

Racks

- [Introduction](#)
- [How Does it Work?](#)
- [Creating a Rack Entry](#)
- [Viewing Racks](#)
- [Racks Reporting](#)
- [Database Schema](#)
- [API / Web Access](#)

Introduction

The Racks feature is used to manage and visualize your rack use with an Organisation, Location, Building, Floor, Room and Row.

How Does it Work?

A rack is a collection of devices which are assigned a position and height within the rack. A device can optionally have a picture associated with it. A rack is placed in a row. We have created a very granular system for positioning of racks, which is as follows. At the top level (as always) is the Organisation (Org). An Org can have multiple locations (as has always been the case). With the addition of the Racks feature, a location can now contain one or more Buildings. A building can contain one or more Floors. A floor can contain one or more Rooms. A room can contain one or more Rows. This sounds like a lot of work, but defaults are created for you. Create a new Location and the sub-components will be automatically created for you. If you need more items (buildings, rooms, etc) you can add them as you like. A rack can also be part of a "pod" of racks. The pod attribute works as a tag, rather than a strict hierarchical inheritance model as per buildings, floors, etc.

Racks are a feature available to Open-Audit Enterprise licensed customers.

Creating a Rack Entry

As always, racks are fully usable from the API, just like other collections within Open-Audit.

A Rack entry can be created using the web interface if the current user logged in has a role that contains the racks::create permission. Go to menu: Manage -> Racks -> Create Racks. They can also be created from the Rooms View, using the "Create" button.

When creating a rack, you can provide the minimum required amount of information (name, Org, height and location details). We have provided defaults for all we can, so really - all you need is a name. If you would like to keep more details about the rack, click the "Advanced" button and you see many more attributes you can use.

The screenshot shows the 'Racks' creation form in the Open-Audit Enterprise 2.0 web interface. The form is titled 'Racks' and includes a 'Notes' section on the right. The form fields are as follows:

- Name:** A text input field with a question mark icon.
- Org ID:** A dropdown menu with 'Default Organisation' selected.
- Description:** A text input field with a question mark icon.
- RU Height:** A text input field with '42' and a question mark icon.
- Location:** A dropdown menu with 'Default Location in Default Organisation' selected.
- Building:** A dropdown menu with 'Default Building at Default Location' selected.
- Floor:** A dropdown menu with 'Ground Floor in Default Building' selected.
- Room:** A dropdown menu with 'Default Room on Ground Floor' selected.
- Row ID:** A dropdown menu with 'Default Row in Default Room' selected.

At the bottom of the form are two buttons: 'Submit' and 'Advanced'.

On the right side, under the 'Notes' heading, there is a text area with the following text: 'Your racks help refine exactly where your devices are located. For more detailed information, check the Open-Audit Knowledge Base.'

At the bottom of the page, there is a footer with the following text: 'Open-Audit Enterprise 2.0.0 is licensed to Opmantek for 12345 Nodes - Expires 18-Jul-2019. Purchase a license for more nodes by clicking [here](#). Powered by Opmantek.'

Open-Audit Enterprise 2.3
Discover
Report
Manage
Modules
Licenses
Admin
Help
User: admin

HomeRacks

Name

?

Org ID

Default Organisation

?

Description

?

RU Height

42

?

Location

Default Location in Default Organisation

?

Building

Default Building in Default Location

?

Floor

Ground Floor in Default Building

?

Room

Default Room on Ground Floor

?

Row ID

Default Row in Default Room

?

Purpose

servers

?

Type

compute

?

Manufacturer

?

Model

?

Series

?

Serial

?

Asset Number

?

Asset Tag

?

Bar Code

?

Row Position

1

?

Pod

?

Physical Height

2000

?

Physical Width

600

?

Physical Depth

1000

?

Weight Empty

?

Weight Current

?

Weight Max

?

Rtu Total

?

Rtu Max

?

Power Circuit

?

Power Sockets

1

?

Circuit Count

1

?

Submit

Advanced

Notes

Your racks help define exactly where your devices are located.
For more detailed information, check the [Open-Audit Knowledge Base](#).

Open-Audit Enterprise 2.3.0 is licensed to Openstack for 12345 Nodes - Expires 18-Jul-2018
Purchase a license for more nodes by clicking [here](#)

Powered by Openstack

Viewing Racks

As pre creating a rack, when viewing a rack, if you have provided the minimum amount of attributes, the Advanced attributes will not show by default. Click the Advanced button to reveal (and edit) them. If you have provided some Advanced attributes, they will be shown by default. Each device will have its icon shown on the left, along with a clickable "eye" icon on the right. Clicking this icon shows the basic machine details (name, IP, etc) and provides a link to view the full device. You can add a device by clicking the + icon in the Devices table. You can edit the position and height of a device by clicking the blue 'eye' icon next to each device.

If you have added an image to a device, it will be shown. If you have not added an image (as per the router, below), the device's icon will be shown.

The best size for an image is 500px wide and 50px high for each RU in height. The image of the HP server below is 500px by 100px. You can now also assign a single image to multiple devices (as at 2.3.0).

Open-Audit Enterprise 2.3DiscoverReportManageModulesLicensesAdminHelpUser: admin

Home / Racks / OurRack

OurRack

Details

ID7

NameOurRack

Description

Row IDDefault Row

Org IDDefault Organisation

RU Height42

PurposeServers

Typecompute

Manufacturer

Model

Series

Serial

Asset Number

Asset Tag

Bar Code

Row Position1

Pod

Physical Height2000

Physical Width600

Physical Depth1050

Weight Empty0

Weight Current0

Weight Max0

Btu Total0

Btu Max0

Power Circuit

Power Sockets1

Circuit Count1

Edited ByAdministrator

Edited Date2018-11-05 10:17:46

Advanced

Rack Visualisation

OurRack	
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42

Devices

ID	Name	Type	Position	Height	Delete
1	desktop		10	2	
2	Router		4	1	

Open-Audit Enterprise 2.0.0 is licensed to Opmantek for 12345 Nodes - Expires 18-Jul-2019
Purchase a license for more nodes by clicking [here](#).

Powered by Opmantek

They are accessible using [The Open-Audit API](#).

The table definition is best retrieved in application by going to menu Admin Database List Tables.

Racks Reporting

Along with being able to create and visualize Racks, we have provided some initial Rack Reporting. You can find it at menu -> Report -> Racks Reporting or menu -> Manage -> Racks -> Reporting.

You can specify the Org, all the way down to the Pod the list of racks you would like to know about and the largest contiguous aspaces there-in. This provides a quick and easy way to say "What's the largest space in Building C" (for example).

Open-Audit Enterprise 2.3 Discover Report Manage Modules Licenses Admin Help User: admin

Home / Rack Reports / Contiguous Space

Contiguous Space

50 records per page Search:

Details	Name	Row	Room	Floor	Building	Location	Organisation	Height	Used	Free	Max Available
	OurRack	Default Row	Default Room	Ground Floor	Default Building	Default Location	Default Organisation	42	3	39	31

Showing 1 to 1 of 1 entries First Previous Next Last

Open-Audit Enterprise 2.0.0 is licensed to Opmantek for 12345 Nodes - Expires 18-Jul-2019
Purchase a license for more nodes by clicking [here](#). Powered by Opmantek

Database Schema

The database schema can be found in the application if the user has database::read permission by going to menu: Admin -> Database -> List Tables, then clicking on the details button for the table.

API / Web Access

You can access the collection using the normal Open-Audit JSON based API. Just like any other collection. Please see [The Open-Audit API](#) documentation for further details.