OpenSRS

COM.BR Implementation Guide

An Addendum to the Domain Manager &
Domain Command Reference Guides

April, 2012

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Introduction

COM.BR domains have very specific registration requirements. These can complicate the registration process and make it difficult to complete new registrations.

This document identifies important requirements that should be taken into consideration for a successful implementation of COM.BR registrations.

By ensuring that all requirements are met when a registration is requested you'll ensure a high success rate of COM.BR registrations.

Registration Overview

COM.BR registrations do not occur real-time. The registering of COM.BR domains is an asynchronous process. As such, resellers should ensure that a refund process is implemented for their clients.

COM.BR registrations *can* have a high failure rate due to the restrictive requirements imposed by the BR Registry ([Registro Br](#)).

When a COM.BR registration request is submitted, the order is placed in your reseller account's *in progress* queue with order state *waiting for registry response*. API based queries of *in progress* orders will report a status of *waiting*.

If all requirements are met when the request is submitted, it should complete within a day.

In very specific cases it can take up to 45 days before a domain registration completes. See *Appendix A – Registering Dropped Names* for further information.

Implementation Guidance

The following sections detail each of the Registry's requirements for COM.BR registrations.

Valid Registrants

Any person or organization that is legally established in Brazil as a legal entity (institution) or as an individual (liberal professional or natural person) with a contact location within the Brazilian national territory is considered a valid registrant.

A valid registrant must be able to present a legal identification number (CPF/CNPJ) issued by the government organization, the Secretariat of the Federal Revenue of Brazil (Secretaria da Receita Federal).

Foreign companies can register COM.BR domains but must meet additional requirements as outlined in *Appendix D - Registrations By Foreign Entities*.

Individual And Business Identifiers (CPF & CNPJ)

All .COM.BR registrations require that a legal Brazilian identifier be submitted in the form of a CNPJ (Business Identifier / Cadastro Nacional de Pessoa Juridica) or CPF (Individual Tax Number / Cadastro de Pessoa Fisica).

Invalid CNPJ and CPF numbers are typically the largest reason for failed registrations.

If the CPF or CNPJ has already been used for a COM.BR registration with another Registrar, then the registrant needs to contact the BR Registry to request a change of Registrar prior to registering a new COM.BR domain with OpenSRS.

The registry validates the registrant name, company name, and owner contact address associated with the CNPJ/CPF with the federal revenue service of Brazil (Secretariat of the Federal Revenue of Brazil).

Resellers are advised to implement a programmatic validation routine when accepting a CNPJ or CPF number to ensure that the submitted values, at minimum, are in the correct format.

CNPJ Format (14 digits): *NN.NNN.NNN/NNNN-NN*

CPF Format (11 digits): *NNN.NNN.NNN-NN*

Google Gadgets hosts a CPF & CNPJ validation tool here:

http://www.google.com/ig/directory?type=gadgets&url=hosting.gmodules.com/ig/gadgets/file/117697753513995606918/validaCPF.xml

The following link provides additional information on the CNPJ including examples of validation scripts:

http://pt.wikipedia.org/wiki/Cadastro_Nacional_da_Pessoa_Jurídica
Note: This page is in Portuguese and you may prefer to view it through a translator.

The following link provides additional information on the CPF including examples of validation scripts:

http://en.wikipedia.org/wiki/Cadastro_de_Pessoas_Físicas

Contact Information Requirements

COM.BR registrations require four contact types: Owner, Admin, Technical, and Billing. Owner and Billing contact information that is submitted with each registration request must be a real Brazilian address with all information correctly matching as the address will be strictly and fully validated by the Registry.

Contact validation is not performed by OpenSRS; the BR Registry performs it after the registration request is submitted by OpenSRS.

All aspects of the Owner and Billing address that is submitted will be validated, including street number, street name, city name, state code, postal code, and country code.

Street and city names that include accents must be submitted in UTF-8 encoding.

For example, the UTF-8 encoding of São Paulo would be: S[c3][a3]o Paulo.

When using the Reseller Web Interface to register a domain name, please ensure that your browser's encoding is set to UTF-8. Set correctly you can submit accented characters properly, for example entering *São Paulo* as the city.

