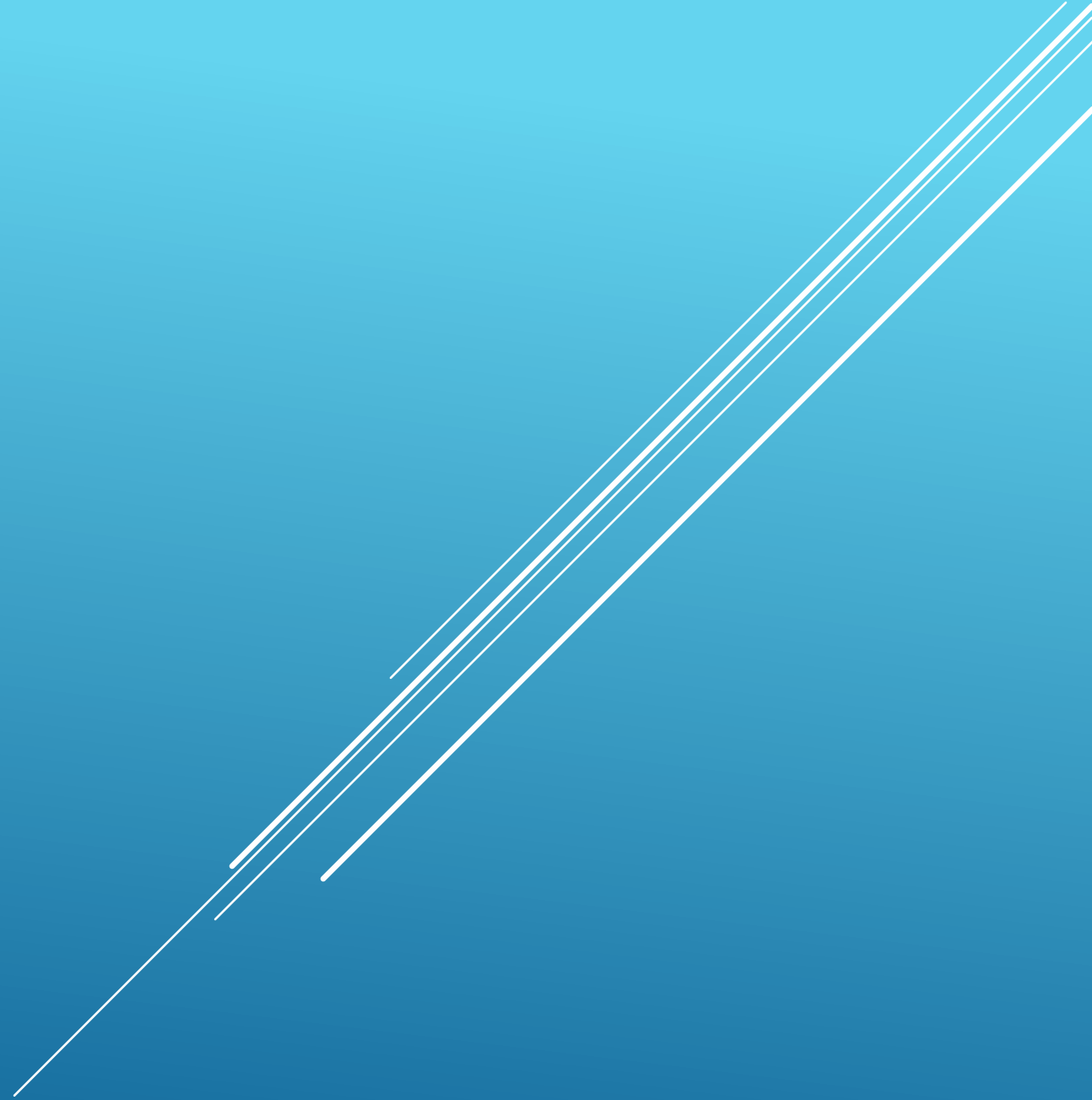
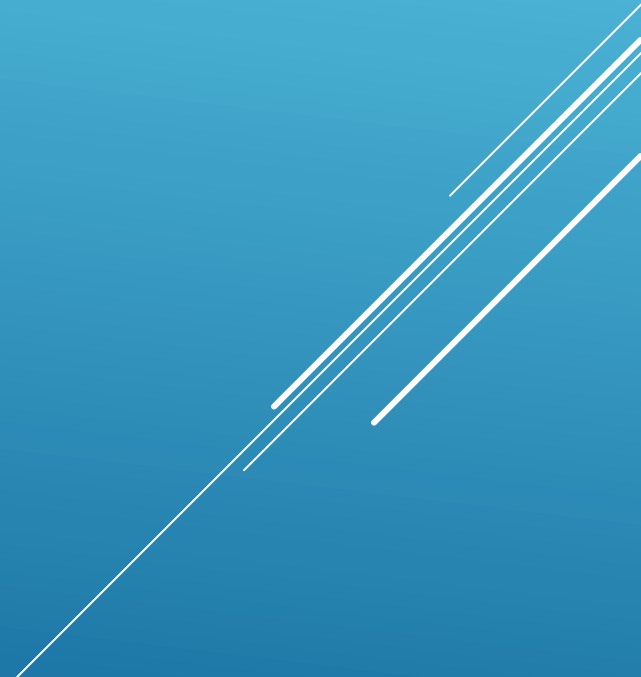


