

Rack Audit

Cabinet by cabinet audit: equipment by U position, power, cooling, labelling, cable management.

1. Location

Which cabinet, where, and what it looks like now.

Project

Filled in from the project in SiteSurvey.

Client

Site address

Site *

Room or comms cupboard

Cabinet ID *

Rack size (U)

Cabinet lock (choose one)

☐ Locked ☐ Lockable, found unlocked ☐ No lock

Photos of the front, doors open (photos: attach, or note the file names)

Photos of the back (photos: attach, or note the file names)

2. Equipment

One entry for each item, working from the top of the cabinet down.

Most cabinets number U1 at the bottom. Check the numbers on the rails before you start and record the lowest and highest U an item takes, for example 38 to 39.

Equipment (copy this block for each one)

U position

Height (U)

How many U it takes, for example 2 for 38 to 39.

Device (choose one)

- ☐ Patch panel
- ☐ Fibre patch panel
- ☐ Network switch
- ☐ Router or firewall
- ☐ Server
- ☐ Storage or NAS
- ☐ NVR or DVR
- ☐ UPS
- ☐ PDU
- ☐ Shelf
- ☐ Cable manager or brush panel
- ☐ Blanking plate
- ☐ AV matrix or processor
- ☐ Amplifier
- ☐ Other: _____

Make and model

Labelled?

- ☐ Yes ☐ No

Powered on?

- ☐ Yes ☐ No

Items recorded (worked out automatically in the app)

Items with no label (worked out automatically in the app)

U used (worked out automatically in the app)

U free (if applicable; worked out automatically in the app)

Space used (%) (if applicable; worked out automatically in the app)

If applicable: More U recorded than the cabinet has. Check the rack size and each item's height.

If applicable: Over 90% of the cabinet is used. Plan where new equipment will go before it arrives.

3. Power and cooling

How the cabinet is fed, and whether it is running cool.

Number of PDUs

PDU rating (A) (if applicable)

From the label on the PDU or its supply.

Highest PDU reading (A) (if applicable)

The highest current shown on any PDU display or clamp meter reading.

Highest PDU load (% of rating) (if applicable; worked out automatically in the app)

If applicable: Above 80% of the PDU rating. Balance the load or add a feed before adding equipment.

Is there a UPS?

☐ Yes ☐ No

UPS status on the display (if applicable; choose one)

☐ Normal ☐ On battery ☐ Alarm or fault showing

If applicable: The UPS was on battery or showing a fault at the visit. The site contact was told, because the cabinet could lose power without warning.

UPS load on the display (%) (if applicable)**Runtime on the display (minutes)** (if applicable)**Runtime the site needs (minutes)** (if applicable)

From the site standard or the customer, for example time to shut down cleanly.

If applicable: UPS load above 80%. There is little headroom, and the runtime will be short.

If applicable: Runtime is shorter than the site needs. Check the batteries and the load.

Is dual-corded equipment fed from two different PDUs?

☐ Yes ☐ No

Load notes

PDU readings, overloaded strips, daisy-chained extensions.

Temperature at the front of the cabinet (°C)**Temperature at the back of the cabinet (°C)****Rise front to back (°C)** (if applicable; worked out automatically in the app)

If applicable: This is above 27 °C, the top of the recommended range for air going into IT equipment in ASHRAE TC 9.9, Thermal Guidelines for Data Processing Environments (5th edition, 2021), which recommends 18 to 27 °C at the equipment inlet. Check the room cooling and anything blocking the airflow.

Cabinet fans (choose one)

☐ Working ☐ Not working ☐ No fans fitted

Are empty U spaces fitted with blanking plates?

☐ Yes ☐ No

4. Cabling

Patching, labels and cable management.

Is the patching tidy?

☐ Yes ☐ No

Does the labelling meet the site standard?

☐ Yes ☐ No

Cable management (circle one (Poor to Very good))

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Checks needing action (if applicable; worked out automatically in the app)

If applicable: Counted from: cabinet not locked, UPS not normal, dual-corded kit on one PDU, front temperature above 27 °C, fans not working, no blanking plates, untidy patching and labelling not to the site standard.

Issues found (tick all that apply)

- ☐ Unlabelled cables
- ☐ Over-length patch leads
- ☐ Cables blocking airflow
- ☐ Tight bends or crushed cables
- ☐ Loose or unsupported cables
- ☐ Redundant cables left in place
- ☐ Doors cannot close
- ☐ Power and data not separated
- ☐ Other: _____

Photos of the issues (if applicable; photos: attach, or note the file names)

Action needed (if applicable)

Who will do this? (if applicable)

By when? (if applicable)

Auditor sign-off

Name

Date

Auditor signature

Site contact told of the findings
