

C API – Exit Codes, stdout, stderr

Case 1: Happy Path

ExitCode: 0

Stderr: "" (MUST BE blank string)

Stdout: '<output>'

MySQLAPI promise returns: {success: true, output: <stdout>}

ipcMain.handle() promise returns: {success: true, output: <stdout>}

Example:

```
if (command == TEST) {  
  printf("Mucho successo");  
  return 0;  
}
```

Case 2: Mismatched Exit Code

C_API.exe gave an exit code of 0, but there's something in the stderr stream.

ExitCode: 0

Stderr: <non-blank string>

MySQLAPI promise returns: {success: false, output: <stderr>}

ipcMain.handle() promise returns: {success: false, output: < stderr >}

Example:

```
if (command == TEST) {  
  fprintf(stderr, "Error log here");  
  return 0;  
}
```

Case 3: API Error

Can be anything from EXIT_FAILURE within the C api, to C_API.exe is not found. Details will be in the output.

ExitCode: *non-zero*

Stderr: <hopefully something>

MySQLAPI promise returns: {success: false, output: <stderr>}

ipcMain.handle() promise returns: {success: false, output: < stderr >}

Example:

```
if (command == TEST) {  
    fprintf(stderr, "Error log here");  
    printf("This will be ignored.");  
    return EXIT_FAILURE;  
}
```

Case 4: Node.js IPC error

This means our frontend JS was never able to reach the backend.

ExitCode, Stderr, Stdout: <N/A>

MySQLAPI promise will never occur.

ipcMain.handle() promise throws an error, which needs to be caught by calling function.