# DOTNET CLI

Command Line Interface



- ▶ .NET Komut satırı arayüzüdür.
  - ▶ .NET Uygulamaları geliştirmeyi, oluşturmayı, çalıştırmayı ve yayınlamayı sağlar.
  - ▶ .NET SDK ile birlikte gelir.
- 
- A series of white diagonal lines of varying lengths and thicknesses, located in the bottom right corner of the slide, creating a modern, abstract graphic element.

► Dotnet [command]

PROTOTIP

- ▶ help
- ▶ new
- ▶ restore
- ▶ build
- ▶ publish
- ▶ run

# TEMEL KOMUTLAR

```

PS C:\Users\Gençay> dotnet help
.NET SDK (5.0.100)
Usage: dotnet [runtime-options] [path-to-application] [arguments]

Execute a .NET application.

runtime-options:
  --additionalprobingpath <path>    Path containing probing policy and assemblies to probe for.
  --additional-deps <path>          Path to additional deps.json file.
  --depsfile <path>                 Path to <application>.deps.json file.
  --fx-version <version>            Version of the installed Shared Framework to use to run the application.
  --roll-forward <setting>          Roll forward to framework version (LatestPatch, Minor, LatestMinor, Major, LatestMajor, Disable).
  --runtimeconfig <path>            Path to <application>.runtimeconfig.json file.

path-to-application:
  The path to an application .dll file to execute.

Usage: dotnet [sdk-options] [command] [command-options] [arguments]

Execute a .NET SDK command.

sdk-options:
  -d|--diagnostics    Enable diagnostic output.
  -h|--help            Show command line help.
  --info              Display .NET information.
  --list-runtimes      Display the installed runtimes.
  --list-sdks          Display the installed SDKs.
  --version            Display .NET SDK version in use.

SDK commands:
  add                  Add a package or reference to a .NET project.
  build                Build a .NET project.
  build-server         Interact with servers started by a build.
  clean                Clean build outputs of a .NET project.
  help                 Show command line help.
  list                 List project references of a .NET project.
  msbuild              Run Microsoft Build Engine (MSBuild) commands.
  new                  Create a new .NET project or file.
  nuget                Provides additional NuGet commands.
  pack                 Create a NuGet package.
  publish              Publish a .NET project for deployment.
  remove               Remove a package or reference from a .NET project.
  restore              Restore dependencies specified in a .NET project.
  run                  Build and run a .NET project output.
  sln                  Modify Visual Studio solution files.
  store                Store the specified assemblies in the runtime package store.
  test                 Run unit tests using the test runner specified in a .NET project.
  tool                 Install or manage tools that extend the .NET experience.
  vstest               Run Microsoft Test Engine (VSTest) commands.

Additional commands from bundled tools:
  dev-certs            Create and manage development certificates.
  fsi                  Start F# Interactive / execute F# scripts.
  sql-cache            SQL Server cache command-line tools.
  user-secrets          Manage development user secrets.
  watch                Start a file watcher that runs a command when files change.

Run 'dotnet [command] --help' for more information on a command.

