

464XLAT Deployment Guidelines in Operator Networks

**draft-palet-v6ops-464xlat-
deployment-00**

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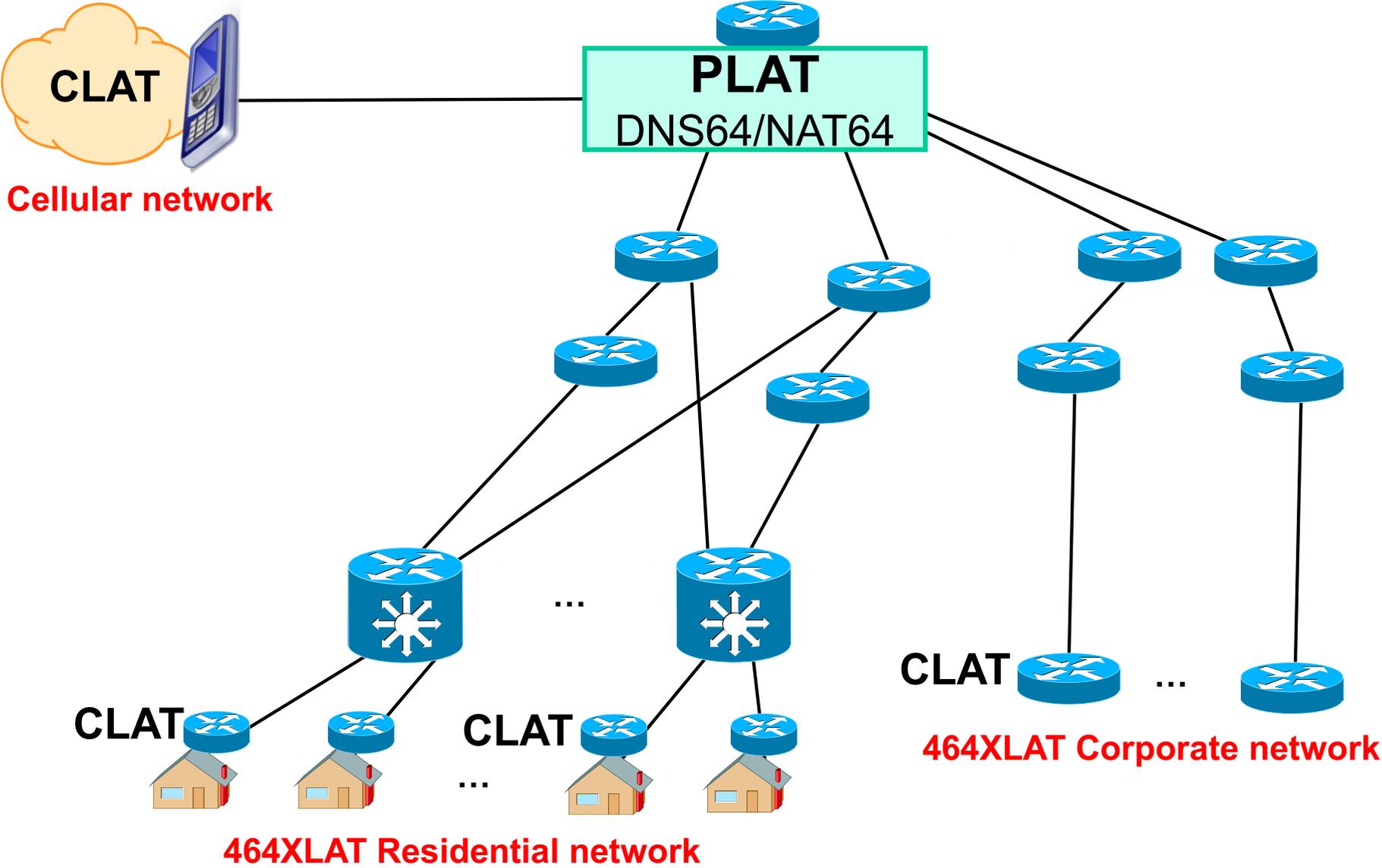
History

- Discussion in IETF regarding using only NAT64 in our network
- Suggested deploying 464XLAT instead
- Discussion: DNS64 breaks DNSSEC
- 464XLAT can be used w/o DNS64, which is not possible for (only) NAT64

464XLAT Deployment

- 464XLAT has been deployed only in cellular networks with a great success
 - The most successful protocol in terms of number of users
 - More than all the other protocols together
- There is some initial deployment in non-cellular networks
 - Very convenient for operators with both types of networks

464XLAT Multiservice Network



Goal (1)

- Originally:
 - Document deploying it w/o DNS64 in IETF network
- RFC6877 is Informational
 - Why not making it STD?
- This document can tackle the issue, a BCP that gives a more formal “status” to 464XLAT
- Single place as guideline to operators:
 - At least 10 documents

Goal (2)

- 464XLAT perceived as “only-for-cellular”
- “IPv4-as-a-service”:
 - Used while needed by customers
 - “on demand”
 - Nothing “extra” in the operator network
 - Nothing to “remove” when is not used
- So, document as BCP to describe how to deploy it, issues and solutions

DNSSEC Considerations

- Main issues related to DNSSEC and workarounds:
 - DNSSEC validator aware of DNS64
 - Stub validator
 - CLAT with DNS proxy and validator
 - ACL of clients
 - Mapping-out IPv4 addresses

464XLAT with/without DNS64

- 464XLAT could be deployed without DNS64
 - Only if clients have dual-stack “access”
 - Not valid for IPv6-only clients
- Pros and Cons
 - With DNS64
 - Without DNS64

Other Sections

- DNS64 and Reverse Mapping
- CLAT Translation Considerations
 - Dedicated /64 for the NAT46 (stateless)
- Summary of deployment recommendations

Next steps

- Questions ?
- Become a WG item ?
- Inputs ?