

Taiwan Network Information Center- Non-Profit Organization

http://www.twmic.net.tw
E-mail: service@twmic.net.tw

◎ Establishment :

- The Taiwan Network Information Center (TWNIC) is a non-profit organization, officially funded by the Directorate General Telecommunications of MOTC (Ministry of Transportation and Communications) and Computer Society of Republic of China, on December 29, 1999.

● Primary Duties

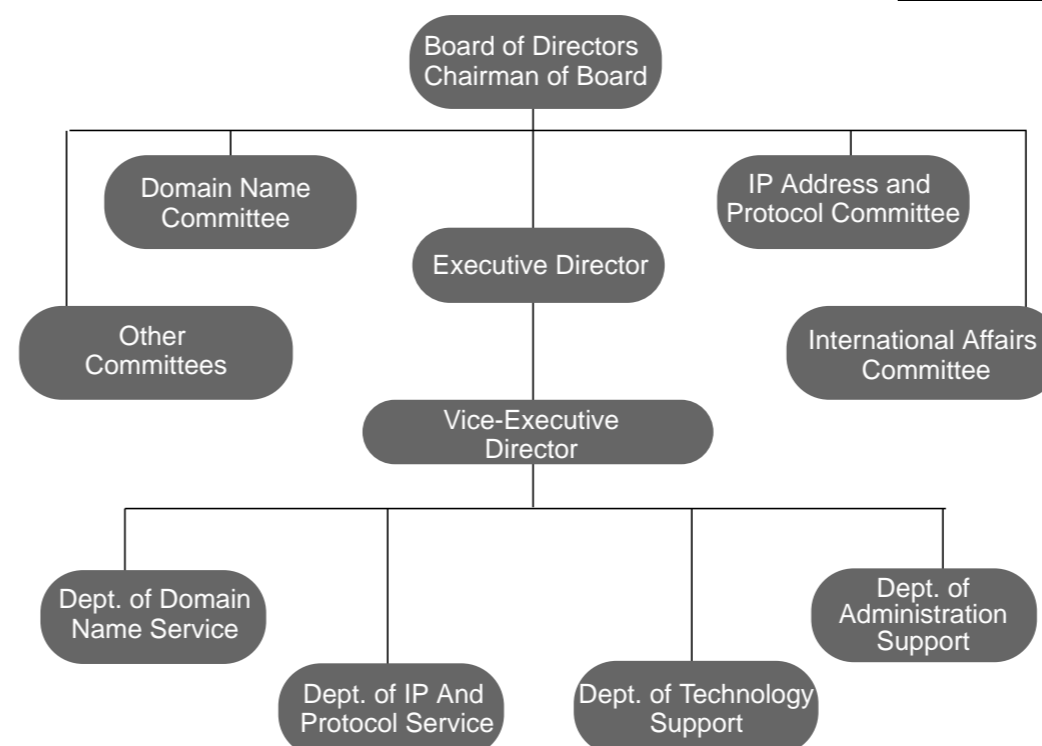
As a national network information center, TWNIC has following fundamental missions and duties :

1. To provide Internet services such as domain name and IP/ASN registration and management, directory and database access as well as the promotion for the nation's Internet business, based on its non-profit, neutral and mutual sharing of network resources.
2. To facilitate and coordinate the activities and co-operation between national and international Internet-related organizations.
3. To assist the promotion of nationwide Internet applications, and to coordinate the exchange and integration of Internet information services.

◎ Organization Structure

TWNIC consists of a Board of Directors, three major committees and four departments of its operations:

English Page



◎ Function of Committees

Responsible for providing suggestion and consultation of Internet-related policy

● International Affairs Committee

1. To enhance the collaboration with international Internet communities and secure the interests of national Internet communities.
2. To actively participate in the meeting and activities of ICANN, APNIC, APNG, INET and other related Internet international organizations.
3. To coordinate Internet-related international affairs with other countries.

● Domain Name Committee

1. To establish the Internet domain name registration policy.
2. To actively participate in the meeting and activities of International network registration organizations.
3. To coordinate other related research and promotion activities on domain name.

● IP Address and Protocol Committee

1. To establish the Internet Ipv4 and Ipv6 address application and distribution policy.
2. To actively participate in the meeting and activities of related international IP address and Protocol organizations.
3. To coordinate other related research and promotion activities of IP address and Protocol.

