URL: https://ec2-18-224-246-127.us-east-2.compute.amazonaws.com:8080/api/**ENDPOINT**

Add:

Add_device:
- **Parameters**:
  - (String) **device: d_name**
- **ENDPOINT**:
  - add_device?**device=d_name**
- **Return Values**:
  - (Message string) 'Device added successfully.'
    - **Status**: **SUCCESS**
    - **Action**: None
  - (Message string) 'Missing device name.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: **d_name** was not set
  - (Message string) 'Device already exists in database.'
    - **Status**: **ERROR**
    - **Action**: list_devices
    - **Cause**: a device with **d_name** is already present in the database
  - (Message string) 'QUERY_FAILED: $message.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: SQL query failed

add_manufacturer:
- **Parameters**:
  - (String) **manufacturer: m_name**
- **ENDPOINT**:
  - add_manufacturer?**manufacturer=m_name**
- **Return Values**:
  - (Message string) 'Manufacturer added successfully.'
    - **Status**: **SUCCESS**
    - **Action**: None
  - (Message string) 'Missing manufacturer name.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: **m_name** was not set
  - (Message string) 'Manufacturer already exists in database.'
    - **Status**: **ERROR**
    - **Action**: list_manufacturers
    - **Cause**: a manufacturer with **m_name** is already present in the database
  - (Message string) 'QUERY_FAILED: $message.'
    - **Status**: **ERROR**

- ■ **Action**: None
- ■ **Cause**: SQL query failed

add_equipment:
- ● **Parameters**:
  - ○ (Int) **did: device_id**
  - ○ (Int) **mid: manufacturer_id**
  - ○ (String) **sn: serial_number**
- ● **ENDPOINT**:
  - ○ add_equipment?**did=device_id**&**mid=manufacturer_id**&**sn=serial_number**
- ● **Return Values**:
  - ○ (Message string) 'Equipment added successfully.'
    - ■ **Status**: SUCCESS
    - ■ **Action**: None
  - ○ (Message string) 'Missing device id.'
    - ■ **Status**: ERROR
    - ■ **Action**: None
    - ■ **Cause**: device_id was not set
  - ○ (Message string) 'Missing manufacturer id.'
    - ■ **Status**: ERROR
    - ■ **Action**: None
    - ■ **Cause**: manufacturer_id was not set
  - ○ (Message string) 'Missing serial number.'
    - ■ **Status**: ERROR
    - ■ **Action**: None
    - ■ **Cause**: serial_number was not set
  - ○ (Message string) 'Invalid device id.'
    - ■ **Status**: ERROR
    - ■ **Action**: query_device
    - ■ **Cause**: device_id was set but not an integer
  - ○ (Message string) 'Invalid manufacturer id.'
    - ■ **Status**: ERROR
    - ■ **Action**: None
    - ■ **Cause**: manufacturer_id was set but not an integer
  - ○ (Message string) 'Equipment already exists in database.'
    - ■ **Status**: ERROR
    - ■ **Action**: query_serial
    - ■ **Cause**: equipment with serial_number is already present in the database
  - ○ (Message string) 'QUERY_FAILED: $message.'
    - ■ **Status**: ERROR
    - ■ **Action**: None
    - ■ **Cause**: SQL query failed

List:

list_devices:
- **Parameters**: None
- **ENDPOINT**:
  - list_devices
- **Return Values**:
  - (JSON) Array [device_id, device_name, status]
    - **Status**: SUCCESS
    - **Action**: None
  - (Message string) 'No devices found.'
    - **Status**: SUCCESS
    - **Action**: None
    - **Cause**: Query was successful but returned no results
  - (Message string) 'QUERY_FAILED: $message.'
    - **Status**: ERROR
    - **Action**: None
    - **Cause**: SQL query failed

list_manufacturers:
- **Parameters**: None
- **ENDPOINT**:
  - list_manufacturers
- **Return Values**:
  - (JSON) Array [manufacturer_id, manufacturer_name, status]
    - **Status**: SUCCESS
    - **Action**: None
  - (Message string) 'No manufacturers found.'
    - **Status**: SUCCESS
    - **Action**: None
    - **Cause**: Query was successful but returned no results
  - (Message string) 'QUERY_FAILED: $message.'
    - **Status**: ERROR
    - **Action**: None
    - **Cause**: SQL query failed

