

How to Install Swordfish Mockups (1.0)

October 12, 2016

The Swordfish mockups extend the Redfish mockups, based on the Redfish specification from the DMTF.

The SNIA Scalable Storage Management TWG recommends using version 1.00 of the redfish mockups with the Swordfish mockups. Version 1.00 of the Redfish mockups is available from the DMTF here:

http://www.dmtf.org/sites/default/files/standards/documents/DSP2043_1.0.0.zip

Basic Installation

1. Unzip the Redfish files to a user selected directory.
 - a. To ensure that everything will resolve properly from your browser, here is how to set up the directory structure:

For example, Say you set the http root directory to c:/httpdocs.

The nginx.conf files to match this would look like:

```
location / {  
    root    C:/httpdocs;
```

I would then put the redfish and swordfish files in “c:\httpdocs\redfish\v1”

2. Unzip the Swordfish mockups so that the “StorageServices” and “StorageSystems” directories are in the root (this is called the “Service Root” of the redfish directory structure (parallel to the chassis and systems directory, see figure below). This is the same directory as the “v1” we set up in 1a, above.
 - a. The “index.html” file should replace the “index.html” file from the redfish mockups (use the contents of the DSP2043-server directory from the redfish download).

Open Include in library ▾ Share with ▾ New folder					
	Name	Date modified	Type	Size	
Documents	\$metadata	3/16/2016 2:40 PM	File folder		
	AccountService	3/16/2016 2:40 PM	File folder		
	Chassis	3/16/2016 2:40 PM	File folder		
	Chipwise.com	3/16/2016 2:40 PM	File folder		
	Contoso.com	3/16/2016 2:40 PM	File folder		
	EventService	3/16/2016 2:40 PM	File folder		
	ExtErrorResp	3/16/2016 2:40 PM	File folder		
	JsonSchemas	3/16/2016 2:40 PM	File folder		
	Managers	3/16/2016 2:40 PM	File folder		
	odata	3/16/2016 2:40 PM	File folder		
is (\\win-b3mu	Registries	3/16/2016 2:40 PM	File folder		
	SessionService	3/16/2016 2:40 PM	File folder		
	StorageServices	3/16/2016 2:40 PM	File folder		
	Systems	3/16/2016 2:40 PM	File folder		
	TaskService	3/16/2016 2:40 PM	File folder		
	index.json	3/16/2016 2:40 PM	JSON File	2 KB	
	json-ptr-0.1.1.min.js	3/16/2016 2:40 PM	JScript Script File	4 KB	
	MakeJson.ps1	3/16/2016 2:40 PM	PS1 File	2 KB	
	README2043.pdf	3/16/2016 2:40 PM	Foxit Reader PDF ...	130 KB	
	run.bat	3/16/2016 2:40 PM	Windows Batch File	1 KB	
deServices Date modified: 3/16/2016 2:40 PM					
	server.js	3/16/2016 2:40 PM	JScript Script File	4 KB	
	SSMPOSTExample.html	3/16/2016 2:40 PM	Chrome HTML Do...	1 KB	
	viewer.html	3/16/2016 2:40 PM	Chrome HTML Do...	2 KB	

The mockups are formatted json. There are multiple ways to view these. If you would like to set up and view them in a browser from a web server, the following instructions are provided to give you an example of how to use the nginx web server to do so.

Installing a Local Web Server

Notes and recommendations:

- Ensure that you don't have any other http server running on ports 80.
- Plugins to view formatted json are provided for the chrome web browser only

Configure HTTP server (nginx)

1. Download latest mainline nginx from <http://nginx.org/>

ex: Windows - nginx/Windows-1.9.4

Register now for [nginx.conf 2015!](#) Sept 22-24 @ Fort Mason, San Francisco
Learn best practices for building & delivering apps with performance, security & scalability

