

**oneM2M Browser**

**Software Version: 1.0.3.5**

**-Base on mobius-yt-r2-2.4.1**

**User Guide v1.2**

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1. Introduction
   1. What is oneM2MBrowser

oneM2MBrowser is a tool for monitoring the oneM2M resources in the Mobius Yellow Turtle([Mobius-yt](https://github.com/IoTKETI/Mobius)). It is working base on oneM2M HTTP RESTful API and MQTT Message. It was designed for helping developer to easily work with Mobius-yt.

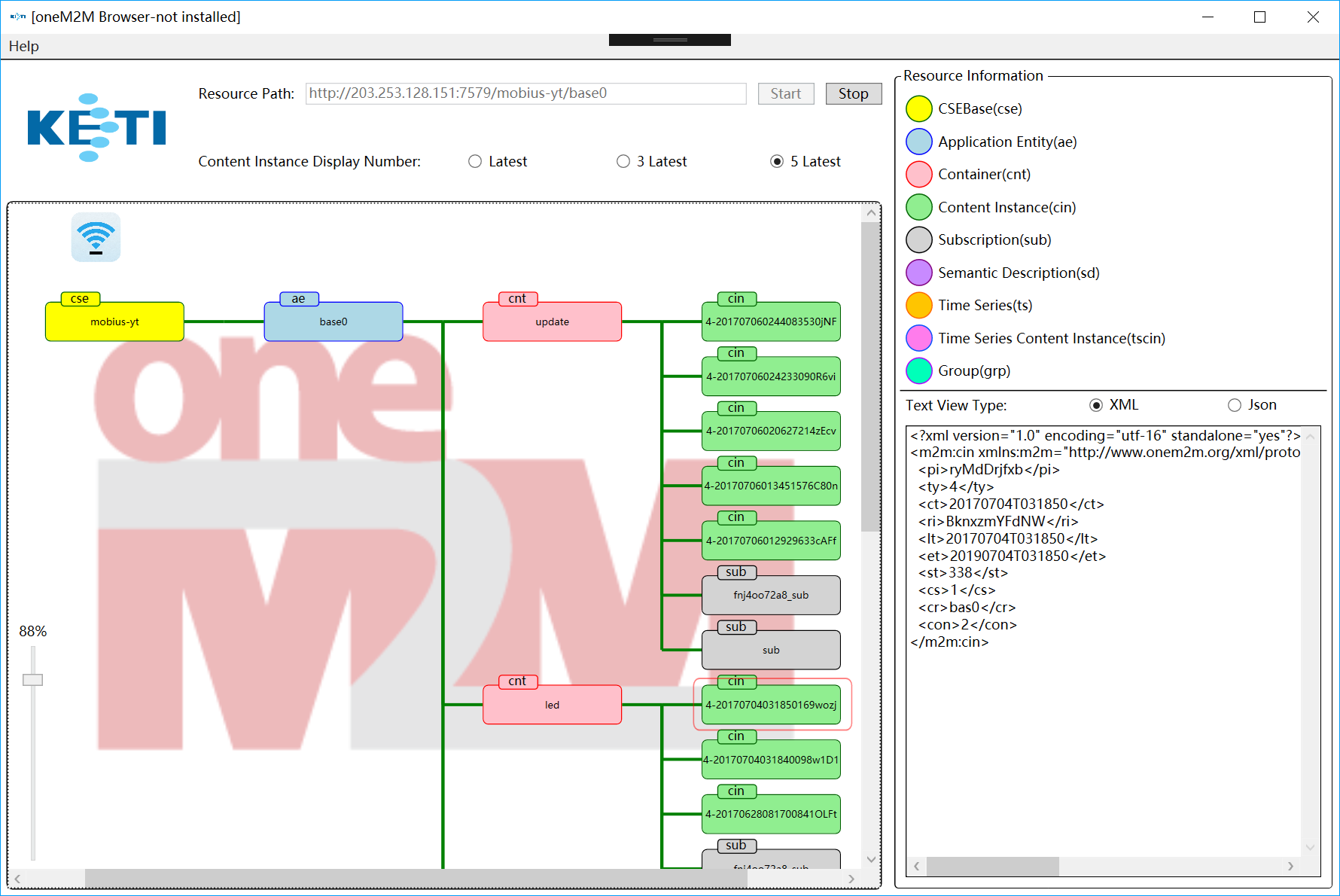


Figure 1 oneM2M Browser

* 1. Supported platform

It only works on Windows OS (windows XP, Vista, 7, 8, 10) and it also require the OS must be installed the .NET Framework.