◎ Functions of Operational Departments

● Domain Name Service Department

1. To manage DNS services.
2. To coordinate and consolidate domain name services and registry among government, academy and business.
3. To support the activities of the committees.

● IP address and Protocol Service Department

1. To manage the application and distribution of IP address and AS number.
2. To coordinate and consolidate the application and distribution of IP address and AS number among government, academy and business.
3. To support the activities of the committees.

● Technology Support Department

1. To establish, manage and maintain all of the service related systems.
2. To coordinate and consolidate the related network protocol standard, network information access and statistics among government, academy and business.
3. To support the activities of the committees.

● Administration Support Department

1. To coordinate and consolidate the affairs regarding network promotion and publications among government, academy and business.
2. To take charge of board meeting and board related business.
3. To make the business plans and monitor their progress.
4. To manage general affairs, personnel and purchasing.
5. To control budget and file tax.

◎ TWNIC Core Business

● Domain Name Registration Service

1. English Domain Name Registration Service

Currently, TWNIC provides the registration service of .com.tw, .net.tw, .org.tw and .idv.tw. The registration service of .idv.tw just started from 2000/5/1 officially. As the rapid growth of Internet and related business, the registry/ registrar service system should be re-organized with the principle of free-market competition and open-participated. We are looking forward to having a more free and healthy environment and better Internet related service. In the last season of 2000, we are going to select several qualified registrars. Therefore, from 2001, there will have more local registrars providing Domain Name registration service.

Since the rapid growth of Domain Name registration, it comes along with more and more argument. Therefore, we are working on a practical dispute resolution package and forging the qualification of administration center of dispute resolution in order to manage these increasing related problems more effectively.

2. Chinese Domain Name Registration Service

From 2000/5/1 to 2000/10/1, TWNIC provides the Chinese Domain Name registration service. Currently, TWNIC is working on progressing the Multilingual Domain Name System with many Network Information Centers (NIC) from other countries. It also setup a Chinese Domain Name Registration tech supporting team under Domain Name Committee to discuss related standard and technology in regular meetings. TWNIC will develop a system that follow open source, internationalization, standardization, and localization for testing and service. TWNIC will provide a more international standard for a better Chinese Domain Name registration service.

● AS Number and IP Addresss Allocation Service

1. Autonomous System Number Service

AS number application is only be needed unless the system works through the Exterior Gateway Protocol(EGP), Border Gateway Protocol(BGP) or OSI Inter-Domain Routing Protocol(IDRP). Therefore, only the users who are multi-homed to more than one Internet Service Provider can apply Autonomous System Number Service from TWNIC.

2. IP Address Allocation Service

TWNIC is responsible for IP address allocation in Taiwan. So far, there are 29 ISPs of agents which authorized by TWNIC can assign the IP address to its users already. According to the expeditious growth and change of Internet business in Taiwan, there will have more qualified and authorized ISPs as agents in future.

Ministry of Education Computer Center (TANet)	(http://www.edu.tw/tanet)
Digital United Inc. (SeedNet)	(http://www.seed.net.tw)
Chunghwa Telecom Co., Ltd.(HiNet)	(http://www.hinet.net)
Reach & Range Inc.(GCN)	(http://www.gcn.net.tw)
Universal Joint Network Technologies Co., Ltd(UNET)	(http://www.unet.net.tw)
PAGIC Net, Inc. (PAGIC)	(http://www.pagic.net)
HITRON Technology Inc.(HTNet)	(http://www.ht.net.tw)
Taiwan Telecom. Network Services Co. Ltd. (TTNET)	(http://www.ttn.net.tw)
Systex Cprporation Ltd. (SYSNet)	(http://www.sysnet.net.tw)
Infoserve Technology Corp. (ISNet)	(http://www.is.net.tw)
Seeder Computer Corporation Ltd. (Seeder)	(http://www.seeder.net.tw)
TimeNet International Corp. (TimeNet)	(http://www.timenet.net.tw)
Pacific Resources Technology Corp. (MyNet)	(http://www.my.net.tw)
Mackay Telecommunications Inc. (MKY)	(http://www.mky.net.tw)
Sun Yard Info. Tech Co., Ltd.	(http://www.cable.net.tw)
ERA Communications Co., Ltd. (ERA)	(http://www.eranet.net)
SaveCom International Inc.(SaveCom)	(http://www.savecom.net)
Far EdsTone Telecommunication Co., Ltd (FetNet)	(http://www.fetnet.com.tw)
Government Service Network(GSN)	(http://gsnet.gsn.gov.tw)
FIC Network Service, Inc. (FIC Net)	(http://www.ficnet.net.tw/)
Multa Communications Corp. Taiwan (Multa Com)	(http://www.multacom.com)
Internet Solution Lab., Inc. (Easy Net)	(http://www.isl.net.tw)
Goldsun Computer & Communication Co., Ltd.(GSNet)	(http://www.gsnet.com.tw/)
TransAsia Information Services Inc.(TATNet)	(http://www.tat.net.tw/)
Atlas Internet & Life International, Inc.(Atlas)	(http://www.atlas.net.tw/)
KG Telecommunications Co.,Ltd (KGT)	(http://www.kgt.com.tw/)
NETPOLY TELECOM INC. (INTERGRAND)	(http://www.intergrand.net)