nginx: download

Mainline version

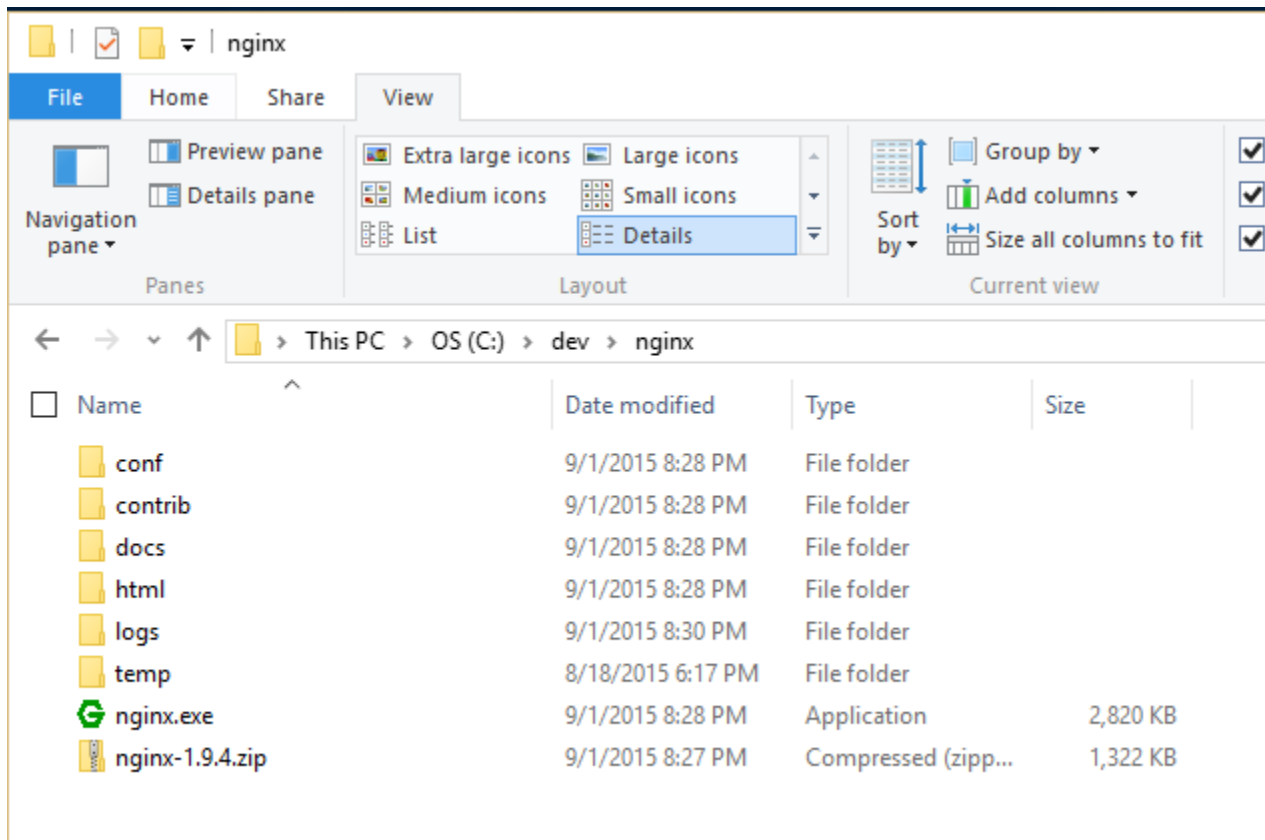
[CHANGES](#)

[nginx-1.9.4](#) [pgp](#)

[nginx/Windows-1.9.4](#) [pgp](#)

