Purpose

• Informational on
  – how operator can organize the MAP domain?
    • rule setting and distribution
    • options
    • address planning
    • migrate

• Relation with spec
  – deployment draft is not spec but about to share requirements, understandings and recommendations
    • currently in MAP terminology and MAP-specific
    • easy to be extended/revised/replaced to cover deployment issues of 4rd, the unified solution, within the WG consensus framework
    • details need to develop along with the base spec
Where

• Typical use cases
  – Fixed networks
    • MAP CE as CPE deployed at
      – home network
      – enterprise network
    • BR at one of core routers as the interface towards IPv4 world
  – Mobile networks (3GPP)
    • MAP CE at UE
    • MAP BR at EPC
  – ... (to be added)
How Deploy

• Domain Building
  – Planning
    • Topology
    • Forwarding mode
    • Addressing and Rules
    • Port-set
  – Provisioning
    • Number of Domains : Number of DHCPv6 server
    • FMR distribution (mesh, hub&spoke, etc...)
Address Planning

• Identify the requirements
  – How many users?
  – How long prefix for each user?
  – Maximum concurrent port numbers?

• Step-by-step planning
  – Independent IPv6 planning
    • Planning prefix delegation
  – Allocating residual IPv4 addresses
    • Deciding PSID length according to sharing ratio
    • Applying available IPv4 address blocks and PSID
    • Mapping IPv6 prefix to address and PSID
  – Formulating the MAP rules
  – If rules are too many to suffer, try to relax the length of delegation (if possible) and do the above again

• Dispatching BMRs to CPEs
Further Remarks

• Number of rules
  – the fewer the better
    • significance of stateless deployment
  – ... but constrained in practice by
    • the aggregation property of IPv4 residual blocks
    • the possible aggregator of IPv6 planned for this purpose
Moving Forward

• Comments?
• WG adoption call ended
  – no objections remained
  – ready for adoption?