RIPE ncc

# *"RIPE-81"*
# *Possible Enhancements*





RIPE ncc

## Overview

Discussion items / Possible enhancements to RIPE-81

- Inter-AS Local Information
- DMZs
- IP "Next Generation"
- CIDR
- Colouring



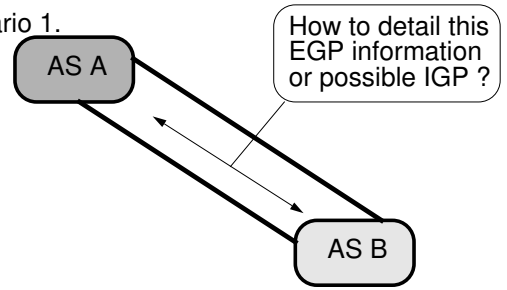


RIPE ncc

## Inter-AS Local Info.

- Need a way to represent local inter-AS information

Scenario 1.




**Multiple Inter-AS connection**



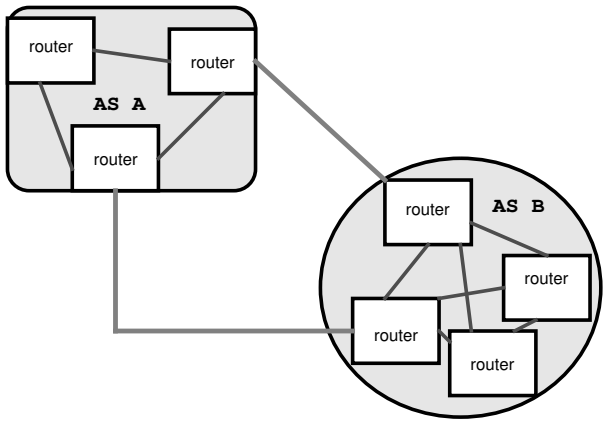


RIPE ncc

## Inter-AS Local Info.

Scenario 2.

**Multi-homed multi Inter-AS connection**



RIPE ncc

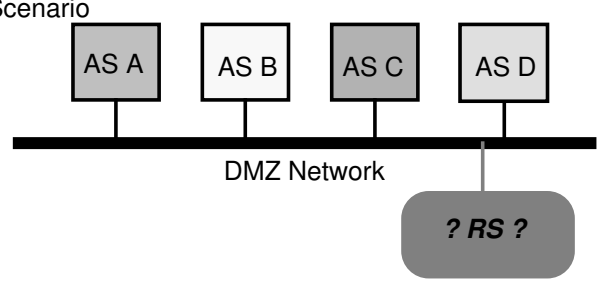
## DMZs

- What ?

***De-Militarized Zone !!!!! (i.e. FIX/?IX/ NBMA)***

- Issue
  - What AS should the DMZ network be in ?

Scenario








RIPE ncc

## DMZs

- Issues
- Should the network be announced
  - Not always ?
  - If so - should you rely on others to announce it (i.e. An elected AS)
  - Should it be represented in line with the routing protocol ?
- Should it be in it's own AS
  - For RSes YES
  - "prtrace" issue
- Possible solution
  - DMZ attribute in RIPE db





RIPE ncc

## IP "Next Generation"

- Should support for other protocols be added ?
  - Fits well with TUBA/CLNP
  - PIP ?
  - SIP ?
  - Is there enough interest ?
- SDRP
  - Potential to extend ripe-81 format for source based routing representation





RIPE ncc

## CIDR

- BGP 4 will support CIDR
- Network plus prefix or supernet mask
- Aggregation ?
  - Where do you aggregated ?
  - If it is above the AS level then it is impossible to determine the CIDR nets routing policy
- Need at least to show which ASes can or cannot aggregate
- De-Aggregation

RIPE ncc

## Colouring

- Community “like” but in pure routing terms
- Example..
  - Peer-peer relation across a shared infrastructure where certain network within an AS have a special meaning/use
  - Can tell transit networks NOT to aggregate
- Future protocols will carry colour tags (IDRP)
  - BGP communities ?