Zap Emergency Call Demo

http://ecrit.labs.nic.at



Karl Heinz Wolf ESW5, October 2008

Introduction

- nic.at
 - Austrian Domain Name Registry (.at domains)
- Karl Heinz Wolf
 - working on the nic.at emergency call project
 - Implementations (based on existing software)
 - SIP Client with prototype emergency call support
 - Wireshark: support for decoding DHCP location information (RFC 4776, RFC 3825)
 - openLLDP: MED Location Identification support

Demo Overview

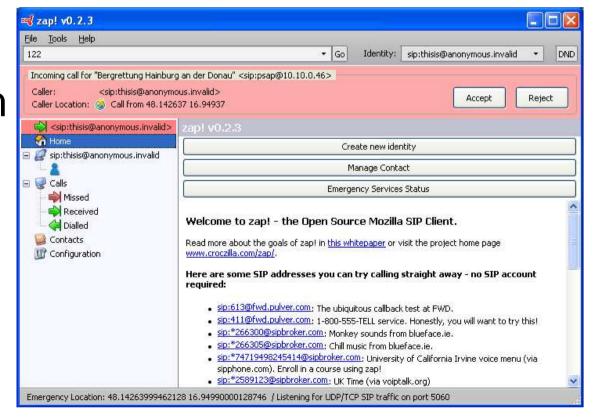
- 1) SIP call + location conveyance
 - Location Configuration
 - Call remote party and convey location information
- 2) SIP emergency call demonstration
 - Location Configuration
 - Find PSAP
 - Call PSAP and convey location information



Zap!

- Mozilla Project
- Open Source
 SIP Client
- Cross platform

http://www.croczilla.com/zap



Zap! Enhancement

- Caller features
 - Location Determination/Configuration
 - Service Discovery
 - Conveyance of Location Information
- PSAP features
 - Show location of the caller
 - Google Maps link

Implemented Caller Features

- Location Configuration/Determination
 - HELD
 - DHCP (RFC 4776, RFC 3825)
 - LLDP-MED (with openLLDP)
 - GPS
- Service Discovery: LoST
- Emergency Call Detection: Dialstring
- SIP Location Conveyance (by value) for emergency calls – optional for non-emergency calls

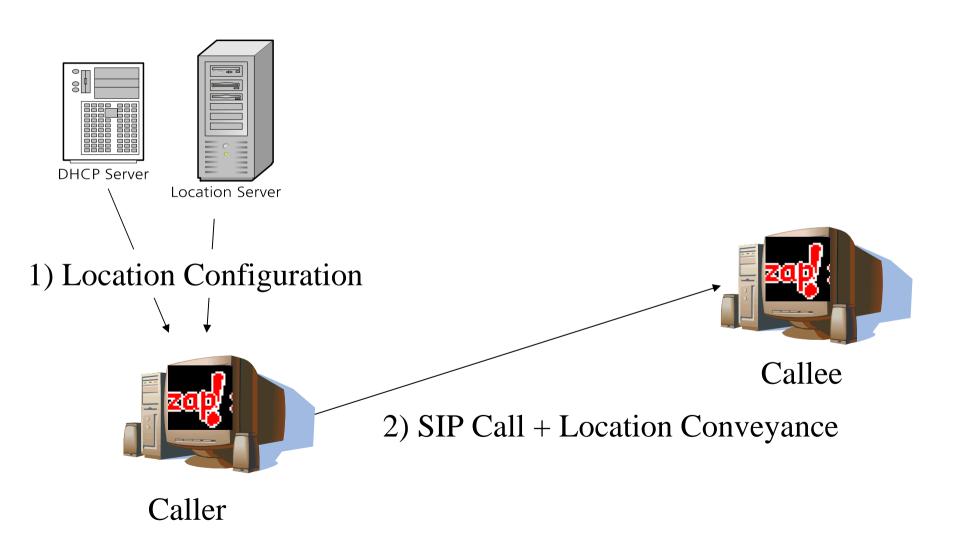


Implemented PSAP Features

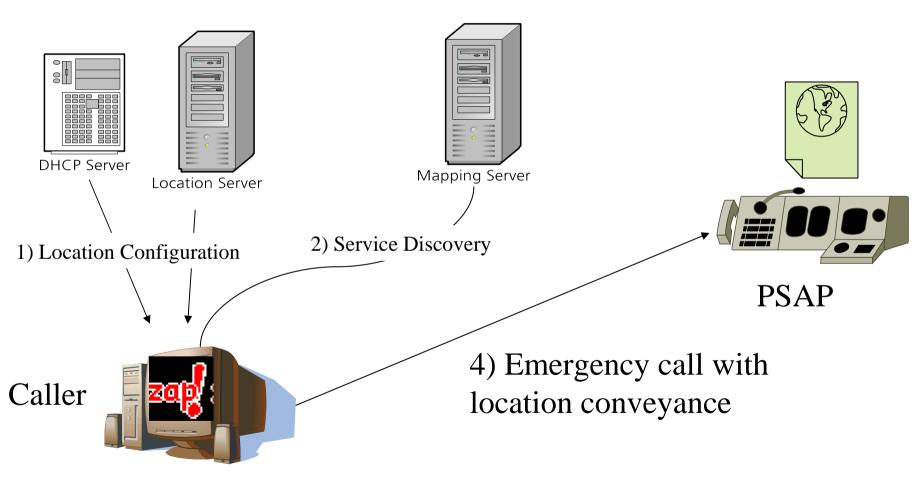
- process location data
 - Parse PIDF-LO of inbound call
 - show location of the caller to the call taker
 - link to Google Maps



1. Call + Location Conveyance



2. Emergency Call



3) User dials emergency dialstring (911, 112)

Zap utilization

- IETF'72 Code Sprint
 - First VoIP Emergency Call at an IETF meeting
 - http://geopriv.googlepages.com
- IN911 (see Byron's presentation)
- Other US 911 companies plan to use it as reference client for their tests
- Open source, download at http://ecrit.labs.nic.at



Thank you for your attention!

Contact: karlheinz.wolf @ nic.at

http://ecrit.labs.nic.at

http://www.handbuch-notruf.at