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SIP Interoperability Specification

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1 Introduction

... some text about what and why ...

Note: This is a interoperability test, not a SIP protocol conformance test.

2 Devices

The following types of equipment will be tested:

- Proxy (P)
 - Generic Proxy
 - Media Relay Proxy
- User Agent (UA)
 - IP Telephone
 - PSTN Gateway
 - Conference Bridge
- Firewall (FW)

3 Scenario

3.1 Signaling

3.1.1 UDP

- All elements must handle UDP signaling

3.1.2 TCP

- All elements must handle TCP signaling

3.1.3 Routing

- Loose routing must be supported by P
- Strict router traversal must be supported by P
- P should be transaction stateful

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3.1.4 Request Forking

- P should support forking of requests

3.2 Registration

3.2.1 Dynamic Registration

- UA must be able to register at P
- P must be able to handle registration from UA
- FW must handle state for UA to P registrations

3.2.2 Static Registration

- P should be able to handle static registrations

3.3 Call Setup

3.3.1 Basic Call using FQDN

- UA must be able to establish a basic call using FQDN addressing

3.3.2 Basic Call using E.164

- UA must be able to establish a basic call using E.164 addressing

3.3.3 Redirection

- UA should handle redirected calls
- P must handle redirected calls

3.4 Call Routing for Proxies

3.4.1 FQDN

- P must route calls using FQDN (RFC 3263)

3.4.2 ENUM

- P should route calls using ENUM (RFC3761, RFC3764, RFC3824)

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3.5 Call Management

3.5.1 Call On Hold

- UA should support call-on-hold

3.5.2 Call Transfer

- UA should support call transfer (RFC 3515)

3.5.3 3rd Party Call Control

- UA may support 3rd party call control

3.6 Instant Messaging

- UA may support instant messaging (RFC 3428)

3.7 NAT traversal

- UA should support configurable ports for SIP signaling and RTP
- UA should support STUN for NAT discovery
- UA should support symmetrical response routing (RFC 3581)
- UA may support UPnP
- P must not allow registration from private addresses (RFC 1918)

4 Mechanisms

Testing the following mechanisms is considered useful:

- TLS signaling and sips URIs
- SRTP (RFC 3711)
- S/MIME

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5 Test Environment

5.1 Network

Network and IP address plan TBD.

5.2 DNS

One domain name (using SRV/NAPTR addressing) per proxy will be provided.

5.3 ENUM

ENUM for +467814xx (aka 4.1.8.7.6.4.e164.arpa) will be provided.