

Appendix D

LSN Object-Based Design

UML Diagrams

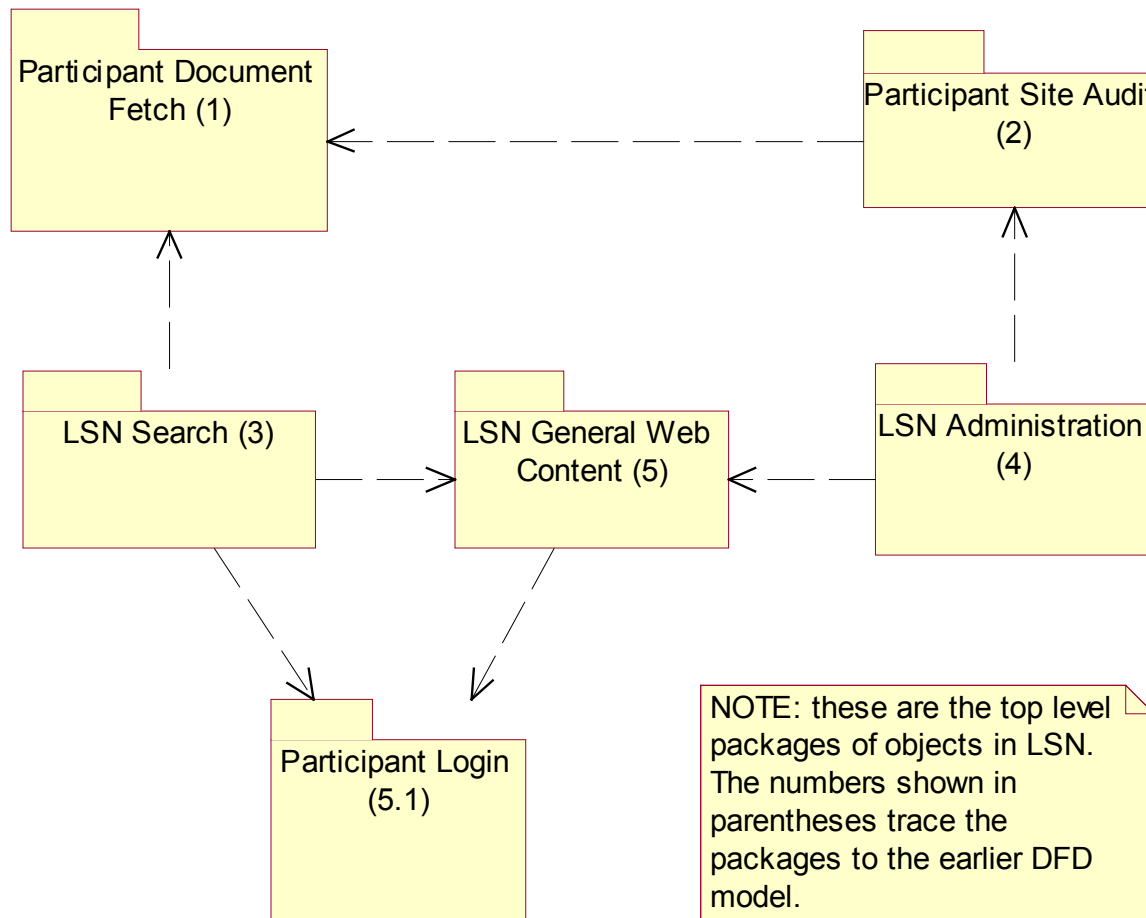


Figure 3-1: Top Level LSN Packages Diagram

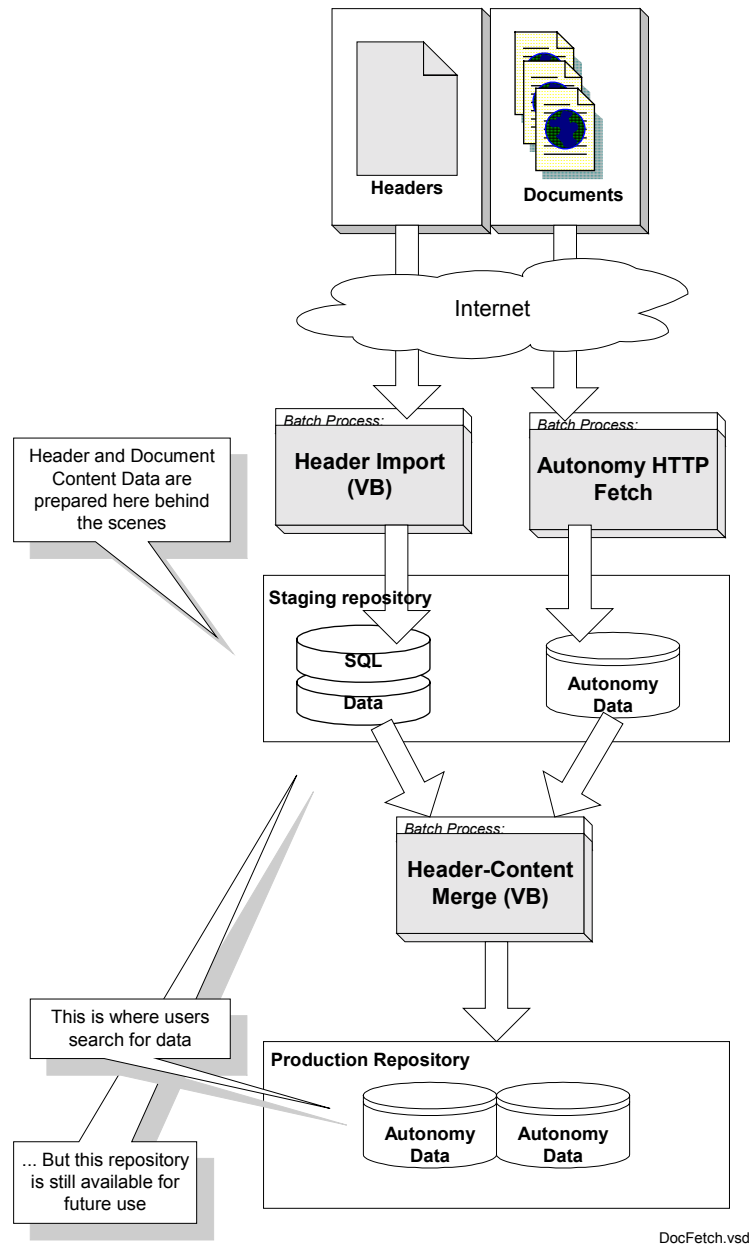


Figure 3.1-1: Participant Document Fetch, A Conceptual View

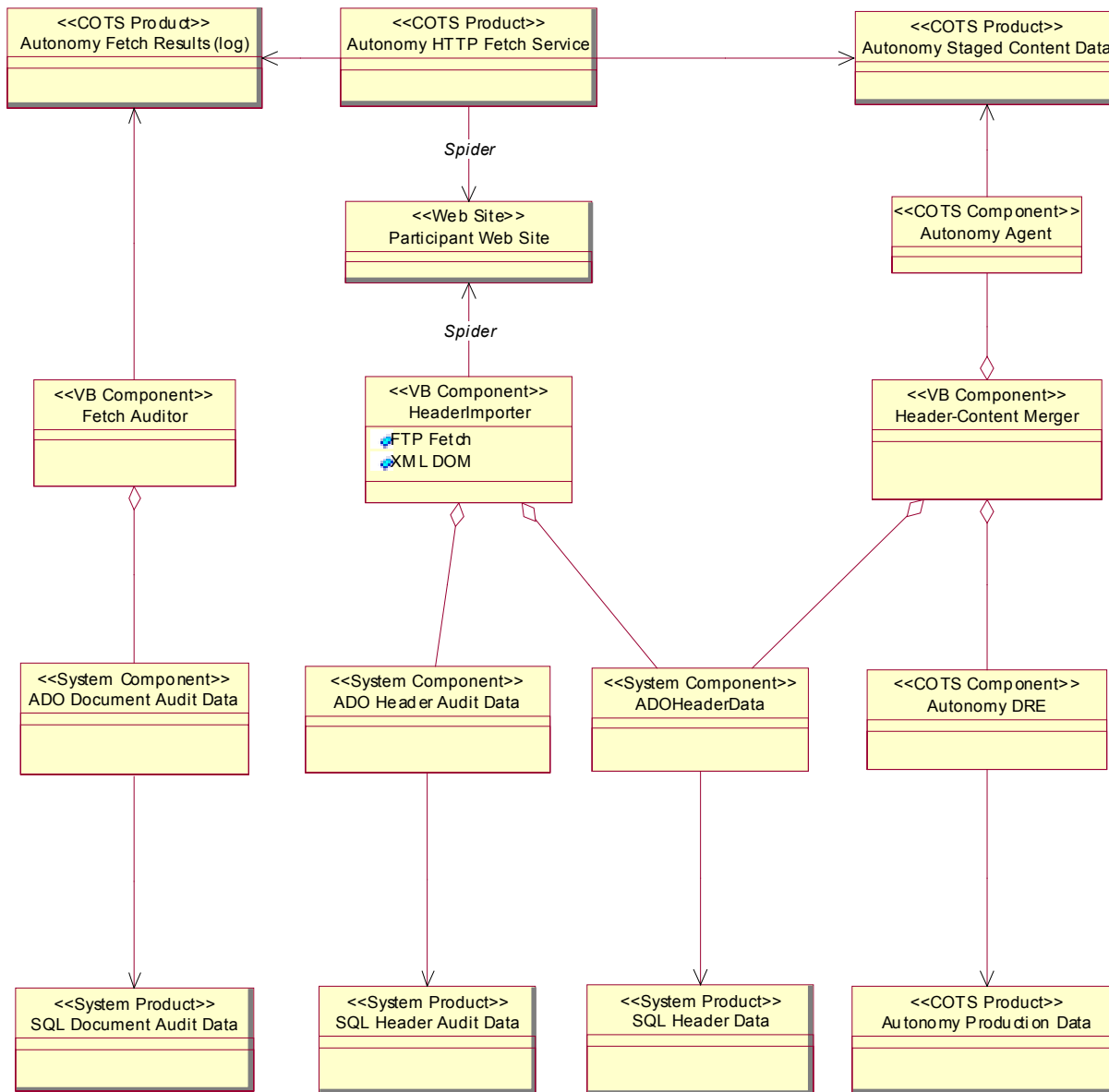


Figure 3.1.1-1: Participant Document Fetch Class Diagram

ASSEMBLE DOCS & HEADERS:

**** FETCH DOCUMENT CONTENT ****

LOOP: For each participant document site, fetch each document.

