Network redundancy

Network redundancy refers to how our technological system behaves when a unit fails or a wire breaks. How fault-tolerant should the system be? Redundancy can be classified in various ways, and one of the easiest methods to evaluate it is to divide system solutions into four levels.

- **S1**: No redundancy management. If it fails, the system fails, such as in the case of a wire break.
- **S2**: Media redundancy; if a wire breaks, the secured subsystems stay operational. If a sub-unit fails, replacing it may not be possible at this level.
- **R1**: Media and unit redundancy; the secured network components stay operational during a wire break, and there's a possibility of continued operation even if sub-units fail.
- **R2**: Maximum level of redundancy.