Systems:

PACs – an inventory and provisioning tool, used by the IPMC to link locations to specific devices, and then see what devices are supposed to be connected to a particular device. These are physical and layer 2 links, not VLANs. PACs is also used to find the rack, shelf, floor and room that contain a particular device.

AutoFix – ticketing system.

IRAMs – incident reporting system.

SMARTs – alarm system. Also does root cause analysis on alarms. Also automatically tickets faults and sends them directly into Autofix.

Activity Logging System – built by one of the Operations Team. The IPMC use this to keep a track of the work that has been done. ALS has references for PEWs and Autofix jobs.

ESID – keeps track of customer VLANs, and links them to the routers that act as access points to the customer’s network: one AP (the customer’s transfer point) is linked to many EPs (aggregators).

Incident Process:

1. An alarm is raised on SMARTs.
2. The alarms members of the IPMC team attempt find the cause of the alarm and try to fix it within 20 minutes.
3. If the job will take longer than 20 minutes, an incident is created on IRAMs.
4. A job is created on Autofix, with reference to the IRAMs incident. At this point one of the IPMC team can start investigating. They log any information about the job on ALS.
5. Once the job is closed on Autofix, the incident can be completed on IRAMs.

Autofix jobs can also be created by customer complaints. In this case, the customer is BT Retail or Orange or Virgin.

Engineering Works Process:

1. A PEW is created to send out the engineers.
2. Something goes wrong, so a task appears on Autofix for the IPMC team.
3. The IPMC team are also responsible for ordering spares, and chasing engineers about missing kit.

Software requirements:

Log system: what has been done and by whom, as well as reference numbers and notes about the job.

Job system: showing who is assigned to a given incident.

Inventory system: details of the devices on the network. Where they are, what they are connected to

Observations:

Was surprised how little router configuration goes on.

Causes:

Mostly incidents are faulty cards.

In other cases, a router has been misconfigured.

Or there is a spike in traffic, causing a router to drop packets.