

National Internet Exchange of India (NIXI)

APRICOT (Feb 2009)

14TH Edition

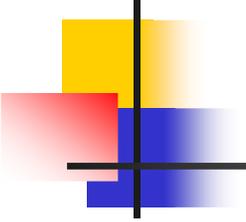
SOFITEL PHILIPPINE PLAZA

MANILA

Presentation done by:

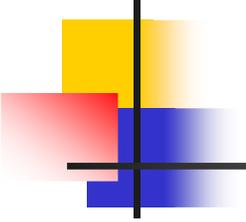
Amitabh Singhal – Founder, Board Member & Former CEO

Sharad Sanghi – Board Member



NIXI (National Internet Exchange of India)

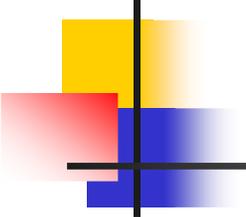
- **NIXI is a not-for-profit Company under section 25 of the Companies Act 1956 of India.**
- **The Company was formed on 19th July, 2003, with joint efforts by ISPAI (Internet Service Providers Association of India) and DIT (Department of Information Technology, Government of India).**
- **NIXI is the only neutral Internet Exchange in the country.**



NIXI (National Internet Exchange of India)

Main Functions:

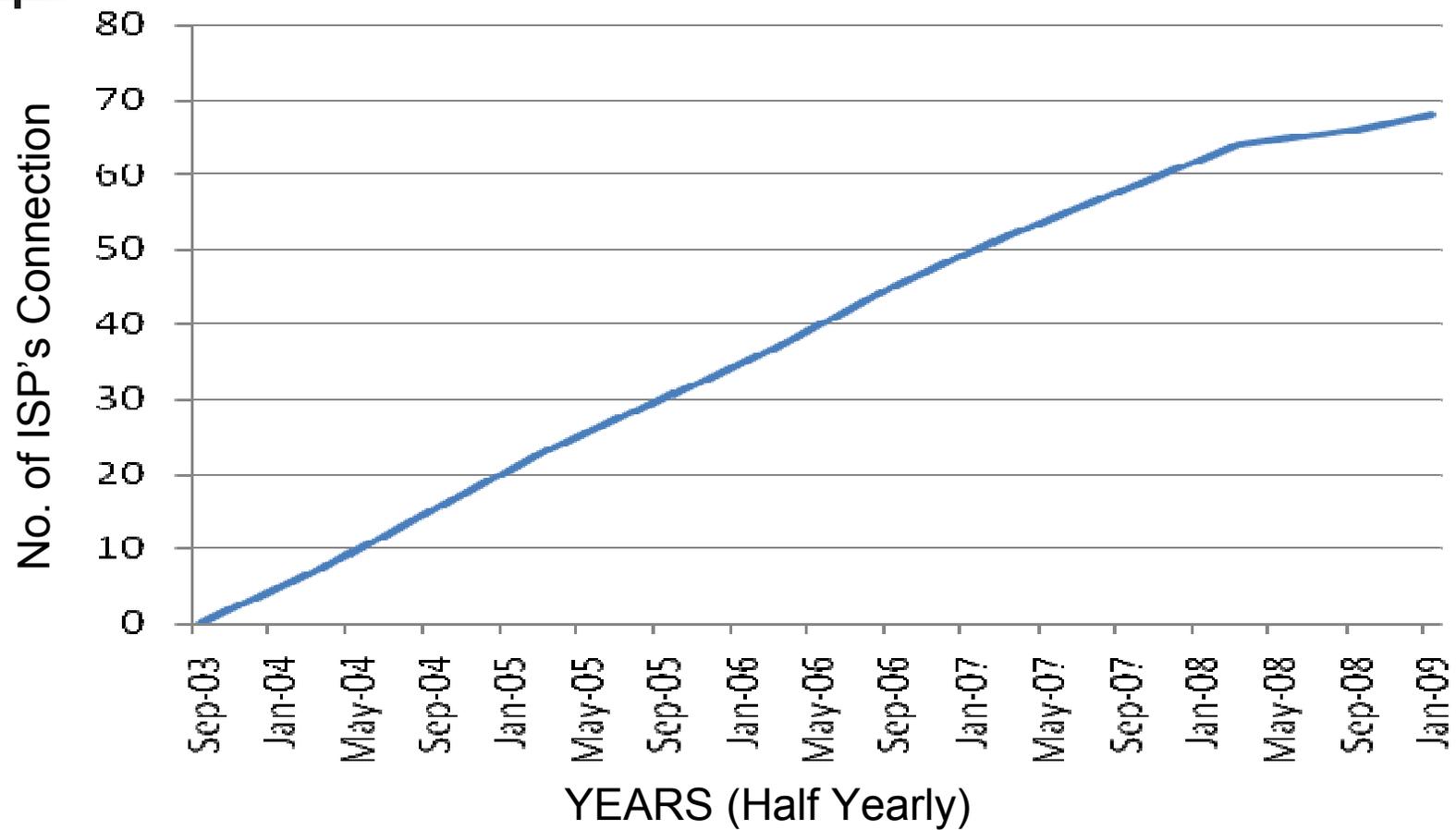
- **Internet Exchange** points with 30 major ISPs with 67 connections at SEVEN locations.
- **.IN Registry**, with about 500000 Domain names registered through 58 Registrars located globally.
- NIXI is active in International Forums like IGF, ICANN, APTLD, SANOG, APNIC etc.
- 3 Anycast Root servers (F,I and K) at 3 IXP locations.
- Sponsoring Open Source projects, IPv6 and Internet Awareness campaigns etc.

