

Syslog NAT Logging

draft-zhou-behave-syslog-nat-logging-00

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Introduction

- This document defines:
 - Requirements of NAT log server
 - Syslog interface for NAT logging.
- Reference:
 - The Syslog Protocol [RFC5424]
 - Transport Layer Security (TLS) Transport Mapping for Syslog [RFC5425].
 - Transmission of Syslog Messages over UDP [RFC5426].
The log server must support sending the syslog log using standard UDP port 514, and support sending syslog log using any one self-configured port of the user.
 - Reliable Delivery for Syslog [RFC3195].

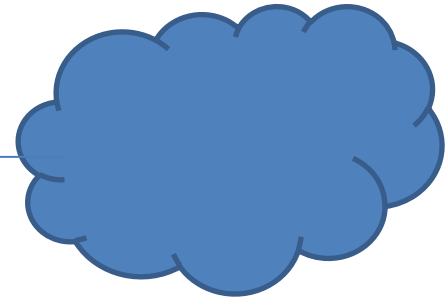
NAT Log Server



NAT Server
(e.g., CGN)



Log Server



Traceback System

Log Server:

- Acquire dynamic address/port mapping information from the NAT device
- Provide the mapping to the traceback system (or AAA)
- The storage information in the log server:
 - Application name
 - Hostname
 - Start time
 - Original source IP
 - Translated source IP
 - Translated source start port
 - Translated source stop port

Syslog Interface

- HEADER
 - PRI: Facility value =16; Severity value=6
 - VERSION: 1
 - TIMESTAMP: <year> <mon> <day> <hh:mm:ss>
 - HOSTNAME: IPv4 address of the originating device
 - APP-NAME: The name of the device that originated the syslog message
 - PROCID: The interrelated logs in one device
 - MSGID: Message type (NAT444 or DS-Lite)
- MSG
 - [<L4> < Original Source IP > < Original Source IPv6> < Translated Source IP > < Original Port > < Translated First Source Port > < Translated Last Source Port >]

Next Steps

- Update data structure elements to specify SD-ID and SD-PARAM in 01 version.
- Add syslog NAT logging in Behave charter?