

# **.np ccTLD updates & General overview of ICT in Nepal**

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Presented By  
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# Overview

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- Introduction
- History of .np domain
- Objectives of .np domain
- .np Domain Registration policies
- .np Domain structure
- Registration process of .np domain
- Staffing and regulatory bodies for .np domain
- Funding model (fee structure )
- Future plans
- General overview of ICT in nepal

# Introduction

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- ❖ This presentation focus on how the NP ccTLD domains are registered , managed .
- ❖ It enlist .np domain structure, policies and future plans to optimize and scaling up domain services.
- ❖ The later part of this presentation will be the overview of ICT developments in nepal.

# History of .np

|   |   |
|---|---|
| <b>Introduced</b>                             | <b>1995</b>   |
| <b>Registry &amp; sponsor &amp; Registrar</b> | <b>Mercantile Communications Pvt. Ltd<br/>( <a href="http://www.mos.com.np">www.mos.com.np</a>)</b> |
| <b>Registration</b>                           | <b>Provided free but local presence is required</b>   |
| <b>Structure</b>                              | <b>registrations are made in third level beneath various<br/>second level generic domains</b>       |
| <b>Web site</b>                               | <b><u><a href="http://www.register.com.np">www.register.com.np</a></u></b>                          |
|   |   |

# Objectives of .np domain

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- ❖ To promote increased use of the .np domain by the Nepal Internet community
- ❖ Accountable to all members of the country online community
- ❖ Operate as a fully self funding non-profit organization and accountability to domain community.
- ❖ Administer the ccTLD to foster development of the national and global internet community
- ❖ Enhance benefits to internet users by promoting competition, fair trading and consumer adequate protection of intellectual property of .np domain

