

Arabic Domain Names Pilot Project

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Pilot Project

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Agenda



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 - Obstacles
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Introduction

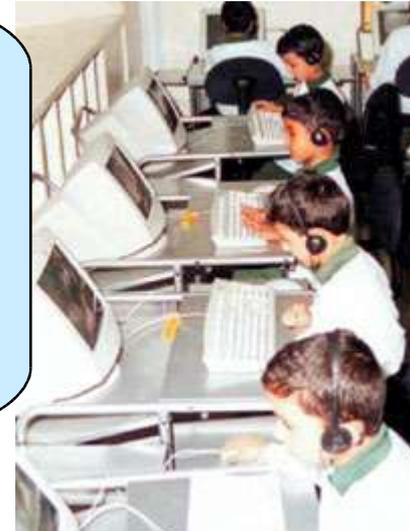
What is the problem?



- Current ASCII-based DNS are **incapable** of representing Arabic characters
- Difficulty to reach Arabic sites using English DNS (**pronunciation & spelling** problems)
- Full Arabic DNS will **encourage** Arab users to widely use the Internet

Arabic News paper
صحيفة الشرق الأوسط
www.al-sharqalawsat.com
www.asharqalawsat.com
www.asharq-alaowsat.com
www.elsharkelaosat.com

...



E-government Site
يَدَّر
www.yasser.gov.sa
www.yaser.gov.sa
www.yasir.gov.sa
www.yassir.gov.sa

...





Introduction

Internet in the Arab World



- **Statistics**
 - Population of Arab world: **275 B** (5% of world population)
 - Arab Internet users represent **0.9 %** of world users
 - **2.6 %** Average Internet penetration in Arab world
 - **1.2 %** PC penetration
 - Less than **10%** who can speak English in the Arab world
- **Obstacles facing Internet use**
 - Low level of telecommunication infrastructure
 - Lack of adequate regulations
 - High cost
 - Computer Illiteracy
 - Language barrier
 - Contents
 - Tools and applications
 - **Domain names**





Introduction

Arabic Language Characteristics



- Consists of 28 characters.
- Writing direction from Right-to-Left.
- Diacritics are used for pronunciations which lead to different meanings as well
- Two sets of numerals are used (Arabic and Arabic-Indic)
- Abbreviation is not common
- ...





Arabic Domain Names

Levels of an ADN Solution



1 Linguistic issues

To define the accepted Arabic character set to be used for writing Arabic domain names

2 Arabic TLDs

To define the top-level Arabic domain name (i.e., Arabic TLDs)

3 Technical solutions

IETF, ...

4 Arabic root servers

ICANN/IANA, ...





Arabic Domain Names Contribution Methodology



- Identifying problems & areas of contributions
- Participating and initiating interest groups & task forces
 - MINC, AINC, ADNTF (ESCWA-UN), GCC ccTLDs Group, ADNT (Arab League)
- Conducting web surveys
- Publishing reports & papers
- Meeting linguists (face to face)
- Testing and building local experiences





Arabic Domain Names

What has been done so far?



1 Linguistic issues

To define the accepted Arabic characters to be used for writing Arabic domain names

2 Arabic TLDs

To define the top-level Arabic domain (i.e., Arabic TLDs)

3 Technical solutions

IETF, MINC, ...

4 Arabic root servers

ICANN/IANA, ...

- Local community efforts:
 - Linguistic Committee - Arabic linguists - publishing papers - web surveys, ...
- Internet Draft
 - defining accepted Arabic character set for Arabic domain names
 - U0621-U063A (hamza-gheen)
 - U0641-U064A (feh-yeh)
 - U0660-U0669 (2,1,0,...,9)
 - U0030 - U0039 (0,1,2,...,9)
 - U002D (Hyphen)
 - U002E (Dot)
 - defining Arabic ccTLDs



Arabic Domain Names

What is remaining?



