

# Table of Contents

Software maintenance

Software Configuration Management (SCM)

Disciplines & Methodologies

Tools & Technologies

Links

3

5

5

6

6



# Software maintenance

Software maintenance is an important aspect of the software development life cycle (SDLC), as it ensures that software programs continue to run properly and satisfy the changing needs of the business. Software maintenance is an important process in ALM (Application Lifecycle Management) and DevOps that helps to ensure that software is continuously updated, maintained, and enhanced over time.

ALM and DevOps are concerned with continuous software delivery and the use of automation tools to speed up the software development process. This includes using automated testing, continuous integration, and continuous deployment to ensure that software is built and distributed as quickly and efficiently as possible.

One of the primary advantages of ALM and DevOps software maintenance is that it helps to ensure that software is always up to date and working efficiently. This can help to avoid downtime and guarantee users have access to the most up-to-date features and capabilities.

Another advantage of ALM and DevOps software maintenance is that it can help to improve the quality of software applications over time. Developers can find and repair bugs and performance issues before they become serious problems by continuously monitoring and enhancing the product.

Furthermore, ALM and DevOps software maintenance can help to lower the expenses associated with software development and maintenance. Developers can save time and resources by automating the maintenance process, as well as reducing the possibility of faults or mistakes in the product.

Overall, software maintenance is an important process in ALM and DevOps since it helps to ensure that software applications are constantly updated, maintained, and enhanced over time. Developers can save time, cut expenses, and improve the overall quality and performance of software systems by leveraging automation technologies and processes.

[https://en.wikipedia.org/wiki/Software\\_maintenance](https://en.wikipedia.org/wiki/Software_maintenance)

- ITIL
- MMM
- PM3
- ITSM

## What is software maintenance?

Software maintenance is the process of modifying, updating, and improving software to ensure that it continues to meet the desired requirements and quality standards over time.

## Why is software maintenance important?

Software maintenance is important because it helps to keep software up-to-date, ensure that it continues to meet the needs of users and stakeholders, and reduce the risk of software failure.

## **What are some common types of software maintenance?**

Some common types of software maintenance include corrective maintenance (fixing defects and errors), adaptive maintenance (updating software to accommodate changes in the environment), perfective maintenance (improving software performance and usability), and preventive maintenance (taking proactive steps to prevent future problems).

## **What is the difference between software maintenance and software development?**

Software maintenance is focused on modifying and improving existing software, while software development is focused on creating new software from scratch.

## **What are some common challenges of software maintenance?**

Common challenges of software maintenance include maintaining the integrity of the software, dealing with technical debt, managing the complexity of the software, and ensuring that maintenance activities do not introduce new defects or errors.

## **What is a software maintenance plan?**

A software maintenance plan is a document that outlines the goals, objectives, scope, and resources of a software maintenance project. It helps to ensure that maintenance activities are planned, organized, and executed effectively.

## **What is regression testing in software maintenance?**

Regression testing is the process of retesting software after modifications have been made, to ensure that the modifications have not introduced new defects or errors.

## **What is the role of documentation in software maintenance?**

Documentation is important in software maintenance because it provides a record of the software's design, functionality, and maintenance history. This can help developers and maintainers to understand the software better, identify potential problems, and make informed decisions about maintenance activities.

## **What is a software maintenance release?**

A software maintenance release is a version of software that includes bug fixes, minor updates, and other modifications that are intended to improve the software's performance, reliability, and usability.

## What is the difference between corrective and adaptive maintenance?

Corrective maintenance is focused on fixing defects and errors in software, while adaptive maintenance is focused on modifying software to accommodate changes in the environment, such as changes in hardware, operating systems, or business processes.

## Software Configuration Management (SCM)

See [Software configuration management](#)

---

Snippet from [Wikipedia](#): **Software maintenance**

**Software maintenance** in software engineering is the modification of a software product after delivery to correct faults, to improve performance or other attributes.

A common perception of maintenance is that it merely involves fixing defects. However, one study indicated that over 80% of maintenance effort is used for non-corrective actions. This perception is perpetuated by users submitting problem reports that in reality are functionality enhancements to the system. More recent studies put the bug-fixing proportion closer to 21%.

