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# **iControl Router Manager REST API**

## **Reference Guide**

M407-9901-AA

2019-03-21

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Title	iControl Router Manager REST API Reference Guide
Part Number	M407-9901-AA
Revision	2019-03-21, 15:34

# 1 Introduction

This document describes iControl's Router Manager REST API service. This service requires the *iControl Router Manager* license (order code: IC-REST-ROUTER).

## Summary

As of iControl version 8.10, the Router Manager provides a REST service to access the router manager.

The REST service is available with the following configuration:

- Accessed through HTTP on the iControl Application Server
- Registered on port:
  - 5970
- With base path:
  - <http://10.0.3.6:5970/routermanager/api/v1>

A WADL file describing the service is available in the base path:

- <http://10.0.3.6:5970/routermanager/api/v1/application.wadl>

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**Note:** In this document, the IP address 10.0.3.6 represents the iControl Application Server.

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# Router REST API

Documentation for the Routers REST api that allows to set crosspoints

Version: 1.0

BasePath: /routermanager/api/v1/

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## Access

## Methods

### Table of Contents

- /routers/{routerId}/crosspoints
- /routers/{routerId}/crosspoints
- /routers/
- /routers/{routerId}/levels
- /routers/{routerId}/levels/{levelId}/destinations
- /routers/{routerId}/levels/{levelId}/sources
- /routers/ping

## Default

GET /routers/{routerId}/crosspoints

GetCrosspoints (**routersCrosspointsByRouterIdGet**)

Get a list of crosspoints for a logical router.

### Path parameters

**routerId (required)**

*Path Parameter* – Id of the logical router (0-based) format: int32

### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

### Return type

getDestinationsResponse1

### Example data

Content-Type: application/json

```
{
  "crosspoints" : [ {
    "level" : 0,
    "status" : [ {
      "destination" : 6,
      "source" : 1
    }, {
      "destination" : 6,
      "source" : 1
    } ]
  }, {
    "level" : 0,
    "status" : [ {
      "destination" : 6,
      "source" : 1
    }, {
      "destination" : 6,
      "source" : 1
    } ]
  } ]
}
```

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed

by the Content-Type response header.

- application/json

## Responses

200

List of crosspoints getDestinationsResponse1

---

## POST /routers/{routerId}/crosspoints

PostCrosspoints (**routersCrosspointsByRouterIdPost**)

Set a crosspoint on a logical router.

### Path parameters

#### routerId (required)

*Path Parameter* – Id of the logical router (0-based) format: int32

### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

### Request body

#### body postCrosspointsRequest (required)

*Body Parameter* – Crosspoint to set.

### Return type

Object

### Example data

Content-Type: application/json

```
"{}"
```

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

## Responses

200

empty Object

---

## GET /routers/

GetLogicalRouters (**routersGet**)

Get a list of all logical routers on the server.

### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

### Return type

getRoutersResponse

### Example data

Content-Type: application/json

```
{
  "routers" : [ {
    "name" : "name",
    "id" : 0
  }, {
```

```
    "name" : "name",
    "id" : 0
  } ]
}
```

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

### Responses

200

List of routers getRoutersResponse

---

## GET /routers/{routerId}/levels

### GetLevels (routersLevelsByRouterIdGet)

Get a list of levels for one logical router.

### Path parameters

#### routerId (required)

*Path Parameter* – Id of the logical router (0-based) format: int32

### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

### Return type

getLevelsResponse

### Example data

Content-Type: application/json

```
{
  "levels" : [ {
    "id" : 0,
    "label" : "label"
  }, {
    "id" : 0,
    "label" : "label"
  } ]
}
```

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

### Responses

200

List of levels getLevelsResponse

---

## GET /routers/{routerId}/levels/{levelId}/destinations

### GetDestinations (routersLevelsDestinationsByRouterIdAndLevelIdGet)

Get list of destinations for a level, or find a single destination

### Path parameters

#### routerId (required)

*Path Parameter* – Id of the logical router (0-based) format: int32

#### levelId (required)

*Path Parameter* – Id of the level (0-based) format: int32

## Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

## Query parameters

### id (optional)

*Query Parameter* – Optional filter to search for a single id (1-based).

