

What is ITIL? Today, ITIL no longer refers to "Information Technology Infrastructure Library"—instead, it is a standalone term. ITIL has matured significantly since it was introduced in the late 20th century as a series of books that spanned more than 30 volumes. Around 2000, the second version of ITIL streamlined these publications by grouping them into sets that mapped to different aspects of IT management, services, and applications. Around this time, Microsoft standardized on ITIL to help develop its Microsoft Operations Framework. One of the most essential parts of ITIL is the configuration management database (CMDB), which provides the central authority for all components—including services, software, IT components, documents, users, and hardware—that must be managed to deliver an IT service. The CMDB tracks the location of, and changes to, all of these assets and processes, along with their attributes and relationships to each other. Adhering to ITIL principles helps ensure you can get to the root cause of problems in your environment as quickly as possible and that you have the right visibility into the systems and people to prevent future problems.

Foundations The ITIL framework is administered and updated by AXELOS. ITIL version 3, released in 2007, is the current version of the standard. Version 3 improved on the previous version of ITIL by adding process improvement, a stronger lifecycle approach, and more processes for aligning business and IT. At this writing, AXELOS is updating ITIL to version 4, which will focus on fostering digital transformation, artificial intelligence, cloud computing, and DevOps. Some modules of ITIL 4 have already been released, with the rest planned to roll out during 2019. The Foundation level of ITIL 4 certification is already available, and the rest is coming during the second half of 2019.

Five key stages, comprising 26 processes

1. **Service Strategy** This stage focuses on the ITIL service lifecycle and describes how to design, develop, and implement IT Service Management. It includes the following processes:
 - Strategy Management for IT Services: Assessment and measurement of IT strategy
 - Service Portfolio Management: Defining and documenting IT services
 - Financial Management for IT Services: Determining IT service costs and budgeting
 - Demand Management: Forecasting future demand for IT services and budgeting resources
 - Business Relationship Management: Managing the feedback and improvement of the IT services
2. **Service Design** This stage describes how to design services and processes. Processes include the following:
 - Service Catalog Management: Define services available in a service catalog
 - Availability Management: Processes around management and monitoring of IT services
 - Information Security Management: Creation, management, and assessment of Information Security services
 - Service Level Management: Creation, management, and feedback process for SLA's
 - Capacity Management: Monitoring and optimizing the service capacities
 - Design Coordination: Coordination of process and policy designs
 - Supplier Management: Selection and management of vendors as well as performance monitoring
 - IT Service Continuity Management: Development, implementation, and maintenance of BC/DR services
3. **Service Transition** This stage explains how to manage the transition of a new or changed service with a focus on ensuring that all service management processes balance. It includes the following processes:
 - Transition Planning and Support: Responsible for moving a new service into production
 - Change Management: Overall responsibility of change requests and risk management of change
 - Change Evaluation: Measure the impact and performance increase/decrease of a change
 - Release and Deployment Management: Codifies the lifecycle of IT service updates
 - Service Asset and Configuration Management: Monitors the

asset lifecycle of IT services and related hardware Service Validation and Testing: Tests the impact and benefit of an IT service before release Knowledge Management: Responsible for documentation and curation of support documentation for the IT services 4. Service Operation This stage guides you in ways to ensure that services are delivered and are running smoothly and reliably. It includes the following: Access Management: In relation to data and physical access, controls the rights assignments of people Event Management: Coordinates with incident and problem management to manage the entire event Service Request Fulfillment: Manages the lifecycle of a service request, from definition to closing it out Incident Management: Triage and resolution of individual service disruption events Problem Management: Defines causal relationships between incidents and finds/resolves root cause issues 5. Continual Service Improvement This stage covers how to re-align IT services as business needs change. CSI consists of seven steps that cover what can and should be measured; gathering, processing and analyzing data; and presenting and using information. Problem management ITIL makes a distinction between "incident management" and "problem management." ITIL stands for Information Technology Infrastructure Library.