```

## HELP

- Dotnet CLI tarafından desteklenen komutlar hakkında ayrıntılı bilgi veren komuttur.
- dotnet help

- ▶ `dotnet new [project type] --name [project name]`

NEW

```
PS C:\Users\Gençay\Desktop\OrnekProje> dotnet new console --name myproject
The template "Console Application" was created successfully.

Processing post-creation actions...
Running 'dotnet restore' on myproject\myproject.csproj...
  Determining projects to restore...
  Restored C:\Users\Gençay\Desktop\OrnekProje\myproject\myproject.csproj (in 87 ms).
Restore succeeded.
```

```
PS C:\Users\Gençay\Desktop\OrnekProje> dotnet new console --name myproject
Creating this template will make changes to existing files:
  Overwrite  myproject.csproj
  Overwrite  Program.cs

Rerun the command and pass --force to accept and create.
PS C:\Users\Gençay\Desktop\OrnekProje> dotnet new console --name myproject --force
The template "Console Application" was created successfully.

Processing post-creation actions...
Running 'dotnet restore' on myproject\myproject.csproj...
  Determining projects to restore...
  All projects are up-to-date for restore.
Restore succeeded.
```

- ▶ dotnet new [project type] --name [project name] **--force**

# NEW - FORCE PARAMETRESİ

- ▶ Proje sürecinde referans edilen yahut referansı kaldırılan paketlerin restorasyonunu sağlar.
- ▶ dotnet restore

# RESTORE



```

C:\Users\Gençay\Desktop\OrnekProje\myproject> dotnet build
Microsoft (R) Build Engine version 16.8.0+126527ff1 for .NET
Copyright (C) Microsoft Corporation. All rights reserved.

Determining projects to restore...
C:\Users\Gençay\Desktop\OrnekProje\myproject\myproject.csproj : warning NU1604: Project dependency AutoMapper does not contain an inclusive lower bound. Include a lower bound in the dependency version to ensure consistent restore results.
C:\Users\Gençay\Desktop\OrnekProje\myproject\myproject.csproj : warning NU1701: Package 'AutoMapper 1.1.118' was restored using '.NETFramework,Version=v4.6.1, .NETFramework,Version=v4.6.2, .NETFramework,Version=v4.7, .NETFramework,Version=v4.7.1, .NETFramework,Version=v4.7.2, .NETFramework,Version=v4.8' instead of the project target framework 'net5.0'. This package may not be fully compatible with your project.

Restore completed in 2.15 sec for C:\Users\Gençay\Desktop\OrnekProje\myproject\myproject.csproj
C:\Users\Gençay\Desktop\OrnekProje\myproject\myproject.csproj : warning NU1604: Project dependency AutoMapper does not contain an inclusive lower bound. Include a lower bound in the dependency version to ensure consistent restore results.
C:\Users\Gençay\Desktop\OrnekProje\myproject\myproject.csproj : warning NU1701: Package 'AutoMapper 1.1.118' was restored using '.NETFramework,Version=v4.6.1, .NETFramework,Version=v4.6.2, .NETFramework,Version=v4.7, .NETFramework,Version=v4.7.1, .NETFramework,Version=v4.7.2, .NETFramework,Version=v4.8' instead of the project target framework 'net5.0'. This package may not be fully compatible with your project.

Build succeeded.
    0 Warning(s)
    0 Error(s)
Time Elapsed 00:00:05.11