When performing registrations through the API, the programming language being used needs to be directed to submit information in UTF-8 encoding.

Further information on UTF-8 encoding:
http://www.utf8-chartable.de/
http://en.wikipedia.org/wiki/UTF-8

If the country submitted is "BR" (Brazil), then the state must be a valid Brazilian state code:

AC AL AP AM BA CE DF ES GO MA MT MS MG PA PB PR PE PI RJ RN RS RO RR SC SP SE TO

We recommend that resellers validate the postal code format and that the **state** that is submitted correctly correlates to the **postal code** that is submitted.

Postal Code References:
http://en.wikipedia.org/wiki/List_of_postal_codes_in_Brazil
http://en.wikipedia.org/wiki/Postal_codes_in_Brazil

Nameserver & DNS Requirements

When registering a COM.BR domain, DNS must already exist for the domain and be fully functional to ensure that the registration request is successful. Two authoritative nameservers must be submitted at registration and these nameservers must respond to DNS queries by the BR Registry.

If the nameservers exist but are not yet responding to queries for the domain being registered, and are therefore not authoritative for the domain, then the order will remain in a *waiting* state in the *in progress* queue until the DNS is verified by the BR Registry. Otherwise, the request will expire after 14 days.

Use of nameservers within the same namespace of a domain is only possible after the domain has been successfully registered.

The BR Registry provides a web-based tool that can be used to check the validity of the DNS settings prior to submitting a registration: http://registro.br/cgi-bin/nicbr/dnscheck

Important: The OpenSRS SystemDNS Service nameservers cannot be used when registering a COM.BR domain. Zone entries cannot be set up in SystemDNS unless the domain has been registered. Once a COM.BR domain has been successfully registered it can then use the SystemDNS service.

Additional Restrictions

Transfers into your OpenSRS reseller account are currently not supported.

This function will be added by OpenSRS in the near future.

Appendix A – Registering Dropped Names

When domains expire and are not renewed they are made available to be registered again. These are termed *dropped* domains.

The BR Registry only drops domains three to four times per year, and not to a specific schedule.

Although names become available for registration when querying the registry, the registration of dropped names can take up to 45 days to complete due to a review process that is performed by the BR Registry.

Additionally, multiple end users could apply for the same dropped domain and the BR Registry will determine to whom it's awarded with no input from the registrant.

A reseller and registrant may experience this type of situation when requesting the registration of a dropped name. The domain registration could stay in a *waiting* state (*in progress*) for as long as 45 days. If domain registration does not complete in 45 days, then OpenSRS declines the registration.

Appendix B – Registering Related Names

Domains that are similar, where a hyphen may be the only difference or where accented characters are the only difference, can only be registered by a single applicant.

Accented Character Example: pensãoboa.com.br and pensaoboa.com.br

Attempts to register accented or non-accented versions of a domain that is already registered will fail unless identification and contact information being submitted for the new domain registration matches that of the existing registered domain.

Hyphen example: oneexample.com.br and one-example.com.br

When domain name registration requests that include hyphens are checked by the Registry, the hyphens are stripped out resulting in a name that is already registered, and so the registration request will fail unless the identification and contact information being submitted for the new domain registration request matches that of the existing registered domain.

Appendix C – Registry Errors

Registry errors are recorded in the **notes** field of a registration order. A list of the most typical errors follows.

OpenSRS errors generated by our API are covered in the *OpenSRS Domains API Command Reference Guide*.

CNPJ/CPF & Contact Set Errors

If the CNPJ/CPF number has been used with a different registrar for a different domain, it cannot be re-used with OpenSRS and the domain registration will fail.