MCI WorldCom Taiwan Co., Ltd. (WORLDCOM)	(http://www.wcom.com)
TISNet Technology Inc. (TISNET)	(http://www.tisnet.net.tw/)

- 1.For the development of Internet business, TWNIC authorizes ISPs to allocate the IP address to their users.
- 2.To become an agent, ISPs must submit their allocation proposal along with the ISP licences approved by MOTC to TWNIC. The IP address and Protocol committee will evaluate and approve its application.
- 3.The proposal should include the following subjects:
 - To demonstrate the DNS and Routing can be operated normally.
 - Plans which show IP address use.
 - Network topology which includes the numbers of regional network centers and the domestic and global dedicated lines bandwidth.

◎ Major Activities in the near future

- Improving DN registration service and expanding its new business.
 - 1.Re-examining and speeding the Domain Name application flow and its services
 - 2.Expanding the generic Second Level Domain Name services such as the personal domain name and Chinese domain name application.
 - 3.Creating the Registry and Registrar sharing system and integrating its services.
- Enhancing IP/AS (including Ipv6) allocation service and expanding its new business to Taiwan Internet Exchange (TWIX).
 1. Re-examining and speeding the IP Address allocation flow and its services.
 2. Providing CIDR/Route aggregation services.
 3. Providing Ipv6 allocation services.
- Providing the network security services
- Enhancing Whois database integrity and completeness.
- Re-structuring the Web Pages of TWNIC.
- Developing the related discussion group and collecting and localizing the related technical document.
- Participating and cooperating with international Internet-related organizations.