Stable version

2. Unzip to a folder in local disk: ex: c:\dev\nginx



3. Open command prompt and change directory to installation folder

4. Start nginx: ex: c:\dev\nginx>start nginx.exe

```
C:\WINDOWS\system32>cd \dev\nginx

C:\dev\nginx>dir
Volume in drive C is OS
Volume Serial Number is 345F-A6F6

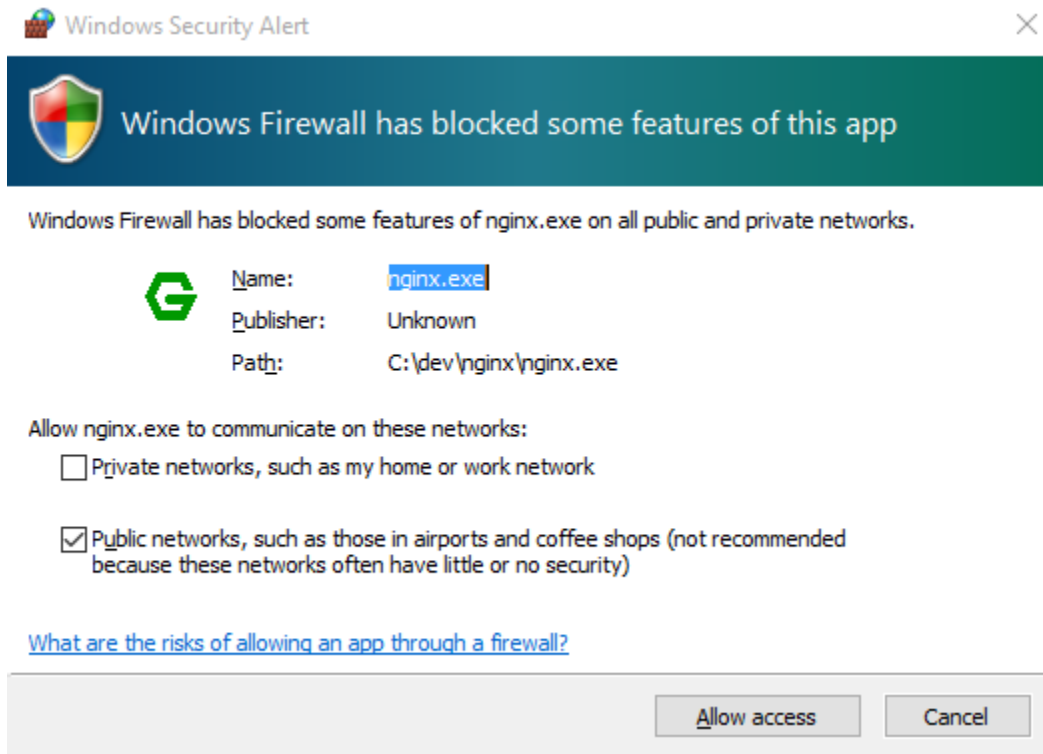
Directory of C:\dev\nginx

09/01/2015  08:28 PM    <DIR>          .
09/01/2015  08:28 PM    <DIR>          ..
09/01/2015  08:28 PM    <DIR>          conf
09/01/2015  08:28 PM    <DIR>          contrib
09/01/2015  08:28 PM    <DIR>          docs
09/01/2015  08:28 PM    <DIR>          html
08/18/2015  06:17 PM    <DIR>          logs
09/01/2015  08:27 PM             1,353,497 nginx-1.9.4.zip
09/01/2015  08:28 PM             2,887,168 nginx.exe
08/18/2015  06:17 PM    <DIR>          temp
                2 File(s)      4,240,665 bytes
                8 Dir(s)   1,162,842,578,944 bytes free

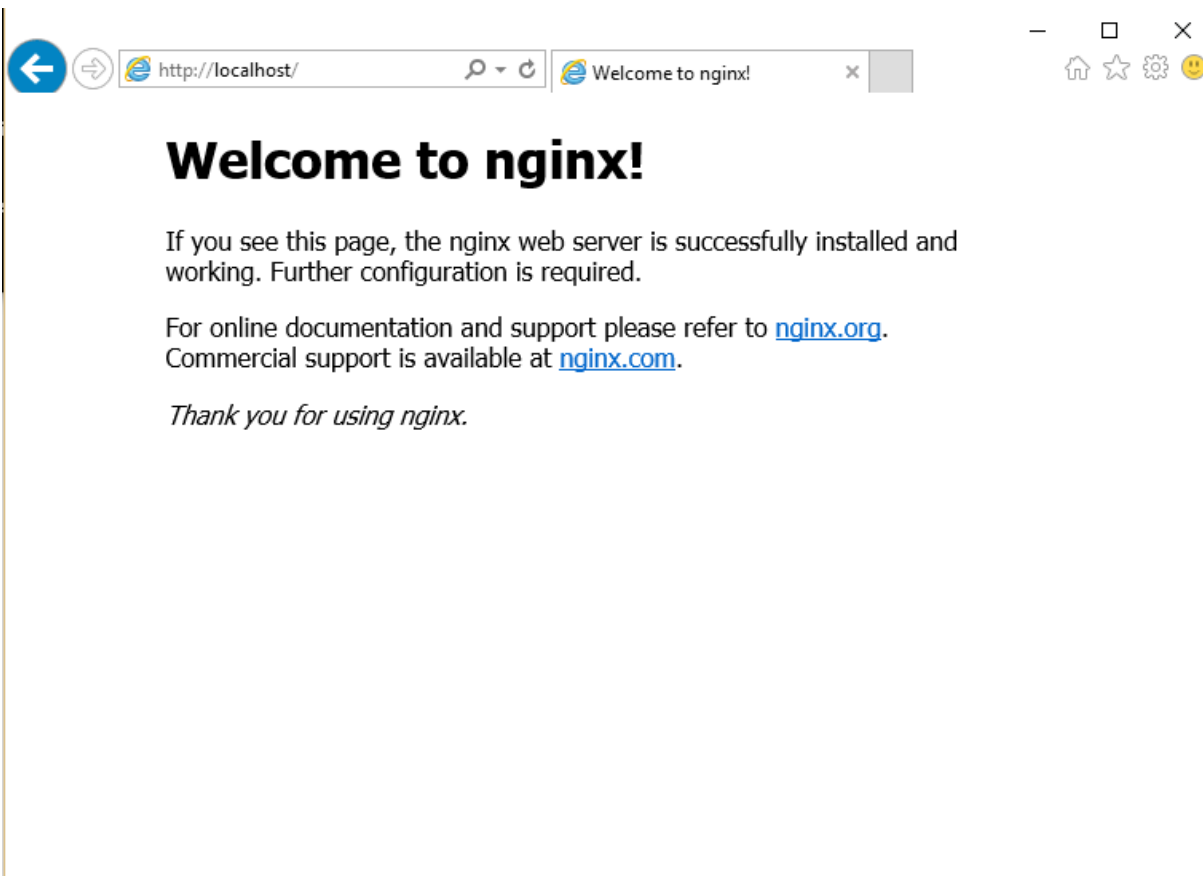
C:\dev\nginx>start nginx.exe

C:\dev\nginx>
```

