

CLAIMS

1. A method implemented by one or more computing devices, the method comprising:

receiving a file sending request initiated by a source user for a preset file, the file sending request being generated upon detecting an operation of the source user to transmit the preset file to a target user in a communication session page between the source user and the target user and the preset file being associated with a security level;

determining an approval user according to the security level, the approval user having a management authority level to approve transmission of the preset file;

sending an approval message for the file sending request to the approval user corresponding to the source user when the source user does not have a transmission privilege for the preset file;

displaying, on the communication session page, a message including an access entry to the preset file and a status indicating pending approval of accessing the preset file; and

updating the status to indicate authorized operations of the preset file via the access entry in response to the approval message being approved by the approval user.

2. The method of claim 1, further comprising obtaining respective group attribution information of the source user and the target user.

3. The method of claim 2, further comprising:

determining that the source user does not have the transmission privilege for the preset file in response to the respective group attribution information of the source user and the target user being inconsistent and the preset file belonging to a group to which the source user belongs.

4. The method of claim 1, wherein sending the approval message for the file sending request to the approval user corresponding to the source user comprises selecting the approval user corresponding to the security level of the preset file from among all approved users corresponding to the source user according to the security level.

5. The method of claim 1, further comprising:

setting the preset file as the obtainable status for the target user, granting the target user an access privilege for the preset file when the approval message is approved by the approval user, so that an access operation performed by the target user via the access entry to the preset file is responded.

6. The method of claim 1, further comprising sending a notification message for the preset file to the target user in response to receiving the file sending request.

7. The method of claim 6, wherein the notification message comprises the access entry for the preset file, to be used by the target user to perform the access operation on the preset file through the access entry.

8. The method of claim 1, further comprising sending a notification message regarding an approval status of the preset file to at least one of the source user and the target user.

9. The method of claim 1, further comprising sending a corresponding reminder message to the approval user to remind the approval user to process the approval message according to a reminder request for the approval message initiated by the source user.

10. One or more computer readable media storing executable instructions that, when executed by one or more processors, cause the one or more processors to perform acts comprising:

receiving a file sending request initiated by a source user for a preset file, the file sending request being generated upon detecting an operation of the source user to transmit the preset file to a target user in a communication session page between the source user and the target user and the preset file being associated with a security level;

determining an approval user according to the security level, the approval user having a management authority level to approve transmission of the preset file;

sending an approval message for the file sending request to the approval user corresponding to the source user when the source user does not have a transmission privilege for the preset file;

displaying, on the communication session page, a message including an access entry to the preset file and a status indicating pending approval of accessing the preset file; and

updating the status to indicate authorized operations of the preset file via the access entry in response to the approval message being approved by the approval user.

11. The one or more computer readable media of claim 10, the acts further comprising obtaining respective group attribution information of the source user and the target user.

12. The one or more computer readable media of claim 11, the acts further comprising determining that the source user does not have the transmission privilege for the preset file in response to the respective group attribution information of the source user and the target user being inconsistent and the preset file belonging to a group to which the source user belongs.

13. The one or more computer readable media of claim 10, wherein sending the approval message for the file sending request to the approval user corresponding to the source user comprises selecting the approval user corresponding to the security level of the preset file from among all approved users corresponding to the source user according to the security level.

14. The one or more computer readable media of claim 10, the acts further comprising:

setting the preset file as an obtainable status for the target user, granting the target user an access privilege for the preset file when the approval message is approved by the approval user, so that an access operation performed by the target user via the access entry to the preset file is responded.

15. The one or more computer readable media of claim 10, the acts further comprising sending a notification message for the preset file to the target user in response to receiving the file sending request.

16. The one or more computer readable media of claim 15, wherein the notification message comprises the access entry for the preset file, to be used by the target user to perform the access operation on the preset file through the access entry.

17. The one or more computer readable media of claim 10, the acts further comprising sending a notification message regarding an approval status of the preset file to at least one of the source user and the target user.

18. The one or more computer readable media of claim 10, the acts further comprising sending a corresponding reminder message to the approval user to remind the approval user to process the approval message according to a reminder request for the approval message initiated by the source user.

19. An apparatus comprising:
one or more processors;
memory;

a detection unit stored in the memory and executable by the one or more processors to detect a file sending operation initiated by a source user to a target user for a preset file in a communication session page of the source user and the target user, the preset file being associated with a security level, and determine an approval user according to the security level, the approval user having a management authority level to approve transmission of the preset file; and

a showing unit stored in the memory and executable by the one or more processors to initiate a file sending request for the preset file to a server and send an approval message for the preset file to the approval user corresponding to the source user when the source user does not have a transmission privilege for the preset file, display, on the communication session page, a message including an access entry to the preset file and a status indicating pending approval of accessing the preset file and

update the status to indicate authorized operations of the preset file via the access entry in response to the approval message being approved by the approval user.

20. The apparatus of claim 19, further comprising:

a message box showing unit stored in the memory and executable by the one or more processors to display a message box corresponding to the preset file in the communication session page in response to detecting the file sending operation; and

a status showing unit stored in the memory and executable by the one or more processors to display approval status information of the approval message at an associated area of the message box.