



APPLICATION PROGRAMMING INTERFACE

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1.0	03/04/2019	English Version
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1.2	18/05/2019	Modify by MD
1.3	20/05/2019	Modify by MG

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1 Scope

LAM USSD is a solution to integrate its information system with the short number **#2121#** of LAfricaMobile.

This document describes and explains how to use this API.

2 Account parameters

2.1 Prerequisites

To use this API, you need a valid account. When creating your account Lafricamobile will give you :

- A login (also named accountid)
- A password

This identifier / password pair is used as a parameter in the API.

The customer will have to provide an url which will allow LAfricaMobile to integrate the menu of these different operations

2.2 Variables used in the documentation

In this document, we use values below. The true values will be given by our technical team or by your own configuration. Some of them may not be used according to your needs.

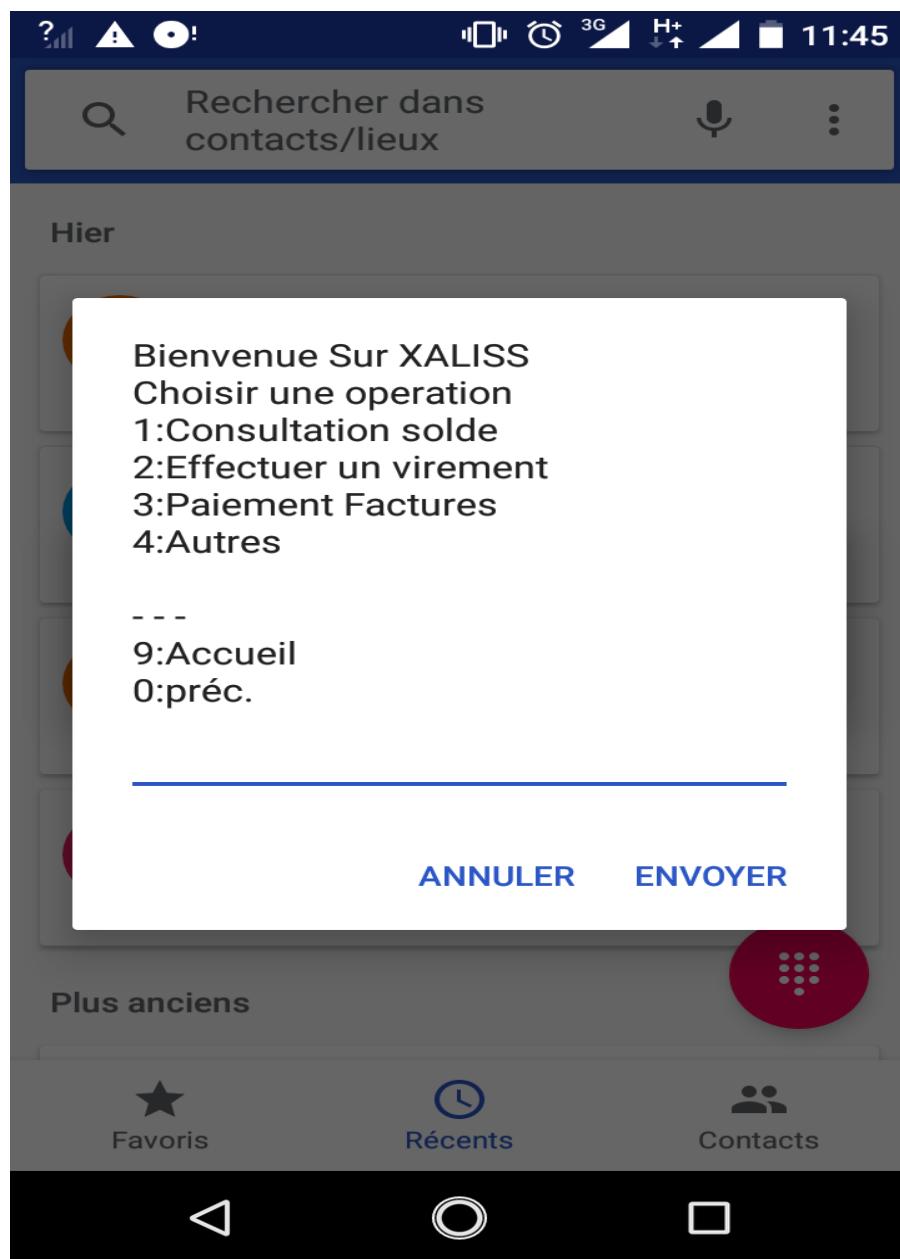
Document test values :

- login=**fred**
- password=**xpasswordx**
- URL LAFRICAMOBILE = <https://ussd.lafricamobile.com:3443/session>
- URLPARTENAIRE = <https://votre-entreprise.com/index.php>

You have to replace these values by your own means during your tests.

3 Menu

3.1 Example



4 Use XML to display the menu

To display the menu you will need the file:

index.php : which contains the php code that will generate the XML for the menu display

4.1 The index.php file

This file contains the php code that will generate the xml file.