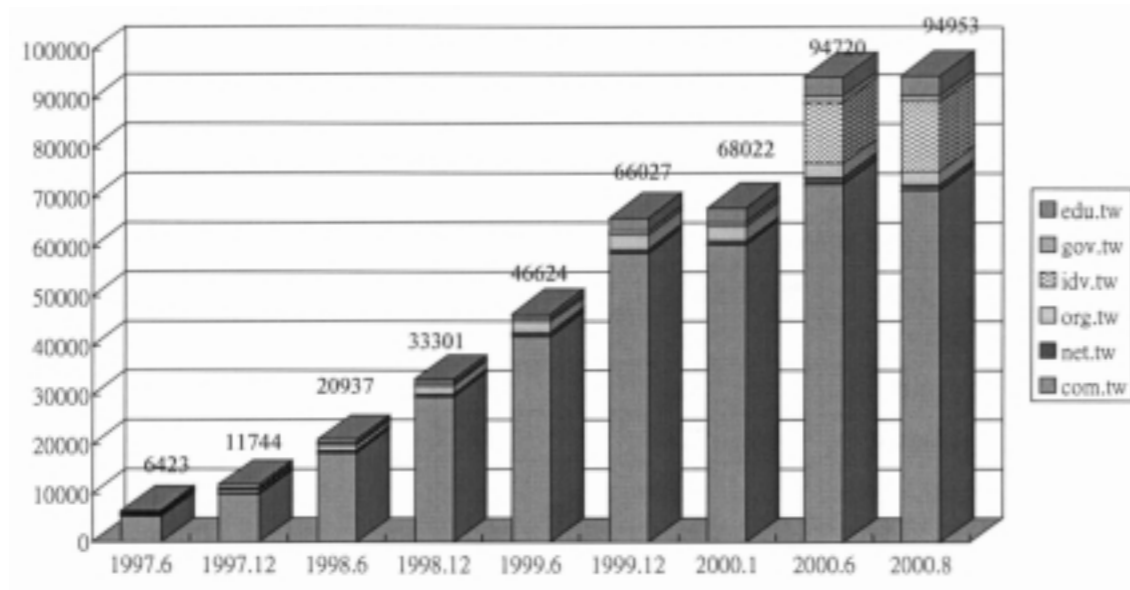
Statistical Report

English Domain Name Growth

Date Domain Name	1997.6	1997.12	1998.6	1998.12	1999.6	1999.12	2000.1	2000.6	2000.8
com.tw	5229	9807	18184	29637	42053	58882	60526	72950	71688
net.tw	388	489	591	630	705	770	776	1458	1237
org.tw	290	559	1032	1627	2228	2968	3054	2610	2508
idv.tw	—	—	—	—	—	—	—	12518	14300
gov.tw	199	286	350	470	569	755	761	1251	1276
edu.tw	317	603	780	937	1069	2652	2905	3933	3944
Total	6423	11744	20937	33301	46624	66027	68022	94720	94953

Source : GSN 、TANet 、TWNIC

English Domain Name Growth Chart



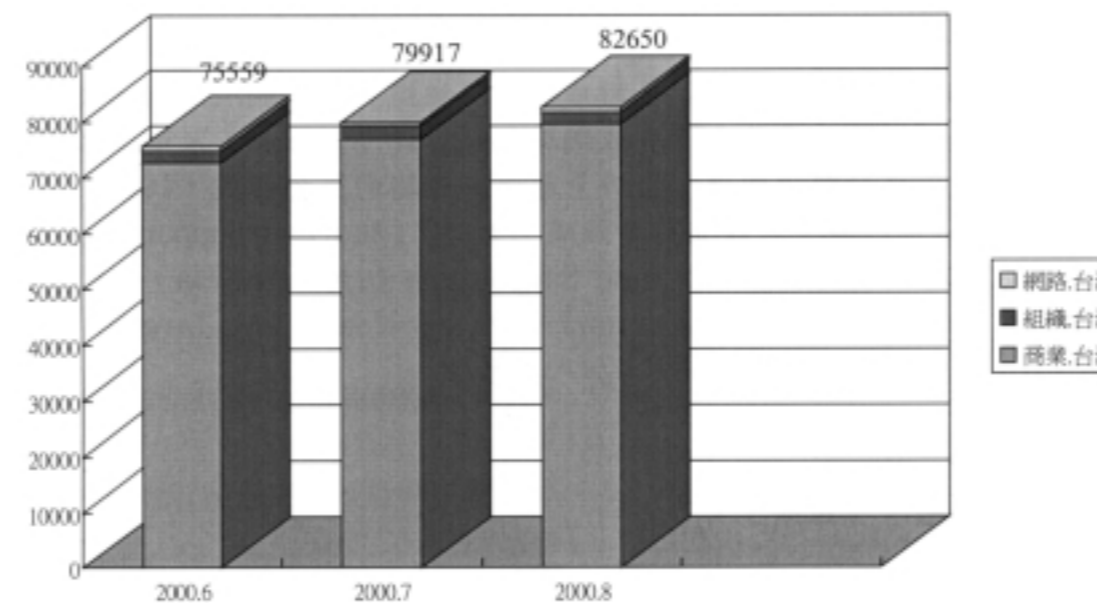
Chinese Domain Name Growth

2000.8 Made by TWNIC

Date	商業·台灣	組織·台灣	網路·台灣	Total
2000.6	72727	2064	768	75559
2000.7	76923	2194	800	79917
2000.8	79527	2296	827	82650