An example of such a scenario:

```
"Parameter value syntax error\ntext Invalid attribute value syntax; Could not
get registry contact for ownercontact (P-XXX0000: 531 Authorization failed;
CNPJ/CPF (000.000.000-00) belongs to another provider (000))"
```

If the CNPJ/CPF has been previously used to successfully register a domain with an OpenSRS reseller and a request to register a new domain is being submitted with the same CNPJ/CPF, all contact data must match what was submitted previously or the following error will occur:

```
"Could not create owner, possibly due to CNPJ/CPF re-use. Owner contact data
must match owner from previous pending sw_order 123456"
```

Another example for a similar CNPJ/CPF re-use situation:

```
"Parameter value syntax error\ntext Contact error ; Could not get registry
contact for ownercontact (P-XXX000: 549 Command failed; [Could not create
organization!])"
```

Additional errors where the CNPJ/CPF may be invalid or the submitted contact information does not match what is on file:

```
"Parameter value syntax error text Invalid attribute value syntax; Could not
get registry contact for ownercontact (P-XXXXX: 541 Invalid attribute value;
Could not create organization); Could not get registry contact for
admincontact (P-XXXXX: 541 Invalid attribute value [contact:pc => 13526965:
Incompatible Postal code and city]); Could not get registry contact for
techcontact (P-XXXXX: 541 Invalid attribute value [contact:pc => 13526965:
Incompatible Postal code and city]); Could not get registry contact for
billingcontact (P-XXXXX: 541 Invalid attribute value [contact:pc => 13526965:
Incompatible Postal code and city]) [contact:pc => 13526965: Incompatible
Postal code and city]"
```


```
"Parameter value syntax error text Invalid attribute value syntax; Could not
get registry contact for ownercontact (P-ACS2985: 541 Invalid attribute
value; Could not create organization); Could not get registry contact for
admincontact (P-ACS2985: 541 Invalid attribute value [contact:pc => 66000000:
Incompatible Postal code and city]); Could not get registry contact for
techcontact (P-ACS2985: 541 Invalid attribute value [contact:pc => 66000000:
Incompatible Postal code and city]); Could not get registry contact for
billingcontact (P-ACS2985: 541 Invalid attribute value [contact:pc =>
```

```
66000000: Incompatible Postal code and city]) [contact:pc => 66000000:
Incompatible Postal code and city]"
```

```
"Command failed text Command failed [Inexistent organization]"
```

```
"Command failed text Command failed [Irregular CNPJ]"
```

```
"At 2011-11-06 14:45:22 UTC we received a poll message
DOMAIN_REGISTRATION_FAILED:The document does not exist in the SRF database."
```

```
"At 2011-11-06 15:30:28 UTC we received a poll message
DOMAIN_REGISTRATION_FAILED:The document is cancelled according to the SRF."
```

```
"At 2011-11-06 23:00:27 UTC we received a poll message
DOMAIN_REGISTRATION_FAILED:The document is suspended according to the SRF.'
```

```
"At 2011-11-06 23:45:24 UTC we received a poll message
DOMAIN_REGISTRATION_FAILED:The document is irregular according to the SRF."
```

Error example for invalid street number:

```
"541 Invalid attribute value [contact:street: Invalid address number]"
```

Nameserver & DNS Errors

An invalid nameservers submitted:

```
"Request failed validation: Name server &apos;ns2.livednsdomain.com&apos; is
not found at the registry.Please double check the nameserver and re-submit.
Name server &apos;ns3.livednsdomain.com&apos; is not found at the
registry.Please double check the nameserver and re-submit. Name server
&apos;ns1.livednsdomain.com&apos; is not found at the registry.Please double
check the nameserver and re-submit."
```

Example error for failing the authoritative zone validation:

```
"Command failed text Command failed [dns precheck failed!]"
```

Appendix D - Registrations By Foreign Entities

Foreign companies may be able to register COM.BR domains with OpenSRS however, all of the following requirements must first be met.

In order for a foreign company to register a .BR domain, it must appoint a legally established attorney-in-fact in the country, must be registered with the BR Registry, and must meet some additional criteria. Once the foreign company is registered with the BR Registry, the company will receive an identification number (CNPJ) that must be submitted with the domain registration request.

To register a foreign company with the BR Registry the following must be provided:

- A power of attorney notarized in the company's country of origin, conferring authority on the attorney-in-fact to perform acts regarding domain registry, domain cancellation, domain ownership transfer and change of the contact person for the entity.

