

Resource Certification in MyAPNIC

Robert Loomans
Senior Software Engineer, APNIC

Resource Certification in MyAPNIC


- Focus on tasks
- MyAPNIC pages
- Future direction

Focus on Tasks


- What do you want done?
 - Focus on tasks and resources...
 - ... not certificates
- Complex details, if you want them

MyAPNIC Home Page

APNIC 30 24 - 27 August 2010, Gold Coast, Australia



Joe [APNICTRAINING-AU] | [Contacts and Users](#) | [My Profile](#) | [Log out](#)



Home Resources Administration Training Tools

Home

Welcome to MyAPNIC

Hello Joe!

[My Profile](#)
[Contacts and Users](#)
[User Registrations](#)

Membership details

Account: **APNICTRAINING-AU**
Expiry: **2020-04-30** [Renew](#)
Tier: **medium**


Kickstart IPv6!

(2010-02-09 14:00:00)

APNIC Members holding IPv4 addresses but no IPv6 addresses can now obtain an IPv6 address block easily. Eligible Members can see a "Get your IPv6 addresses" icon on the bottom left-hand corner of this page. To take advantage of this new policy, simple click on that icon.
For more information, see [Kickstart IPv6](#).

Useful links

[MyAPNIC features](#)
[How do I create a Route object?](#)
[IP address calculator](#)
[Reverse DNS troubleshooting](#)
[Training](#)
[FAQs](#)
[Annual membership fees calculator](#)

APNIC Helpdesk Chat
Online
Click here to chat 

What can I do?

- View and update your [resource information](#) for IPv4, IPv6, AS numbers, Whois updates and [Resource certification](#)
- View and update your [Member details](#) and [Contact details](#). You may also track your [Billing history](#)
- Use the [Training](#) section to view training and events history
- Use the [APNIC looking glass](#) or generate a prefix report

News

10-02-2010 [New APNIC policies now active](#)
27-01-2010 [IPv6 indicator to business leaders](#)
21-01-2010 [Global recovery to pressure IP address pool](#)
20-01-2010 [APNIC supports JANOG 25](#)
20-01-2010 [IANA IPv4 pool less than 10%](#)
11-01-2010 [EC Nominations now open](#)

- [More news...](#)

Resources Management

MyAPNIC

Joe [APNICTRAINING-AU] | [Contacts and Users](#) | [My Profile](#) | [Log out](#)

Home Resources Administration Training Tools

IPv4 IPv6 ASN Whois updates Certification Maintainers Correspondence

Home / Resource management

Resource management

Reminder

Please [register](#) your whois maintainer.

Internet resources

Use MyAPNIC to view and update your information about the following Internet resources:

- [IPv4](#)
- [IPv6](#)
- [ASN](#)
- [Whois updates](#)
- [Certification](#)
- [Maintainers](#)
- [Correspondence](#)

Resource request forms

Request more:

- [IPv4 addresses](#)
- [IPv6 addresses](#)
- [AS numbers](#)

© APNIC | [Feedback](#)

Activate Certification

MyAPNIC

Joe [APNICTRAINING-AU] | [Contacts and Users](#) | [My Profile](#) | [Log out](#)

Home Resources Administration Training Tools

[IPv4](#) | [IPv6](#) | [ASN](#) | [Whois updates](#) | [Certification](#) | [Maintainers](#) | [Correspondence](#)

Home / Resources / Certification

Resource Certification

Activation

Your service is not yet activated. To activate the service click the button below.