### label (optional)

*Query Parameter* – Optional filter to search for a single label.

## Return type

getDestinationsResponse

## Example data

Content-Type: application/json

```
{
  "levels" : [ {
    "id" : 0,
    "label" : "label"
  }, {
    "id" : 0,
    "label" : "label"
  } ]
}
```

## Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

## Responses

### 200

List of destinations or a single one. Single source does not include the array, only a single label/id pair.

getDestinationsResponse

```
GET /routers/{routerId}/levels/{levelId}/sources
```

GetSources (routersLevelsSourcesByRouterIdAndLevelIdGet)

Get list of sources for a level, or find a single source

## Path parameters

### routerId (required)

*Path Parameter* – Id of the logical router (0-based) format: int32

### levelId (required)

*Path Parameter* – Id of the level (0-based) format: int32

## Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

## Query parameters

### id (optional)

*Query Parameter* – Optional filter to search for a single id (1-based).

### label (optional)

*Query Parameter* – Optional filter to search for a single label.

## Return type

getSourceResponse

### Example data

Content-Type: application/json

```
{
  "levels" : [ {
    "id" : 0,
    "label" : "label"
  }, {
    "id" : 0,
    "label" : "label"
  } ]
}
```

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

### Responses

200

List of sources or a single one. Single source does not include the array, only a single label/id pair. getSourcecessResponse

## GET /routers/ping

### Ping (routersPingGet)

Verifies that the REST server for router manager is running at the given url. Returns "pong"

### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

### Return type

String

### Example data

Content-Type:

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- text/plain

### Responses

200

pong String

## Models

### Table of Contents

1. crosspointObject
2. destinationObject
3. getDestinationsResponse
4. getDestinationsResponse1
5. getLevelsResponse
6. getRoutersResponse
7. getSourcecessResponse
8. levelObject
9. postCrosspointsRequest
10. routerObject
11. sourceObject
12. statusObject

crosspointObject - crosspointObject



Single crosspoint

**level**

*Integer format: int32*

**status**

*array[statusObject]*

**destinationObject - destinationObject**

Single destination (id is 1-based)

**id**

*Integer format: int32*

**label**

*String*

**getDestinationsResponse - getDestinationsResponse**

Body of a the response of a get destinations request

**levels**

*array[destinationObject]*

**getDestinationsResponse1 - getDestinationsResponse1**

Body of a the response of a get crosspoints request

**crosspoints**

*array[crosspointObject]*

**getLevelsResponse - getLevelsResponse**

Body of a the response of a get levels request

**levels**

*array[levelObject]*

**getRoutersResponse - getRoutersResponse**

Body of a the response of a get routers request

**routers**

*array[routerObject]*

**getSourceResponse - getSourceResponse**

Body of a the response of a get sources request

**levels**

*array[sourceObject]*

**levelObject - levelObject**

Single level (id is 0-based)

**id**

*Integer format: int32*

**label**

*String*

**postCrosspointsRequest - postCrosspointsRequest**

Body of a post crosspoint request. Uses integer ids for level, source and destination. A level of -1 connects the crosspoint for all levels. Level id is 0-based, source and destination id are 1-based

**level**

*Integer* format: int32

**source**

*Integer* format: int32

**destinations**

*array[Integer]* format: int32

**routerObject - routerObject**

Single router (id is 0-based)

**id**

*Integer* format: int32

**name**

**sourceObject - sourceObject**

Single source (id is 1-based)

**id**

*Integer* format: int32

**label**

*String*

**statusObject - statusObject**

Single destination/source pair (source and destination ids are 1-based)

**destination**

*Integer* format: int32

**source**

*Integer* format: int32



## **Grass Valley Technical Support**

For technical assistance, contact our international support center, at 1-800-547-8949 (US and Canada) or +1-530-478-4148.

To obtain a local phone number for the support center nearest you, consult the Contact Us section of Grass Valley's website ([www.grassvalley.com](http://www.grassvalley.com)).

An online form for e-mail contact is also available from the website.

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