[Creative Commons Attribution-Share Alike 4.0](#)

## Disciplines & Methodologies

- [CloudOps](#)
- [Configuration management](#)
- [Continuous configuration automation](#)
- [Customer relationship management](#)
- [Database Automation](#)
- [DevOps](#)
- [DevOps toolchain](#)
- [Information Management](#)
- [Information security](#)
- [Installation](#)
- [ITSM](#)
- [Program management](#)
- [Solution Architecture Document \(SAD\)](#)
- [Software asset management \(SAM\)](#)
- [Software configuration management \(SCM\)](#)
- [Software deployment](#)
- [Software development process](#)
- [Software documentation](#)
- [Static program analysis](#)

## Tools & Technologies

- [Apache Archiva](#)
- [Azure Monitor](#)
- [Bash](#)
- [CloudRepo](#)
- [Cloudsmith](#)
- [Confluence](#)
- [Docker](#)
- [Dynatrace](#)
- [Elasticsearch](#)
- [GitHub Learning Lab](#)
- [GitLab](#)
- [Grafana](#)
- [Grunt](#)
- [Honeycomb](#)
- [HP ALM](#)
- [Icinga](#)
- [Inedo ProGet](#)
- [inspectIT Ocelot](#)
- [Instana](#)
- [Jfrog Artifactory](#)
- [Kubernetes](#)
- [LogicMonitor](#)
- [Logscape](#)
- [Netdata](#)
- [New Relic](#)
- [npm](#)
- [Pepperdata](#)
- [PowerShell](#)
- [Prometheus](#)
- [Rally Software](#)
- [Rational solution for CLM](#)
- [Rational Team Concert](#)
- [Seerene](#)
- [ServiceNow](#)
- [SonarQube](#)
- [Stackify](#)
- [Target Process](#)
- [Team Foundation Server](#)
- [TeamForge](#)
- [Helix ALM \(TestTrack\)](#)
- [VSALM](#)
- [Visual Studio Team Services](#)

## Links

- [Comparison of open-source configuration management software](#)
- [Comparison of version-control software](#)

- [Devhints](#)
- [GeeksforGeeks](#)
- [Integrated ALM Tools Are Fundamental to Success](#)
- [Knowledge Management Tools](#)
- [EITBOK](#)
- [Feature Flags](#)
- [Git](#)
- [IEEE software life cycle](#)
- [Information Lifecycle Management \(ILM\)](#)
- [ISO 9000](#)
- [Issue tracking system](#)
- [LAN](#)
- [NOC](#)
- [Representational State Transfer \(REST\)](#)
- [Software versioning](#)
- [Technical Debt](#)

## ## ToDo ##

-  - [Support Us...](#) →
- [Bosun](#)
- [CAST Application Engineering Dashboard](#)
- [Cacti](#)
- [Check\\_MK](#)
- [Ganglia](#)
- [Grafana](#)
- [Graphite](#)
- [Icinga](#)
- [Librato](#)
- [Riemann](#)
- [Rollbar](#)
- [SPM](#)
- [Sensu](#)
- [Sentry](#)
- [Spotinst](#)
- [StackState](#)
- [Tableau](#)
- [jKool](#)
- [Corrective Maintenance](#)
- [Adaptive Maintenance](#)
- [Perfective Maintenance](#)
- [Preventive Maintenance](#)
- [Software Maintenance Process](#)
- [Software Maintenance Models](#)
- [Software Maintenance Metrics](#)
- [Software Maintenance Cost Estimation](#)
- [Software Maintenance Tools](#)
- [Software Maintenance Best Practices](#)

- Software Maintenance Planning
- Software Maintenance Documentation
- Software Maintenance Standards
- Software Maintenance Techniques
- Software Maintenance Optimization
- Software Maintenance Automation
- Software Maintenance Testing
- Software Maintenance Performance Monitoring
- Software Maintenance Knowledge Management
- Software Maintenance Knowledge Transfer
- Legacy System Maintenance
- Software Retirement
- Software Reengineering
- Software Refactoring
- Software Evolution

[operations](#), [skill](#), [ops](#)

From:

<https://www.almbok.com/> - **ALMBoK.com**

Permanent link:

<https://www.almbok.com/maintenance/maintenance>

Last update: **2023/05/01 18:15**

