

| Server Room Risk Assessment Template | | | | | | |
|--|--|--|--|--|--------------------|-----------|
| Please complete the form below for each client site or supplier being risk assessed. | | | | | | |
| Company Name: Generic | | | | | Assessment Number: | RA-number |
| Division/Department: - | | | | | Review Date: | |
| Address/Location: - | | | | | Project Number: | |
| Site Contact: - | | | | | Form Completed By: | |
| Contact Number: - | | | | | Signed By: | |

| Hazard(s) | Risk Register | People at Risk / Systems at Risk | Precautions/Controls required to reduce the level of risk to the lowest practical level | | Residual Risk | | |
|-------------------------------|---------------|---|---|---|---------------|----------|-------------|
| | | | Control Measures | Monitoring Measures | Probability | Severity | Risk Rating |
| Power - Outages | 1-7 | Who: people working within the server room or data centre IT space those reliant on the IT services provided including employees, clients, suppliers and subcontractors. How: without suitable power protection there will be an IT service loss if the mains power supply fails and need to evacuate the room / building if during nighttime / dark hours. | Uninterruptible Power Supplies (UPS) with sufficient battery backup and working life to provide protection until systems can be safely powered down or a local standby power generator starts or the mains power supply is restored. Smart or Intelligent Power Distribution Units (PDUs) with individual outlet monitoring and reboot switching in order to assist capacity planning and control. Standby Power Generators to provide a source of power to the UPS system during prolonged power outages with a fuel tank sufficient for at least 8hours runtime. Emergency lighting systems and route indications to ensure safe evacuation of the building if there is loss of the local lighting system or natural daylight. | The use of SNMP traps and control software to monitor information over an IP/network from the connected devices including UPS and PDUs. Connection using signal contacts of the emergency lighting system and automatic mains failure (AMF) panel to a building management system, if installed. Connection to a local environment monitoring device with sufficient digital input capabilities and one that can issue alerts (email or SMS) to a distribution list. Regular maintenance and inspection and testing of the power protection plan. | 1 | 1 | 1 |
| Cooling - Failure or Overload | 8-9 | Who: people working within the server room or data centre IT space those reliant on the IT services provided including employees, clients, suppliers and subcontractors. How: without adequate cooling there could be a significant and rapid rise in server rack temperatures if an air conditioner fails, leading to a potential fire risk and IT system downtime. | Air conditioning installed of a sufficient capacity to cool the total IT load with N+X redundancy allowing for the loss of at least one cooling unit. | The use of SNMP traps and control software to monitor information over an IP/network from the air conditioning system. Connection using signal contacts to a building management system, or local environment monitoring device with temperature and humidity sensors which can issue alerts (email or SMS) to a distribution list. Regular maintenance and inspection of the cooling system. | 1 | 1 | 1 |
| Fire - Break out | 10-13 | Who: people working within the server room or data centre IT space and the rest of the building. How: burns, smoke inhalation and potential threat to life. | Fire suppression system installed to protect the room and server racks. | Connection to a fire alarm panel and building management system for remote monitoring of in room smoke detectors. Use of an environment monitoring device with remote reporting. Regular cleaning and removal of waste and packaging. Routine annual maintenance and inspection including room integrity testing. | 1 | 1 | 1 |

| Hazard(s) | Risk Register | People at Risk / Systems at Risk | Precautions/Controls required to reduce the level of risk to the lowest practical level | | Residual Risk | | |
|---------------|---------------|--|---|---|---------------|----------|-------------|
| | | | Control Measures | Monitoring Measures | Probability | Severity | Risk Rating |
| Water Leakage | 14-15 | Who: people working within the server room or data centre IT space and the rest of the building. How: water leakage creates a potential for electric shock or an electrical fire. | Water leakage monitoring using sensors installed under a raised access floor, underneath air conditioning units and alongside any water carrying pipework in the room that cannot be removed. | Connection to a local environment monitoring device with reporting to local management software over an IP/network connection or reporting to an HTTPS internet based cloud portal that can send out alerts to email and SMS distribution lists for water leakage alarms. | 1 | 1 | 1 |

IMSFMS030-01

Notes:

This template is provided as a sample of items that could be covered by a server room risk assessment and is intended as an example only.
Risk assessments must be carried out and completed by suitable trained personnel and in line with local health & safety regulations and statutory requirements.

| Probability | Severity | Risk Ranking (PxS) |
|-------------------|--------------------|---------------------|
| 1 Highly Unlikely | 1 Trivial | 1 No action |
| 2 Unlikely | 2 Minor Injury | 2-5 Low priority |
| 3 Possible | 3 Over 3day injury | 6-9 Medium priority |
| 4 Probable | 4 Major injury | 10-14 High priority |
| 5 Certain | 5 Incapacity/death | =>15 Urgent action |

| Number | Risk(s) |
|--------|---|
| 1 | Mains power supply failure requiring the IT servers and network to use uninterruptible power to maintain availability. |
| 2 | UPS overloaded and goes to bypass to protect itself when no mains power supply is present and the load is dropped. |
| 3 | UPS battery cannot support the runtime required. |
| 4 | UPS monitoring and control software not set up to initiate an orderly system shutdown of the servers and IT network. |
| 5 | Critical IT loads not connected to the PDUs powered from an uninterruptible power supply are dropped. |
| 6 | Standby power generator fails to start due to a flat starter battery or open-circuit breaker. |
| 7 | Emergency lighting system fails due to batteries not holding their electrical charge. |
| 8 | Cooling system overload due to higher outside ambient temperatures. |
| 9 | Cooling system with reduced capacity due to an internal fault or blocked filters |
| 10 | Fire risk from waste materials left in the room due to a poor cleaning regime. |
| 11 | Fire risk from packaging materials stored in the room which should have been removed for recycling. |
| 12 | An electrical fire due to overloaded, corroded or poorly installed or maintained electrical infrastructure. |
| 13 | Explosions (e.g. from chemicals or dust or fuel in generators). |
| 14 | Water leaks into the server room from a local source including local building pipework or a local flood. |
| 15 | Water leakage within the room caused by a failure in a liquid cooling system or failure in the air conditioning coolant pipework. |
| 16 | Add further risks to the register as identified. |
| 17 | |
| 18 | |
| 19 | |
| 20 | |