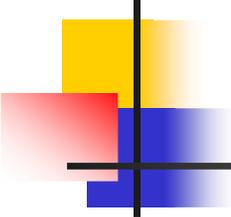


NIXI (National Internet Exchange of India)

<u>IXP Locations:</u>	<u>No of ISPs</u>	<u>Traffic Stats/Daily 5 Min</u>	
1. Mumbai	21	In 2869.9 Mb/s	Out 2739.8Mb/s
2. Delhi	17	973.0 Mb/s	973.3Mb/s
3. Chennai	12	327.8Mb/s	326.2Mb/s
4. Kolkata	05	338.4Kb/s	339.7Kb/s
5. Bangalore	05	759.0Kb/s	760.7Kb/s
6. Hyderabad	04	308.4Kb/s	310.0Kb/s
7. Ahmedabad	03	462.0Kb/s	462.8Kb/s
8. Mohali	(Upcoming)		
9. Lucknow	(Upcoming)		

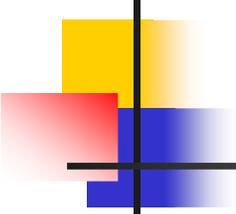
Growth of ISP Connections at NIXI





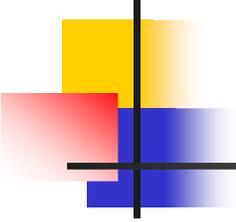
Main Routing Policies

- An ISP at any NIXI node must at a minimum announce all its regional routes to the NIXI router at that NIXI location.
- ISPs must announce all their routes at least at one of the IXP locations
- If one NIXI member is already providing transit to another NIXI member, the exchange of regional routes mentioned above, may also happen using a separate private connection between the ISPs.
- ISPs are allowed to privately peer at NIXI using their own switch
- ISPs are reqd to announce only those routes that belong to their AS, and their customer routes at the NIXI.
- No transit traffic is allowed to be carried.
- An ISP must Upgrade its port capacity or take additional port if 95th percentile of its OUT or IN traffic in a month crosses 70% of its port capacity



