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Martin Richards
23 February 2007

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```
<Project Sdk="Microsoft.NET.Sdk">
  <PropertyGroup>
    <OutputType>Exe</OutputType>
    <ApplicationManifest>App.manifest</ApplicationManifest>
  </PropertyGroup>
  <ItemGroup>
    <Compile Include="Program.cs" />
    <Compile Include="..\..\ServerContracts/Server.CoClasses.cs" />
    <Compile Include="..\..\ServerContracts/Server.Contracts.cs" />
    <Compile Include="..\..\ServerContracts/ServerGuids.cs" />
  </ItemGroup>
  <ItemGroup>
    <CMakeProjectReference Include="..\..\NativeServer/CMakeLists.txt" />
    <ProjectReference Include="$(TestSourceDir)Common/CoreCLRTestLibrary/CoreCLRTestLibrary.csproj" />
  </ItemGroup>
</Project>
```

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new XElement("TITLE", "The Tragedy of Hamlet, Prince of Denmark"),

```
new XElement("fm",
  new XElement("p", "Text placed in the public domain by Moby Lexical Tools, 1992."),
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  new XElement("p", "XML version by Jon Bosak, 1996-1997."),
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This is a port of the SciMark2a Java Benchmark to C# by
Chris Re (cmr28@cornell.edu) and Werner Vogels (vogels@cs.cornell.edu)

For details on the original authors see <http://math.nist.gov/scimark2>

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<Project Sdk="Microsoft.Build.NoTargets">

<UsingTask TaskName="RegenerateThirdPartyNotices" AssemblyFile="\$(InstallerTasksAssemblyPath)" />

<Target Name="RegenerateThirdPartyNotices" AfterTargets="Build">

<PropertyGroup>

<TpnFile>\$(InstallerProjectRoot)pkg\THIRD-PARTY-NOTICES.TXT</TpnFile>

</PropertyGroup>

```

<!--
Repo configuration. Upstreams, but also more: the TPN in dotnet/runtime serves many repos outside
its graph, because dotnet/runtime produces the installer that ends up placing the single TPN file
in the dotnet home directory.
-->
<ItemGroup>
  <TpnRepo Include="dotnet/runtime" />
  <TpnRepo Include="dotnet/aspnetcore" />
  <TpnRepo Include="dotnet/installer" />
  <TpnRepo Include="dotnet/roslyn-analyzers" />
  <TpnRepo Include="dotnet/templating" />
  <TpnRepo Include="dotnet/winforms" />
  <TpnRepo Include="dotnet/wpf" />
  <TpnRepo Include="dotnet/linker" />

  <!--
    Additional repos that
should be included but don't have any third-party-notices files:
    dotnet/efcore
    dotnet/emsdk
    dotnet/extensions
    dotnet/icu
    dotnet/sdk
    dotnet/windowsdesktop
  -->

  <TpnRepo Condition="'%(TpnRepo.Branch)' == ''" Branch="main" />

  <PotentialTpnPath Include="THIRD-PARTY-NOTICES.TXT" />
  <PotentialTpnPath Include="THIRD-PARTY-NOTICES.txt" />
  <PotentialTpnPath Include="THIRD-PARTY-NOTICES" />
  <PotentialTpnPath Include="THIRDPARTYNOTICES.TXT" />
  <PotentialTpnPath Include="THIRDPARTYNOTICES.txt" />
</ItemGroup>

<RegenerateThirdPartyNotices
  TpnFile="$(TpnFile)"
  PotentialTpnPaths="@ (PotentialTpnPath)"
  TpnRepos="@ (TpnRepo)" />

  <Message Text="$(MSBuildProjectName) -> $(TpnFile)" Importance="High" />
</Target>

</Project>
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```

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https://zlib.net/zlib_license.html

/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.2.12, March 27th, 2022

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By Sean Eron Anderson
seander@cs.stanford.edu

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By Sean Eron Anderson
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1.3 reactivereswift 4.0.1

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1.4 microsoft.windows.compatibility 7.0.1

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1.5 tss.msr 2.1.1

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1.6 system.commandline 2.0.0-beta4.22272.1

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1.7 criollo 0.5.5

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1.8 microsoft.windows.sdk.net.ref

10.0.22621.28

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<param name="attestation">A plain-english statement declaring that the publisher has permission to use the feature.</param>

<summary>Indicates that the user has permission to use the feature, and that the feature is still in the "limited access" state.</summary>

<member name="T:Windows.ApplicationModel.UserActivities.UserActivityAttribution">

<member name="M:Windows.ApplicationModel.UserActivities.UserActivityAttribution.#ctor">

<summary>Create a **UserActivityAttribution** object.</summary>

<member

name="M:Windows.ApplicationModel.UserActivities.UserActivityAttribution.#ctor(Windows.Foundation.Uri)">

<summary>Create a **UserActivityAttribution** object with the specified icon image URI.</summary>

<param name="iconUri">The Uniform Resource Identifier (URI) of the icon image to use with this **UserActivityAttribution**.</param>

<member name="P:Windows.ApplicationModel.UserActivities.UserActivityAttribution.AddImageQuery">

<member

name="P:Windows.ApplicationModel.UserActivities.UserActivityAttribution.AlternateText">

<member name="P:Windows.ApplicationModel.UserActivities.UserActivityAttribution.IconUri">

<member name="P:Windows.ApplicationModel.UserActivities.UserActivityVisualElements.Attribution">

<member

name="P:Windows.ApplicationModel.UserActivities.UserActivityVisualElements.AttributionDisplayText">

<member name="P:Windows.Networking.Connectivity.AttributedNetworkUsage.AttributionId">

<member name="P:Windows.Networking.Connectivity.AttributedNetworkUsage.AttributionName">

<member name="P:Windows.Networking.Connectivity.AttributedNetworkUsage.AttributionThumbnail">

<returns>**true** if permission is granted. Otherwise, **false**.</returns>

<member name="P:Windows.Services.Maps.MapService.DataAttributions">

<member name="P:Windows.Services.Maps.LocalSearch.LocalLocation.DataAttribution">

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* /microsoft-windows-sdk-net-ref-10-0-22621-31-zip/lib/net6.0/Microsoft.Windows.SDK.NET.xml

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* /bin/grep

1.9 lumberjackconsole 1.0.2

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/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.2.11, January 15th, 2017

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By Sean Eron Anderson
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in 2018 by David Blackman and Sebastiano Vigna (vigna@acm.org)

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```
<Project Sdk="Microsoft.NET.Sdk">
  <PropertyGroup>
    <OutputType>Exe</OutputType>
    <ApplicationManifest>App.manifest</ApplicationManifest>
  </PropertyGroup>
  <ItemGroup>
    <Compile Include="Program.cs" />
    <Compile Include="..\..\ServerContracts/Server.CoClasses.cs" />
    <Compile Include="..\..\ServerContracts/Server.Contracts.cs" />
    <Compile Include="..\..\ServerContracts/ServerGuids.cs" />
  </ItemGroup>
  <ItemGroup>
    <ProjectReference Include="..\..\NativeServer/CMakeLists.txt" />
    <ProjectReference Include="$(TestSourceDir)Common/CoreCLRTestLibrary/CoreCLRTestLibrary.csproj" />
  </ItemGroup>
</Project>
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version 1.2.11, January 15th, 2017

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1.12 azure-activedirectory-identitymodel-extensions-for-dotnet 6.29.0

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1.13 system-formats-asn 7.0.0

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Martin Richards

23 February 2007

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```
<Project Sdk="Microsoft.NET.Sdk">
  <PropertyGroup>
    <OutputType>Exe</OutputType>
    <ApplicationManifest>App.manifest</ApplicationManifest>
  </PropertyGroup>
  <ItemGroup>
    <Compile Include="Program.cs" />
    <Compile Include="..\..\ServerContracts\Server.CoClasses.cs" />
    <Compile Include="..\..\ServerContracts\Server.Contracts.cs" />
    <Compile Include="..\..\ServerContracts\ServerGuids.cs" />
  </ItemGroup>
</ItemGroup>
```

```
<CMakeProjectReference Include="../../NativeServer/CMakeLists.txt" />
<ProjectReference Include="$(TestSourceDir)Common/CoreCLRTestLibrary/CoreCLRTestLibrary.csproj" />
</ItemGroup>
</Project>
```

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```
new XElement("TITLE", "The Tragedy of Hamlet, Prince of Denmark"),
new XElement("fm",
  new XElement("p", "Text placed in the public domain by Moby Lexical Tools, 1992."),
  new XElement("p", "SGML markup by Jon Bosak, 1992-1994."),
  new XElement("p", "XML version by Jon Bosak, 1996-1997."),
  new XElement("p", "This work may be freely copied and distributed worldwide."))
```

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This is a port of the SciMark2a Java Benchmark to C# by
Chris Re (cmr28@cornell.edu) and Werner Vogels (vogels@cs.cornell.edu)

For details on the original authors see <http://math.nist.gov/scimark2>

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```
<Project Sdk="Microsoft.Build.NoTargets">
```

```
<UsingTask TaskName="RegenerateThirdPartyNotices" AssemblyFile="$(InstallerTasksAssemblyPath)" />
```

```
<Target Name="RegenerateThirdPartyNotices" AfterTargets="Build">
```

```
<PropertyGroup>
```

```
<TpnFile>$(InstallerProjectRoot)pkg\THIRD-PARTY-NOTICES.TXT</TpnFile>
```

```
</PropertyGroup>
```

```
<!--
```

Repo configuration. Upstreams, but also more: the TPN in dotnet/runtime serves many repos outside its graph, because dotnet/runtime produces the installer that ends up placing the single TPN file in the dotnet home directory.

```
-->
```

```
<ItemGroup>
```

```
<TpnRepo Include="dotnet/runtime" />
```

```
<TpnRepo Include="dotnet/aspnetcore" />
```

```
<TpnRepo Include="dotnet/installer" />
```

```
<TpnRepo Include="dotnet/roslyn-analyzers" />
```

```
<TpnRepo Include="dotnet/templating" />
```

```
<TpnRepo Include="dotnet/winforms" />
```

```
<TpnRepo Include="dotnet/wpf" />
```

```
<TpnRepo Include="dotnet/linker" />
```

```
<!--
```

Additional repos that should be included but don't have any third-party-notices files:

dotnet/efcore

dotnet/emsdk

dotnet/extensions

dotnet/icu

dotnet/sdk

dotnet/windowsdesktop

```
-->
```

```
<TpnRepo Condition="'%(TpnRepo.Branch)' == ''" Branch="main" />
```

```
<PotentialTpnPath Include="THIRD-PARTY-NOTICES.TXT" />
```

```

    <PotentialTpnPath Include="THIRD-PARTY-NOTICES.txt" />
    <PotentialTpnPath Include="THIRD-PARTY-NOTICES" />
    <PotentialTpnPath Include="THIRDPARTYNOTICES.TXT" />
    <PotentialTpnPath Include="THIRDPARTYNOTICES.txt" />
  </ItemGroup>

  <RegenerateThirdPartyNotices
    TpnFile="$(TpnFile)"
    PotentialTpnPaths="@ (PotentialTpnPath)"
    TpnRepos="@ (TpnRepo)" />

  <Message Text="$(MSBuildProjectName) -> $(TpnFile)" Importance="High" />
</Target>

```

</Project>

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<https://github.com/madler/zlib>
https://zlib.net/zlib_license.html

/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.2.12, March 27th, 2022

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Bit Twiddling Hacks

By Sean Eron Anderson
seander@cs.stanford.edu

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/* zlib.h -- interface of the 'zlib' general purpose compression library
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By Sean Eron Anderson
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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6.

Any executables

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1.19 moq 4.13.1

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1.20 fluxor 5.9.0

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1.22 tdoauth 1.6.2

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1.24 microsoft-identitymodel-tokens 6.29.0

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1.25 cuckoo 1.10.3

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1.30 system.diagnostics.eventlog 7.0.0

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 *
 [Matthew Whilden (1)](<https://github.com/dotnet/corefx/commits/master?author=mwhilden@microsoft.com>)
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 * [Miguel de Icaza (1)](<https://github.com/dotnet/corefx/commits/master?author=miguel@gnome.org>)
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 * [mirhagk (1)](<https://github.com/dotnet/corefx/commits/master?author=mirhagk@gmail.com>)
 * [mkborg (1)](<https://github.com/dotnet/corefx/commits/master?author=mkborg@users.noreply.github.com>)
 *
 [moozyk (1)](<https://github.com/dotnet/corefx/commits/master?author=pawelka@microsoft.com>)
 * [Mort Yao (1)](<https://github.com/dotnet/corefx/commits/master?author=mort.yao@gmail.com>)
 * [MyungJoo Ham (1)](<https://github.com/dotnet/corefx/commits/master?author=myungjoo.ham@samsung.com>)
 * [nbilling (1)](<https://github.com/dotnet/corefx/commits/master?author=nbilling@microsoft.com>)
 * [Noah Falk (1)](<https://github.com/dotnet/corefx/commits/master?author=noahfalk@microsoft.com>)
 * [Paolo G. Giarrusso (1)](<https://github.com/dotnet/corefx/commits/master?author=p.giarrusso@gmail.com>)
 * [Peter Blazejewicz (1)](<https://github.com/dotnet/corefx/commits/master?author=peter.blazejewicz@gmail.com>)
 * [Peter Monks (1)](<https://github.com/dotnet/corefx/commits/master?author=pjmonks@gmail.com>)
 * [Petermarcu (1)](<https://github.com/dotnet/corefx/commits/master?author=Petermarcu@hotmail.com>)
 * [Pierre Arnaud (1)](<https://github.com/dotnet/corefx/commits/master?author=arnaud@epsitec.ch>)
 *

[Prajwal A N (1)](<https://github.com/dotnet/corefx/commits/master?author=an.prajwal@samsung.com>)

- * [Rahul Kotecha (1)](<https://github.com/dotnet/corefx/commits/master?author=rahul.kotecha@microsoft.com>)
- * [Rama Krishnan Raghupathy (1)](<https://github.com/dotnet/corefx/commits/master?author=ramarag@microsoft.com>)
- * [rcabr (1)](<https://github.com/dotnet/corefx/commits/master?author=github@reubencabrera.com>)
- * [Russell Gray (1)](<https://github.com/dotnet/corefx/commits/master?author=russgray@gmail.com>)
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- * [Shawn Hargreaves (1)](<https://github.com/dotnet/corefx/commits/master?author=shawnhar@microsoft.com>)
- * [Shay Rojansky (1)](<https://github.com/dotnet/corefx/commits/master?author=roji@roji.org>)
- * [Simon Timms (1)](<https://github.com/dotnet/corefx/commits/master?author=stimms@gmail.com>)
- * [Steven Engelhardt (1)](<https://github.com/dotnet/corefx/commits/master?author=sengelha@gmail.com>)
- *
- [stukselbax (1)](<https://github.com/dotnet/corefx/commits/master?author=stukselbax@gmail.com>)
- * [Sung-Jae Lee (1)](<https://github.com/dotnet/corefx/commits/master?author=sjlee@mail.com>)
- * [SunnyWar (1)](<https://github.com/dotnet/corefx/commits/master?author=itsallthesametome@hotmail.com>)
- * [Tanner Gooding (1)](<https://github.com/dotnet/corefx/commits/master?author=tagoo@microsoft.com>)
- * [Taylor Southwick (1)](<https://github.com/dotnet/corefx/commits/master?author=twsouthwick@outlook.com>)
- * [theCrispy (1)](<https://github.com/dotnet/corefx/commits/master?author=chr.steinert@outlook.com>)
- * [Tijoy Tom Kalathiparambil (1)](<https://github.com/dotnet/corefx/commits/master?author=tijoytk@microsoft.com>)
- * [Tom Deseyn (1)](<https://github.com/dotnet/corefx/commits/master?author=tom.deseyn@gmail.com>)
- * [tymlipari (1)](<https://github.com/dotnet/corefx/commits/master?author=tym@tymlipari.com>)
- * [Ujjwol Lamichhane (1)](<https://github.com/dotnet/corefx/commits/master?author=ujjwollamichhane@gmail.com>)
- *
- [vecode (1)](<https://github.com/dotnet/corefx/commits/master?author=marvindanker@gmail.com>)
- * [Vlad Riscutia (1)](<https://github.com/dotnet/corefx/commits/master?author=vladris@outlook.com>)
- * [Wade Wegner (1)](<https://github.com/dotnet/corefx/commits/master?author=wade.wegner@gmail.com>)
- * [yfakariya (1)](<https://github.com/dotnet/corefx/commits/master?author=yfakariya@gmail.com>)

Core Tools

- * [Bryan Thornbury (304)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=brthor@microsoft.com>)
- * [Sridhar Periyasamy (210)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=sridhper@microsoft.com>)
- * [Eric Erhardt (196)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=eric.erhardt@microsoft.com>)
- * [David Fowler (164)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=davidfowl@gmail.com>)
- * [piotrp (149)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=piotrp@microsoft.com>)
- * [Andrew Stanton-Nurse (148)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=andrew@andrewnurse.net>)
- *
- [Pavel Krymets (107)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=pavel@krymets.com>)
- * [Senthil (106)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=schellap@microsoft.com>)
- * [Livar Cunha (78)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=livar@live.com>)
- * [Zlatko Knezevic (78)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=zlakne@microsoft.com>)
- * [Krzysztof Wicher (74)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=kwicher@microsoft.com>)
- * [Troy Dai (66)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=troy.dai@outlook.com>)
- * [Mihai Codoban (43)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=micodoba@microsoft.com>)
- * [Matt Ellis (26)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=matell@microsoft.com>)
- * [Andy Gocke (25)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=angocke@microsoft.com>)

* [Livar Cunha (21)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=licavalc@microsoft.com>)

*

[Pranav K (20)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=prkrishn@hotmail.com>)

* [Andrew Stanton-Nurse (19)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=andrew@stanton-nurse.com>)

* [Enrico Sada (19)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=enrico@sada.io>)

* [Eric Mellino (16)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=erme@microsoft.com>)

* [Eric St. John (16)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=ericstj@microsoft.com>)

* [Dan Quirk (13)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=danquirk@microsoft.com>)

* [glennnc (12)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=glennnc@microsoft.com>)

* [discostu105 (11)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=c.neumueller@gmail.com>)

* [Petr Onderka (11)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=gsvick@gmail.com>)

* [Tanner Gooding (11)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=tannergooding@users.noreply.github.com>)

*

[Gaurav Khanna (10)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=gkhanna@microsoft.com>)

* [moozyk (10)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=pawelka@microsoft.com>)

* [Richard Lander (9)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=rlander@microsoft.com>)

* [Jonathan Miller (8)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=jonmill@microsoft.com>)

* [Rob Mensching (8)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=rob@firegiant.com>)

* [Adam Gorman (7)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=adamgor@microsoft.com>)

* [Lakshan Fernando (7)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=lakshanf@microsoft.com>)

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* [Peter Marcu (7)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=Peter.Marcu@Microsoft.com>)

* [Todd Moscinski (7)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=toddmosc@microsoft.com>)

*

[Wes Haggard (7)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=Wes.Haggard@microsoft.com>)

