Network Working Group Request for Comments: 576 K. Victor September 1973

## Proposal for Modifying Linking

We plan to modify the link jsys in TENEX to work in a little bit better way in terms of the user interface. Conversations with BBN indicate that they have no complaints with the current implementation. However, if after we have gained experience with our new implementation, we will let them know about it and they will review the new implementation and possibly accept it as part of standard TENEX.

I would appreciate feedback in the next couple of days so that I can go ahead and implement this proposal (or a modified proposal or nothing...). (I estimate that it will only take a couple of hours to implement!)

(Note that by modifying the jsys, the proposed changes as specified will be in effect at the user level in the exec.)

The default state for all users will remain as it currently is, i.e. RECEIVE LINKS.

Now, consider users A, B, and C.

If A and B link to each other they are now holding a conversation.

After establishing a conversation, all members of the conversation will be placed in the REFUSE LINKS state.

If user C (or any other user) now tries to link to user A (or B), the bell will ring on users A (or B) and C terminals indicating that A (or B) is in a REFUSE LINKS state.

If A ignores the bell then C is not admitted to the conversation and A and B can continue their conversation as if C had never tried to enter the conversation.

However, if A does a RECEIVE LINKS while the bell is ringing (the bell rings for approximately 15 seconds), then C will be linked into the conversation and not to just user A. Thus A and B will be linked, A and C will be linked, and B and C will be linked, i.e., a three way conversation. Also, users A, B, and C will be in the REFUSE LINKS state.

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Whenever a user leaves a conversation, his state will be set automatically to RECEIVE LINKS.

Thus, when user C does a break links the resulting states will be:

A and B will be linked and both will be in REFUSE LINKS

C will be out of the conversation and will be in RECEIVE LINKS

Now, when A or B does a BREAK LINKS there will no longer be a conversation and both A and B will be in the RECEIVE LINKS state.

To summarize:

After any conversation is established, all members of the conversation are placed in the REFUSED LINKS state.

When a user links to a terminal or a user, he is in fact linking into a conversation if one exists or to an individual if no conversation is taking place.

When a user leaves a conversation, she is placed in the RECEIVE LINKS state.

Changes to the TLINK jsys will be necessary to implement the above. No changes are required in the EXEC. In addition to the above changes, we will add a new jsys that will return the link and advise status for a passed terminal, i.e., you will be able to tell which lines are linked to the passed terminal, which lines the passed terminal is linked to, which line the passed terminal is advising, and/or which line is advising the passed terminal. This information will probably be incorporated into the systat printout, the where is printout, and will probably be used within NLS for shared screen work.

> [This RFC was put into machine readable form for entry] [into the online RFC archives by Bob German 7/99]

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