# RM Bridge - API Documentation

# Version History

v 1.0.0	27-Jun-2015	Jochen Ruehl	Initial version
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# Introduction

This document describes the protocol to communicate with the Android RM which which can communicate with BroadLink<sup>™</sup> RM1 and RM2 devices.

### Restrictions

Although the Android RM Bridge does support BroadLink<sup>TM</sup> *Open API* specification, the description of the *Open API* is not subject to this document.

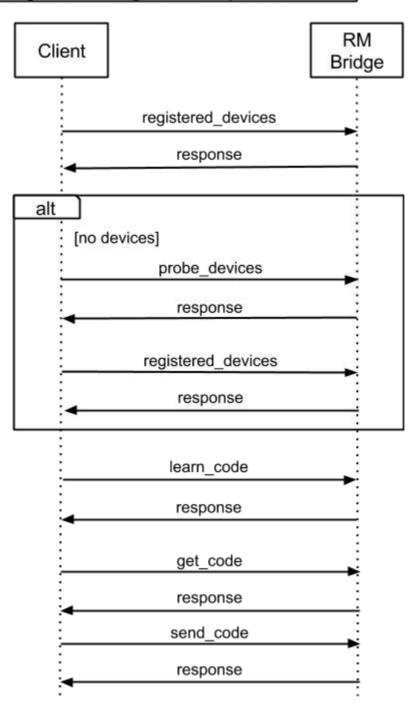
The reason for this is that the *Open API* documentation is subject to BrodaLink<sup>TM</sup>'s NDA.

# **Command Overview**

Command ID	Command	Description
1000	registered_devices	Returns a list of currently registered devices on the bridge.
1001	probe_devices	Updates the list of registered devices of the bridge.
1002	learn_code	Sets the RM device into learning mode.
1003	get_code	Retrieves a learned code from the RM device.
1004	send_code	Sends a code to the RM device.
1005	delete_code	Deletes a stored code shortcut from the bridge.
1006	list_codes	Retrieves the listed of code shortcuts.
1007	add_coddes	Adds new code shortcuts to the list of shortcuts.

# Sequence Diagram

# RM Bridge - Learning Code Sequence



# Overview

Requests can be sent to the RM Bridge by using RAW POST/POST or GET requests. Regarding RAW POST request, the command data can be sent as is inside the POST request.

POST and GET request the following parameters can be supplied:

Parameter Name	Description
cmd	Contains the API command as JSON string
callback	Specifies the JSONP callback function (optional)
jsonp	Specifies the JSONP callback function (optional)

The return code of an request is stored inside the response parameter *code*. Apart from zero, all other values indicate an error.

# **Command Shortcuts**

When providing a *name* argument to the *get\_code* API command, calling the code via shortcut is possible by calling the following URI:

http://<ip>:<port>/code/<name>

# **Specification**

This section contains the specification of the RM Bridge API.

# registered\_devices

Since: RM Bridge 1.2.0

Retrieves all registered devices from the RM Bridge.

The bridge registers all found devices on startup. To update the list of registered devices, use the command *probe\_devices*.

Argument Name	Description
api_id	Command ID (1000)
command	Command name (optional)

## **Example**

```
{
    "api_id":1000,
    "command":"registered_devices"
}
```

#### **Response Arguments**

The argument list contains the list of all available devices registered by the bridge. The description only lists name and MAC address, because these are the only parameters needed by the bridge API. The real result contains much more parameters, which are not listed here to respect the BroadLink™ NDA.

Argument Name	Description
code	Return code
list	List of available devices
mac	Device MAC address
name	Device name
msg	Return message

#### Example

# probe\_devices

Since: RM Bridge 1.2.0

Requests the bridge to update its list of registered devices.

### **Request Arguments**

Argument Name	Description
api_id	Command ID (1001)
command	Command name (optional)

# **Example**

```
{
    "api_id":1001,
    "command":"probe_devices"
}
```

# **Response Arguments**

Argument Name	Description
code	Return code
msg	Return message

# **Example**

```
{
    "code": 0,
    "msg": "Probe devices success"
}
```

# learn\_code

Since: RM Bridge 1.2.0

Sets the RM device into learning mode.

This is signaled by the red LED on the device.

Argument Name	Description
api_id	Command ID (1002)

command	Command name (optional)
mac	Device MAC address

# **Example**

```
{
    "api_id":1002,
    "command":"learn_code",
    "mac": "00:11:22:33:44:55"
}
```

# **Response Arguments**

Argument Name	Description
code	Return code
msg	Return message

# **Example**

```
{
    "code": 0,
    "msg": "rm2 enter study mode success"
}
```

# get\_code

Since: RM Bridge 1.2.0

Retrieves the code the RM device has learned by using the *learn\_code* command.