Modify:

modify_device:
- **Parameters**:
  - (Int) **did: device_id**
  - (String) **device: d_name**
  - (String) **status: status**
- **ENDPOINT**:
  - modify_device?**did=device_id**&**device=d_name**&**status=status**
- **Return Values**:
  - (Message string) 'Device modified successfully.'
    - **Status: SUCCESS**
    - **Action**: None
  - (Message string) 'Missing device id.'
    - **Status: ERROR**
    - **Action**: None
    - **Cause: device_id** was not set
  - (Message string) 'Missing device name.'
    - **Status: ERROR**
    - **Action**: None
    - **Cause: d_name** was not set
  - (Message string) 'Missing status.'
    - **Status: ERROR**
    - **Action**: None
    - **Cause: status** was not set
  - (Message string) Invalid device id.'
    - **Status: ERROR**
    - **Action**: query_device
    - **Cause: device_id** was set but not an integer
  - (Message string) 'Device already exists in database.'
    - **Status: ERROR**
    - **Action**: list_devices
    - **Cause**: a device with **d_name** is already present in the database
  - (Message string) 'QUERY_FAILED: $message.'
    - **Status: ERROR**
    - **Action**: None
    - **Cause**: SQL query failed

modify_manufacturer:
- **Parameters**:
  - (Int) **mid: manufacturer_id**
  - (String) **manufacturer: m_name**
  - (String) **status: status**
- **ENDPOINT**:
  - modify_device?**mid=manufacturer_id**&**manufacturer=m_name**&**status=status**

- **Return Values**:
  - (Message string) 'Manufacturer modified successfully.'
    - **Status**: **SUCCESS**
    - **Action**: None
  - (Message string) 'Missing manufacturer id.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: **manufacturer_id** was not set
  - (Message string) 'Missing manufacturer name.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: **m_name** was not set
  - (Message string) 'Missing status.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: **status** was not set
  - (Message string) Invalid manufacturer id.'
    - **Status**: **ERROR**
    - **Action**: query_manufacturers
    - **Cause**: **manufacturer_id** was set but not an integer
  - (Message string) 'Manufacturer already exists in database.'
    - **Status**: **ERROR**
    - **Action**: list_manufacturers
    - **Cause**: a manufacturer with **m_name** is already present in the database
  - (Message string) 'QUERY_FAILED: $message.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: SQL query failed

modify_equipment:
- **Parameters**:
  - (Int) **eid: equipment_id**
  - (Int) **did: device_id**
  - (Int) **mid: manufacturer_id**
  - (String) **sn: serial_number**
  - (String) **status: status**
- **ENDPOINT**:
  - modify_device?**eid=equipment_id**&**did=device_id**&**mid=manufacturer_id**&**sn =serial_number**&**status=status**
- **Return Values**:
  - (Message string) Equipment modified successfully.'
    - **Status**: **SUCCESS**
    - **Action**: None
  - (Message string) 'Missing equipment id.'
    - **Status**: **ERROR**

- - **Action**: None
  - **Cause**: **equipment_id** was not set
  - (Message string) 'Missing device id.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: **device_id** was not set
  - (Message string) 'Missing manufacturer id.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: **manufacturer_id** was not set
  - (Message string) 'Missing serial number.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: **serial_number** was not set
  - (Message string) 'Missing status.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: **status** was not set
  - (Message string) Invalid equipment id.'
    - **Status**: **ERROR**
    - **Action**: query_id
    - **Cause**: **equipment_id** was set but not an integer
  - (Message string) Invalid device id.'
    - **Status**: **ERROR**
    - **Action**: query_device
    - **Cause**: **device_id** was set but not an integer
  - (Message string) Invalid manufacturer id.'
    - **Status**: **ERROR**
    - **Action**: query_manufacturer
    - **Cause**: **manufacturer_id** was set but not an integer
  - (Message string) Equipment already exists in database.'
    - **Status**: **ERROR**
    - **Action**: query_serial
    - **Cause**: equipment with **serial_number** is already present in the database
  - (Message string) 'QUERY_FAILED: $message.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: SQL query failed