Tariff Policies

- Company Membership Fee - INR 1000 per annum (\$20)
- Joining Fee at each IXP - INR 1000 one time (\$20)
- Rack Space - 2u Free, Add INR 2500 per u (\$50)
- Port Charges:
- 2 Mbps - INR 24,000 (\$480)
- 10 Mbps - INR 200,000 (\$4000)
- 100Mbps - INR 400,000 (\$8000)
- 1000 Mbps - INR 600,000 (\$1200)
- Additional Port for 100Mb and above at 50% of the slab charge
- Introducing a downward revision to reduce & eliminate 2 Mbps slab
- Between ISP A and ISP B, B pays to A, an amount equal to Rs. 50 (\$1) per Gb x [traffic from A to B - traffic from B to A]. Here, the concept is of "Requester Pays" to promote domestic content.
- $C \times P \times (X - Y)$ Where C is currently Rs. 50 per GBytes as mentioned in (b) above, and P has a value of 0 or 1 respectively if the ISP is a standalone Data Center (i.e his outgoing traffic is 5 times his incoming traffic).



Plans

1. Increase ISP participation at regional IXs
2. Reviewing Port tariff plan. Reduce current pricing and increase port size
3. Preparing to set up NIR
4. Support IPV6 plans
5. DNS Security implementation
6. Supporting IDN development in various Indian languages



Background



- NIXI (National Internet Exchange of India) is responsible for Maintaining **.IN** Country Code Top Level Domains (ccTLDs)
- Originally opened in 1992
 - Managed by National Centre for Software Development (NCST), then by Centre for Development of Advanced Computing (C-DAC)
 - Restrictive eligibility requirements
 - Registry and Registrar functions combined in one
 - Difficult, expensive and lengthy registration process
 - About 6600 names in the database
- 2nd Aug, 2004, Government of India decided to transfer the .IN Domain Name activity from National Center for software technology, Mumbai to NIXI.
- .IN Registry under NIXI became functional with effect from 1st Jan, 2005 with liberal policies



Where are we today ?



- Half a million domain names registered
- More than 50 Registrars appointed across the world.
- Qualified Arbitrators appointed for dispute/conflict management of domains, with a vibrant Dispute Resolution Policy
- Proactively taking steps to eliminate domain tasting, reduce abuse of domain names, Registrant protection measures etc.



Products available...



.IN Zones

Unlimited registrations
available for all

.in	org.in
co.in	firm.in
net.in	gen.in

Reserved for use by
qualified organizations in India

ac.in (Academic)	gov.in (Government)
res.in (Research)	mil.in (Military)



How do I get one ?



Click one to get one - <http://www.registry.in>

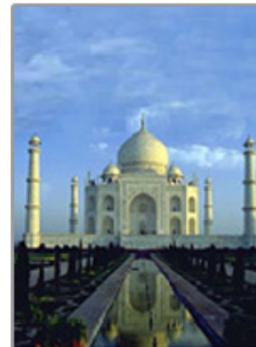
Click on
Accredited Registrars



The screenshot shows the INRegistry website homepage. At the top left is the INRegistry logo, and at the top right is the text "INRegistry The .IN Domain Name Registry" next to a globe icon. Below the header is a navigation menu with links: Home >, About .IN, How to Register, Accredited Registrars, Policies, Frequently Asked Questions, WHOIS Search, For Registrars, News, About INRegistry, and Contact Us. The main content area features a headline ".IN Registry: India's Official .IN Domain Name Registry" with a sub-image of the Taj Mahal. To the right of the image is a paragraph stating ".IN domain names are available to anyone! Companies, individuals, and organizations in India and abroad are eligible. Show your pride by using a .IN domain name -- the symbol of India's future!" followed by a link "Click Here To Learn How to Register." On the far right, there is a "Perform a whois search..." form with a "GO" button and a link to "Advanced Search". Below that is a "Press" section with a date "October 30, 2007:" and a link to "Cyber-Squatting: The New Gateway to Identity Crime, Economic Times", along with links for "More Press Articles" and "More Press Releases". At the bottom, a "News About .IN" section starts with "October 22, 2007: The .IN registry has reached 200,000 registrations".

