

FoIP Task Group

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SIP Forum Background

- ❖ Founded in 2000 in Sweden
- ❖ Leading non-profit IP communications industry association
- ❖ Membership comprised of corporate and academic members

SIPFORUM Full Member Companies

(as of 1-5-10)



FoIP Task Group Charter

Investigate ongoing issues with the deployment of fax services, specifically ITU-T T.38, in SIP networks.

Task Group Questions:

- ❖ Product validation
- ❖ T.38 interoperability
- ❖ T.38 performance
- ❖ G.711-V.34 Data-V.34 Fax Negotiations (published)
- ❖ SDP negotiations (approved by TG)
- ❖ Redundancy, FEC, and ECM study/recommendations
- ❖ LEC usage
- ❖ Secure fax
- ❖ **Network interconnection and peering/tandem-network problems**

Results to Date:

- ❖ SIP Forum – Fax Over IP Task Group
Problem Statement

(draft-jones-sip-forum-fax-problem-statement-00.txt)

- ❖ V.34 Fax Fallback to Standard G3

(Submitted TIA TR30.1)

- ❖ ITU-T T.38 SIP/SDP Negotiation
Improvements

(Submitted TIA TR30.1)

Next Step:

- ❖ Perform testing to quantify problems in the existing network.
- ❖ Coordinate this testing with I3 to achieve broad coverage.

Test Objectives

- ❖ Quantify the problem
- ❖ Catalog unsuccessful FoIP calls
- ❖ Statistical analysis of failures
- ❖ Discover relation between successful call rate and delay before re-INVITE to T.38 and the record the route.
- ❖ Determine T.38 re-Invite best practices (re: SIP Forum SDP document)
- ❖ Validate proposals with retest

Testing Overview

- ❖ Commetrex will provide BladeWare-based fax server
- ❖ Testing carrier will install on Windows machine and connect to SIP-T.38 net.
- ❖ Testing carriers and SIP Forum will make accessible fax terminals with E.164 numbers

Testing

- ❖ Commetrex will provide a “fax phonebook” with all numbers pre-loaded.
- ❖ Each carrier will send 10-30 (TBD) faxes to E.164 number of all other Forum members.
- ❖ 500 – 1000 fax calls.
- ❖ BladeWare-based fax server will record the calls
- ❖ Data sharing and analysis to be discussed and determined

Data evaluation

- ❖ Wireshark captures can be shared
- ❖ Captures for successful and failed calls will be compared
- ❖ Analysis results will be shared and used together
- ❖ Agree on problem statement that lists major problems

Resolution

- ❖ SIP & i3 Forum to propose best practices to resolve each problem
- ❖ Group to determine practicality of retest