* [Ajay Bhargav Baaskaran (6)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=ajbaaska@microsoft.com>)

* [Charles Stoner (6)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=chucks@microsoft.com>)

* [Matt Mitchell (6)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=mmitche@microsoft.com>)

* [Krzysztof Wicher (5)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=mordotymoja@gmail.com>)

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*

[Aditya Mandaleeka (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=adityam@microsoft.com>)

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* [Daniel Podder (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=dpodder@gmail.com>)

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* [Joel Verhagen (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=jver@microsoft.com>)

* [Kevin Jones (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=kevin@vcsjones.com>)

* [Lee Campbell (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=lee.ryan.campbell@gmail.com>)

*

[Manish Jayaswal (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=manishj@microsoft.com>)

* [N. Taylor Mullen (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=nimullen@microsoft.com>)

* [Peter Schneider (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=office@schneider-netservices.com>)

* [rkakadia (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=rajesh.kakadia@gmail.com>)

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* [Alex KeySmith
(1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=AlexKeySmith@users.noreply.github.com>)

* [Alex Panov (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=alpaix@outlook.com>)

*

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* [blackdwarf (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=blackdwarf@msforge.net>)

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* [Brice Lambson (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=bricelam@microsoft.com>)

* [Brice Lambson (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=bricelam@outlook.com>)

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* [Damian Edwards (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=damian@damianedwards.com>)

* [Daniel Podder (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=dapodd@microsoft.com>)

*

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* [factormystic (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=factormystic@gmail.com>)

* [Geoff Norton (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=grompf@gmail.com>)

* [jacalvar (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=jacalvar@microsoft.com>)

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*

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* [Kai Eichinger (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=cH40z-Lord@outlook.com>)

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* [Lakshmi Priya (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=Priya91@users.noreply.github.com>)

* [Luke Elliott (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=revlucio@gmail.com>)

* [Luke Latham (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=mis@guardrex.com>)

* [Mark Junker (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=fubar-coder@users.noreply.github.com>)

*

[Mark Rendle (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=mark@markrendle.net>)

* [martincostello (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=martin@martincostello.com>)

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- * [Noah Falk (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=noahfalk@microsoft.com>)
- * [Peter Jas (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=necmon@yahoo.com>)
- * [Rob Relyea (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=rob@relyeas.net>)
- * [shahid-pk (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=shahid.mrd@hotmail.com>)
- * [stephentoub (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=stoub@microsoft.com>)
- * [Tanner Gooding (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=tannergooding@outlook.com>)
- *
- [The Gitter Badger (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=badger@gitter.im>)
- * [Tomas Matousek (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=tomas.matousek@microsoft.com>)
- * [Zhi Li (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=zhili128@outlook.com>)

Core Docs

- * [Steve Hoag (195)](<https://github.com/dotnet/core-docs/commits/master?author=shoag@microsoft.com>)
- * [Zlatko Knezevic (61)](<https://github.com/dotnet/core-docs/commits/master?author=zlakne@microsoft.com>)
- * [Bill Wagner (42)](<https://github.com/dotnet/core-docs/commits/master?author=bill@thebillwagner.com>)
- * [Richard Lander (35)](<https://github.com/dotnet/core-docs/commits/master?author=rlander@microsoft.com>)
- * [Tom Dykstra (29)](<https://github.com/dotnet/core-docs/commits/master?author=tdykstra@microsoft.com>)
- * [Beth Massi (28)](<https://github.com/dotnet/core-docs/commits/master?author=bethma@microsoft.com>)
- * [Phillip Carter (26)](<https://github.com/dotnet/core-docs/commits/master?author=phillip.carter@outlook.com>)
- *
- [matthewreily (24)](<https://github.com/dotnet/core-docs/commits/master?author=matthew.reily@interworks.com>)
- * [rpetrusha (21)](<https://github.com/dotnet/core-docs/commits/master?author=ronpet@microsoft.com>)
- * [Petr Onderka (17)](<https://github.com/dotnet/core-docs/commits/master?author=gsvick@gmail.com>)
- * [Maira Wenzel (16)](<https://github.com/dotnet/core-docs/commits/master?author=mairaw@users.noreply.github.com>)
- * [Bill Wagner (14)](<https://github.com/dotnet/core-docs/commits/master?author=wiwagn@microsoft.com>)
- * [brady gaster (14)](<https://github.com/dotnet/core-docs/commits/master?author=bradyg@microsoft.com>)
- * [blackdwarf (12)](<https://github.com/dotnet/core-docs/commits/master?author=zlakne@zlakne-bigun.redmond.corp.microsoft.com>)
- * [Ken Chen (12)](<https://github.com/dotnet/core-docs/commits/master?author=kenchen@microsoft.com>)
- * [Qinzen Zhu (12)](<https://github.com/dotnet/core-docs/commits/master?author=qinzen@microsoft.com>)
- *
- [Liangying (7)](<https://github.com/dotnet/core-docs/commits/master?author=lianwei@microsoft.com>)
- * [Steven Das (7)](<https://github.com/dotnet/core-docs/commits/master?author=DasAllFolks@users.noreply.github.com>)
- * [Kemp Brown (5)](<https://github.com/dotnet/core-docs/commits/master?author=kempb1@hotmail.com>)
- * [Daniel Roth (4)](<https://github.com/dotnet/core-docs/commits/master?author=danroth27@hotmail.com>)
- * [Duncan Mackenzie (4)](<https://github.com/dotnet/core-docs/commits/master?author=duncanma@microsoft.com>)
- * [Bertrand Le Roy (3)](<https://github.com/dotnet/core-docs/commits/master?author=bertrandleroy@gmail.com>)
- * [blackdwarf (3)](<https://github.com/dotnet/core-docs/commits/master?author=blackdwarf@msforge.net>)
- * [Eric StJohn (3)](<https://github.com/dotnet/core-docs/commits/master?author=ericstj@microsoft.com>)
- * [Kemp Brown (3)](<https://github.com/dotnet/core-docs/commits/master?author=kempb@microsoft.com>)
- * [Maira Wenzel (3)](<https://github.com/dotnet/core-docs/commits/master?author=mairaw@microsoft.com>)
- *

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# Contributions to .NET Core SDK 1.0

```

We're still working out the best way to present contributors and trying to be as accurate as possible. The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core SDK 1.0. Where multiple email addresses were returned for a single person, the counts were aggregated with the email address reported the most commits.

```

```bash
git shortlog -sne --no-merges --until release/1.1.0@{2017-02-25}
```

```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

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- [Geoff Norton (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=grompf@gmail.com>)

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[Rob Relyea (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=rob@relyeas.net>)

- [Aleksandar Milicevic (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=almili@microsoft.com>)

- [Falco (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=rs38@users.noreply.github.com>)

- [Erik Schierboom (1)](https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=erik_schierboom@hotmail.com)

- [Scott Carlton (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=v-sccarl@microsoft.com>)

- [Senthil Chellappan (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=schellap@bose.guest.corp.microsoft.com>)

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- [Dongyun Jin (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=dongyun.jin@samsung.com>)

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[William Li (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=wul@microsoft.com>)

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- [Mark Junker (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=fubar-coder@users.noreply.github.com>)
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- [Mattias Karlsson (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=mattias@devlead.se>)
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Contributions to .NET Core 2.0

The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core 2.0.

```
```bash
git shortlog -sne --no-merges --since release/2.0.0@{2016-10-03} --until release/2.0.0@{2017-07-25}
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

- * [CLI](#cli)
- * [CoreCLR](#coreclr)
- * [CoreFX](#corefx)
- * [WCF](#wcf)

CLI

* [Livar Cunha (311)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=livar@live.com>)

* [Piotr Puskiewicz (219)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=piotrp@microsoft.com>)

* [Eric Erhardt (159)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=eric.erhardt@microsoft.com>)

* [Justin Goshi (145)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=jgoshi@microsoft.com>)

* [Krzysztof Wicher (103)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=mordotymoja@gmail.com>)

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* [Nick Guerrero (71)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=nicholg@microsoft.com>)

* [William Li (67)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=wul@microsoft.com>)

* [Livar (58)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=licavalc@microsoft.com>)

* [Jon Sequeira (52)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=jonsequira@gmail.com>)

* [Livar Cunha (38)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=licavalc@microsoft.com>)

* [Daniel Plaisted (34)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=daplaist@microsoft.com>)

* [Faizan Ahmad (30)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=faahmad@microsoft.com>)

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[Zlatko Knezevic (29)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=zlakne@microsoft.com>)

* [Bryan Thornbury (26)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=brthor@microsoft.com>)

* [Scott Carlton (19)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=v-sccarl@microsoft.com>)

* [mlorbetske (17)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=mike.lorbetske@n3-p.com>)

* [Matt Ellis (16)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=matell@microsoft.com>)

* [Rainer Sigwald (16)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=raines@microsoft.com>)

* [Satya Madala (14)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=samadala@microsoft.com>)

* [Kevin Ransom (13)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=kevinr@microsoft.com>)

* [Vijay Ramakrishnan (12)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=vramak@microsoft.com>)

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[Rama Krishnan Raghupathy (12)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=ramarag@microsoft.com>)

* [Justin Emgarten (11)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=justin@emgarten.com>)

* [Steve Sanderson (11)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=SteveSandersonMS@users.noreply.github.com>)

* [Ankit Mishra (11)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=anmishr@microsoft.com>)

* [Harsh Jain (10)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=harjain@microsoft.com>)

* [Nate Amundson (9)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=naamunds@microsoft.com>)

* [Rohit Agrawal (9)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=ragrawal@microsoft.com>)

* [Chris Rummel (9)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=crummel@microsoft.com>)

* [Enrico Sada (8)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=enrico@sada.io>)

* [Jeff Kluge (8)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=jeffkl@microsoft.com>)

* [seancpeters (8)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=sepeters@microsoft.com>)

* [Omair Majid (8)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=omajid@redhat.com>)

* [Ashley Hauck (8)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=ashauck@microsoft.com>)

* [Zbynk Sailer (7)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=v-zbsail@microsoft.com>)

* [Shayne Boyer (6)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=spboyer@live.com>)

* [dasMulli (6)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=martin.andreas.ullrich@gmail.com>)

* [Arun Mahapatra (6)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=codito@users.noreply.github.com>)

* [Parallels (6)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=livar@live.com>)

* [Mikkel Nylander Bundgaard (6)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=mikkelbu@gmail.com>)

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* [Maira Wenzel (5)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=mairaw@microsoft.com>)

* [Jonathan Channon (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=jonathan.channon@gmail.com>)

* [Arun Mahapatra (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=armahapa@microsoft.com>)

* [Sridhar Periyasamy (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=sridhper@microsoft.com>)

* [Rohit Agrawal (NUGET) (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=ragrawal@microsoft.com>)

* [blackdwarf (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=zlakne@microsoft.com>)

* [Christopher Costa (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=chcosta@microsoft.com>)

* [Ashish Jain (NUGET) (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=asja@microsoft.com>)

* [Faizan2304 (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=faizan2304@hotmail.com>)

* [Davis Goodin (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=dagood@microsoft.com>)

* [mendhak (3)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=gpslogger@mendhak.com>)

* [PiotrP (3)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=piotrp@microsoft.com>)

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* [William Lee (2)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=xingmu33@gmail.com>)

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CoreCLR

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- * [Jan Kotas (182)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jkotas@microsoft.com>)
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- [Pat Gavlin (143)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=pagavlin@microsoft.com>)
- * [danmosemsft (139)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=danmose@microsoft.com>)
- * [Bruce Forstall (101)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=brucefo@microsoft.com>)
- * [Andy Ayers (77)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=andya@microsoft.com>)
- * [wtgodbe (77)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=wigodbe@microsoft.com>)
- * [Stephen Toub (76)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=stoub@microsoft.com>)
- * [Joseph Tremoulet (58)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jotrem@microsoft.com>)
- * [Mike Danes (57)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=onemihaid@hotmail.com>)
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- *
- [Jan Vorlicek (50)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=janvorli@microsoft.com>)
- * [Sergey Andreenko
(49)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=seandree@microsoft.com>)
- * [SaeHie Park (42)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=saehe.park@gmail.com>)
- * [Michelle McDaniel (41)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=adiaaida@gmail.com>)
- * [Hyeongseok Oh
(41)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=hseok82.oh@samsung.com>)
- * [Gaurav Khanna (40)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=gkhanna@microsoft.com>)
- * [Aditya Mandaleeka
(40)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=adityam@microsoft.com>)
- * [Koundinya Veluri (40)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=kouvel@microsoft.com>)
- * [Sean Gillespie (36)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=sean@swgillespie.me>)
- *
- [Carol Eidt (35)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=carol.eidt@microsoft.com>)
- * [Rahul Kumar (34)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=rahku@microsoft.com>)
- * [Tarek Mahmoud Sayed
(33)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=tarekms@microsoft.com>)
- * [Justin Van Patten (32)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jvp@justinvp.com>)
- * [Atsushi Kanamori
(31)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=AtsushiKan@users.noreply.github.com>)
- * [Steve MacLean
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- * [Mikhail Skvortcov
(30)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=m.skvortcov@partner.samsung.com>)
- * [Mike McLaughlin (28)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=mikem@microsoft.com>)
- * [James Ko (28)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jamesqko@gmail.com>)
- *
- [Hyung-Kyu Choi
(28)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=hk0110.choi@samsung.com>)
- * [Christopher Costa (27)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=chcosta@microsoft.com>)
- * [jashook (27)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jashoo@microsoft.com>)
- * [sivarv (26)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=sivarv@microsoft.com>)

* [Drew Scoggins (26)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=anscoggi@microsoft.com>)

* [Alex Perovich (25)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=alperovi@microsoft.com>)

* [Ben Adams (25)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=thundercat@illyriad.co.uk>)

* [Brian Robbins (24)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=brianrob@microsoft.com>)

* [Dan Moseley (24)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=danmose@microsoft.com>)

*

[Jeremy Kuhne
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* [Brian Sullivan (20)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=briansul@microsoft.com>)

* [Russ Keldorph
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* [Evgeny Pavlov (17)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=lucenticus@gmail.com>)

* [Michal Strehovsk
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)

* [Pat Gavlin (15)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=pgavlin@gmail.com>)

* [William Godbe (15)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=wigodbe@microsoft.com>)

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*

[John Chen (15)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jochen@microsoft.com>)

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* [mikedn (14)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=onemihaid@hotmail.com>)

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*

[Dmitry-Me (11)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=Dmitry-Me@users.noreply.github.com>)

* [Ian Hays (11)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=ianha@microsoft.com>)

* [Davis Goodin
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*

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* [Vance Morrison (8)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=vancem@microsoft.com>)
* [Faizur Rahman (8)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=shrah@microsoft.com>)
* [Matt Mitchell (8)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=mmitche@microsoft.com>)
* [Alexander Soldatov
(7)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=soldatov.a@samsung.com>)
* [Jon Hanna (7)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jon@hackcraft.net>)
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* [Yi
Zhang (CLR)
(7)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=yizhang82@users.noreply.github.com>)
* [Daniel Podder (7)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=dapodd@microsoft.com>)
* [Rich Lander (6)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=rlander@microsoft.com>)
* [Eric Erhardt (6)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=eric.erhardt@microsoft.com>)
* [Jos Rivero (6)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jorive@microsoft.com>)
* [Mukul Sabharwal (6)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=mjsabby@gmail.com>)
* [SaeHie Park (6)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=saehie.park@samsung.com>)
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*

[John Chen (CLR) (5)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jochen@microsoft.com>)
* [Karel Zikmund
(5)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=karelz@users.noreply.github.com>)
* [Matt Warren (5)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=matt.warren@live.co.uk>)
* [Peter Marcu (5)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=Peter.Marcu@Microsoft.com>)
* [Swaroop Sridhar
(5)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=Swaroop.Sridhar@microsoft.com>)
* [Roman Artemev (5)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=rartemev@microsoft.com>)
* [Aditya Mandaleeka
(5)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=adityamandaleeka@users.noreply.github.com>)
* [Cyd Haselton (4)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=chaselton@gmail.com>)
* [noahfalk
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* [Adam Sitnik (4)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=adam.sitnik@gmail.com>)
* [Alex Ghiondea
(4)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=AlexGhiondea@users.noreply.github.com>)
* [Buyduck (4)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=ivan.vagin@partner.samsung.com>)
* [Tanner Gooding
(4)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=tannergooding@users.noreply.github.com>)
* [LaSombra

(4)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=lasombra@users.noreply.github.com>)

- * [mskvortsov (4)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=mikhael.skvortsov@gmail.com>)
- * [Jiyoung Giuliana Yun (4)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=t2wish@gmail.com>)
- * [chunseoklee (4)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=chunseoklee@naver.com>)
- *

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(4)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=WinCPP@users.noreply.github.com>)

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- * [Atsushi Kanamori (4)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=atsushik@microsoft.com>)
- * [Yongseop Kim (4)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=yons.kim@samsung.com>)
- * [Eugene Rozenfeld (4)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=erozen@microsoft.com>)
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(3)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=felipepessoto@hotmail.com>)

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(3)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=DieselMachine84@users.noreply.github.com>)

- * [Hugh Bellamy (3)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=hughbellars@gmail.com>)
- * [Evgeny Pavlov (3)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=e.pavlov@samsung.com>)
- *

[Eric St. John (3)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=ericstj@microsoft.com>)

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- * [Austin Wise (3)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=AustinWise@gmail.com>)
- * [Vance Morrison

(3)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=vancemorrison@comcast.net>)

- * [Sedar Gokbulut (3)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=sedarg@microsoft.com>)
- * [Sean Gillespie (3)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=sean.william.g@gmail.com>)
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- *

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- * [Petr Onderka (3)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=gs Vick@gmail.com>)
- * [Peter Kukol

(3)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=pkukol@users.noreply.github.com>)

- * [John Bottenberg (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jobotten@microsoft.com>)
- * [Hanjoung Lee (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=hanjoung.lee@samsung.com>)
- * [Luis G (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=lvgomez@users.noreply.github.com>)
- * [Maoni0 (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=maonis@microsoft.com>)
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- * [Fei Peng (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=fei.peng@intel.com>)
- *

[Fadi Hanna (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=fadim@microsoft.com>)

- * [Mukul Sabharwal (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=muks@microsoft.com>)

* [Omar Majid (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=omajid@redhat.com>)

* [Paul Westcott (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=p.westcott@gmail.com>)

* [Phil Christensen (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=philc@microsoft.com>)

* [Drew Scoggins (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=Drew%20Scoggins>)

* [Dmitry-Me (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=wipedout@yandex.ru>)

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*

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* [varocarbas (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=contact@customsolvers.com>)

* [Davis Goodin (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=dagood@microsoft.com>)

* [Daniel Podder (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=dpodder@gmail.com>)

* [Smile Wei (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=xiwe@microsoft.com>)

* [Chris Rummel (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=crummel@microsoft.com>)

* [Tanner Gooding (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=tagoo@microsoft.com>)

* [Tom Deseyn (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=tom.deseyn@gmail.com>)

* [Bruce Bowyer-Smyth (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=bbowyersmyth@live.com.au>)

*

[WinCPP (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=mandards@gmail.com>)

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* [ahsonkhan (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=ahsonkhan@users.noreply.github.com>)

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*

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* [Matt Galbraith (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=MattGal@users.noreply.github.com>)

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* [Russ Keldorph (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=russ.keldorph@microsoft.com>)

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- *
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*

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* [WinCPP (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=mandards@gmail.com>)

*

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*

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*

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*

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.NET 5 is an amazing milestone enabled, in part, by a wonderfully engaged community. This page is an attempt to acknowledge the efforts of many folks across the breadth of the ecosystem. We're working to get better at recognizing the your contributions so please, let us know if something is incorrect or missing.

****Thank you!!****

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 ## sdk

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Contributions to .NET Core 1.1

We're still working out the best way to present contributors and trying to be as accurate as possible. The list below is generated with the following command against each repo. The release qualifier is different from the example in some cases. Also, where multiple email addresses were returned for a single person, the counts were aggregated with the email address reported the most commits.