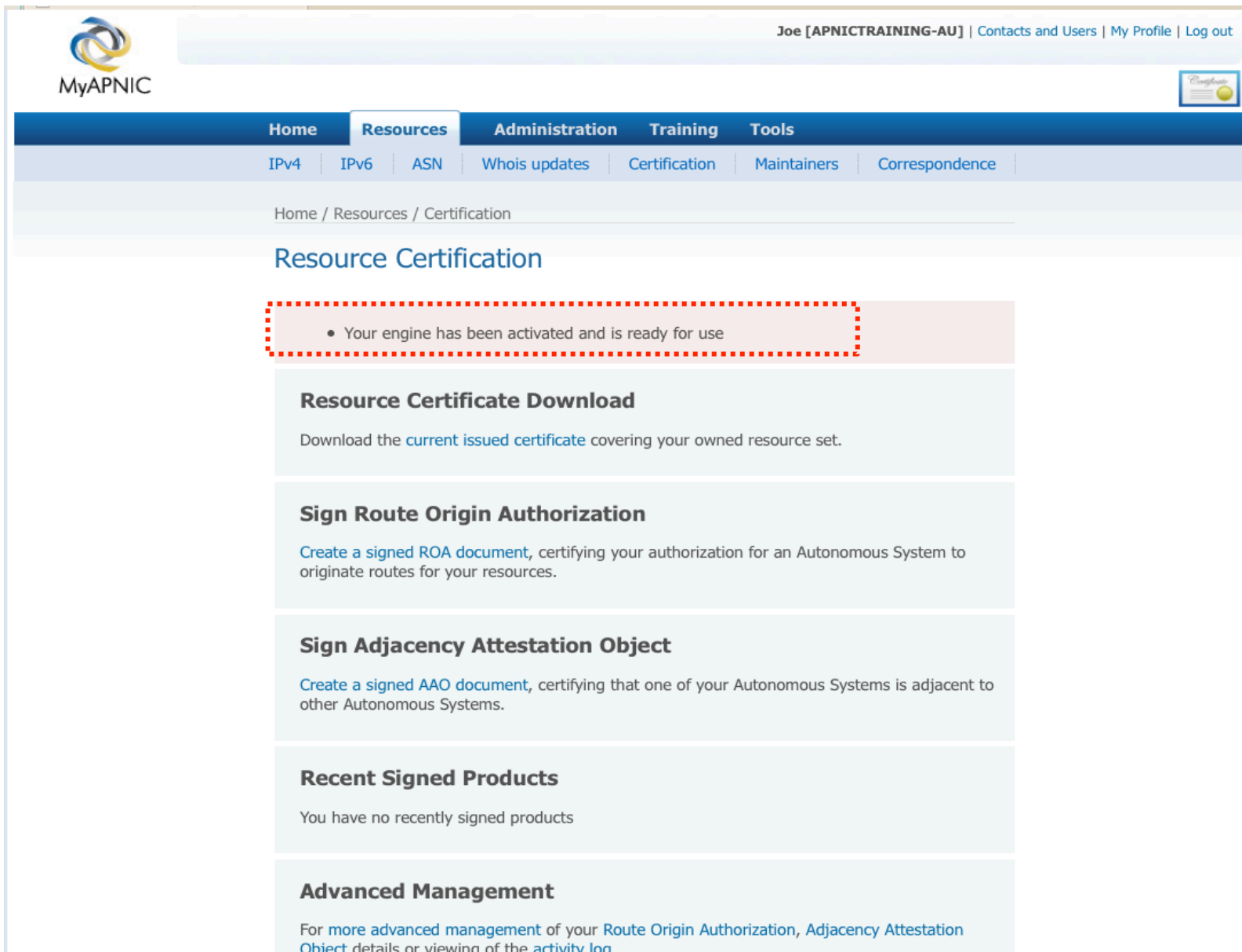
NOTE: This process may take a couple of minutes. Please be patient.

[Activate Service](#)

© APNIC | [Feedback](#)

Service Activated

APNIC 30 24 - 27 August 2010, Gold Coast, Australia



The screenshot shows the MyAPNIC website interface. At the top left is the MyAPNIC logo. At the top right, the user is identified as 'Joe [APNICTRAINING-AU]' with links for 'Contacts and Users', 'My Profile', and 'Log out'. A 'Compliance' badge is visible in the top right corner. The main navigation bar includes 'Home', 'Resources', 'Administration', 'Training', and 'Tools'. Below this, a secondary navigation bar lists 'IPv4', 'IPv6', 'ASN', 'Whois updates', 'Certification', 'Maintainers', and 'Correspondence'. The breadcrumb trail reads 'Home / Resources / Certification'. The main heading is 'Resource Certification'. A red dashed box highlights a message: 'Your engine has been activated and is ready for use'. Below this are several sections: 'Resource Certificate Download' (with a link to 'current issued certificate'), 'Sign Route Origin Authorization' (with a link to 'signed ROA document'), 'Sign Adjacency Attestation Object' (with a link to 'signed AAO document'), 'Recent Signed Products' (stating 'You have no recently signed products'), and 'Advanced Management' (with links to 'Route Origin Authorization', 'Adjacency Attestation Object', and 'activity log').

