<!DOCTYPE html>

<html lang="en">

<head>

<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Node-RED on IBM Cloud</title>

<link href='https://fonts.googleapis.com/css?family=Roboto+Slab:400,700,300,100' rel='stylesheet' type='text/css'>

<link href="css/simplegrid.css" rel="stylesheet" media="screen">

<link href="css/style.css" rel="stylesheet" media="screen">

</head>

<body>

<div class="header">

<div class="header-content">

<div class="brand">Node-RED on IBM Cloud</div>

</div>

</div>

<!-- Grid 1 -->

<div class="title">

<div class="grid">

<div class="col-1-1">

<div class="content">

<h1>Node-RED</h1>

<h2>Flow-based programming for the Internet of Things</h2>

</div>

</div>

</div>

</div>

<!-- Grid 1/2 -->

<div class="row2">

<div class="grid">

<div class="col-1-2">

<div class="content blurb">

<p>Node-RED is a programming tool for wiring together hardware devices, APIs and online services in new and interesting ways.</p>

<p>This instance is running as an IBM Cloud application, giving it access to the wide range of services available on the platform.</p>

<p>More information about Node-RED, including documentation, can be found at <a href="https://nodered.org">nodered.org</a>.</p>

</div>

</div>

<div class="col-1-2">

<div class="content blurb">

<p style="text-align: center"><a style="width:350px;" class="button" href="red/">Go to your Node-RED flow editor</a></p>

<p style="text-align: center"><a href="#custom">Learn how to customise Node-RED</a></p>

</div>

</div>

</div>

</div>

<!-- Grid 1/2 -->

<div class="row3">

<div class="grid">

<div class="col-1-1">

<div class="content blurb">

<h3 id="custom">Customising your instance of Node-RED</h3>

<p>This instance of Node-RED is enough to get you started creating flows.</p>

<p>You may want to customise it for your needs, for example replacing

this introduction page with your own, adding http authentication to the flow editor or adding new nodes to

the palette.

</p>

<p>To start customising your instance of Node-RED, you can either download the application locally or use IBM DevOps Services to edit and deploy your changes directly.</p>

<ul class="customisations">

<li>

<h4 id="securing-the-editor"> + Securing the editor</h4>

<div class="custom-content">

<p>When you first ran this application you were presented with some options to secure the editor. To change those options,

you can set some environment variables from either the Bluemix console or the <code>cf</code> command-line

</p>

<p>The environment variables you can set are:</p>

<ul>

<li><code>NODE\_RED\_USERNAME</code> - the username to secure the editor with</li>

<li><code>NODE\_RED\_PASSWORD</code> - the password to secure the editor with</li>

<li><code>NODE\_RED\_GUEST\_USER</code> - set to <code>true</code> to allow anonymous users to have read-only access to the editor</li>

</ul>

<h5>Bluemix console</h5>

<ol>

<li>On the Bluemix console page for this application, go to the 'Runtime' page and then the 'Environment Variables' section</li>

<li>Add the required user-defined variables</li>

<li>Click <code>Save</code> and restart your application</li>

</ol>

<h5><code>cf</code> command-line</h5>

<ol>

<li>Run the command: <pre>cf set-env [APPLICATION\_NAME] [ENV\_VAR\_NAME] [ENV\_VAR\_VALUE]</pre></li>

</ol>

</div>

</li>

<li>

<h4 id="enabling-appmetrics"> + Enabling Application Metrics for Node.js monitoring</h4>

<div class="custom-content">

<p>When you first ran this application you were presented with an option to enable monitoring of your Node-RED

flows using the <a href="https://developer.ibm.com/node/monitoring-post-mortem/application-metrics-node-js/" target="\_blank">Application Metrics for Node.js</a>

dashboard. To change those options, you can set an environment variable from either the Bluemix console or the <code>cf</code> command-line

</p>

<p>When enabled, the <a href="https://developer.ibm.com/node/monitoring-post-mortem/application-metrics-node-js/" target="\_blank">Application Metrics for Node.js</a> dashboard will be available at </p>

<p id="appdashURL"></p>

<p>The environment variable you can set is:</p>

<ul>

<li><code>NODE\_RED\_USE\_APPMETRICS</code> - set to <code>true</code> to enable <a href="https://developer.ibm.com/node/monitoring-post-mortem/application-metrics-node-js/" target="\_blank">Application Metrics for Node.js</a>

monitoring. Set to <code>false</code> to disable.

