# CWE Detail – CWE-587

## Description

The product sets a pointer to a specific address other than NULL or 0.

## Extended Description

Using a fixed address is not portable, because that address will probably not be valid in all environments or platforms.

## Threat-Mapped Scoring

Score: 0.0

Priority: Unclassified

## Modes of Introduction

**•** Implementation: N/A

## Common Consequences

**•** Impact: Execute Unauthorized Code or Commands — Notes: If one executes code at a known location, an attacker might be able to inject code there beforehand.

**•** Impact: DoS: Crash, Exit, or Restart, Reduce Maintainability, Reduce Reliability — Notes: If the code is ported to another platform or environment, the pointer is likely to be invalid and cause a crash.

**•** Impact: Read Memory, Modify Memory — Notes: The data at a known pointer location can be easily read or influenced by an attacker.

## Potential Mitigations

**•** Implementation: Never set a pointer to a fixed address. (Effectiveness: N/A)

## Applicable Platforms

**•** C (Class: None, Prevalence: Undetermined)

**•** C++ (Class: None, Prevalence: Undetermined)

**•** C# (Class: None, Prevalence: Undetermined)

**•** None (Class: Assembly, Prevalence: Undetermined)

## Demonstrative Examples

**•** The same function may not always be found at the same memory address. This could lead to a crash, or an attacker may alter the memory at the expected address, leading to arbitrary code execution.