MyAPNIC

Joe [APNICTRAINING-AU] | [Contacts and Users](#) | [My Profile](#) | [Log out](#)

Compliance

Home Resources Administration Training Tools

IPv4 IPv6 ASN Whois updates Certification Maintainers Correspondence

Home / Resources / Certification

Resource Certification

- Your engine has been activated and is ready for use

Resource Certificate Download

Download the [current issued certificate](#) covering your owned resource set.

Sign Route Origin Authorization

Create a [signed ROA document](#), certifying your authorization for an Autonomous System to originate routes for your resources.

Sign Adjacency Attestation Object

Create a [signed AAO document](#), certifying that one of your Autonomous Systems is adjacent to other Autonomous Systems.

Recent Signed Products

You have no recently signed products

Advanced Management

For [more advanced management](#) of your [Route Origin Authorization](#), [Adjacency Attestation Object](#) details or viewing of the [activity log](#).

Create Route Origin Authorization



Robert | Account: APNICRANDNET-AU | [Manage Contacts](#) | [My Profile](#) | [Log out](#)



[Home](#) | [Voting](#) | **[Resources](#)** | [Administration](#) | [Training](#) | [Tools](#)

[IPv4](#) | [IPv6](#) | [ASN](#) | [Whois updates](#) | [Certification](#) | [Maintainers](#) | [Correspondence](#)

[Home](#) / [Resources](#) / [Certification](#)

Resource Certification

Resource Certificate Download

Download the [current issued certificate](#) covering your owned resource set.

Sign Route Origin Authorization

[Create a signed ROA document](#), certifying your authorization for an Autonomous System to originate routes for your resources.

