A WWW On-line Chat and Bulletin-Board System For Collaborative Interaction

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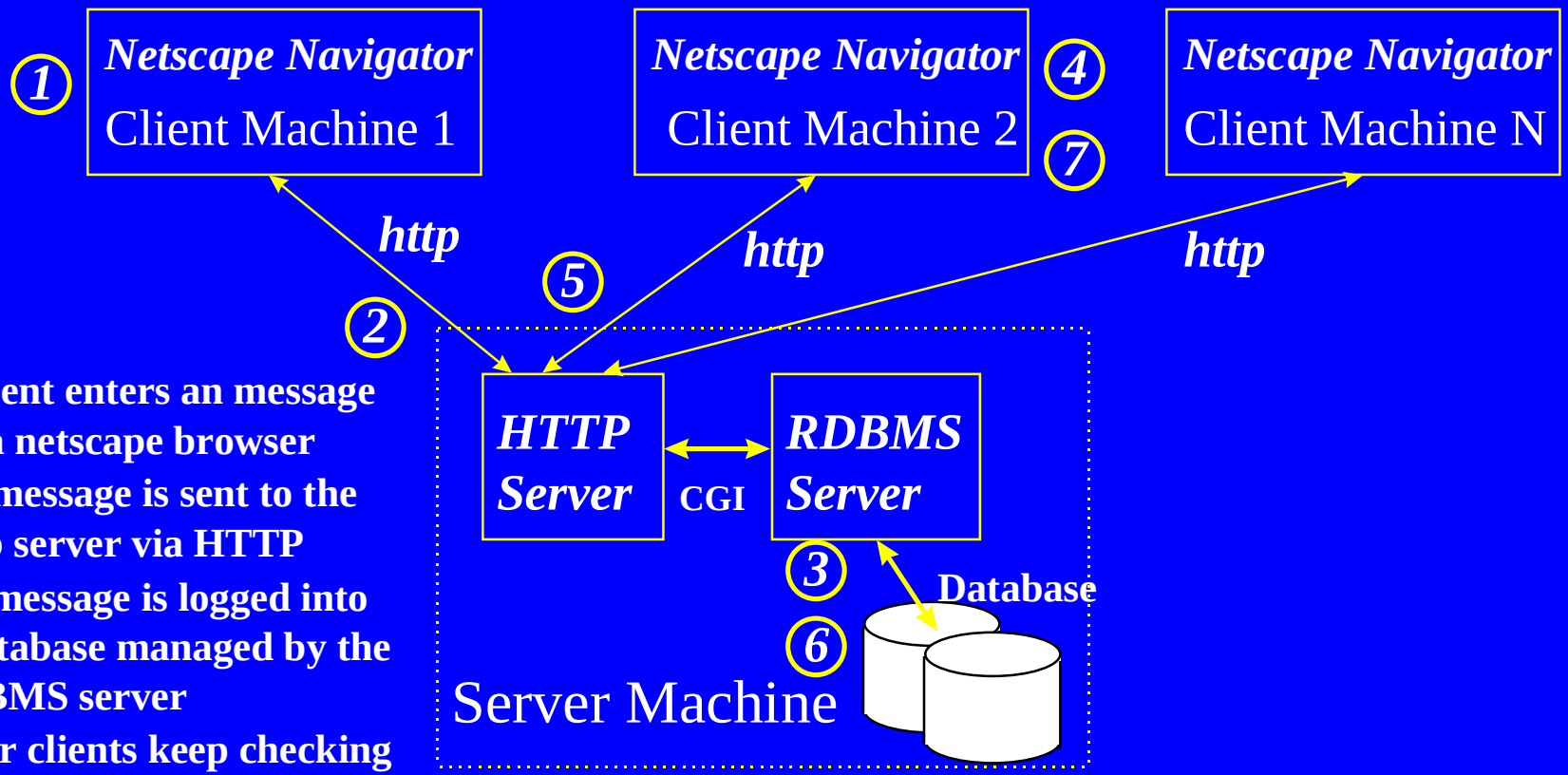
Summary

- Text-oriented interaction and collaboration
- Synchronous chat and asynchronous bulletin-board are integrated in a single collaboration environment
- Messages are in email-like format
- Built on HTTP,Web server/browser and RDBMS server

Architecture



1 a client enters an message via a netscape browser

2 the message is sent to the Web server via HTTP

3 the message is logged into a database managed by the RDBMS server

4 other clients keep checking if new message arrived

5 the check request is sent to the Web server via HTTP

6 the RDBMS server checks the message database

7 if a new message found, it is sent back to the client via HTTP

Major Functionality

- **Support multiple chat-channels/bulletin-boards simultaneously**
- **Support multiple conversation/discussion modes - group (many-to-many), personal (one-to-one) and moderated auditorium (one-to-many)**
- **On-line archiving and searching**
- **Fully integrated with WWW**

Chat Client

- Written in HTML and JavaScript
- Works under Netscape browsers on any platform - no special client software needed
- Multi-frame based GUI
- Client-Server interaction is via HTTP
- No ‘refresh effect’ on the GUI due to the use of JavaScript

Chat Server

- **A Web server plus an Oracle7 RDBMS server serves as the chat server**
- **Web server - listens to messages/requests from clients via HTTP**
- **Oracle server - handles message logging/archiving/searching, concurrency control, user/session/server management and message retrieval**
- **All advantages of a RDBMS server - high-performance, large number of concurrent users**

Current Status

- **Fully Operational**
- **Customizable to Particular Control and Command Scenario**
- **Possible Integration with the Java-based Chat System to Include Line-based Chat Conversation**
- **Integration with the Application Scenarios is pending**
- **Demo - *http://naos.npac.syr.edu:1963/cgi-bin/chat/chat.html***