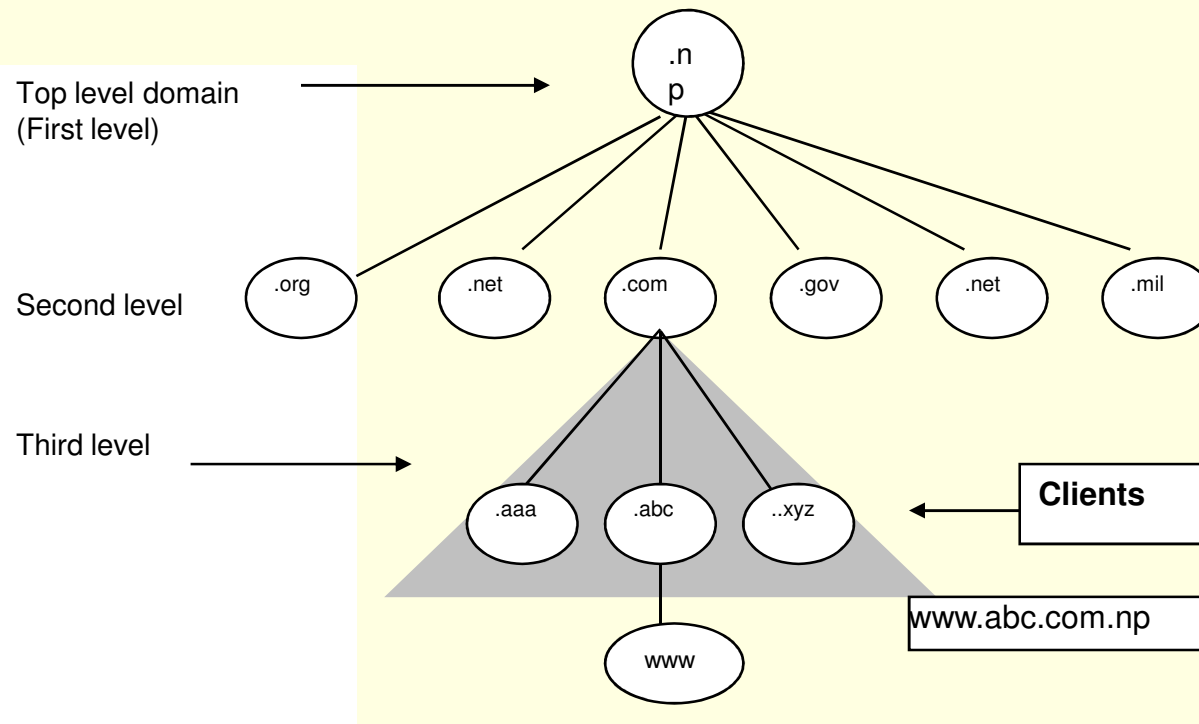
# .np Domain Registration policy

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- ❖ The registration of a domain name is undertaken on a First Come - First Served basis
- ❖ Any claim to trade name or copyright under .NP domain name is considered valid ONLY if it is registered with an official trade-name/copyright/patent office in Nepal.
- ❖ Personal domains can be registered with providing citizen as an identity  
([http://www.register.com.np/terms\\_and\\_conditions.asp](http://www.register.com.np/terms_and_conditions.asp))

# .np Domain structure

The basic structure of DNS is systematically organized in hierarchical structure that is segregated by dot.



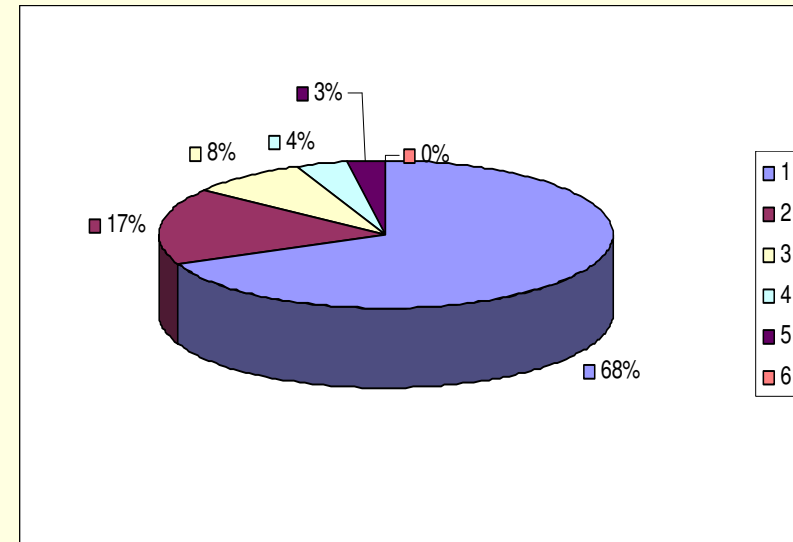
# .np Domain structure

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- ❖ 3rd level domain is allocated to client. Registrants (clients) can choose any domain name which has not been registered .
- ❖ To provide faster service of np domains, we have 6 slave servers including one anycast server which are hierarchical in nature and placed in different regions around the world.

