

# Node.js Validator

fork and edit tutorial (<https://github.ibm.com/MFPSamples/DevCenter/tree/master/tutorials/en/foundation/8.0/authentication-and-security/protecting-external-resources/node-js/index.md>) | report issue (<https://github.ibm.com/MFPSamples/DevCenter/issues/new>)

## Overview

MobileFirst Foundation provides a Node.js framework to enforce security capabilities on external resources.

The Node.js framework is provided as an npm module (**passport-mfp-token-validation**).

This tutorial will show how to protect a simple Node.js resource, `GetBalance`, using a scope (`accessRestricted`).

### Prerequisites:

- Make sure to read the Using the MobileFirst Server to authenticate external resources (../) tutorial.
- Understanding of the MobileFirst Platform Foundation security framework (../..).

## The passport-mfp-token-validation module

The passport-mfp-token-validation module provides an authentication mechanism to verify access tokens that are issued by the MobileFirst Server.

To install the module run:

```
npm install passport-mfp-token-validation
```

## Usage

- The sample uses the `express` and `passport-mfp-token-validation` modules:

```
var express = require('express');
var passport = require('passport-mfp-token-validation').Passport;
var mfpStrategy = require('passport-mfp-token-validation').Strategy;
```

- Setup the `Strategy` as follows:

```
passport.use(new mfpStrategy({
  authServerUrl: 'http://localhost:9080/mfp/api',
  confClientID: 'testclient',
  confClientPass: 'testclient',
  analytics: {
    onpremise: {
      url: 'http://localhost:9080/analytics-service/rest/v3',
      username: 'admin',
      password: 'admin'
    }
  }
}));
```

- `authServerUrl`: Replace `localhost:9080` with your MobileFirst Server IP address and

port number.

- `confClientID`, `confClientPass`: Replace the confidential client ID and password with the ones you defined in the MobileFirst Operations Console.
- `analytics`: The analytics item is optional and only required if you wish to log analytics events to MFP.

Replace `localhost:9080`, `username` and `password` with your Analytics Server IP address, port number, username and password.

- Authenticate requests by calling `passport.authenticate`:

```
var app = express();
app.use(passport.initialize());

app.get('/getBalance', passport.authenticate('mobilefirst-strategy', {
  session: false,
  scope: 'accessRestricted'
})),
function(req, res) {
  res.send('17364.9');
};

var server = app.listen(3000, function() {
  var port = server.address().port
  console.log("Sample app listening at http://localhost:%s", port)
});
```

- The `Strategy` to employ should be `mobilefirst-strategy`.
- Set `session` to `false`.
- Specify the `scope` name.

## Sample

Download the Node.js sample (<https://github.com/MobileFirst-Platform-Developer-Center/NodeJSValidator/tree/release80>).

## Sample usage

1. Navigate to the sample's root folder and run the command: `npm install` followed by: `npm start`.
2. Make sure to update the confidential client (`../#confidential-client`) and secret values in the MobileFirst Operations Console.
3. Deploy either of the security checks: **UserLogin** (`../user-authentication/security-check/`) or **PinCodeAttempts** (`../credentials-validation/security-check/`).
4. Register the matching application.
5. Map the `accessRestricted` scope to the security check.
6. Update the client application to make the `WLResourceRequest` to your servlet URL.