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(version 2007-02)

The goal of this document is to provide a comparative overview of policies across the Regional Internet Registry (RIR) system. It is not a policy statement by the RIRs, but serves as a reference for the Internet community. While this document was accurate on the date of publication (31 March 2007), it may be outdated by subsequent policy implementations. The official policy documents can be found at the respective websites of the RIRs. This is a public document that will be reviewed and revised through the coordinated efforts of the RIRs.

For more information, refer to the <u>AfriNIC</u>, <u>APNIC</u>, <u>ARIN</u>, <u>LACNIC</u>, and <u>RIPE NCC</u> websites.

RIR Comparative Policy Overview

(version 2007-02)

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1. General

1.1 Goals of the RIR System

AfriNIC
APNIC
ARIN
LACNIC
RIPE
NCC
AfriNIC
ARIN
CARIN
LACNIC
RIPE
NCC
All allocations and assignments of Internet resources must be consistent with the goals of the Internet Registry system: aggregation, conservation and registration.

[TOP]

1.2 Membership

RIR	Category	Policy
	Qualification	Membership is globally open without condition.
AfriNIC	Access to registration services	Registration service is accessible by members only. Registered resources are publicly available.
	Fee model	Not-for profit. Fee established by members to enable cost recovery of operations.
	Qualification	Membership is open globally without conditions.
APNIC	Access to registration services	Members have full access to all services. Non-member account holders may access resource assignment and allocation services.
	Fee model	Not-for-profit organisation. Fee schedule established to enable cost recovery of operations.
	Qualification	Open globally without conditions. Organisations that receive allocations automatically become members.
ARIN	Access to registration services	Do not need to be a member to receive registration services.
	Fee model	Not-for-profit organisation. Fee schedule established to enable cost recovery of operations.
	Qualification	Membership is open to LACNIC region only, without conditions.
LACNIC	Access to registration services	Organisations approved for IP addresses automatically become members. It is not necessary to become a member to obtain some services like ASN assignments. Only organisations based in LACNIC region may apply for resources.
	Fee model	Not-for-profit organisation. Fee schedule established to enable cost recovery of operations.
RIPE	Qualification	Membership is open globally without conditions.
NCC	Access to registration services	Members only.

Fee model

Not-for-profit organisation. Fee schedule established to enable cost recovery of operations.

[TOP]

1.3 Allocation Terms and Conditions

1.3.1 Type of Custodianship

RIR Policy

Assignments remain valid as long as the original criteria on which the AfriNIC assignment was based are still in place, membership fees paid, and the

assignment is registered in the AfriNIC database.

Allocates and assigns on a 'license' basis, to be of specific limited duration

APNIC (normally 1 year). Licenses are renewable if: a) the original basis of the

allocation or assignment remains valid and b) requirements have been met at

time of renewal.

ARIN Valid as long as original criteria remain satisfied and registration fees are

LACNIC kept up to date.

RIPE NCC

Valid as long as original criteria remain satisfied.

[TOP]

1.3.2 Transfer of Custodianship

RIR Policy

AfriNIC

ARIN Do not allow sale of addresses, but recognise name changes and transfers of

LACNIC tangible assets associated with addresses. Requires submission of legal

RIPE documents. Utilisation is verified. May require new agreement.

NCC

As above, with the exception of "historical resource transfers". "Historical"

APNIC resources can be transferred to APNIC members without the need for the

technical justification procedures.

[TOP]

1.3.3 Recovering Unused Resources

RIR	Policy	Comment
AfriNIC ARIN LACNIC RIPE NCC	Valid as long as original criteria remain satisfied.	Does not actively recover unused resources, but if an organisation closes, unused resources are returned to the public pool.
APNIC	Valid as long as	Has policy to actively recover 'unused' networks.
	original criteria remain satisfied.	If an organisation ceases operation, unused resources are returned to the public pool.