5. Windows might prompt you to allow nginx.exe through the firewall



6. Confirm that the http server is running by navigating to <http://localhost>



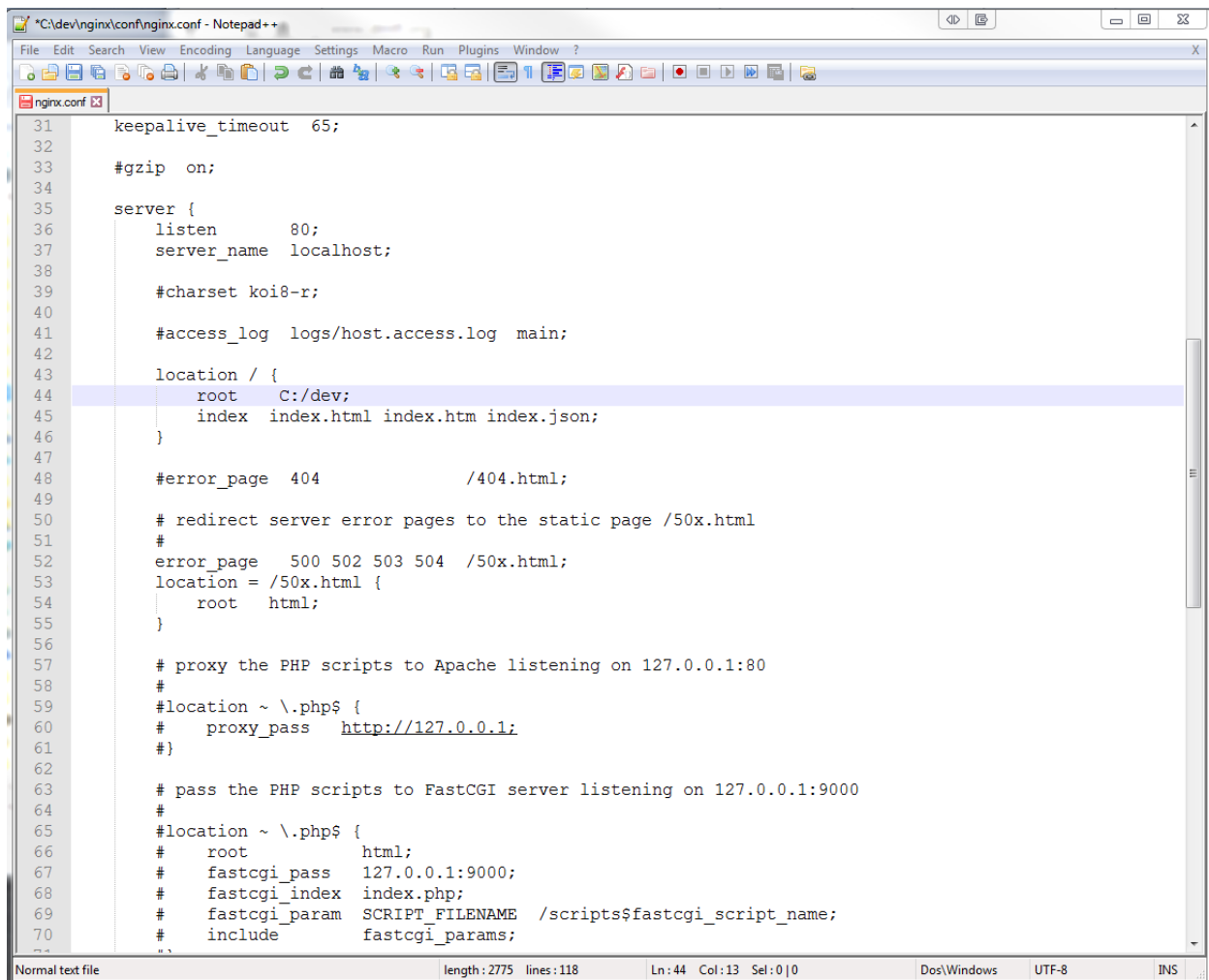
Modify nginx configuration file

1. Open nginx configuration file in c:\dev\nginx\conf\nginx.conf
2. In HTTP/SERVER/LOCATION block, update root so it points to folder with Redfish and Swordfish files

location / {

 root C:/...(folder containing redfish and swordfish mockups);

 index index.html index.htm index.json;



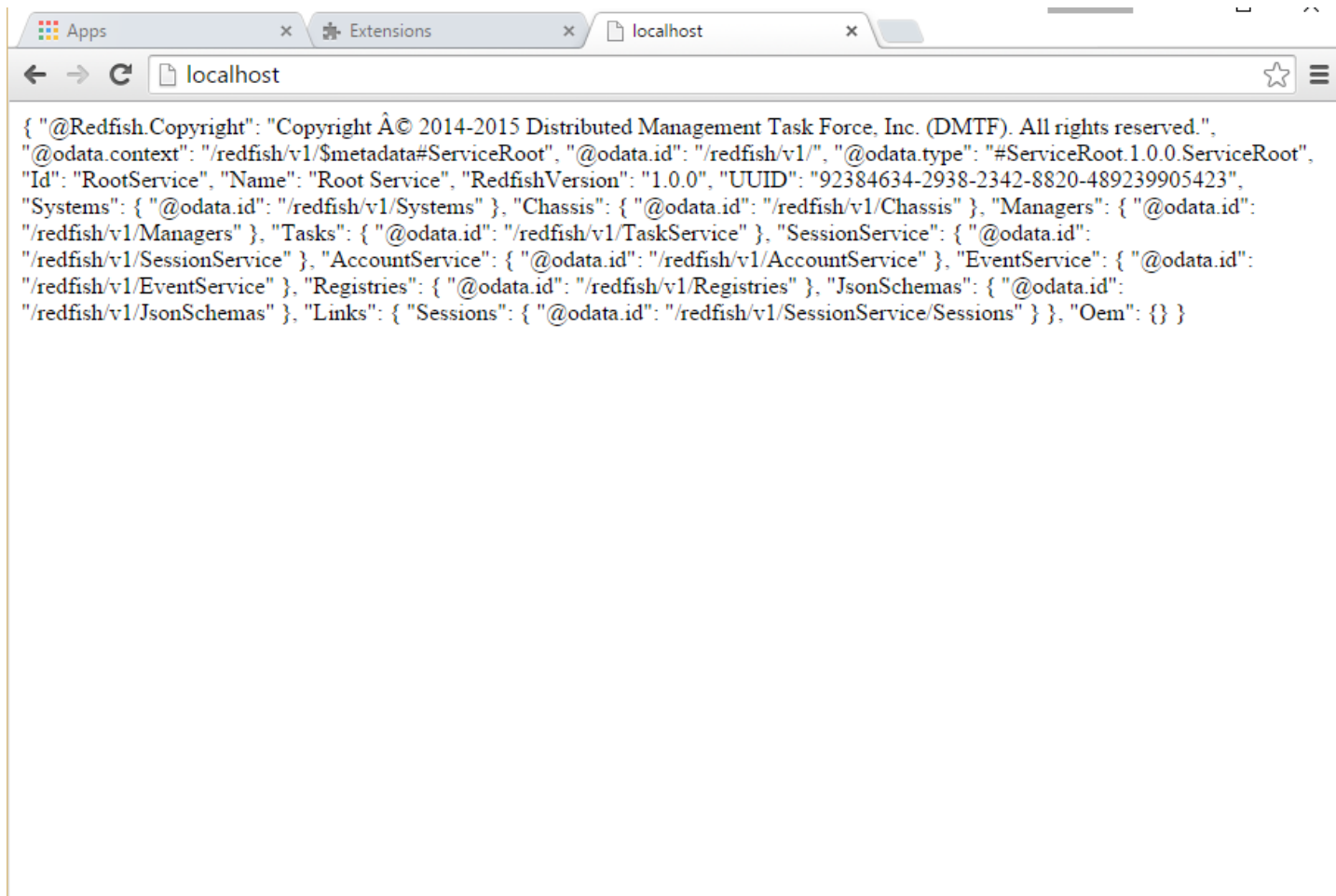
```
31 keepalive_timeout 65;
32
33 #gzip on;
34
35 server {
36     listen      80;
37     server_name localhost;
38
39     #charset koi8-r;
40
41     #access_log logs/host.access.log main;
42
43     location / {
44         root     C:/dev;
45         index    index.html index.htm index.json;
46     }
47
48     #error_page 404              /404.html;
49
50     # redirect server error pages to the static page /50x.html
51     #
52     error_page   500 502 503 504  /50x.html;
53     location = /50x.html {
54         root    html;
55     }
56
57     # proxy the PHP scripts to Apache listening on 127.0.0.1:80
58     #
59     #location ~ \.php$ {
60     #     proxy_pass   http://127.0.0.1;
61     #}
62
63     # pass the PHP scripts to FastCGI server listening on 127.0.0.1:9000
64     #
65     #location ~ \.php$ {
66     #     root           html;
67     #     fastcgi_pass   127.0.0.1:9000;
68     #     fastcgi_index  index.php;
69     #     fastcgi_param  SCRIPT_FILENAME  /scripts$fastcgi_script_name;
70     #     include        fastcgi_params;
```

