



المشروع التجريبي لأسماء النطاقات العربية

كيفية استقصاء
أسماء النطاقات
العربية

**How to Resolve
Arabic Domain Names**

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Arabic Domain Names Pilot Project

1. Introduction

Since ICANN has not yet supported full Arabic ccTLD/gTLD, any solution for supporting Arabic domain names would be only accessible locally. Therefore, there should be a work-around solution until Arabic domain names are world-wide supported. Hence, any entity needs to reach Arabic domain names (through this project) must therefore do some changes in the configuration files of their resolving/caching name servers. This work-around solution has no effect whatsoever on the normal English (ASCII) domain name resolution, in other words, it will not affect the regular DNS queries.

2. Work-around Solution

The technical committee has agreed on using the “stub zone” configuration option for resolving Arabic domain names. A “stub” zone is like a “slave” zone, except that it replicates only the NS records of a master zone instead of the entire zone.

```
// Example of a stub zone in bind 8+ configuration file (named.conf)
zone "xn--mgberp4a5d4ar" {
    type stub;
    file "idn.sa.zone" ;
    masters { 213.42.20.76; 212.26.18.12; };
};
```

Therefore, any entity wants to resolve Arabic domain names should configure its name server (resolver) as “stub zone” for all Arabic ccTLD zones, as described in the following section.

3. Configuring Bind name server

Follow the following steps in order to setup a name server (resolver) to support Arabic domain names:

1. Get the latest update of the project configuration file (which contains all the Arabic ccTLD zones), this file is located in the project website at:

http://arabic-domains.org/resources/Arabic_ccTLD_stub_zone_files.inc

Appendix I lists the content of this file. Please note that you should always contact the technical committee to get the up-to-date file or a list of all Arabic stub zones.

2. Include the above configuration file to the name server configuration file ("named.conf") using the "include" statement as follows:

```
// e.g. : add this line to your named.conf file.
// Note: the "file Arabic_ccTLD_stub_zone_files.inc" should be
// located in bind default directory.
Include "Arabic_ccTLD_stub_zone_files.inc";
```

File: named.conf

3. Test your work by trying to resolve some Arabic domain names, for example:
- xn--4gbrim.xn--mgberp4a5d4ar (موقع.السعودية)
 - xn--ugb6bax.xn--kgbdbap4b0ij (دليل.الإمارات)

Note: you can use any DNS tool (e.g. nslookup, dig, host) to do this test on your name server. Here is an example using nslookup:

```
$nslookup xn--4gbrim.xn--mgberp4a5d4ar
Server: mx1.ruh.isu.net.sa
Address: 212.26.18.23

Non-authoritative answer:
Name: xn--4gbrim.xn--mgberp4a5d4ar
Address: 66.225.214.202

$
```

For Questions or Seeking Help

- ◆ Please contact: isp-help@arabic-domains.org

More information

- ◆ The Project website:
<http://www.arabic-domains.org>
- ◆ Bind DNS server:
<http://www.isc.org/sw/bind/>
- ◆ The DNS resource directory:
<http://www.dns.net/dnsrd/>
- ◆ How to setup stub zones on Windows 2003 server
http://www.wown.com/articles_tutorials/DNS_Stub_Zones.html
- ◆ GNU Libidn:
<http://www.gnu.org/software/libidn/>

Appendix I

```
//***** Appendix 1 *****
// This file holds information about The Arabic
// Domain Name Pilot Project
//
// To reach Arabic domain names you need to include
// this file from your resolver configuration file
// (named.conf), as follows:
//   Include "Arabic_ccTLD_stub_zone_files.inc";
//
// To get the latest and up-to-date file check
// the web site www.arabic-domains.org
// for file name "Arabic_ccTLD_stub_zone_files.inc"
//
// last update:   June 6, 2005
//

zone "xn--igbhz7gpa" {
    type stub;
    file "idn.jo.zone" ;
    masters { 213.42.20.76; 212.26.18.12; }; };

zone "xn--kgdbap4b0ij" {
    type stub;
    file "idn.ae.zone" ;
    masters { 213.42.20.76; 212.26.18.12; }; };

zone "xn--mgbcpq6gpa1a" {
    type stub;
    file "idn.bh.zone" ;
    masters { 213.42.20.76; 212.26.18.12; }; };

zone "xn--pgbs0dh" {
    type stub;
    file "idn.tn.zone" ;
    masters { 213.42.20.76; 212.26.18.12; }; };

zone "xn--lgbat1ad8j" {
    type stub;
    file "idn.dz.zone" ;
    masters { 213.42.20.76; 212.26.18.12; }; };

zone "xn--mgbu4chg" {
    type stub;
    file "idn.km.zone" ;
    masters { 213.42.20.76; 212.26.18.12; }; };

zone "xn--ngbee7iid" {
```

```

type stub;
file "idn.dj.zone" ;
masters { 213.42.20.76; 212.26.18.12; }; };

zone "xn--mgberp4a5d4ar" {
type stub;
file "idn.sa.zone" ;
masters { 213.42.20.76; 212.26.18.12; }; };

zone "xn--mgbaxp8fpl" {
type stub;
file "idn.sd.zone" ;
masters { 213.42.20.76; 212.26.18.12; }; };

zone "xn--ogbpf8fl" {
type stub;
file "idn.sy.zone" ;
masters { 213.42.20.76; 212.26.18.12; }; };

zone "xn--mgba5b5cceu" {
type stub;
file "idn.so.zone" ;
masters { 213.42.20.76; 212.26.18.12; }; };

zone "xn--mgba3a5azci" {
type stub;
file "idn.iq.zone" ;
masters { 213.42.20.76; 212.26.18.12; }; };

zone "xn--mgb9awbf" {
type stub;
file "idn.om.zone" ;
masters { 213.42.20.76; 212.26.18.12; }; };

zone "xn--ygbi2ammx" {
type stub;
file "idn.ps.zone" ;
masters { 213.42.20.76; 212.26.18.12; }; };

zone "xn--wgb16a" {
type stub;
file "idn.qa.zone" ;
masters { 213.42.20.76; 212.26.18.12; }; };

zone "xn--mgbg8edvm" {
type stub;
file "idn.kw.zone" ;
masters { 213.42.20.76; 212.26.18.12; }; };

zone "xn--mgb7fjb" {

```

```
type stub;
file "idn.lb.zone" ;
masters { 213.42.20.76; 212.26.18.12; }; }
```

```
zone "xn--mgb7fyab" {
type stub;
file "idn.ly.zone" ;
masters { 213.42.20.76; 212.26.18.12; }; }
```

```
zone "xn--wgbh1c" {
type stub;
file "idn.eg.zone" ;
masters { 213.42.20.76; 212.26.18.12; }; }
```

```
zone "xn--mgbc0a9azcg" {
type stub;
file "idn.ma.zone" ;
masters { 213.42.20.76; 212.26.18.12; }; }
```

```
zone "xn--mgbah1a3hkrd" {
type stub;
file "idn.mr.zone" ;
masters { 213.42.20.76; 212.26.18.12; }; }
```

```
zone "xn--mgb2ddes" {
type stub;
file "idn.ye.zone" ;
masters { 213.42.20.76; 212.26.18.12; }; }
```