

Components

Component

Module

Software Package (software development kit)

Web Service

Main goal is to encapsulate functions and data contained within.

Component

Communicate via interfaces

- Provide
- Require

Objects or Collections of Objects

Balance on Modularity and Re-use, proper deconstruction into components can decrease coupling.

Component

Keep objects in your components cohesive!

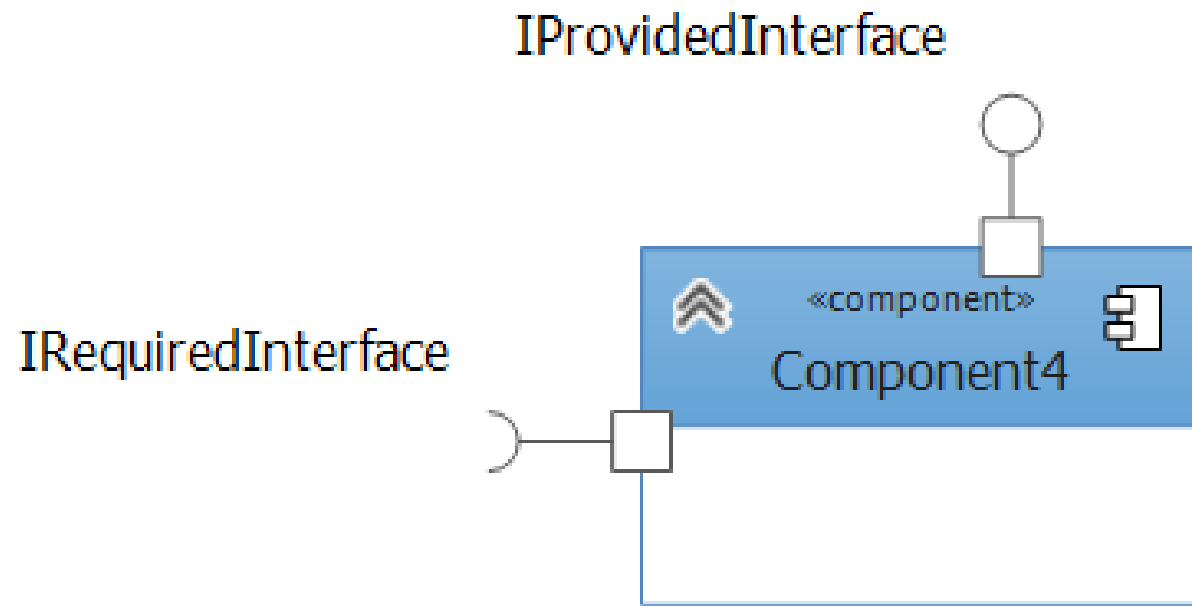
These objects should share a common function

UML Component Diagrams

Model sub-systems of the software.

Help show what interfaces are required and provided.

Components are like black boxes, you only care what and how to pass data in and out of them.



cmp ExampleDiagram

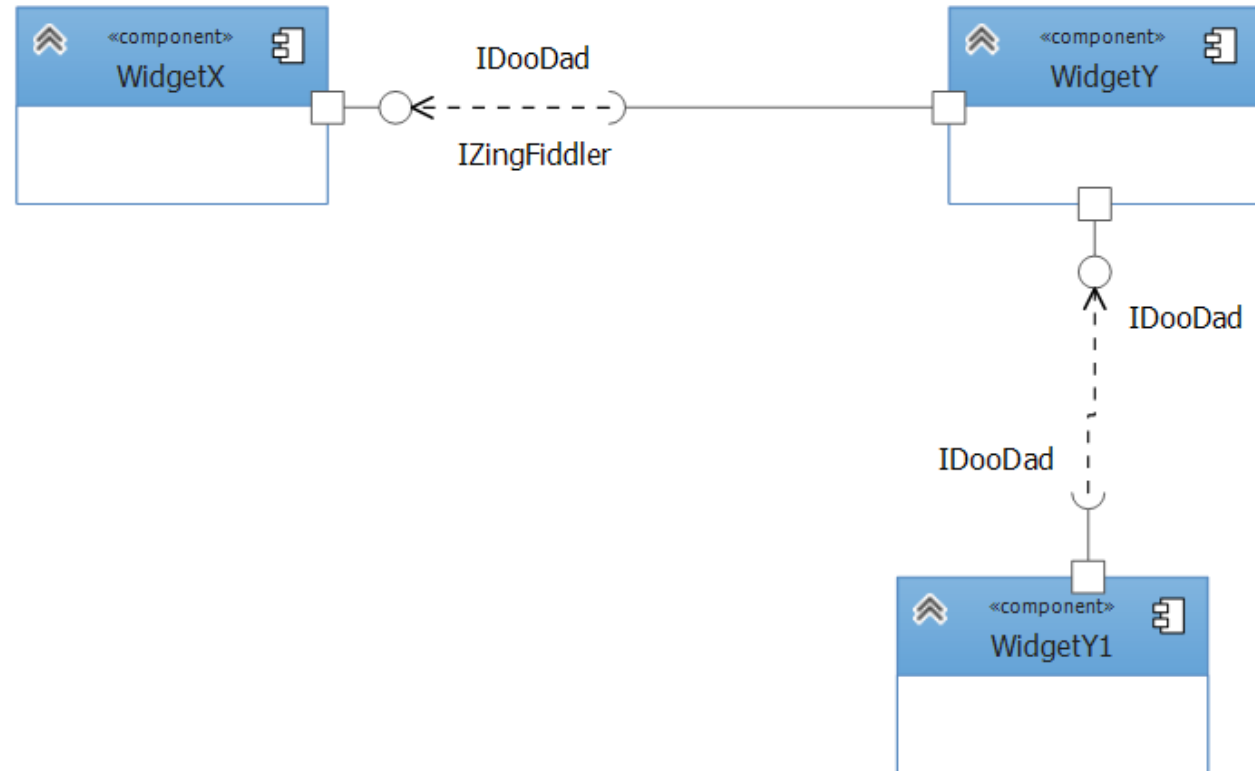


Diagram Notes

Part

- Attribute of a component whose type is another component

Dependency

- Required interface can be satisfied by a provided interface of another

Delegation

- Demonstrates that a provided interface can be relayed to a part

Generalization

- A component is inherited from another, and thus, so are its interfaces

