



# Overview of UAEnic

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- Who is UAEnic?
- The Objectives
- UAEnic Time Lines
- Internet in the UAE
- Domain Name System
- Operating Mirror Root Server(s)

Agenda

- UAEnic Main Tasks
- Domain Names Statistics
- (.ae) DNs Growth
- Projects Implemented/Activities



## Who is UAEnic?



- UAE Network Information Center (UAEnic)
- The (.ae) Domain Name Registry ccTLD of the UAE since 1995.
- Local Internet Registry (LIR)
- Part of Etisalat.



# The Objectiives



- Give the UAE an extensive global presence in the cyber world.
- Treat all eligible applicants equally on a first come, first served basis.
- Promote the use of Internet in UAE for economical, educational and cultural development.





- In 1994, UAE University was delegated by IANA to run (.ae) Domain Name Space.
- In 1995, UAEnic was re-delegated to run (.ae) Domain Name Space with mutual agreement with UAE University.
- In 1995, UAEnic was authorized LIR by RIPE NCC.





- In 2002, UAEnic was allocated IPv6 Addresses. (first in the region).
- In 2002, UAEnic was authorized by ITU to run ENUM (+971) Registry (among the first in the world).
- Founding Member of UAE IPv6 Task Force.



#### **Internet Penetration Rate**



Note: Figures are as of December, 2005



#### Domain Name System (DNS)



- Dubai Data Center
- Abu Dhabi Data Center

# DNS Outside UAE

- Europe RIPE NCC
- Asia Pacific APNIC
- US ISC





#### **DNS Outside UAE**







**Operating Mirror Root Server(s)** 



- Mirror of Root Name Servers
  - Hosting of "K" Root Name Server in Abu Dhabi (Apr 2005)
  - Hosting of "F" Root Name Server in Dubai (Nov 2004)
- Advantages
  - Improve DNS Response Time for Users in the UAE as well as in the Region.
  - Improve Internet Stability, Resiliency and Performance.





#### Root Servers Response Time

450 m, 427 🗖 i, 420 🗖 a 400 🔳 b □ c 350 LLC: 330 🗆 d e, 309 e. 306 ■ g, 293 h, 30 □ k, 299, 29 ■ b, 29<mark>5</mark> e 300 284 b, 273 ■ i, 270<sup>1, 280</sup> 1,276 🔲 f d. 27 Query Time (Msec) f, 26 g, 219, 25 **g** C, 242 250 -Crd. 22 🗆 h j, 201 **i** 200 m, 179 ∎ j 🗆 k 150 m 100 50 f. 3 🗅 k, S 0 After F-Root Before F-Root 284 🗆 a 281 295 273 = b 242 330 □ c 270 227 🗆 d 306 309 e e 🗖 f 261 3 293 249 **g** 303 250 🗆 h 420 270 **i •** j 207 280 299 5 🗆 k 293 276 427 179 🗖 m

13 ROOT SERVERS

DNS Response Time





- Handles day-to-day operation of Domain Name Registration and IP Address assignment to the local Internet community
- Maintain UAEnic Databases for Domain Names and IP Addresses (IPv4 and IPv6)
- Setting up policies regulating domain name registration and IP Address Assignment.





- Participate in International events organized by ICANN, RIPE, ISOC, ITU, WIPO and any other events that are related to domain name and IP Address.
- Promote and rise awareness among the local community on latest issues related to domain names and IP Addresses in particular and Internet in general.



#### **UAEnic Domain Names** Categories and Charges



Category	1 year (AED)	3 years (AED)	10 years (AED)	50 years (AED)
.ae	150	400	1,200	3,500
.net.ae	150	400	1,200	-
.ac.ae *	75	195	560	- /
.gov.ae *	75	195	560	-
.org.ae *	75	195	560	-
.sch.ae *	75	195	560	
.mil.ae *	75	195	560	
.pro.ae	75	-	-	-
.name.ae	50	-	-	-

\* One Free Domain Name per Entity



- The total number of domain names registered as of October 2005 is 29,669
- .ae (direct) = 28,278
- .gov.ae = 423
- .net.ae = 214
- .org.ae = 256
- .sch.ae = 345
- *.mil.ae* = 15
- .ac.ae = 138





# Evolution of (.ae) Domain Name Unfinic





- **Registration Policies:** 
  - Introduce a flat name structure (<u>www.etisalat.ae</u>) to replace (<u>www.etisalat.co.ae</u>) (Jan 2002)
  - Open Domain Name Registration under (.ae) direct for Individual (Oct 2002)
  - Open Domain Name Registration under (.ae) for International (Oct 2002)



**UAEnic Project Implemented / Activities** 

- **Registration Policies:** 
  - Developed Domain Name Dispute Resolution Policy in June 2002, endorsed by WIPO (the first in the region)
  - Introducing long period contract for Domain Names Registration i.e. 3 years and 10 years (Oct 2002)
  - Introduce second level domains .pro.ae and .name.ae.
  - Introduce longer period contract for Domain Name Registration i.e. 50 years (Apr 2005)



UAEnic Project Implemented / Activities Activities

- DNS/IP Infrastructure Development and Services:
  - Re-Engineering of (.ae) Name Servers to increase resiliency and availability.
  - Increase the Redundancy and Resiliency of (.ae) Name Servers (Europe – RIPE NCC, Asia Pacific – APNIC and US - ISC)
  - Received IPv6 Allocation from RIPE NCC in 2002 (first in the region)



- Testing IPv6 connectivity with Universities and Colleges in the UAE, in step to create the National IPv6 Native Network
- Coordinate IPv6 connectivity testing with the ISPs in the GCC
- Hosting a Mirror Server of "F" Root Name Server in the UAE (Nov 2004)
- Coordinate IPv6 connectivity testing with the ISPs in the GCC



- Testing ENUM Services: +971 12345678 → (8.7.6.5.4.3.2.1.1.7.9.e164.arpa)
- Establishment of UAEnic Help Desk (800 6060) operating 24x7
- Hosting a Mirror of K Root Name Server (Apr 2005)
- Implementing of WHOIS for (.ae) Domains



- Arabic Domain Name:
  - Participate actively in various International forums on IDN (MINC, AINC, ICANN ... etc)
  - Developing test-bed for Arabic Domain Name under (امارات) ccTLD e.g. (امارات) in the UAE.
  - Co-founder of the Arabic Domain Name Pilot Project in the GCC





- We recommend:
  - RIPE to consider conducting one of its coming Meetings in the region.
  - RIPE to increase number of training courses in the region.
  - ISPs are encouraged to attend RIPE Meeting





# Thank You

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