Chinese Domain Name Growth Chart

2000.8 Made by TWNIC



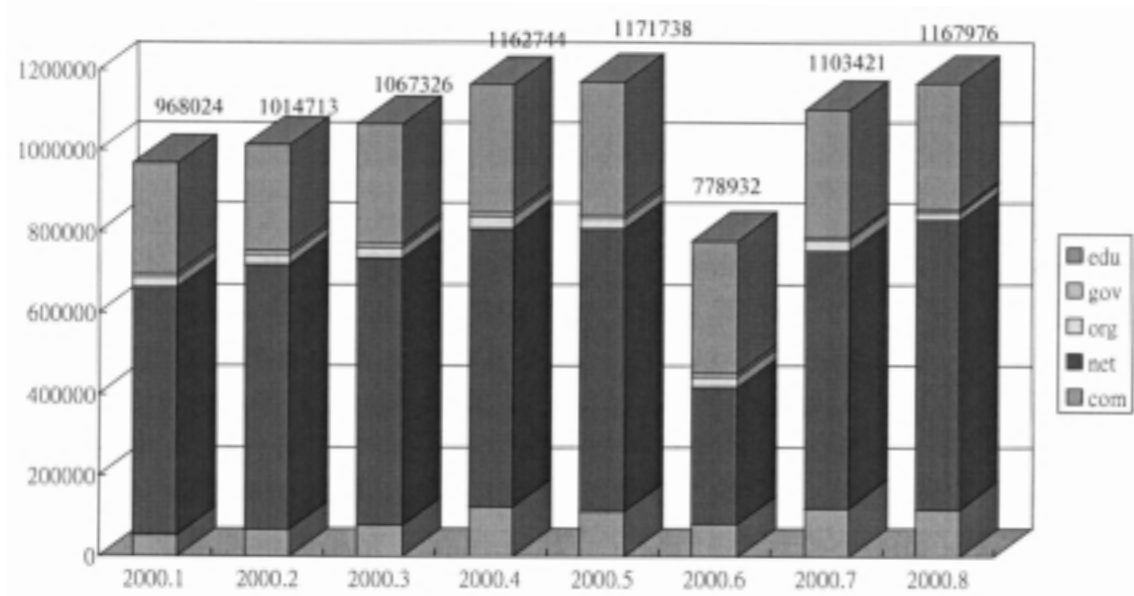
Host(New Deductive Method)

Jan.2000 - Aug.2000

Date	com	edu	gov	Net	org	Total
2000.1	52686	270807	10508	610529	23494	968024
2000.2	67255	260618	10289	652688	23863	1014713
2000.3	78888	295089	10707	657696	24946	1067326
2000.4	122155	314713	10795	688596	26785	1162744
2000.5	113276	327377	10208	695251	25626	1171738
2000.6	81738	325881	9896	337457	23960	778932
2000.7	121236	315012	7240	633139	26794	1103421
2000.8	117792	311782	7286	711655	19461	1167976

Source : <http://dnstat.nsysu.edu.tw/>

Host Growth Chart (New Deductive Method)



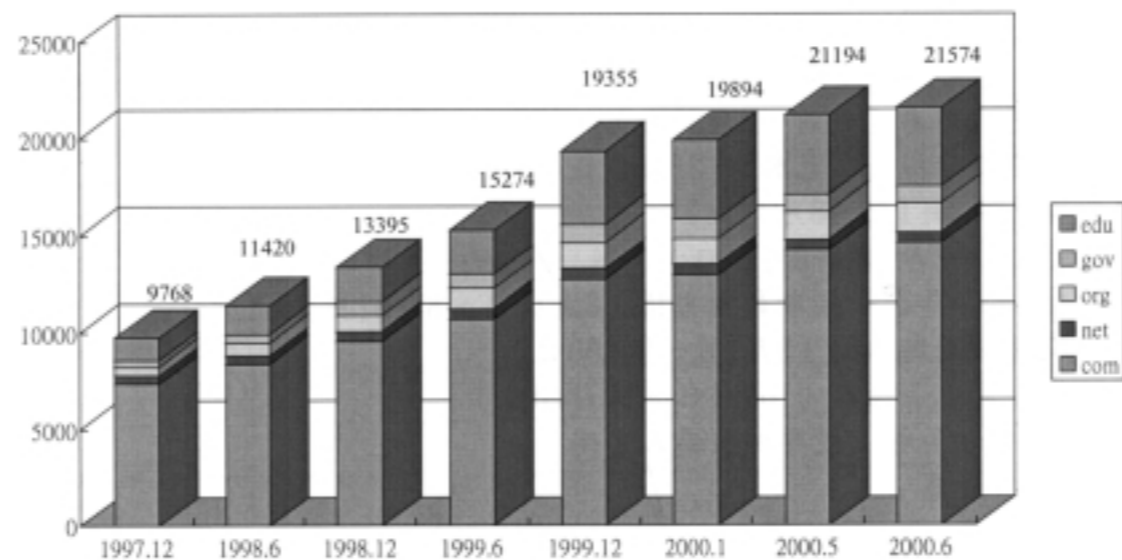
Source : <http://dnstat.nsysu.edu.tw/>

WWW Server(Traced by DNS)