```
```bash
git shortlog -sne --no-merges --since {2016-05-20} --until {2016-11-08}
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

CLI

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- [Bryan Thornbury (27)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=brthor@microsoft.com>)
- [Zlatko Knezevic (11)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=zlakne@microsoft.com>)
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- [Livar (3)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=licavalc@microsoft.com>)
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preview2.1?author=lasekar@microsoft.com)

- [Livar Cunha (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=licavalc@microsoft.com>)
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- [Deepak Shankargouda (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=deshank@microsoft.com>)
- [Jostein Kjnigsen (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=jostein@kjonigsen.net>)
- [vinnyrom (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=vinnyrom@microsoft.com>)
- [Sasha Semennikov (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=alsemenn@microsoft.com>)
-
- [rhadley (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=rhadley@microsoft.com>)
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- [Rich Lander (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=rlander@microsoft.com>)
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- [Adam Speight (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=AdamSpeight2008@users.noreply.github.com>)
- [Andrey Kvochko (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=a.kvochko@samsung.com>)
- [Atsushi Kanamori (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=atsushik@microsoft.com>)
- [Austin Wise (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=AustinWise@gmail.com>)
- [Barry Dorrans (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=Barry.Dorrans@microsoft.com>)
-
- [Bryan Arant (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=bryanar@microsoft.com>)
- [Bryan P. Arant (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=bryanar@microsoft.com>)
- [Chris McKinsey (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=chrismck@microsoft.com>)
- [Daniel Podder (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=dapodd@microsoft.com>)
- [Daniel Podder (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=dpodder@gmail.com>)
- [Davis Goodin (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=dagood@users.noreply.github.com>)
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-
- [Hyeongseok Oh (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=hseok82.oh@samsung.com>)
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-
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-
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-
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- [Sasha Semennikov (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=alsemenn@sashas-mbp.guest.corp.microsoft.com>)
- [Sean Gillespie (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=sean.william.g@gmail.com>)
- [Sejong OH (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=sejooh@microsoft.com>)
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-
- [Shahid Khan (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=shahid.mrd@hotmail.com>)
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(1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=tijoytk@microsoft.com>)
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(1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=weshaggard@users.noreply.github.com>)
- [Xiangyang (Mark) Guo
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- [dotnet bot (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=dotnet-bot@microsoft.com>)
- [hqueue (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=hqueue@users.noreply.github.com>)
- [jashook (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=jashoo@microsoft.com>)
-
- [joemmett (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=joemmett@microsoft.com>)
- [kchoi (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=code.kchoi@gmail.com>)
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##

CoreFX

- [Stephen Toub (179)](<https://github.com/dotnet/corefx/commits/release/1.1.0/?author=stoub@microsoft.com>)
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- [Hugh Bellamy (57)](<https://github.com/dotnet/corefx/commits/release/1.1.0/?author=hughbellars@gmail.com>)
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- [Ian Hays (29)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=ianha@microsoft.com>)
- [Tom Matouek (27)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=tmat@users.noreply.github.com>)
- [James Ko (27)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=jamesqko@gmail.com>)
- [Justin Van Patten (23)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=jvp@justinvp.com>)
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- [Nick Guerrero (9)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=nicholg@microsoft.com>)
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- [chcosta (7)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=chcosta@microsoft.com>)
- [Hyeongseok Oh (6)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=hseok82.oh@samsung.com>)
- [Prajwal A N (5)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=an.prajwal@samsung.com>)
- [Matt Galbraith (5)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=mattgal@microsoft.com>)
- [Eric Eilebrecht (5)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=ericeil@hotmail.com>)
- [Tijoy Tom Kalathiparambil (5)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=tijoytk@microsoft.com>)
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- [vitek-karas (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0/?author=vitek.karas@microsoft.com>)
- [Davis Goodin (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0/?author=dagood@users.noreply.github.com>)
- [Matt Connew (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0/?author=mconnew@microsoft.com>)
- [Matt Mitchell (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0/?author=mmitche@microsoft.com>)
- [Khoa Dang (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0/?author=Khoa.Dang@microsoft.com>)
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- [Matt Galbraith (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0/?author=MattGal@users.noreply.github.com>)
- [Stephen A. Imhoff (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0/?author=clockwork-muse@outlook.com>)
- [Andrew Au (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0/?author=andrewau@microsoft.com>)
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- [Atsushi Kanamori (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0/?author=atsushik@microsoft.com>)
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- [Jonghyun Park (2)](<https://github.com/dotnet/corefx/commits/release/1.1.0/?author=parjong@gmail.com>)
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- [Vance Morrison (2)](<https://github.com/dotnet/corefx/commits/release/1.1.0/?author=vancemorrison@comcast.net>)
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- [Jiyoung Yun (2)](<https://github.com/dotnet/corefx/commits/release/1.1.0/?author=jy910.yun@samsung.com>)
- [loulun (2)](<https://github.com/dotnet/corefx/commits/release/1.1.0/?author=loulun@hotmail.com>)
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-

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Contributions to .NET Core 2.0 Preview 2

We're still working out the best way to present contributors and trying to be as accurate as possible. The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core 2.0 Preview 2. Where multiple email addresses were returned for a single person, the counts were aggregated with the email address reported the most commits.

```
```bash
git shortlog -sne --no-merges --since release/2.0.0@{2017-05-05} --until release/2.0.0@{2017-06-07}
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

- * [CLI](#cli)
- * [CoreCLR](#coreclr)
- * [CoreFX](#corefx)
- * [WCF](#wcf)

CLI

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- * [Eric Erhardt (22)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=eric.erhardt@microsoft.com>)
- * [William Li (21)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=wul@microsoft.com>)
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- * [Rainer Sigwald (5)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=raines@microsoft.com>)
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* [Gaurav Khanna (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=gkhanna@microsoft.com>)

* [Eric Erhardt (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=eric.erhardt@microsoft.com>)

* [Stephen A. Imhoff (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=clockwork-muse@outlook.com>)

WCF

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* [Zhenlan Wang (3)](https://github.com/dotnet/wcf/commits/release/2.0.0?author=zhenlwa@microsoft.com)
* [Matt Connew (2)](https://github.com/dotnet/wcf/commits/release/2.0.0?author=mconnew@microsoft.com)
*
[KKhurin (2)](https://github.com/dotnet/wcf/commits/release/2.0.0?author=kkhurin@microsoft.com)
* [Tarek Mahmoud Sayed
(2)](https://github.com/dotnet/wcf/commits/release/2.0.0?author=tarekms@microsoft.com)
* [Shin Mao (1)](https://github.com/dotnet/wcf/commits/release/2.0.0?author=shmao@microsoft.com)
* [hongdai (1)](https://github.com/dotnet/wcf/commits/release/2.0.0?author=hongdai@microsoft.com)
# Contributions to .NET Core 2.0 Preview 1
```

We're still working out the best way to present contributors and trying to be as accurate as possible. The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core 2.0 Preview 1. Where multiple email addresses were returned for a single person, the counts were aggregated with the email address reported the most commits.

```
```bash
git shortlog -sne --no-merges --since release/2.0.0@{2016-10-03} --until release/2.0.0@{2017-05-05} --
committer="dotnet-bot" --invert-grep
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

```
* [CLI](#cli)
* [CoreCLR](#coreclr)
* [CoreFX](#corefx)
* [WCF](#wcf)
```

CLI

```
* [Livar Cunha (227)](https://github.com/dotnet/cli/commits/release/2.0.0?author=livar@live.com)
* [Piotr Puskiewicz (219)](https://github.com/dotnet/cli/commits/release/2.0.0?author=piotrp@microsoft.com)
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[Justin Goshi (145)](https://github.com/dotnet/cli/commits/release/2.0.0?author=jgoshi@microsoft.com)
* [Eric Erhardt (136)](https://github.com/dotnet/cli/commits/release/2.0.0?author=eric.erhardt@microsoft.com)
* [Krzysztof Wicher (103)](https://github.com/dotnet/cli/commits/release/2.0.0?author=mordotymoja@gmail.com)
* [jonsequitur (74)](https://github.com/dotnet/cli/commits/release/2.0.0?author=jonsequira@gmail.com)
* [Jon Sequeira (51)](https://github.com/dotnet/cli/commits/release/2.0.0?author=jonsequira@gmail.com)
* [Mike Lorbeteske (43)](https://github.com/dotnet/cli/commits/release/2.0.0?author=mike.lorbeteske@n3-p.com)
* [Faizan Ahmad (32)](https://github.com/dotnet/cli/commits/release/2.0.0?author=faahmad@microsoft.com)
* [Livar Cunha (29)](https://github.com/dotnet/cli/commits/release/2.0.0?author=licavalc@microsoft.com)
* [Zlatko Knezevic (29)](https://github.com/dotnet/cli/commits/release/2.0.0?author=zlakne@microsoft.com)
* [Bryan Thornbury (26)](https://github.com/dotnet/cli/commits/release/2.0.0?author=brthor@microsoft.com)
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```

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- * [Daniel Plaisted (25)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=daplaist@microsoft.com>)
- * [Nick Guerrero (21)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=nicholg@microsoft.com>)
- * [Scott Carlton (19)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=v-sccarl@microsoft.com>)
- * [William Li (18)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=wul@microsoft.com>)
- * [John Beisner (15)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=jbeisner@microsoft.com>)
- * [Satya Madala (14)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=samadala@microsoft.com>)
- * [Unknown (14)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=piotrp@microsoft.com>)
- * [Rama Krishnan Raghupathy (12)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=ramarag@microsoft.com>)
- *
- [Matt Ellis (12)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=matell@microsoft.com>)
- * [Harsh Jain (10)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=harjain@microsoft.com>)
- * [Nate Amundson (9)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=naamunds@microsoft.com>)
- * [Ankit Mishra (9)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=anmishr@microsoft.com>)
- * [Rohit Agrawal (9)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=ragrawal@microsoft.com>)
- * [Jeff Kluge (8)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=jeffkl@microsoft.com>)
- * [Vijay Ramakrishnan (7)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=vramak@microsoft.com>)
- * [Shayne Boyer (6)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=spboyer@live.com>)
- * [dasMulli (6)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=martin.andreas.ullrich@gmail.com>)
- * [Omair Majid (6)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=omajid@redhat.com>)
- *
- [Justin Emgarten (6)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=justin@emgarten.com>)
- * [Mike Lorbeteske (5)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=mlorbe@microsoft.com>)
- * [Arun Mahapatra (5)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=codito@users.noreply.github.com>)
- * [Parallels (5)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=livar@live.com>)
- * [Maira Wenzel (5)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=mairaw@microsoft.com>)
- * [Jonathan Channon (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=jonathan.channon@gmail.com>)
- * [Zbynk Sailer (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=v-zbsail@microsoft.com>)
- * [blackdwarf (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=zlakne@microsoft.com>)
- * [Sridhar Periyasamy (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=sridhper@microsoft.com>)
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- [Faizan2304 (3)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=faizan2304@hotmail.com>)
- * [Arun Mahapatra (3)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=armahapa@microsoft.com>)
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- * [vsccarl (2)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=v-sccarl@microsoft.com>)
- * [Anoop John Bandi (2)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=aajohn@microsoft.com>)
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CoreCLR

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- * [danmosemsft (139)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=danmose@microsoft.com>)
- * [Pat Gavlin (130)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=pagavlin@microsoft.com>)
- * [Bruce Forstall (80)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=brucefo@microsoft.com>)
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- * [wtgodbe (60)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=wigodbe@microsoft.com>)
- * [Joseph Tremoulet (55)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jotrem@microsoft.com>)
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- [Sergey Andreenko (42)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=seandree@microsoft.com>)
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- * [Michelle McDaniel (39)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=adiaaida@gmail.com>)
- * [Hyeongseok Oh (38)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=hseok82.oh@samsung.com>)
- * [Steve MacLean, Qualcomm Datacenter Technologies, Inc (37)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=sdmaclea@qti.qualcomm.com>)
- * [Koundinya Veluri (35)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=kouvel@microsoft.com>)
- * [Rahul Kumar (34)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=rahku@microsoft.com>)
- * [dotnet bot (31)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=dotnet-bot@dotnetfoundation.org>)
- * [Carol Eidt (31)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=carol.eidt@microsoft.com>)
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*

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*

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* [WinCPP (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=mandards@gmail.com>)

*

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*

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*

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*

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* [Viktor Hofer (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=viktor.hofer@microsoft.com>)

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* [Zverev Eugene (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=zverev.eugene@gmail.com>)

* [cod7alex (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=cod7alex@gmail.com>)

* [darxis (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=darxis@users.noreply.github.com>)

* [dasMulli (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=martin.andreas.ullrich@gmail.com>)

* [dnickless (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=daniel.hegener@gmx.net>)

* [giuliohome
(1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=giuliohome@gmail.com>)

* [helloguo (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=xiangyang.guo@intel.com>)

* [ikopylov
(1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=ikopylov@users.noreply.github.com>)

* [jorive (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jorive@microsoft.com>)

* [kchoi (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=code.kchoi@gmail.com>)

* [pius.lee (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=pius.lee@samsung.com>)

* [rahul (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=rahku@github.com>)

* [smile21prc (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=xiwe@microsoft.com>)

* [vkvenkat (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=Varun.K.Venkatesan@intel.com>)

CoreFX

* [Stephen Toub (535)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=stoub@microsoft.com>)

*

[Jon Hanna (344)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=jon@hackcraft.net>)

* [Eric St. John (285)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=ericstj@microsoft.com>)

* [Eric Mellino (167)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=erme@microsoft.com>)

* [Jose Perez Rodriguez (116)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=joperezr@microsoft.com>)

* [Wes Haggard (113)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=Wes.Haggard@microsoft.com>)

* [Hugh Bellamy (102)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=hughbellars@gmail.com>)

* [Bart De Smet (99)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=bartde@microsoft.com>)

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*

[Ian Hays (90)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=ianha@microsoft.com>)

* [Santiago Fernandez Madero (88)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=safarn@microsoft.com>)

* [Jan Kotas (80)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=jkotas@microsoft.com>)

* [Anthony Langsworth (78)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=anthony.langsworth@gmail.com>)

* [chcosta (78)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=chcosta@microsoft.com>)

* [Dan Moseley (73)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=danmose@microsoft.com>)

* [sepidMS (59)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=sekho@microsoft.com>)

* [Liudmila Molkova (58)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=lmolkova@microsoft.com>)

* [Alex Perovich (58)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=alperovi@microsoft.com>)

* [Tarek Mahmoud Sayed (56)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=tarekms@microsoft.com>)

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* [Geoff Kizer (34)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=geoffrek@microsoft.com>)

* [Stephen A. Imhoff (32)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=clockwork-muse@outlook.com>)

*

[Viktor Hofer (31)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=viktor.hofer@microsoft.com>)

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* [Alex Ghiondea (28)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=ghiondea.alexandru@microsoft.com>)

* [Matt Mitchell (28)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=mmitche@microsoft.com>)

* [Bart J.F. De Smet (26)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=bartdesmet@hotmail.com>)

* [David Shulman (26)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=david.shulman@microsoft.com>)

* [Davis Goodin (26)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=dagood@microsoft.com>)

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* [Steve Harter (24)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=steveharter@users.noreply.github.com>)

* [Christopher Costa (21)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=chcosta@microsoft.com>)

* [Steve Harter (21)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=sharter@microsoft.com>)

* [Frederik Carlier (21)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=frederik.carlier@quamotion.mobi>)

* [Alexander Radchenko (21)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=radchenkosasha@gmail.com>)

* [Sedar Gokbulut (20)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=sedarg@microsoft.com>)

* [Ahson Ahmed Khan (19)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=ahsonkhan@users.noreply.github.com>)

* [Rahul Kumar (19)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=rahku@microsoft.com>)

*

[Wes Haggard (19)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=weshaggard@users.noreply.github.com>)

* [dotnet-bot (19)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=dotnet-bot@microsoft.com>)

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* [Gaurav Khanna (17)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=gkhanna@microsoft.com>)

* [Marek Safar (17)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=marek.safar@gmail.com>)

* [Koundinya Veluri (17)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=kouvel@microsoft.com>)

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*

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* [Immo Landwerth (13)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=immol@microsoft.com>)

* [David Wright (13)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=dcwuser@live.com>)

*

[Huangli Wu (12)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=huanwu@microsoft.com>)

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(12)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=atsushik@microsoft.com>)

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*

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(9)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=MattGal@users.noreply.github.com>)

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* [Santiago Fernandez (9)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=saferr@microsoft.com>)

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* [Alex Ghiondea
(7)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=AlexGhiondea@users.noreply.github.com>)

* [Petr Onderka (7)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=gs Vick@gmail.com>)

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* [wtgodbe (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=wigodbe@microsoft.com>)

*

[Gene Lee (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=gelee@microsoft.com>)

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* [Eric StJohn (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=ericstj@microsoft.com>)

* [WinCPP (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=mandards@gmail.com>)

* [Brahmnes Fung (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=bfung@microsoft.com>)

* [Jan Vorlicek (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=janvorli@microsoft.com>)

*
[nietras (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=nietras@users.noreply.github.com>)
* [vsadov (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=vsadov@microsoft.com>)
* [Jonghyun Park (5)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=parjong@gmail.com>)
* [Peter Marcu (5)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=Peter.Marcu@Microsoft.com>)
* [Davis Goodin
(5)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=dagood@users.noreply.github.com>)
* [chunseok lee (5)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=chunseok.lee@samsung.com>)
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* [Adam Friedman
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* [Jiayi Li (4)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=v-lijiay@microsoft.com>)
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* [cydhaselton (4)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=chaselton@gmail.com>)
* [cod7alex (4)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=cod7alex@gmail.com>)
* [Carol Wang (4)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=v-carwan@microsoft.com>)
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[Tom Deseyn (4)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=tom.deseyn@gmail.com>)
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* [Egor Bogatov (4)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=egorbo@gmail.com>)
* [Robert Anderson
(4)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=shiftylogic@users.noreply.github.com>)
* [Eric Erhardt (4)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=eric.erhardt@microsoft.com>)
* [stone-li (4)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=v-stoli@microsoft.com>)
* [AlexGhiondea
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Contributions to .NET Core 2.1

The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core 2.1.

