432 A Remote Disk Driver Chap. 18

```
retval = rdscomm((struct rd_msg_hdr *)&msg,
                                        sizeof(struct rd_msg_oreq),
                         (struct rd_msg_hdr *)&resp,
                                        sizeof(struct rd_msg_ores),
                                rdptr );
        /* Check response */
        if (retval == SYSERR) {
                rdptr->rd_state = RD_FREE;
                return SYSERR;
        } else if (retval == TIMEOUT) {
                kprintf("Timeout during remote file open\n\r");
                rdptr->rd_state = RD_FREE;
                return SYSERR;
        } else if (ntohs(resp.rd_status) != 0) {
                rdptr->rd_state = RD_FREE;
                return SYSERR;
        }
        /* Change state of device to indicate currently open */
        rdptr->rd_state = RD_OPEN;
        /* Return device descriptor */
        return devptr->dvnum;
}
```

18.11 The Remote Communication Function (rdscomm)

As one of the steps in opening the local device that is used to access the remote disk, *rdsopen* exchanges a message with the remote server. It places an *open request* message in local variable *msg*, and calls *rdscomm* to forward the message to the server. *Rdscomm* takes arguments that specify an outgoing message, a buffer for a reply, and the length of each. It sends the outgoing message to the server, and awaits a reply. If the reply is valid, *rdscomm* returns the length of the reply to the caller; otherwise, it returns *SYSERR* to indicate that an error occurred or *TIMEOUT* to indicate that no response was received. File *rdscomm.c* contains the code: