

This example show how to use Code Splitting with the ES6 module syntax.

The standard `import` is sync.

`import(module: string) -> Promise` can be used to load modules on demand. This acts as a split point for webpack and creates a chunk.

Providing dynamic expressions to `import` is possible. The same limits as with dynamic expressions in `require` calls apply here. Each possible module creates an additional chunk. In this example `import("c/" + name)` creates two additional chunks (one for each file in `node_modules/c/`). This is called “async context”.

## example.js

```
import a from "a";

import("b").then(function(b) {
  console.log("b loaded", b);
})

function loadC(name) {
  return import("c/" + name);
}

Promise.all([loadC("1"), loadC("2")]).then(function(arr) {
  console.log("c/1 and c/2 loaded", arr);
});
```

## dist/output.js

```
/***/ ((() => { // webpackBootstrap
/***/      var __webpack_modules__ = ([
/* 0 */,
/* 1 */
/*!*****!*\
  !*** ./node_modules/a.js ***!
  \***** */
/*! unknown exports (runtime-defined) */
/*! runtime requirements: */
/***/ ((() => {

// module a

/***/ })),
/* 2 */
/*!*****!*\
```

```

    !*** ./node_modules/c/ lazy ^\.\.*$ namespace object ***!
    \*****
/*! default exports */
/*! exports [not provided] [no usage info] */
/*! runtime requirements: module, __webpack_require__.o, __webpack_require__, __webpack_req
/***/ ((module, __unused_webpack_exports, __webpack_require__) => {

var map = {
  "./1": [
    4,
    346
  ],
  "./1.js": [
    4,
    346
  ],
  "./2": [
    5,
    98
  ],
  "./2.js": [
    5,
    98
  ]
];
};
function webpackAsyncContext(req) {
  if(!__webpack_require__.o(map, req)) {
    return Promise.resolve().then(() => {
      var e = new Error("Cannot find module '" + req + "'");
      e.code = 'MODULE_NOT_FOUND';
      throw e;
    });
  }

  var ids = map[req], id = ids[0];
  return __webpack_require__.e(ids[1]).then(() => {
    return __webpack_require__.t(id, 7 | 16);
  });
}

webpackAsyncContext.keys = () => (Object.keys(map));
webpackAsyncContext.id = 2;
module.exports = webpackAsyncContext;

/***/ })
***** ]);

```

```

/* webpack runtime code */

/*****
/*****/    // The module cache
/*****/    var __webpack_module_cache__ = {};
/*****/
/*****/    // The require function
/*****/    function __webpack_require__(moduleId) {
/*****/        // Check if module is in cache
/*****/        var cachedModule = __webpack_module_cache__[moduleId];
/*****/        if (cachedModule !== undefined) {
/*****/            return cachedModule.exports;
/*****/        }
/*****/        // Create a new module (and put it into the cache)
/*****/        var module = __webpack_module_cache__[moduleId] = {
/*****/            // no module.id needed
/*****/            // no module.loaded needed
/*****/            exports: {}
/*****/        };
/*****/
/*****/        // Execute the module function
/*****/        __webpack_modules__[moduleId](module, module.exports, __webpack_require__);
/*****/
/*****/        // Return the exports of the module
/*****/        return module.exports;
/*****/    }
/*****/
/*****/    // expose the modules object (__webpack_modules__)
/*****/    __webpack_require__.m = __webpack_modules__;
/*****/

/*****
/*****/    /* webpack/runtime/compat get default export */
/*****/    (() => {
/*****/        // getDefaultExport function for compatibility with non-harmony modules
/*****/        __webpack_require__.n = (module) => {
/*****/            var getter = module && module.__esModule ?
/*****/                () => (module['default']) :
/*****/                () => (module);
/*****/            __webpack_require__.d(getter, { a: getter });
/*****/            return getter;
/*****/        };
/*****/    })();
/*****/
/*****/    /* webpack/runtime/create fake namespace object */
/*****/    (() => {
/*****/        var getProto = Object.getPrototypeOf ? (obj) => (Object.getPrototypeOf(obj)

