PROtech
IT Hygiene

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THE IMPORTANCE OF COMMS ROOMS CLEANING

Introduction to Comms Rooms

A comms room, server room, computer suite or data centre is a critical part of a company's computer network. It ensures a continuous supply of all network services, secures information systems, stores all technology data and maintains the company's computer infrastructure.

Should this room be lost to fire, flood, breakdown or other disaster, without sufficient back-up systems in place, the company would lose access to not only the computer system itself but also to all of its stored data. This could have disastrous consequences and may even bankrupt the company! Even small server breakdowns can be a major inconvenience to staff and irritate customers, resulting in a substantial loss in earnings. It has been estimated that one hour of down-time could cost a company between £50,000 and £500,000 depending on its size and industry sector.

Environmental monitoring

Environmental conditions are important factors in the performance and reliability of computer equipment. Every precaution must be taken to ensure the comms room is highly protected from physical risks such as heat, fire and contaminants[1], and has appropriate monitoring.

High access cleaning

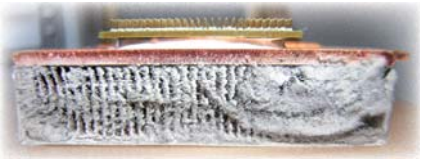
Preventative measures are usually taken against heat and fire, but little is often done about dust, which is thought to be responsible for about 70% of computer room breakdowns[2]. In addition, just under 2% of all fires in non-domestic properties in 2004 were caused by dust, powder or flour[3].

The root of the problem

There are many forms of "dust" with varying sizes, compositions and possible harmful effects. Some common examples are described here:

Construction debris is highly abrasive and a thorough clean by specialists is specifically recommended following any significant building works or renovation.

Human skin and hair fibres can clog electrical equipment.



Lap top heat sink blocked with dust

Natural clothing fibres, e.g. cotton or wool, absorb moisture, which could short the electrical equipment.

Synthetic fibres from clothes, carpets etc., melt easily and become glutinous, allowing further particles to attach.

The carbon particles found in printer toners are conductive and combustible.

Paper dust from envelopes or packing materials is flammable. Along with metallic dust from air conditioning units or rewiring work, it can be drawn to the magnetic fields generated by computer equipment causing a short or even a fire.

There can also be chemical contamination from printed circuit boards and casings[4].

The solution

Trials carried out by Rentokil Initial Research and Development have shown that regular cleaning helps to reduce particulate levels in the atmosphere, preventing dust from settling onto equipment and in turn, preventing breakdowns caused by dust[5]. Indeed it is recommended that all "Type A" IT rooms should be cleaned at least once every three months[6].

You should never attempt to clean this equipment yourself. Protech personnel are specialists in the cleaning of comms rooms. We employ highly qualified and trained staff who have full knowledge and understanding of the importance and sensitivities of comms rooms. Full anti-static protective clothing is worn and specialist cleaning products are used to ensure an effective and thorough clean is carried out, whilst protecting the highly sensitive and expensive equipment.

References:

[1] Contamination: The Undetected Disaster, (1999) Sher, M. *Disaster Recovery Journal* **4** No 1

[2] Falcon Safety Report (2004)

[3] Fire Statistics, United Kingdom 2004, Office of the Deputy Prime Minister: London, (February 2006)

[4] Brominated Flame Retardants in Dust on Computers: The Case for Safer Chemicals and Better Computer Design, McPherson, A., Thorpe, B., Blake, A., (June 2004) Clean Production Action, Computer Take Back Campaign

[5] Comms Room Cleaning (2006) S. Wilson, Rentokil Initial Technical Report

[6] British Standard BS7083 "The accommodation and operating environment for IT equipment"

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