



# The 61<sup>st</sup> APTLD Members' Meeting in Taipei

TWNIC held the 61<sup>st</sup> Asia Pacific Top Level Domain (APTLD) Association Members' Meeting in Caesar Park Hotel Taipei on Nov. 27~28, 2012. This was the fourth APTLD members' meeting in Taiwan. Ms. Ai-Chin Lu, the CEO of TWNIC, indicated that Taiwanese scholars and experts in the relevant fields were invited to give speech to share their experience with APTLD members. Discussions were mainly on Internet security mechanism, innovation and applications of the Internet, smart networks and applications of next-generation mobile communications technology in Taiwan. In addition, legal issues of the cloud technology in Korea and government supervision in Japan's digital policies were also discussed in the sessions.

On the first day, the keynote speeches were focused on the results of the IPv6 upgrading promotion in Taiwan, applications of the Internet, smart living,

and the mobile communications industry in digital convergence. Prof. Shian-Shyong Tseng, the Chairman of Board, TWNIC, shared current development of Taiwan Information Security Alliance and raised awareness of network security promotion issues among the APTLD members. Mr. Tien-Lai Teng, Director-General of the Post and Telecommunication Department, the Ministry of Transportation and Communications, R.O.C., also made a keynote speech on the Internet creativity and applications in Taiwan. Mr. Teng noted the ICT development, the current status of cloud computing, and IPv6 transition in his speech.

Many executives from the ccTLD Registries in the Asia Pacific regions attended APTLD Members' Meeting. More than 80 representatives from 18 ccTLDs and 22 other organizations met to change ideas in this meeting.



## 2012 Global IPv6 Summit and The 19<sup>th</sup> Annual TWNIC IP Open Policy Meeting

2012 Global IPv6 Summit and the 19th Annual TWNIC IP Open Policy Meeting were jointly held in November 2012. Shan-Cheng Chang, the Minister without Portfolio of Executive Yuan, was invited to have a keynote speech: "Cloud Computing for Taiwan – Challenges and Opportunities" and talked about future developments and challenges of telecommunications in Taiwan.

Mr. George Michaelson, the Senior R&D Scientist and Expert of APNIC, was also invited to give a speech on "Measuring IPv6 Users, A Taiwan perspective," and pointed out that Taiwan had great progress in IPv6 implementation. Another speaker, Mr. Fred Baker of CISCO, addressed "IPv6: Open for Business" to the participants.

In conjunction with the conference event, awards were given to outstanding organizations regarding their successful IPv6



upgrade. There were a total of 29 awarded organizations with excellent performance.

In the three-day event, the IPv6 upgrade and future network development were intensively addressed. Also, in this year's meeting agenda, the team from National IPv6 program gathered to review and discuss the current achievements of the projects.

## 2012 TWNIC Booth in Taiwan's IT Month Exhibition



TWNIC joined Taiwan's IT Month Exhibition in 2012 and demonstrated its application services of Chinese domain names and next-generation IPv6 network. The theme of TWNIC booth is "Fast and Easy Chinese Domain Names, Unlimited IP Connection on Networks" in the e-government section of this year's IT Month Exhibition.

In TWNIC Booth, people gained more understanding of our

.tw/. 台灣 domain name registration services and the newly-announced EAI services. The local Internet users can use Chinese domain names and Chinese e-mail addresses to communicate each other on the Internet. Ten types of .tw/. 台灣 domain names will be displayed to allow more people to learn .tw/. 台灣 domain name. How to establish personal identity with .tw/. 台灣 domain names was demonstrated. Several promotional activities were held on the booth.

IPv6 Network is another focus in TWNIC booth. TWNIC has been promoting the importance of IPv6 transition in Taiwan and compiling standard procedures of IPv6 implementation. In this exhibition, TWNIC will display the results of the next-generation Internet interoperability certification program. "IPv6 Implementation Technical Manuals" will be on sale in TWNIC Booth. Five tips of IPv6 Transition, including "learning, purchasing, checking, testing and upgrading" will help people to know more about IPv6.

## 2012 TWNIC Forum on Domain Name Dispute Resolution and Personal Information Protection



Internet is a vital communication tool in the 21st century, and domain names are the major identification on the Internet for individuals and enterprises. The link between trademarks and domain names has always been the issues for discussions. With the emergence of IDNs and new gTLDs, the ownership and rights on domain name are more extensive, and domain name disputes will not be limited to trademarks or business benefits only. In addition, the management mechanism of domain name registration data must be adjusted when Personal Information Protection Act is implemented.