- A statement, duly notarized in the company's country of origin, declaring the commercial activity of the company, including the following: trade name, full registered address, telephone number, business purpose, activities performed, name and position of the legal representative.

- A statement, duly notarized in the company's country of origin, declaring the company's commitment to permanently carry out its activities in Brazil, within 12 months from the receipt of the statement.

- A sworn translation of the power of attorney, the commercial activity statement and the commitment statement.

- A copy of the CNPJ or CPF (individual tax payer registration number) of the attorney-in-fact.

- An official letter from the attorney-in-fact establishing the ID of the contact for the foreign entity.

All documents must be certified by the Brazilian Consulate in the company's country of origin.

Should the attorney-in-fact not have an entity registered in the BR Registry system, this registration shall also be made, for which purpose all the information regarding the attorney-in-fact must be sent: CNPJ/CPF, trade name/ name, full address, telephone number and ID of the contact for the entity.

The address to which documents to the Registro.br must be forwarded is:

A/C Hostmaster - Registro .br
Subject: Cadastro de empresa estrangeira
Av. das Nações Unidas, 11541, 7° andar
04578-000 - São Paulo – SP

Additional Requirements:

- The domain billing contacts registered by the company must be residents in Brazil.

- The trade name of the foreign company can only be altered administratively by Registro.br.

Additional information should be obtained directly from the BR Registry (http://registro.br).

Appendix E – API Guidance

For guidance on integrating to the OpenSRS API please review the *OpenSRS Integration Guide*.

Please review the *Domains API Command Reference Guide* for all other commands related to the OpenSRS Domains Service as well as all **sw_register** command parameters that are not described in this document.

Contact information for domain registration requests must meet the requirements listed in the "Contact Set" section of the *Domains API Command Reference Guide*.

When performing registrations through the API, the programming language being used needs to be directed to submit information in UTF-8 encoding.

Specific parameters and required values for .COM.BR

Parameters within the **tld_data** associative array are described below.

Parameter_Name	Obligation	Definition/Value
br_register_number	Required	The CNPJ/CPF Brazilian legal identification number.

