

Programowanie w .NET – IoC

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Wersja 1.0



- Historia IoC
- Co to jest IoC
- Castle Windsor
- Ćwiczenie

Model klasyczny

```
public class MyService
{
    MyLogger _l;
    MyDatabase _d;
    MyValidator _v;

    public MyService()
    {
        _l = new MyLogger();
        _d = new MyDatabase();
        _v = new MyValidator();
    }

    ...
}
```

Service Locator

```
public class MyService
{
    MyLogger _l;
    MyDatabase _d;
    MyValidator _v;

    public MyService()
    {
        _l = ServiceLocator.Logger;
        _d = ServiceLocator.Database;
        _v = ServiceLocator.Validator;
    }
}
```

```
public static class ServiceLocator
{
    public static MyLogger Logger { get; set; }
    public static MyDatabase Database { get; set; }
    public static MyValidator Validator { get; set; }

    static ServiceLocator()
    {
        Logger = new MyLogger();
        Database = new MyDatabase();
        Validator = new MyValidator();
    }
}
```

Inversion Of Control

```
public class MyService
{
    ILogger _l;
    IDatabase _d;
    IValidator _v;

    public MyService(ILogger l, IDatabase d, IValidator v)
    {
        _l = l;
        _d = d;
        _v = v;
    }
}
```

```
_container = new WindsorContainer();
_container.Register(Component.For<MyService>());
```

```
var service = _container.Resolve<MyService>();
```

Windsor 101

```
_container.Register(Component.For<IDatabase>().ImplementedBy<MyDatabase>());  
_container.Register(Component.For<IDatabase>().Forward<ISecordInterface>().ImplementedBy<MyDatabase>());  
_container.Register(Component.For<IDatabase>().UsingFactoryMethod(c => new MyDatabase()));  
_container.Register(Component.For<IDatabase>().ImplementedBy<MyDatabase>().Named("Baza"));  
  
var d1 = _container.Resolve<IDatabase>();  
var d2 = _container.Resolve<IDatabase>("Baza");
```

<https://github.com/castleproject/Windsor/blob/master/docs/README.md>

Q&A

- Pytania?

Zadanie

- Zmienić kod, tak żeby spełniał założenia IoC
- Dla chętnych: Logger powinien wyświetlać numer żądania