To address the importance of the issue, TWNIC held "2012 TWNIC Forum on Domain Name Dispute Resolution and Personal Information Protection" on Oct. 12, 2012. Experts and scholars from Internet-related fields were invited to the seminar for discussions on different domain name dispute cases and relationship with personal information protection. The speakers included Wen-Chi Lai, the Head of InfoShare Tech Law Office, Tien Chou, the Director of Personal information Protection Center, National Kaohsiung First University of Science and Technology, and Chao-Yan Wu, the Deputy Director of Science & Technology Law Institute, III.

The experts and scholars pointed out in the Forum

that according to international trends, the rank of personal privacy protection in a country has become an index item for national progress and human rights. Governmental agencies should protect personal information when dealing with their missions, so that state compensation will not occur under the condition. The protection of personal information is related to many aspects, such as regulations, information security, and management systems. After the Fair Trade Act and Consumer Protection Act, Personal Information

Protection Act will have a major impact on the operation of the government and enterprises. To advance the development of the e-government and e-commerce, personal information protection should be followed by authorities and corporate sectors. Through experience sharing from the experts, this forum has deepened people's knowledge and understanding of the trends of domain name dispute resolution.

For relevant information and handouts on this forum, please refer to <http://dispute2012.twNIC.tw>.



## 2012 TWNIC Campus Tour

TWNIC called for public service proposals from its campus tour from September 2012. In the proposal, students should express their ideas to execute public services through the Internet. Ten proposals were granted and the students were awarded. Students had the opportunities to implement their ideas and provide public services with TWNIC's assistance. Through the activity, the students had more understanding of the latest Internet applications and technologies. TWNIC encouraged students to use their creative ideas to provide public services on the Internet. The young generation was cultivated when executing the proposal. The final results were announced by the end of December this year. Students were interviewed and presented their proposals on the stage. For more



information on this activity, please visit the website at <http://showking.tw/2012/index.html>.

## The 11<sup>th</sup> Netking Website Design Contest

In 2012, the theme of the 11<sup>th</sup> Netking Website Design Contest was "Love Your Hometown and Light Up Taiwan". Every Taiwanese has special feelings about his/her hometown. Therefore, this year, participants of the contest can represent the hometowns in their works. Participants can display the local products, customs, natural and ecological features, etc., and promote the beauty of their hometowns through the Internet.

The contest was closed on Nov. 7, 2012. 129 works joined the contest this year. They include travel information of different areas of Taiwan and introduction to traditional food and offshore islands. Some of them introduced the

campus and cultures of aboriginal and Hakka people. A few of the websites focused on special shopping districts and the process of local community development. The very diverse works are full of Taiwanese people's passion and love for their homeland. Additionally, the "Netking Forecasting Activity" was held, in which each one of the participants will have a chance to win major prizes.

The Netking Website Design Contest has been held for ten years since 2002. This year's winners of the contest was finalized on Dec. 18, 2012. For more information, please visit at <http://新人王.台灣>.

## 2012 TWNIC Charity Campaign



While striving to advance the development of the Internet, TWNIC has been holding the charity campaign with ".tw/. 台灣" registrars since 2001. The 2012 TWNIC Charity Campaign was to shorten the digital divide and to provide the young generation in remote areas with more opportunities and access to Internet.

This 9<sup>th</sup> annual event was especially in cooperation with TWNIC accredited registrars: PChome and IP Mirror. The total amount of donations accumulated until Nov.

30, 2012 reached to NTD 725,754 with more than 53,495 domain name registration. Through this campaign, many children

were benefited from the multifunctional computer classrooms built in the areas. It assisted to reduce the digital gap.

The campaign was ended on November 30. This year's total donation amount and results throughout the years will both be available on the event website. For more information, please visit the website at <http://www.lovetw.tw>.

## IPv6 Technician Certificate Program

To address the exhaustion of IPv4 addresses and promote the use of the next-generation IPv6 Internet, TWNIC and IPv6 Upgrade Office jointly held the "IPv6 Technician Certificate Program" activity in November to allow people who are interested in relevant IPv6 developments to learn more about the level of their understanding of next-generation Internet technology through written tests and hands-on practices.

This activity was divided into three subjects. Examinees passed respective subjects and received their certification, including . 34 people for the Windows OS, 35 people for the Linux OS and 35 people for CISCO routers. All the certificated technicians were awarded as IPv6 Masters. The list of IPv6 Masters were published on



the activity website at <http://ipv6launch.tw/igo>.

In the future, TWNIC will keep promoting and holding the program to further the development of the IPv6 Internet technology in Taiwan.

## Press Conference and Forum on “Envisioning Taiwan’s Future Internet Development from 10-year Taiwan Broadband Internet Use Surveys”

To learn the behavior of the broadband Internet user population in Taiwan, TWNIC has been conducting “Taiwan Broadband Internet Usage Survey” since 2002 to observe and oversee the dynamics and trends of Taiwan’s broadband Internet development over the last decade.

