



APNIC Survey 2020 Questionnaire





Welcome to the 2020 APNIC Survey.

This survey is run every two years to gather feedback from Members and stakeholders about APNIC services, the challenges facing the Internet community, and how APNIC can assist.

The survey helps the APNIC Executive Council (EC) and Secretariat to understand the needs and wishes of the community and to guide decisions on future priorities and services. The APNIC EC places a high degree of importance on this survey as a source of guidance for strategy and planning.

The APNIC EC has commissioned Survey Matters to conduct this survey so you can be sure that your answers will remain confidential. Individual responses will not be identified and we encourage you to provide honest and objective feedback¹.

To access the APNIC Survey 2020, please click **"next"** below. You can check your progress from the "% Completed" listed at the top of each page. Depending on your responses, the survey should take around 15 minutes to complete for Members and Account Holders, and much less for other stakeholders in the APNIC community.

Completed responses will be eligible to enter a draw for a chance to win prizes including <Insert prizes>

You can view Survey Matters' <u>terms of use</u> at the bottom of each page of the survey. If you have any questions in relation to this survey, please contact Survey Matters at <u>support@surveymatters.com.au</u> or on +61 3 9452 0101.

Thank you for your participation. Your views are important and APNIC values your feedback.

¹ Please note that free text comments will be provided to APNIC unedited, so if you identify yourself by name or otherwise in these comments these will be visible.





APNIC Account Holder and Member Questionnaire

About you

1. Where do you live?

<Economy list selection – all countries>

2. What is your role within the organisation?

(Please select all that apply)

Academic/Research
Applications Developer
CEO/COO/CFO
СТО/СІО
IT Support
Manager
Network/Systems Planning Engineer/Manager
Network/Systems Operations Engineer/Manager
Product/Peering/Interconnect Engineer/Manager
Project Manager
Sales/Marketing
Software Engineer
Student
Trainer
Other (Please specify)

3. What is your organisation's relationship with APNIC?

We are an APNIC Member or Account Holder [Go to Member Survey]
We are a member of an NIR in the APNIC region [Go to Stakeholder Survey]
Other stakeholder (Please specify) [Go to Stakeholder Survey]

4. How many times have you used an APNIC service, contacted or interacted with APNIC in the past two (2) years?

None [Go to Q9]
1-5 times
More than 5 times
Don't know/can't remember





Participation

5. Over the past two years, which of the following APNIC products, services or initiatives have you used or participated in:":

(Not presented to participants who selected "None" at Q4) (Select all that apply) (Randomise)

	New membership account
	MyAPNIC
	APNIC Helpdesk
	APNIC's EC election
	APNIC Annual Report
Regis	Iration Services, Registry Products, and Policy Development
	IP address or AS number resource application
	IPv4 address transfer (as source or recipient)
	APNIC Whois database*
	APNIC RDAP service
	APNIC reverse DNS service (as address holder)
	Resource certification (RPKI)
	APNIC Policy Development Process*
Inter	net Development
	APNIC Conference, APRICOT or another APNIC event (eg. NFH)*
	APNIC training (face-to-face or online)*
	Special Interest Groups (SIGs) – face-to-face meetings or mailing list*
	Met with an APNIC representative*
	Presentation by APNIC representative*
	APNIC Foundation activities (of any kind)*
	Contacted APNIC with a query (NB: Stakeholder Only)
Infor	nation Products, Research & Analysis.
	APNIC Blog*
	APNIC website*
	APNIC Internet Directory*
	APNIC NetOX *

*Asked of Stakeholders as well as members





6. Thinking about the APNIC products, services or initiatives have you used or participated in , how would you rate your experience?

(Only the specific services selected above will be presented for each respondent)

	1 = Poor	-	4 = N	eutral	-	7 = Ex	cellent
New membership account	1	2	3	4	5	6	7
MyAPNIC	1	2	3	4	5	6	7
APNIC Helpdesk	1	2	3	4	5	6	7
APNIC's EC election	1	2	3	4	5	6	7
APNIC Annual Report	1	2	3	4	5	6	7
IP address or AS number resource application	1	2	3	4	5	6	7
IPv4 address transfer (as source or recipient)	1	2	3	4	5	6	7
APNIC Whois database	1	2	3	4	5	6	7
APNIC RDAP service	1	2	3	4	5	6	7
APNIC reverse DNS service (as address holder)	1	2	3	4	5	6	7
Resource certification (RPKI)	1	2	3	4	5	6	7
APNIC Policy Development Process	1	2	3	4	5	6	7
APNIC Conference, APRICOT or another APNIC event (eg. NFH)	1	2	3	4	5	6	7
APNIC training (face-to-face or online)	1	2	3	4	5	6	7
Special Interest Groups (SIGs) – face-to-face meetings or mailing list	1	2	3	4	5	6	7
Met with an APNIC representative	1	2	3	4	5	6	7
Presentation by APNIC representative	1	2	3	4	5	6	7
APNIC Foundation activities (of any kind)	1	2	3	4	5	6	7
Contact with APNIC (Stakeholders only)	1	2	3	4	5	6	7
APNIC Blog	1	2	3	4	5	6	7
APNIC website	1	2	3	4	5	6	7
APNIC Internet Directory	1	2	3	4	5	6	7
APNIC NetOX	1	2	3	4	5	6	7