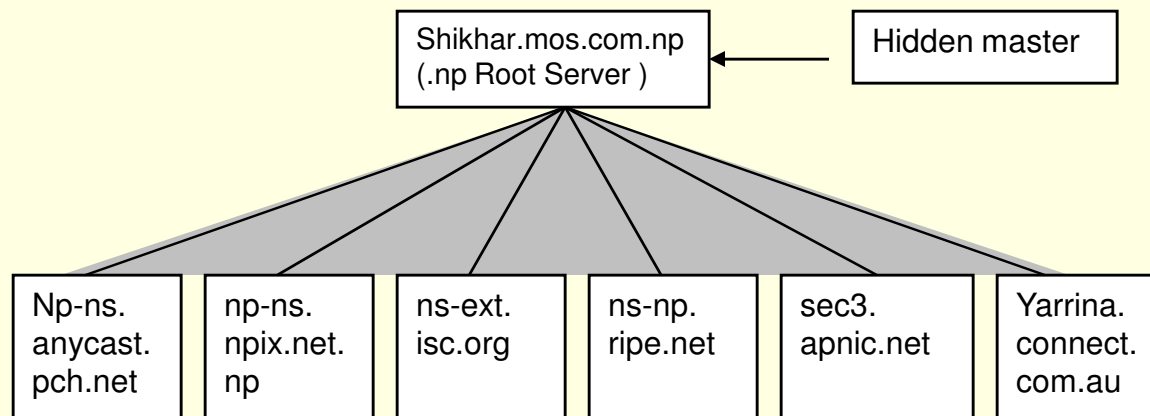
# .np domain structure

| Sno | Domain category | Total domain |
|-----|-----------------|--------------|
| 1.  | com.np          | 7978         |
| 2.  | org.np          | 1977         |
| 3.  | edu.np          | 972          |
| 4.  | net.np          | 420          |
| 5.  | gov.np          | 309          |
| 6.  | mil.np          | 1            |

