

C) Using ThingsCentral RESTful API

ThingsCentral provides a RESTful API for interacting with IoT nodes. This guide explains how to read and post node values using API requests.

Reading a Node Value

To retrieve a node's value, use the following API endpoint:

```
http://thingssentral.io/ReadNode?Params=tokenid|YOUR_USER_ID@NodeId|YOUR_NODE_ID
```

Example:

To read the value of node **0069101010101**, use:

```
http://thingssentral.io/ReadNode?Params=tokenid|00691@NodeId|0069101010101
```

Where:

- **00691** is the user ID
- **0069101010101** is the node ID

Posting a Node Value (single Node ID)

To send a value to a node, use the following API endpoint:

```
http://thingssentral.io/postlong?data=userid|YOUR_USER_ID@YOUR_NODE_ID|VALUE_TO_SEND
```

Example:

To send the value **1** to node **0069101010101**, use:

```
http://thingssentral.io/postlong?data=userid|00691@0069101010101|1
```

Where:

- **00691** is the user ID
- **0069101010101** is the node ID
- **1** is the value being sent

Posting Node Values (multiple Node ID)

ThingsSentral supports posting values to multiple nodes in a single GET request. The following outlines the API request format for this functionality.

To send values to multiple nodes, concatenate @ followed by the **Node ID**, then | followed by the **value to send**.

```
http://thingssentral.io/postlong?data=userid|YOUR_USER_ID  
    @YOUR_NODE_ID_1|VALUE_TO_SEND_1  
    @YOUR_NODE_ID_2|VALUE_TO_SEND_2  
    @YOUR_NODE_ID_3|VALUE_TO_SEND_3  
    .  
    .  
    .  
    @YOUR_NODE_ID_n|VALUE_TO_SEND_n
```

Example:

To send the value **1** to node **0069101010101**, value **2** to node **0069101010102**, and value **3** to node **0069101010103**, use:

```
http://thingssentral.io/postlong?data=userid|00691  
    @0069101010101|1  
    @0069101010102|2  
    @0069101010103|3
```

Where:

- **00691** is the user ID
- **0069101010101** is the 1st node ID
- **1** is the 1st value being sent
- **0069101010102** is the 2nd node ID
- **2** is the 2nd value being sent
- **0069101010103** is the 3rd node ID
- **3** is the 3rd value being sent