Store each in the Autonomy Staged Content Data repository.

Detect and record added or changed (add+del) docs in the Autonomy Fetch Results (log).

END LOOP

NOTE: Document adds, changes, deletes are written to the SQL Document Audit Data later. Deleted document content remains in the Autonomy Production Data.

**** IMPORT HEADERS ****

LOOP: Concurrently, for each participant site, get each current header.

Parse the content of the imported header.

Retrieve the stored header from SQL Header Data using the participant accession #

IF HEADER NOT FOUND:
If the stored header is not found, generate a new LSN Accession #, write a "New Header" transaction to the SQL Header Audit Data (2), write the new header to the SQL Header Data (1).

ELSE IF HEADER FOUND:

Compare the imported header to the stored header.

IF HEADER DIFFERENT:
Write "Changed Header" transaction to the SQL Header Audit Data (4) and write the changed header to SQL Header Data (3).

ELSE NOT DIFFERENT
Update the SQL Header Data to flag it as found today (last found date).
END IF HEADER DIFFERENT

END IF HEADER NOT FOUND

END LOOP

NOTE: Deleted headers are detected later and recorded in the SQL Header Audit Data. Deleted Headers remain in the SQL Header Data.

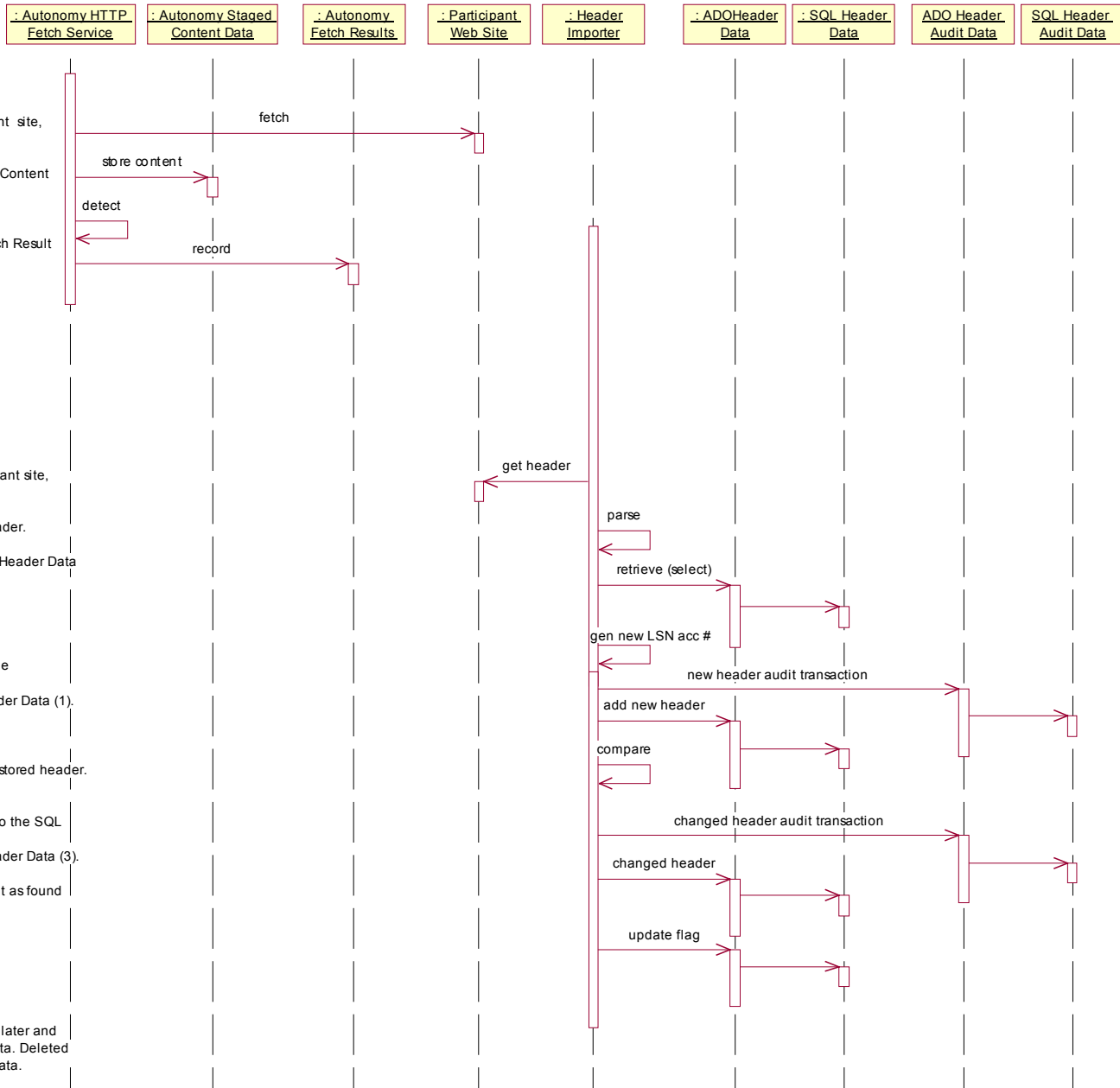


Figure 3.1.2-1: Assemble Documents and Headers Sequence Diagram

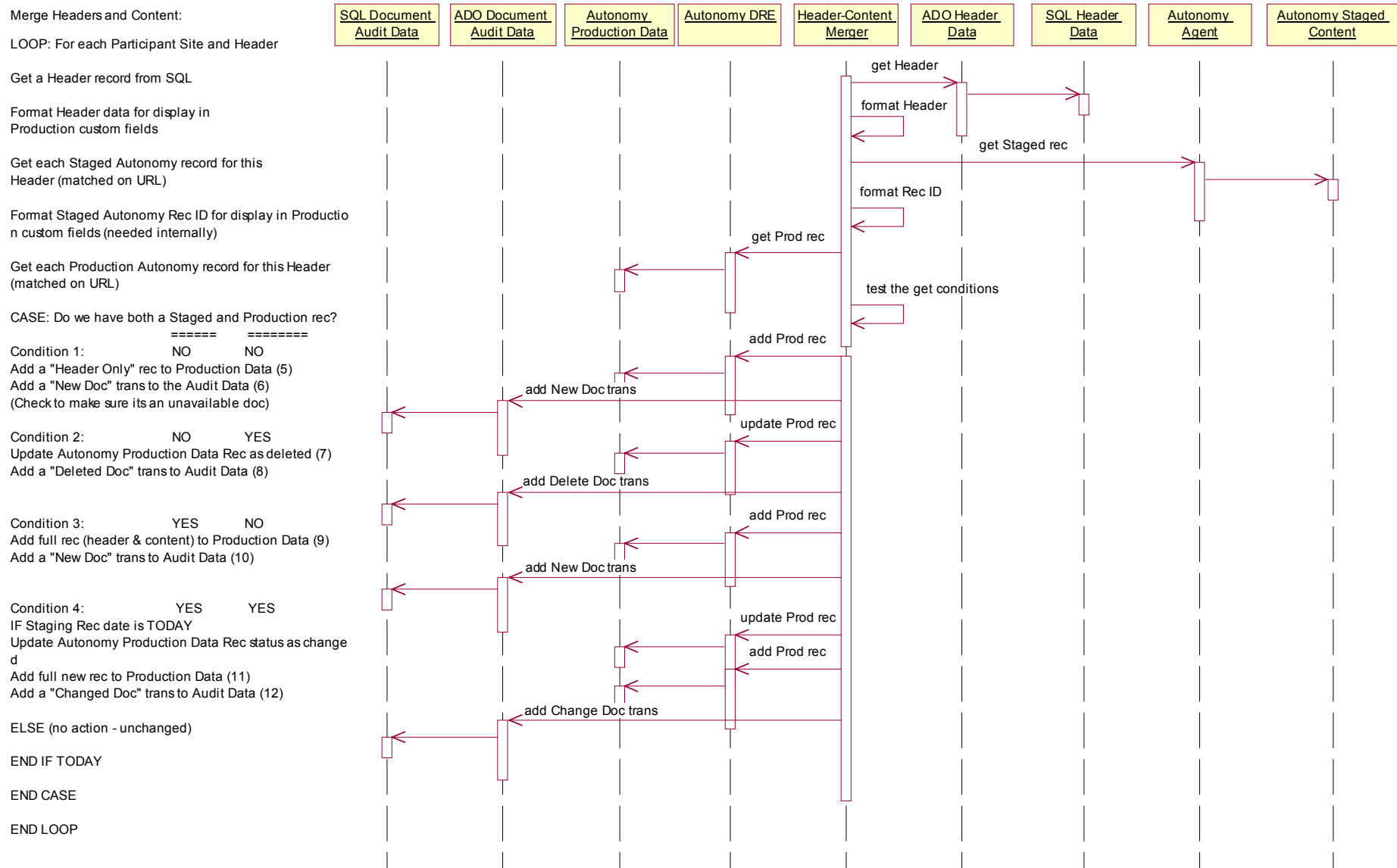


Figure 3.1.3-1: Merge Headers and Content Sequence Diagram

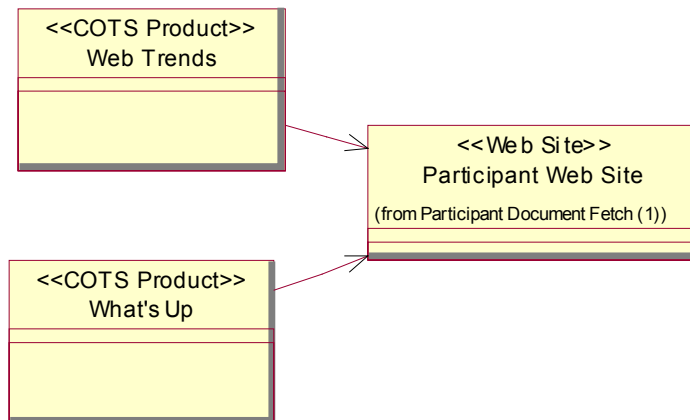
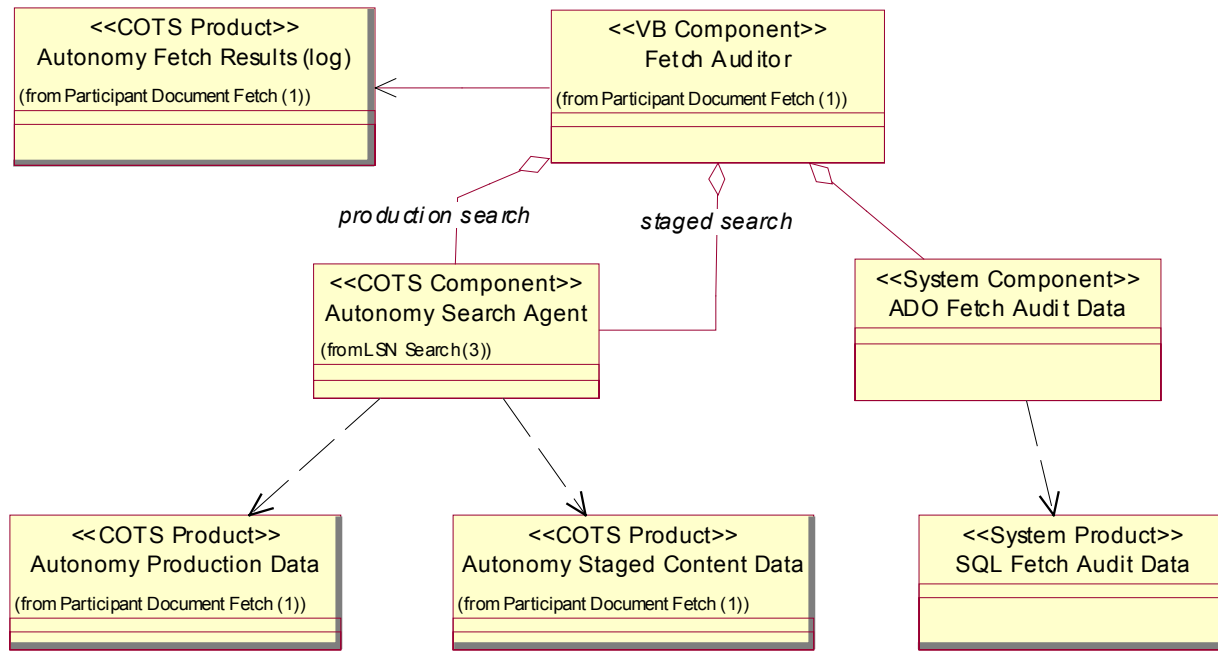


Figure 3.2.1-1: Participant Site Audit Class Diagram

Audit Document Changes:

LOOP: For each entry in the LOG

Read each DELETE entry from log

Parse the fields for Autonomy Doc ID, etc.

Search Production records for Stage Doc ID (stored as a custom field)

IF PROD REC NOT FOUND, ignore (not a doc)

ELSE IF PROD REC FOUND

Get Participant URL from Production rec

Search Staging records for matching URL

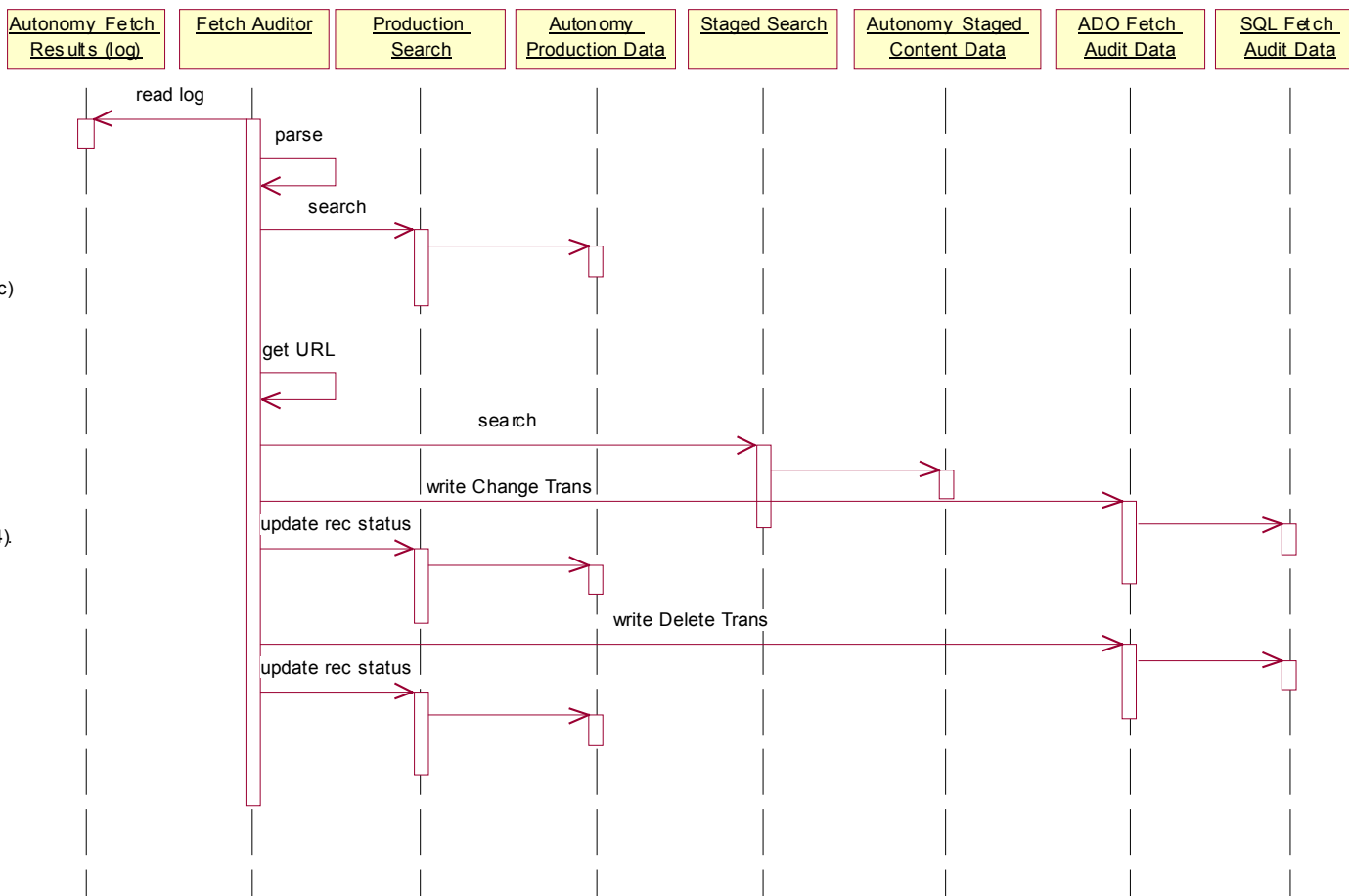
IF STAGING REC FOUND,
Write a Change Trans to Audit (13) &
Update production rec status to "Changed" (14).

ELSE IF NOTFOUND,
Write a Delete Trans to Audit (15) &
Update production rec status to "Deleted" (16).