1 Linguistic issues

- To define the accepted Arabic character set to be used for writing Arabic domain names

2 Arabic TLDs

- To define the top-level Arabic domain name (i.e., Arabic TLDs)

3 Technical solutions

- IETF, MINC, ...

4 Arabic root servers

- ICANN/IANA, ...

No root servers yet available for non-ASCII domain names



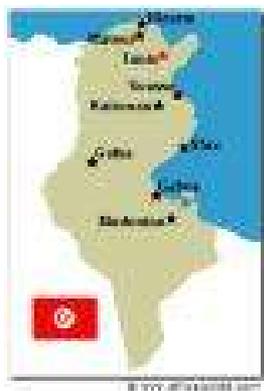


Testing Projects

1. At country-level



- Individually done by some Arab countries (ccTLDs)
 - Arabic.**English**
 - E.g., موقع-عربي.**sa**
 - Problem of mixing languages (left-to-right and right-to-left)





Testing Projects

2. GCC ADN Project



- **March 2004:**
 - During the Gulf Cooperation Council (GCC) ccTLDs group meeting on 7 March 2004,
 - “A Technical Proposal for Implementing Arabic Domain names in the GCC Countries” was presented and accepted
 - A technical taskforce was formed and assigned the task to implement the proposal within 6 months in **three phases**



ae, bh, kw, om, qa, sa





Testing Projects

2. GCC ADN Project



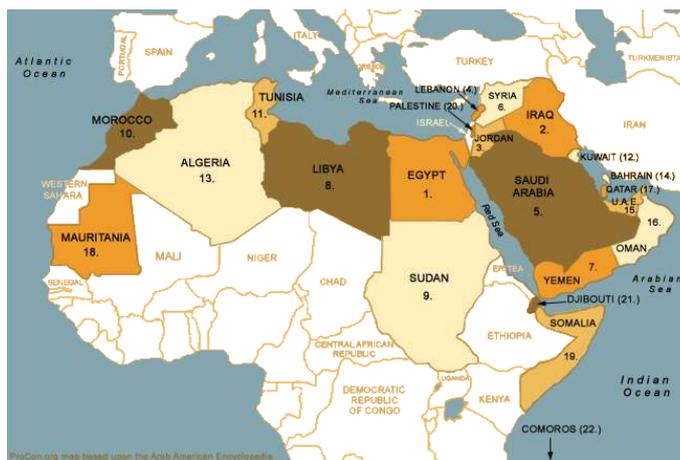


Testing Projects

3. ADN Pilot Project



- May 2005: the 2nd meeting of the Working Group on Arabic Domain Names, Cairo.
- Recommendations:
 - Extend the GCC Pilot Project for Arabic Domain Names to include all members of the Arab League (22 countries).
 - Renamed it to be "**Arabic Domain Names Pilot Project**".
 - It will be under the auspices of the Arab League.





ADN Pilot Project

Mission & Objectives



- **Mission**

- Implementing a **test bed** for Arabic domain names (ADN) in the **Arab world**.
- This will allow all Arab countries to early experience the use of Arabic domain names, identify their needs, agree on standards, locate possible problems, and develop required tools and policies.

- **Objectives:**

- To establish and implement Arabic domain names.
- To increase the Internet use in the Arab world by making the Internet easier to use for native Arabic speakers.
- To gain experience and knowledge of using Arabic domain names and share it with the Internet community.
- To test the implantations of Arabic domain names based on the guidelines drafted by the “Arabic Team for Domain Names”.
- To develop necessary tools required fro Arabic domain names and DNS.





ADN Pilot Project

Participants & Duration



- **Participants**
 - All members of Arab League are invited to participate in this pilot project
- **Duration**
 - Open ... will **continue** as a test bed until the recognition of Arabic TLDs by concerned international bodies, e.g., ICANN and ITU.
- **Team Structure**
 - **Steering Committee:**
 - general supervision of the project, management supervision of the Arabic root servers, and setting policies and procedures which include participation policies and use terms and conditions.
 - **Technical Committee:**
 - Providing technical support for participants and users, technical coordination between participants, technical supervision of the Arabic root servers, and enhancing and improving the project from technical point of view.





