

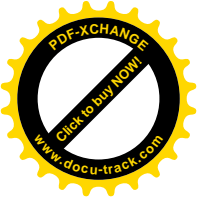


Debugging SIP Networks

Peter Dawes

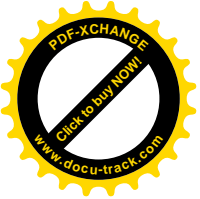
Kar Ann Chew

73rd IETF, Minneapolis, USA



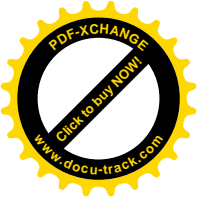
SIP Debugging - Motivation

- Networks using SIP frequently upgraded and reconfigured
- Client software also frequently changed by users
- Troubleshooting and regression testing needed
- Debugging should be part of network fabric



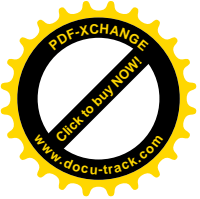
Scenario 1

- Alice has a SIP client on her laptop used for video calls with work colleagues
- Ability to call audio only devices outside company is added, but doesn't work for Alice
- Debugging indicates that Alice's SIP client does not accept audio only sessions and sends a BYE immediately



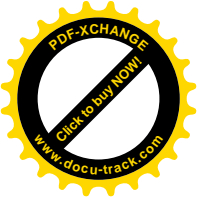
Scenario 2

- FooCorp has performed a software upgrade of its SIP registrar to increase capacity
- FooCorp would like to ensure that the upgraded software works correctly before adding live users
- Before/after logging is used to ensure that the upgrade has not altered behaviour



Solution Properties

- Indexed using address of record
- Debugging is not the usual condition - SIP entities perform logging only as needed
- A single logical entity controls debugging configuration
- SIP entities can be triggered to log by content of SIP signalling



Proposed Solution

- A new event package provides the required properties
- A new SIP header field can trigger SIP signalling to be logged
- Event package described in draft-dawes-sipping-debug-event
- New SIP header field described in draft-dawes-sipping-debug-id