2. IPv4

2.1 Initial Allocation

RIR	Category	Policy
	Size	Slow start: /22 (can be exceeded when justified by requesting LIR).
AfriNIC	Eligibility	The requesting organisation must show an existing efficient utilization of IP addresses from their upstream provider or an immediate need of IP addresses. Justification may be based on a combination of immediate need and existing usage.
	Period	2 years.
	Size	Slow start: /21 (can be exceeded when documented immediate infrastructure need exceeds /21).
APNIC	Eligibility	a) Membership or pay non-member fee; b) have previously used or can demonstrate immediate need for /23; c) complied with policies in managing all previous address space; d) detailed plan for use of a /22 within a year; e) commit to renumber from previously deployed space.
	Period	1 year.
ARIN	Size	Slow start: /22 minimum for multihomed, otherwise /20 (can be exceeded when documented immediate need exceeds /20).
	Eligibility	For a /22: efficient utilisation of a /23 from upstream; intent to

multihome; agree to renumber,

or

For a /21: efficient utilisation of /22 from upstream; intent to multihome; agree to renumber,

or

For a /20: efficient utilisation of /21 from upstream; intent to multihome; agree to renumber,

or

Efficient utilisation of /20 from upstream (no renumbering required).

Period 3 months.

Slow start: /21, otherwise /20 (can be exceeded when Size documented immediate need exceeds /20).

For a /21: documented need of a /23;

For a /20:

Must have /22 from upstream; multihomed; agree to renumber within 12 months.

Eligibility

If not multihomed must demonstrate use of /21 from upstream

and agree to renumber within 12 months.

or

or

Demonstrate immediate need.

Period 3 months

Size Slow start: /21 (can be exceeded when justified).

RIPE

LACNIC

a) Membership; b) Demonstration of need. Eligibility NCC

> Period Up to 12 months.

[TOP]

2.2 Subsequent Allocations

RIR Category **Policy** Comment

Size Minimum /22, no maximum. Demonstrate 80% efficient utilisation of all prior allocated space or an immediate need AfriNIC Eligibility that requires more IP addresses than are available in the LIRs most recent allocation. Period Up to 2 years. Size Minimum /21, no maximum. Demonstrate 80% efficient utilisation of all APNIC Eligibility prior allocated space. Period Up to 1 year. Minimum /22 for multihomed, otherwise Size /20. no maximum. Contiguous Demonstrate efficient utilisation of all allocation previous allocations and at least 80% of the Eligibility **ARIN** provided where most recent allocation. possible. 3 months. Internet Service Providers (ISPs) Period may request 6 months after they have been an ARIN member for one year. Size Minimum /20, no maximum. Demonstrate 80% efficient utilisation of all LACNIC Eligibility prior allocated space. Period 12 months. Size Minimum /21, no maximum. Demonstrate approximately 80% efficient RIPE Eligibility

[TOP]

NCC

2.3 Sub-Allocations

Period

RIR Policy Comment

utilisation of all prior allocated space.

Up to 12 months, previous utilisation

considered.

AfriNIC	LIRs may sub-allocate addresses to other organisations, which further assign addresses to End Users. LIRs also assign addresses. Sub-allocations are subject to the 'Sub-Allocation Window' procedure.	
APNIC	LIRs may sub-allocate addresses to other organisations, which further assign addresses to end-users. LIRs also assign addresses. Sub-allocations are subject to the 'Assignment Window' procedure.	See section 2.5.1 'Assignment Window' below.
ARIN	ISPs may sub-allocate addresses to other organisations, which further assign addresses to End Users.	
LACNIC	RIR allocates and assigns IP blocks to organisations that can be ISPs, End Users or National Internet Registries, (NIRs - see section 7). NIRs allocate and assign IP blocks to organisations in their countries. ISPs may suballocate IP blocks to other ISPs or assign them to End Users.	
RIPE NCC	LIRs may sub-allocate addresses to other organisations, which further assign addresses to End Users. LIRs also assign addresses. Sub-allocations are subject to the 'Assignment Window' policy.	See section 2.5.1 'Assignment Window' below.

2.4 Assignments by RIRs (Independent/Portable)

2.4.1 General

RIR	Category	Policy	Comment
	Size	/24 minimum, no maximum.	
		- Must be AfriNIC member	
AfriNIC	Eligibility	- Assignments will be made according to the following criteria: 25% immediate utilisation rate and 50% utilisation rate within one year.	
APNIC	Size	No minimum, no maximum.	Known as 'small multihoming
	Eligibility	Requesting organisation needs	assignment policy'. Can be applied for under membership

to be multihomed and agree to renumber out of previously assigned address space. or as a 'non-member account holder'.

Assignments will be made according to the following criteria: 25% immediate utilisation rate and 50% utilisation rate within one year.

Size /22 minimum for multihomed, otherwise /20, no maximum.

ARIN Assignments will be made Known as 'end-user' according to the following assignments.

Eligibility criteria: 25% immediate utilisation rate and 50% utilisation rate within one year.

Size /24 minimum, no maximum.

Multihomed organisations (End User) may receive a minimum of /24 based on previous assignments of /25 from

LACNIC upstream providers.

Eligibility

Singlehome organisation may

apply, for at least a /20, based on demonstrated need of /21.

Size No minimum, no maximum. Submit an application via an existing LIR. Cannot request

Eligibility Based on demonstrated need. directly.

[TOP]

RIPE

NCC

2.4.2 Critical Infrastructure

RIR	Category	Policy	Comment
AfriNIC	Definition	Public IXPs and core DNS service providers.	Portable space can be obtained
	Size	/24	can be obtained

	Eligibility	No specific criteria defined.	by submitting a request directly to AfriNIC.
	Definition	Root DNS, ccTLD, gTLD, IANA, RIRs.	
	Size	/24 minimum.	
APNIC	Eligibility	Assignments to critical infrastructure are available only to the actual operators of the network infrastructure performing such functions.	
	Definition	Root DNS, ccTLD, gTLD, IANA, RIRs.	
	Size	/24 minimum.	Requested via the 'micro-
ARIN	Eligibility	Assignments to critical infrastructure are available only to the actual operators of the network infrastructure performing such functions.	allocations' policy.
	Definition	Root DNS, ccTLD, gTLD, IANA, RIRs.	
	Size	/24 minimum.	Requested via the 'micro-
LACNIC	Eligibility	Assignments to critical infrastructure are available only to the actual operators of the network infrastructure performing such functions.	allocations' policy.
	Definition	Anycasting ccTLD, gTLD.	
	Size	/24.	
RIPE NCC	Eligibility	If the name server set of a ccTLD or a gTLD without anycasting technology applied would not pass the "IANA Administrative Procedure for Root Zone Name Server Delegation and Glue Data' the TLD administrator may receive a single dedicated /24 network prefix for the sole purpose of anycasting name servers, as described in RFC 3258.	Address space can be obtained by submitting a request through an existing LIR.

2.4.3 Internet Exchange Points (IXPs)

RIR	Category	Policy	Comment	
AfriNIC	Size	/24.	Portable space can be obtained by	
7 Hill VIC	Eligibility	No specific criteria defined.	submitting a request directly to AfriNIC.	
	Size	/24 minimum assignment.	There is no	
APNIC	Eligibility	Must be an IXP. The number of ISPs connected should be at least three and there must be a clear and open policy for others to join.	restriction on routing prefixes assigned under this policy.	
	Size	/24 minimum assignment.		
ARIN	Eligibility	Exchange point operators must provide justification for the allocation, including: connection policy, location, other participants (minimum of two total), ASN, and contact information.	Requested via the 'micro-allocations' policy.	
	Size	/24.		
LACNIC	Eligibility	Exchange point operators must provide documentation showing that it is an IXP, list of participants, structure diagram and numbering plan.	Requested via the 'micro-allocations' policy.	
	Size	No special policy.	Portable address	
RIPE NCC	Eligibility	No special policy.	space for this purpose can be requested via an existing LIR.	

2.5 Assignments by LIRs (Aggregatable/Non-Portable)

2.5.1 Assignment Window

RIR	Policy	Comment
AfriNIC ARIN	Not applicable.	Assignment practices are audited by RIR staff at time of request for

additional resources.

APNIC APNIC making assignments larger than their Assignment LACNIC Window. This is the number of addresses an LIR/ISP can assign without prior approval. The NCC RIR sets the assignment window according to the LIR's/ISP's level of experience with the policies.