END IF STAGING

END IF PROD REC

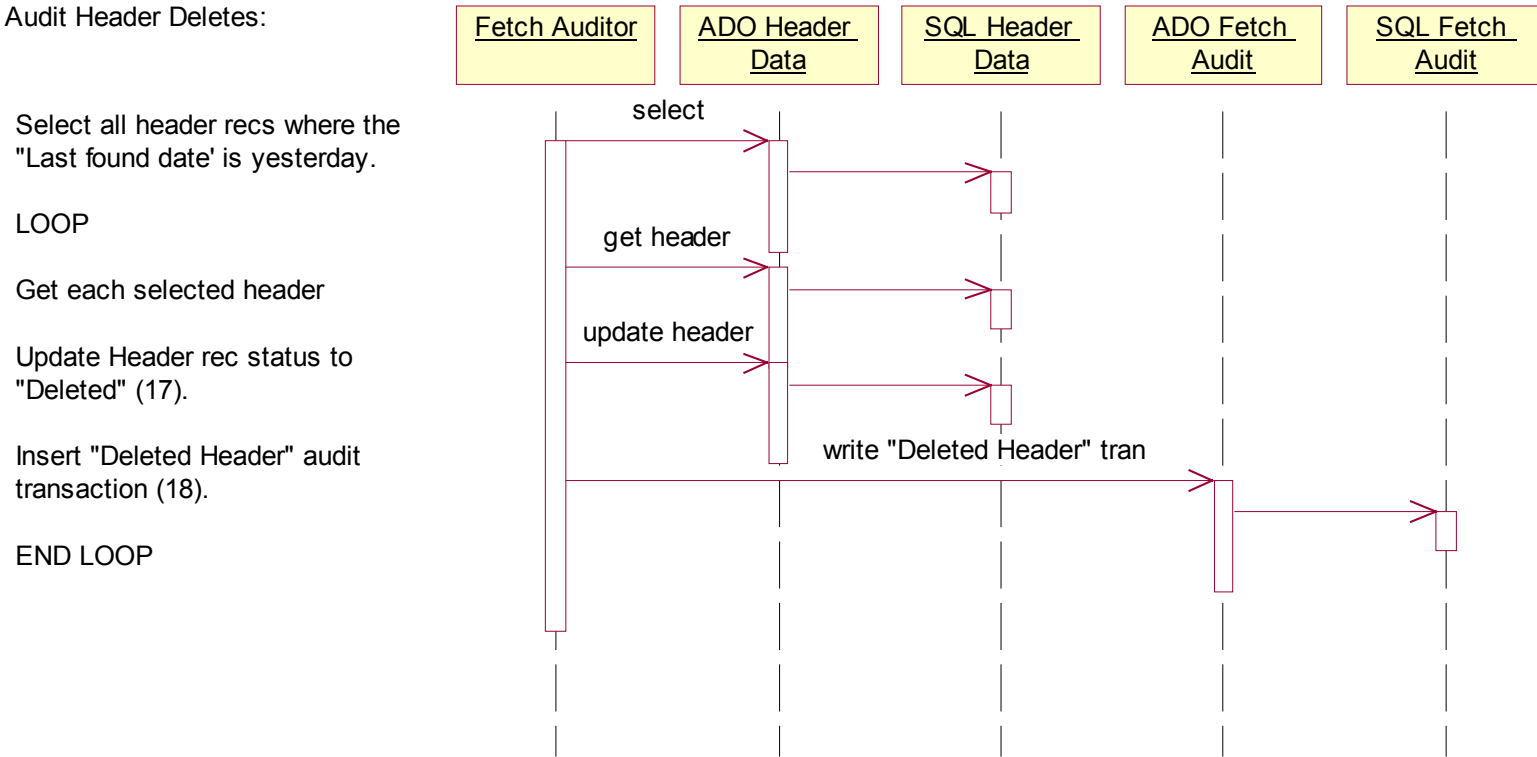
END LOG LOOP



NOTE: the log shows a CHANGED document as 2 transactions - DELETE & ADD.

Figure 3.2.3-1: Audit Document Changes Sequence Diagram

Audit Header Deletes:



Select all header recs where the "Last found date" is yesterday.

LOOP

Get each selected header

Update Header rec status to "Deleted" (17).

Insert "Deleted Header" audit transaction (18).

END LOOP

Figure 3.2.4-1: Audit Header Deletes Sequence Diagram

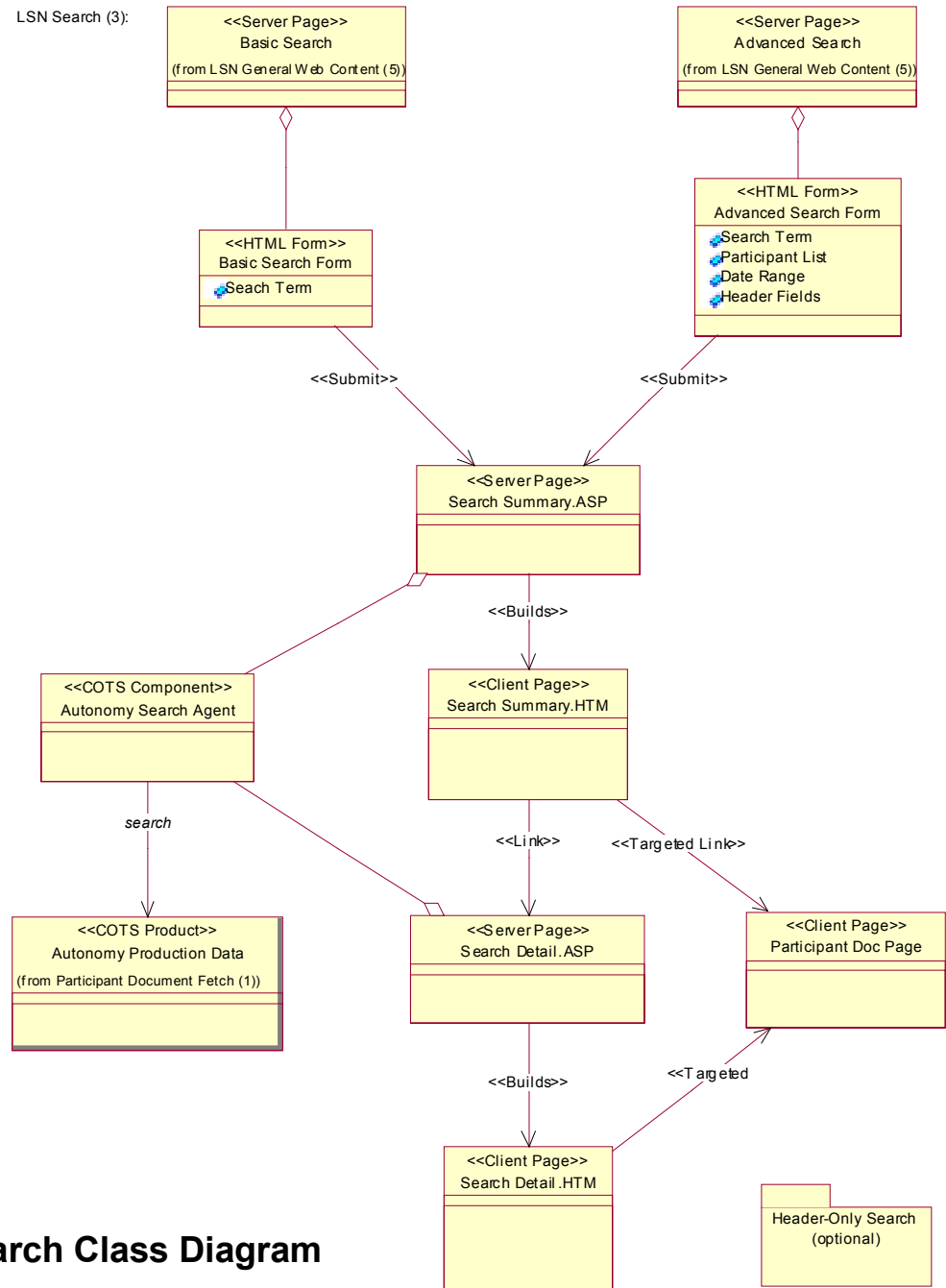


Figure 3.3.1-1: LSN Search Class Diagram

LSN Search:

