SYNCHRONOUS COLLABORATION WITH WWW

presented by

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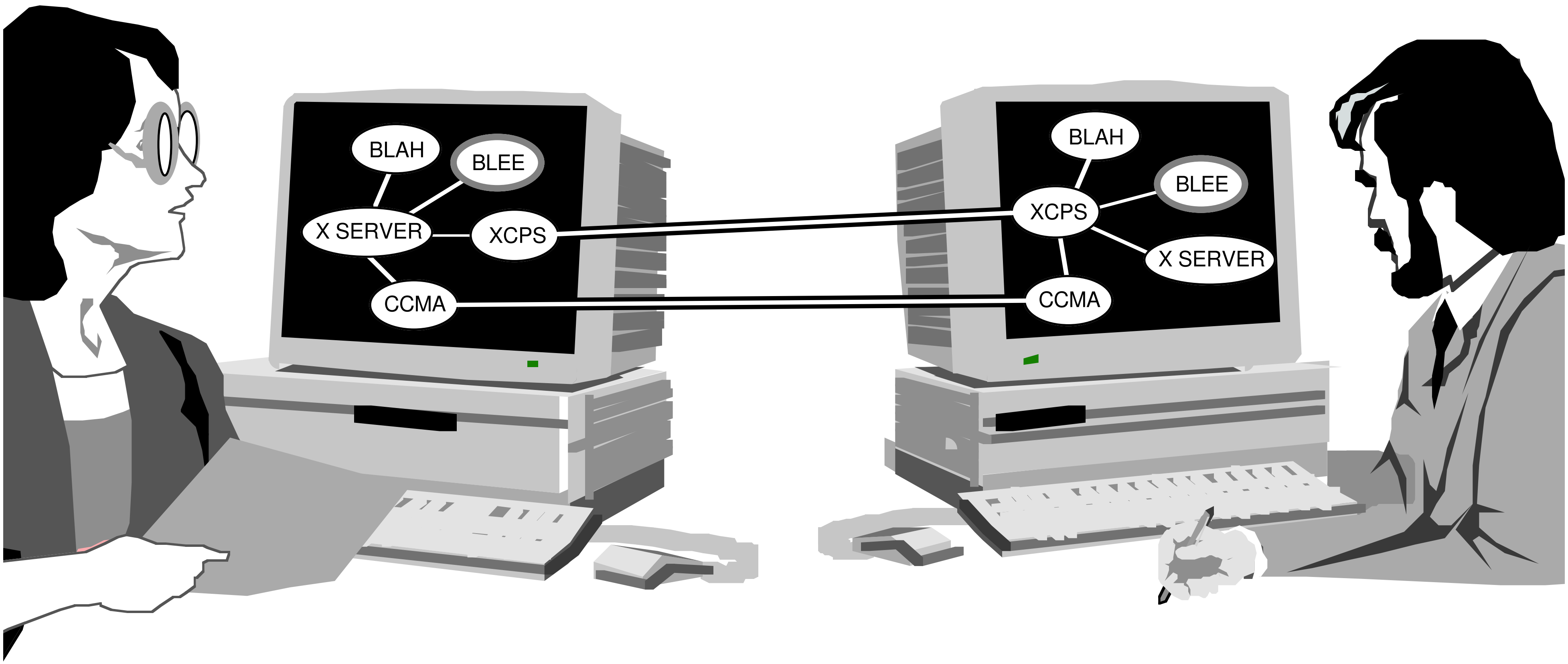
SYNCHRONOUS COLLABORATION WITH COMET



WHAT IS COMET (Collaborative Multimedia Environment)

- XCPS (X Collaborative Pseudo Server)
  - Provides synchronous collaboration over single-user, unmodified application
  - Implemented as a distributed X "pseudo" server
  - Supports both input and output sharing models for replicated and centralized applications
  - Session membership is "closed"

- CCMA (Collaboration Connection Management Agent)
  - An agent representing an individual user
  - Provides support for negotiating (TBD) and distributing conference requirements
  - Conference requirements stored in hierarchical structure with attribute/value pairs