Sign Adjacency Attestation Object

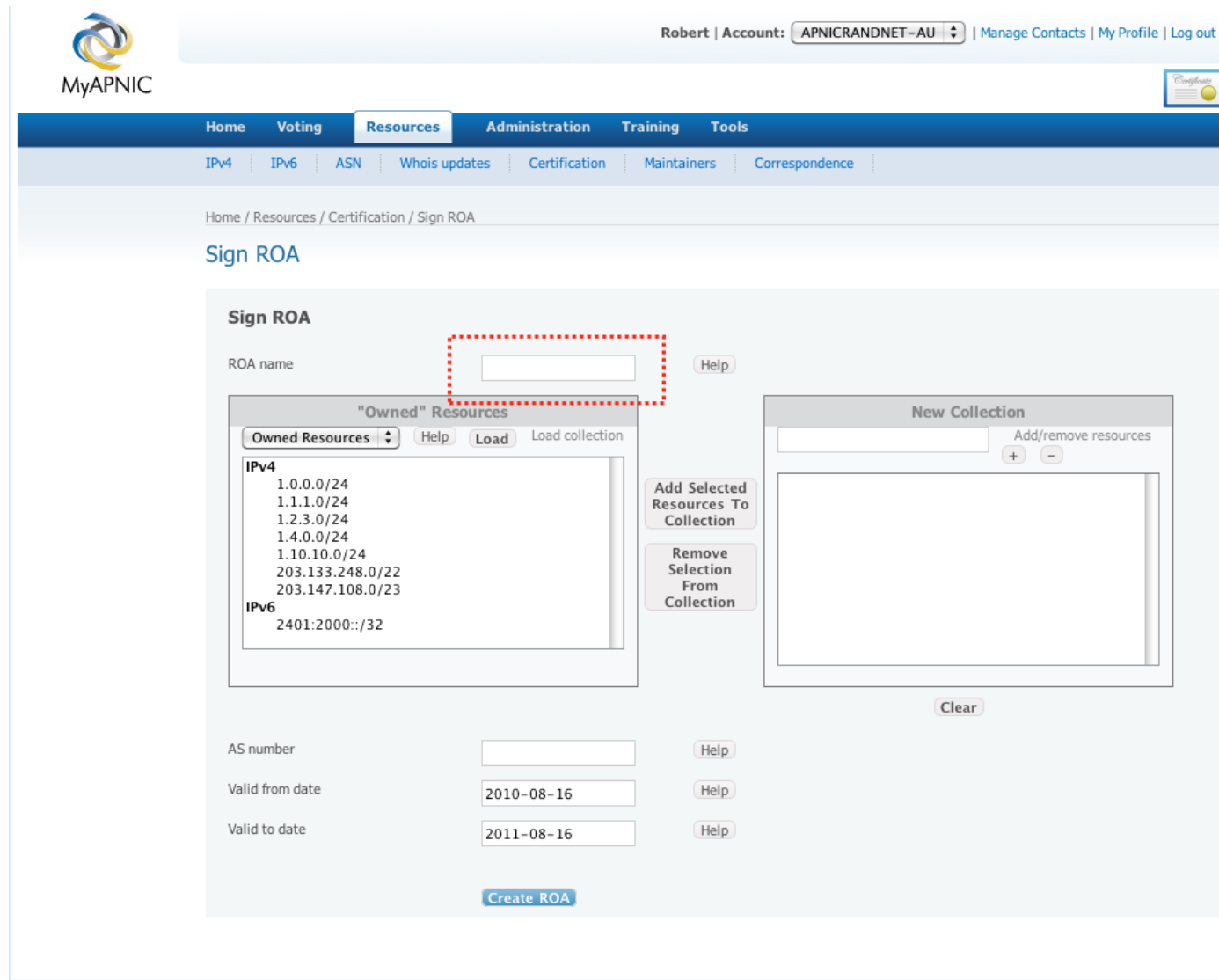
[Create a signed AAO document](#), certifying that one of your Autonomous Systems is adjacent to other Autonomous Systems.

24 - 27 August 2010, Gold Coast, Australia

APNIC 30



Name ROA



The screenshot shows the MyAPNIC website interface for signing a Resource Origin Authentication (ROA). The page title is "Sign ROA". At the top, the user is logged in as "Robert" with account "APNICRANDNET-AU". The navigation menu includes Home, Voting, Resources, Administration, Training, and Tools. The "Resources" menu is expanded, showing options like IPv4, IPv6, ASN, Whois updates, Certification, Maintainers, and Correspondence. The breadcrumb trail is "Home / Resources / Certification / Sign ROA".

The main content area is titled "Sign ROA" and contains the following fields and controls:

- ROA name:** A text input field with a "Help" button next to it. A red dashed box highlights this field.
- "Owned" Resources:** A panel with a dropdown menu set to "Owned Resources", a "Help" button, and a "Load" button. Below this is a list of resources:
 - IPv4:** 1.0.0/24, 1.1.1.0/24, 1.2.3.0/24, 1.4.0/24, 1.10.10.0/24, 203.133.248.0/22, 203.147.108.0/23
 - IPv6:** 2401:2000::/32
- New Collection:** A panel with a text input field, "Add/remove resources" (+/-) buttons, and a "Clear" button at the bottom.
- AS number:** A text input field with a "Help" button.
- Valid from date:** A date input field containing "2010-08-16" with a "Help" button.
- Valid to date:** A date input field containing "2011-08-16" with a "Help" button.
- Create ROA:** A blue button at the bottom of the form.

Additional controls include "Add Selected Resources To Collection" and "Remove Selection From Collection" buttons located between the "Owned Resources" and "New Collection" panels.