3. Reload configuration in nginx using `nginx.exe -s reload`

ex: `c:\dev\nginx\nginx.exe -s reload`

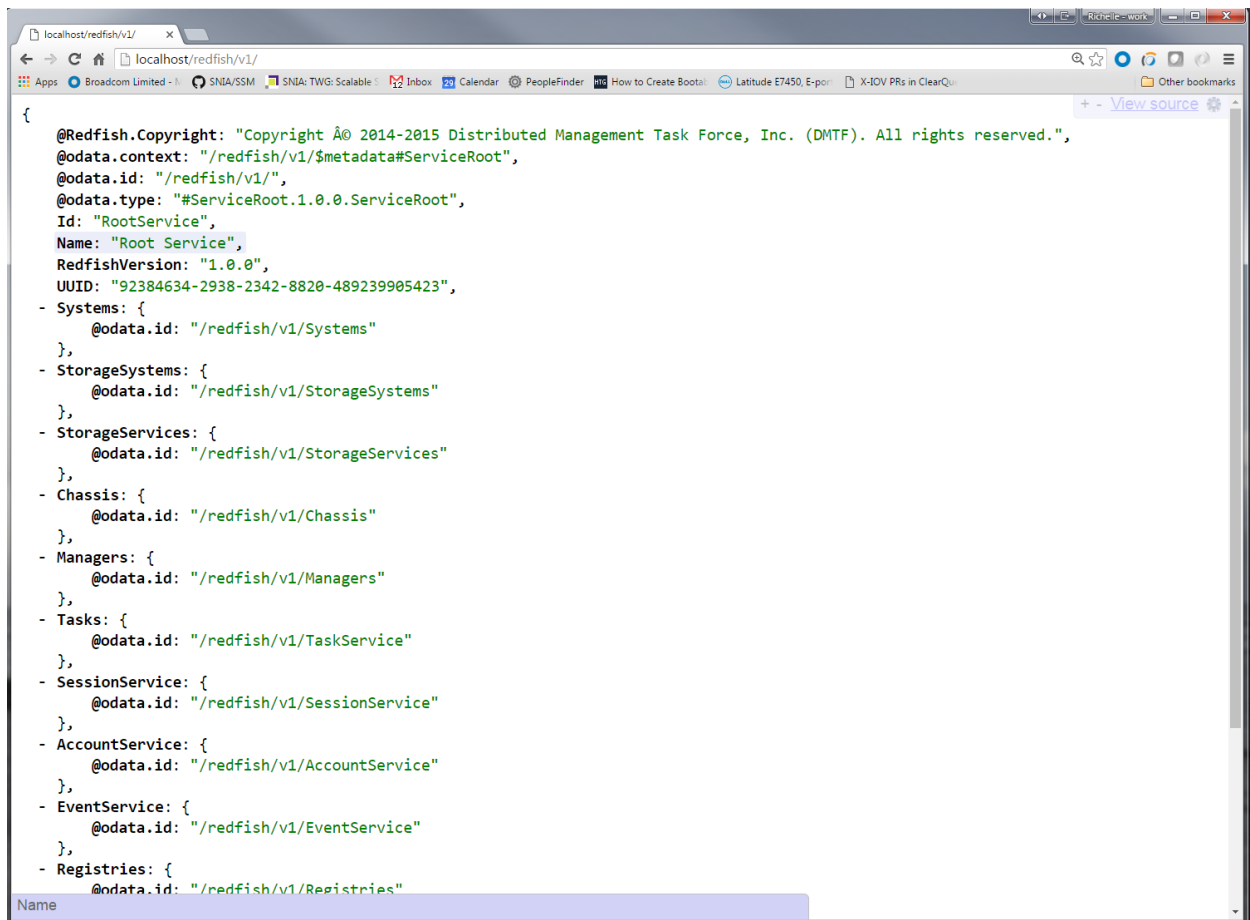
4. Confirm that the http server is serving up redfish files by navigating to `http://localhost/redfish/v1`

