

```

/*
Node 1 is "looking after" Node 2, and waits for Node 2 to send
messages requesting more data. On receiving such a message, Node 1
allocates some more memory which it makes available to Node 2.
Once Node 2 signals that it has completed, Node 1 deletes all the
allocated memory.
*/

{

    mrapi_status_t status; /* For error checking */

    int message;

    int next_buf = 0;

    while (wait_for_message_from_node_2(&message))
    {
        if(message == QUIT)
        {
            /* Node 2 says "I'm done", so we can exit the loop */
            break;
        }

        assert(message == MORE_MEMORY_PLEASE);

        /* Node 2 needs some more memory, and will have sent another
message saying how much */

        int amount_of_data_required_in_bytes;

        wait_for_message(&amount_of_data_required_in_bytes);

        /* Allocate the desired amount of memory locally */
        buffers[next_buf].pointer = (char*) malloc(
            amount_of_data_required_in_bytes * sizeof(char) );

        /* We want to make this memory available remotely, so obtain an
id for the new piece of remote memory */
        mrapi_rmem_id_t id = get_fresh_rmem_id();

        /* Now promote the freshly allocated buffer to be visible
remotely */
        buffers[next_buf].handle = mrapi_rmem_create(
            id,
            buffers[next_buf].pointer,
            AGREED_ACCESS_TYPE,
            NULL,
            amount_of_data_required_in_bytes * sizeof(char),
            &status);

        // CHECK status FOR ERRORS - OMITTED
    }
}

```