APNIC does not have assignment windows on infrastructure.

[TOP]

2.5.2 Dynamic Addressing

RIR Policy

AfriNIC APNIC

ARIN In general, dynamic assignment of IP addresses is expected on transient

LACNIC connections such as analogue dialup.

RIPE NCC

[TOP]

2.5.3 Mobile Terminals

RIR Policy

AfriNIC APNIC

ARIN There is no special assignment policy with respect to mobile terminals.

LACNIC RIPE NCC

[TOP]

2.5.4 Web Hosting

RIR Policy

AfriNIC

APNIC Name based web hosting is strongly encouraged where feasible.

ARIN

LACNIC RIPE NCC

[TOP]

2.5.5 Network Address Translation (NAT)

RIR Policy

AfriNIC APNIC

ARIN The use of NAT is neither encouraged nor discussed during the request

LACNIC process.

RIPE NCC

[TOP]

2.5.6 RFC1918 Private Address Space

Policy RIR

AfriNIC

APNIC

For private networks that will never be connected to the Internet, the ARIN requestor is made aware of the IPv4 address space reserved for use in **LACNIC** RFC1918.

RIPE

NCC

[TOP]

3. **IPv6**

3.1 Initial Allocation

RIR Comment Category Policy

AfriNIC Size /32.

> Eligibility a) be an LIR; b) not be an end

> > site; c) show a detailed plan to provide IPv6 connectivity to organizations in the AfriNIC

region. d) show a reasonable plan for making /48 IPv6 assignments to end sites in the AfriNIC region within twelve months. The LIR should also plan to announce the allocation as a single aggregated block in the inter-domain routing system within twelve months.

Period

Up to 2 years.

Size

/32.

a) Be an LIR; b) not be an end site; c) plan to provide IPv6 connectivity to organisations to which it will make assignments, by advertising that connectivity through its single aggregated address allocation; d) have a plan for making at least 200 assignments to other organisations within two years.

Eligibility

Allocations consistent with the globally co-ordinated 'IPv6 Address Allocation and Assignment Policy' document. Organisations may qualify for an initial allocation greater than /32 by submitting documentation that reasonably justifies the request.

Considers IPv4 deployment

as one of the means of

allocation.

justifying a larger initial

In addition, APNIC will make allocations to 'closed' networks if they meet all other criteria. APNIC can make allocation

based on existing IPv4 network

infrastructure

For up to two years.

ARIN

APNIC

Size

Period

/32.

a) Be an LIR; b) not be an end site; c) Plan to provide IPv6 connectivity to organizations to which it will assign IPv6 address space, by advertising that connectivity through its single

Eligibility

aggregated address allocation;

and d) Be an existing, known ISP in the ARIN region or have a plan for making at least 200 /48

assignments to other organizations within five years. Organisations may qualify for an initial allocation greater than /32 by submitting documentation

that reasonably justifies the request.

Period For up to five years.

Size /32.

Eligibility

a) Be an LIR; b) not be an end site; c) plan to provide IPv6 connectivity to organisations to which it will assign /48s, by advertising that connectivity through its single aggregated address allocation; d) have a plan for making at least 200 /48

assignments to other

organisations within two years.

Allocations consistent with the globally co-ordinated 'IPv6 Address Allocation and Assignment Policy' document. Organisations may qualify for an initial allocation greater than /32 by submitting documentation that reasonably justifies the request.

Considers IPv4 deployment as one of the means of justifying a larger initial allocation.

Period For up to two years.

Size /32.

Eligibility

a) Be a LIR or an ISP; b) not be an end site (End User); c) document a detailed plan for the services and IPv6 connectivity to be offered to other organisations (clients); d) announce a single block in the Internet interdomain routing system,

domain routing system, aggregating the total IPv6 address allocation received, within a period not longer than 12 months; e) offer IPv6 services to clients physically located within the region covered by LACNIC within a period not

longer than 24 months.

Period For up to two years.

