

Geng-Da Tsai, TWNIC APNIC 43



#### Outline

- Statistics of TWNIC's IP members
- TWNIC's activities and training programs
- Status of IPv6 upgrade of governmental agencies in Taiwan
- Conclusions & future works



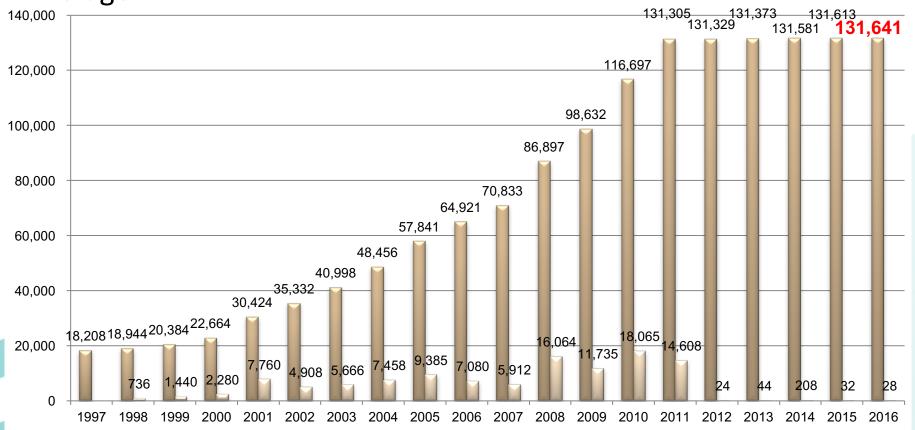
#### Statistics of TWNIC's IP Members

1 2 3 4 5 6	代理發放單位 TWNIC	22 23 24 25 26 27	代理發放單位 台灣基礎開發科技股份有限公司 中嘉和網股份有限公司 世新有線電視股份有限公司 台灣恩悌悌股份有限公司 大台北寬頻網路股份有限公司 易達通網路系統有限公司	43 44 45 46 47 48	代理發放單位		
7 8 9	本郷科技版物有限公司  遠傳電信股份有限公司  宏遠電訊股份有限公司	28 29 30	數位通國際網路股份有限公司 士無具實籍股份有限公司 Service Types	49 50 # O	全球一動股份有限公司 洞淵有總重組股份有限公司 f TWNIC's Members	ĵ	
10	向邦網路科技股份有限公司 博訊科技股份有限公司	31 32	Co-location/IDC		33		
12 13	和宇寬頻網路股份有限公司 協志科技股份有限公司	33 34	FTTx	14			
14 15	新世紀資通股份有限公司	35 36	ADSL	4			
16	75 F	37	Cable Modem		18		
17	TWNIC 's LIR:	38	WLAN		2		
18 19	<b>61</b>	39 40	3G/3.5G		5		
20 21	台灣碩網網路娛樂股份有限公司	41 42	4G(LTE) 果豆件仅仅仅有限公司		5		



#### **IPv4** Address Allocation

- TWNIC has allocated 131,641 /24s IPv4 addresses
- The numbers of small allocations are growth after final /8 stage.

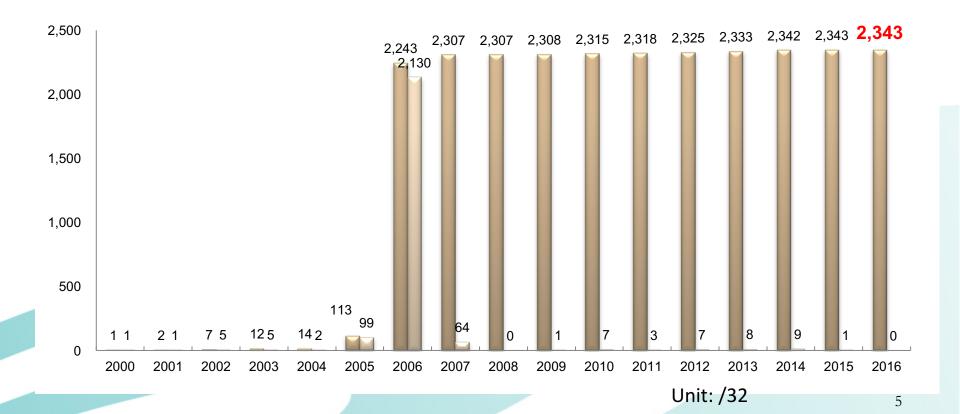


Unit: /24



#### IPv6 Address Allocation

- TWNIC has allocated 2,343/32s IPv6 addresses
- Most TWNIC IP members have obtained IPv6 addresses.





#### 2016 Taiwan Internet Forum

2016 Global IPv6 Summit in Taiwan 27th TWNIC IP Open Policy Meeting 2016 TWNOG 2016 Network Security Seminar

2016 Network Security Seminar 2016 Taiwan Youth Internet Forum

12-15 December, 2016 NTUH International Convention Center, Taipei, Taiwan

- Time: Dec 12-15, 2016
- Keynote speech: Herman Rao, Executive Vice President of FarEastTone and Geoff Huston, Chief Scientist of APNIC
- Session topics include IPv6 Upgrade in Government Agencies & ISP Collaboration Trends, Network Management Technologies, IPv6 Security Workshop, etc.
- Website: http://www.ipv6.org.tw/summit2016/







# TWNIC's IPv6 Training Programs in 2016

Period(Aug. to Dec.)

http://lesson.ipv6lab.tw/



	Courses	Times	Attendees
	IPv6 Routing Settings	8	248
Introduction Program	DHCPv6 Server	8	250
	IPv6 Wi-Fi Router Settings	8	252
Hands on	Windows Server IPv6	8	244
Program	Linux Server IPv6	8	248
	Total	40	1242



## IPv6 Upgrade of External Network Services

- Till Dec. 2016, 4,420 network services of governmental agencies have been upgraded to IPv6.
- 4,338 (98.15%) of upgraded services are reachable by IPv6.





## IPv6 Upgrade of Governmental Agencies' Office Internet Access Service

#### Aims

Most governmental agencies' users can access Internet
 IPv6 services before 2018.

#### Stage in 2017

- More than 1,100 governmental agencies attend this program to provide the IPv6 upgrade plan for office internet access service.
- TWNIC provides the documents of the upgrade plan template and the IPv6 implementation guide for all governmental agencies.
- TWNIC also cooperate with 13 IPv6 cousulting teams to help governmental agencies upgrade IPv6.



#### Conclusions & future works

- All governments' public network services had finished to be upgraded to IPv6 in Taiwan. We continuously promote more than 1,100 government agencies' Office Internet Access to upgrade to support IPv6 this year.
- We will continuously hold IPv6 training courses and IPv6 activities this year.
- Welcome you all to attend the IPv6 readiness measurement BoF this afternoon.



# Thank You



