

CI/CD

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WHAT IS CI/CD?

Continuous integration/continuous delivery (CI/CD) is a software development practice that combines development and operations teams and their day-to-day tasks. It applies automation to developing, testing, and delivering applications.

- **Continuous integration (CI)** is a software development process where teams integrate code early and often into a central repository where they can run frequent tests and validate changes.
- **Continuous Delivery (CD)** is the practice of getting all updates, fixes, features, and configuration changes either into production or into the hands of end-users as quickly (and safely) as possible.



BENEFITS OF CI/CD

- 1. REDUCE COST**
- 2. AVOID COST**
- 3. INCREASE REVENUE**
- 4. PROTECT REVENUE**

BENEFITS OF CI/CD

1. REDUCE COST

**CATCH COMPILE ERRORS AFTER
MERGE**

**LESS DEVELOPER TIME ON ISSUES
FROM NEW DEVELOPER CODE**

**AUTOMATE INFRASTRUCTURE
CLEANUP**

**LESS INFRASTRUCTURE COSTS
FROM UNUSED RESOURCES**

BENEFITS OF CI/CD

2. AVOID COST

CATCH UNIT TEST FAILURES

**LESS BUGS IN PRODUCTION AND
LESS TIME IN TESTING**

**DETECT SECURITY
VULNERABILITIES**

**PREVENT EMBARRASSING OR
COSTLY SECURITY HOLES**

**AUTOMATE INFRASTRUCTURE
CREATION**

**LESS HUMAN ERROR, FASTER
DEPLOYMENTS**

BENEFITS OF CI/CD

3. INCREASE REVENUE

**FASTER AND MORE FREQUENT
PRODUCTION DEPLOYMENTS**

**NEW VALUE-GENERATING
FEATURES RELEASED MORE
QUICKLY**

**DEPLOY TO PRODUCTION
WITHOUT MANUAL CHECKS**

LESS TIME TO MARKET

BENEFITS OF CI/CD

4. PROTECT REVENUE

AUTOMATED SMOKE TESTS

**REDUCED DOWNTIME FROM A
DEPLOY-RELATED CRASH OR
MAJOR BUG**

**AUTOMATED ROLLBACK
TRIGGERED BY JOB FAILURE**

**QUICK UNDO TO RETURN
PRODUCTION TO WORKING
STATE**