```



```

/*****/      __webpack_require__.f[key](chunkId, promises);
/*****/      return promises;
/*****/      }, []));
/*****/      };
/*****/      })();
/*****/
/*****/      /* webpack/runtime/get javascript chunk filename */
/*****/      (() => {
/*****/          // This function allow to reference async chunks
/*****/          __webpack_require__.u = (chunkId) => {
/*****/              // return url for filenames based on template
/*****/              return "" + chunkId + ".output.js";
/*****/          };
/*****/      })();
/*****/
/*****/      /* webpack/runtime/hasOwnProperty shorthand */
/*****/      (() => {
/*****/          __webpack_require__.o = (obj, prop) => (Object.prototype.hasOwnProperty.call
/*****/      })();
/*****/
/*****/      /* webpack/runtime/load script */
/*****/      (() => {
/*****/          var inProgress = {};
/*****/          // data-webpack is not used as build has no uniqueName
/*****/          // loadScript function to load a script via script tag
/*****/          __webpack_require__.l = (url, done, key, chunkId) => {
/*****/              if(inProgress[url]) { inProgress[url].push(done); return; }
/*****/              var script, needAttach;
/*****/              if(key !== undefined) {
/*****/                  var scripts = document.getElementsByTagName("script");
/*****/                  for(var i = 0; i < scripts.length; i++) {
/*****/                      var s = scripts[i];
/*****/                      if(s.getAttribute("src") == url) { script = s; break; }
/*****/                  }
/*****/              }
/*****/              if(!script) {
/*****/                  needAttach = true;
/*****/                  script = document.createElement('script');
/*****/
/*****/                  script.charset = 'utf-8';
/*****/                  script.timeout = 120;
/*****/                  if (__webpack_require__.nc) {
/*****/                      script.setAttribute("nonce", __webpack_require__.nc);
/*****/                  }
/*****/
/*****/                  script.src = url;

```





```

/*****/      // no HMR manifest
/*****/
/*****/      // no on chunks loaded
/*****/
/*****/      // install a JSONP callback for chunk loading
/*****/      var webpackJsonpCallback = (parentChunkLoadingFunction, data) => {
/*****/          var [chunkIds, moreModules, runtime] = data;
/*****/          // add "moreModules" to the modules object,
/*****/          // then flag all "chunkIds" as loaded and fire callback
/*****/          var moduleId, chunkId, i = 0;
/*****/          if(chunkIds.some((id) => (installedChunks[id] !== 0))) {
/*****/              for(moduleId in moreModules) {
/*****/                  if(__webpack_require__.o(moreModules, moduleId)) {
/*****/                      __webpack_require__.m[moduleId] = moreModules[moduleId];
/*****/                  }
/*****/              }
/*****/              if(runtime) var result = runtime(__webpack_require__);
/*****/          }
/*****/          if(parentChunkLoadingFunction) parentChunkLoadingFunction(data);
/*****/          for(;i < chunkIds.length; i++) {
/*****/              chunkId = chunkIds[i];
/*****/              if(__webpack_require__.o(installedChunks, chunkId) && installedChunks[chunkId][0]())
/*****/                  installedChunks[chunkId][0]();
/*****/              installedChunks[chunkIds[i]] = 0;
/*****/          }
/*****/      }
/*****/
/*****/      var chunkLoadingGlobal = self["webpackChunk"] = self["webpackChunk"] || [];
/*****/      chunkLoadingGlobal.forEach(webpackJsonpCallback.bind(null, 0));
/*****/      chunkLoadingGlobal.push = webpackJsonpCallback.bind(null, chunkLoadingGlobal);
/*****/      }());
/*****/

/*****/

var __webpack_exports__ = {};
// This entry need to be wrapped in an IIFE because it need to be in strict mode.
(() => {
"use strict";
/*****/
    !*** ./example.js ***!
    \*****/
    /*! namespace exports */
    /*! exports [not provided] [no usage info] */
    /*! runtime requirements: __webpack_require__, __webpack_require__.n, __webpack_require__.r,

```



```

__webpack_require___.r(__webpack_exports__);
/* harmony import */ var a__WEBPACK_IMPORTED_MODULE_0__ = __webpack_require__(/* a */ 1);
/* harmony import */ var a__WEBPACK_IMPORTED_MODULE_0___default = /*#__PURE__*/__webpack_re

__webpack_require__.e(/*! import() */ 644).then(__webpack_require__.t.bind(__webpack_require
  console.log("b loaded", b);
})

function loadC(name) {
  return __webpack_require__(2)("." + name);
}

Promise.all([loadC("1"), loadC("2")]).then(function(arr) {
  console.log("c/1 and c/2 loaded", arr);
});

})();

/*****/ })()
;