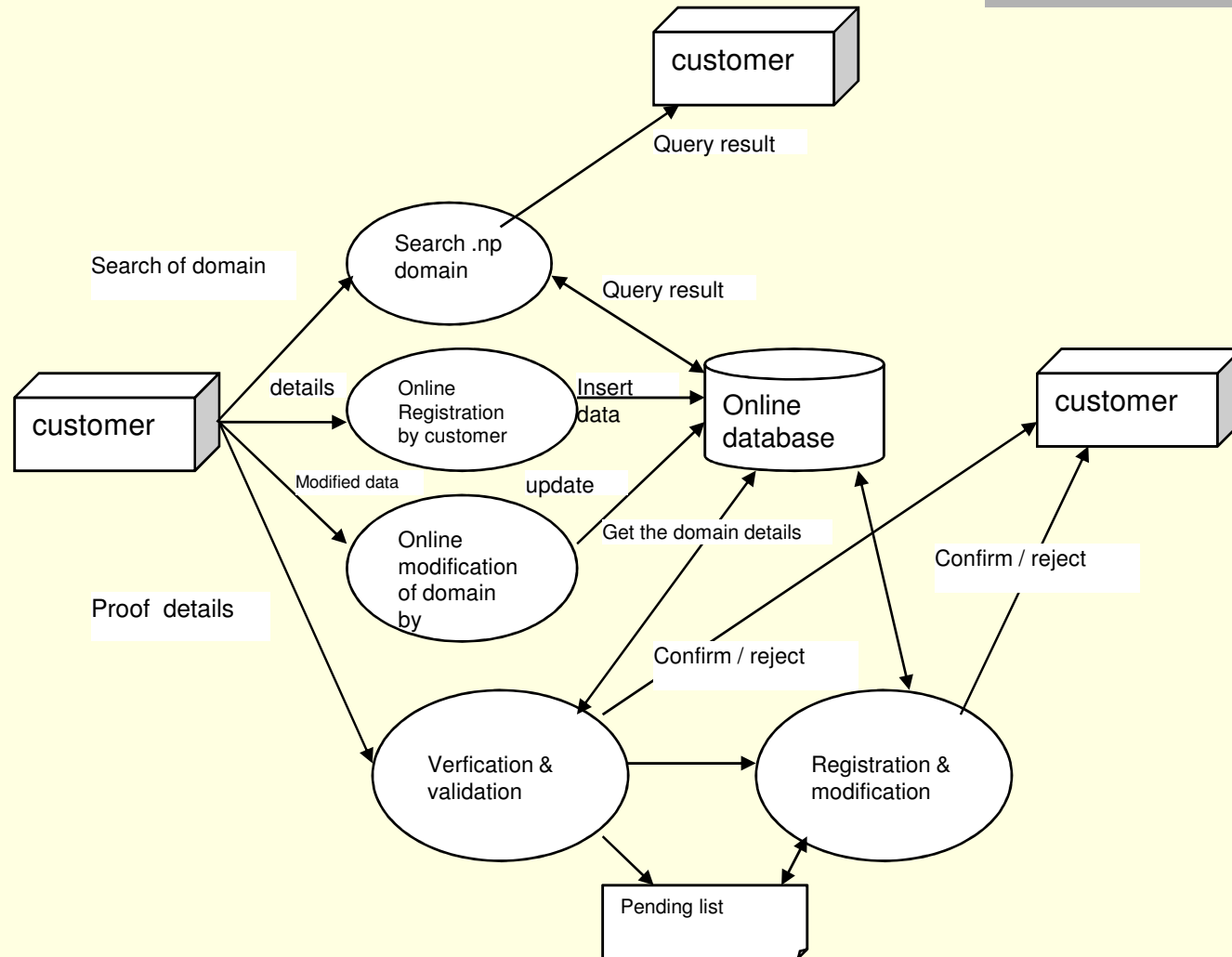


- 30% rise in .np domains this year
- 18% rise in .np domains last year

# Structure of np root servers



# Data Flow Diagram of .np registration and modification process

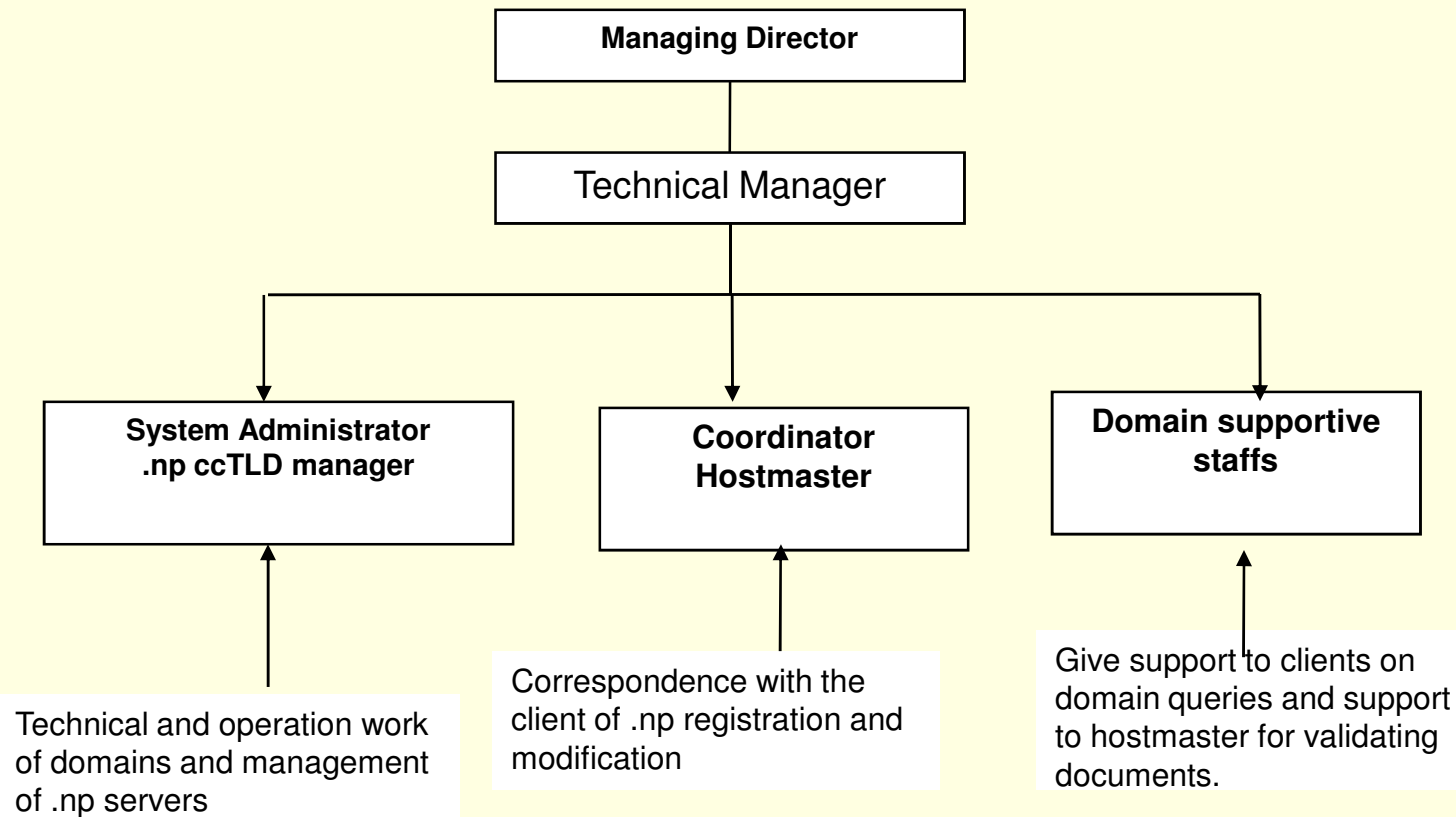


# Registration process of .np domain

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- ❖ The client will fill the online form from [www.register.com.np](http://www.register.com.np)
- ❖ The client has to submit the proof affidavit and reason for the domain registration.
- ❖ The domain will be registered on the first – come first service [FIFO] .
- ❖ The co-ordinator/hostmaster will validate the client validation and verification process before sending to the system Administrator for the domain registration.
- ❖ The system Administrator will check the online database for registration and modification of domain names.
- ❖ After registration or modification, the client will be notified about the domain status ( domain registered or rejected with reason)

# Staffing and regulatory bodies for .np domain



# Funding model

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- ❖ .np registration is available free of cost provided local presence is required
- ❖ Mercantile providing .np registration on free to make the people more use of web technology.