5. Browser should show unformatted output for Redfish



Load JSONView and Advanced REST client plugins to Chrome

1. To view properly formatted json out, find and install JSONVIEW Chrome extension
2. Browser should show properly formatted output for Redfish

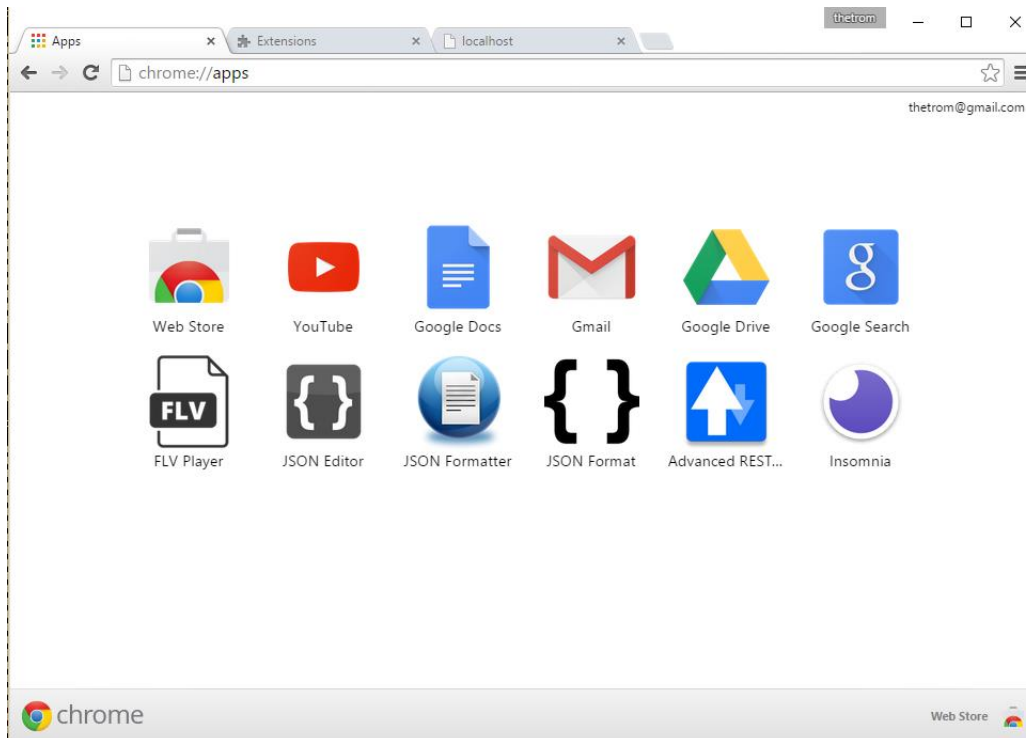


The screenshot shows a web browser window with the address bar set to `localhost/redfish/v1/`. The page content is a JSON document representing the Redfish v1 metadata service root. The JSON is formatted with syntax highlighting and includes a 'View source' link in the top right corner. The browser's address bar also shows a search bar and several bookmarks, including 'Apps', 'Broadcom Limited', 'SNIA/SSM', 'SNIA: TWG: Scalable', 'Inbox', 'Calendar', 'PeopleFinder', 'How to Create Boot...', 'Latitude E7450, E-por...', and 'X-IOV PRs in ClearQu...'. The JSON document is as follows:

```
{
  @Redfish.Copyright: "Copyright Â© 2014-2015 Distributed Management Task Force, Inc. (DMTF). All rights reserved.",
  @odata.context: "/redfish/v1/$metadata#ServiceRoot",
  @odata.id: "/redfish/v1/",
  @odata.type: "#ServiceRoot.1.0.0.ServiceRoot",
  Id: "RootService",
  Name: "Root Service",
  RedfishVersion: "1.0.0",
  UUID: "92384634-2938-2342-8820-489239905423",
  - Systems: {
    @odata.id: "/redfish/v1/Systems"
  },
  - StorageSystems: {
    @odata.id: "/redfish/v1/StorageSystems"
  },
  - StorageServices: {
    @odata.id: "/redfish/v1/StorageServices"
  },
  - Chassis: {
    @odata.id: "/redfish/v1/Chassis"
  },
  - Managers: {
    @odata.id: "/redfish/v1/Managers"
  },
  - Tasks: {
    @odata.id: "/redfish/v1/TaskService"
  },
  - SessionService: {
    @odata.id: "/redfish/v1/SessionService"
  },
  - AccountService: {
    @odata.id: "/redfish/v1/AccountService"
  },
  - EventService: {
    @odata.id: "/redfish/v1/EventService"
  },
  - Registries: {
    @odata.id: "/redfish/v1/Registries"
  }
}
```