```
```bash
git shortlog -sne --no-merges --since 2017-11-16 --until 2018-05-15
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

- * [CLI](#cli)
- * [CoreCLR](#coreclr)

* [CoreFX](#corefx)

* [WCF](#wcf)

CLI

* [Livar Cunha (78)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=livar@live.com>)

* [jbeisner (57)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=jbeisner@microsoft.com>)

* [Peter Huene (57)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=pehuene@microsoft.com>)

* [Nate McMaster

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* [Livar (44)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=licavalc@microsoft.com>)

*

[John Beisner (42)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=jbeisner@microsoft.com>)

* [Nick Guerrero (36)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=nicholg@microsoft.com>)

* [William Lee (33)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=wul@microsoft.com>)

* [William Li (22)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=wul@microsoft.com>)

* [Andy Gerlicher (18)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=angerlic@microsoft.com>)

* [John Beisner

(18)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=johnbeisner@users.noreply.github.com>)

* [Livar Cunha (14)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=licavalc@microsoft.com>)

* [Mike Lorbetske (14)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=mlorbe@microsoft.com>)

* [Matt Mitchell (10)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=mmitch@microsoft.com>)

* [John Luo (9)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=jt.luo@mail.utoronto.ca>)

*

[Zbynk Sailer (9)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=v-zbsail@microsoft.com>)

* [Pranav K (9)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=prkrishn@hotmail.com>)

* [Rainer Sigwald (8)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=raines@microsoft.com>)

* [Parallels (7)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=livar@live.com>)

* [danmosemsft (6)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=danmose@microsoft.com>)

* [John Luo (6)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=johluo@microsoft.com>)

* [Daniel Plaisted (6)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=daplaist@microsoft.com>)

* [Kevin Ransom

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* [Eric Erhardt (5)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=eric.erhardt@microsoft.com>)

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* [Nate McMaster

(4)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=natemcmaster@users.noreply.github.com>)

* [Wes Haggard (4)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=Wes.Haggard@microsoft.com>)

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* [Mayank Bansal (3)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=maban@microsoft.com>)

* [Dan Moseley (3)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=danmose@microsoft.com>)

* [Jan Vorlicek (3)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=janvorli@microsoft.com>)

* [Javier Calvarro Nelson

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*
 [Maira Wenzel (3)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=mairaw@microsoft.com>)
 * [Tanner Gooding (3)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=tagoo@outlook.com>)
 * [Vijay Ramakrishnan (2)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=vramak@microsoft.com>)
 * [Kevin Ransom
 (2)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=codecutter.fsharp@hotmail.com>)
 * [Davis Goodin (2)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=dagood@microsoft.com>)
 * [vramak (2)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=vramak@microsoft.com>)
 * [Rakesh Ranjan Singh
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 * [abhishk (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=abhishk@microsoft.com>)
 * [Mihai Codoban (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=micodoba@microsoft.com>)
 * [jagarg (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=jagarg@microsoft.com>)
 *
 [Jose Perez Rodriguez (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=joperezr@microsoft.com>)
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 (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=johnbeisner@users.noreply.github.com>)
 * [Brice Lambson
 (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=bricelam@users.noreply.github.com>)
 * [root
 (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=33230602+kasper3@users.noreply.github.com>)
 * [test (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=test@net-dale.guest.corp.microsoft.com>)
 * [v-mdriml (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=v-mdriml@microsoft.com>)
 * [Steve MacLean
 (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=sdmaclea.qdt@qualcommdatacenter.com>)
 * [Steve Harter
 (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=steveharter@users.noreply.github.com>)
 * [Sean Peters
 (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=sepeters@microsoft.com>)
 * [Rohit Agrawal (NUGET
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 * [Yanchen Wu (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=yanchenw@microsoft.com>)

CoreCLR

* [Tanner Gooding (151)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=tagoo@outlook.com>)
 * [Jan Kotas (124)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=jkotas@microsoft.com>)
 * [Bruce Forstall (94)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=brucefo@microsoft.com>)
 * [Steve MacLean
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 * [Fei Peng (66)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=fei.peng@intel.com>)
 * [Stephen Toub (56)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=stoub@microsoft.com>)
 * [Sergey Andreenko (52)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=seandree@microsoft.com>)
 *
 [Carol Eidt (50)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=carol.eidt@microsoft.com>)
 * [Ahson Khan (44)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=ahkha@microsoft.com>)
 * [Brian Robbins (35)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=brianrob@microsoft.com>)
 * [Ben Adams (35)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=thundercat@illyriad.co.uk>)

* [Brian Sullivan (33)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=briansul@microsoft.com>)

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* [Michal Strehovsk (25)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=MichalStrehovsky@users.noreply.github.com>)

*

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* [Michelle McDaniel (19)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=adiaaida@gmail.com>)

* [Sung Yoon Whang (19)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=suwhang@microsoft.com>)

* [David Mason (17)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=davmason@microsoft.com>)

* [Mike McLaughlin (17)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=mikem@microsoft.com>)

* [Matt Mitchell (17)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=mmitch@microsoft.com>)

*

[Wes Haggard (15)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=Wes.Haggard@microsoft.com>)

* [Konstantin Baladurin (15)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=k.baladurin@partner.samsung.com>)

* [Victor "Nate" Graf (14)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=nategraf1@gmail.com>)

* [mikedn (14)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=onemihaid@hotmail.com>)

* [Jeremy Kuhne (14)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=jeremy.kuhne@microsoft.com>)

* [jashook (13)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=jashoo@microsoft.com>)

* [Mike Danes (13)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=onemihaid@hotmail.com>)

* [Justin Van Patten (12)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=jvp@justinvp.com>)

* [Tarek Mahmoud Sayed (11)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=tarekms@microsoft.com>)

*

[Sean Gillespie (11)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=segilles@microsoft.com>)

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* [JC Aguilera (9)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=juanam@microsoft.com>)

* [Maryam Ariyan (9)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=maryam.ariyan@microsoft.com>)

* [Atsushi Kanamori (8)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=AtsushiKan@users.noreply.github.com>)

* [Eugene Rozenfeld (8)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=erozen@microsoft.com>)

* [Russ Keldorph (7)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=Russ.Keldorph@microsoft.com>)

* [Luqun Lou (7)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=luqunl@users.noreply.github.com>)

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*

[Tom Deseyn (6)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=tom.deseyn@gmail.com>)
* [Adam Sitnik (6)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=adam.sitnik@gmail.com>)
* [Michal Strehovsk (5)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=michals@microsoft.com>)
* [Davis Goodin (5)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=dagood@microsoft.com>)
* [Ian Hays (5)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=ianha@microsoft.com>)
* [Levi Broderick (5)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=levib@microsoft.com>)
* [Eric Erhardt (5)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=eric.erhardt@microsoft.com>)
* [William Godbe (4)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=wigodbe@microsoft.com>)
* [John Doe (4)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=github.john.doe@outlook.com>)
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[sergey ignatov (4)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=sergign60@mail.ru>)
* [Viktor Hofer (4)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=viktor.hofer@microsoft.com>)
* [Marco Rossignoli
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* [Fei (3)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=fei.peng@intel.com>)
* [Jose Perez Rodriguez
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* [Jos Rivero (3)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=jorive@microsoft.com>)
* [Dan Moseley (3)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=danmose@microsoft.com>)
* [Vance Morrison (3)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=vancemorrison@comcast.net>)
* [Santiago Fernandez Madero
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* [Petr Bred (3)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=bredpetr@gmail.com>)
*

[Davis Goodin
(3)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=dagood@users.noreply.github.com>)
* [Maoni Stephens
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* [wtgodbe (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=wigodbe@microsoft.com>)
* [Alex (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=cod7alex@gmail.com>)
* [Alfred Myers
(2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=alfredmyers@users.noreply.github.com>)
* [Andon Andonov (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=anandono@microsoft.com>)
* [Atanu (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=RoyAtanu@users.noreply.github.com>)
* [Bruno Tagliapietra
(2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=bruno.tagliapietra@gmail.com>)
* [Cesar Soares Lucas (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=disoares@microsoft.com>)
*

[Igor Kulaychuk (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=igor.kulaychuk@gmail.com>)
* [Jarret Shook (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=jashoo@microsoft.com>)
* [Levi Broderick
(2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=GrabYourPitchforks@users.noreply.github.com>)
* [Mandar Sahasrabudhe
(2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=WinCPP@users.noreply.github.com>)
* [Matt Galbraith (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=mattgal@microsoft.com>)

* [Matt Warren (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=matt.warren@live.co.uk>)

* [Phil Garcia (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=phil@thinkedge.com>)

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*

[Sergey Ignatov (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=sergign60@mail.ru>)

* [Sven Boemer (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=sbomer@gmail.com>)

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* [gbalykov (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=g.balykov@samsung.com>)

* [kasper3
(2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=33230602+kasper3@users.noreply.github.com>)

* [Jon Hanna (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=jon@hackcraft.net>)

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* [Alexander Soldatov
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* [Ruben Ayrapetyan (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=ruben-ayrapetyan@users.noreply.github.com>)

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*

[Adam Sitnik (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=adam.sitnik@microsoft.com>)

* [Russell Cohen (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=russell.r.cohen@gmail.com>)

* [Hugh Zabriskie (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=hugh.zabriskie@gmail.com>)

* [Sean Gillespie (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=sean@pulum.com>)

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*

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- * [Tomas Weinfurt (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=tweinfurt@yahoo.com>)
- * [Vance Morrison (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=vancem@microsoft.com>)
- * [Chris Sienkiewicz (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=chsienki@microsoft.com>)
- *
- [Chad Nedzlek (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=chadnedz@microsoft.com>)
- * [Victor Zaytsev (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=allisq3@gmail.com>)
- * [Buyduck (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=ivan.vagin@partner.samsung.com>)
- * [Bruce Bowyer-Smyth (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=bbowyersmyth@live.com.au>)
- * [Wes Haggard (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=weshaggard@users.noreply.github.com>)
- * [Anton Lapounov (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=anton.lapounov@microsoft.com>)
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- * [antofik (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=antofik@gmail.com>)
- * [nietras (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=nietras@users.noreply.github.com>)
- * [chunseoklee (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=chunseoklee@naver.com>)
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- * [danmosemsft (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=danmose@microsoft.com>)
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- * [Martin Andersen (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=martin.andersen@outlook.com>)
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- * [Alfred Myers (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=git@alfredmyers.com>)
- * [Krzysztof Wicher (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=mordotymoja@gmail.com>)
- *
- [Alexandre Teoi (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=ateoi@users.noreply.github.com>)
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CoreFX

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*

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*

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*

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*

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* [Davis Goodin (4)](<https://github.com/dotnet/corefx/commits/release/2.1?author=dagood@microsoft.com>)

* [Matt Galbraith
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*

[Eugene Rozenfeld (4)](<https://github.com/dotnet/corefx/commits/release/2.1?author=erozen@microsoft.com>)

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* [TylerBrinkley (4)](<https://github.com/dotnet/corefx/commits/release/2.1?author=Tydude4Christ@hotmail.com>)

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*

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*

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*

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/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.2.11, January 15th, 2017

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Martin Richards

23 February 2007

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<Project Sdk="Microsoft.Build.NoTargets">

<UsingTask TaskName="RegenerateThirdPartyNotices" AssemblyFile="\$(InstallerTasksAssemblyPath)" />

<Target Name="RegenerateThirdPartyNotices" AfterTargets="Build">

<PropertyGroup>

<TpnFile>\$(InstallerProjectRoot)pkg\THIRD-PARTY-NOTICES.TXT</TpnFile>

</PropertyGroup>

<!--

Repo configuration. Upstreams, but also more: the TPN in dotnet/runtime serves many repos outside its graph, because dotnet/runtime produces the installer that ends up placing the single TPN file in the dotnet home directory.

-->

<ItemGroup>

<TpnRepo Include="dotnet/runtime" />

<TpnRepo Include="dotnet/aspnetcore" />

<TpnRepo Include="dotnet/installer" />


```

<TpnRepo Include="dotnet/roslyn-analyzers" />
<TpnRepo Include="dotnet/templating" />
<TpnRepo Include="dotnet/winforms" />
<TpnRepo Include="dotnet/wpf" />

<!--
  Additional repos that should be included but don't have any
third-party-notices files:
  dotnet/efcore
  dotnet/emsdk
  dotnet/extensions
  dotnet/icu
  dotnet/sdk
  dotnet/windowsdesktop
-->

<TpnRepo Condition="'%(TpnRepo.Branch)' == ''" Branch="main" />

<PotentialTpnPath Include="THIRD-PARTY-NOTICES.TXT" />
<PotentialTpnPath Include="THIRD-PARTY-NOTICES.txt" />
<PotentialTpnPath Include="THIRD-PARTY-NOTICES" />
<PotentialTpnPath Include="THIRDPARTYNOTICES.TXT" />
<PotentialTpnPath Include="THIRDPARTYNOTICES.txt" />
</ItemGroup>

<RegenerateThirdPartyNotices
  TpnFile="$(TpnFile)"
  PotentialTpnPaths="@ (PotentialTpnPath)"
  TpnRepos="@ (TpnRepo)" />

<Message Text="$(MSBuildProjectName) -> $(TpnFile)" Importance="High" />
</Target>

</Project>
<Project Sdk="Microsoft.NET.Sdk">
  <PropertyGroup>
    <OutputType>Exe</OutputType>
    <ApplicationManifest>App.manifest</ApplicationManifest>
  </PropertyGroup>
  <ItemGroup>
    <Compile Include="Program.cs" />
    <Compile Include="..\..\ServerContracts/Server.CoClasses.cs" />
    <Compile Include="..\..\ServerContracts/Server.Contracts.cs" />
    <Compile Include="..\..\ServerContracts/ServerGuids.cs" />
  </ItemGroup>
  <ItemGroup>
    <CMakeProjectReference Include="..\..\NativeServer/CMakeLists.txt" />
    <ProjectReference Include="$(TestSourceDir)Common/CoreCLRTestLibrary/CoreCLRTestLibrary.csproj" />

```

</ItemGroup>

</Project>

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<https://github.com/madler/zlib>
https://zlib.net/zlib_license.html

/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.2.13, October 13th, 2022

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/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.3.1, January 22nd, 2024

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By Sean Eron Anderson
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1.38 mstest.testadapter 1.2.1

1.38.1 Available under license :

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1.39

system.configuration.configurationmanager 7.0.0

1.39.1 Notifications :

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit

(<http://www.openssl.org/>)

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com).

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- *
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- *
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- * [Mike Rousos (1)](<https://github.com/dotnet/corefx/commits/master?author=MikeRou@Microsoft.com>)
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- * [mirhagk (1)](<https://github.com/dotnet/corefx/commits/master?author=mirhagk@gmail.com>)
- * [mkborg (1)](<https://github.com/dotnet/corefx/commits/master?author=mkborg@users.noreply.github.com>)
- *
- [moozyk (1)](<https://github.com/dotnet/corefx/commits/master?author=pawelka@microsoft.com>)
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- * [Noah Falk (1)](<https://github.com/dotnet/corefx/commits/master?author=noahfalk@microsoft.com>)
- * [Paolo G. Giarrusso (1)](<https://github.com/dotnet/corefx/commits/master?author=p.giarrusso@gmail.com>)
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- * [Peter Monks (1)](<https://github.com/dotnet/corefx/commits/master?author=pjmonks@gmail.com>)
- * [Petermarcu (1)](<https://github.com/dotnet/corefx/commits/master?author=Petermarcu@hotmail.com>)
- * [Pierre Arnaud (1)](<https://github.com/dotnet/corefx/commits/master?author=arnaud@epsitec.ch>)
- *
- [Prajwal A N (1)](<https://github.com/dotnet/corefx/commits/master?author=an.prajwal@samsung.com>)
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- * [Rama Krishnan Raghupathy (1)](<https://github.com/dotnet/corefx/commits/master?author=ramarag@microsoft.com>)
- * [rcabr (1)](<https://github.com/dotnet/corefx/commits/master?author=github@reubencabrera.com>)
- * [Russell Gray (1)](<https://github.com/dotnet/corefx/commits/master?author=russgray@gmail.com>)
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- * [Shay Rojansky (1)](<https://github.com/dotnet/corefx/commits/master?author=roji@roji.org>)
- * [Simon Timms (1)](<https://github.com/dotnet/corefx/commits/master?author=stimms@gmail.com>)
- * [Steven Engelhardt (1)](<https://github.com/dotnet/corefx/commits/master?author=sengelha@gmail.com>)
- *
- [stukselbax (1)](<https://github.com/dotnet/corefx/commits/master?author=stukselbax@gmail.com>)
- * [Sung-Jae Lee (1)](<https://github.com/dotnet/corefx/commits/master?author=sjlee@mail.com>)
- * [SunnyWar (1)](<https://github.com/dotnet/corefx/commits/master?author=itsallthesametome@hotmail.com>)
- * [Tanner Gooding (1)](<https://github.com/dotnet/corefx/commits/master?author=tagoo@microsoft.com>)
- * [Taylor Southwick (1)](<https://github.com/dotnet/corefx/commits/master?author=twsouthwick@outlook.com>)
- * [theCrispy (1)](<https://github.com/dotnet/corefx/commits/master?author=chr.steinert@outlook.com>)
- * [Tijoy Tom Kalathiparambil (1)](<https://github.com/dotnet/corefx/commits/master?author=tijoytk@microsoft.com>)
- * [Tom Deseyn (1)](<https://github.com/dotnet/corefx/commits/master?author=tom.deseyn@gmail.com>)
- * [tymlipari (1)](<https://github.com/dotnet/corefx/commits/master?author=tym@tymlipari.com>)
- * [Ujjwol Lamichhane (1)](<https://github.com/dotnet/corefx/commits/master?author=ujjwollamichhane@gmail.com>)
- *
- [vecode (1)](<https://github.com/dotnet/corefx/commits/master?author=marvindanker@gmail.com>)
- * [Vlad Riscutia (1)](<https://github.com/dotnet/corefx/commits/master?author=vladris@outlook.com>)
- * [Wade Wegner (1)](<https://github.com/dotnet/corefx/commits/master?author=wade.wegner@gmail.com>)
- * [yfakariya (1)](<https://github.com/dotnet/corefx/commits/master?author=yfakariya@gmail.com>)

Core Tools

* [Bryan Thornbury (304)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=brthor@microsoft.com>)

* [Sridhar Periyasamy (210)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=sridhper@microsoft.com>)

* [Eric Erhardt (196)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=eric.erhardt@microsoft.com>)

* [David Fowler (164)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=davidfowl@gmail.com>)

* [piotrp (149)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=piotrp@microsoft.com>)

* [Andrew Stanton-Nurse (148)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=andrew@andrewnurse.net>)

*

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* [Livar Cunha (78)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=livar@live.com>)

* [Zlatko Knezevic (78)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=zlakne@microsoft.com>)

* [Krzysztof Wicher (74)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=kwicher@microsoft.com>)

* [Troy Dai (66)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=troy.dai@outlook.com>)

* [Mihai Codoban (43)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=micodoba@microsoft.com>)

* [Matt Ellis (26)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=matell@microsoft.com>)

* [Andy Gocke (25)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=angocke@microsoft.com>)

* [Livar Cunha (21)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=licavalc@microsoft.com>)

*

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* [Andrew Stanton-Nurse (19)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=andrew@stanton-nurse.com>)

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* [Eric St. John (16)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=ericstj@microsoft.com>)

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* [discostu105 (11)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=c.neumueller@gmail.com>)

* [Petr Onderka (11)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=gsvick@gmail.com>)

* [Tanner Gooding (11)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=tannergooding@users.noreply.github.com>)

*

[Gaurav Khanna (10)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=gkhanna@microsoft.com>)

* [moozyk (10)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=pawelka@microsoft.com>)

* [Richard Lander (9)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=rlander@microsoft.com>)

* [Jonathan Miller (8)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=jonmill@microsoft.com>)

* [Rob Mensching (8)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=rob@firegiant.com>)

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* [Lakshan Fernando (7)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=lakshanf@microsoft.com>)

* [Michael Simons (7)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=msimons@microsoft.com>)

* [Peter Marcu (7)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=Peter.Marcu@Microsoft.com>)

* [Todd Moscinski (7)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=toddmosc@microsoft.com>)

*

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* [Matt Mitchell (6)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=mmitche@microsoft.com>)

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- *
- [Aditya Mandaleeka (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=adityam@microsoft.com>)
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- * [Joel Verhagen (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=jver@microsoft.com>)
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- *
- [Manish Jayaswal (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=manishj@microsoft.com>)
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- *
- [Alexander Kozlenko (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=alexander.kozlenko@live.com>)
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- * [Ben Adams (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=thundercat@illyriad.co.uk>)
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- * [Brice Lambson (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=bricelam@outlook.com>)
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- * [Damian Edwards (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=damian@damianedwards.com>)
- * [Daniel Podder (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=dapodd@microsoft.com>)
- *
- [David Lechner (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=david@lechnology.com>)
- * [Dennis Fischer (1)](https://github.com/dotnet/cli/commits/rel/1.0.0?author=fischer_dennis@live.de)
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- * [Geoff Norton (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=grompf@gmail.com>)
- * [jacalvar (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=jacalvar@microsoft.com>)
- * [Jan Kotas (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=jkotas@microsoft.com>)
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*
 [Joel Hendrix (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=jhendrix@microsoft.com>)
 * [John Luo (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=jt.luo@mail.utoronto.ca>)
 * [John Van Tuyl (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=jpvantuy@gmail.com>)
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 * [Kai Eichinger (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=cH40z-Lord@outlook.com>)
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 * [Luke Elliott (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=revlucio@gmail.com>)
 * [Luke Latham (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=mis@guardrex.com>)
 * [Mark Junker (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=fubar-coder@users.noreply.github.com>)
 *
 [Mark Rendle (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=mark@markrendle.net>)
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 * [nattress (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=simonnn@microsoft.com>)
 * [Noah Falk (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=noahfalk@microsoft.com>)
 * [Peter Jas (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=necmon@yahoo.com>)
 * [Rob Relyea (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=rob@relyeas.net>)
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 * [stephentoub (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=stoub@microsoft.com>)
 * [Tanner Gooding (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=tannergooding@outlook.com>)
 *
 [The Gitter Badger (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=badger@gitter.im>)
 * [Tomas Matousek (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=tomas.matousek@microsoft.com>)
 * [Zhi Li (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=zhili128@outlook.com>)

Core Docs

* [Steve Hoag (195)](<https://github.com/dotnet/core-docs/commits/master?author=shoag@microsoft.com>)
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 *
 [matthewreily (24)](<https://github.com/dotnet/core-docs/commits/master?author=matthew.reily@interworks.com>)
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 * [blackdwarf (12)](<https://github.com/dotnet/core-docs/commits/master?author=zlakne@zlakne-bigun.redmond.corp.microsoft.com>)
 * [Ken Chen (12)](<https://github.com/dotnet/core-docs/commits/master?author=kenchen@microsoft.com>)

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*

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Contributions to .NET Core SDK 1.0

We're still working out the best way to present contributors and trying to be as accurate as possible. The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core SDK 1.0. Where multiple email addresses were returned for a single person, the counts were aggregated with the email address reported the most commits.