[Home >](#)

.IN Registry: India's Official .IN Domain Name Registry



.IN domain names are available to anyone! Companies, individuals, and organizations in India and abroad are eligible. Show your pride by using a .IN domain name -- the symbol of India's future!

[Click Here To Learn How to Register.](#)

Perform a whois search...

www. .in

[GO](#) [Advanced Search](#)

Press

October 30, 2007:
[Cyber-Squatting: The New Gateway to Identity Crime](#),
Economic Times

[More Press Articles](#)

[More Press Releases](#)

News About .IN

October 22, 2007: The .IN registry has reached 200,000 registrations



How do I get one ?



Click one to get one - <http://www.registry.in>

Signup with one of our 58 appointed registrars across the country

A simple online process would make you a proud owner of .IN

The screenshot shows the INRegistry website interface. At the top, there is a navigation bar with the INRegistry logo and the text 'The .IN Domain Name Registry'. Below the navigation bar, there is a main content area with a sidebar on the left and a main content area on the right. The sidebar contains a list of links: 'About .IN', 'How to Register', 'Accredited Registrars', 'Public Information', 'Frequently Asked Questions', 'WHOIS Search', 'For Registrars', 'News', 'About INRegistry', and 'Contact Us'. The main content area is titled 'Accredited Registrars' and contains the following text: 'The below registrars are fully accredited, and are authorized to register .IN domain names. Registrars marked with an asterisk (*) are currently participating in a marketing program sponsored by NIXI.' Below this text, there are three bullet points: 'See list in alphabetical order.', 'See list in order of sales rank.', and 'Government registrars'. Below the bullet points, there is a section titled 'REGISTRARS IN ALPHABETICAL ORDER:' followed by a list of registrars: '#1 IndianDomains d.b.a. Mitsu.in *', 'Aapkadomain.com (BE Software Solutions) *', 'Alankit Technologies Ltd *', 'Ascio Technologies *', 'BiznetIndia Dot Com Private Limited *', 'Broadspire India Private Limited', 'Business Solutions *', 'CORE Internet Council of Registrars', 'CSC Corporate Domains, Inc.', 'Data Infosys Limited *', 'Direct Information Pvt. Ltd. d/b/a PublicDomainRegistry.com *'. On the right side of the page, there is a search box with the text 'Perform a whois search...' and a 'GO' button. Below the search box, there is a 'Press' section with the text 'October 30, 2007: Cyber-Squatting: The New Gateway to Identity Crime, Economic Times' and a link to 'More Press Articles'. Below the 'Press' section, there is an 'In the News' section with the text 'November 7, 2006: .IN Registrations Exceed 2 Lakh, Business Standard India'.



Want to be an accredited .IN registrar ?



INRegistry
The .IN Domain Name Registry

Home > [For Registrars](#) > [Become a Registrar](#) >

Become a Registrar

Registrars will be officially accredited after their application is accepted by the Registry, they sign a contract with the Registry, set up a financial account, and prove their technical ability to interact with the registry system.

Each registrar will use the Extensible Provisioning Protocol (EPP) client to connect to the .IN registry database. The registry provides an EPP toolkit to interested parties.

To become accredited, you must begin by [submitting an application](#).

Perform a whois search...
www. .in
[GO](#) [Advanced Search](#)

Press

October 30, 2007:
[Cyber-Squatting: The New Gateway to Identity Crime](#), Economic Times
[More Press Articles](#)
[More Press Releases](#)

In the News

November 7, 2006:
[.IN Registrations Exceed 2 Lakh](#), Business Standard India

Under **For registrars**
Click **Become a member**



Thanks

For further information please visit :-

<http://www.registry.in>