# Infrastructure design [prototype] IFDN

Designing and planning IT infrastructure systems to meet business requirements, ensuring scalability, reliability, security, and alignment with strategic objectives.

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| **Guidance Notes:**  Infrastructure design involves developing architectural frameworks for the technology environment including hardware, software, network components, and cloud services. This skill ensures that infrastructure solutions support current and future business needs. It includes creating design specifications, integrating systems, and aligning designs with organisational goals and standards. Infrastructure design supports the alignment of individual system designs to ensure compatibility, performance, and security across the IT environment.  Activities may include, but are not limited to:   * developing detailed infrastructure design specifications and diagrams * ensuring compatibility and integration between different infrastructure components * designing systems for scalability, performance, and reliability * incorporating security measures into infrastructure design * ensuring designs adhere to industry standards and regulatory requirements * collaborating with stakeholders to align infrastructure design with business objectives * maintaining comprehensive documentation of the design process and decisions * integrating cloud services into the infrastructure design. |

## Level 2

Assists in developing preliminary infrastructure design specifications under routine supervision.   
Uses standard design tools and methodologies to contribute to infrastructure design activities.   
Helps draft design documents and diagrams. Documents design-related issues.

## Level 3

Performs varied infrastructure design tasks, including complex and non-routine assignments, using standard methods.   
Develops design specifications and diagrams for infrastructure components. Ensures compatibility and integration of hardware, software, network elements, and cloud services.  
Collaborates with others to align infrastructure design with organisational objectives and resolve design issues.   
Suggests improvements to enhance infrastructure performance and reliability.

## Level 4

Leads the design of complex infrastructure systems to deliver comprehensive design solutions.   
Develops detailed architectural frameworks and ensures integration of all infrastructure components, including cloud services.  
Provides guidance on best practices and design standards. Reviews and validates design specifications and documentation.   
Ensures that designs are scalable, reliable, and secure, aligning with business and technical requirements.

## Level 5

Manages the design of infrastructure from analysis to execution and evaluation.   
Accountable for achieving design objectives and ensuring alignment with organisational goals and the effective integration of infrastructure components and systems. Provides authoritative guidance on design practices and methodologies.  
Evaluates new technologies and their applicability to the organisation's needs. Develops and enforces design standards and best practices, ensuring consistent and high-quality design outcomes.

## Level 6

Develops and drives adoption of and adherence to organisational policies, standards, guidelines, and methods for infrastructure design.  
Makes high-level infrastructure design decisions that solutions that drive business value.   
Collaborates with senior stakeholders to align design projects with organisational objectives.   
Provides strategic oversight and guidance, ensuring that infrastructure designs are forward-looking, scalable, and secure.   
Accountable for the overall success of infrastructure design initiatives.