Definitions

1. IPv6 Internet – part of the Internet including links, hosts and nodes which has IPv6 support or which is used to transmit IPv6 packets.
2. IPv4 Internet – part of the Internet including links, hosts and nodes which has IPv4 support or which is used to transmit IPv4 packets.
3. Translation – translation of IP header from IPv6 to IPv4 and vice versa.
4. Translator – host performing IP packet translation from IPv6 to IPv4 and vice versa.

What is NAT64/DNS64 service

5. It is a suite of network services allowing packets from IPv6 Internet to be sent to IPv4 Internet and vice versa.
6. NAT64/DNS64 service consists of two parts:
7. DNS64:
    a. Its recursive DNS service which generates synthetic AAAA RR for domain names having only A RR. It is done by appending NAT64 translator IPv6 prefix to the IPv4 address.
    b. DNS64 functionality is covered in RFC 6147.
8. NAT64:
    a. Its a translator performing translation between IPv6 and IPv4. It uses IPv4 address pool to represent IPv6 nodes.
    b. NAT64 functionality is covered in RFC 6146.

Resources LITNET provides

9. LITNET provides following computational and network resources:
10. **For DNS64 service:**
    a. IPv6 address for the DNS64 server.
    b. IPv6 traffic via LITNET network to DNS64 server.
    c. Computational resources for DNS server to perform DNS64 functionality.
11. **For NAT64 service:**
    a. Blocks of IPv4 and IPv6 addresses for NAT64 host.
    b. IPv6 traffic via LITNET network to NAT64 host.
    c. IPv4 traffic via LITNET network from NAT64 host to the destination.
    d. Computational resources for NAT64 host to perform NAT64 functionality.

Who can use

12. LITNET permits usage of this service to all hosts having IPv6 connectivity with LITNET network.

Terms of service

13. NAT64/DNS64 service is experimental and is used mainly for further translation algorithm analysis and improvements. Therefore:
    a. LITNET does not provide any quality assurance related to service performance.
    b. Service can be stopped at any time without prior notification.
    c. Service functionality can be altered or modified at any time.
    d. LITNET can restrict usage of the service to any network, part of the network or particular hosts.
    e. All data passing the translator (including packet headers and content) can be used for research or statistics collection to improve translation algorithm or translator

software.

14. NAT64/DNS64 service can not be used to:
    a. Perform any activity which could lead to security incident.
    b. Perform any activity that is not compliant with the laws of Republic of Lithuania or any ratified international agreements.
15. LITNET collects following information about NAT64/DNS64 service users:
    a. IPv4 and IPv6 addresses of communicating hosts.
    b. IPv4 address assigned by translator for communication session.
    c. Upper layer protocol (TCP, UDP, ICMP).
    d. Source and destination ports of the session (if TCP or UDP is used).
    e. Port assigned by translator for communication session (if TCP or UDP is used).
    f. Start and end time of the communication session.
    g. Queries sent to DNS64 server.
16. All collected information can be provided for third party in following cases:
    a. When investigating security incident. Collected data are passed to LITNET CERT.
    b. In cases defined by the laws of Republic of Lithuania.

Responsibility

17. LITNET is not responsible for any damage caused by or related to NAT64/DNS64 service usage.
18. NAT64/DNS64 service users are fully responsible for all activity related to NAT64/DNS64 service.