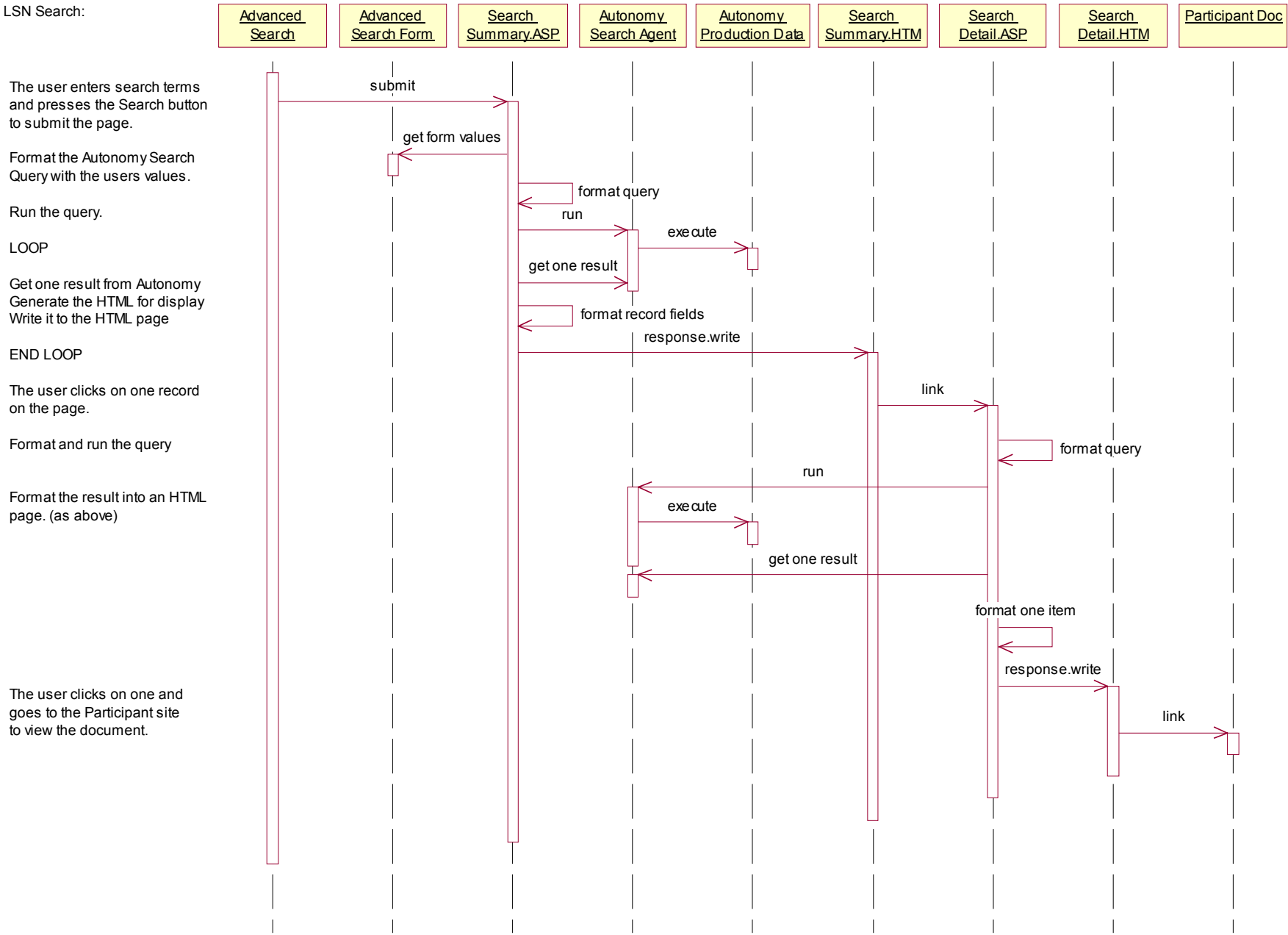


Figure 3.3.2-1: LSN Search Sequence Diagram

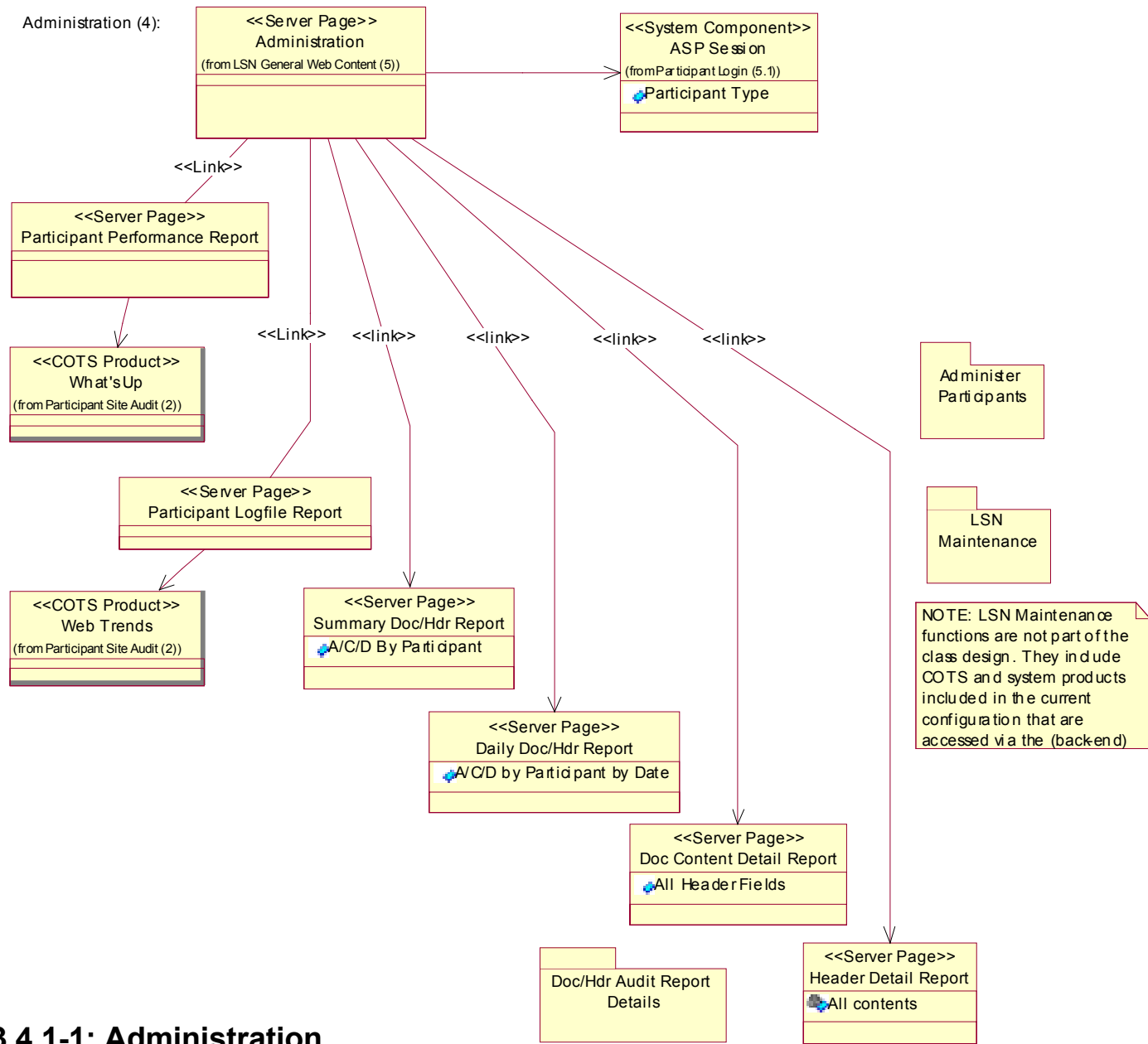


Figure 3.4.1-1: Administration Class Diagram

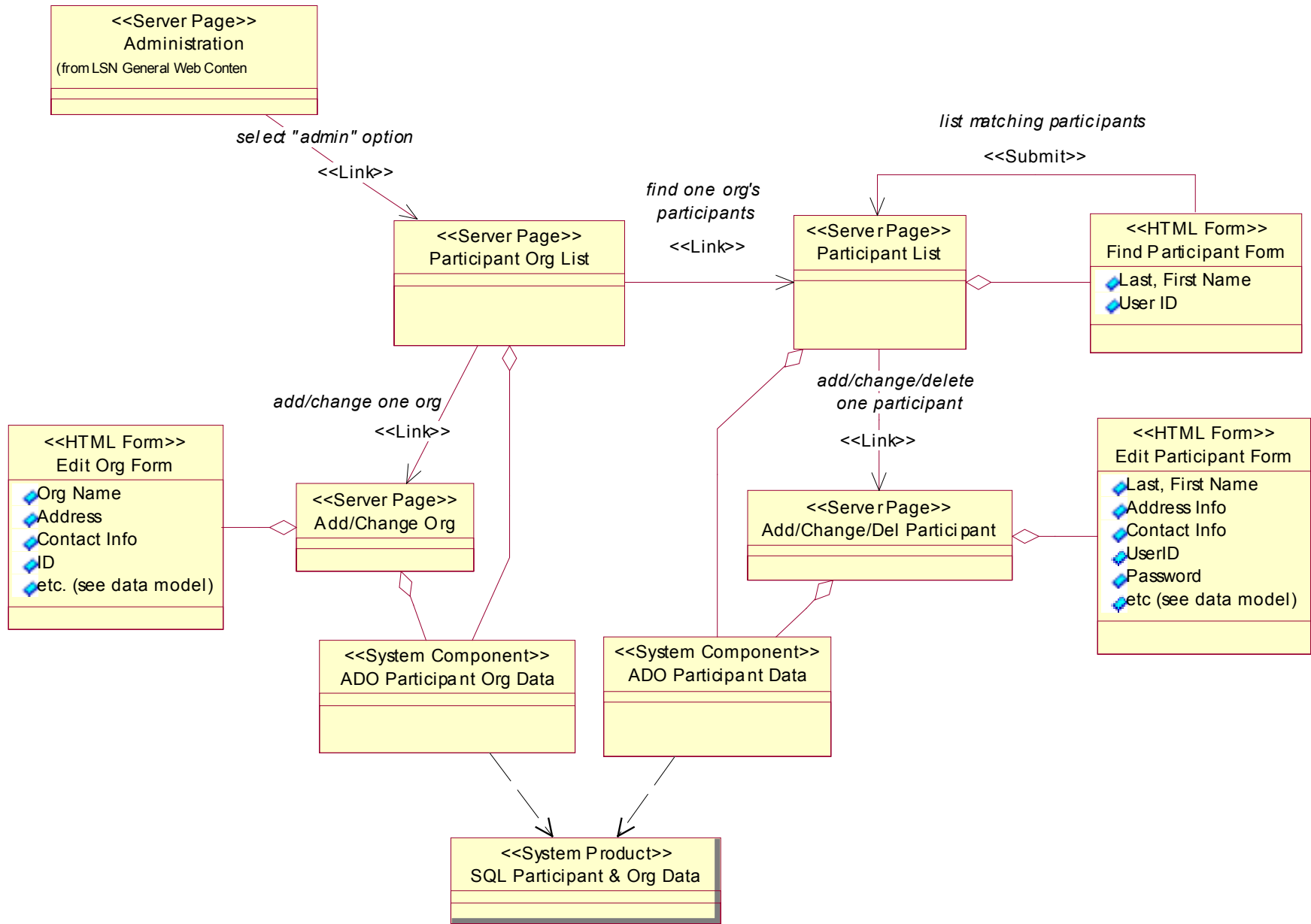


Figure 3.4.2-1: Participant Administration Class Diagram

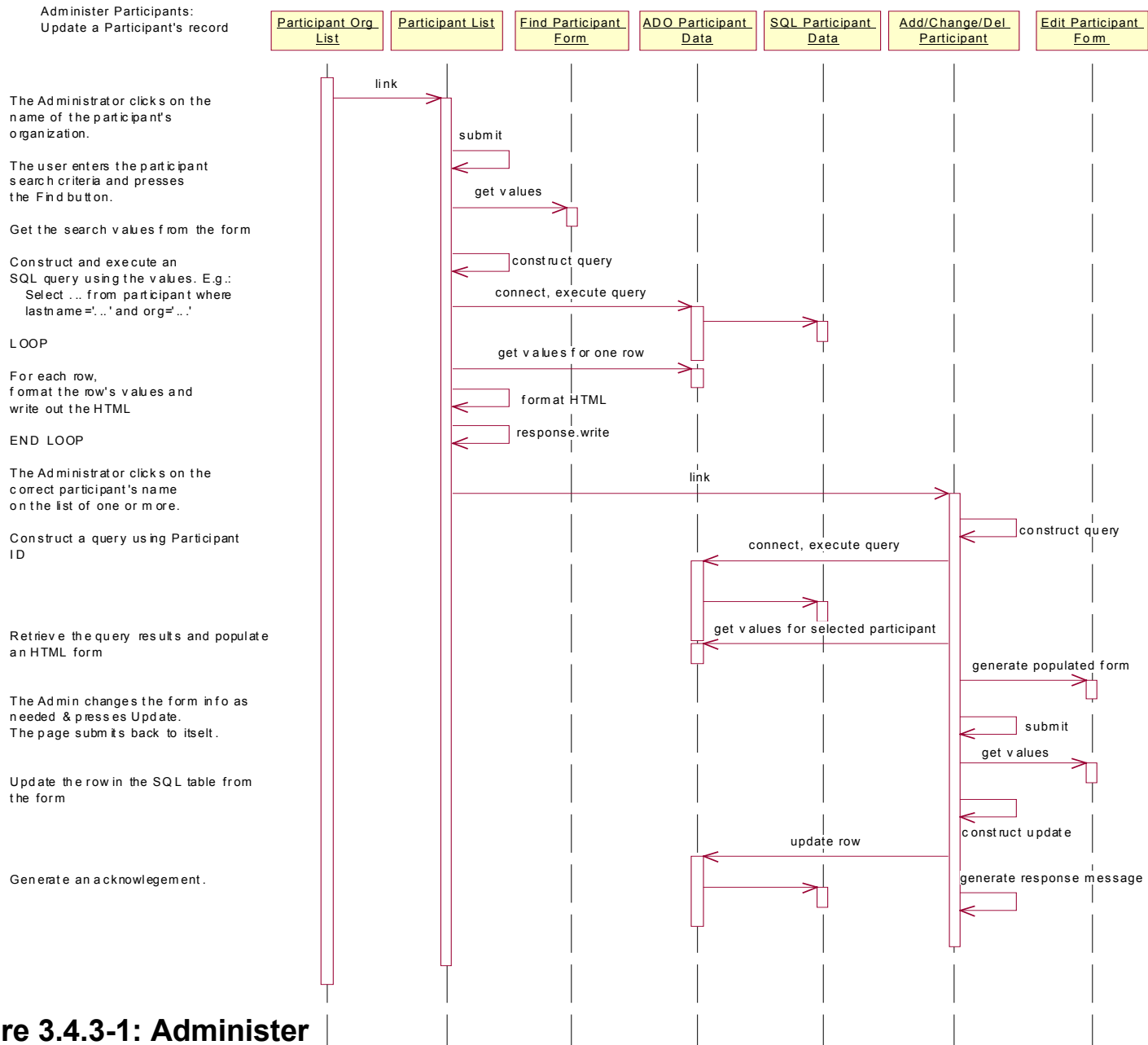