7. Please tell us why some of your experiences were not as good as you expected?

(Only asked if selected 1, 2 or 3 in Q7)





8. What do you think are the main barriers to participation in APNIC community activities? (Select up to three (3) responses only) (Randomise)

Cost-related factors
Gender-related factors
Language-related factors
Accessibility / Disability-related factors
Age-related factors
Skills and knowledge-related factors
Lack of time to participate
Geographical-related factors
Technical challenges with remote participation
Other (Please specify)
No significant barriers to participation (Exclusive)

9. If you have any comments regarding barriers to participation in APNIC community activities, please provide them here:

10. Where should APNIC place additional focus to encourage greater diversity of participation in community activities? (Select up to two (2) responses only) (Randomise)

Gender diversity
Cultural diversity
Improved accessibility for those with disabilities
Age diversity (e.g. Youth)
Language diversity
Other (Please specify)
No diversity support required from APNIC (Exclusive)

11. *Thinking about APNIC overall, how would you rate: (Members)

(Not asked if selected None at Q 4)

1	= Poor	-	4 = N	eutral		7 =Ex	cellent
The quality of APNIC products and services	1	2	3	4	5	6	7
The value of APNIC products and services	1	2	3	4	5	6	7
The value of APNIC membership	1	2	3	4	5	6	7

Overall, how would you rate your experience dealing with APNIC? (Stakeholders)

Very poor Poor Below average Average Above average Good Excellent	Very poor	Poor	Below average	Average	Above average	Good	Excellent
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Internet-Related Challenges

12. In your own words, what is the MAIN challenge for you / your organisation in providing your Internet-related products, services and activities?

13. Thinking about Internet-related services, products or activities, what are the MAIN strategic challenges facing your organisation?

Please rank these in order of priority, where 1 is the greatest challenge.

(Asked if CEO/COO/CFO, CIO/CTO or Sales/Marketing at Q2) (Please rank at least three (3) challenges in order of their priority to your organisation) (Randomise)

Compliance with regulatory requirements
Scaling up capacity to meet market demands
Security risks which affect business
Hiring and / or keeping skilled employees
Keeping pace with new technologies
Introduction of new products and services to improve business and stay competitive
Cost control of hardware, software, and network investment
Adapting business model to meet market changes
Access to reliable and credible Internet Industry data

14. Thinking again about Internet-related services, products or activities, what are the MAIN operational challenges facing your organisation?

Please rank these in order of priority, where 1 is the greatest challenge.

(Please rank at least three (3) challenges in order of their priority to your organisation) (Randomise)

Handling of security incidents
Automation of network & systems operations
Deployment of IPv6 in our network
Coping with IPv4 shortage
Management of Internet traffic, transit & peering and network capacity
Keeping up with the pace of technology changes (e.g. SDN, NFV, blockchain)
Managing cost of systems, network operations, and security
Benchmarking and adopting best practices in network operations
Managing the impact of new Internet technologies (e.g. 5G, Internet of Things (IoT)) on existing
infrastructure

15. How might APNIC best assist you or others with these challenges?





Network Security

16. Thinking about network security, what are the MAIN challenges facing your organisation?

(Select up to three (3) responses only) (Randomise)

DDoS attacks
Routing security
Intrusion and other breaches
Phishing, spam, malware, ransomware
Blacklisting of our IP addresses
Lack of application security
Lack of security for IoT applications
Staff lack awareness of security issues
Lack of clear directives/policies from relevant government authorities
Lack of clear directives/policies from management
Inadequate security policies
Handling abuse and incident reports
Lack of expertise in implementing enterprise-wide security programs
Other (Please specify)

17. How might APNIC best assist you or others with network security challenges?

(Select up to two (2) of the most important) (Randomise)

Collaboration with other technical security organizations to share information and best practice
Engagement with governments in the region about the issues of cyber security
Sharing of security insights on the APNIC Blog and website
Increase security-focused Training courses (DDoS prevention, Security policy development etc.)
Enhance security content in APNIC conferences
Encourage CERT development and information sharing between CERTs and the APNIC community
APNIC is already doing all it can to assist with these challenges (Exclusive)
None of these (Exclusive)