[TOP]

LACNIC

RIPE

NCC

3.2 Subsequent Allocations

RIR Category Policy Comment

AfriNIC RIPE NCC	Size Eligibility	Minimum size of next allocation will equal the first allocation size. More can be allocated but justification must be supplied. ISP/LIR must satisfy the evaluation threshold of past address utilisation in terms of the number of sites in units of /48 assignments. The HD- Ratio of 0.8 is used to determine the utilisation thresholds that justify the allocation of additional addresses.	Contiguous allocation provided if possible. RFC 3194 defines the HD-Ratio.
	Period	Up to two years.	
	Size	Minimum size of next allocation will equal the first allocation size. More can be allocated but justification must be supplied.	Contiguous allocation
APNIC ARIN	Eligibility	ISP/LIR must satisfy the evaluation threshold of past address utilisation in terms of the number of sites in units of /56 assignments. The HD-Ratio of 0.94 is used to determine the utilisation thresholds that justify the allocation of additional addresses.	provided if possible. RFC 3194 defines the HD-Ratio.
	Period	Up to two years.	
	Size	Minimum size of next allocation will equal the first allocation size. More can be allocated but justification must be supplied.	Contiguous allocation provided if
LACNIC	Eligibility	ISP/LIR must satisfy the evaluation threshold of past address utilisation in terms of the number of sites in units of /48 assignments. The HD-Ratio of 0.94 is used to determine the utilisation thresholds that justify the allocation of additional addresses.	possible. RFC 3194 defines the HD- Ratio.
	Period	Up to two years.	

3.3 Other Allocations

3.3.1 Micro-allocations for Internal Infrastructure

RIR Category Policy Comment

AfriNIC Size No policy.

APNIC

LACNIC

RIPE Eligibility Not applicable.

NCC

Size /48 minimum.

Organizations that currently hold IPv6 allocations may apply for a micro-allocation for

internal infrastructure.

ARIN Applicant must provide technical justification

Eligibility indicating why a separate non-

routed block is required.

Justification must include why a sub-allocation of currently held IP space cannot be

utilized.

These allocations come from specific blocks reserved only for this purpose.

[TOP]

3.4 Assignments by RIRs (Independent/Portable)

3.4.1 Critical Infrastructure

RIR Category Policy Comment

Definition No policy.

AfriNIC Size Not applicable.

Eligibility Not applicable.

APNIC Definition Root DNS, ccTLD, gTLD, IANA, RIRs,

NIRs.

Size /32 maximum

Assignments to critical infrastructure are available only to the actual operators of Eligibility

the network infrastructure performing

such functions.

Definition Root DNS, ccTLD, gTLD, IANA, RIRs.

Size /48 minimum.

ARIN

Assignments to critical infrastructure are

available only to the actual operators of Eligibility the network infrastructure performing

such functions.

NAPs, Root DNS, ccTLD, gTLD, IANA, Definition

RIRs, NIRs.

LACNIC

Size /48 minimum, /32 maximum.

Micro allocation to critical Internet Eligibility

infrastructure operators only.

Definition Root DNS, Anycasting ccTLD, gTLD.

For Root DNS minimum allocation size

Size at time of request. For Anycasting

ccTLD/gTLD a /48.

Assignments to critical infrastructure are available only to the actual network

infrastructure performing such functions.

RIPE NCC

If the name server set of a ccTLD or a gTLD without anycasting technology

applied would not pass the "IANA Eligibility Administrative Procedure for Root Zone

Name Server Delegation and Glue Data' the TLD administrator may receive a single dedicated /48 network prefix for the sole purpose of anycasting name

servers, as described in RFC 3258.

Address space for this purpose can be obtained by members or if not a member by submitting a request

through an existing

Known as 'micro-

allocation' policy.

LIR.

[TOP]

3.4.2 Internet Exchange Points (IXPs)

RIR	Category	Policy	Comment
AfriNIC	Size	No policy.	
Timivie	Eligibility	Not applicable.	
	Size	/48 minimum.	
APNIC LACNIC	Eligibility	The IXP must have a clear and open policy for others to join and must have at least three members.	
	Size	/48 minimum.	
ARIN	Eligibility	Exchange point operators must provide justification for the allocation, including: connection policy, location, other participants (minimum of two total), ASN, and contact information.	
	Size	/64 or /48.	Address space for
RIPE NCC	Eligibility	The IXP must have a clear and open policy for others to join and must have at least three members.	this purpose can be obtained by submitting a request through an existing LIR.