* 1. oneM2M Browser function

1. Display the oneM2M resource as tree.
2. Retrieve the resource information.
3. Create new resource.
4. Real-time monitoring resource (delete, create).
5. Architecture
   1. System Architecture

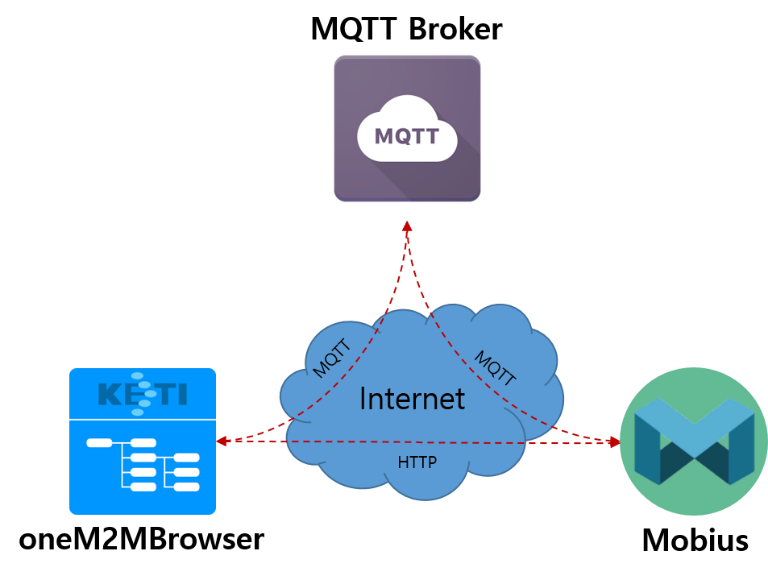


Figure 2 System Architecture

The oneM2MBrowser connects with Mobius IoT Server Platform and MQTT Broker. Mobius is a kind of IoT Server Platform collection all oneM2M(IoT Standard) Resources and provides a set of open API which binding with HTTP, COAP, MQTT protocol for managing resource inside. In oneM2MBrowser case, it retrieves the resource structure by discovery API and display it as GUI and create subscription for necessary resources for receiving resource creating or deleting notification message.