Query:

query_device:
- **Parameters**:
  - (Int) **did: device_id**
- **ENDPOINT**:
  - query_device?**did=device_id**
- **Return Values**:
  - (JSON) Single {device_id, device_name, status}
    - **Status**: SUCCESS
    - **Action**: None
  - (Message string) 'Device not found.'
    - **Status**: SUCCESS
    - **Action**: None
    - **Cause**: Query was successful but returned no results
  - (Message string) 'Missing device id.'
    - **Status**: ERROR
    - **Action**: None
    - **Cause**: device_id was not set
  - (Message string) 'Invalid device id.'
    - **Status**: ERROR
    - **Action**: None
    - **Cause**: device_id was set but not an integer
  - (Message string) 'QUERY_FAILED: $message.'
    - **Status**: ERROR
    - **Action**: None
    - **Cause**: SQL query failed

query_manufacturer:
- **Parameters**:
  - (Int) **mid: manufacturer_id**
- **ENDPOINT**:
  - query_manufacturer?**mid=manufacturer_id**
- **Return Values**:
  - (JSON) Single {manufacturer_id, manufacturer_name, status}
    - **Status**: SUCCESS
    - **Action**: None
  - (Message string) 'Manufacturer not found.'
    - **Status**: SUCCESS
    - **Action**: None
    - **Cause**: Query was successful but returned no results
  - (Message string) 'Missing manufacturer id.'
    - **Status**: ERROR
    - **Action**: None
    - **Cause**: manufacturer_id was not set

- - (Message string) 'Invalid manufacturer id.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: **manufacturer_id** was set but not an integer
  - (Message string) 'QUERY_FAILED: $message.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: SQL query failed

query_id:
- **Parameters**:
  - (Int) **eid: equipment_id**
- **ENDPOINT**:
  - query_id?**eid=equipment_id**
- **Return Values**:
  - (JSON) Single {equipment_id, device_id, manufacturer_id, serial_number, status}
    - **Status**: **SUCCESS**
    - **Action**: None
  - (Message string) 'Equipment not found.'
    - **Status**: **SUCCESS**
    - **Action**: None
    - **Cause**: Query was successful but returned no results
  - (Message string) 'Missing equipment id.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: **equipment_id** was not set
  - (Message string) 'Invalid equipment id.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: **equipment_id** was set but not an integer
  - (Message string) 'QUERY_FAILED: $message.'
    - **Status**: **ERROR**
    - **Action**: None
    - **Cause**: SQL query failed

query_serial:
- **Parameters**:
  - (Int) **sn: serial_number**
- **ENDPOINT**:
  - query_id?**sn=serial_number**
- **Return Values**:
  - (JSON) Single {equipment_id, device_id, manufacturer_id, serial_number, status}
    - **Status**: **SUCCESS**
    - **Action**: None
  - (Message string) 'Equipment not found.'
    - **Status**: **SUCCESS**

- **Action**: None
- **Cause**: Query was successful but returned no results
    - ○ (Message string) 'Missing serial number.'
        - ■ **Status**: **ERROR**
        - ■ **Action**: None
        - ■ **Cause**: serial_number was not set
    - ○ (Message string) 'QUERY_FAILED: $message.'
        - ■ **Status**: **ERROR**
        - ■ **Action**: None
        - ■ **Cause**: SQL query failed

Search:

search_devices:
- ● **Parameters**:
    - ○ (Optional int) **did: device_id**
    - ○ (Optional int) **mid: manufacturer_id**
    - ○ (Optional string) **sn: serial_number**
    - ○ (Optional string) **include_inactive: include_inactive**
- ● **ENDPOINT**:
    - ○ add_equipment?**did=device_id**&**mid=manufacturer_id**&**sn=serial_number**&**include_inactive=include_inactive**
- ● **Return Values**:
    - ○ (JSON) Array [equipment_id, device_id, manufacturer_id, serial_number, status]
        - ■ **Status**: **SUCCESS**
        - ■ **Action**: None
    - ○ (Message string) 'No equipment found.'
        - ■ **Status**: **SUCCESS**
        - ■ **Action**: None
        - ■ **Cause**: Query was successful but returned no results
    - ○ (Message string) 'Invalid device id.'
        - ■ **Status**: **ERROR**
        - ■ **Action**: query_device
        - ■ **Cause**: device_id was set but not an integer
    - ○ (Message string) 'Invalid manufacturer id.'
        - ■ **Status**: **ERROR**
        - ■ **Action**: None
        - ■ **Cause**: manufacturer_id was set but not an integer
    - ○ (Message string) 'QUERY_FAILED: $message.'
        - ■ **Status**: **ERROR**
        - ■ **Action**: None
        - ■ **Cause**: SQL query failed