CIV Videoconferencing

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InSoft OpenDVE

Collaborative environment

Basic functionality:

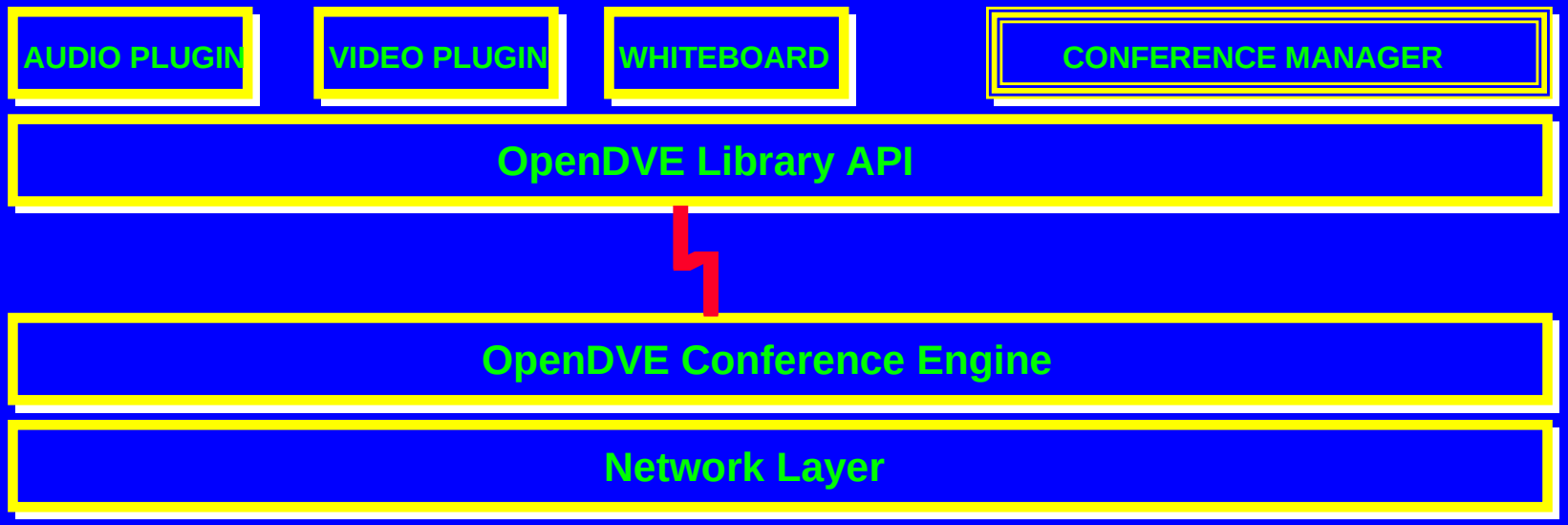
- session management
- event distribution
- data distribution

System features:

- commonality
- modularity
- platform neutrality
- interoperability

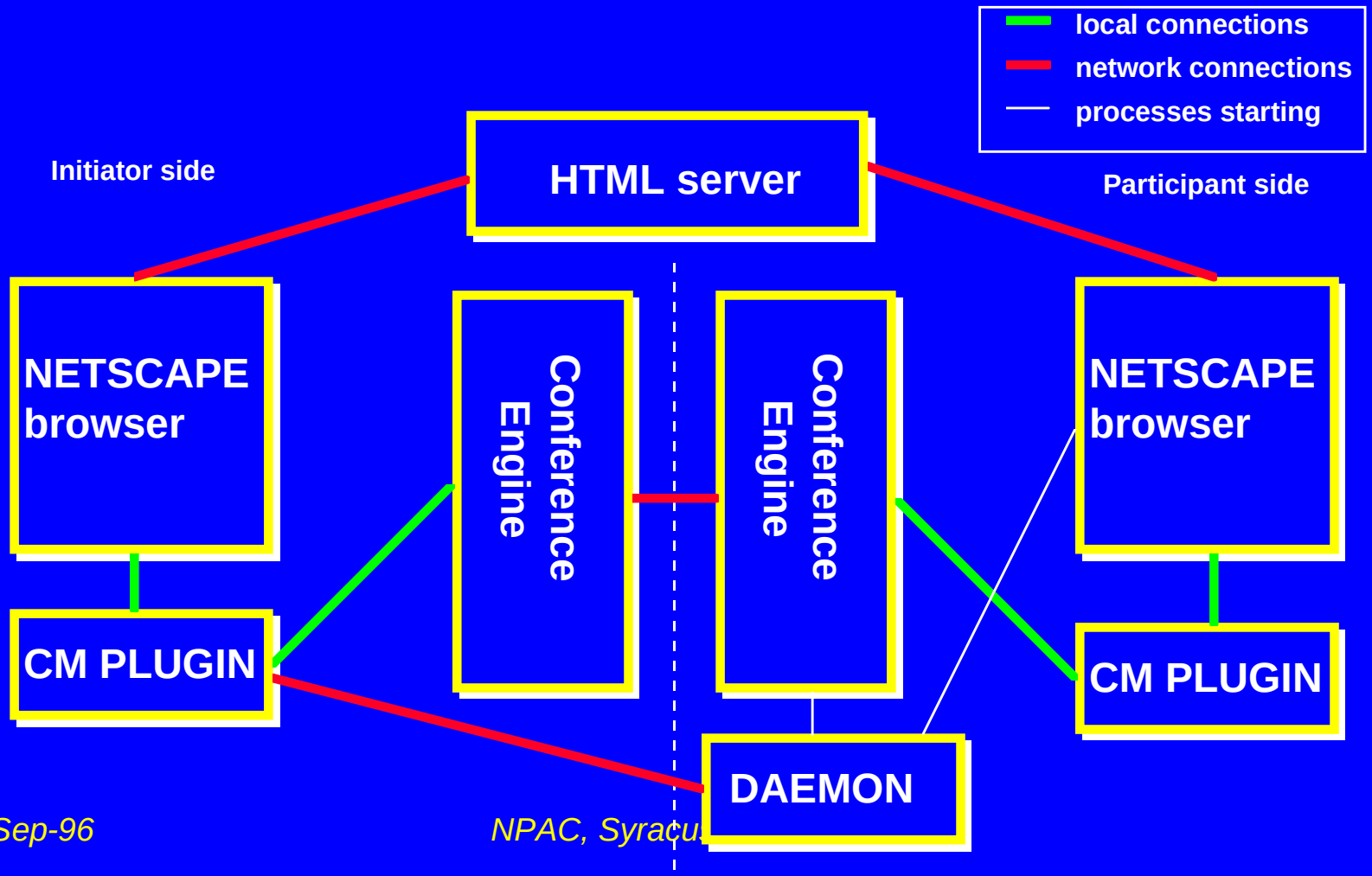
Insoft OpenDVE

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