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FREE RESOURCE — GUIDE

Server Room Relocation Guide

Planning and executing a server room move with zero data loss. This guide covers risk assessment, physical planning, migration sequencing, and post-move validation for on-premise infrastructure.

0	48hr	3x	Free
TARGET DATA LOSS	TYPICAL MOVE WINDOW	BACKUP BEFORE MOVING	EXPERT GUIDANCE

When to Use This Guide

Use this guide when physically relocating servers, network equipment, or comms rooms to a new location. Whether you are moving within the same building or to a new site, the principles of careful planning, redundant backups, and methodical execution apply.

1 Pre-Move Risk Assessment

Identify and mitigate all risks before committing to the server room move.

A server room relocation is one of the highest-risk IT activities you can undertake. Equipment failure, data loss, extended downtime, and connectivity issues are all real possibilities. Thorough risk assessment and mitigation planning are essential.

- **Hardware age and condition:** Equipment older than 5 years has a significantly higher failure rate when powered down and moved. Consider replacing aging hardware before the move rather than risking failure during relocation.
- **Data protection:** Perform a minimum of 3 independent backups before the move — on-site, off-site, and cloud. Verify all backups with test restores. Maintain offline backup copies that travel separately from the equipment.
- **Downtime impact:** Calculate the business cost of downtime per hour. This drives decisions about move timing (weekend vs. weeknight), migration approach (lift-and-shift vs. parallel infrastructure), and contingency investment.
- **Environmental risks:** Temperature, humidity, vibration during transport, static electricity, and power surges during reconnection can all damage sensitive equipment. Plan appropriate mitigations for each.
- **Dependencies:** Map all system dependencies before the move. A forgotten dependency (e.g., an application that calls a hardcoded IP address) can cause cascading failures after reconnection.

Critical: Never Move Without Verified Backups

Before disconnecting any server, verify that you have at least 3 independent backup copies and that you have successfully test-restored from at least one. If backup verification fails, postpone the move until it is resolved.

2 New Site Preparation

Ensure the new server room meets all requirements before any equipment arrives.

The new server room must be fully prepared and tested before move day. Last-minute discoveries about power capacity, cooling, or cabling will cause costly delays and potentially force you to operate in a degraded state.

Power Requirements

- → **Dedicated circuits:** Servers require dedicated electrical circuits, ideally 2 independent feeds for redundancy. Calculate total power draw from all equipment and add 30% headroom for future growth.
- → **UPS systems:** Install and test uninterruptible power supplies before the move. Size UPS to provide minimum 15–30 minutes of runtime — enough to safely shut down all systems during a power cut.
- → **PDUs:** Install rack-mounted power distribution units with monitoring capability. Dual PDUs per rack provide redundancy.

Cooling & Environment

- → **Cooling capacity:** Calculate heat output (BTU) from all equipment and ensure the new room's cooling system exceeds this by at least 30%. Server rooms should maintain 18–24°C.
- → **Environmental monitoring:** Install temperature, humidity, and water leak sensors connected to your alerting system before equipment arrives.
- → **Fire suppression:** Ensure appropriate fire suppression is installed (gas-based, not water sprinklers). Verify smoke detection covers all areas including under raised floors and above ceiling tiles.

Physical Security & Access

- → **Access control:** Install keycard or biometric access. Limit access to authorised IT personnel only.
- → **CCTV:** Install cameras covering the server room entrance and interior.
- → **Cable management:** Install structured cabling, patch panels, and cable management before equipment arrives. Label everything.

3 Migration Sequencing

Plan the exact order in which systems are shut down, moved, and brought back online.

The migration sequence must respect system dependencies. Core infrastructure (firewalls, switches, domain controllers, DNS) must be operational before dependent systems (file servers, application servers, databases) are brought online.

PHASE	SYSTEMS	SEQUENCE	EST. DURATION
1 — Core Network	Firewall, core switches, ISP connection	First to move, first to test	2–4 hours
2 — Directory & DNS	Domain controllers, DNS, DHCP	Immediately after network	1–2 hours
3 — File & Print	File servers, print servers, NAS	After directory services confirmed	2–3 hours
4 — Applications	Line-of-business apps, databases, ERP	After file services confirmed	3–6 hours
5 — Communications	Phone system, video conferencing	After core network confirmed	1–2 hours
6 — Secondary	Development servers, test environments, non-critical systems	After all production systems	2–4 hours

Consider a Parallel Approach

Where budget permits, build the new server room infrastructure in parallel with the existing one. This allows testing at the new site before cutover, reduces the downtime window, and provides a rollback path. Cloud migration during the move can eliminate the need to physically relocate some servers entirely.

4 Move-Day Execution & Post-Move Validation

Execute the plan methodically and validate every system before declaring the move complete.

Before disconnecting any equipment: take photographs of all cable connections (front and rear of every rack), record all IP configurations, and label every cable. This documentation is invaluable if anything needs to be reconnected in a specific way.

Post-Move Validation Checklist

- [ ] All servers powered on and accessible on the network
- [ ] Domain controllers replicating successfully
- [ ] DNS resolution working for internal and external queries
- [ ] All file shares accessible with correct permissions
- [ ] Line-of-business applications functioning and tested by key users
- [ ] Backup jobs configured and first post-move backup completed successfully
- [ ] Monitoring systems active and receiving data from all devices
- [ ] UPS tested — simulate power cut and verify clean failover
- [ ] Environmental monitoring active and alerting correctly
- [ ] Physical security (access control, CCTV) operational

Notes

Need Server Room Relocation Support?

Our engineers have relocated hundreds of server rooms with zero data loss. Let us plan and execute your move.

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