## • Super Users can:

- Update Memberships
- Maintain a list of taboo words
- unlock locked documents
- process complaints about ou's
- have all privileges reserved for ou's inside any group

## • Ordinary Users can:

- Create New documents- They own the documents they create.
- Invite other ou's to update documents they own.
- Decide whether the document is:
  - \* open to the public (can be seen by everyone)
  - \* restricted (can only be viewed as read-only by gu's and edited by ou's)
  - \* shared (viewed/ edited by ou's who are invited)
  - \* private
- accept/deny invitation(s) placed by other ou's for their specific documents
- lock a shared document for updating (only one ou can lock a document successfully and system should indicate
  which ou is updating the document)
- update a successfully locked document & assign a unique version sequence number & remember who made the update & when the update was made
- unlock a shared document locked by him/herself
- file complaints in two ways:
  - 1. to the owner of a document about another ou's update
  - 2. to the a SuperUser about the owner of the documents
- if they own a document, they should deal with complaints filed by other ou's
- remove ou's who were invited before.
- unlock locked documents that s/he owns that is being updated by others (unlock documents locked by others as long as you are the owner)
- search own files based on keyword
- search information about other ou's based on name and/or interests.
- have all privileges for gu's

## • Guest users can:

- read open documents
- retrieve old versions of open documents
- retrieve complaints about old versions of documents
- send suggestions to Super Users about taboo words.
- apply to be an ordinary user, that will be <u>confirmed or rejected by su</u> (in application, name and technical interests are submitted)

## • Constraints

- only one current version of any document exists as current
- for simplicity there is only one word for each line in all documents
- only the editing commands are saved for older versions with three possible actions
  - \* add
  - \* delete
  - \* update

- \* Example: For instance, if the file  $doc_1$ .txt contains one line "the", and  $doc_2$ .txt contains three lines "welcome n the n world n", then your system only saves  $doc_2$ .txt,  $doc_1$ .history saves the commands "delete 1; delete 3" which changes  $doc_2$ .txt into  $doc_1$ .txt. Your system generates the history command file based on the difference.
- retrieving old versions should be done by system based on current version and sequence of history files.
- words on taboo list (maintained by SU) are replaced by UNK by the system
  - \* users who use words on taboo list are automatically warned "user update the document next time you log into the system"
  - \* until update is made by user all other activities are blocked for that user.