3.4.3 End Users

RIR	Category	Policy	Comment
AfriNIC LACNIC	Size	No policy.	
RIPE NCC	Eligibility	Not applicable.	
APNIC	Size	/48 minimum.	These assignments come from

a) An organization is currently a distinctly identified prefix.

multihomed or plans to be multihomed within three

months.

Size /48 minimum.

Eligibility

a) Not be an IPv6 LIR; and b)
ARIN

Qualify for an IPv4 assignment or allocation from ARIN under the IPv4 policy currently in

effect.

These assignments come from a distinctly identified prefix and are made with a reservation for growth of at least a /44.

[TOP]

3.5 Assignments by LIRs (Aggregatable/Non-Portable)

3.5.1 Dynamic Addressing

RIR Policy Comment

AfriNIC APNIC

ARIN There is currently no specific policy related to dynamic See

LACNIC addressing. RFC3177.

RIPE NCC

[TOP]

3.5.2 Mobile Terminals

RIR Policy

AfriNIC APNIC

ARIN There is no special assignment policy with respect to mobile terminals.

LACNIC RIPE NCC

[TOP]

3.5.3 Web Hosting

RIR Policy

AfriNIC APNIC

ARIN There is no recommendation for IPv6 assignments in support of web hosting

LACNIC at this time.

RIPE NCC

[TOP]

3.5.4 Network Address Translation (NAT)

RIR Policy

AfriNIC APNIC

ARIN The use of NAT is neither encouraged nor discussed during the request

LACNIC process.

RIPE NCC

[TOP]

4. Autonomous System Numbers (ASNs)

4.1 Allocations

RIR Policy

APNIC Blocks of ASNs are allocated to NIRs for further distribution to their

members.

AfriNIC ARIN

LACNIC

Not applicable.

RIPE NCC

[TOP]

4.2 Assignments

RIR	Category	Policy	Comment
AfriNIC ARIN LACNIC RIPE NCC	Eligibility	Policies for ASN assignments are aligned with the guidelines contained in RFC1930. Verify that a network will have a unique routing policy or that it will be a multihomed site before assigning an ASN.	In RIPE region ASNs cannot be requested directly. An application must be submitted to the RIPE NCC through an existing LIR.
		ASNs may be obtained directly from APNIC as a member or non-member account holder. The ASN obtained directly is portable. ASNs may also be obtained indirectly, through a LIR who 'sponsors' the request. In this event, the ASN is non-portable.	
APNIC	Eligibility	Criteria need to be met in both cases, that is: An organisation is eligible if it a) is multihomed; and b) has a single, defined routing policy that is different from its providers' routing policies. An organisation will also be eligible if it can demonstrate that it will meet the above criteria upon receiving an ASN (or within a reasonably short time thereafter).	

4.2.1 32-bit ASNs

RIR Policy

Commencing 1 January 2007, the RIR will process applications that specifically request 32-bit only AS Numbers and assign such AS numbers as requested by the applicant. In the absence of any specific request for a 32-bit only AS Number, a 16-bit only AS Number will be assigned.

AfriNIC APNIC ARIN LACNIC RIPE NCC

- From 1 January 2009 the RIR will process applications that specifically request 16-bit only AS Numbers and assign such AS Numbers as requested by the applicant. In the absence of any specific request for a 16-bit only AS Number, a 32-bit only AS Number will be assigned by the RIR.
- From 1 January 2010 the RIR will cease to make any distinction between 16-bit only AS Numbers and 32-bit only AS Numbers, and will operate AS Number assignments from an undifferentiated 32-bit AS Number allocation pool.