- ❖ Mercantile is the premier ISP in nepal and providing different IT solutions and services.

# Future plans

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- ❖ TSIG will be implemented soon for secure zone transfers
- ❖ Need to automate the registry management system to make ease of operation and could provide faster service to customers.
- ❖ As localization has already began in nepal, IDN stuffs need to be implemented at the earliest.

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General overview  
of

ICT Developments in Nepal

# Outline

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- General overview of Nepal
- Challenges
- IT trends
- Internet usage
- Localization efforts & Telecommunication in Nepal
- Achievements

# Challenges

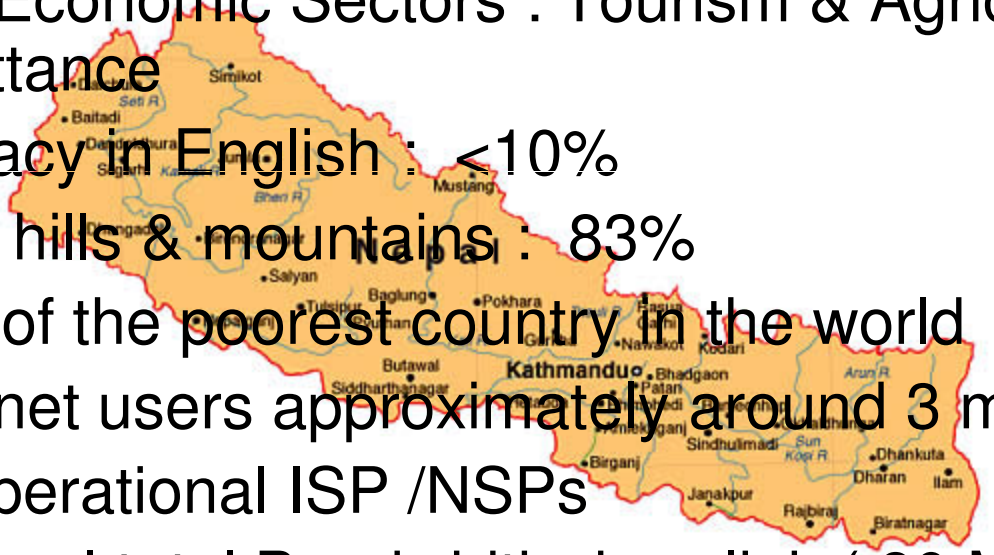
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- Connected to the internet backbone via expensive vsat links
- Around 70% is terrai region difficult for the rural and pops ( city ) connectivity
- Political instability for quite long time which makes difficult for long term investment and plan
- Majority of the people don't know to utilize internet , lacks of quality education and awareness
- GDP of the people is extremely low, therefore lack of market.

