



# SaudiNIC experience in ADN pilot project

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# SaudiNIC experience in ADN pilot project



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# Introduction : About SaudiNIC



- SaudiNIC is a non-profit entity that is operated by King Abdulaziz City for Science and Technology
- SaudiNIC is in charge of administering the domain name space under (.sa)
- Leading the local community effort toward adapting Arabic language in the Internet
- Coordinates with regional and international entities in order to present the local communities needs

# Introduction : ADN project



- 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
- The project is **not commercial** and had been initiated by a non profit organizations

# Introduction : why do we need ADN ?



- Current ASCII-based DNs are **incapable** of representing Arabic characters
- It is difficult to reach Arabic sites using English DNs (**pronunciation & spelling** problems)
- A full Arabic DN will **encourage** Arab users to widely use the Internet

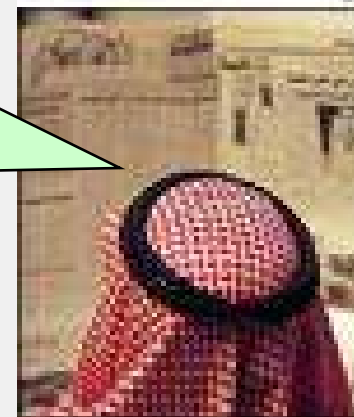
Arabic News paper  
صحيفة الشرق الأوسط  
www.al-sharqalawsat.com  
www.asharqalawsat.com  
www.asharq-alaowsat.com  
www.elsharkelaosat.com

...



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

...



# Introduction : why do we need ADN ?



- Some statistics about Arab internet users
  - Population of Arab world is about **5%** of world population
  - Arab Internet users represent about **1 %** of world users
  - Less than **10%** of them can speak English !!
- Obstacles facing Internet use
  - Language barriers is the biggest obstacle
    - Content
    - Tools and applications
    - Domain names
  - Low level of telecommunication infrastructure
  - Lack of adequate regulations
  - High cost
  - Computer Illiteracy

# Introduction : why do we need ADN ?



- Facts about Arabic language
  - Arabic language is special and different than other languages
  - It consists of **28** characters.
  - The writing direction is from **Right-to-Left**.
  - **Diacritics** are used for pronunciations which lead to different meanings as well
  - Two sets of **numerals** are used (Arabic and Hindi)
  - **Abbreviation** is not common
- Some proposed solutions E.g., mixing tow scripts :  
نطاق.com.sa
  - Dose not solve the problem since the user will have to write in tow different languages (left-to-right and right-to-left)

# ADN pilot project : Goals & objectives



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

# 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 .

# 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**)

# ADN pilot project : deliverables



- Test and develop end-user applications (browsers, email clients, .....etc) to ensure support of Arabic domain names  
(done)
- 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 : phases



- 1 - Linguistic issues
  - To define the accepted Arabic character set to be used for writing Arabic domain names
  - Local community efforts:
  - Linguistic Committees – Arabic linguists – published papers – web surveys
- Phase deliverables : (done)
  - An Internet Draft that defined the set of accepted Arabic character set for Arabic domain names

# ADN pilot project : phases



- 2- Technical solution
  - A technical solution that satisfies the project objectives must be found and tested .
- Phase deliverables : (done)
  - IDN.IDN was chosen as the technical solution

# ADN pilot project : phases



- 3- Arabic TLDs
  - To define the top-level Arabic domain name (i.e., Arabic TLDs)
- Phase deliverables : (done)
  - An Internet Draft that defined the Arabic ccTLDs for all the Arab countries was released .

# ADN pilot project : phases



- 4 – implementation on country-level
  - The project was implemented Individually by some of the Arab countries
- Phase deliverables : (done)
  - Establishing ADN ccTLDs root servers in the countries participated in this phase .

# ADN pilot project : phases



- 5- implementation on GCC Countries-level
  - During the (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
- Phase deliverables : **(done)**
  - Setting up Arabic GCC root servers.
  - Resolving Arabic GCC domain names.
  - Testing other DNS software and browsers.

# ADN pilot project : phases



- 5- implementation on GCC Countries-level
  - Writing technical documents about the gained experience
  - Studying the current available polices for domain registration and Writing policies and regulations for registering Arabic domains.
  - Build a website for the project and publish some tools and useful documents in it.
  - Encourage other Arab countries and entities to participate in this project.
  - Registering some test Arabic Domain names.

# ADN pilot project : phases



- 6- implementation on Arab Countries-level
  - 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 supervision of the Arab League.
- Phase deliverables :
  - It is the current phase ,

# ADN pilot project : Accomplishments



- Participated Countries:
  - **United Arab Emirates**
  - **Saudi Arabia**
  - **Qatar**
  - **Oman**
  - **Palestine**
  - **Egypt**
  - **Tunisia**
  - **Syria**

 United Arab Emirates  
[United Arab Emirates Network Information Center](#)

 Kingdom of Saudi Arabia  
[Saudi Network Information Center](#)

 State of Qatar  
[Internet Qatar](#)

 Sultanate of Oman  
[Oman Telecommunications Company](#)

 State Of Palestine  
[Ministry of Telecom and IT](#)

 Arab Republic Of Egypt  
[Ministry of Communications & Information Technology](#)

 Republic Of Tunisia  
[Tunisian Internet agency](#)

 Syrian Arab Republic  
[Tunisian Internet agency](#)



# ADN pilot project : Accomplishments



- The Steering Committee produced a number of **policy documents** (so far):
  - 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



- 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



- The Technical Committee produced a number of **tools** (so far):
  - 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.