Comment

"16-bit only AS Numbers" refers to AS numbers in the range 0 - 65535

"32-bit only AS Numbers" refers to AS Numbers in the range 65,536 -4,294,967,295

[TOP]

5. Database - Registration

RIR	Category	Policy	Comment
	Modification	LIRs are required to register all assignments and sub-allocations.	
AfriNIC	Entry	Can update all assignment and sub- allocation registrations (protection mechanism available). Org object cannot be created or updated by a LIR.	
APNIC	Modification	LIRs required to register all assignments and sub-allocations except infrastructure assignments. Registrations will be stored	

		privately by APNIC unless the custodian wishes them to be made publicly available in the APNIC database.	
	Entry	Can update all assignment and sub- allocation registrations (protection mechanism available).	
ARIN	Modification	Downstream reassignments and reallocations are reported, showing hierarchy and End User assignments.	Not required to register infrastructure assignments.
		Reassignment information for residential customers need not contain the customer's name nor street address.	
	Entry	Can modify all parent data except "org name" and address range. Can modify all child data.	
LACNIC	Modification	Downstream reassignments and reallocations are reported, showing hierarchy and End User assignments.	Not required to register infrastructure assignments.
	Entry	Can modify all parent data except "org name" and address range. Can modify all child data. Users have to authenticate themselves in LACNIC web system.	
RIPE NCC	Modification	LIRs are required to register all assignments and sub-allocations.	
	Entry	Can update all assignment and sub- allocation registrations (protection mechanism available).	

6. Reverse DNS

RIR	Policy	Comment
AfriNIC	Only make delegations on 8-bit boundaries (/16 or /24). Multiple delegations may be requested to cover CIDR prefixes for blocks bigger than a /24.	

APNIC	Provides reverse DNS based on domain objects in the APNIC database. If the delegation is /16 or larger then the authority for the reverse zone, it is delegated to the custodian of the address space.	Policy for "lame delegations" checking established and enforced.
ARIN	Provides reverse DNS for all allocations and assignments in the database with the following exception: For all /16 or shorter prefixes ARIN delegates reverse DNS authority to the registrant.	Policy for "lame delegations" checking established and enforced.
LACNIC	Provides reverse DNS for all parent blocks. Does not provide reverse DNS for reassignments on child blocks if the parent is /16 or greater.	Policy for "lame delegations" checking established and enforced
RIPE NCC	Provides reverse DNS delegation on request. Holders of IPv4 /16 or larger are required to use the RIPE NCCs name server as secondary. Deploys DNSSEC on all the reverse zones.	RIPE NCC verifies RFC1912 compliance.

7. National Internet Registries (NIRs)

RIR	Policy
AfriNIC ARIN RIPE NCC	Not applicable.
APNIC	NIRs operate in Korea, China, Japan, Taiwan, Indonesia and Vietnam. They are not ISPs. They allocate to their members within their economy following APNIC policies. Organisations within those NIR economies may go to either the relevant NIR or APNIC.
LACNIC	NIRs operate in Brazil and Mexico. They are not ISPs. They allocate to their members following LACNIC policies. NIRs are responsible for providing services within their country.

[TOP]

8. Policy Development

RIR Policy

AfriNIC APNIC

ARIN LACNIC RIPE NCC The policy development process is consensus based, open to anyone to participate and is transparent in archiving all decisions and policies so that they are publicly accessible.

RIPE 3 1 3

[TOP]

9. Internet Experiments

RIR Policy

AfriNIC APNIC RIPE NCC Allocations and assignments of Internet resources for Internet experiments are available. Such allocations or assignments are made for one year after which they must be returned. They are intended to support experimental Internet activities. Results of experiments must be made freely available to

the public.

ARIN

ARIN will allocate Numbering Resources to entities requiring temporary Numbering Resources for a fixed period of time under the terms of recognised experimental activity.

LACNIC

LACNIC shall make experimental allocations with the aim of encouraging research and development within the region of Latin America and the Caribbean. The experimental allocation shall be for a period of one year, renewable for a period of the same duration, with no specified maximum. The results of the experiment must be published on a public website.

[TOP]

10. Documentation Prefix

RIR Policy

A documentation prefix is available to organisations wishing to use examples

APNIC of Internet resources in educational materials, case studies and other

documentation.

AfriNIC

ARIN No policy.

LACNIC

RIPE NCC

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