

7.5.1 Packet Processing Code

7.5.1.1 common.h

```
/*
 * MCAPI 2.000 Packet Processing Use Case
 * common.h
 *
 */

// Header file containing a couple of declarations that are shared
// between the load balancer and the worker.

#ifndef COMMON_H_
#define COMMON_H_

#include <stdio.h>
#include <stdlib.h>

extern char* mcapi_strerror(int s);

enum {
    WORKER_REQUEST_PORT_ID,
    WORKER_ACK_PORT_ID
};

#define DOMAIN_0 0
#define NODE_LOAD_BALANCER 0

#define CHECK_STATUS(S) do { \
    if (S != MCAPI_SUCCESS) { \
        printf("Failed with MCAPI status %d (%s)\n", S, mcapi_strerror(S)); \
        exit(1); \
    } \
} while (0)

typedef struct{
    unsigned char is_valid;
    int worker;
} PacketInfo;

#endif /* COMMON_H_ */
```

7.5.1.2 load_balancer.c

```
/*
 * MCAPI 2.000 Packet Processing Use Case
 * load_balancer.c
 *
 */

#include "common.h"
#include "mcapi.h"

#include <stdbool.h>

extern void spawn_new_thread(void* funct, int worker_id);
extern void worker_spawn_function(int worker_num);
extern int get_next_packet(PacketInfo* packet_info);
extern void drop_packet(PacketInfo* packet_info);
```