The results of Broadband Internet Survey announced in June 2012 shows that the percentage of individuals who have ever used the Internet has grown from 57.23% to 77.25%. Compared with the results announced five

years ago, wireless Internet and mobile Internet users have also significantly grown more than 60%. TWNIC has compiled the statistics of Taiwan Broadband Internet Usage Survey from 2002 and invited scholars, experts, and government officials to analyse and share their views on the future development of Taiwan’s Internet. Several topics were explored and discussed on the forum. They include network security, quality of Internet connection, application services, and Internet governance.

## Cyber Clean Center Updates

TWNIC launched Cyber Clean Center (CCC) in 2011 to solve the proliferation of BotNet in Taiwan. It has created a milestone in Asia because of Taiwan’s high growth of Internet penetration in recent years. CCC effectively addresses and handles BotNet attacks and intrusion in Taiwan.

Currently, the CCC mainly provides domestic Internet users with antidotes for BotNet. BotNet attacks can be detected real-time through the Honeypot; users will then be notified through their ISPs to obtain antidotes from the CCC.

With the effort of the CCC, the percentage of the number of detectable attacks in Taiwan is gradually declining. In the fourth quarter of 2011, the attacks in Taiwan accounted for 26% of global proportion. After the CCC’s efforts, the percentage has reduced down to 16%, and the number of attacks has reduced from 1.46 million down to 0.76 million. The proliferation of BotNet has been improved but not completely defeated. In the future, we hope to play a key role in BotNet prevention.

	Q4, 2011	Q1, 2012	Q2, 2012	Total
Number of Attacks (Taiwan)	1.46 million (26%)	1.47 million (20%)	760,000 (16%)	4.08 million
Number of Attacks (Overseas)	4.11 million (74%)	5.83 million (80%)	3.88 million (84%)	15.04 million
Total Number of Attacks	5.58 million	7.31 million	4.65 million	19.13 million

Table 1: The statistics for the number of BotNet attacks in the Taiwan

Percentage Sample Type in CCC

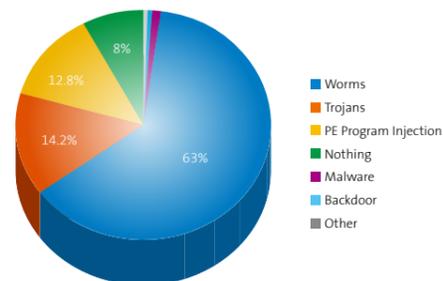


Figure 1: Malware Sample Type Analysis

## TWNIC Announces DNSSEC Chain Services

Since ICANN’s launch of DNSSEC in root servers in 2009, it has highlighted the international awareness of DNS security even further. In 2010, TWNIC also developed and implemented DESSEC in its .tw/ 台灣 domain name servers. Because DNSSEC enhances the relevance of the authoritative DNS server through DS records, TWNIC has gradually been developing and testing the DS uploading function of the third-level domain. Users can upload their DS records, complete

the connection between DNS servers and .tw domains and strengthen users’ DNS environments through their domain name registrars. After users have formally uploaded their DS records, their authoritative servers will be protected by DNSSEC Chain from more traditional hacker attacks, further strengthening the security of .tw domains.

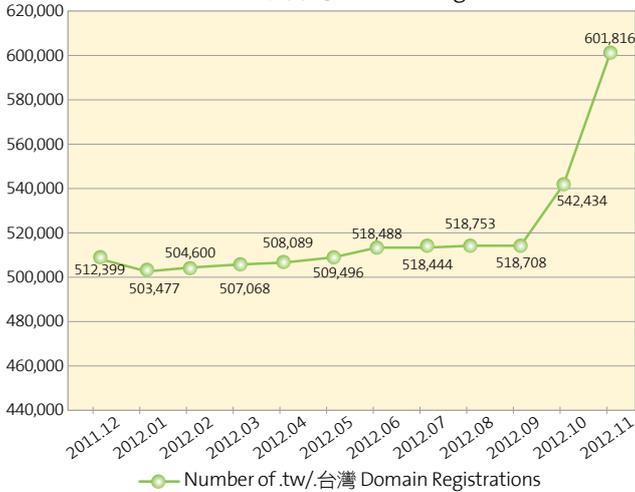
## “IPv6 Transition Implementation Technical Manual” Released

To work with our government’s promotion of the “IPv6 Upgrade Program”, TWNIC has published “IPv6 Transition Implementation Technical Manual” for reference to all industries. This manual is jointly compiled by TWNIC IP Department, the team from National IPv6 Program Program Office and experts from the Internet industry to assist government bodies, industries, and individuals to accelerate their IPv6 transition plan.