Date	com	edu	gov	Net	org	Total
1997.12	7373	1181	338	396	480	9768
1998.6	8406	1500	423	398	693	11420
1998.12	9566	1798	684	510	837	13395
1999.6	10710	2241	756	530	1037	15274
1999.12	12744	3773	949	561	1328	19355
2000.1	12930	4076	985	564	1339	19894
2000.5	14253	4086	871	538	1446	21194
2000.6	14609	4090	871	544	1460	21574

Source : <http://dnstat.nsysu.edu.tw/>

WWW Server Growth Chart (Traced by DNS)

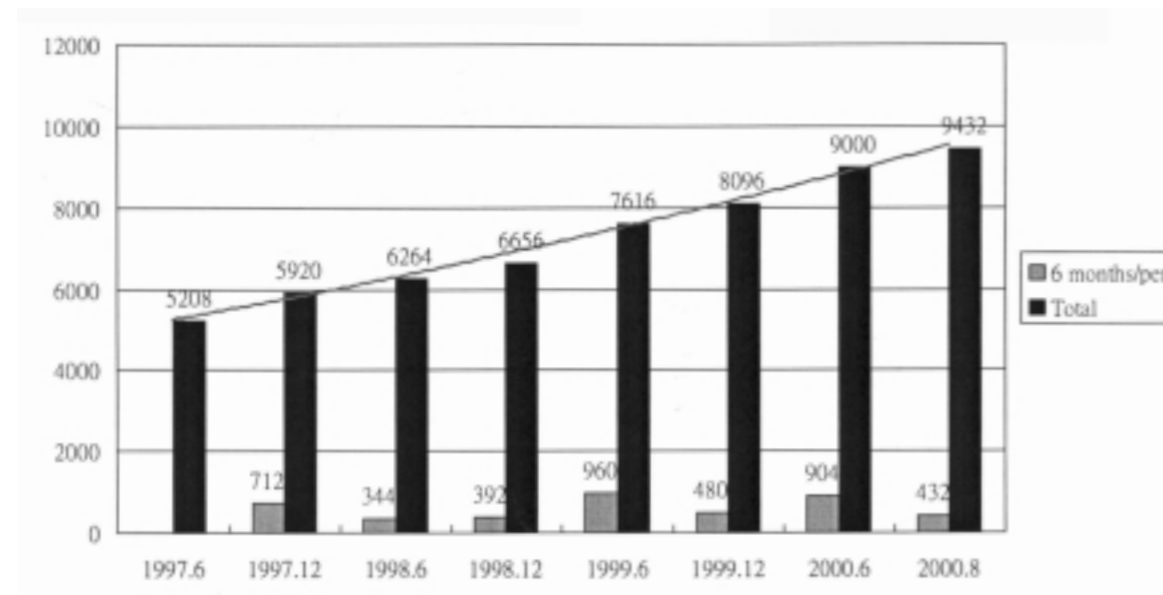


Source : <http://dnstat.nsysu.edu.tw/>

IP Growth (Unit:Class C)

Date	6 months/per	Total
1997.6	—	5208
1997.12	712	5920
1998.6	344	6264
1998.12	392	6656
1999.6	960	7616
1999.12	480	8096
2000.6	904	9000
2000.8	432	9432

IP Growth Chart (Unit:Class C)



Delegated IPs

(Unit:Class C)

ISP	Number of IP
TANet	2176
HiNet	3240
SEEDNet	1920
GSN	416
Medical Net	160
SySNet	176
TTNet	208
PagicNet	192
GCNet	160
HtNet	64
Unet	32
Infoserve	96
ISL	16
TimeNet	48
FETNet	128
MyNet	48
MkyNet	32
Einvest	32
DOME	32
SaveCom	32
NCHC	32
IONet	32
NCIC	32
KGTNet	32
Other	112
Total	9432

TWNIC IP Address Allocation/Delegations

(Unit:Class C)

Item	Total
Delegated From APNIC	$256*43 = 11008$
Delegated TO ISP	$256*36.84375 = 9432$
Remain	$256*6.15625 = 1576$