RTC-Web

Cisco Implementation Overview

Cary Bran
Cisco Systems

Design Objectives

- Answer the question of could we get a SIP stack running natively within one or more web browsers

- Browser2Browser Voice and video calling

- Interoperability with IPPBX

- Prototype not product

Implementation Overview

Implementation Details

- Cisco SIP Stack Embedded in Google Chromium and Firefox (4/5)
  - Chromium – built into the browser process
  - Firefox – built as an Firefox Extension
- Uses commercial GIPs library with H.264 codec
- Leverages Cisco's IPPBX, but could interoperate with others
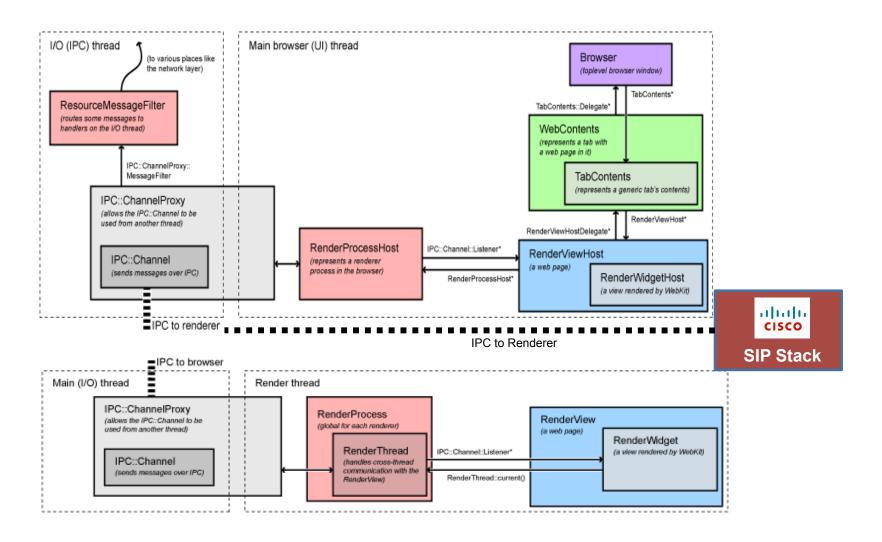
What's Working

Voice and Video Calling Between:

- Browser to Browser (combinations of Chromium and Firefox)
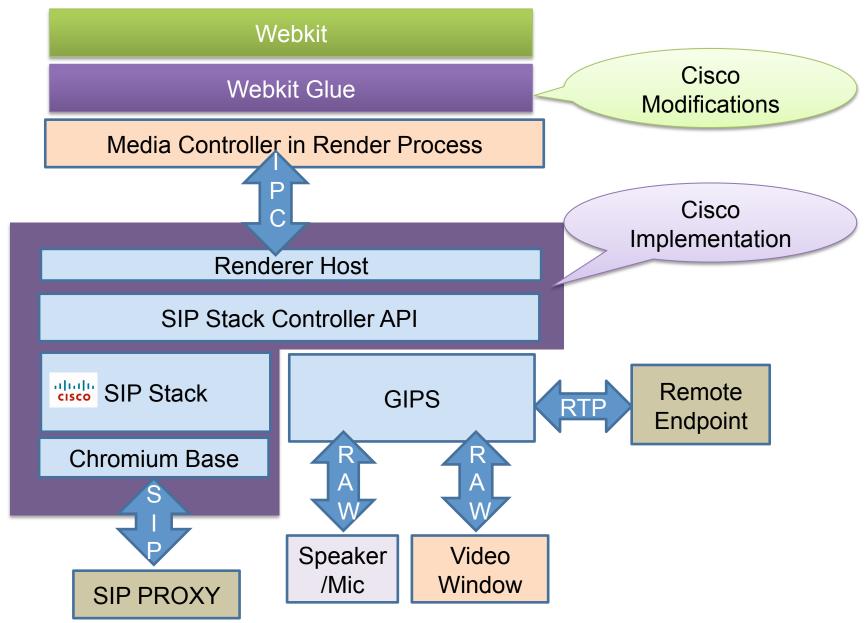- Browser to desktop IP phone
- Desktop IP phone to browser

Backup Slides

Cisco SIP Stack in Chromium

Cisco SIP Stack in Chromium

Webkit

Webkit Glue

Cisco Modifications

Media Controller in Render Process

I P C

Cisco Implementation

Renderer Host

SIP Stack Controller API

CISCO SIP Stack

GIPS

RTP

Remote Endpoint

Chromium Base

S I P

R A W

R A W

SIP PROXY

Speaker /Mic

Video Window

Cisco SIP Stack as Firefox Extension