# RequireJS Overview

## Centralized JavaScript

RequireJS is a JavaScript Library that provides a solution for dependency management. It provides an easy way to create modular code.

By using RequireJS, which is included as a central piece of the BigMachines JavaScript Framework, we are able to load all of our requirements from within a central JavaScript file - similar to “include” or “require” statements in other languages. This takes a lot of the guesswork out of custom add-ons.

The other great benefit of using RequireJS is that code loaded through this library is loaded asynchronously; it will not block the browser, and so can result in a performance boost for your users if used properly.

From the library, we get access to two functions: require and define.

## Require

The “require” function is used to load any dependent files. For instance, to include the modules cookie\_module.js and commerce\_ids.js in this script, you would write:

// notice that “.js” is not necessary

require([“cookies\_module”, “commerce\_ids”], function(cookies, ids) {

// This code is run after loading the files

// “./cookies\_module.js” and “./commerce\_ids.js”

// now we can use functions defined in the modules

cookies.get\_cookie();

ids.bsid();

});

This lets you easily load modules for common operations. See the CoE for available modules.

## Define

Require can actually load any JavaScript file, which is nice, but we want to write safe modules that we can use over and over again.

The “define” function is used to create these safe modules for us. Define can be used only once in each file, so that each file consists of one and only one module.

Let’s say we want to create a simple hello world module:

/\* ./helloworld.js \*/

// define also defines dependencies, just like require

define([], function() {

// code here is run when dependencies are loaded

// this module has no dependencies, so it’s run immediately

var obj = {};

obj.helloworld = function() {

alert(“Hello, world!”);

}

// whatever we return becomes available in require

return obj;

});

Now you can require this module in your require block:

/\* ./commerce.js \*/

require([“helloworld”], function(obj) {

// this code runs when ./helloworld.js is loaded

obj.helloworld();

});