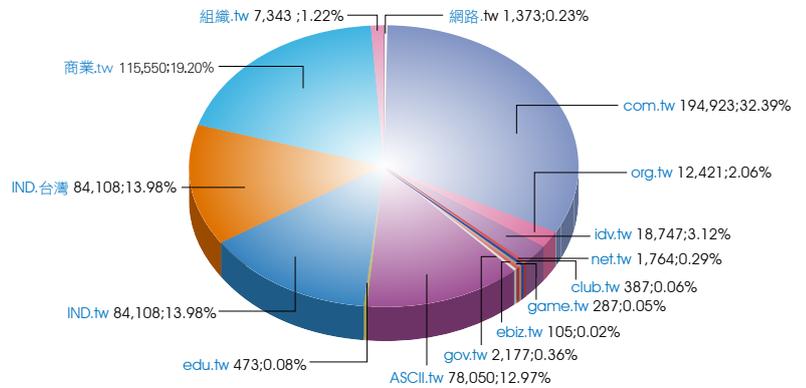
This manual highlights basic concepts, such as IPv6 addressing, steps to upgrade to IPv6 network, Internet application such as, webpage, Email, DNS, FTP, Internet security, and how to activate home routers to support IPv6. It helps readers to catch relevant knowledge for IPv6 transitions of various service systems step by step. For information on how to order this manual, please refer to <http://www.ipv6launch.tw/book.html>.



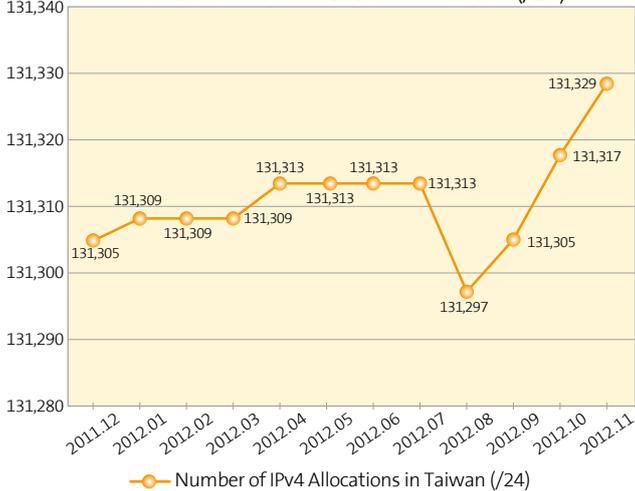
Number of .tw/.台灣 Domain Registrations



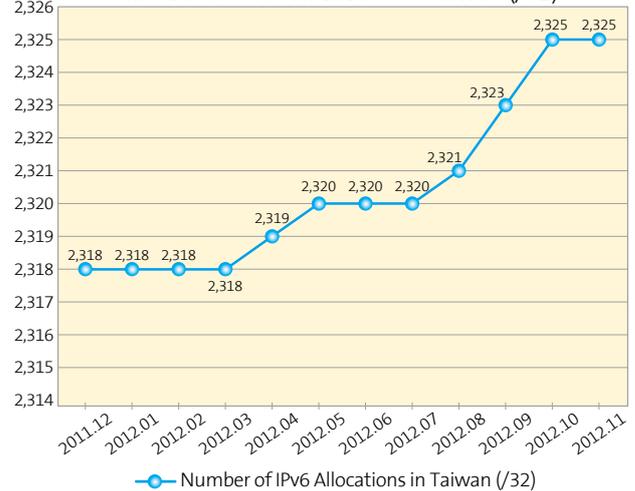
Number of Different Types of .tw/.台灣 Domain Name Registrations as of Nov. 30, 2012



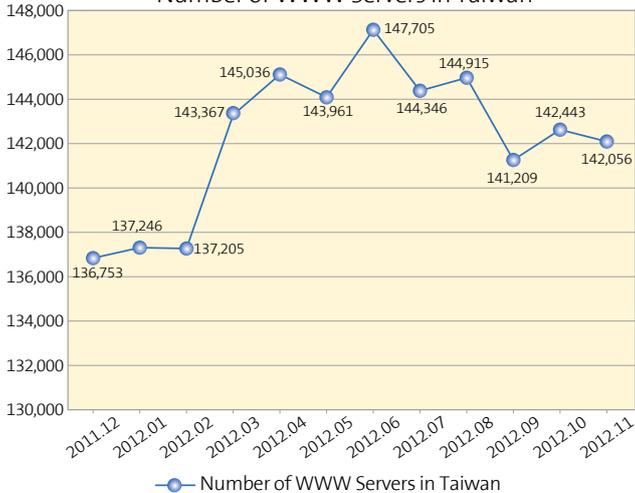
Number of IPv4 Allocations in Taiwan (/24)



Number of IPv6 Allocations in Taiwan (/32)



Number of WWW Servers in Taiwan



Number of Hosts in Taiwan