Domain registration example

For domain = .COM.BR

XML Registration Request

The following request is an example of a com.br registration request for a Brazillian national (individual):

```
<?xml version='1.0' encoding="UTF-8" standalone="no" ?>

<!DOCTYPE OPS_envelope SYSTEM "ops.dtd">

<OPS_envelope>

 <header>

  <version>0.9</version>

  </header>

 <body>
```

```
<data_block>
 <dt_assoc>
  <item key="protocol">XCP</item>
  <item key="object">DOMAIN</item>
  <item key="action">SW_REGISTER</item>
  <item key="attributes">
   <dt_assoc>
    <item key="tld_data">
     <dt_assoc>
      <item key="br_register_number">114.113.111-11</item>
     </dt_assoc>
    </item>
    <item key="reg_type">new</item>
    <item key='handle'>process</item>
    <item key="domain">mybraziliandomain.com.br</item>
    <item key="period">1</item>
    <item key='reg_domain'/>
    <item key='reg_username'>username</item>
    <item key='reg_password'>changeit123</item>
    <item key="custom_tech_contact">1</item>
    <item key="contact_set">
     <dt_assoc>
      <item key="owner">
       <dt_assoc>
        <item key="first_name">Antonio</item>
        <item key="last_name">Jobim</item>
        <item key="org_name">Antonio Jobim</item>
        <item key="address1">Rua João Cachoeira, 741</item>
        <item key='address2'></item>
        <item key='address3'></item>
        <item key="city">São Paulo</item>
        <item key="state">SP</item>
        <item key="postal_code">3168-1784</item>
        <item key="country">BR</item>
        <item key="phone">+55.4165551122</item>
        <item key="fax">+55.4165551123</item>
        <item key="email">ajobim12345@somedomain.com.br</item>
```

```
    </dt_assoc>
  </item>
  <item key="admin">
   <dt_assoc>
    <item key="first_name">Antonio</item>
    <item key="last_name">Jobim</item>
    <item key="org_name">Antonio Jobim</item>
    <item key="address1">Rua João Cachoeira, 741</item>
    <item key='address2'></item>
    <item key='address3'></item>
    <item key="city">São Paulo</item>
    <item key="state">SP</item>
    <item key="postal_code">3168-1784</item>
    <item key="country">BR</item>
    <item key="phone">+55.4165551122</item>
    <item key="fax">+55.4165551123</item>
    <item key="email">ajobim12345@somedomain.com.br</item>
   </dt_assoc>
  </item>
  <item key="tech">
   <dt_assoc>
    <item key="first_name">Antonio</item>
    <item key="last_name">Jobim</item>
    <item key="org_name">Antonio Jobim</item>
    <item key="address1">Rua João Cachoeira, 741</item>
    <item key='address2'></item>
    <item key='address3'></item>
    <item key="city">São Paulo</item>
    <item key="state">SP</item>
    <item key="postal_code">3168-1784</item>
    <item key="country">BR</item>
    <item key="phone">+55.4165551122</item>
    <item key="fax">+55.4165551123</item>
    <item key="email">ajobim12345@somedomain.com.br</item>
   </dt_assoc>
  </item>
  <item key="billing">
```

```xml
  <dt_assoc>
   <item key="first_name">Antonio</item>
   <item key="last_name">Jobim</item>
   <item key="org_name">Antonio Jobim</item>
   <item key="address1">Rua João Cachoeira, 741</item>
   <item key='address2'></item>
   <item key='address3'></item>
   <item key="city">São Paulo</item>
   <item key="state">SP</item>
   <item key="postal_code">3168-1784</item>
   <item key="country">BR</item>
   <item key="phone">+55.4165551122</item>
   <item key="fax">+55.4165551123</item>
   <item key="email">ajobim12345@somedomain.com.br</item>
  </dt_assoc>
 </item>
 </dt_assoc>
</item>
<item key="custom_nameservers">1</item>
<item key="nameserver_list">
 <dt_array>
  <item key="0">
   <dt_assoc>
    <item key="name">ns1.livednsservice.com</item>
    <item key="sortorder">1</item>
   </dt_assoc>
  </item>
  <item key="1">
   <dt_assoc>
    <item key="name">ns2.livednsservice.com</item>
    <item key="sortorder">2</item>
   </dt_assoc>
  </item>
  <item key="2">
   <dt_assoc>
    <item key="name">ns3.livednsservice.com</item>
    <item key="sortorder">3</item>
```

```
          </dt_assoc>
         </item>
        </dt_array>
       </item>
      </dt_assoc>
     </item>
    </dt_assoc>
   </data_block>
  </body>
</OPS_envelope>
```

XML Registration Response

```
</OPS_envelope><?xml version='1.0' encoding="UTF-8" standalone="no" ?>
<!DOCTYPE OPS_envelope SYSTEM "ops.dtd">
<OPS_envelope>
 <header>
  <version>0.9</version>
  </header>
 <body>
  <data_block>
   <dt_assoc>
    <item key="protocol">XCP</item>
    <item key="object">DOMAIN</item>
    <item key="response_code">250</item>
    <item key="is_success">1</item>
    <item key="parameters">
     <dt_array>
      <item key="0">
       <dt_assoc>
       </dt_assoc>
      </item>
      <item key="1">
       <dt_assoc>
        <item key="attributes">
         <dt_assoc>
         </dt_assoc>
        </item>
```

```
        </dt_assoc>
      </item>
     </dt_array>
    </item>
    <item key="rr_id">6466</item>
    <item key="response_text">Domain registration successfully
submitted</item>
    <item key="transaction_id">2011-04-14 18:12:39 25830 101</item>
    <item key="domain_id">256808</item>
    <item key="action">REPLY</item>
    <item key="attributes">
     <dt_assoc>
      <item key="registration_text">Domain registration successfully
submitted</item>
      <item key="admin_email">ajobim12345@somedomain.com.br</item>
      <item key="registration_code">300</item>
      <item key="waiting_requests_no">1</item>
      <item key="waiting_request">sw_register</item>
      <item key="id">296660</item>
     </dt_assoc>
    </item>
   </dt_assoc>
  </data_block>
 </body>
</OPS_envelope>
```