VERSIONS
2.0.7

## **Getting Started:**

# **CRUD Operations with NodeJS**

#### **Creating Objects In Riak KV**

Pinging a Riak cluster sounds like a lot of fun, but eventually someone is going to want us to do productive work. Let's create some data to save in Riak.

The Riak Node.js Client makes use of a RiakObject class to encapsulate Riak key/value objects. At the most basic, a RiakObject is responsible for identifying your object and for translating it into a format that can be easily saved to Riak.

Javascript

```
var async = require('async');
var people = [
        emailAddress: "bashoman@basho.com",
        firstName: "Basho",
        lastName: "Man"
    },
        emailAddress: "johndoe@gmail.com",
        firstName: "John",
        lastName: "Doe"
    }
];
var storeFuncs = [];
people.forEach(function (person) {
    // Create functions to execute in parallel to store people
    storeFuncs.push(function (async cb) {
        client.storeValue({
                bucket: 'contributors',
                key: person.emailAddress,
                value: person
            },
            function(err, rslt) {
                async cb(err, rslt);
        );
    });
});
async.parallel(storeFuncs, function (err, rslts) {
    if (err) {
        throw new Error(err);
    }
});
```

In this sample, we create a collection of Person objects and then save each Person to Riak. Once again, we check the response from Riak.

### Reading from Riak

Let's find a person!

Javascript

```
var logger = require('winston');

client.fetchValue({ bucket: 'contributors', key: 'bashoman@basho.com', convertToJs: true },
    function (err, rslt) {
        if (err) {
            throw new Error(err);
        } else {
            var riakObj = rslt.values.shift();
            var bashoman = riakObj.value;
            logger.info("I found %s in 'contributors'", bashoman.emailAddress);
        }
    }
}
```

We use client.fetchValue to retrieve an object from Riak. This returns an array of RiakObject objects which helpfully encapsulates the communication with Riak.

After verifying that we've been able to communicate with Riak *and* that we have a successful result, we use the value property to get the object, which has already been converted to a javascript object due to the use of convertToJs: true in the options.

#### **Modifying Existing Data**

Let's say that Basho Man has decided to be known as Riak Man:

• Javascript

```
bashoman.FirstName = "Riak";
riakObj.setValue(bashoman);

client.storeValue({ value: riakObj }, function (err, rslt) {
    if (err) {
        throw new Error(err);
    }
});
```

Updating an object involves modifying a RiakObject then using client.storeValue to save the existing object.

### **Deleting Data**

Javascript

```
client.deleteValue({ bucket: 'contributors', key: 'johndoe@gmail.com' }, function (err, rslt) {
    if (err) {
        throw new Error(err);
    }
});
```

Just like other operations, we check the results that have come back from Riak to make sure the object was successfully deleted. Of course, if you don't care about that, you can just ignore the result.

The Riak Node.js Client has a lot of additional functionality that makes it easy to build rich, complex applications with Riak. Check out the documentation to learn more about working with the Riak Node.js Client and Riak.

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