ADN Pilot Project

Deliverables



- Establish and activate the Steering and Technical Committees (**done**)
- Prepare and maintain a website for the project (**done**)
- Prepare the Arabic DNS root servers (**done**)
- Prepare the Arabic ccTLD servers for the participating countries and connect them with the Arabic root servers (**done**)
- Register and test Arabic domain names (**partially done**)
- Test and develop tools supporting the use of Arabic domain names and DNS (**done and in progress**)
- Test and develop end-user applications (browsers, email clients, etc) to ensure support of Arabic domain names
- Draft technical guidelines (**done**)
- Define policies and regulations for registering Arabic domain names (**done**)
- Participate in local and regional activities related to Arabic domain names (**done**)



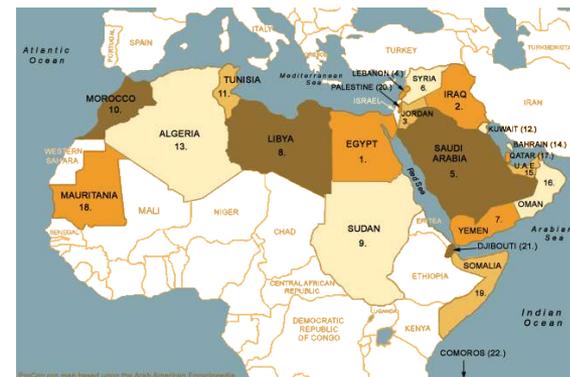


ADN Pilot Project

Accomplishments: Participants



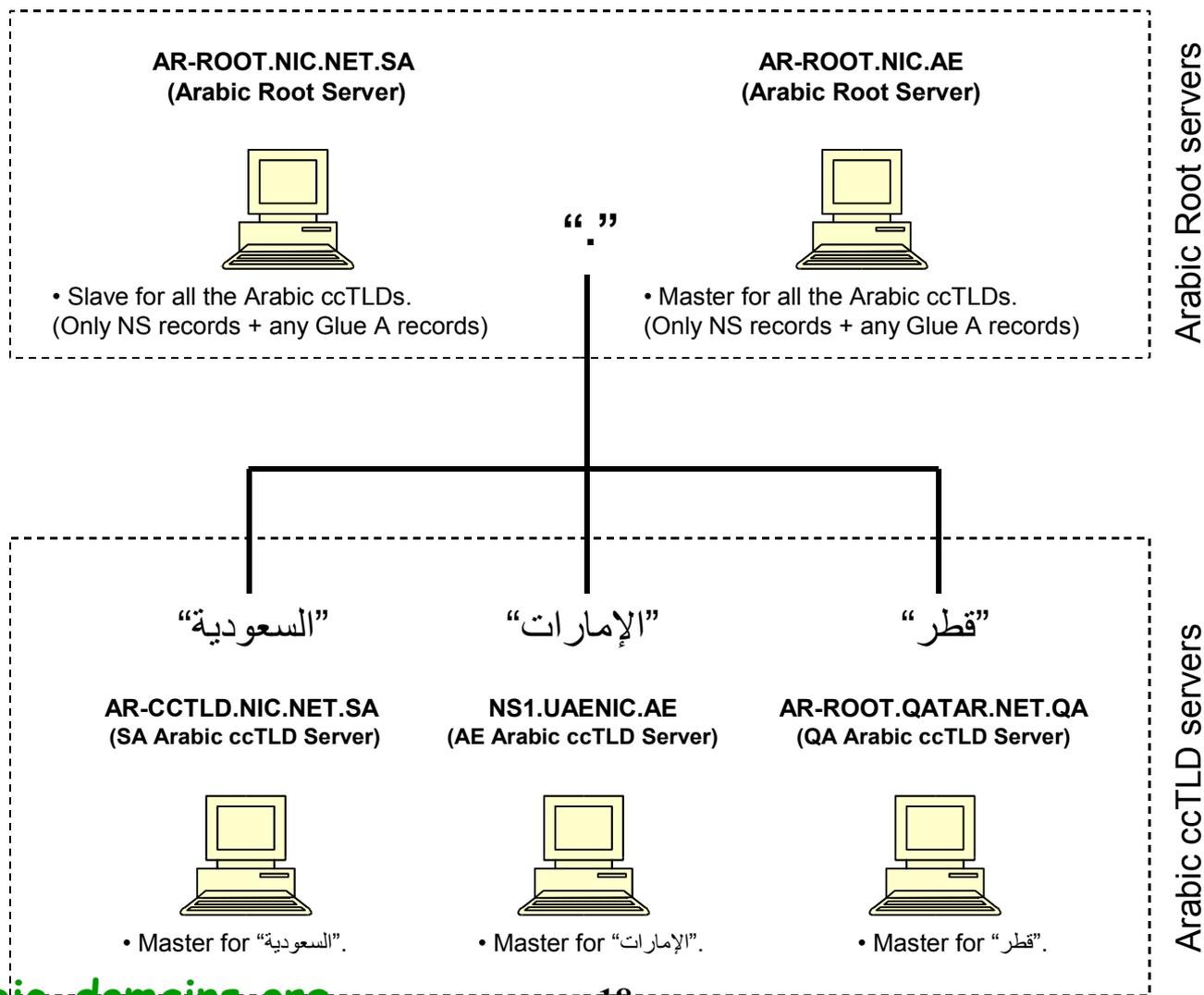
- Participated Countries:
 - Saudi Arabia
 - Saudi Network Information Center
 - United Arab Emirates
 - United Arab Emirates Network Information Center
 - Qatar
 - Internet Qatar
 - Oman
 - Oman Telecommunications Company
 - Palestine
 - The Government Computer Center
 - Egypt
 - Ministry of Communications and Information Technology
 - Tunisia
 - The Tunisian Internet Agency
 - Syria
 - Syrian Computer Society Network