Figure 3.4.3-1: Administer Participants Sequence Diagram

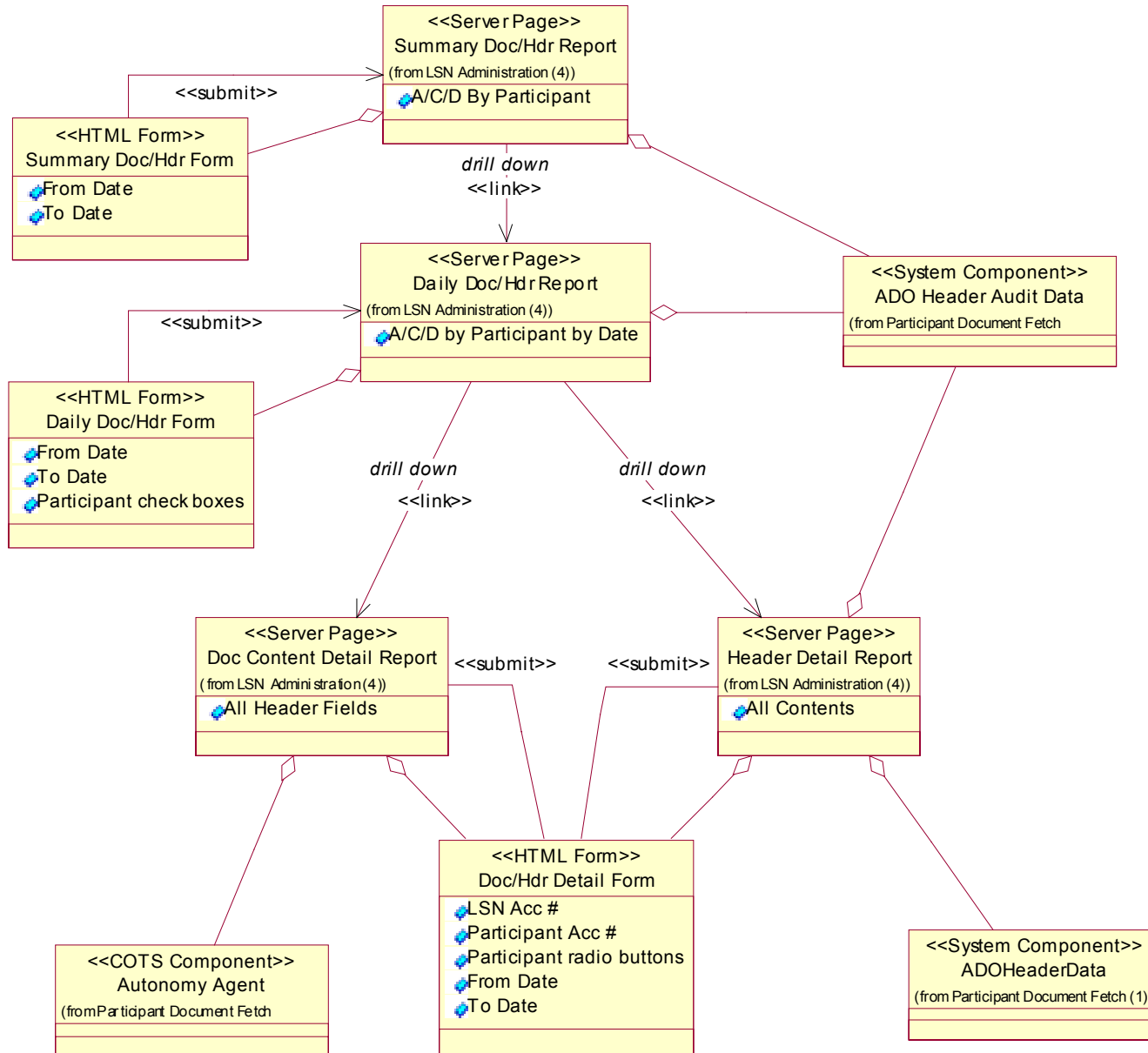


Figure 3.4.4-1: General Web Content Class Diagram

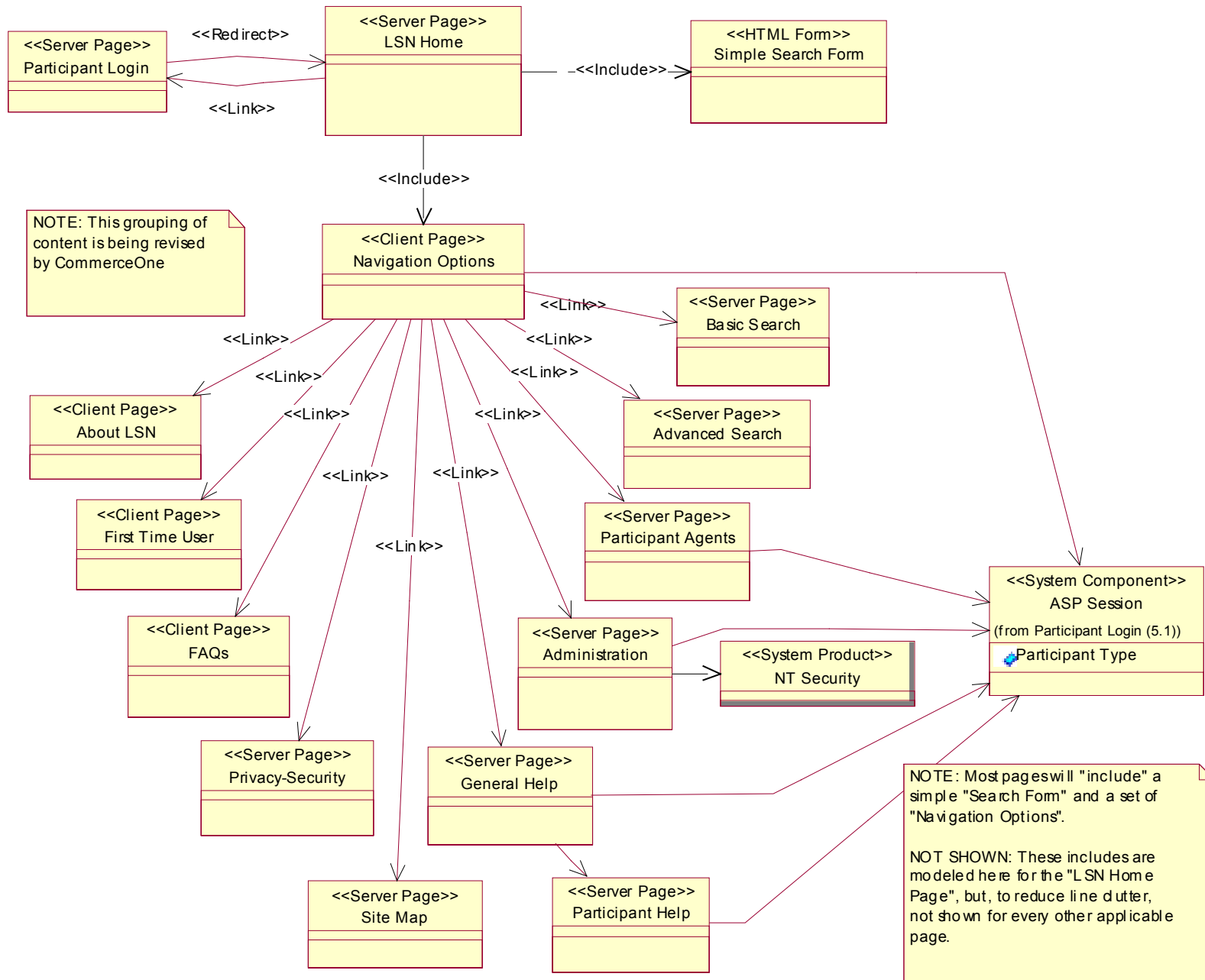


Figure 3.5.1-1: General Web Content Class Diagram

Configure the Participant's and Administrator's page options :
(Page customization)