```

## Info

### Unoptimized

```

asset output.js 13.6 KiB [emitted] (name: main)
asset 346.output.js 296 bytes [emitted]
asset 98.output.js 295 bytes [emitted]
asset 644.output.js 288 bytes [emitted]
chunk (runtime: main) 98.output.js 13 bytes [rendered]
  > ./2 ./node_modules/c/ lazy ^\.\.*$ namespace object ./2
  > ./2.js ./node_modules/c/ lazy ^\.\.*$ namespace object ./2.js
  ./node_modules/c/2.js 13 bytes [optional] [built] [code generated]
  [used exports unknown]
  import() context element ./2 ./node_modules/c/ lazy ^\.\.*$ namespace object ./2
  import() context element ./2.js ./node_modules/c/ lazy ^\.\.*$ namespace object ./2.js
chunk (runtime: main) output.js (main) 414 bytes (javascript) 6.92 KiB (runtime) [entry] [re
  > ./example.js main
runtime modules 6.92 KiB 10 modules
dependent modules 171 bytes [dependent] 2 modules
./example.js 243 bytes [built] [code generated]
  [no exports]
  [used exports unknown]
  entry ./example.js main

```

```

chunk (runtime: main) 346.output.js 13 bytes [rendered]
> ./1 ./node_modules/c/ lazy ^\.\./*$ namespace object ./1
> ./1.js ./node_modules/c/ lazy ^\.\./*$ namespace object ./1.js
./node_modules/c/1.js 13 bytes [optional] [built] [code generated]
[used exports unknown]
import() context element ./1 ./node_modules/c/ lazy ^\.\./*$ namespace object ./1
import() context element ./1.js ./node_modules/c/ lazy ^\.\./*$ namespace object ./1.js
chunk (runtime: main) 644.output.js 11 bytes [rendered]
> b ./example.js 3:0-11
./node_modules/b.js 11 bytes [built] [code generated]
[used exports unknown]
import() b ./example.js 3:0-11
webpack 5.51.1 compiled successfully

```

## Production mode

```

asset output.js 2.88 KiB [emitted] [minimized] (name: main)
asset 346.output.js 69 bytes [emitted] [minimized]
asset 644.output.js 69 bytes [emitted] [minimized]
asset 98.output.js 67 bytes [emitted] [minimized]
chunk (runtime: main) 98.output.js 13 bytes [rendered]
> ./2 ./node_modules/c/ lazy ^\.\./*$ namespace object ./2
> ./2.js ./node_modules/c/ lazy ^\.\./*$ namespace object ./2.js
./node_modules/c/2.js 13 bytes [optional] [built] [code generated]
[used exports unknown]
import() context element ./2 ./node_modules/c/ lazy ^\.\./*$ namespace object ./2
import() context element ./2.js ./node_modules/c/ lazy ^\.\./*$ namespace object ./2.js
chunk (runtime: main) output.js (main) 403 bytes (javascript) 6.66 KiB (runtime) [entry] [re
> ./example.js main
runtime modules 6.66 KiB 9 modules
dependent modules 160 bytes [dependent] 1 module
./example.js 243 bytes [built] [code generated]
[no exports]
[no exports used]
entry ./example.js main
chunk (runtime: main) 346.output.js 13 bytes [rendered]
> ./1 ./node_modules/c/ lazy ^\.\./*$ namespace object ./1
> ./1.js ./node_modules/c/ lazy ^\.\./*$ namespace object ./1.js
./node_modules/c/1.js 13 bytes [optional] [built] [code generated]
[used exports unknown]
import() context element ./1 ./node_modules/c/ lazy ^\.\./*$ namespace object ./1
import() context element ./1.js ./node_modules/c/ lazy ^\.\./*$ namespace object ./1.js
chunk (runtime: main) 644.output.js 11 bytes [rendered]
> b ./example.js 3:0-11
./node_modules/b.js 11 bytes [built] [code generated]
[used exports unknown]

```

```
import() b ./example.js 3:0-11  
webpack 5.51.1 compiled successfully
```