Health Professions Council
Finance & Resources Committee 20th November 2006

HPC Partial Disaster Recovery invocation 9th/10th October 2006

Executive Summary and Recommendations

This document reports event and on the "Lessons Learned" – from a power failure instigated partial DR invocation on 9th October 2006.

The document illustrates the value of having a balanced DR strategy, designed to mitigate the most likely causes of invocation whilst not expending excessive amounts on very low probability invocations of high cost.

Introduction

A power failure in the south London area; Kennington, Oval, Lambeth terminated regular business at HPC's Park House and Stannary Street location in the mid afternoon The ODP profession was in renewal. Marc Seale was off site, and Rachel Tripp was Acting Chief Executive for this week.

Decision

The Council/Committee is requested to note the document. No decision is required.

Background information

15.15 hours on 9th October 2006; Lighting, printers, fax air conditioning, heating and photocopiers failed due to loss of power. Emergency lighting started through out the HPC campus.

The LISA server Krusty remained operational, using the UPS (Uninterruptible Power Supply) and did not fail. The LISA application did not fail. The phone service within the building was maintained. Desktop PC's shutdown, and external calls could not be received or made, whilst existing calls could be continued. Battery powered laptops continued functioning.

15.20 hours; The various on-site members of EMT gathered in the IT office suggested a wait and see approach for the next 30 minutes or so, to see if power was restored rapidly, investigate cause of problem if possible and to determine way forward for the remainder / following day. Greg Ross-Sampson (GRS) / Richard Houghton (RH) & Roy Dunn (RD) discussed invoking the DR servers for register look up to provide some continuity of service.

RH / GRS went toward Kennington BT exchange, RD went toward Oval. Power was down over a wide area. Steve Hall (SH) Facilities Manager attempted to phone the local power company to determine a timescale for restoration of power. Locally various alarms were sounding and Police/Fire/Ambulance sirens were sounding

locally. It was initially difficult to determine if this was a simple power failure, or something more significant such a terrorist activity.

RD checked the internet via Laptop and 3G mobile data card, but could not determine any further information. Local radio and London websites did not report any issues with power in London. The assumption was therefore that the disruption was localised to Lambeth/Kennington.

The office internet connection to the outside world failed had due to the loss of power.

15.48 hours; Star Internet contacted RD@ HPC via mobile phone to report loss of connectivity. RD confirmed outage due to total failure of local power. Possible invocation of the DR service was highlighted.

15.50 hours; HPC IT shut down LISA Krusty server in controlled manner before the UPS ran out of power. This also terminated the internal telephone system.

16.00 hours; HPC EMT met at in the IT office to determine way forward. Rachel Tripp (ACE) agreed employees should go home, (Health & Safety, and inability to work) and the LISA register should be started at Star DR. The fire alarm/intrusion alarm company (Secom) were alerted that the power had failed and that the alarms may initiate when battery unit ran down.

Employees were asked to go home, but report as normal to the HPC offices next day. This negated any immediate Health & Safety concerns of operating is an environment without adequate power and light, or fire detection and alarms.

16.00 hours Commenced invocation of partial DR, where LISA application is run up at Star Gloucestershire by DSL (Robert Longstaff). This will use the latest LISA extract usually copied to the DR servers at the end of the previous working day.

EMT determine next steps for 8/9 am next morning should power still be down.
It was arranged that Michael Burke (Caretaker) would attend the office at the normal time Tuesday 10th October 06.00 hours to unlock the building and check on the power situation. He would only telephone SH, RT, RD if power had not been restored. Assumption if NOT contacted, was that power had been restored.

When populated by Friday evenings data the register look up was redirected by Star (Jason Taylor) to the DR data at Stars servers. The Register was thus available from approximately 5pm, taking up to 15 minutes for the redirection to be replicated to servers on the internet.

Power was restored to the local area several hours later approx 6.30pm

Upon restoration of power at HPC Park House it was noted that the power was not restored to part of the server room. RW ran cables from the unaffected part of the server room to critical machines and started all servers. (A critical "fuse" had tripped and the unit was in a difficult to reach location.)

Krusty was restarted at around 09.05 hrs when DNS servers were running. The LISA application is designed to restart itself from power up of the server.

LISA on Krusty did not start completely when Krusty was powered up. The Oracle listener failed to start (DSL investigating and started on our behalf) and the reverse proxy box did not boot correctly although power had been restored. Power cycling the reverse proxy box corrected the issue. (However the unit failed later in the week and was "rebuilt" as a consequence.)

By 10.00 hrs LISA was running and the DR server shut down around 1030 hrs

Main issues
- Difficult to determine whether to instigate DR processes at the time. Hindsight is no help. On this occasion HPC could not have reacted any differently due to lack of information from the power company.
- The IT processes worked well, a 12 hour old version of the online register being available within 45 minutes of the decision to initiate the DR servers.
- Need to ensure no single points of failure at HPC if at all possible, diverse power routing, spare fuse cartridges etc However, these would not have helped on this occasion.
- EMT member Office copies of the DR plan were en-route from the Council / EMT awayday in Barnsley. RD & RT had hard copies on site, laptop copies were available via battery power. It is possible to coordinate the DR activities without hardcopy, but is possibly more difficult.
- The IT department will investigate using an old reconditioned UPS to power a single printer in the IT department, plus one laptop for a short period of time. This will facilitate emergency printing if required.
- The IT department will investigate obtaining a laptop battery charger and endeavour to keep a few charged for emergency use only.
- IT Systems for DR worked as far as public view of an online register. We did not test the operation of LISA from the DR Office space in Uxbridge.

Resource implications

No immediate impacts

Financial implications
None based on this document.

Background papers
HPC Disaster Recovery Plan – not circulated on this occasion.

Appendices

Date of paper
31st October 2006