Add Resources



Robert | Account: APNICRANDNET-AU | Manage Contacts | My Profile | Log out



Home Voting Resources Administration Training Tools

IPv4 IPv6 ASN Whois updates Certification Maintainers Correspondence

Home / Resources / Certification / Sign ROA

Sign ROA

Sign ROA

ROA name [Help](#)

Owned Resources

Owned Resources [Help](#) [Load](#) [Load collection](#)

IPv4

- 1.0.0/24
- 1.1.1.0/24
- 1.2.3.0/24
- 1.4.0/24
- 1.10.10.0/24
- 203.133.248.0/22
- 203.147.108.0/23

IPv6

- 2401:2000::/32

Add Selected Resources To Collection

Remove Selection From Collection

New Collection

[Add/remove resources](#)

+ -

[Clear](#)

AS number [Help](#)

Valid from date [Help](#)

Valid to date [Help](#)

[Create ROA](#)

Add Resources



Robert | Account: APNICRANDNET-AU | [Manage Contacts](#) | [My Profile](#) | [Log out](#)



[Home](#) | [Voting](#) | **[Resources](#)** | [Administration](#) | [Training](#) | [Tools](#)

[IPv4](#) | [IPv6](#) | [ASN](#) | [Whois updates](#) | [Certification](#) | [Maintainers](#) | [Correspondence](#)

[Home](#) / [Resources](#) / [Certification](#) / [Sign ROA](#)

Sign ROA

Sign ROA

ROA name

[Help](#)

"Owned" Resources

[Owned Resources](#) | [Help](#) | [Load](#) | [Load collection](#)

IPv4

- 1.0.0.0/24
- 1.1.1.0/24
- 1.2.3.0/24
- 1.4.0.0/24
- 1.10.10.0/24
- 203.133.248.0/22
- 203.147.108.0/23

IPv6

- 2401:2000::/32

Add Selected Resources To Collection

Remove Selection From Collection

New Collection

Add/remove resources

+ -

[Clear](#)

AS number

[Help](#)

Valid from date

[Help](#)

Valid to date

[Help](#)

[Create ROA](#)

Add AS



Robert | Account: APNICRANDNET-AU | [Manage Contacts](#) | [My Profile](#) | [Log out](#)



[Home](#) | [Voting](#) | **[Resources](#)** | [Administration](#) | [Training](#) | [Tools](#)

[IPv4](#) | [IPv6](#) | [ASN](#) | [Whois updates](#) | [Certification](#) | [Maintainers](#) | [Correspondence](#)

[Home](#) / [Resources](#) / [Certification](#) / [Sign ROA](#)

Sign ROA

Sign ROA

ROA name [Help](#)

"Owned" Resources

[Owned Resources](#) | [Help](#) | [Load](#) | [Load collection](#)

IPv4

- 1.0.0.0/24
- 1.1.1.0/24
- 1.2.3.0/24
- 1.4.0.0/24
- 1.10.10.0/24
- 203.133.248.0/22
- 203.147.108.0/23

IPv6

- 2401:2000::/32

Add Selected Resources To Collection

Remove Selection From Collection

New Collection

[Add/remove resources](#)

[+](#) [-](#)

[Clear](#)

AS number [Help](#)

Valid from date [Help](#)

Valid to date [Help](#)

[Create ROA](#)

Advanced Management



Joe [APNICTRAINING-AU] | [Contacts and Users](#) | [My Profile](#) | [Log out](#)



[Home](#) | [Resources](#) | [Administration](#) | [Training](#) | [Tools](#)

[IPv4](#) | [IPv6](#) | [ASN](#) | [Whois updates](#) | [Certification](#) | [Maintainers](#) | [Correspondence](#)

[Home](#) / [Resources](#) / [Certification](#)

Resource Certification

Resource Certificate Download

Download the [current issued certificate](#) covering your owned resource set.

Sign Route Origin Authorization

[Create a signed ROA document](#), certifying your authorization for an Autonomous System to originate routes for your resources.

Sign Adjacency Attestation Object

[Create a signed AAO document](#), certifying that one of your Autonomous Systems is adjacent to other Autonomous Systems.

Recent Signed Products

You have no recently signed products

Advanced Management

For more advanced management of your [Route Origin Authorization](#), [Adjacency Attestation Object](#) details or viewing of the [activity log](#).

