# CIV Videoconferencing

Januasz Bulawa,Tom Stachowiak

# InSoft OpenDVE

***Collaborative environment***

Basic functionality:

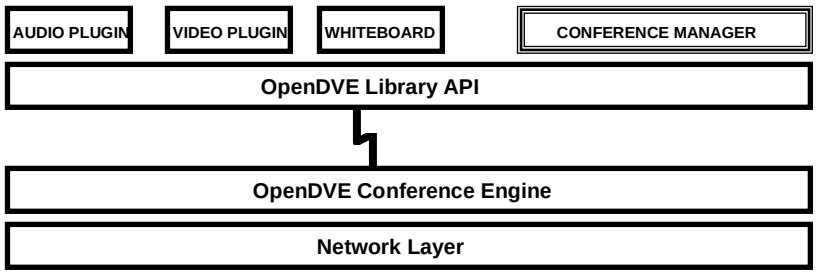
- session management
- event distribution
- data distribution

System features:

- commonality
- modularity
- platform neutrality
- interoperability

# Insoft OpenDVE

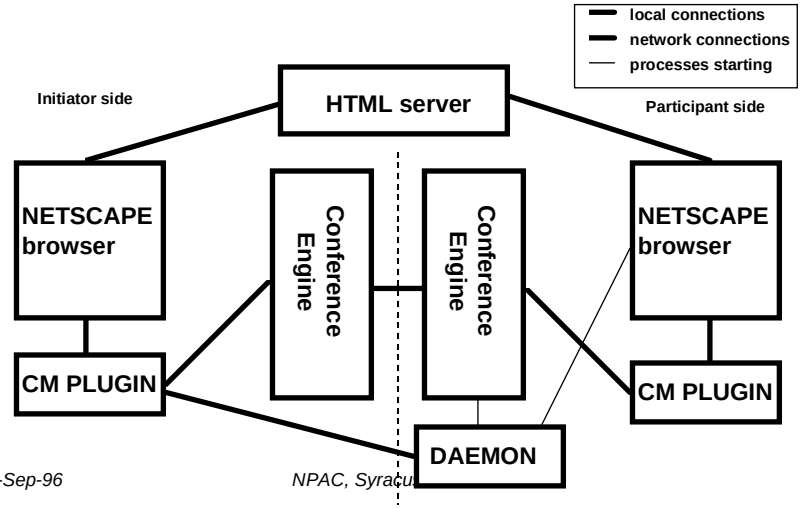
*OpenDVE Architecture*






# Conference Manager

*Architecture of Conference Manager integrated with Netscape browser*



# Video Tool

***Video tool features:***

- uses two types of compression - H.261 and H.263
- takes advantages of the H.263 codec on fast machines
- for slower machines enables switching to the faster H.261 compression

***H.263 vs. H.261***

- the same quality with 30-50% of bits usage
- half pixel prediction
- negotiable options: unrestricted motion vector, advanced prediction, syntax-based arithmetic coding, PB-frames



# Audio Tool

***Audio Tool features:***

- uses two types of compression: GSM 06.10 speech codec and Intel/DVI ADPCM codec
- GSM codec offers better compression ratio but worse speech quality - it is good for less reliable networks
- ADPCM compresses audio just four times but it has much better quality

***GSM 06.10 codec***

- used in digital cellular telephony standard
- based on the RPE-LTP compression algorithm

***Intel/DVI ADPCM codec***

- less computionally intensive than G.721
- produces very good quality for voice signals and reasonably good quality for music