msisdn : The mobile phone number of the end-user
- Timestamp : When the message was received
- SMS Message : the SMS message sent by the end-user
- Provider: The Provider name
- Gateway Retry : the number of retries remaining to perform the HTTP request
- Gateway URL: The last http request destination
- HTTP Status: the last http status
- ExecutionDate: the timestamp when the HTTP request was performed
- Gateway Status: The Status of the Gateway process for this message:
 - OK: means the process was completed with success
 - Error: the HTTP request failed
 - New: the HTTP request is not yet performed
- Actions : the icon enables you to reprocess the Http request. This operation is only available for failed requests (when you server is not reachable for example).

Messages are listed in a table with the following information for the MT messages:

- Gateway : The Gateway Name
- Msisdn : The mobile phone number of the end-user
- MT XML Received : When the MT order was received
- SMS Message : the SMS message sent to the end-user



- Gateway Retry : the number of retries remaining to perform the HTP request for the DLR
 - Gateway URL: The last http request destination for the DLR
 - DLR Channel : The channel used to forward the DLR (HTTP or FTP)
 - DLR File : The filename of the file containing DLR (only if channel was FTP)
 - HTTP Status: the last http status
 - ExecutionDate: the timestamp when the HTTP request was performed
 - SMS Status: The Message status of the SMS
 - Gateway Status: The Status of the Gateway process for this message:
 - OK: means the process was completed with success
 - Error: the HTTP request failed
 - New: the HTTP request is not yet performed
 - Actions : the icon  enables you to reprocess the Http request. This operation is only available for failed requests (when you server is not reachable for example).
-



8 Message Status

The “Message Status” are grouped into Categories and range of Code.

The latest list of Message Status is publicly available on the address:
<http://interactive.ringring.be/public/documentation/DeliveryNotificationCodes.pdf>

Not Sent	Category “Not Sent” Message Status less than 100 means the message is not yet sent to mobile Providers. When scheduling messages, the messages appear in the system with a Message Status equal to 0.
Delivered	Category “Delivered” This category contains only one message status (200) , this code means that the message was successfully delivered to the end-user.
Not Delivered	Category “Not Delivered” This category contains 2 ranges of message status. The range 300-399 (3xx) is used to classify messages that were not delivered by the mobile provider. The range 800-899 (8xx) is used to define messages that were not correctly sent by The Ring Ring Company to the mobile provider (Internal Error).
Unknown	Category “Unknown” The range 400-499 (4xx) defines messages for which we never received a Message Status from the mobile provider. The message can be correctly delivered or not.
Pending	Category “Pending” The Range 100-199 (1xx) is used for messages that were submitted to the mobile providers. The range 900-999 (9xx) is used to classify messages that are in progress. This last range is the only temporary range and the message status will be updated to 2xx or a 3xx range or 8xx or 4xx.

This range is never forwarded by the DLR API.



9 GSM Alphabet

Only the character set “*GSM 7-bit default alphabet and extension table of 3GPP TS 23.038 / GSM 03.38*” is supported.

3GPP TS 23.038 / GSM 03.38																
	x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	xA	xB	xC	xD	xE	xF
0x	@	£	\$	¥	è	é	ù	ì	ò	Ç	LF	∅	ø	CR	Å	å
1x	Δ	_	Φ	Γ	Λ	Ω	Π	Ψ	Σ	Θ	Ξ	C	Æ	æ	ß	É
2x	SP	!	"	#	¤	%	&	'	()	*	+	,	-	.	/
3x	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
4x	i	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5x	P	Q	R	S	T	U	V	W	X	Y	Z	Ä	Ö	Ñ	Ü	§
6x	ç	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
7x	p	q	r	s	t	u	v	w	x	y	z	ä	ö	ñ	ü	à
1B 0x											FF					
1B 1x					^											
1B 2x									{	}						\
1B 3x													[~]	
1B 4x																
1B 5x																
1B 6x						€										
1B 7x																



10 Quick References

Latest version of the SMS Gateway Standard Edition

http://interactive.ringring.be/public/documentation/SMS_Gateway_STD_V2.0.pdf

List of providers codes

<http://interactive.ringring.be/public/documentation/ProvidersList.pdf>

Delivery Notification Codes

<http://interactive.ringring.be/public/documentation/DeliveryNotificationCodes.pdf>

Supervisor URL

<http://interactive.ringring.be/smsGatewaySupervisor>

Statistics Manager

<http://stats.ringring.be>

XSD used by the SMS Standard Gateway

http://interactive.ringring.be/public/XMLschema/smsgatewaystd/GW_SMS_DLR.xsd

http://interactive.ringring.be/public/XMLschema/smsgatewaystd/GW_SMS_MO.xsd