APNIC 30 24 - 27 August 2010, Gold Coast, Australia

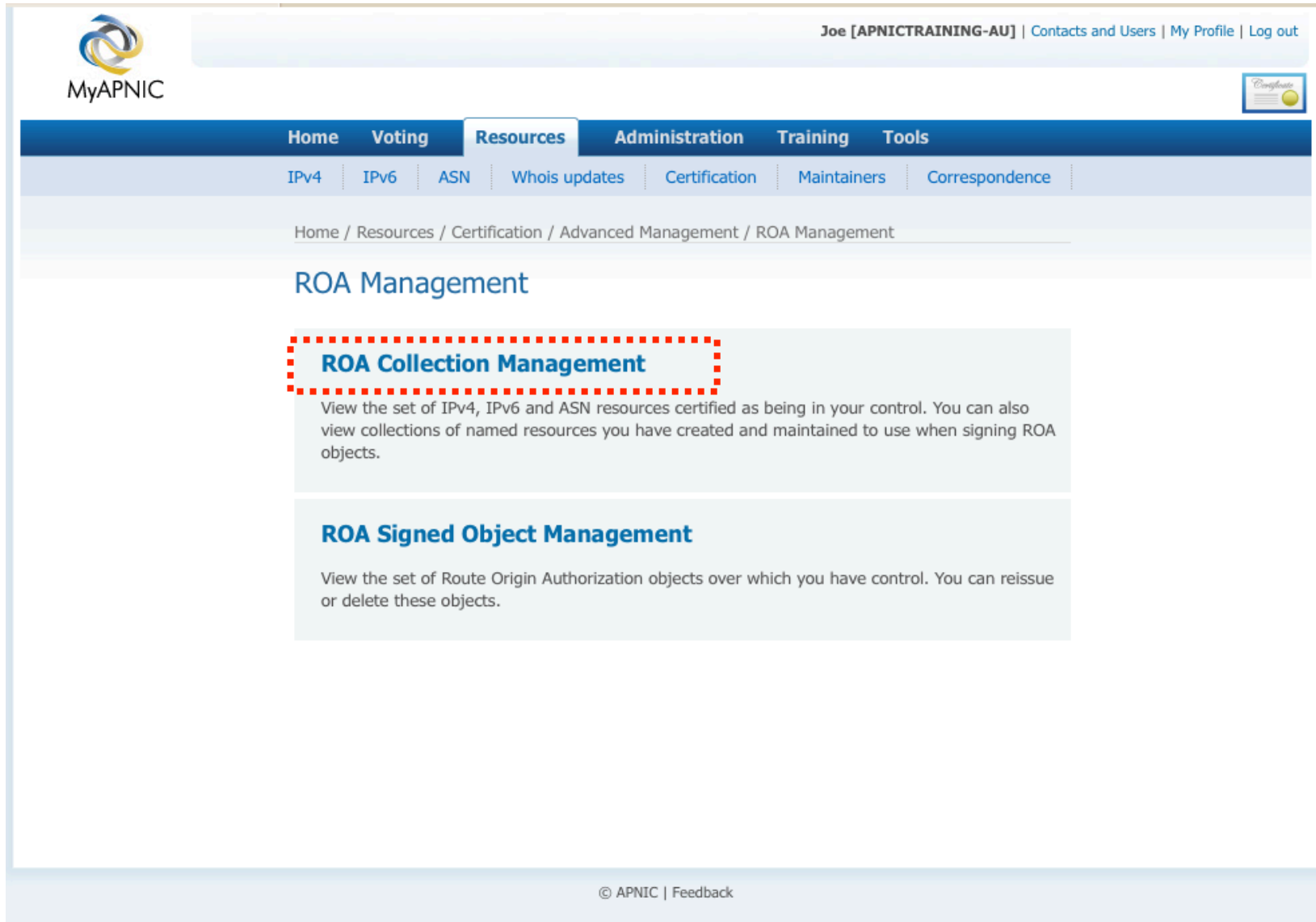
APNIC 30



Route Origin Authorization (ROA)