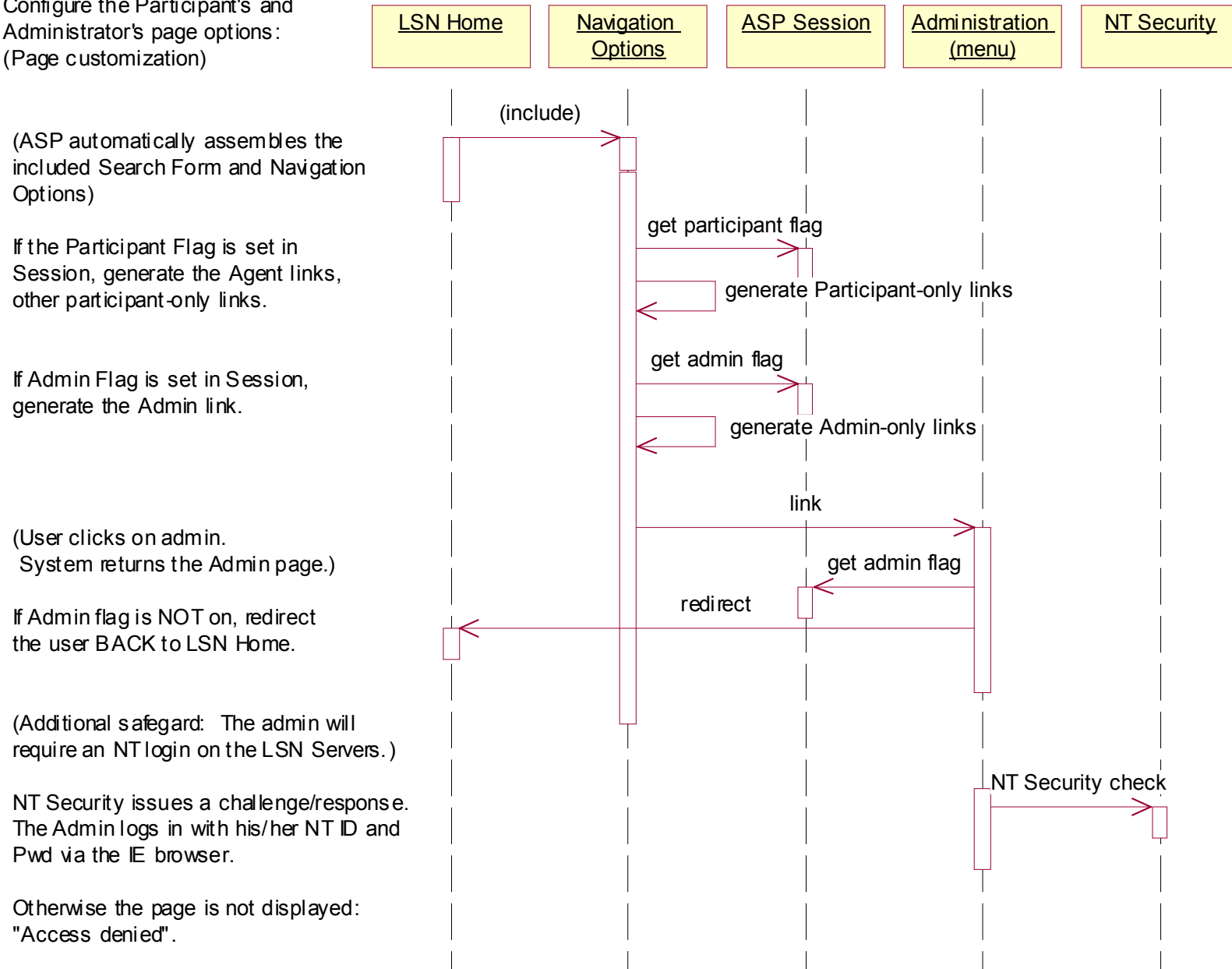


Figure 3.5.2-1: Configure Participant Page Sequence Diagram

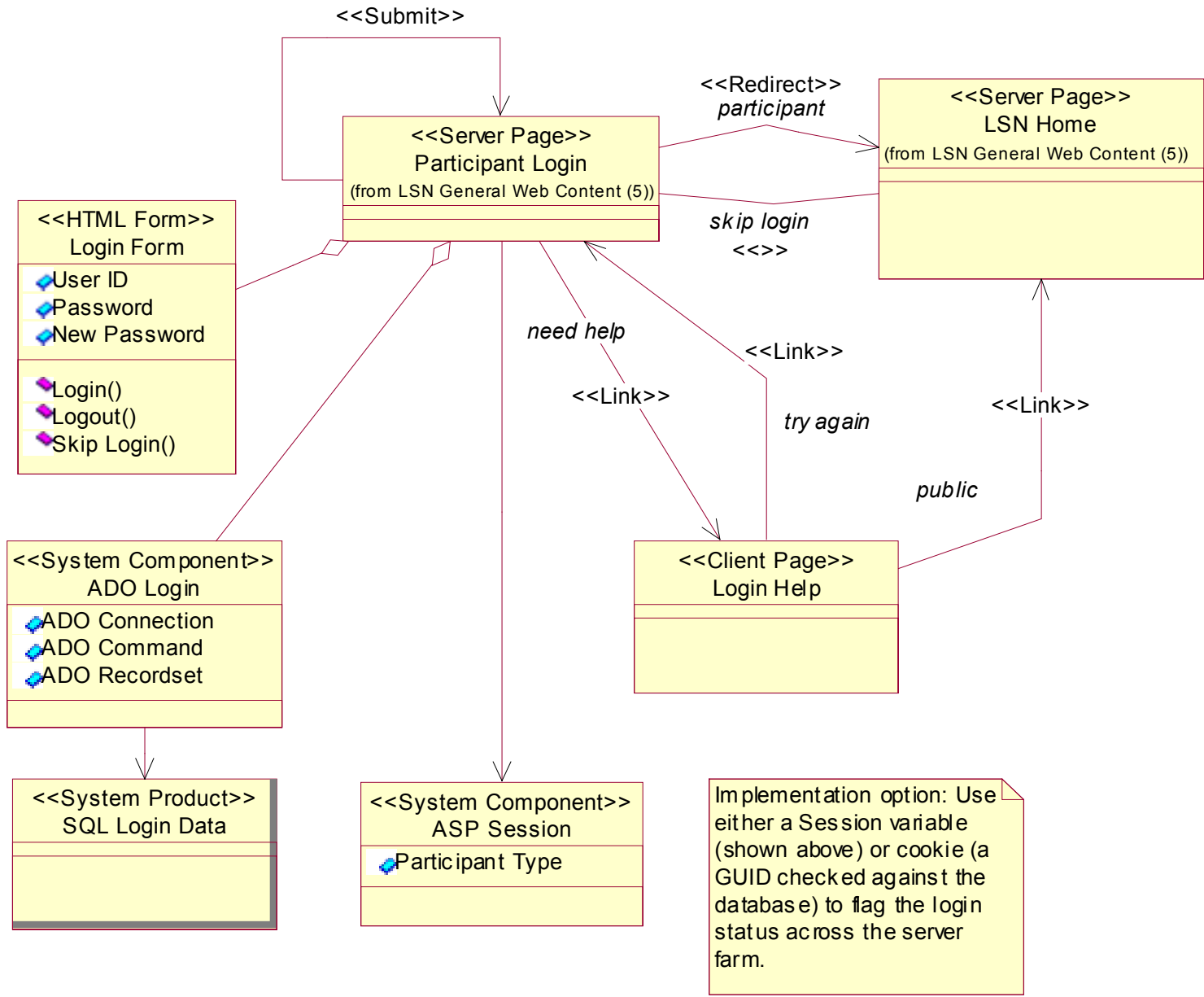


Figure 3.6.1-1: Participant Representative Login Class Model

Participant Login:

