

“Very rough” source code for the HTML extension

Drop these bits into your existing server. They’re C89/Windows-friendly and reuse your `send_all(...)`. The idea:

- GET / or /index.html → serve ./index.html
- GET /static/... → serve files from ./static/...
- (optional) GET /harbour-writer → call a Harbour function that returns HTML

1) Small helpers (top of your C file, after includes)

```
/* --- helpers for routing and mime --- */
static int starts_with(const char *s, const char *p) {
    while (*p) { if ((*s|32) != (*p|32)) return 0; s++; p++; } return 1;
}

static void strip_query(char *path) { /* in-place: "/x?a=b" -> "/x" */
    char *q = path ? strchr(path, '?') : NULL;
    if (q) *q = '\0';
}

static const char *guess_mime(const char *path) {
    const char *ext = path ? strchr(path, '.') : NULL;
    if (!ext) return "application/octet-stream";
    if (_stricmp(ext, ".html")==0 || _stricmp(ext, ".htm")==0) return "text/html; charset=utf-8";
    if (_stricmp(ext, ".css")==0) return "text/css";
    if (_stricmp(ext, ".js")==0) return "application/javascript";
    if (_stricmp(ext, ".json")==0) return "application/json";
    if (_stricmp(ext, ".png")==0) return "image/png";
    if (_stricmp(ext, ".jpg")==0 || _stricmp(ext, ".jpeg")==0) return "image/jpeg";
    if (_stricmp(ext, ".svg")==0) return "image/svg+xml";
    return "application/octet-stream";
}

static void BuildAndSendHtmlResponse(SOCKET s, const char *htmlBody, const char *connection) {
    char header[256];
    int bodyLen = (int)(htmlBody ? strlen(htmlBody) : 0);
    int headerLen = _snprintf(header, sizeof(header),
        "HTTP/1.1 200 OK\r\n"
        "Content-Type: text/html; charset=utf-8\r\n"
        "Content-Length: %d\r\n"
        "Connection: %s\r\n"
        "\r\n",
        bodyLen, connection ? connection : "close");
    send_all(s, header, headerLen);
    if (bodyLen > 0) send_all(s, htmlBody, bodyLen);
}

/* simple static file sender using stdio (portable enough) */
static void serve_static_file(SOCKET s, const char *localPath, const char *connection) {
    FILE *f = fopen(localPath, "rb");
    if (!f) {
        const char *nf = "HTTP/1.1 404 Not Found\r\nContent-Length:0\r\nConnection: close\r\n\r\n";
        send_all(s, nf, (int)strlen(nf));
        return;
    }
    if (fseek(f, 0, SEEK_END) != 0) { fclose(f); return; }
    long sz = ftell(f);
    if (sz < 0) { fclose(f); return; }
    rewind(f);
```

```

/* header */
{
    char hdr[256];
    const char *mime = guess_mime(localPath);
    int hlen = _snprintf(hdr, sizeof(hdr),
        "HTTP/1.1 200 OK\r\n"
        "Content-Type: %s\r\n"
        "Content-Length: %ld\r\n"
        "Connection: %s\r\n"
        "\r\n", mime, sz, connection ? connection : "close");
    send_all(s, hdr, hlen);
}
/* body */
{
    char buf[4096];
    size_t n;
    while ((n = fread(buf, 1, sizeof(buf), f)) > 0) {
        send_all(s, buf, (int)n);
    }
}
fclose(f);
}

```

2) (Optional) Harbour page that returns HTML

```

FUNCTION PAGE_HARBOUR_WRITER()
    LOCAL cHtml := ""
    TEXT TO cHtml
<!doctype html>
<html><head><meta charset="utf-8"><title>harbour writer</title></head>
<body>
    <h1>This is a heading</h1>
    <p>This is a paragraph.</p>
</body></html>
    ENDTXT
RETURN cHtml

```

3) Router additions in your GET branch

Inside your existing if (strcmp(httpMethod,"GET")==0) section:

```

/* normalize path before routing */
strip_query(httpPath);

if (_strcmp(httpPath, "/")==0 || _strcmp(httpPath, "/index.html")==0) {
    /* serve the main page */
    serve_static_file(ClientSocket, "./index.html", connection);
    alreadySent = 1;
} else if (starts_with(httpPath, "/static/")) {
    /* map /static/... -> ./static/... */
    char local[512]; _snprintf(local, sizeof(local), "%s", httpPath);
    serve_static_file(ClientSocket, local, connection);
    alreadySent = 1;
} else if (_strcmp(httpPath, "/harbour-writer")==0) {
    /* dynamic HTML from Harbour */
    const char *html = NULL;
    hb_vmPushSymbol( hb_dynsymSymbol( hb_dynsymFindName("PAGE_HARBOUR_WRITER") ) );
    hb_vmPushNil();
    hb_vmDo(0);
    html = hb_parcc(-1);
    if (!html) html = "<!doctype html><meta charset=\"utf-8\"><h1>empty</h1>";
    BuildAndSendHtmlResponse(ClientSocket, html, connection);
    alreadySent = 1;
}

```

```
/* ...else: your other GET API endpoints or 404 ... */  
}
```

Place your UI assets like this:

```
your.exe  
index.html  
static/  
  css/style.css  
  js/app.js  
  img/logo.png
```

4) Cloudflare Tunnel (very short dummy)

config.yml:

```
tunnel: zplan  
credentials-file: C:\Users\<<YOU>\.cloudflared\zplan.json  
ingress:  
  - hostname: app.mytest.com  
    service: http://localhost:9090  
  - service: http_status:404
```

Run:

```
cloudflared tunnel create zplan  
cloudflared tunnel route dns zplan app.mytest.com  
cloudflared tunnel run zplan
```

That's it: <https://app.mytest.com/> hits your EXE, which serves index.html (and /static/...) and still handles your JSON API routes.