# General overview of Nepal



- Population in million : 26
- Rural population : 85%
- Key Economic Sectors : Tourism & Agriculture & remittance
- Literacy in English : <10%
- High hills & mountains : 83%
- One of the poorest country in the world
- Internet users approximately around 3 million
- 33 operational ISP /NSPs
- National total Bandwidth downlink ( 80 Mbps) and uplink bandwidth ( 20 mbps)



# IT trends ..

|      |   |
|------|---|
| 1971 | IBM 1401 for population census  |
| 1983 | Foreign investment in IT for software development   |
| 1992 | Establishment of computer Association of Nepal  |
| 1995 | Email and Internet services first started by Mercantile communications  |
| 1997 | Establishment of Nepal Telecommunication Authority  |
| 2000 | Real software development started<br>IT law & policy ( draft)<br>Establishment of IT professional forum ( ITPF) |
| 2002 | NPIX – started peering between ISPs to save local bandwidth   |

# IT trends ..

|      |   |
|------|---|
| 2002 | wireless project started for rural access connectivity in Myagdi and later other places ( <a href="http://nepalwireless.net/">http://nepalwireless.net/</a> ) |
| 2003 | SANOG started and first meeting was held in kathmandu in Jan 2003   |
| 2004 | IT policy revision ( draft) , Integrated action plan ( 2004-2007) . His majesty govt. started constructing IT park in Banepa                                  |
| 2005 | localization of nepali application started . Nepalinux version 1 released Madan puraskar pustakalya and started grooming open source projects                 |
| 2006 | MicrosoftWindows xp and MS-office 2003 in Nepali uniccode   |
| 2007 | Nepal telecom has acquired fiber connectivity with BSNL, India and looking for another transit through china  |

# Internet in Nepal

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- Still the main backbone of Internet is Vsat, *all the ISPs in nepal using VSAT with license from NTA*
- *Estimated 3,00,000 users are served by ISPS*
- *ISPs provide internet through different media like vsat, fiber, cable, wireless and dial up*
- Daily newspapers are on web and video and audio streaming has been implemented in websites ( [www.nepalnews.com](http://www.nepalnews.com) )
- Still no true Ecommerce application have been implemented due to lack of IT policy.

# Localization efforts in Nepal

- First opensource project nepalinux released on 2005 and recently nepalinux version 3 has been released
- Nepali unicode has been included in Microsoft operating system and nows its easy for application localization
- To help and provide support free open source community has been started ([www.fossnepal.org](http://www.fossnepal.org)) and many open source are being developed.



# Localization efforts in Nepal..

- FOSS documentary show and other promotional programmes for the free open source software (FOSS)
- Ecubers are doing mozilla firefox in nepali language



# Telecommunication in Nepal

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- NTC is setting up 1000 VSATs for rural telephony aiming to provide at least 2 telephones to each village by 2006 but the work isn't finished till date.
- Apart from Nepal Telecom, the other two mobile operators (Meromobile and UTL) also providing mobile GSM and CDMA services.
- East West Fiber Optics Cable structure for transfer linked with Nepal to India and Nepal to China is completed

# Achievements ..

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- Nepalinux, created a localized GNU linux distribution in nepali language has been chosed as a joint winner of the first APC chris Nicol FOSS prize
- Mahabir Pun has been awarded Roman Magsaysay awards 2007 for community leadership (<http://nepalwireless.net> )for the implementation of rural access project.



This is the picture of the first relay station we built in May<sub>26</sub> 2002 on a 20m tall tree

# currently

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- FOSS nepal community and High Level commission for Information Technology [HLCIT] are jointly taking lead in organizing the software freedom day celebration with the theme Linux for desktops
- The private organization and MNCs are coming up very fast in the field of IT. The CAN and other also playing a leading role in “placing Nepal on the Global IT map ”

# Future Plan

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- Joint project by mercantile and wlink to Get connected to internet backbone via India.
- Nationwide terrestrial wireless connectivity
- Nepal Govt will soon introduce the cyber law aiming to boost the true e-commerce solution in Nepal.

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Thank you

Questions, Comments, Suggestion?

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