</li>

</ul>

<h5>Bluemix console</h5>

<ol>

<li>On the Bluemix console page for this application, go to the 'Runtime' page and then the 'Environment Variables' section</li>

<li>Add the required user-defined variable</li>

<li>Click <code>Save</code> and restart your application</li>

</ol>

<h5><code>cf</code> command-line</h5>

<ol>

<li>Run the command: <pre>cf set-env [APPLICATION\_NAME] [ENV\_VAR\_NAME] [ENV\_VAR\_VALUE]</pre></li>

</ol>

</div>

</li>

<li>

<h4> + Adding new nodes to the palette</h4>

<div class="custom-content">

<p>There is a growing collection of additional nodes that can be added to the Node-RED editor.

You can search for available nodes on the <a target="\_blank" href="https://flows.nodered.org">Node-RED library</a>.

</p>

<p>To add a node to the editor you can either use the Palette Manager feature within the editor itself or manually edit the <code>package.json</code> file.</p>

<h5>Palette Manager</h5>

<ol>

<li>Within the editor, select the Manage Palette option from the drop-down menu</li>

<li>Go to the Install tab</li>

<li>Search for the module you're interested in and click <code>install</code></li>

</ol>

<h5>Edit <code>package.json</code></h5>

<ol>

<li>Edit the file <code>package.json</code> and add the required node package to the <code>dependencies</code>

section. The format is:

<pre>"node-red-node-package-name":"x.x.x"</pre>

Where <code>x.x.x</code> is the desired version number.

</li>

</ol>

</div>

</li>

<li>

<h4> + Upgrading the version of Node-RED</h4>

<div class="custom-content">

<p>The application's <code>package.json</code> is setup to grab the latest stable release of Node-RED.</p>

<p>To trigger an upgrade following a new release being made available:</p>

<ol>

<li>Set the <code>NODE\_MODULES\_CACHE</code> environment variable to <code>false</code>. You can either

do this on your application's Bluemix console page (Runtime -&gt; Environment Variables), or by

using the <code>cf</code> command-line:

<pre>cf set-env [APPLICATION\_NAME] NODE\_MODULES\_CACHE false</pre>

</li>

<li>Trigger a restage of your application. This cannot be done using the Bluemix console, so the <code>cf</code>

command-line should be used:

<pre> cf restage [APPLICATION\_NAME]</pre>

</li>

</ol>

</div>

</li>

<li>

<h4> + Changing the static web content</h4>

<div class="custom-content">

<p>The page you are reading now is served as static content from the application. This can be replaced

with whatever content you want in the <code>public</code> directory.

</p>

</div>

</li>

<li>

<h4> + Remove static web content and serve the flow editor from the root path</h4>

<div class="custom-content">

<p>In the file <code>bluemix-settings.js</code>, delete the <code>httpStatic</code> and <code>httpAdminRoot</code> entries.</p>

</div>

</li>

</ul>

</div>

</div>

</div>

</div>

<div class="links">

<div class="grid">

<div class="col-1-3">

<p><a href="https://nodered.org">Node-RED</a> is a visual wiring tool for the Internet of Things.</p>

<p>A project of the <a href="https://js.foundation/">JS Foundation</a>.</p>

</div>

<div class="col-1-6">

<ul>

<li><a href="https://github.com/node-red">GitHub</a></li>

<li><a href="https://www.npmjs.com/package/node-red">npm</a></li>

<li><a href="https://nodered.org/docs">Documentation</a></li>

</ul>

</div>

<div class="col-1-6">

<ul>

<li><a href="https://flows.nodered.org">Flow Library</a></li>

<li><a href="https://nodered.org/about/">About</a></li>

</ul>

</div>

<div class="col-1-6">

<ul>

<li><a href="https://nodered.org/blog/">Blog</a></li>

<li><a href="https://twitter.com/nodered">Twitter</a></li>

<li><a href="https://groups.google.com/forum/#!forum/node-red">Mailing List</a></li>

<li><a href="https://nodered.org/slack">Slack</a></li>

</ul>

</div>

</div>

</div>

<script src="https://code.jquery.com/jquery-1.12.4.min.js"></script>

<script>

var appdashURL = $("#appdashURL");

var urlString = location.origin + "/appmetrics-dash";

appdashURL.empty();

$('<a href="' + urlString + '" target="\_blank">' + urlString + '</a>').appendTo(appdashURL);

$(function() {

$("ul.customisations h4").click(function(ev) {

$(this).next('.custom-content').slideToggle();

});

});

</script>

</body>

</html>