The screenshot displays the MyAPNIC user interface. At the top left is the MyAPNIC logo. The top right shows the user name 'Joe [APNICTRAINING-AU]' and links for 'Contacts and Users', 'My Profile', and 'Log out'. A navigation bar contains 'Home', 'Voting', 'Resources', 'Administration', 'Training', and 'Tools'. Below this, a secondary menu lists 'IPv4', 'IPv6', 'ASN', 'Whois updates', 'Certification', 'Maintainers', and 'Correspondence'. The breadcrumb trail reads 'Home / Resources / Certification / Advanced'. The main content area is titled 'Advanced management' and features three panels: 'Manage Route Origin Authorization Details' (highlighted with a red dashed border), 'Manage Adjacency Attestation Object Details', and 'Activity Log'. The footer contains the copyright notice '© APNIC | Feedback'.

ROA Collection Management



The screenshot shows the MyAPNIC website interface. At the top left is the MyAPNIC logo. At the top right, the user is identified as Joe [APNICTRAINING-AU] with links for Contacts and Users, My Profile, and Log out. A navigation bar contains Home, Voting, Resources, Administration, Training, and Tools. Below this, a secondary navigation bar lists IPv4, IPv6, ASN, Whois updates, Certification, Maintainers, and Correspondence. A breadcrumb trail reads Home / Resources / Certification / Advanced Management / ROA Management. The main content area is titled ROA Management and features two sections: ROA Collection Management (highlighted with a red dashed border) and ROA Signed Object Management. The footer contains the copyright notice © APNIC | Feedback.

MyAPNIC

Joe [APNICTRAINING-AU] | [Contacts and Users](#) | [My Profile](#) | [Log out](#)

Home Voting Resources Administration Training Tools

IPv4 IPv6 ASN Whois updates Certification Maintainers Correspondence

Home / Resources / Certification / Advanced Management / ROA Management

ROA Management

ROA Collection Management

View the set of IPv4, IPv6 and ASN resources certified as being in your control. You can also view collections of named resources you have created and maintained to use when signing ROA objects.

ROA Signed Object Management

View the set of Route Origin Authorization objects over which you have control. You can reissue or delete these objects.

© APNIC | [Feedback](#)

Add ROA Collection

MyAPNIC

Joe [APNICTRAINING-AU] | [Contacts and Users](#) | [My Profile](#) | [Log out](#)

Home | **Voting** | **Resources** | Administration | Training | Tools

IPv4 | IPv6 | ASN | Whois updates | Certification | Maintainers | Correspondence

Home / Resources / Certification / Advanced Management / ROA Management / Collections / Editing

Edit ROA Collection

Collection Name: This name will be used for collection selection, helping you identify this individual collection.

Description:

Collection Resources

"Owned" Resources

Owned Resources | Load | Load Collection

IPv4	203.176.189.0/24
IPv6	2001:DF0:A::/48

New Collection

Add/remove resources

+ -

Add Selected Resources To Collection

Remove Selection From Collection

Clear

Save Collection

© APNIC | Feedback

Add ROA Collection

MyAPNIC

Joe [APNICTRAINING-AU] | [Contacts and Users](#) | [My Profile](#) | [Log out](#)

Home Voting Resources Administration Training Tools

IPv4 IPv6 ASN Whois updates Certification Maintainers Correspondence

Home / Resources / Certification / Advanced Management / ROA Management / Collections / Editing

Edit ROA Collection

Collection Name [Help](#)

Description [Help](#)

Collection Resources

"Owned" Resources

Owned Resources Load Collection

IPv4	203.176.189.0/24
IPv6	2001:DF0:A::/48

New Collection

Add/remove resources

© APNIC | [Feedback](#)

Add ROA Collection

MyAPNIC

Joe [APNICTRAINING-AU] | [Contacts and Users](#) | [My Profile](#) | [Log out](#)

Home Voting Resources Administration Training Tools

IPv4 IPv6 ASN Whois updates Certification Maintainers Correspondence

Home / Resources / Certification / Advanced Management / ROA Management / Collections / Editing