At the bottom of the browser window, there is a 'Name' label followed by a text input field.

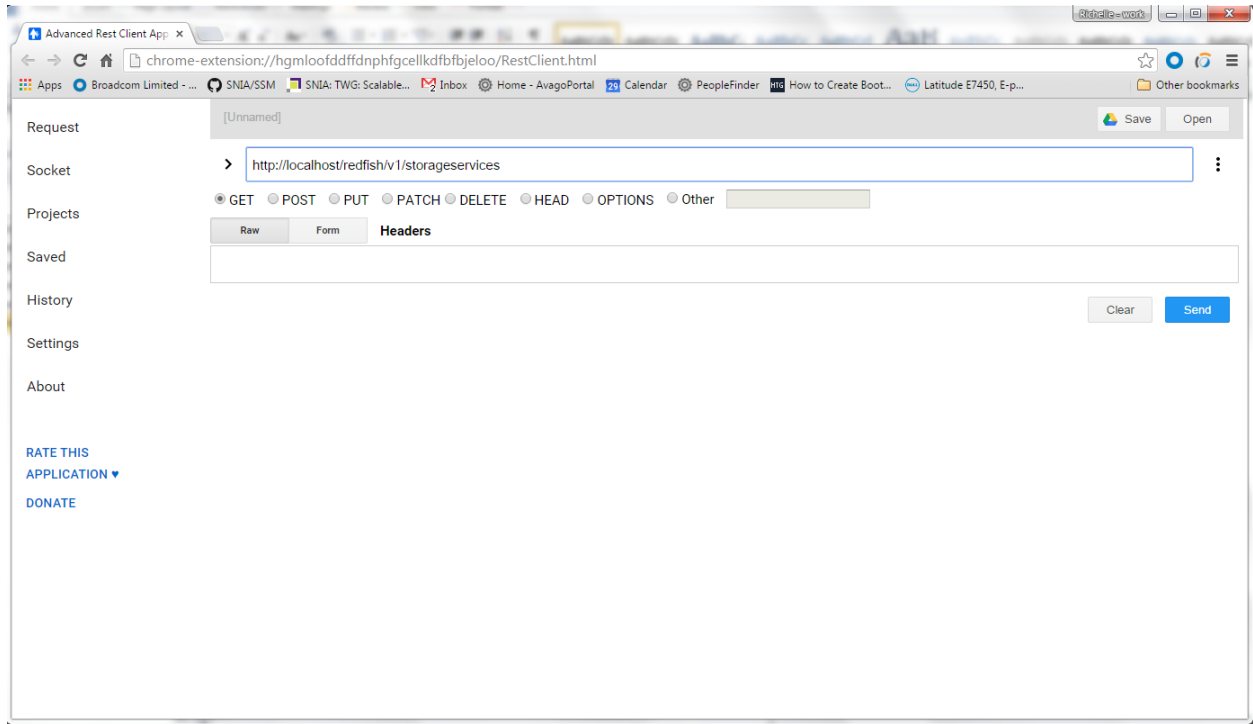
3. View from Advanced REST Client



Extras

The Advanced REST client supports navigating through links. The intention is to create a hypermedia so anyone should have the ability to navigate through the structure.

1. Launch Advanced REST client. Navigate to <http://localhost/redfish/v1>




2. In the output section, click on JSON tab




3. Clicking on /redfish/v1/storageservices/1 will insert the string to the URL field

Request


Use XHR





>

http://localhost/redfish/v1/StorageServices/1




☒ GET

☐ POST

☐ PUT

☐ DELETE

Other methods



Raw headers

Headers form

Headers sets

SEND

- Click on Send to see the results in the window