# Broadcom Monitoring Services (BMON) REST API Uniform Resource Identification (URI) Specification

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## Revision History

| Issue | Date | By | Change |
|-------|------|-----|--------|
| 0.1 | 04/13/2018 | Prashant Katre | Creation |

## Introduction

Broadcom Monitoring Services (BMON) is part of Broadcom Analytic Services (BAS). BMON is responsible for collecting analytics data from the system. Data analytics provide REST API to access data representations. REST API use Uniform Resource Identifiers to address resources.

The term "resource" is used in generic term. A resource can be a collection of resources, a single object or service.

This document specifies the Broadcom use of REST API naming convention and use of URI query format.

## URI Resource convention

1    URI syntax to follow standard format as defined in RFC 3986.

scheme:[//[user[:password]@]host[:port]][/path][?query][#fragment]

For simplicity purpose only subset of URI specification is used.

*http://192.168.1.100:8888/wifi/transmiStatistics?include=transmitFrames+transmitStatusErrors*

2    **Do not confuse "path" with file system path.** "path" is path to get to the resource. "/" indicate the hierarchical relationships between resources. Path is terminated by question mark "?", number sign "#" or end of the URI.

3    Naming should adhere to  Camel Case format with the exception for the top level resource which can be _ separated

http://192.168.1.100:8888/video_decoder/decodeResolution

4     URI should refer to resource as a thing (noun) and not as action (verb).

*http://192.168.1.100:8888/wifi*

*http://192.168.1.100:8888/wifi/spectrumData*

*http://192.168.1.100:8888/video_decoder*

5     A resource can be single object instance or collection of objects

# URI Query format

Optimally limited queries are allowed to include, exclude certain data elements. Input parameters are passed as query parameters. **Query component contains non-hierarchical data**. Query is indicated by the first question mark character "?" and end of the URI. "&" character separates two query parameters

*http://192.168.1.100:8888/wifi/transmitStatistics?include=transmitframes+transmitStatusErrors*

*http://192.168.1.100:8888/wifi/transmitStatistics?include=transmitframes+transmitStatusErrors&SpectrumDataTrigger=1*

**Supported Standard Query parameters**

**include**: "include" parameter allows for building of resource collection at a given path. Multiple resources are combined with plus "+".

http://192.168.1.100:8888/wifi/transmitStatistics?include=transmitframes+transmitStatusErrors

 **exclude**: "exclude parameter for excluding certain elements in given path

*http://192.168.1.100:8888/wifi?exclude=ampduData*

**Controller object**

Query parameters include controller objects, that can make certain actions happen. Controller objects are like executables with parameters. In following example spectrum data collection is initiated by controller object spectrumDataTrigger.

*http://192.168.1.100:8888/wifi?*spectrumDataTrigger=1

Multiple query parameters can combined with &

*http://192.168.1.100:8888/wifi?*spectrumDataTrigger=1*&tag=value*