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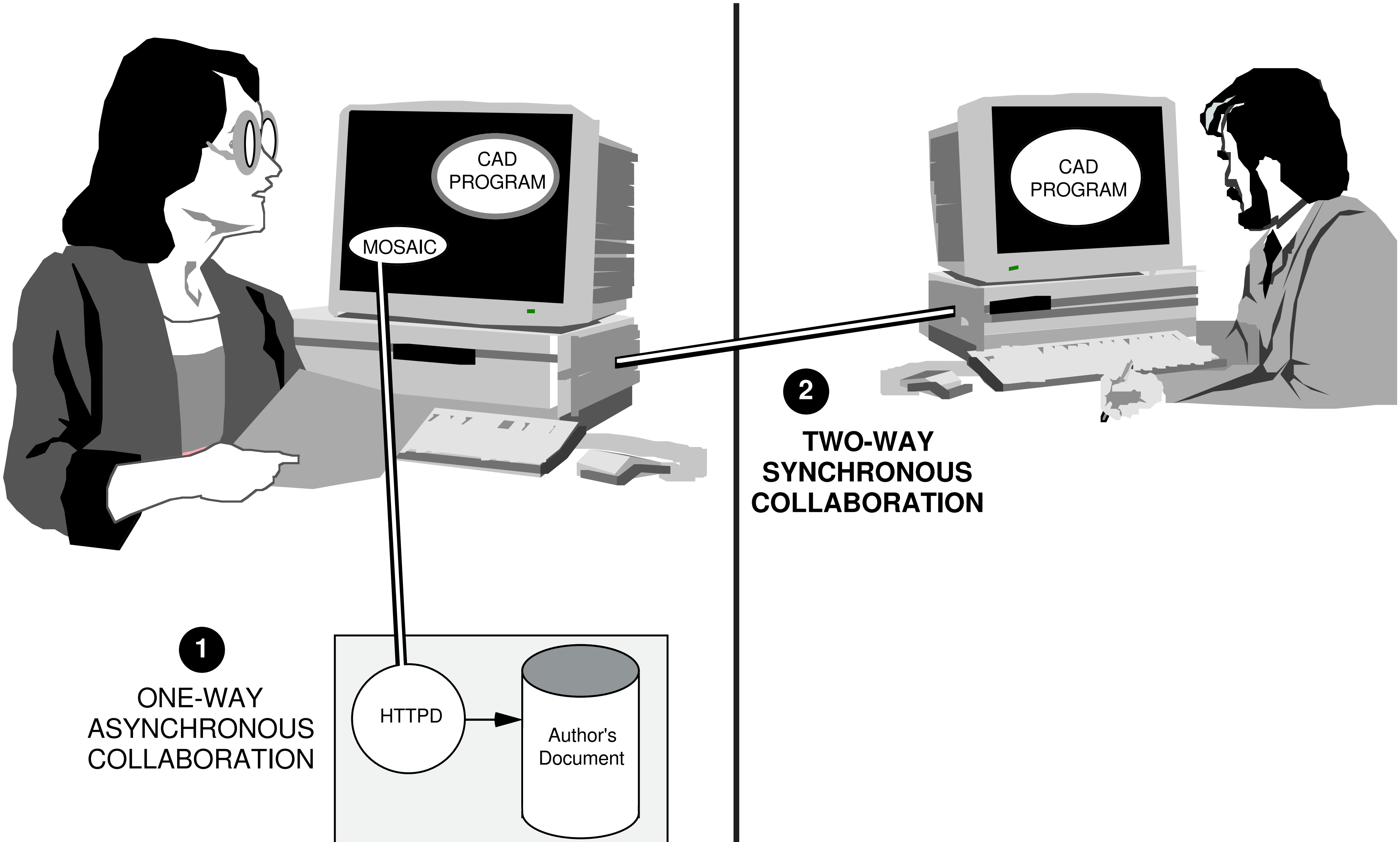
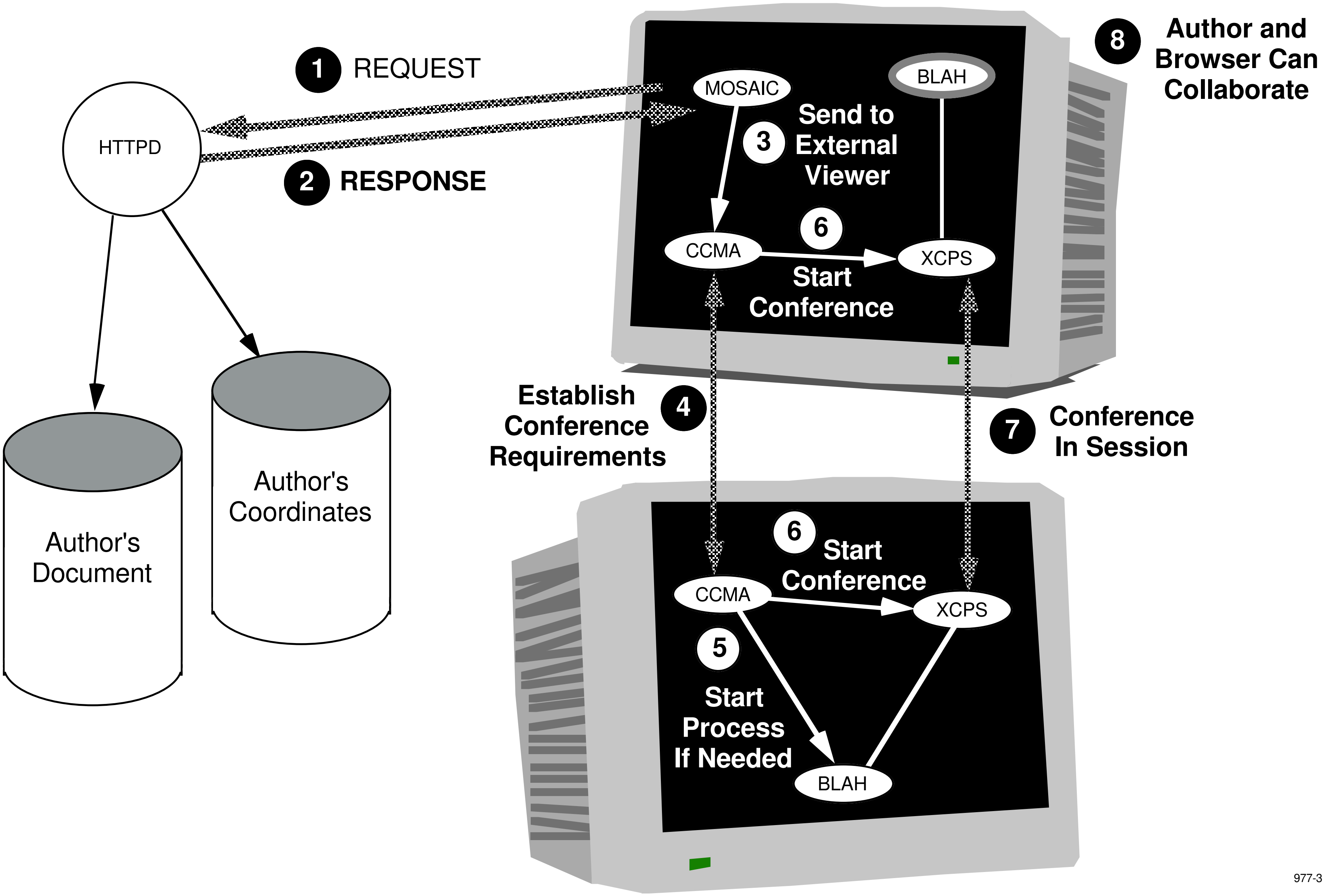
SRI International



IMPLEMENTING WWW COLLABORATION WITH COMET



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WWW AND COLLABORATION

- WWW advantages
  - Flexible mechanism to "publish" information
  - Excellent browsing applications available
  - MIME conformance provides extensibility

- WWW barriers
  - Client/server model provides one-way, asynchronous collaboration (dissemination)
  - Synchronous collaboration requires peer-to-peer model

CCMA REVISITED

- Architecture
  - One CCMA per individual user
  - Peer-to-peer communications
- Functions
  - Distribute conference requirements (applications, data, participants)
  - Negotiate requirements (TBD)
  - Instantiate conferences (start protocol, process invocation)

CCMA Revisited (concluded)

- Protocol
  - Still evolving
  - ASCII-based communications
  - Same protocol for client-to-CCMA and CCMA-to-CCMA
  - Conference "directives" are TCL procedures
  - Suites of directives enforce different policies
  - Directives currently include:
    - Process specification
    - Participant specification
    - Invitation and RSVP
    - Enter conference
    - Leave conference
    - Start conference
    - Stop conference

CONTINUED DEVELOPMENT

- Implementing user-level requirement negotiation
- Use of distributed information system to store and fetch CCMA "handles"
- Hybrid collaboration models (both shared input and output in same conference)