



GROUP REPORT

Generic migration steps from IPv4 to IPv6

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Foreword

This Group Report (GR) has been produced by ETSI Industry Specification Group (ISG) IPv6 Integration (IP6).

Modal verbs terminology

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1 Scope

The present document outlines the generic transition steps from IPv4 to IPv6 [i.1], [i.2], including the transition necessity, principles and technology guidelines, generic transition steps, security implications and the generic step-by-step process.

2 References

2.1 Normative references

Normative references are not applicable in the present document.

2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] IETF RFC 791: "Internet Protocol", September 1981.
- [i.2] IETF RFC 2460: "Internet Protocol, Version 6 (IPv6) Specification", December 1998.
- [i.3] IETF RFC 1631: "The IP Network Address Translator (NAT)", May 1994.
- [i.4] IETF RFC 1701: "Generic Routing Encapsulation", October 1994.
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- [i.6] IETF RFC 5569: "IPv6 Rapid Deployment on IPv4 Infrastructures (6rd)", January 2010.
- [i.7] IETF RFC 7597: "Mapping of Address and Port with Encapsulation (MAP-E)", July 2015.
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- [i.11] IETF RFC 7359: "Layer 3 Virtual Private Network (VPN) Tunnel Traffic Leakages in Dual-Stack Hosts/Networks", August 2014.
- [i.12] LinkedIn® Case Study: "IPv6 at a Social Media Company". Schuller, S. 11th Slovenian IPv6 Summit, June 21, 2016, Ljubljana, Slovenia.

NOTE: Available at <https://go6.si/wp-content/uploads/2016/06/LinkedIn-Case-Study.pdf>.

- [i.13] IETF RFC 1702: "Generic Routing Encapsulation over IPv4 networks".
- [i.14] IETF RFC 5969: "IPv6 Rapid Deployment on IPv4 Infrastructures (6rd) - Protocol Specification".
- [i.15] IETF RFC 6751: "Native IPv6 behind IPv4-to-IPv4 NAT Customer Premises Equipment (6a44)".
- [i.16] IETF RFC 5214: "Intra-Site Automatic Tunnel Addressing Protocol (ISATAP)".