ADN Pilot Project

Accomplishments: Root Servers





ADN Pilot Project

Accomplishments: Policy Docs



- The Steering Committee produced a number of policy documents (so far):
 - Project initiation Document
 - Guidelines for an Arabic Domain Name System (Internet Draft)
 - Terms and Conditions
 - Participation Policy for Arabic ccTLD managers
 - Guidelines for forming Arabic Domain Names





ADN Pilot Project

Accomplishments: Tech Docs



- The Technical Committee produced a number of technical documents (so far):
 - General Technical Introduction.
 - How to Setup Arabic root server.
 - How to Setup Arabic ccTLD server.
 - How to Resolve Arabic Domain Names (ISPS).
 - Requirements for Resolving Arabic Domains (End Users).





ADN Pilot Project

Accomplishments: Tools



- **IDN/ADN Converting Tool:**
 - Convert domain names form IDN to ASCII and vice versa.
- **DNS checker for Arabic Domains:**
 - Check if an IDN domain name is hosted on any name servers.
- **Host checker for Arabic Domains:**
 - Resolve IDN domains to the correspondent IP address and vice versa.
- **Zone file editor for Arabic domains:**
 - Create and manage Arabic zone files easily using this zone editor.
- **Arabic DN Registration system:**
 - Manage Arabic domain names registration information.





Saudi Stock Exchange - Tadawul - market and company information, Saudi Arabia Security Exchange. - Netscape

File Edit View Go Bookmarks Tools Window Help

http://الأسهم.السعودية/ Search

من سامبا From Samba

اوسع الخبرات

نقطة السوق معلومات الشركات الاستثمار الصفقات الأسهم أدوات المستثمر مركز المساعدة

لعرض أسعار للرمز نفذ بحث عن الرمز

0.33% 17.97

ملخص السوق

11:24 07/06/2004 الوقت

1,457,639,619.00 قيمة الأسهم المتداولة

10,913,714 كمية الأسهم المتداولة

14983 عدد الصفقات

69 الشركات المتداولة

26 أسهم ارتفعت

36 أسهم انخفضت

المؤشر العام

5480

5380

5360

5340

09 11 13 15 17

المؤشر العام ومؤشرات القطاعات

% التغيير المؤشر ①

0.33 17.97 ▲ 5,405.07 مؤشر السوق

الإعلان الوقت التاريخ

صافولا تفتتح أربع مراكز تجارية للتجزئة تتجاوز تكلفتها 800 مليون ريال 09:41:47 07/06/2004 جديد