Edit ROA Collection

Collection Name [Help](#)

Description [Help](#)

Collection Resources

"Owned" Resources

IPv4	203.176.189.0/24
IPv6	2001:DF0:A::/48

New Collection

Add/remove resources

IPv6	2001:DF0:A::/48
------	-----------------

© APNIC | [Feedback](#)

Add/Remove Resources



Joe [APNICTRAINING-AU] | [Contacts and Users](#) | [My Profile](#) | [Log out](#)



[Home](#) | [Voting](#) | **[Resources](#)** | [Administration](#) | [Training](#) | [Tools](#)

[IPv4](#) | [IPv6](#) | [ASN](#) | [Whois updates](#) | [Certification](#) | [Maintainers](#) | [Correspondence](#)

[Home](#) / [Resources](#) / [Certification](#) / [Advanced Management](#) / [ROA Management](#) / [Collections](#) / [Editing](#)

Edit ROA Collection

Collection Name

Description

Collection Resources

"Owned" Resources

Owned Resources Load Collection

IPv4	203.176.189.0/24
IPv6	2001:DF0:A::/48

Add Selected Resources To Collection

Remove Selection From Collection

New Collection

Add/remove resources

IPv6	2001:DF0:A:100::/56
	2001:DF0:A:200::/56

24 - 27 August 2010, Gold Coast, Australia

APNIC 30



View & Update Collections

MyAPNIC

Joe [APNICTRAINING-AU] | [Contacts and Users](#) | [My Profile](#) | [Log out](#)

Home Voting Resources Administration Training Tools

[IPv4](#) | [IPv6](#) | [ASN](#) | [Whois updates](#) | [Certification](#) | [Maintainers](#) | [Correspondence](#)

Home / Resources / Certification / Advanced Management / ROA Management / Collections

Route Origin Authorization Collections

[View Certificate](#)

OWNED

Owned Resources

IPV4

203.176.189.0/24

IPV6

2001:DF0:A::/48

ASN

45192
131107

[Edit](#) | [Delete](#)

Customer_Net

My customer net

IPV6

2001:DF0:A::/56
2001:DF0:A:200::/55

Create New Collection

You can [create a new collection](#) of IP addresses to be used when signing ROA objects. You can only create a new collection with the resources you already have.

© APNIC | [Feedback](#)

Download Certificate



Joe [APNICTRAINING-AU] | [Contacts and Users](#) | [My Profile](#) | [Log out](#)



[Home](#) | [Resources](#) | [Administration](#) | [Training](#) | [Tools](#)

[IPv4](#) | [IPv6](#) | [ASN](#) | [Whois updates](#) | [Certification](#) | [Maintainers](#) | [Correspondence](#)

[Home](#) / [Resources](#) / [Certification](#)

Resource Certification

Resource Certificate Download

Download the [current issued certificate](#) covering your owned resource set.

Sign Route Origin Authorization

[Create a signed ROA document](#), certifying your authorization for an Autonomous System to originate routes for your resources.

Sign Adjacency Attestation Object

[Create a signed AAO document](#), certifying that one of your Autonomous Systems is adjacent to other Autonomous Systems.

Recent Signed Products

You have no recently signed products

Advanced Management

For [more advanced management](#) of your [Route Origin Authorization](#), [Adjacency Attestation Object](#) details or viewing of the [activity log](#).

24 - 27 August 2010, Gold Coast, Australia

APNIC 30





APNIC 30

24 - 27 August 2010, Gold Coast, Australia

Future

- “General purpose” signer
- Verifier

General Purpose Signer

- MyAPNIC only
- Upload a file
- Download
 - a detached signature
 - a signed package

Verifier

- Public website
- Upload
 - a file and signature
 - signed package
 - signed object (ROA, etc.)
- Verify signature
- Show certified resource details
- Download package payload

Resource Certification in MyAPNIC

- Focus on tasks
- MyAPNIC pages
- Future direction

Questions?

Thank You!
RobertL@apnic.net