# Configuration Items (CIs)

## 🔹 Definition

**# Source**: **Chatgpt (GPT-5-Standard) at [8/18/2025]**

A **Configuration Item (CI)** is **any component, document, or artifact** that is placed under configuration management control because it is important to the success, quality, or traceability of the project.

Think of them as the **"things we must track, version, and manage"** during the software development and testing process.

## **🔑 Key Characteristics of a CI**

**# Source**: **Chatgpt (GPT-5-Standard) at [8/18/2025]**

1. **Unique Identification** → Each CI has a unique ID or name (so no confusion).
2. **Version Controlled** → Changes are tracked (who changed it, when, why).
3. **Traceable** → Linked to requirements, design, tests, and defects.
4. **Baselined** → Approved versions are fixed as reference points.

## **📂 Examples of Configuration Items**

### **1. Software Artifacts**

**# Source**: **Chatgpt (GPT-5-Standard) at [8/18/2025]**

* Source code files (Java, Python, C# programs).
* Libraries, APIs, executables.
* Database schemas.

### **2. Documentation**

**# Source**: **Chatgpt (GPT-5-Standard) at [8/18/2025]**

* Requirement documents (SRS, BRD).
* Design documents (HLD, LLD).
* Test plans, test cases, test scripts.
* User manuals.

### **3. Test Assets**

**# Source**: **Chatgpt (GPT-5-Standard) at [8/18/2025]**

* Test data.
* Automated test scripts.
* Test environments (VMs, containers, servers).

### **4. Project Management Artifacts**

**# Source**: **Chatgpt (GPT-5-Standard) at [8/18/2025]**

* Schedules, work breakdown structures.
* Risk registers.

## **🏗️ Example in Real Life**

**# Source**: **Chatgpt (GPT-5-Standard) at [8/18/2025]**

Suppose you’re testing a **Banking App**:

* **CIs** could include:  
  + Requirement doc: "User must log in with OTP."
  + Test case: "Verify login with OTP works."
  + Test script: Selenium automation for OTP login.
  + Source code: login.java.
  + Test data: Sample OTP values in DB.
* All of these are tracked as **CIs** so testers, developers, and managers know exactly which version they are working on.

## **🎯 Why Are CIs Important?**

**# Source**: **Chatgpt (GPT-5-Standard) at [8/18/2025]**

* Prevents confusion (e.g., two teams testing different versions).
* Ensures **consistency and accuracy**.
* Makes rollback possible (go back to a stable version if needed).
* Supports **audits, reviews, and compliance**.

👉 **In short:** **Configuration Items (CIs)** = The building blocks of a project (code, documents, test cases, environments, data, etc.) that are placed under **version control and management** to ensure quality, consistency, and traceability.