18. Do you have any other ideas about how APNIC can assist with network security challenges?





IPv4 Scarcity

19. Thinking about the scarcity of IPv4 addresses, what are the MAIN challenges facing your organisation?

(Select up to two (2) responses only) (Randomise)

Finding available IPv4 addresses
The cost of buying IPv4 addresses
IPv4 address transfer policies
"Health" of IPv4 addresses being transferred (e.g. blacklisting)
Cost and complexity of NATs
Deploying IPv6
Other (Please specify)
Don't know (Exclusive)
It is not an issue for my organization (Go to Q19) (Exclusive)

20. Thinking about the scarcity of IPv4 addresses, which of the following activities do you think APNIC should undertake?

(Select up to two (2) of the most important)

Analyse and identify unused IPv4 addresses
Attempt to recover unused IPv4 resources from identified address holders
Reclaim unused IPv4 resources which have no existing (or contactable) holder
Work with resource holders to optimise IPv4 address usage
Ensure consistent treatment of "historical" and "current" IPv4 resource holdings
Serve actively as an IPv4 address broker
Other (Please specify)
Don't know [Exclusive]





IPv6 Deployment

21. Has your organisation already deployed or are you ready for deployment of IPv6?

Yes, IPv6 is fully deployed in our networks and customer services (Go to Q20)
Yes, IPv6 is deployed in our core network(s) but not in access or other networks (Go to Q19)
We have an IPv6 deployment plan (Go to Q19)
We do not have any IPv6 deployment plans (Go to Q19)

22. What is preventing IPv6 deployment in access or other networks?

(Asked if answered "IPv6 is deployed in our core networks but not in access or other networks" at Q19) (Select up to two (2) responses only) (Randomise)

Lack of knowledge and expertise on IPv6
Lack of CPE (customer equipment) that support IPv6
Lack of demand for IPv6 from customers
Lack of IPv6 support in network management/security systems
Our upstream providers or peers do not support IPv6
Lack of business/technical advantages or reasons to adopt IPv6
Lack of support for IPv6 amongst vendors
Other (Please specify)
None of the above (Exclusive)

23. Which of the following activities do you believe are the most important to encouraging IPv6 adoption in the region?

(Select up to two (2) of the most important) (Randomise)

Promoting IPv6 to management and/or decision makers
Promoting IPv6 to government and related organisations
Promoting IPv6 to hardware, software and/or content providers
Promoting IPv6 to customers (business and retail)
Sharing deployment case studies and best current practices about IPv6
Providing basic and advanced training on IPv6
Providing Technical Assistance on IPv6 deployment
Facilitating knowledge sharing between member organisations on IPv6 deployment experiences
Other (Please provide suggestions)
APNIC should take no action to promote or assist with the deployment of IPv6 (Exclusive)





RPKI, ROA, & ROV

24. Please indicate the extent to which you are aware of, and have deployed, the following:

	I am not aware of this	I am aware of this, but not deployed it	We have plans to deploy this	This is deployed in our networks
RPKI				
ROA				
ROV				

25. How could APNIC support your organisation to learn more about, or deploy RPKI / ROA / ROV?

(Asked if answered "I am not aware of this, I am aware of this but not deployed it, or We have plans to deploy this" at Q24)

Online training
Face to face training
Technical Assistance
Promotion to managers and executives about the benefits of deployment
Cost / benefit analysis and reports
Case studies of successful implementation
Other (please specify)

Training

26. Have you completed any APNIC training in the past two (2) years?

Yes, face to face training
Yes, online self-paced training on APNIC Academy
Yes, online live training on APNIC Academy or other platforms
No [Exclusive] (Go to Q28)
Can't remember [Exclusive] (Go to Q28)

27. Why have you not attended training on the past two years?

(Asked if answered "No" at Q26)

It's too expensive
I don't have time
I couldn't get management approval
The location(s) are not suitable
The topics are too basic
The courses are not suited to my role / job
Training is not offered in my local language
I didn't know about the training opportunities
Other (please specify)





28. Are there any training topics you would like APNIC to make available?

29. Which of the following training activities would be of MOST value to your organisation?

(Select up to five (5) responses only) (Randomise)

Training delivered in my local language by people who are familiar with my local economy
Training materials available in my local language
Online live training sessions scheduled for local time zones
Online self-paced training
Online Virtual Labs
Collaboration with universities to train the next generation of engineers
Advanced hands-on face-to-face training courses
Customised training relevant to local needs (not off the shelf)
Customised Technical Assistance on deployment (after attending training)
Full training certification
Training on new technologies (Please specify what)
Other (Please specify)
None of the above (Exclusive)





