

```

void worker_spawn_function(int worker_num)
{
    mcapi_param_t mcapi_parameters;
    mcapi_info_t mcapi_info;
    mcapi_status_t status;

    mcapi_initialize(DOMAIN_0, (1 + worker_num), &mcapi_parameters,
&mcapi_info, &status);

    bind_channels();
    do_work();
    shutdown();
}

void bind_channels()
{
    mcapi_status_t status;
    mcapi_request_t request;
    mcapi_pktchan_rcv_hndl_t work_request_in;
    mcapi_sclchan_send_hndl_t ack_out;

    // Create a packet receive endpoint for incoming work requests; use
    // a static port number so that load balancer can look it up via
    // mcapi_endpoint_get().
    mcapi_endpoint_t work_request_in_endpoint =
mcapi_endpoint_create(WORKER_REQUEST_PORT_ID, &status);
    CHECK_STATUS(status);

    // The load balancer will bind a channel to that endpoint; we use
    // the open function to synchronize and initialize our local packet
    // receive port.
    mcapi_pktchan_rcv_open_i(&work_request_in, work_request_in_endpoint,
&request, &status);
    CHECK_STATUS(status);

    // Repeat the process to create a scalar channel from us back to the
    // load balancer.
    mcapi_endpoint_t ack_out_endpoint =
mcapi_endpoint_create(WORKER_ACK_PORT_ID, &status);
    CHECK_STATUS(status);

    mcapi_sclchan_send_open_i(&ack_out, ack_out_endpoint, &request, &status);
    CHECK_STATUS(status);
}

void do_work()
{
    mcapi_status_t status;
    size_t size;

    // The first thing we do is send an ack so that the load balancer
    // knows we're ready for work.
    mcapi_sclchan_send_uint8(ack_out, 1 /* Any value would do. */, &status);

    while (1)
    {
        // receive a work request from the load balancer
        PacketInfo* work_info;
        mcapi_pktchan_rcv(work_request_in, (void*)&work_info, &size, &status);
        CHECK_STATUS(status);
    }
}

```