Each **<a>** tag will be interpreted as an option of the menu and each tag will be accompanied by an example php file (**Consultation solde → solde.php**).

The **\$msisdn** parameter contains the user's phone number:

```

<?php

$msisdn = $_POST['msisdn'];

$postfields = array('login' =>'fred', 'password' =>'xpasswordx', 'telephone'=>$msisdn, 'service'=>'banque');

$ch = curl_init();
curl_setopt($ch, CURLOPT_URL, 'https://ussd.lafricamobile.com:3443/session?');
curl_setopt($ch, CURLOPT_RETURNTRANSFER, true);
curl_setopt($ch, CURLOPT_FOLLOWLOCATION, true);
curl_setopt($ch, CURLOPT_POST, 1);
curl_setopt($ch, CURLOPT_POSTFIELDS, $postfields);
curl_setopt($ch, CURLOPT_SSL_VERIFYPeer, 0);
$result = curl_exec($ch);

?>

<page>
Bienvenue Sur XALISS<br/>
    Choisir une operation<br/>
<a href="https://votre-entreprise.com/solde.php?&msisdn=<?php echo $msisdn; ?>">
Consultation solde
</a><br/>

<a href="https://votre-entreprise.com/virement.php?&msisdn=<?php echo $msisdn; ?>">
Effectuer un virement
</a><br/>

<a href="https://votre-entreprise.com/facture.php?&msisdn=<?php echo $msisdn; ?>">
Paiement Factures
</a><br/>

<a href="https://votre-entreprise.com/autre.php?&msisdn=<?php echo $msisdn; ?>">
Autres
</a><br/>
</page>

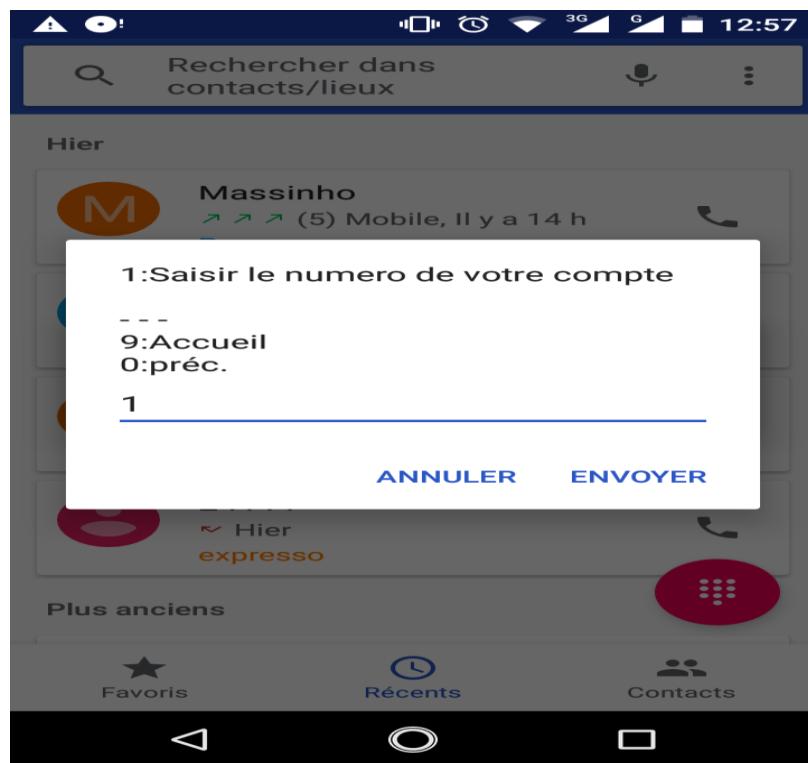
```

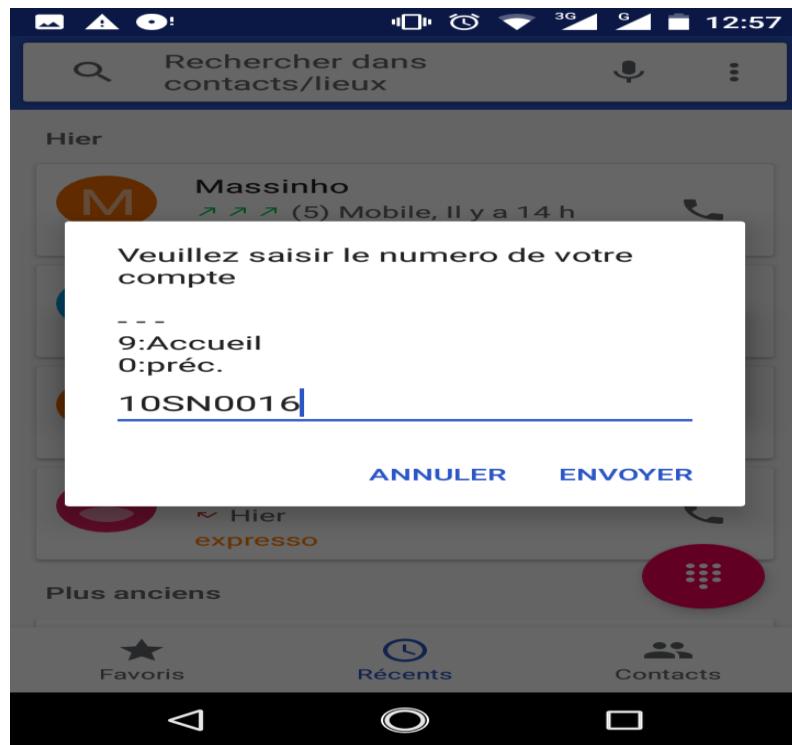
4.2 The XML generated by index.php file

```
<page>
    Bienvenue Sur XALISS<br/>
    Choisir une operation<br/>
    <a href="https://votre-entreprise.com/solde.php?&msisdn=221773758085">
        Consultation solde
    </a><br/>
    <a href="https://votre-entreprise.com/virement.php?&msisdn=221773758085">
        Effectuer un virement
    </a><br/>
    <a href="https://votre-entreprise.com/facture.php?&msisdn=221773758085">
        Paiement Factures
    </a><br/>
    <a href="https://votre-entreprise.com/autre.php?&msisdn=221773758085">
        Autres
    </a><br/>
</page>
```