```

## BUILD

- Projeyi derler ve sonuç olarak .exe ve .dll çıktıları verir.
- Derlemeden önce projeyi restore eder.
- \bin\Debug\net5.0 dizinine çıktı verir.

```
PS C:\Users\Gençay\Desktop\OrnekProje\myproject> dotnet publish
Microsoft (R) Build Engine version 16.8.0+126527ff1 for .NET
Copyright (C) Microsoft Corporation. All rights reserved.

Determining projects to restore...
C:\Users\Gençay\Desktop\OrnekProje\myproject\myproject.csproj : warning NU1604: Project dependency AutoMapper does not contain an inclusive lower bound. Include a lower bound in the dependency version to ensure consistent restore results.
C:\Users\Gençay\Desktop\OrnekProje\myproject\myproject.csproj : warning NU1701: Package 'AutoMapper 1.1.0.118' was restored using '.NETFramework,Version=v4.6.1, .NETFramework,Version=v4.6.2, .NETFramework,Version=v4.7, .NETFramework,Version=v4.7.1, .NETFramework,Version=v4.7.2, .NETFramework,Version=v4.8' instead of the project target framework 'net5.0'. This package may not be fully compatible with your project.

All projects are up-to-date for restore.
C:\Users\Gençay\Desktop\OrnekProje\myproject\myproject.csproj : warning NU1604: Project dependency AutoMapper does not contain an inclusive lower bound. Include a lower bound in the dependency version to ensure consistent restore results.
C:\Users\Gençay\Desktop\OrnekProje\myproject\myproject.csproj : warning NU1701: Package 'AutoMapper 1.1.0.118' was restored using '.NETFramework,Version=v4.6.1, .NETFramework,Version=v4.6.2, .NETFramework,Version=v4.7, .NETFramework,Version=v4.7.1, .NETFramework,Version=v4.7.2, .NETFramework,Version=v4.8' instead of the project target framework 'net5.0'. This package may not be fully compatible with your project.

myproject -> C:\Users\Gençay\Desktop\OrnekProje\myproject\bin\Debug\net5.0\myproject.dll
myproject -> C:\Users\Gençay\Desktop\OrnekProje\myproject\bin\Debug\net5.0\publish\
```

- Projeyi derleyerek, yayınlanabilir dosyaları çıktı olarak verir.
- Çıktı olarak;
  - .dll,
  - .deps.json (projenin tüm bağımlılıklarını içerir),
  - .runtimeconfig.json (runtime konfigürasyonları),
  - Uygulama bağımlılıklarının dll'leri
- \bin\Debug\net5.0\publish dizinine çıktı verir.