# ADN pilot project : What is remaining?



- Expand the project to include all the Arab countries
- Find solutions to some of the technical problems encountered
- Coordinates our efforts with other similar projects in the area
- And with similar projects world wide
- Present our needs to international organizations

# Lesions learned : ADN registration



- SaudiNIC has opened the registration of Arabic domain names under (السعودية) for test purposes on:
  - 26 / September / 2005 (22/8/1426 H)
- Following the regulations of the Arabic Domain Names Pilot Project ([www.arabic-domains.org](http://www.arabic-domains.org))

# Lesions learned : ADN registration



# Lesions learned : ADN registration



المركز السعودي لمعلومات الشبكة

قواعد التسجيل تسجيل نطاق تعديل نطاق إحصائيات الأسئلة شائعة مساعدة اتصل بنا النطاقات العربية

نموذج طلب تسجيل اسم نطاق تجريبى تحت النطاق العربى السعودى (السعودية)

الخطاب ← إرسال الطلب ← التجربة ← النموذج

يرجى تعبئة جميع الحقول التالية بالشكل الصحيح  
ملاحظة: لتسجيل نطاقات نطاق عربى تم تسجيله مسبقا استخدم النموذج التالي: (www.sa.gov.sa)

أولاً: معلومات عن النطاق

اسم النطاق المراد تسجيله (مثلاً: (sa))

اسم النطاق العربى المراد تجريبه

اسم الجهة المستفيدة من النطاق

البريد الإلكتروني (البريد من (sa.gov.sa))

1- توجيهه إلى العنوان (URL) : (http://)

2- رقم الهاتف (IP Address) :

3- استخدام النطاق بشكل مستقل ومستقل على خادم أسماء النطاقات الخاص (DNS Server) :

اسم الخادم (Host name) :

رقم الخادم (IP address) :

معلومات الاتصال مع الجهة

اسمك

رقم هاتفك (جوال)

بوابة إلكترونية

ملاحظات

البحث عن نطاق عربى

السعودية

البحث

النطاقات العربية

قواعد التسجيل

خطوات التسجيل

طريقة الاستخدام

تسجيل نطاق عربى

تعديل نطاق عربى

www.arabic-d

# Lesions learned : ADN registration



Microsoft Internet Explorer - المركز السعودي لمعلومات الشبكة

Address: http://nic.net.sa/page.php?page=63&lang=0

ISa

المركز السعودي لمعلومات الشبكة

قواعد التسجيل تسجيل نطاق تعديل نطاق إحصاءات أسئلة شائعة مساعدة إتصل بنا النطاقات العربية

البحث عن نطاق عربي

السعودية

بحث

النطاقات العربية

قواعد التسجيل

خطوات التسجيل

كيفية الاستخدام

تسجيل نطاق عربي

تعديل نطاق عربي

نموذج طلب تعديل اسم نطاق تجريبي تحت النطاق العربي السعودي (.السعودية)

إسترجاع المعلومات

إستعراض وتعديل

يجب تعبئة جميع الحقول التالية بالشكل الصحيح

استرجاع سجل معلومات التسجيل

اسم النطاق العربي: [ ] .السعودية

رقم آخر طلب تسجيل / تعديل تم الجازه: [ ]

ملاحظة: في حال نسيان رقم آخر طلب تسجيل / تعديل تم تنفيذه أو في حال رغبتكم بإرسال طلب تعديل جديد مع تأكيد الطلب بالفاكس اضغط هنا [رابط طلب تعديل عادي](#)

مسح التالي

جميع الحقوق محفوظة للمركز السعودي لمعلومات الشبكة ISa



# Lesions learned : Obstacles



- Not having **IDN root servers** by itself is a big obstacle. registrants are not encaged to promote the registration of ADN since the concerned international bodies had not adapted **IDN.IDN**
- 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.

# Lesions learned : Common problems



- Users submit many requests for Arabic domains :
  - With Arabic spelling Mistakes! (مؤسسة)
  - With English pronunciation in Arabic letters. (ورلد وايد)
  - With Popular and general names of future selling purposes. (انترنت)
- Other problems :
  - Difficult to coordinate and convince every **ISP** to join the project so users can reach ADN
    - Project can not expand without World-wide Root server.
  - Many users are using Microsoft IE (Ver. 6 or older) browser which does not support IDN .

# Our recommendations



- We strongly believe that users in local communities have the right to be served in their own languages, international bodies should start planning from the actual needs of the users.

شكرا

xn--mgbti4d

Thanks