جمعية التصنيع الوطنية تقرر توزيع الأرباح بواقع 5 ريال للسهم كما تقرر زيادة رأس مال الشركة وإصدار سهم لكل أربعة أسهم بسعر 135 ريال شاملاً علاوة الإصدار 08:18:50 07/06/2004

سيتم احساب نسبة التوزيع (10%) لسهم شركة التصنيع الوطنية على أساس السعر 246 ريال للسهم ليوم الاثنين 2004/06/07 07:22:33 07/06/2004

تعلن شركة اللجين عن بدء الاكتتاب في الأسهم الجديدة ويحق لكل مساهم الاكتتاب في سهمين مقابل كل سهم بسعر 60 ريال للسهم عن طريق فروع البنك الأهلي بدء من يوم السبت 6/12/2004 17:11:04 05/06/2004

يسر مجلس إدارة الشركة السعودية للصناعات المتطورة "المتطورة" دعوة المساهمين لحضور اجتماع الجمعية العامة العادية (للمرة الثانية) وذلك يوم الأربعاء 1425/4/21 هـ الموافق 9/15:14:39 05/06/2004

الخروج | خارطة الموقع | إخلاء مسؤولية | البحث | مواقع أخرى | تحميل البيانات | البنوك

Done

الأسهم السعودية

Compare with:

www.tadawul.com.sa



ADN Pilot Project Obstacles



- International bodies (e.g., ICANN) do not **truly** understand our needs
- Not having **IDN root servers** by itself is a big obstacle.
- Not all **browser vendors** have implemented IDN (e.g., MS Internet Explorer).
- Coordination with **DNS resolver** operators (e.g., local ISPs) to support our project.





Comments on ICANN Guidelines for Implementing IDN



- ICANN issued 2 guidelines for implanting IDN however:
 - They are **still** working on IDN solutions (**IDN.English**) that does not support full IDN (**IDN.IDN**).
 - Not suitable for languages that are not Latin-based (**right-to-left** or **ideographic** languages).
 - Version 2.0 reflects the experiences of the IDN registries who have only **implemented Version 1.0**.
 - Focusing on **IDN.English** solutions has introduced **lots of problems** because of using **multiple languages** in one label.





Comments on ICANN Guidelines for Implementing IDN



- **Poly-IDN:**

- represents an international domain name in which each label in the domain name can be expressed using **different language** character set:
- "Arabic.Chinese", "Chinese.Arabic", or "IDN.English"
- Example: موقع.com.

- **Mono-IDN:**

- represents an international domain name in which all labels in the domain names are expressed using the **same language** character set:
- "Arabic.Arabic" or "Chinese.Chinese"
- Example: موقع.السعودية





Conclusions



- **Mono-IDN** should be supported at the ccTLDs
 - ccTLD managers should be given the ability to implement **Mono-IDN** and develop their language guidelines and share them with ICANN.
 - ICANN may **continue** its effort on supporting **Poly-IDN** and solving their problems.
- Hence, we support the proposal submitted by the Chinese Domain Name Consortium:
 - Give the **priority to internationalizing ccTLDs**.
 - **One form of language** character variant of internationalized ccTLD is accepted.
 - ccTLD registries **make their own choice** of which IDN character sets.
 - **Register and operate** the internationalized ccTLDs in the **root DNS server** in the form of IDNA Punycode.





Thanks

Please

... all of us ...

Let us help others to be part of the Internet by speeding up the implementation of full IDN

شكرا

xn--mgbti4d

thanks