```
```bash
git shortlog -sne --no-merges --until release/1.1.0@{2017-02-25}
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

.NET Core Tools (SDK)

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# Contributions to .NET Core 2.0

```

The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core 2.0.

```

```bash

```

```
git shortlog -sne --no-merges --since release/2.0.0@{2016-10-03} --until release/2.0.0@{2017-07-25}
...
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

\* [CLI](#cli)

\* [CoreCLR](#coreclr)

\* [CoreFX](#corefx)

\* [WCF](#wcf)

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.NET 5 is an amazing milestone enabled, in part, by a wonderfully engaged community. This page is an attempt to acknowledge the efforts of many folks across the breadth of the ecosystem. We're working to get better at recognizing your contributions so please, let us know if something is incorrect or missing.

**\*\*Thank you!!\*\***

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Contributions to .NET Core 1.1

```

We're still working out the best way to present contributors and trying to be as accurate as possible. The list below is generated with the following command against each repo. The release qualifier is different from the example in some cases. Also, where multiple email addresses were returned for a single person, the counts were aggregated with the email address reported the most commits.

```

```bash
git shortlog -sne --no-merges --since {2016-05-20} --until {2016-11-08}
```

```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

## CLI

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- [Swaroop Sridhar (8)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=swaroops@microsoft.com>)
- [Jose Perez Rodriguez (8)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=joperezr@microsoft.com>)
- [Geunsik Lim (8)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=leemgs@users.noreply.github.com>)
- [Joseph Tremoulet (7)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=jotrem@microsoft.com>)
- [Hanjoung Lee (7)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=hanjoung.lee@samsung.com>)
- [Aditya Mandaleeka (6)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=adityamandaleeka@users.noreply.github.com>)
- [chunseoklee (6)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=chunseoklee@naver.com>)
- [Petr Onderka (5)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=gsvick@gmail.com>)
- [Vance Morrison (5)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=vancemorrison@comcast.net>)
- [Tarek Mahmoud Sayed (5)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=tarekms@microsoft.com>)
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- [Kshama Pawar (4)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=kspawa@microsoft.com>)
- 
- [Hyung-Kyu Choi (4)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=hqueue@users.noreply.github.com>)
- [Lakshmi Priya (4)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=Priya91@users.noreply.github.com>)
- [Sejong Oh (4)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=sejooh@microsoft.com>)
- [David Mason (4)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=davmason@microsoft.com>)
- [Jarret Shook (4)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=jashoo@microsoft.com>)
- [Wes Haggard (4)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=Wes.Haggard@microsoft.com>)
- [Davis Goodin (4)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=dagood@microsoft.com>)
- [sivarv (4)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=sivarv@microsoft.com>)
- [stephentoub (3)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=stoub@microsoft.com>)
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- [krk (3)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=keremkat@gmail.com>)
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- [Vance Morrison (3)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=vancem@microsoft.com>)
- [Yi Zhang (3)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=yzha@microsoft.com>)
- [dotnet bot (3)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=dotnet-bot@dotnetfoundation.org>)
- [Joel Hendrix (3)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=jhendrix@microsoft.com>)
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-

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- 
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- [Geunsik Lim (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=geunsik.lim@samsung.com>)
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- 
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- 
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- [Davis Goodin  
(1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=dagood@users.noreply.github.com>)
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(1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=dmitry.b@samsung.com>)
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(1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=guoxiao@users.noreply.github.com>)
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(1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=jpsingleton@users.noreply.github.com>)
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- [Jostein Kjnigsen (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=jostein@kjonigsen.net>)
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- [Lorenzo Tessoro  
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- [Martin Woodward  
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- 
- [Peter Foley (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=pefoley2@pefoley.com>)
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(1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=pkukol@users.noreply.github.com>)
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- [Sasha Semennikov (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=alsemenn@sashas-mbp.guest.corp.microsoft.com>)
- [Sean Gillespie (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=sean.william.g@gmail.com>)
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- 
- [Shahid Khan (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=shahid.mrd@hotmail.com>)
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(1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=tarekms@microsoft.com>)
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(1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=tijoytk@microsoft.com>)
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(1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=weshaggard@users.noreply.github.com>)
- [Xiangyang (Mark) Guo  
(1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=xiangyang.guo@intel.com>)
- [dotnet bot (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=dotnet-bot@microsoft.com>)
- [hqueue (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=hqueue@users.noreply.github.com>)
- [jashook (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=jashoo@microsoft.com>)
- 
- [joemmett (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=joemmett@microsoft.com>)
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CoreFX

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## # Contributions to .NET Core 2.0 Preview 2

We're still working out the best way to present contributors and trying to be as accurate as possible. The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core 2.0 Preview 2. Where multiple email addresses were returned for a single person, the counts were aggregated with the email address reported the most commits.

```
```bash
git shortlog -sne --no-merges --since release/2.0.0@{2017-05-05} --until release/2.0.0@{2017-06-07}
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

- \* [CLI](#cli)
- \* [CoreCLR](#coreclr)
- \* [CoreFX](#corefx)
- \* [WCF](#wcf)

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We're still working out the best way to present contributors and trying to be as accurate as possible. The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core 2.0 Preview 1. Where multiple email addresses were returned for a single person, the counts were aggregated with the email address reported the most commits.

```
```bash
git shortlog -sne --no-merges --since release/2.0.0@{2016-10-03} --until release/2.0.0@{2017-05-05} --
committer="dotnet-bot" --invert-grep
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

- \* [CLI](#cli)
- \* [CoreCLR](#coreclr)
- \* [CoreFX](#corefx)
- \* [WCF](#wcf)

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## # Contributions to .NET Core 2.1

The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core 2.1.

```
```bash
git shortlog -sne --no-merges --since 2017-11-16 --until 2018-05-15
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

- \* [CLI](#cli)
- \* [CoreCLR](#coreclr)
- \* [CoreFX](#corefx)
- \* [WCF](#wcf)

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\* [John Doe (4)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=github.john.doe@outlook.com>)

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## ## CoreFX

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## 3.0.0

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# 1.46 system.buffers 4.5.1

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Martin Richards

23 February 2007

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<Project Sdk="Microsoft.Build.NoTargets">

<UsingTask TaskName="RegenerateThirdPartyNotices" AssemblyFile="\$(InstallerTasksAssemblyPath)" />

<Target Name="RegenerateThirdPartyNotices" AfterTargets="Build">

<PropertyGroup>

<TpnFile>\$(InstallerProjectRoot)pkg\THIRD-PARTY-NOTICES.TXT</TpnFile>

</PropertyGroup>

<!--

Repo configuration. Upstreams, but also more: the TPN in dotnet/runtime serves many repos outside its graph, because dotnet/runtime produces the installer that ends up placing the single TPN file in the dotnet home directory.

-->

<ItemGroup>

<TpnRepo Include="dotnet/runtime" />

<TpnRepo Include="dotnet/aspnetcore" />

<TpnRepo Include="dotnet/installer" />

```

<TpnRepo Include="dotnet/roslyn-analyzers" />
<TpnRepo Include="dotnet/templating" />
<TpnRepo Include="dotnet/winforms" />
<TpnRepo Include="dotnet/wpf" />

<!--
 Additional repos that should be included but don't have any
third-party-notices files:
 dotnet/efcore
 dotnet/emsdk
 dotnet/extensions
 dotnet/icu
 dotnet/sdk
 dotnet/windowsdesktop
-->

<TpnRepo Condition="'%(TpnRepo.Branch)' == '' Branch="main" />

<PotentialTpnPath Include="THIRD-PARTY-NOTICES.TXT" />
<PotentialTpnPath Include="THIRD-PARTY-NOTICES.txt" />
<PotentialTpnPath Include="THIRD-PARTY-NOTICES" />
<PotentialTpnPath Include="THIRDPARTYNOTICES.TXT" />
<PotentialTpnPath Include="THIRDPARTYNOTICES.txt" />
</ItemGroup>

<RegenerateThirdPartyNotices
 TpnFile="$(TpnFile)"
 PotentialTpnPaths="@ (PotentialTpnPath)"
 TpnRepos="@ (TpnRepo)" />

<Message Text="$(MSBuildProjectName) -> $(TpnFile)" Importance="High" />
</Target>

</Project>
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/\* zlib.h -- interface of the 'zlib' general purpose compression library  
version 1.2.13, October 13th, 2022

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```
<Project Sdk="Microsoft.NET.Sdk">
```

```
<PropertyGroup>
```

```
<OutputType>Exe</OutputType>
```

```
<ApplicationManifest>App.manifest</ApplicationManifest>
```

```
</PropertyGroup>
```

```
<ItemGroup>
```

```
<Compile Include="Program.cs" />
```

```
<Compile Include="..\..\ServerContracts/Server.CoClasses.cs" />
```

```
<Compile Include="..\..\ServerContracts/Server.Contracts.cs" />
```

```
<Compile Include="..\..\ServerContracts/ServerGuids.cs" />
```

```
</ItemGroup>
```

```
<ItemGroup>
```

```
<CMakeProjectReference Include="..\..\NativeServer/CMakeLists.txt" />
```

```
<ProjectReference Include="$(TestSourceDir)Common/CoreCLRTestLibrary/CoreCLRTestLibrary.csproj" />
```