Argument Name	Description
api_id	Command ID (1003)
command	Command name (optional)
mac	Device MAC address

name Store named code shortcut on bridge (optional)

## **Example**

```
{
    "api_id":1003,
    "command":"get_code",
    "mac": "00:11:22:33:44:55"
    "name": "test"
}
```

### **Response Arguments**

Argument Name	Description
code	Return code
data	Data of learned code
msg	Return message

### **Example**

```
{
    "data":
"e90b3400091f091f091f0a1f0920091f0920091f092009201c0c09201c0c0
820092008201c0d09201c0c0820092008201d0c0900013300000000",
    "code": 0,
    "msg": "rm2 enter study mode success"
}
```

# send\_code

Since: RM Bridge 1.2.0

Send the code data to the specified RM device.

Argument Name	Description
api_id	Command ID (1004)
command	Command name (optional)

mac	Device MAC address (optional if <i>name</i> is defined)
data	Code data (optional if <i>name</i> is defined)
name	Code shortcut stored on bridge (optional)

### **Example**

```
{
    "api_id":1004,
    "command":"send_code",
    "mac": "00:11:22:33:44:55",
    "data":
"e90b3400091f091f091f0a1f0920091f0920091f092009201c0c09201c0c0
820092008201c0d09201c0c0820092008201d0c0900013300000000"
}

or

{
    "api_id":1004,
    "command":"send_code",
    "name": "test"
}
```

# **Response Arguments**

Argument Name	Description
code	Return code
msg	Return message

#### **Example**

# delete\_code

Since: RM Bridge 1.2.0

Deletes a code shortcut with the given *name* attribute from the bridge.

# **Request Arguments**

Argument Name	Description
api_id	Command ID (1005)
command	Command name (optional)
name	Code shortcut stored on bridge. To delete all shortcuts, use "*".

### Example

```
{
    "api_id":1005,
    "command":"delete_code",
    "name": "test"
}
```

# **Response Arguments**

Argument Name	Description
code	Return code
msg	Return message

# **Example**

```
{
    "code": 0,
    "msg": "Code has been deleted"
}
```

# list\_codes

Since: RM Bridge 1.2.0

Lists all code shortcuts currently stored on the bridge

#### **Request Arguments**

Argument Name	Description
api_id	Command ID (1006)
command	Command name (optional)

# **Example**

```
{
    "api_id":1006,
    "command":"list_codes"
}
```

#### **Response Arguments**

Argument Name	Description
code	Return code
msg	Return message
list	List of codes shortcuts

#### **Example**

 $\begin{tabular}{l} \textbf{"e90098010a1b0c1c0b1d0a1d0a1d0a1d0a1d091e0a1e1e090a1d1e0a081f} \\ 1c0c091e1c0c0720081f081f1c0c07000134081f071f082008200720081f0 \\ 91f071f0821071f081f0820091e1c0b08201b0d071f1b0d07201b0e062007 \\ 22071f1a0d070001330720082008200620081f091f0720081f08200721072 \\ 0072007211a0d07201a0d07211a0d081f1a0e0621062206211a0e05000134 \\ 07210622062205200721072007200721062107210620082106211a0d06211 \\ a0e0622190e0522190e0621062206211a0e05000134072008200720072008 \\ 20072007200820072007200721072007201b0d07201b0c07211a0e0622190 \\ d0622062007201b0d07000133081f08200720082007200721071f08200720 \\ 081f081f0820081f1b0e06201b0c081f1c0c07211a0d081f09200720190d0 \\ 7000133081f091f081f081f091e091f081f0820081f081f091f1b0c081f1b \\ \end{tabular}$ 

0d07201b0d07211b0b07201b0d1b0c1b0d1c0c1b0b07000135071e091e091 f081f081f091f0820081e091f081f091e1c0c081f1c0c081f1c0c071f1c0d 071f1c0c1b0c1c0b1b0d1b0c080005dc",

### add codes

Since: RM Bridge 1.2.0

Adds new code shortcuts to the shortcut collection of the bridge.

#### **Request Arguments**

Argument Name	Description
api_id	Command ID (1007)
command	Command name (optional)
list	List of code shortcuts

#### Example

"mac": "11:22:33:44:55:66",

```
"name": "test" } ] }
```

# **Response Arguments**

Argument Name	Description
code	Return code
msg	Return message

# <u>Example</u>

```
{
    "code": 0,
    "msg": "Codes added to collection"
}
```