

The logo graphic consists of two vertical bars of different heights and two horizontal bars of different lengths, all in a light teal color, intersecting to form a cross-like shape.

**RIPE**

# RIPE Database Requirements Task Force

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Address Policy Working Group Update



# Task Force Members



- Nick Hilliard
- James Kennedy (co-Chair)
- Shane Kerr (Vice Chair)
- Peter Koch
- Sara Marcolla (until February 2021)
- Bijal Sanghani (Chair)

- Email:

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## RIPE NCC Support:

- Boris Duval
- Maria Stafyla
- Edward Shryane

# RIPE Database Requirements Task Force



- The RIPE Database Requirements Task Force was formed in October 2019 as an outcome of the Big Picture BoF that took place at RIPE 78 in Reykjavik, Iceland.
- The Task Force is tasked to produce a RIPE document listing the requirements for the RIPE Database and their rationales.
- The purpose of the document is to establish community consensus at the general level. Software development, deployment and other implementation details are out of scope.
- <https://www.ripe.net/participate/ripe/tf/rdb-requirements-tf>

# Our Work So Far



- Monthly meetings (minutes publicly available)
- Two surveys
- Community feedback (ripe-list, BoFs, DB-WG chairs)
- Updates at RIPE 80 and RIPE 81
- Data and information collection (with support from the RIPE NCC)
- One draft published

# DBTF Recommendation

- Remove requirements for registering IPv4 PA Assignments in the RIPE Database, but still make it possible for users who want it
- Give IPv4 PA Allocation holders freedom free to make\register assignments or not
- However sub-allocating or partitioning part of IPv4 PA address space to another entity should be documented in the RIPE Database

# Background

- ALLOCATED PA: address space allocated by the RIPE NCC to an LIR
- ASSIGNED PA: address space from the ALLOCATED PA that has been assigned to the issuing LIR's infrastructure or an End User for use with services provided by the issuing LIR
- IPv4 policies require all PA Assignments ('status: ASSIGNED PA' inetnum objects) to be registered in the RIPE Database
- A core reason for registration of IPv4 PA Assignments was to justify additional IPv4 Allocations
- However, since the RIPE NCC ran-out of IPv4 in 2019, is this policy still applicable?

# Registration inconsistencies in the RIPE Database



- Some holders register more information than needed (e.g., create PA Assignments for individual IP addresses), while many others don't make any PA Assignments at all

Over Assigning	Under Assigning
<ul style="list-style-type: none"><li>• /32 PA Assignments = 530,995 (out of a total of 4,206,427)</li></ul>	<ul style="list-style-type: none"><li>• PA Allocations without any child PA Assignments = 16,232</li></ul>
<ul style="list-style-type: none"><li>• 420,518 held by 13 LIRs, with more than 10,000 /32 ASSIGNED PA inetnums each</li></ul>	<ul style="list-style-type: none"><li>• 793 held by 12 LIRs, with 50 or more 'empty' PA Allocations each</li></ul>
<ul style="list-style-type: none"><li>• Few LIRs registered bulk of tiny assignments</li></ul>	<ul style="list-style-type: none"><li>• 9,986 LIRs hold PA Allocations containing no PA Assignments</li></ul>

# Other considerations

- LIRs with /24 PA Allocations must also register PA Assignments, but RIPE Database doesn't allow inetnum objects with same range
  - Forced to register /25 inetnum objects or smaller
  - What is the benefit? Seems arbitrary and difficult
- Data minimisation as part of Data Management Principles
  - Less data for Database users to maintain = easier to keep up-to-date => more accurate and useful common database for everyone



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- **Published**
  - Topics on WG mailing lists
  - RIPE list: [ripe-list@ripe.net](mailto:ripe-list@ripe.net)
  
- **Non published**
  - [ripe-db-requirements-tf@ripe.net](mailto:ripe-db-requirements-tf@ripe.net)
  - Contact TF members directly