* 1. Software Architecture

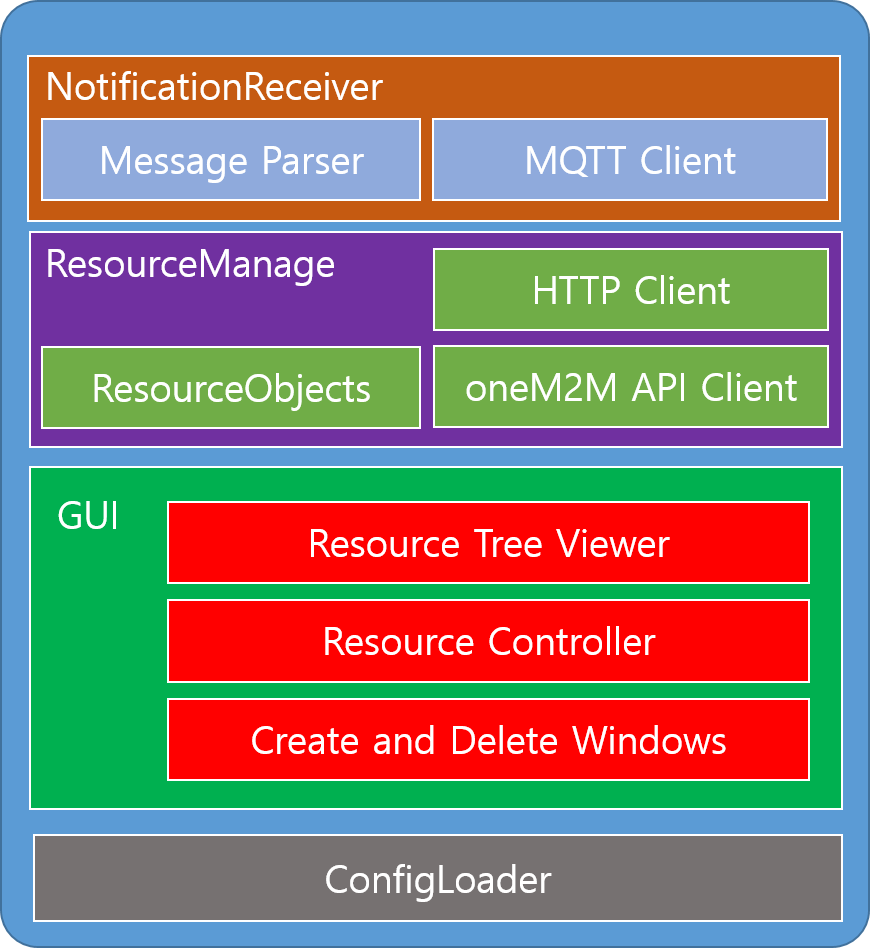


Figure 3 software Architecture

The oneM2MBrowser architecture can be divided into four big modules. "NotificationReceiver" can receive MQTT notification message and parse it then add or delete matched resource in "ResourceManager". "ResourceManager" provide a series of oneM2M API accessing function and it can discovery Mobius inside resource structure by these API then store it in the memory as objects. "GUI" provides some windows and dialogs for user interaction. "ConfigLoader" is used to store local application parameter.

1. Development Environment
   1. Download Source

Download the source file from [oneM2MBrowser github site](https://github.com/IoTKETI/oneM2MBrowser):

<https://github.com/IoTKETI/oneM2MBrowser>

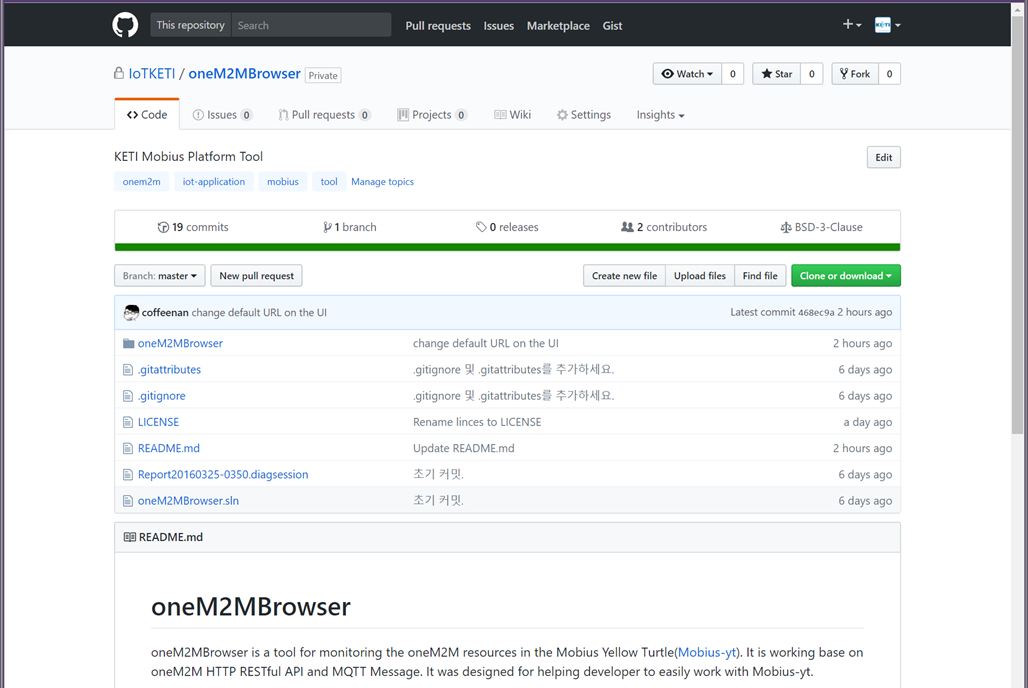


Figure 4 oneM2M Browser GitHub site

* 1. Development Tool

The oneM2MBrowser project is a Vistual Studio project. So, it only can work on window PC. If you don't have the winPC that we suggest to insall the [VMware WorkStation Player](https://www.vmware.com/products/player/playerpro-evaluation.html) and run a Virtrual Machine on it.

1. Download the [Visual Studio](https://www.visualstudio.com/).
2. Install the Visual Studio follow the guide.
3. Open the oneM2MBrowser home and double click oneM2MBrowser.sln file.
   1. Execution

Press the F5 key in Visual Studio click the start button on top of Visual Studio IDE.