# PUBLISH

- ▶ Uygulamayı derler ve ayağa kaldırır. Çalıştırır.
- ▶ dotnet run

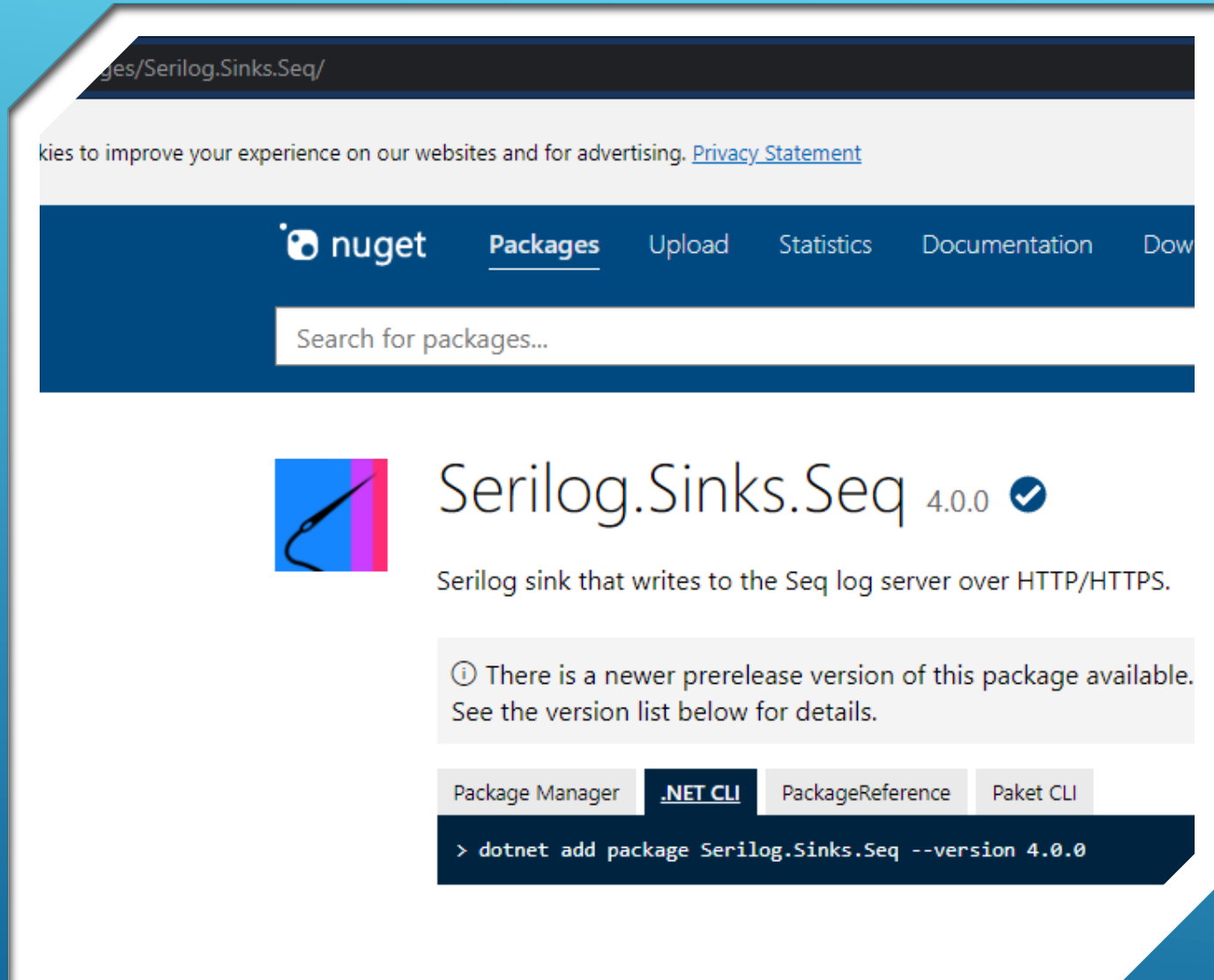
RUN

- ▶ Uygulamayı derlemeden ayağa kaldırır. Çalıştırır.
- ▶ `dotnet run --no-build`

## RUN – NO-BUILD PARAMETRESİ

- ▶ add package
- ▶ add reference
- ▶ remove package
- ▶ remove reference
- ▶ list reference

## PROJE MODİFİKASYON KOMUTLARI



## ADD PACKAGE

Uygulamaya NuGet'ten  
paket/kütüphane yüklememizi sağlar.

- ▶ Uygulamaya fiziksel bir dll dosyasını referans etmemizi sağlar.
- ▶ `dotnet add [source project].csproj reference [target project].csproj`

```
dotnet add myproject.csproj reference ../ornekproje/ornekproje.csproj
```

# ADD REFERENCE

- ▶ Uygulamaya yüklenmiş olan paketlerin/kütüphanelerin silinmesini sağlar.
- ▶ `dotnet remove package [package name]`

# REMOVE PACKAGE



- ▶ Uygulamaya referans edilmiş dll'leri kaldırır.
- ▶ `dotnet remove reference [reference name]`

# REMOVE REFERENCE

- ▶ Uygulamada referans edilen tüm paketleri listeler.
- ▶ dotnet list reference

# LIST REFERENCE