```
</ItemGroup>
```

```
</Project>
```

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```
new XElement("TITLE", "The Tragedy of Hamlet, Prince of Denmark"),
new XElement("fm",
 new XElement("p", "Text placed in the public domain by Moby Lexical Tools, 1992."),
 new XElement("p", "SGML markup by Jon Bosak, 1992-1994."),
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```

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For details on the original authors see <http://math.nist.gov/scimark2>

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Email local part: Philip.Hazel  
Email domain: gmail.com

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/\* zlib.h -- interface of the 'zlib' general purpose compression library  
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- \* [piotrp (149)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=piotrp@microsoft.com>)
- \* [Andrew Stanton-Nurse (148)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=andrew@andrewnurse.net>)
- \*
- [Pavel Krymets (107)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=pavel@krymets.com>)
- \* [Senthil (106)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=schellap@microsoft.com>)
- \* [Livar Cunha (78)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=livar@live.com>)
- \* [Zlatko Knezevic (78)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=zlakne@microsoft.com>)
- \* [Krzysztof Wicher (74)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=kwicher@microsoft.com>)
- \* [Troy Dai (66)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=troy.dai@outlook.com>)
- \* [Mihai Codoban (43)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=micodoba@microsoft.com>)
- \* [Matt Ellis (26)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=matell@microsoft.com>)
- \* [Andy Gocke (25)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=angocke@microsoft.com>)
- \* [Livar Cunha (21)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=licavalc@microsoft.com>)
- \*
- [Pranav K (20)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=prkrishn@hotmail.com>)
- \* [Andrew Stanton-Nurse (19)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=andrew@stanton-nurse.com>)
- \* [Enrico Sada (19)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=enrico@sada.io>)
- \* [Eric Mellino (16)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=erme@microsoft.com>)
- \* [Eric St. John (16)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=ericstj@microsoft.com>)
- \* [Dan Quirk (13)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=danquirk@microsoft.com>)
- \* [glennc (12)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=glennc@microsoft.com>)
- \* [discostu105 (11)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=c.neumueller@gmail.com>)
- \* [Petr Onderka (11)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=gs Vick@gmail.com>)
- \* [Tanner Gooding (11)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=tannergooding@users.noreply.github.com>)
- \*
- [Gaurav Khanna (10)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=gkhanna@microsoft.com>)
- \* [moozyk (10)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=pawelka@microsoft.com>)
- \* [Richard Lander (9)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=rlander@microsoft.com>)
- \* [Jonathan Miller (8)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=jonmill@microsoft.com>)
- \* [Rob Mensching (8)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=rob@firegiant.com>)
- \* [Adam Gorman (7)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=adamgor@microsoft.com>)
- \* [Lakshan Fernando (7)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=lakshanf@microsoft.com>)
- \* [Michael Simons (7)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=msimons@microsoft.com>)
- \* [Peter Marcu (7)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=Peter.Marcu@Microsoft.com>)
- \* [Todd Moscinski (7)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=toddmosc@microsoft.com>)
- \*
- [Wes Haggard (7)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=Wes.Haggard@microsoft.com>)
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- \* [Matt Mitchell (6)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=mmitch@microsoft.com>)
- \* [Krzysztof Wicher (5)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=mordotymoja@gmail.com>)



- \* [Austin Wise (4)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=AustinWise@gmail.com>)
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- \*
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- \*
- [Manish Jayaswal (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=manishj@microsoft.com>)
- \* [N. Taylor Mullen (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=nimullen@microsoft.com>)
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- \* [Alex KeySmith (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=AlexKeySmith@users.noreply.github.com>)
- \* [Alex Panov (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=alpaix@outlook.com>)
- \*
- [Alexander Kozlenko (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=alexander.kozlenko@live.com>)
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- \* [Brice Lambson (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=bricelam@outlook.com>)
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- \* [Daniel Podder (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=dapodd@microsoft.com>)
- \*
- [David Lechner (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=david@lechnology.com>)
- \* [Dennis Fischer (1)]([https://github.com/dotnet/cli/commits/rel/1.0.0?author=fischer\\_dennis@live.de](https://github.com/dotnet/cli/commits/rel/1.0.0?author=fischer_dennis@live.de))
- \* [Dongyun Jin (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=dongyun.jin@samsung.com>)
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- \* [Erik Schierboom (1)]([https://github.com/dotnet/cli/commits/rel/1.0.0?author=erik\\_schierboom@hotmail.com](https://github.com/dotnet/cli/commits/rel/1.0.0?author=erik_schierboom@hotmail.com))
- \* [factormystic (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=factormystic@gmail.com>)
- \* [Geoff Norton (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=grompf@gmail.com>)
- \* [jacalvar (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=jacalvar@microsoft.com>)

- \* [Jan Kotas (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=jkotas@microsoft.com>)
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- \*
- [Joel Hendrix (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=jhendrix@microsoft.com>)
- \* [John Luo (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=jt.luo@mail.utoronto.ca>)
- \* [John Van Tuyl (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=jpvantuyt@gmail.com>)
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- \* [Luke Elliott (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=revlucio@gmail.com>)
- \* [Luke Latham (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=mis@guardrex.com>)
- \* [Mark Junker (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=fubar-coder@users.noreply.github.com>)
- \*
- [Mark Rendle (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=mark@markrendle.net>)
- \* [martincostello (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=martin@martincostello.com>)
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- \* [nattress (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=simonn@microsoft.com>)
- \* [Noah Falk (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=noahfalk@microsoft.com>)
- \* [Peter Jas (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=necmon@yahoo.com>)
- \* [Rob Relyea (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=rob@relyeas.net>)
- \* [shahid-pk (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=shahid.mrd@hotmail.com>)
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- \* [Tanner Gooding (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=tannergooding@outlook.com>)
- \*
- [The Gitter Badger (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=badger@gitter.im>)
- \* [Tomas Matousek (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=tomas.matousek@microsoft.com>)
- \* [Zhi Li (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0?author=zhili128@outlook.com>)

## ## Core Docs

- \* [Steve Hoag (195)](<https://github.com/dotnet/core-docs/commits/master?author=shoag@microsoft.com>)
- \* [Zlatko Knezevic (61)](<https://github.com/dotnet/core-docs/commits/master?author=zlakne@microsoft.com>)
- \* [Bill Wagner (42)](<https://github.com/dotnet/core-docs/commits/master?author=bill@thebillwagner.com>)
- \* [Richard Lander (35)](<https://github.com/dotnet/core-docs/commits/master?author=rlander@microsoft.com>)
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- \* [Phillip Carter (26)](<https://github.com/dotnet/core-docs/commits/master?author=phillip.carter@outlook.com>)
- \*
- [matthewreily (24)](<https://github.com/dotnet/core-docs/commits/master?author=matthew.reily@interworks.com>)
- \* [rpetrusha (21)](<https://github.com/dotnet/core-docs/commits/master?author=ronpet@microsoft.com>)
- \* [Petr Onderka (17)](<https://github.com/dotnet/core-docs/commits/master?author=gs Vick@gmail.com>)
- \* [Maira Wenzel (16)](<https://github.com/dotnet/core-docs/commits/master?author=mairaw@users.noreply.github.com>)
- \* [Bill Wagner (14)](<https://github.com/dotnet/core-docs/commits/master?author=wiwagn@microsoft.com>)
- \* [brady gaster (14)](<https://github.com/dotnet/core-docs/commits/master?author=bradyg@microsoft.com>)
- \* [blackdwarf (12)](<https://github.com/dotnet/core-docs/commits/master?author=zlakne@zlakne->)

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- \* [Ken Chen (12)](<https://github.com/dotnet/core-docs/commits/master?author=kenchen@microsoft.com>)
- \* [Qinen Zhu (12)](<https://github.com/dotnet/core-docs/commits/master?author=qinzhu@microsoft.com>)
- \*
- [Liangying (7)](<https://github.com/dotnet/core-docs/commits/master?author=lianwei@microsoft.com>)
- \* [Steven Das (7)](<https://github.com/dotnet/core-docs/commits/master?author=DasAllFolks@users.noreply.github.com>)
- \* [Kemp Brown (5)](<https://github.com/dotnet/core-docs/commits/master?author=kempb1@hotmail.com>)
- \* [Daniel Roth (4)](<https://github.com/dotnet/core-docs/commits/master?author=danroth27@hotmail.com>)
- \* [Duncan Mackenzie (4)](<https://github.com/dotnet/core-docs/commits/master?author=duncanma@microsoft.com>)
- \* [Bertrand Le Roy (3)](<https://github.com/dotnet/core-docs/commits/master?author=bertrandleroy@gmail.com>)
- \* [blackdwarf (3)](<https://github.com/dotnet/core-docs/commits/master?author=blackdwarf@msforge.net>)
- \* [Eric StJohn (3)](<https://github.com/dotnet/core-docs/commits/master?author=ericstj@microsoft.com>)
- \* [Kemp Brown (3)](<https://github.com/dotnet/core-docs/commits/master?author=kempb@microsoft.com>)
- \* [Maira Wenzel (3)](<https://github.com/dotnet/core-docs/commits/master?author=mairaw@microsoft.com>)
- \*
- [Scott Hanselman (3)](<https://github.com/dotnet/core-docs/commits/master?author=scott@hanselman.com>)
- \* [Usman Prashant Satish (3)](<https://github.com/dotnet/core-docs/commits/master?author=anotherkabab@gmail.com>)
- \* [Brett Morrison (2)](<https://github.com/dotnet/core-docs/commits/master?author=b@brettmorrison.com>)
- \* [Daniel Plaisted (2)](<https://github.com/dotnet/core-docs/commits/master?author=dsplaisted@gmail.com>)
- \* [Jack Fox (2)](<https://github.com/dotnet/core-docs/commits/master?author=jackfoxy@gmail.com>)
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- \*
- [Alex Troshkin (1)](<https://github.com/dotnet/core-docs/commits/master?author=alextroshkin@outlook.com>)
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- \* [Andrew Arnott (1)](<https://github.com/dotnet/core-docs/commits/master?author=andrewarnott@gmail.com>)
- \* [Bertrand Le Roy (1)](<https://github.com/dotnet/core-docs/commits/master?author=beleroy@microsoft.com>)
- \* [Bill Wagner (1)](<https://github.com/dotnet/core-docs/commits/master?author=bill.w.wagner@outlook.com>)
- \* [Cole Mickens (1)](<https://github.com/dotnet/core-docs/commits/master?author=cole.mickens@gmail.com>)
- \* [Dan Moseley (1)](<https://github.com/dotnet/core-docs/commits/master?author=danmose@microsoft.com>)
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- \*
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- \* [Isaac Abraham (1)](<https://github.com/dotnet/core-docs/commits/master?author=isaac.abraham@live.co.uk>)
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- \*
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- \* [Robin Mller (1)](<https://github.com/dotnet/core-docs/commits/master?author=robin.mueller@outlook.de>)
- \* [Ruben Bartelink (1)](<https://github.com/dotnet/core-docs/commits/master?author=ruben@bartelink.com>)
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- \* [Ying Hua (1)](<https://github.com/dotnet/core-docs/commits/master?author=herohua@users.noreply.github.com>)
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## ## WCF

- \* [Ron Cain (191)](<https://github.com/dotnet/wcf/commits/master?author=roncain@microsoft.com>)
- \*
- [Jason Pang (176)](<https://github.com/dotnet/wcf/commits/master?author=jasonpa@microsoft.com>)
- \* [Stephen Bonikowsky (150)](<https://github.com/dotnet/wcf/commits/master?author=stebon@microsoft.com>)
- \* [Matt Connew (80)](<https://github.com/dotnet/wcf/commits/master?author=mconnew@microsoft.com>)
- \* [hongdai (49)](<https://github.com/dotnet/wcf/commits/master?author=hongdai@microsoft.com>)
- \* [Eric St. John (41)](<https://github.com/dotnet/wcf/commits/master?author=ericstj@microsoft.com>)
- \* [Shin Mao (29)](<https://github.com/dotnet/wcf/commits/master?author=shmao@microsoft.com>)
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Contributions to .NET Core SDK 1.0
```

We're still working out the best way to present contributors and trying to be as accurate as possible. The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core SDK 1.0. Where multiple email addresses were returned for a single person, the counts were aggregated with the email address reported the most commits.

```
```bash
git shortlog -sne --no-merges --until release/1.1.0@{2017-02-25}
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

#### ## .NET Core Tools (SDK)

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- [kotov.a (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=kotov.a@hotmail.com>)
- [martincostello (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=martin@martincostello.com>)
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# Contributions to .NET Core 2.0

The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core 2.0.

```

```bash
git shortlog -sne --no-merges --since release/2.0.0@{2016-10-03} --until release/2.0.0@{2017-07-25}
```

```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

```

* [CLI](#cli)
* [CoreCLR](#coreclr)
* [CoreFX](#corefx)
* [WCF](#wcf)

```

## CLI

```

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 \*  
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 \*  
 [WinCPP (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=mandards@gmail.com>)  
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 \* [Tom Matouek  
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 \*  
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 (9)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=morganbr@users.noreply.github.com>)  
 \* [Alex Ghiondea  
 (9)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=AlexGhiondea@users.noreply.github.com>)  
 \* [vsadov (9)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=vsadov@microsoft.com>)  
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.NET 5 is an amazing milestone enabled, in part, by a wonderfully engaged community. This page is an attempt to acknowledge the efforts of many folks across the breadth of the ecosystem. We're working to get better at recognizing your contributions so please, let us know if something is incorrect or missing.

**\*\*Thank you!!\*\***

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 ## sdk

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Contributions to .NET Core 1.1

```

We're still working out the best way to present contributors and trying to be as accurate as possible. The list below is generated with the following command against each repo. The release qualifier is different from the example in some cases. Also, where multiple email addresses were returned for a single person, the counts were aggregated with the email address reported the most commits.

```

```bash
git shortlog -sne --no-merges --since {2016-05-20} --until {2016-11-08}
```

```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

## CLI

```

- [Eric Erhardt (54)](https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=eric.erhardt@microsoft.com)
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```



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## CoreCLR

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- [Vance Morrison (3)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=vancem@microsoft.com>)
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- 
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- 
- [Sujin Kim (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=sjsujin.kim@samsung.com>)
- [Stephen A. Imhoff (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=clockwork-muse@outlook.com>)
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- 
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- 
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- [Davis Goodin
- (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=dagood@users.noreply.github.com>)
- [Dmitri Botcharnikov
- (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=dmitry.b@samsung.com>)
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- [Guo Xiao
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- 
- [Hyeongseok Oh (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=hseok82.oh@samsung.com>)
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- [Jarret Shook (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=jashook@jarrets-mini.guest.corp.microsoft.com>)
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- 
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-

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##

CoreFX

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-  
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-

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 - [Davis Goodin  
 (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=dagood@users.noreply.github.com>)  
 - [Matt Connew (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=mconnew@microsoft.com>)  
 -  
 [Matt Mitchell (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=mmitch@microsoft.com>)  
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 - [Dmitri Botcharnikov  
 (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=dmitry.b@samsung.com>)  
 - [Matt Galbraith  
 (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=MattGal@users.noreply.github.com>)  
 - [Stephen A. Imhoff (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=clockwork-muse@outlook.com>)  
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 - [Atsushi Kanamori (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=atsushik@microsoft.com>)  
 -  
 [Tarek Mahmoud Sayed  
 (3)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=tarekms@microsoft.com>)  
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 - [David Mason (2)](<https://github.com/dotnet/corefx/commits/release/1.1.0?author=davmason@microsoft.com>)  
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- 
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- [Lakshmi Priya  
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 # Contributions to .NET Core 2.0 Preview 2

We're still working out the best way to present contributors and trying to be as accurate as possible. The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core 2.0 Preview 2. Where multiple email addresses were returned for a single person, the counts were aggregated with the email address reported the most commits.

```
```bash
git shortlog -sne --no-merges --since release/2.0.0@{2017-05-05} --until release/2.0.0@{2017-06-07}
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

- \* [CLI](#cli)
- \* [CoreCLR](#coreclr)
- \* [CoreFX](#corefx)
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# Contributions to .NET Core 2.0 Preview 1

We're still working out the best way to present contributors and trying to be as accurate as possible. The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core 2.0 Preview 1. Where multiple email addresses were returned for a single person, the counts were aggregated with the email address reported the most commits.

```
```bash
git shortlog -sne --no-merges --since release/2.0.0@{2016-10-03} --until release/2.0.0@{2017-05-05} --
committer="dotnet-bot" --invert-grep
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

- \* [CLI](#cli)
- \* [CoreCLR](#coreclr)
- \* [CoreFX](#corefx)
- \* [WCF](#wcf)

## ## CLI



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- \* [Pat Gavlin (130)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=pagavlin@microsoft.com>)
- \* [Bruce Forstall (80)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=brucefo@microsoft.com>)
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- \* [Hyeongseok Oh (38)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=hseok82.oh@samsung.com>)
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- \* [sivarv (26)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=sivarv@microsoft.com>)
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- \* [Steve MacLean (20)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=sdmaclea@qti.qualcomm.com>)
- \* [Hyung-Kyu Choi (19)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=hk0110.choi@samsung.com>)
- \* [Brian Sullivan (19)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=briansul@microsoft.com>)
- \* [Evgeny Pavlov (17)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=lucenticus@gmail.com>)
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- \* [John Chen (15)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jochen@microsoft.com>)
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- \* [Russ Keldorph (13)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=Russ.Keldorph@microsoft.com>)
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- \* [Ahson Ahmed Khan (12)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=ahsonkhan@users.noreply.github.com>)
- \* [Dmitry-Me (11)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=Dmitry-Me@users.noreply.github.com>)
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\*

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\* [WinCPP (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=mandards@gmail.com>)

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- \* [andrewlock (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=sock@andrewlock.net>)
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- [dnickless (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=daniel.hegener@gmx.net>)
- \* [dstuckims (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=dstucki@microsoft.com>)
- \* [nightshinez (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=nightshinez@users.noreply.github.com>)
- \* [obligaron (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=obligaron@live.com>)
- \* [ofirmakmal (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=ofir.makmal@gmail.com>)
- \* [smile21prc (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=xiwe@microsoft.com>)
- \* [sxmichael (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=michael@senexx.com>)
- \* [tdupont750 (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=tdupont750@gmail.com>)
- \* [v-yanbgu (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=v-yanbgu@microsoft.com>)
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- [varocarbas (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=contact@customsolvers.com>)
- \* [vitek-karas (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=vitek.karas@microsoft.com>)

## ## WCF

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- \* [Matt Galbraith (9)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=mattgal@microsoft.com>)
- \* [Eric St. John (9)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=ericstj@microsoft.com>)
- \* [Konst Khurin (8)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=kkhurin@microsoft.com>)
- \* [hongdai (7)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=hongdai@microsoft.com>)
- \* [huanwu (6)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=huanwu@microsoft.com>)
- \* [KKhurin (5)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=kkhurin@microsoft.com>)
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- [Zhenlan Wang (4)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=zhenlwa@microsoft.com>)
- \* [Shin Mao (3)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=shmao@microsoft.com>)
- \* [Matt Mitchell (2)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=mmitch@microsoft.com>)
- \* [Morgan Brown (1)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=morganb@microsoft.com>)
- \* [Chris R (1)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=crummel@microsoft.com>)
- \* [Karel Zikmund (1)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=karelz@users.noreply.github.com>)
- \* [Matt Connew (1)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=mconnew@microsoft.com>)
- \* [Carol Wang (Inspur Worldwide Services Ltd) (1)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=v-carwan@microsoft.com>)
- \* [Olof Olsson (1)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=borsna@users.noreply.github.com>)
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[Rich Lander (1)](https://github.com/dotnet/wcf/commits/release/2.0.0?author=rlander@microsoft.com)
* [Wes Haggard (1)](https://github.com/dotnet/wcf/commits/release/2.0.0?author=Wes.Haggard@microsoft.com)
Contributions to .NET Core 2.1
```

The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core 2.1.

```
```bash
git shortlog -sne --no-merges --since 2017-11-16 --until 2018-05-15
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

```
* [CLI](#cli)
* [CoreCLR](#coreclr)
* [CoreFX](#corefx)
* [WCF](#wcf)
```

## ## CLI

```
* [Livar Cunha (78)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=livar@live.com)
* [jbeisner (57)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=jbeisner@microsoft.com)
* [Peter Huene (57)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=pehuene@microsoft.com)
* [Nate McMaster
(46)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=nate.mcmaster@microsoft.com)
* [Livar (44)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=licavalc@microsoft.com)
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[John Beisner (42)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=jbeisner@microsoft.com)
* [Nick Guerrero (36)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=nicholg@microsoft.com)
* [William Lee (33)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=wul@microsoft.com)
* [William Li (22)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=wul@microsoft.com)
* [Andy Gerlicher (18)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=angerlic@microsoft.com)
* [John Beisner
(18)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=johnbeisner@users.noreply.github.com)
* [Livar Cunha (14)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=licavalc@microsoft.com)
* [Mike Lorbeteske (14)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=mlorbe@microsoft.com)
* [Matt Mitchell (10)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=mmitch@microsoft.com)
* [John Luo (9)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=jt.luo@mail.utoronto.ca)
*
[Zbynk Sailer (9)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=v-zbsail@microsoft.com)
* [Pranav K (9)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=prkrishn@hotmail.com)
* [Rainer Sigwald (8)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=raines@microsoft.com)
* [Parallels (7)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=livar@live.com)
* [danmosemsft (6)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=danmose@microsoft.com)
* [John Luo (6)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=johluo@microsoft.com)
* [Daniel Plaisted (6)](https://github.com/dotnet/cli/commits/release/2.1.3xx?author=daplaist@microsoft.com)
* [Kevin Ransom
```

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\* [Kevin Ransom

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\* [Davis Goodin (2)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=dagood@microsoft.com>)

\* [vramak (2)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=vramak@microsoft.com>)

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\* [test (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=test@net-dale.guest.corp.microsoft.com>)

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## ## CoreCLR

- \* [Tanner Gooding (151)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=tagoo@outlook.com>)
- \* [Jan Kotas (124)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=jkotas@microsoft.com>)
- \* [Bruce Forstall (94)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=brucefo@microsoft.com>)
- \* [Steve MacLean (69)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=sdmaclea.qdt@qualcommdatacenter.com>)
- \* [Fei Peng (66)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=fei.peng@intel.com>)
- \* [Stephen Toub (56)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=stoub@microsoft.com>)
- \* [Sergey Andreenko (52)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=seandree@microsoft.com>)
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- [Carol Eidt (50)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=carol.eidt@microsoft.com>)
- \* [Ahson Khan (44)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=ahkha@microsoft.com>)
- \* [Brian Robbins (35)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=brianrob@microsoft.com>)
- \* [Ben Adams (35)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=thundercat@illyriad.co.uk>)
- \* [Brian Sullivan (33)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=briansul@microsoft.com>)
- \* [Andy Ayers (32)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=andya@microsoft.com>)
- \* [Jacek Blaszczyński (30)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=biosciencenow@outlook.com>)
- \* [Egor Chesakov (29)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=Egor.Chesakov@microsoft.com>)
- \* [Michal Strehovsk (25)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=MichalStrehovsky@users.noreply.github.com>)
- \*
- [Jan Vorlicek (24)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=janvorli@microsoft.com>)
- \* [Anirudh Agnihotry (23)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=anirudhagnihotry098@gmail.com>)
- \* [Koundinya Veluri (22)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=kouvel@users.noreply.github.com>)
- \* [Juan Carlos Aguilera Mendez (21)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=juanam@microsoft.com>)
- \* [Michelle McDaniel (19)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=adiaaida@gmail.com>)
- \* [Sung Yoon Whang (19)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=suwhang@microsoft.com>)
- \* [David Mason (17)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=davmason@microsoft.com>)
- \* [Mike McLaughlin (17)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=mikem@microsoft.com>)
- \* [Matt Mitchell (17)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=mmitch@microsoft.com>)
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- [Wes Haggard (15)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=Wes.Haggard@microsoft.com>)
- \* [Konstantin Baladurin (15)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=k.baladurin@partner.samsung.com>)
- \* [Victor "Nate" Graf (14)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=nategraf1@gmail.com>)
- \* [mikedn (14)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=onemihaid@hotmail.com>)
- \* [Jeremy Kuhne (14)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=jeremy.kuhne@microsoft.com>)
- \* [jashook (13)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=jashoo@microsoft.com>)
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\*

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\*

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\*

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- \* [Geoff Kizer (65)](<https://github.com/dotnet/corefx/commits/release/2.1?author=geoffrek>)
- \* [Wes Haggard (62)](<https://github.com/dotnet/corefx/commits/release/2.1?author=Wes.Haggard@microsoft.com>)
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\*

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\*

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\* [Wes Haggard (10)](<https://github.com/dotnet/corefx/commits/release/2.1?author=weshaggard@users.noreply.github.com>)

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\*

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\*

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\* [danmosemsft (3)](<https://github.com/dotnet/corefx/commits/release/2.1?author=danmose@microsoft.com>)

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- \* [Adam Sitnik (2)](<https://github.com/dotnet/corefx/commits/release/2.1?author=adam.sitnik@gmail.com>)
- \*
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- \* [Marco Rossignoli
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- \* [John Rosewicz (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=john.rosewicz@gmail.com>)
- \* [MarcoRossignoli
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## 6.0.0

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License notice for A Benchmark Test for Systems Implementation Languages

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<http://www.cl.cam.ac.uk/~mr10/Bench/README>

Please feel free to re-implement this benchmark in any language you choose. I would be happy to incorporate such translations into this distribution together with their timing/size results.