Information Services

30. What types of Internet trend and benchmarking data services would be of MOST USE to your organization?

(Select up to three (3) responses only) (Randomise)

ASN/IPv4/IPv6 distribution and usage
Network infrastructure, topology, usage
Network threats and security (e.g. Routing anomalies, intrusion detection, security alerts)
Use of specific technologies (e.g. IPv6, DNSSEC, RPKI)
Use of new technologies (e.g. SDN, NFV)
Use of specific vendors for various products
Pricing or charging information (for customer and/or infrastructure services)
Industry and market trends and information
Internet business and operational benchmarks
Other (Please specify)
None of the above (Exclusive)

31. Is there any other Internet trend and benchmark information that would be of value to your organisation?

Support for Internet Development

32. If additional resources were available for Internet development, through assistance for community organisations or supporting shared infrastructure, where do you want APNIC to focus its efforts? (Select up to three (3) responses only) (Randomise)

On NOGs
On NRENs
On CERTs
On IGFs or Schools of Internet Governance (SIGs)
Internet industry associations
Supporting IXPs
Supporting DNS root and TLD servers
Supporting CDN caches
None of these [Exclusive]

33. If additional resources were available for Internet development in information services, what would provide your organisation with the most benefit?

(Select up to two (2) responses only) (Randomise)

New information about security incidents and threats
Information about Internet performance
Information on infrastructure growth
Information about infrastructure costs
Internet industry metrics and trends
Information about national policies and regulations
None of these [Exclusive]





Capability

34. Thinking about your membership of APNIC, please indicate how much you AGREE with the following:

	1 = Strongly	y disa	gree	4 = N	eutral	7 = 5	Strong	ly agree
APNIC is sufficiently open and transparent in its activities		1	2	3	4	5	6	7
APNIC is respected in the Internet community		1	2	3	4	5	6	7

35. Do you have any suggestions or ideas about APNIC governance?

Endorsement

36. Which of these phrases best describes the way you speak about APNIC to others?

I am critical of APNIC without being asked
I tend to be critical of APNIC if I am asked
l am neutral
I speak well about APNIC if I am asked
I speak highly of APNIC without being asked

Other comments

37. If you have any other comments on APNIC's services and activities, or any suggestions or ideas for the APNIC EC to consider, please provide them here:





Demographic Information

38. What is your gender?

Male
Female
Other
Prefer not to say

39. What is your age?

18 - 24
25 – 34
35 – 44
45 – 54
Over 54
Prefer not to say

40. What type of organization do you work for?

Academic/Educational/Research
Banking/Financial
Domain name registry/Registrar
Enterprise/Manufacturing/Retail
Government/Regulator/Municipality
Hardware vendor
Hosting/Data centre
Industrial (construction, mining, oil)
Infrastructure (transport/hospital)
Internet exchange point (IXP)
Internet service provider (ISP)
Media/Entertainment
NREN/Research network
Non-profit/NGO/Internet community
Software vendor
Telecommunications/Mobile operator
Other (please specify)





41. Do you have a disability that requires APNIC to make adjustments so you can engage with us online or at events?

Yes
No (Go to Q43)
Prefer not to say (Go to Q43)

42. If you have any suggestions on adjustments APNIC could make we would welcome them here:

(Asked if answered 'Yes" at Q41)

43. How well can you speak, read and write English?

I am fluent in English			
I can understand most English and have English conversations comfortably			
I can understand some English and have basic English conversations			
I understand little English and need assistance			





Prize Draw

Thank you for providing your feedback and participating in the **APNIC 2020 Survey**. There will be three prize draws during the survey, and prizes include a <Insert>

Prize winners will be drawn at random by Survey Matters, using contact information provided here. Please note that your responses to all of the other questions in the survey will remain anonymous.

Would you like to go into the prize draw?

Yes
No (Go to second chance to win!)

Please enter your details below so we can contact you should you win (Note: your survey responses will remain anonymous and will not be linked to the prize draw):

(Presented if Yes selected at Q40)

Name	
Email Address	
Telephone Number	

Second chance to win!

Encourage others to take the APNIC Survey using Twitter or Facebook. Simply tweet or post the message below on Twitter or Facebook, and you will automatically be entered in a social media competition to win one of two Visa virtual gift cards valued at AUD \$200 each.

Twitter or Facebook message:

I've just completed the 2020 #apnicsurvey – visit survey.apnic.net to provide your thoughts. You could win a prize!

Thank you for taking part. We appreciate your participation and value your feedback.