4.3 Example : consultation de solde

4.3.1 Menu consultation de solde





4.3.2 solde.php file

```
<?php
$msisdn = $_GET['msisdn'];
?>
<page tag="op1">
    Veuillez saisir le numéro de votre compte<br/>
<form action="https://votre-entreprise.com/updatesolde.php?&msisdn=<?php echo $msisdn; ?>">
<entryvar="piece">
<prompt></prompt>
</entry>
</form>
</page>
```

4.3.3 The XML generated by `solde.php`

```
<page tag="op1">
    Veuillez saisir le numéro de votre compte<br/>
<form action="https://votre-entreprise.com/updatesolde.php?&msisdn=221773758085">
<entryvar="piece">
<prompt></prompt>
</entryvar>
</form>
</page>
```

4.3.4 `updatesolde.php` file

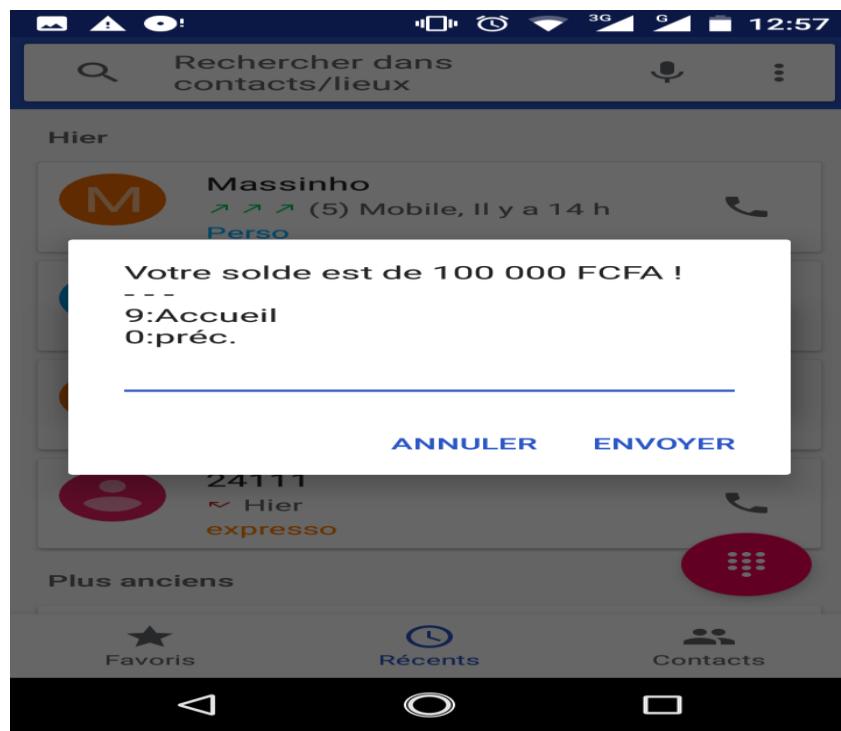
```
<?php
$msisdn = $_GET['msisdn'];
$picece = $_POST['piece'];

// $piece variable contain
// the account number entered by user

// do the necessary treatment here

$solde = "100 000";
?>

<page>
    Le soldé du compte <?php echo $piece; ?> est de <?php echo $solde; ?> FCFA !
</page>
```



4.3.5 The XML generated by updatesolde.php

```
<page>
    Votre solde est de 100 000 FCFA !
</page>
```

5 Sécurity : the 5 basic pillars

⇒ Data integrity

- Restriction of the number of identification tests to avoid brute force attacks

⇒ Responsibility of people

- Traceability of connections with archived logs
- Centralized and secure authentication

⇒ Privacy

- Authentication interface to access the platform with an ultra-secure password

⇒ Availability

- Real-time and permanent monitoring of portal availability with proven tools like NAGIOS

⇒ SSL/TLS

- Protection of data confidentiality
- Encryption of transactions on the platform