Martin Richards

23 February 2007

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```
<Project Sdk="Microsoft.NET.Sdk">
 <PropertyGroup>
 <OutputType>Exe</OutputType>
 <ApplicationManifest>App.manifest</ApplicationManifest>
 </PropertyGroup>
 <ItemGroup>
 <Compile Include="Program.cs" />
 <Compile Include="..\..\ServerContracts\Server.CoClasses.cs" />
 <Compile Include="..\..\ServerContracts\Server.Contracts.cs" />
 <Compile Include="..\..\ServerContracts\ServerGuids.cs" />
 </ItemGroup>
 <ItemGroup>
 <CMakeProjectReference Include="..\..\NativeServer\CMakeLists.txt" />
 </ItemGroup>
</Project>
```

```
<ProjectReference Include="$(TestSourceDir)Common/CoreCLRTestLibrary/CoreCLRTestLibrary.csproj" />
</ItemGroup>
</Project>
```

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License notice for The Tragedy of Hamlet, Prince of Denmark

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```
new XElement("TITLE", "The Tragedy of Hamlet, Prince of Denmark"),
new XElement("fm",
 new XElement("p", "Text placed in the public domain by Moby Lexical Tools, 1992."),
 new XElement("p", "SGML markup by Jon Bosak, 1992-1994."),
 new XElement("p", "XML version by Jon Bosak, 1996-1997."),
 new XElement("p", "This work may be freely copied and distributed worldwide.")
```

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License notice for SciMark C#

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<https://github.com/dosvidos/SciMark>

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This is a port of the SciMark2a Java Benchmark to C# by  
Chris Re ([cmr28@cornell.edu](mailto:cmr28@cornell.edu)) and Werner Vogels ([vogels@cs.cornell.edu](mailto:vogels@cs.cornell.edu))

For details on the original authors see <http://math.nist.gov/scimark2>

This software is likely to burn your processor, bitflip your memory chips  
anihilate your screen and corrupt all your disks, so you it at your  
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```
<Project Sdk="Microsoft.Build.NoTargets">
```

```
<UsingTask TaskName="RegenerateThirdPartyNotices" AssemblyFile="$(InstallerTasksAssemblyPath)" />
```

```
<Target Name="RegenerateThirdPartyNotices" AfterTargets="Build">
```

```
<PropertyGroup>
```

```
<TpnFile>$(InstallerProjectRoot)pkg\THIRD-PARTY-NOTICES.TXT</TpnFile>
```

```
</PropertyGroup>
```

```
<!--
```

Repo configuration. Upstreams, but also more: the TPN in dotnet/runtime serves many repos outside its graph, because dotnet/runtime produces the installer that ends up placing the single TPN file in the dotnet home directory.

```
-->
```

```
<ItemGroup>
```

```
<TpnRepo Include="dotnet/runtime" />
```

```
<TpnRepo Include="dotnet/aspnetcore" />
```

```
<TpnRepo Include="dotnet/installer" />
```

```
<TpnRepo Include="dotnet/roslyn-analyzers" />
```

```
<TpnRepo Include="dotnet/templating" />
```

```
<TpnRepo Include="dotnet/winforms" />
```

```
<TpnRepo Include="dotnet/wpf" />
```

```
<TpnRepo Include="dotnet/linker" />
```

```
<!--
```

Additional repos that should be included but don't have any third-party-notices files:

dotnet/efcore

dotnet/emsdk

dotnet/extensions

dotnet/icu

dotnet/sdk

dotnet/windowsdesktop

```
-->
```

```
<TpnRepo Condition="'%(TpnRepo.Branch)' == ''" Branch="main" />
```

```
<PotentialTpnPath Include="THIRD-PARTY-NOTICES.TXT" />
```

```
<PotentialTpnPath Include="THIRD-PARTY-NOTICES.txt" />
```

```

<PotentialTpnPath Include="THIRD-PARTY-NOTICES" />
<PotentialTpnPath Include="THIRDPARTYNOTICES.TXT" />
<PotentialTpnPath Include="THIRDPARTYNOTICES.txt" />
</ItemGroup>

<RegenerateThirdPartyNotices
 TpnFile="$(TpnFile)"
 PotentialTpnPaths="@ (PotentialTpnPath)"
 TpnRepos="@ (TpnRepo)" />

<Message Text="$(MSBuildProjectName) -> $(TpnFile)" Importance="High" />
</Target>

```

</Project>

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/\* zlib.h -- interface of the 'zlib' general purpose compression library  
version 1.2.12, March 27th, 2022

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/\* zlib.h -- interface of the 'zlib' general purpose compression library  
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Bit Twiddling Hacks

By Sean Eron Anderson

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Bit Twiddling Hacks

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## 1.56 system.management 7.0.2

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<Project Sdk="Microsoft.Build.NoTargets">

<UsingTask TaskName="RegenerateThirdPartyNotices" AssemblyFile="\$(InstallerTasksAssemblyPath)" />

<Target Name="RegenerateThirdPartyNotices" AfterTargets="Build">

<PropertyGroup>

<TpnFile>\$(InstallerProjectRoot)pkg\THIRD-PARTY-NOTICES.TXT</TpnFile>

</PropertyGroup>

<!--

Repo configuration. Upstreams, but also more: the TPN in dotnet/runtime serves many repos outside its graph, because dotnet/runtime produces the installer that ends up placing the single TPN file in the dotnet home directory.

-->

<ItemGroup>

<TpnRepo Include="dotnet/runtime" />

<TpnRepo Include="dotnet/aspnetcore" />

<TpnRepo Include="dotnet/installer" />

<TpnRepo Include="dotnet/roslyn-analyzers" />

<TpnRepo Include="dotnet/templating" />

<TpnRepo Include="dotnet/winforms" />

<TpnRepo Include="dotnet/wpf" />

```

<!--
Additional repos that should be included but don't have any
third-party-notices files:
 dotnet/efcore
 dotnet/emsdk
 dotnet/extensions
 dotnet/icu
 dotnet/sdk
 dotnet/windowsdesktop
-->

<TpnRepo Condition="'%(TpnRepo.Branch)' == '' Branch='main' />

<PotentialTpnPath Include='THIRD-PARTY-NOTICES.TXT' />
<PotentialTpnPath Include='THIRD-PARTY-NOTICES.txt' />
<PotentialTpnPath Include='THIRD-PARTY-NOTICES' />
<PotentialTpnPath Include='THIRDPARTYNOTICES.TXT' />
<PotentialTpnPath Include='THIRDPARTYNOTICES.txt' />
</ItemGroup>

<RegenerateThirdPartyNotices
 TpnFile="$(TpnFile)"
 PotentialTpnPaths="@ (PotentialTpnPath)"
 TpnRepos="@ (TpnRepo)" />

<Message Text="$(MSBuildProjectName) -> $(TpnFile)" Importance="High" />
</Target>

</Project>
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 new XElement("p", "Text placed in the public domain by Moby Lexical Tools, 1992."),
 new XElement("p", "SGML markup by Jon Bosak, 1992-1994."),
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Chris Re ([cmr28@cornell.edu](mailto:cmr28@cornell.edu)) and Werner Vogels ([vogels@cs.cornell.edu](mailto:vogels@cs.cornell.edu))

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```
<Project Sdk="Microsoft.NET.Sdk">
 <PropertyGroup>
 <!-- Needed for CMakeProjectReference -->
 <RequiresProcessIsolation>true</RequiresProcessIsolation>
 <ApplicationManifest>App.manifest</ApplicationManifest>
 </PropertyGroup>
 <ItemGroup>
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 <Compile Include="..\..\ServerContracts/Server.CoClasses.cs" />
 <Compile Include="..\..\ServerContracts/Server.Contracts.cs" />
 <Compile Include="..\..\ServerContracts/ServerGuids.cs" />
 </ItemGroup>
 <ItemGroup>
 <CMakeProjectReference Include="..\..\NativeServer/CMakeLists.txt" />
 <ProjectReference Include="$(TestLibraryProjectPath)" />
 </ItemGroup>
</Project>
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\*\* Create:

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# 1.57 system.serviceprocess.servicecontroller

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## ## Core Docs

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# Contributions to .NET Core SDK 1.0

We're still working out the best way to present contributors and trying to be as accurate as possible. The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core SDK 1.0. Where multiple email addresses were returned for a single person, the counts were aggregated with the email address reported the most commits.

```
```bash
git shortlog -sne --no-merges --until release/1.1.0@{2017-02-25}
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

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- [Jeff Kluge (8)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=jeffkl@microsoft.com>)
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#### # Contributions to .NET Core 2.0

The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core 2.0.

```
```bash
git shortlog -sne --no-merges --since release/2.0.0@{2016-10-03} --until release/2.0.0@{2017-07-25}
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

- \* [CLI](#cli)
- \* [CoreCLR](#coreclr)
- \* [CoreFX](#corefx)
- \* [WCF](#wcf)

## CLI

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- \* [Alex Barney (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=Thealexbarney@users.noreply.github.com>)
- \* [William Li (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=williamli@williams-mbp.guest.corp.microsoft.com>)
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- \*
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- \*
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\*

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.NET 5 is an amazing milestone enabled, in part, by a wonderfully engaged community. This page is an attempt to  
acknowledge the efforts of many folks across the breadth of the ecosystem. We're working to get better at  
recognizing the your contributions so please, let us know if something is incorrect or missing.

\*\*Thank you!!\*\*

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Contributions to .NET Core 1.1

```

We're still working out the best way to present contributors and trying to be as accurate as possible. The list below is generated with the following command against each repo. The release qualifier is different from the example in some cases. Also, where multiple email addresses were returned for a single person, the counts were aggregated with the email address reported the most commits.

```

```bash
git shortlog -sne --no-merges --since {2016-05-20} --until {2016-11-08}

```

...

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

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- [Pavel Krymets (3)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=pavel@krymets.com>)
- [Ajay Bhargav Baaskaran (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=ajbaaska@microsoft.com>)
- [Jonathan Miller (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=jonmill@microsoft.com>)
- [Krzysztof Wicher (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=kwicher@microsoft.com>)
- [Lakshmi Priya Sekar (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=lasekar@microsoft.com>)
- [Livar Cunha (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=licavalc@microsoft.com>)
-
- [Piotr Puskiewicz (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=piotrp@microsoft.com>)
- [Troy Dai (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=troy.dai@outlook.com>)
- [cartermp (2)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=phcart@microsoft.com>)
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- [Luke Latham (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=mis@guardrex.com>)
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- [Petr Onderka (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=gsvick@gmail.com>)
- [PiotrP (1)](<https://github.com/dotnet/cli/commits/rel/1.0.0-preview2.1?author=piotrp@microsoft.com>)

CoreCLR

- [James Ko (53)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=jamesqko@gmail.com>)
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-
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- [Wes Haggard (4)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=Wes.Haggard@microsoft.com>)
- [Davis Goodin (4)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=dagood@microsoft.com>)
- [sivarv (4)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=sivarv@microsoft.com>)
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- [dotnet bot (3)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=dotnet-bot@dotnetfoundation.org>)
- [Joel Hendrix (3)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=jhendrix@microsoft.com>)
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- [Drew Scoggins (3)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=anscoggi@microsoft.com>)
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- [Egor Chesakov (3)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=t-egche@microsoft.com>)
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- [Eugene Rozenfeld (3)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=erozen@microsoft.com>)
- [Bruce Bowyer-Smyth (3)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=bbowyersmyth@live.com.au>)
- [Maoni Stephens (3)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=maonis@microsoft.com>)
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-
- [Viacheslav Nikolaev (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=v.nikolaev@samsung.com>)
- [Hannah Zhang (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=t-hazhan@microsoft.com>)
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- [Geunsik Lim (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=geunsik.lim@samsung.com>)
- [Hanjoung Lee (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=waterets@gmail.com>)
- [Manu (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=manu-silicon@users.noreply.github.com>)
- [MyungJoo Ham (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=myungjoo.ham@samsung.com>)
- [Tanner Gooding (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=tannergooding@users.noreply.github.com>)
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-

[Sujin Kim (2)](<https://github.com/dotnet/coreclr/commits/release/1.1.0?author=sjsujin.kim@samsung.com>)

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-
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-
- [Shahid Khan (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=shahid.mrd@hotmail.com>)
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(1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=tijoytk@microsoft.com>)
- [Wes Haggard
(1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=weshaggard@users.noreply.github.com>)
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- [dotnet bot (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=dotnet-bot@microsoft.com>)
- [hqueue (1)](<https://github.com/dotnet/coreclr/commits/release/1.1.0/?author=hqueue@users.noreply.github.com>)
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CoreFX

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-
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-
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-
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-
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-
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WCF

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- [Stephen Bonikowsky (59)](<https://github.com/dotnet/wcf/commits/release/1.1.0?author=stebon@microsoft.com>)
- [Ron Cain (48)](<https://github.com/dotnet/wcf/commits/release/1.1.0?author=roncain@microsoft.com>)
- [Jason Pang (42)](<https://github.com/dotnet/wcf/commits/release/1.1.0?author=jasonpa@microsoft.com>)
- [Matt Connew (23)](<https://github.com/dotnet/wcf/commits/release/1.1.0?author=mconnew@microsoft.com>)
- [hongdai (16)](<https://github.com/dotnet/wcf/commits/release/1.1.0?author=hongdai@microsoft.com>)
- [Eric St. John (14)](<https://github.com/dotnet/wcf/commits/release/1.1.0?author=ericstj@microsoft.com>)
- [Zhenlan Wang (5)](<https://github.com/dotnet/wcf/commits/release/1.1.0?author=zhenlwa@microsoft.com>)
- [Jason Pang
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- [Eric Mellino (2)](<https://github.com/dotnet/wcf/commits/release/1.1.0?author=erme@microsoft.com>)
- [Matt (1)](<https://github.com/dotnet/wcf/commits/release/1.1.0?author=mconnew@microsoft.com>)
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Contributions to .NET Core 2.0 Preview 2

We're still working out the best way to present contributors and trying to be as accurate as possible. The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core 2.0 Preview 2. Where multiple email addresses were returned for a single person, the counts were aggregated with the email address reported the most commits.

```
``bash
git shortlog -sne --no-merges --since release/2.0.0@{2017-05-05} --until release/2.0.0@{2017-06-07}
``
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

- * [CLI](#cli)
- * [CoreCLR](#coreclr)
- * [CoreFX](#corefx)
- * [WCF](#wcf)

CLI

- * [Livar Cunha (57)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=livar@live.com>)
- * [Mike Lorbeteske (39)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=mike.lorbetske@n3-p.com>)
- * [Nick Guerrero (29)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=nicholg@microsoft.com>)
- * [John Beisner (28)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=jbeisner@microsoft.com>)
- * [Eric Erhardt (22)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=eric.erhardt@microsoft.com>)
- * [William Li (21)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=wul@microsoft.com>)
- * [Livar (14)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=licavalc@microsoft.com>)
- * [Daniel Plaisted (8)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=daplaist@microsoft.com>)
- * [Rainer Sigwald (5)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=raines@microsoft.com>)
- * [Justin Emgarten (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=justin@emgarten.com>)
- * [Vijay Ramakrishnan (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=vramak@microsoft.com>)
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- * [Kevin Ransom (3)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=kevinr@microsoft.com>)
- * [Steve Sanderson (3)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=SteveSandersonMS@users.noreply.github.com>)
- * [Mikkel Nylander Bundgaard (3)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=mikkelbu@gmail.com>)
- * [Enrico Sada (3)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=enrico@sada.io>)
- * [Ankit Mishra (2)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=anmishr@microsoft.com>)
- * [Ashish Jain (NUGET) (2)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=asja@microsoft.com>)
- * [Matt Ellis (2)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=matell@microsoft.com>)
- * [Nat Ayewah (2)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=nayewah@microsoft.com>)
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- * [Jan Kotas (8)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jkotas@microsoft.com>)
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- * [Davis Goodin (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=dagood@microsoft.com>)
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- [Morgan Brown
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CoreFX

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WCF

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[KKhurin (2)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=kkhurin@microsoft.com>)

* [Tarek Mahmoud Sayed (2)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=tarekms@microsoft.com>)

* [Shin Mao (1)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=shmao@microsoft.com>)

* [hongdai (1)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=hongdai@microsoft.com>)

Contributions to .NET Core 2.0 Preview 1

We're still working out the best way to present contributors and trying to be as accurate as possible. The list below is

generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core 2.0 Preview 1. Where multiple email addresses were returned for a single person, the counts were aggregated with the email address reported the most commits.

