

# Disaster Recovery

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## Introduction to IT Security

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# What do we mean by disaster?

By *disaster*, we mean an event that stops or severely hinders an organisation from conducting its business.

- Flood, earthquake, etc.
- Building fire
- Major security breach
- Network or power outage

Since there are many types of disasters, there is no single solution to the problem of disaster response and recovery.

# You must have DR plans

- DR planning is an organisation-wide issue
- ICT assets are typically a critical (and difficult) component of DR plans

# First steps: risk analysis

- Identify possible disasters of concern
- Prioritise
- Set budget

## Next steps: risk reduction

It is generally very cost-effective to take steps to reduce the risks of disasters striking in the first place.

- Building planning
- Fire suppression
- Earthquake strengthening
- Physical and network security
- Power conditioning and supply
- Network redundancy
- Deal with well-prepared suppliers and service providers

## Next steps: damage mitigation

We can't completely prevent disasters, so we plan to reduce the harm caused when they occur.

- Backup your data
- Prepare a list of needed hardware and have a plan to get it
- Prepare a backup location(s) with adequate space, power, and connectivity
- Have the right service contracts in place
- Make sure that your people know the plan

## More on backups

- Reliable backups are critical to a wide range of DR scenarios
- You must move your backed-up data to a secure offsite location
- If you need special hardware to restore from backup (e.g., a high-end tape drive), then you need that hardware in secure offsite location.
- There are a number of service providers who offer reasonably priced backup service
- You must document your restoration procedure and test it regularly.



# Practice

The final step in DR preparation is to conduct drills in which you carry out your DR plans.

This can, and should, span a range of activities from table top simulations to full scale rehearsals.