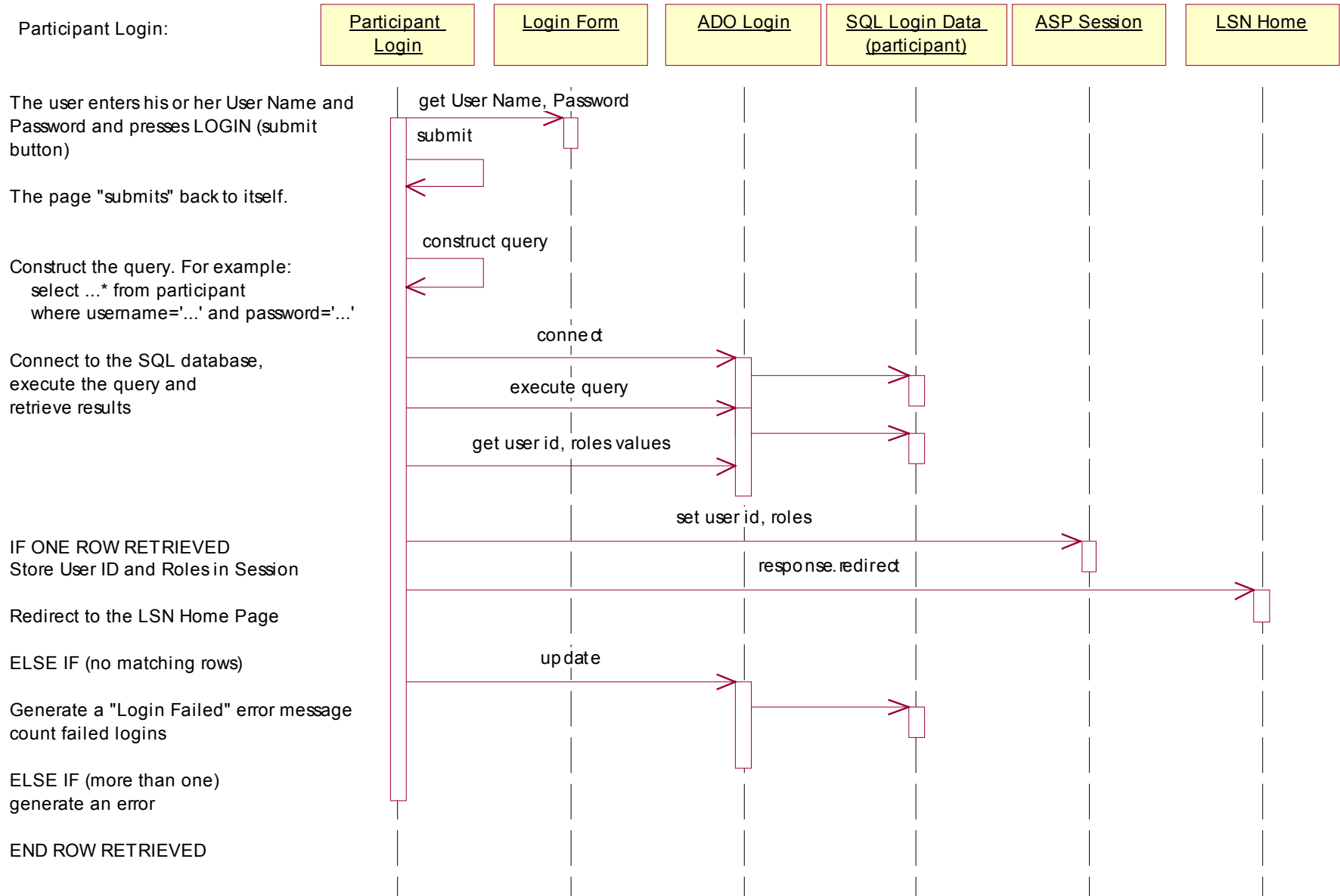


Figure 3.6.2-1: Participant Representative Login Sequence Diagram

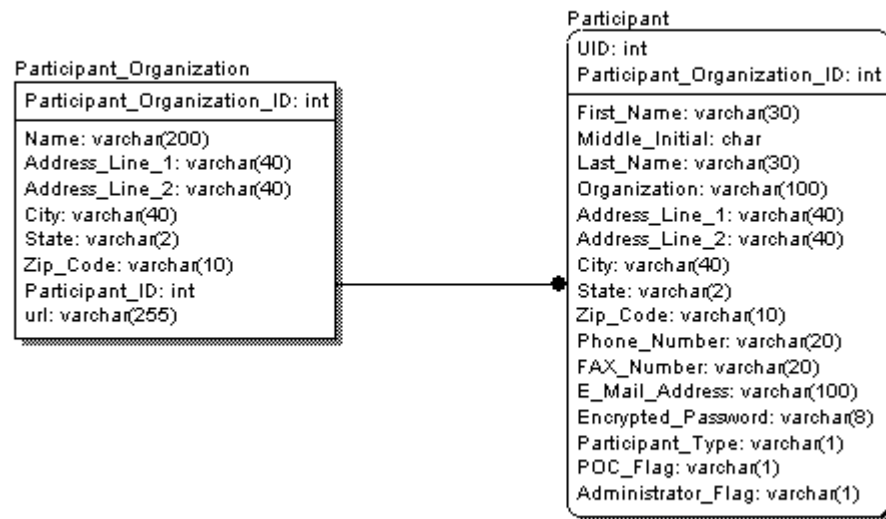


Figure 3.7-1: Physical Data Model (Part 1 of 3)

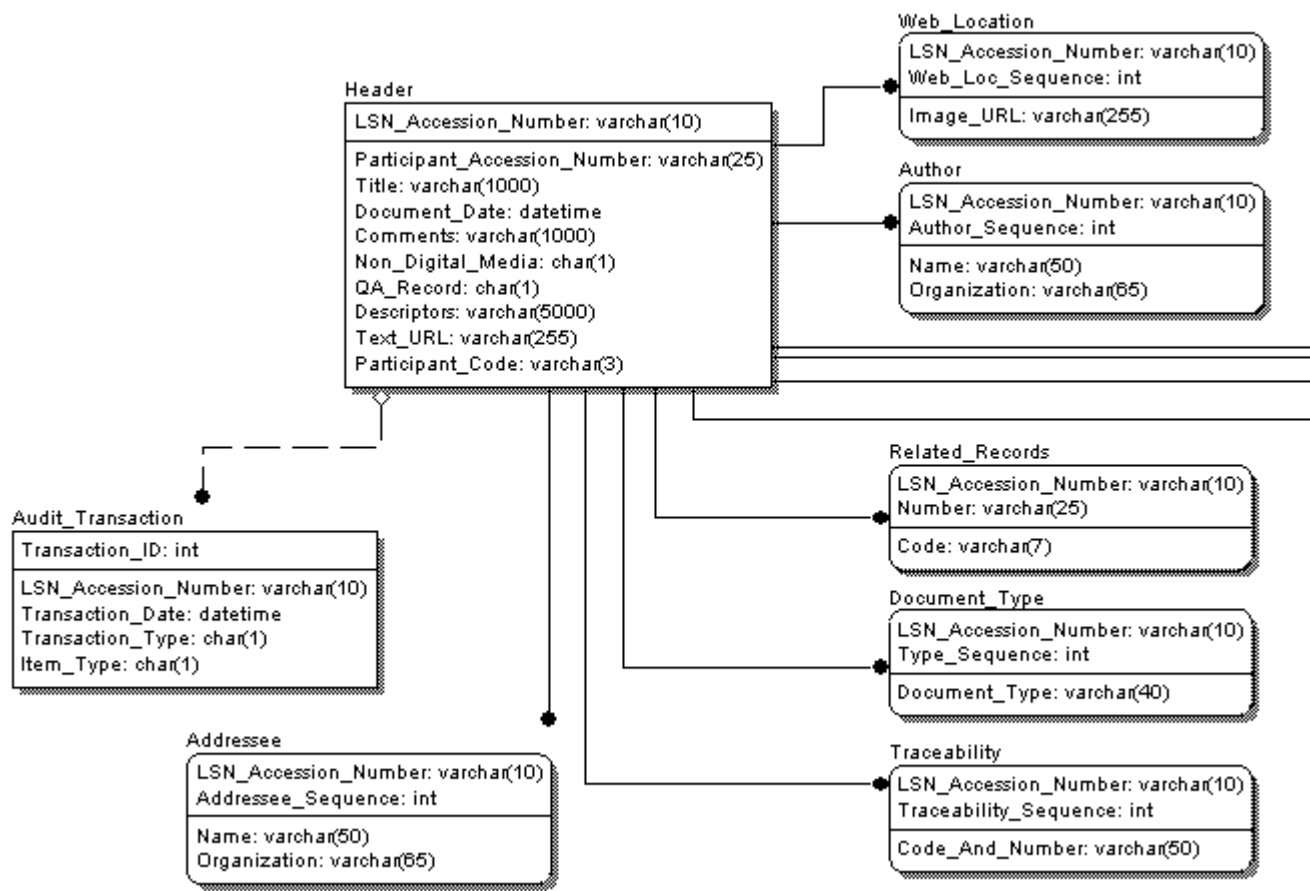


Figure 3.7-2: Physical Data Model (Part 2 of 3)

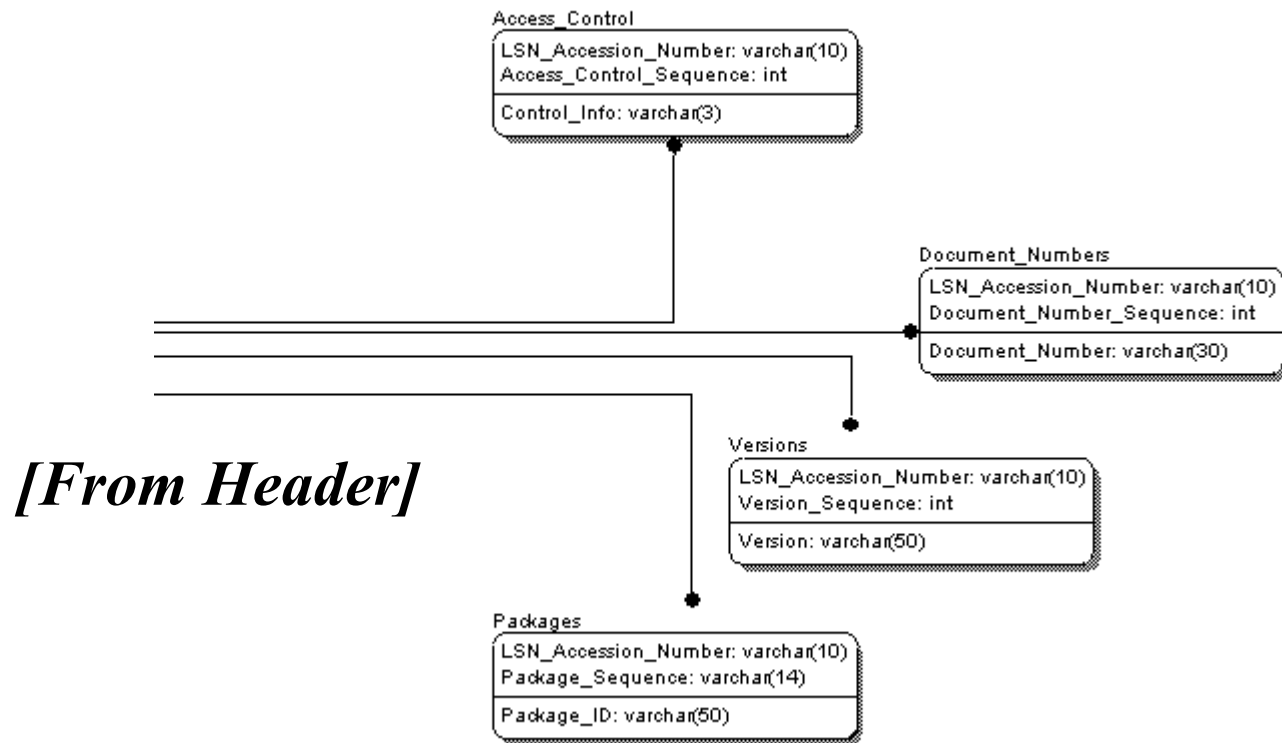


Figure 3.7-3: Physical Data Model (Part 3 of 3)