```
```bash
git shortlog -sne --no-merges --since release/2.0.0@{2016-10-03} --until release/2.0.0@{2017-05-05} --
committer="dotnet-bot" --invert-grep
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

- * [CLI](#cli)
- * [CoreCLR](#coreclr)
- * [CoreFX](#corefx)
- * [WCF](#wcf)

CLI

- * [Livar Cunha (227)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=livar@live.com>)
- * [Piotr Puskiewicz (219)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=piotrp@microsoft.com>)
- *
- [Justin Goshi (145)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=jgoshi@microsoft.com>)
- * [Eric Erhardt (136)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=eric.erhardt@microsoft.com>)
- * [Krzysztof Wicher (103)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=mordotymoja@gmail.com>)
- * [jonsequitur (74)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=jonsequeira@gmail.com>)
- * [Jon Sequeira (51)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=jonsequeira@gmail.com>)
- * [Mike Lorbeteske (43)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=mike.lorbetske@n3-p.com>)
- * [Faizan Ahmad (32)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=faahmad@microsoft.com>)
- * [Livar Cunha (29)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=licavalc@microsoft.com>)
- * [Zlatko Knezevic (29)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=zlakne@microsoft.com>)
- * [Bryan Thornbury (26)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=brthor@microsoft.com>)
- *
- [Livar (25)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=licavalc@microsoft.com>)
- * [Daniel Plaisted (25)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=daplaist@microsoft.com>)
- * [Nick Guerrero (21)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=nicholg@microsoft.com>)
- * [Scott Carlton (19)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=v-sccarl@microsoft.com>)
- * [William Li (18)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=wul@microsoft.com>)
- * [John Beisner (15)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=jbeisner@microsoft.com>)
- * [Satya Madala (14)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=samadala@microsoft.com>)
- * [Unknown (14)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=piotrp@microsoft.com>)
- * [Rama Krishnan Raghupathy (12)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=ramarag@microsoft.com>)
- *
- [Matt Ellis (12)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=matell@microsoft.com>)
- * [Harsh Jain (10)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=harjain@microsoft.com>)
- * [Nate Amundson (9)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=naamunds@microsoft.com>)
- * [Ankit Mishra (9)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=anmishr@microsoft.com>)

* [Rohit Agrawal (9)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=ragrawal@microsoft.com>)

* [Jeff Kluge (8)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=jeffkl@microsoft.com>)

* [Vijay Ramakrishnan (7)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=vramak@microsoft.com>)

* [Shayne Boyer (6)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=spboyer@live.com>)

* [dasMulli (6)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=martin.andreas.ullrich@gmail.com>)

* [Omair Majid (6)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=omajid@redhat.com>)

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[Justin Emgarten (6)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=justin@emgarten.com>)

* [Mike Lorbetske (5)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=mlorbe@microsoft.com>)

* [Arun Mahapatra (5)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=codito@users.noreply.github.com>)

* [Parallels (5)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=livar@live.com>)

* [Maira Wenzel (5)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=mairaw@microsoft.com>)

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* [Zbynk Sailer (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=v-zbsail@microsoft.com>)

* [blackdwarf (4)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=zlakne@microsoft.com>)

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- * [Kyu Choi (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=hk0110.choi@samsung.com>)
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- [Falco (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=rs38@users.noreply.github.com>)
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- * [Eric Mellino (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=erme@microsoft.com>)
- * [Matt Galbraith (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=MattGal@users.noreply.github.com>)
- * [MichaelSimons (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=msimons@microsoft.com>)
- * [Dustin Campbell (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=dustin@teamcampbell.org>)
- * [Nikolaj Jrgensen (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=nikolaj@loftjoer.dk>)
- * [Pranav K (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=prkrishn@hotmail.com>)
- * [Rainer Sigwald (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=raines@microsoft.com>)
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- [Rakesh Ranjan Singh (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=raksingh@microsoft.com>)
- * [Ravi Eda (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=raeda@microsoft.com>)
- * [Ravi Mandal (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=ravimandal47@hotmail.com>)
- * [Rich Lander (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=rlander@microsoft.com>)
- * [Rikard Johansson (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=rajoo@mail.com>)
- * [Roger (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=narayanroger@gmail.com>)
- * [Chris R (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=crummel@microsoft.com>)
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- * [Scott Addie (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=tobias.addie@gmail.com>)
- * [Steve Desmond (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=steve@vtsv.ca>)
- *
- [William Li (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=williamli@williams-mbp.guest.corp.microsoft.com>)
- * [Alex Barney (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=Thealexbarney@users.noreply.github.com>)
- * [eerhardt (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=eric.erhardt@microsoft.com>)
- * [faahmad (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=faahmad@FAAHMAD-RTW3>)
- * [foresterre (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=foresterre@ilumeo.com>)
- * [Adeel (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=adeelbm@outlook.com>)
- * [mlorbetske (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=mike.lorbetske@n3-p.com>)
- * [v-mdriml (1)](<https://github.com/dotnet/cli/commits/release/2.0.0?author=v-mdriml@microsoft.com>)

CoreCLR

- * [Jonghyun Park (227)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=parjong@gmail.com>)
- *
- [Jan Kotas (157)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jkotas@microsoft.com>)
- * [danmosemsft (139)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=danmose@microsoft.com>)
- * [Pat Gavlin (130)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=pagavlin@microsoft.com>)
- * [Bruce Forstall (80)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=brucefo@microsoft.com>)
- * [Andy Ayers (74)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=andya@microsoft.com>)
- * [Stephen Toub (74)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=stoub@microsoft.com>)

* [wtgodbe (60)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=wtgodbe@microsoft.com>)

* [Joseph Tremoulet (55)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jotrem@microsoft.com>)

* [Mike Danes (55)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=onemihaid@hotmail.com>)

* [SaeHie Park (42)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=saehie.park@gmail.com>)

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[Sergey Andreenko
(42)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=seandree@microsoft.com>)

* [Jan Vorlicek (41)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=janvorli@microsoft.com>)

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* [Hyeongseok Oh
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* [Koundinya Veluri (35)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=kouvel@microsoft.com>)

* [Rahul Kumar (34)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=rahku@microsoft.com>)

* [dotnet
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* [Alex Perovich (24)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=alperovi@microsoft.com>)

* [Dan Moseley (24)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=danmose@microsoft.com>)

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* [Frederik Carlier
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*

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*

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*

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* [WinCPP (2)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=mandards@gmail.com>)

*
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*

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- * [Varun Venkatesan (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=varun.k.venkatesan@intel.com>)
- * [Vijay Ramakrishnan (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=vijayrkn@users.noreply.github.com>)
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- * [Viktor Hofer (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=viktor.hofer@outlook.com>)
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- * [darxis (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=darxis@users.noreply.github.com>)
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- * [jorive (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=jorive@microsoft.com>)
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- * [pius.lee (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=pius.lee@samsung.com>)
- * [rahul (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=rahku@github.com>)
- * [smile21prc (1)](<https://github.com/dotnet/coreclr/commits/release/2.0.0?author=xiwe@microsoft.com>)
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- * [Eric St. John (285)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=ericstj@microsoft.com>)
- * [Eric Mellino (167)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=erme@microsoft.com>)
- * [Jose Perez Rodriguez (116)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=joperezr@microsoft.com>)
- * [Wes Haggard (113)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=Wes.Haggard@microsoft.com>)
- * [Hugh Bellamy (102)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=hughbellars@gmail.com>)
- * [Bart De Smet (99)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=bartde@microsoft.com>)
- * [Lakshmi Priya Sekar (97)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=lasekar@microsoft.com>)
- * [James Ko (94)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=jamesqko@gmail.com>)

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 * [Santiago Fernandez Madero
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 Sayed (56)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=tarekms@microsoft.com>)
 * [Krzysztof Wicher (52)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=kwicher@microsoft.com>)
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 (52)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=karelz@users.noreply.github.com>)
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 *
 [Viktor Hofer (31)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=viktor.hofer@microsoft.com>)
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 * [Matt Mitchell (28)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=mmitch@microsoft.com>)
 * [Bart J.F. De Smet
 (26)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=bartdesmet@hotmail.com>)
 * [David Shulman
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 * [Davis Goodin (26)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=dagood@microsoft.com>)
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 * [Steve Harter (21)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=sharter@microsoft.com>)
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*

[Wes Haggard
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* [dotnet-bot (19)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=dotnet-bot@microsoft.com>)

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* [Koundinya Veluri (17)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=kouvel@microsoft.com>)

* [Tanner Gooding (16)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=tagoo@outlook.com>)

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*

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* [David Wright (13)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=dcwuser@live.com>)

*

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*

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 * [Viktor Hofer (9)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=viktor.hofer@outlook.com>)
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 * [Santiago Fernandez (9)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=safarn@microsoft.com>)
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 * [Mandar Sahasrabudhe
 (8)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=WinCPP@users.noreply.github.com>)
 * [Hanjoung Lee (7)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=hanjoung.lee@samsung.com>)
 * [Rion Williams (7)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=rionmonster@gmail.com>)
 * [Alex Ghiondea
 (7)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=AlexGhiondea@users.noreply.github.com>)
 * [Petr Onderka (7)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=gs Vick@gmail.com>)
 * [Michael Simons (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=msimons@microsoft.com>)
 * [wtgodbe (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=wigodbe@microsoft.com>)
 *
 [Gene Lee (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=gelee@microsoft.com>)
 * [Ben Adams (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=thundercat@illyriad.co.uk>)
 * [Vance Morrison (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=vancem@microsoft.com>)
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 * [Marek Linka (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=marek.linka@outlook.com>)
 * [Eric StJohn (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=ericstj@microsoft.com>)
 * [WinCPP (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=mandards@gmail.com>)
 * [Brahmnes Fung (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=bfung@microsoft.com>)
 * [Jan Vorlicek (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=janvorli@microsoft.com>)
 *
 [nietras (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=nietras@users.noreply.github.com>)
 * [vsadov (6)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=vsadov@microsoft.com>)
 * [Jonghyun Park (5)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=parjong@gmail.com>)
 * [Peter Marcu (5)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=Peter.Marcu@Microsoft.com>)
 * [Davis Goodin
 (5)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=dagood@users.noreply.github.com>)
 * [chunseok lee (5)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=chunseok.lee@samsung.com>)
 * [Anton Lapounov
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 * [John Chen (CLR) (5)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=jochen@microsoft.com>)
 * [Jay Simmons (4)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=boatboy22@hotmail.com>)
 *

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*

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*

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*

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* [huanwu (2)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=huanwu@microsoft.com>)

* [cydhaselton (2)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=ubuntu@ip-172-31-42-205.us-west-2.compute.internal>)

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* [Brian Robbins (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=brianrob@microsoft.com>)

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- * [Steve Desmond (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=stevedesmond-ca@users.noreply.github.com>)
- * [Sung-Jae Lee (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=sjlee@mail.com>)
- * [SunnyWar (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=itsallthesametome@hotmail.com>)
- * [TEPW (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=TEPW@L008202B>)
- * [Tanner Gooding (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=tannergooding@users.noreply.github.com>)
- * [Tarun Pothulapati (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=tarunpothulapati@outlook.com>)
- * [Tautvydas Zilys (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=suniusx@gmail.com>)
- * [Tomas Matousek (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=tomas.matousek@microsoft.com>)
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- * [Travis Querec (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=tquerec@microsoft.com>)
- * [Tyler Brinkley (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=Tydude4Christ@hotmail.com>)
- * [Vladimir Sadov (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=vsadov@microsoft.com>)
- * [Will Dean (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=will.dean@indcomp.co.uk>)
- * [Yaakov (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=yaakov-h@users.noreply.github.com>)
- * [Yaakov (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=yaakov@codingrange.com>)
- * [Yi Zhang (CLR) (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=yizhang82@users.noreply.github.com>)
- * [andrewlock (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=sock@andrewlock.net>)
- * [costahome (1)](https://github.com/dotnet/corefx/commits/release/2.0.0?author=costa_christopher@hotmail.com)
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- [dnickless (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=daniel.hegener@gmx.net>)
- * [dstuckims (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=dstucki@microsoft.com>)
- * [nightshinez (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=nightshinez@users.noreply.github.com>)
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- * [smile21prc (1)](<https://github.com/dotnet/corefx/commits/release/2.0.0?author=xiwe@microsoft.com>)
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- * [Stephen Bonikowsky (59)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=stebon@microsoft.com>)
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- * [Matt Galbraith (9)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=mattgal@microsoft.com>)
- * [Eric St. John (9)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=ericstj@microsoft.com>)
- * [Konst Khurin (8)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=kkhurin@microsoft.com>)
- * [hongdai (7)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=hongdai@microsoft.com>)
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- * [KKhurin (5)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=kkhurin@microsoft.com>)
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- [Zhenlan Wang (4)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=zhenlwa@microsoft.com>)
- * [Shin Mao (3)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=shmao@microsoft.com>)
- * [Matt Mitchell (2)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=mmitch@microsoft.com>)
- * [Morgan Brown (1)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=morganb@microsoft.com>)
- * [Chris R (1)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=crummel@microsoft.com>)
- * [Karel Zikmund (1)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=karelz@users.noreply.github.com>)
- * [Matt Connew (1)](<https://github.com/dotnet/wcf/commits/release/2.0.0?author=mconnew@microsoft.com>)
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Contributions to .NET Core 2.1

The list below is generated with the following command listed below in an attempt to capture all contributions which have gone into .NET Core 2.1.

```
```bash
git shortlog -sne --no-merges --since 2017-11-16 --until 2018-05-15
```
```

When you navigate to a contributors commit page, the results are not filtered by release so more commits than are listed below will be shown.

- * [CLI](#cli)
- * [CoreCLR](#coreclr)
- * [CoreFX](#corefx)
- * [WCF](#wcf)

CLI

- * [Livar Cunha (78)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=livar@live.com>)
- * [jbeisner (57)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=jbeisner@microsoft.com>)
- * [Peter Huene (57)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=pehuene@microsoft.com>)
- * [Nate McMaster (46)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=nate.mcmaster@microsoft.com>)
- * [Livar (44)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=licavalc@microsoft.com>)
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* [William Lee (33)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=wul@microsoft.com>)

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* [John Beisner (18)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=johnbeisner@users.noreply.github.com>)

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- * [jagarg (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=jagarg@microsoft.com>)
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- [Jose Perez Rodriguez (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=joperezr@microsoft.com>)
- * [jbeisner
- (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=johnbeisner@users.noreply.github.com>)
- * [Brice Lambson
- (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=bricelam@users.noreply.github.com>)
- * [root
- (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=33230602+kasper3@users.noreply.github.com>)
- * [test (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=test@net-dale.guest.corp.microsoft.com>)
- * [v-mdriml (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=v-mdriml@microsoft.com>)
- * [Steve MacLean
- (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=sdmaclea.qdt@qualcommdatacenter.com>)
- * [Steve Harter
- (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=steveharter@users.noreply.github.com>)
- * [Sean Peters
- (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=sepeters@microsoft.com>)
- * [Rohit Agrawal (NUGET
- (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=ragrawal@microsoft.com>)
- * [Yanchen Wu (1)](<https://github.com/dotnet/cli/commits/release/2.1.3xx?author=yanchenw@microsoft.com>)

CoreCLR

- * [Tanner Gooding (151)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=tagoo@outlook.com>)
- * [Jan Kotas (124)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=jkotas@microsoft.com>)
- * [Bruce Forstall (94)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=brucefo@microsoft.com>)
- * [Steve MacLean
- (69)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=sdmaclea.qdt@qualcommdatacenter.com>)
- * [Fei Peng (66)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=fei.peng@intel.com>)
- * [Stephen Toub (56)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=stoub@microsoft.com>)
- * [Sergey Andreenko (52)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=seandree@microsoft.com>)
- *
- [Carol Eidt (50)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=carol.eidt@microsoft.com>)
- * [Ahson Khan (44)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=ahkha@microsoft.com>)
- * [Brian Robbins (35)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=brianrob@microsoft.com>)
- * [Ben Adams (35)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=thundercat@illyriad.co.uk>)
- * [Brian Sullivan (33)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=briansul@microsoft.com>)
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- * [Jacek Blaszczyński
- (30)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=biosciencenow@outlook.com>)
- * [Egor Chesakov
- (29)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=Egor.Chesakov@microsoft.com>)
- * [Michal Strehovsk
- (25)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=MichalStrehovsky@users.noreply.github.com>)
- *
- [Jan Vorlicek (24)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=janvorli@microsoft.com>)
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* [David Mason (17)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=davmason@microsoft.com>)

* [Mike McLaughlin (17)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=mikem@microsoft.com>)

* [Matt Mitchell (17)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=mmmitche@microsoft.com>)

*

[Wes Haggard (15)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=Wes.Haggard@microsoft.com>)

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* [jashook (13)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=jashoo@microsoft.com>)

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* [Tarek Mahmoud Sayed
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*

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*

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* [Michal Strehovsk (5)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=michals@microsoft.com>)

* [Davis Goodin (5)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=dagood@microsoft.com>)

* [Ian Hays (5)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=ianha@microsoft.com>)

* [Levi Broderick (5)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=levib@microsoft.com>)

* [Eric Erhardt (5)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=eric.erhardt@microsoft.com>)

* [William Godbe (4)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=wigodbe@microsoft.com>)

* [John Doe (4)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=github.john.doe@outlook.com>)

*
 [sergey ignatov (4)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=sergign60@mail.ru>)
 * [Viktor Hofer (4)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=viktor.hofer@microsoft.com>)
 * [Marco Rossignoli
 (3)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=marco.rossignoli@gmail.com>)
 * [Fei (3)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=fei.peng@intel.com>)
 * [Jose Perez Rodriguez
 (3)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=joperezr@microsoft.com>)
 * [Jos Rivero (3)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=jorive@microsoft.com>)
 * [Dan Moseley (3)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=danmose@microsoft.com>)
 * [Vance Morrison (3)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=vancemorrison@comcast.net>)
 * [Santiago Fernandez Madero
 (3)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=safarn@microsoft.com>)
 * [Petr Bred (3)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=bredpetr@gmail.com>)
 *
 [Davis Goodin
 (3)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=dagood@users.noreply.github.com>)
 * [Maoni Stephens
 (3)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=Maoni0@users.noreply.github.com>)
 * [wtgodbe (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=wigodbe@microsoft.com>)
 * [Alex (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=cod7alex@gmail.com>)
 * [Alfred Myers
 (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=alfredmyers@users.noreply.github.com>)
 * [Andon Andonov (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=anandono@microsoft.com>)
 * [Atanu (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=RoyAtanu@users.noreply.github.com>)
 * [Bruno Tagliapietra
 (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=bruno.tagliapietra@gmail.com>)
 * [Cesar Soares Lucas (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=disoares@microsoft.com>)
 *
 [Igor Kulaychuk (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=igor.kulaychuk@gmail.com>)
 * [Jarret Shook (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=jashoo@microsoft.com>)
 * [Levi Broderick
 (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=GrabYourPitchforks@users.noreply.github.com>)
 * [Mandar Sahasrabuddhe
 (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=WinCPP@users.noreply.github.com>)
 * [Matt Galbraith (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=mattgal@microsoft.com>)
 * [Matt Warren (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=matt.warren@live.co.uk>)
 * [Phil Garcia (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=phil@thinkedge.com>)
 * [Ricardo Arenas (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=riarenas@microsoft.com>)
 * [Russ Keldorph (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=russ.keldorph@microsoft.com>)
 *
 [Sergey Ignatov (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=sergign60@mail.ru>)
 * [Sven Boemer (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=sbomer@gmail.com>)
 * [chcosta (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=chcosta@microsoft.com>)
 * [gbalykov (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=g.balykov@samsung.com>)
 * [kasper3
 (2)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=33230602+kasper3@users.noreply.github.com>)
 * [Jon Hanna (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=jon@hackcraft.net>)

* [Jingyu Ma (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=mazong1123@gmail.com>)

* [Jeremy Meng (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=yumeng@microsoft.com>)

* [Nobuyuki Iwanaga (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=ufcpp@live.jp>)

* [Omair Majid (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=omajid@redhat.com>)

* [Pent Ploompuu (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=kaalikas@gmail.com>)

* [Petar Petrov (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=petarpetrov@gmail.com>)

* [Jeff Schwartz (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=jeffschw@microsoft.com>)

* [Adam Stark (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=llamadonica@gmail.com>)

* [Rex Morgan (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=rex@reflex.net>)

* [Alexander Soldatov (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=soldatov.a@samsung.com>)

* [Roman Artemev (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=rartemev@microsoft.com>)

* [Ruben Ayrapetyan (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=ruben-ayrapetyan@users.noreply.github.com>)

* [Hyeongseok Oh (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=hseok82.oh@samsung.com>)

* [Adam Sitnik (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=adam.sitnik@microsoft.com>)

* [Russell Cohen (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=russell.r.cohen@gmail.com>)

* [Hugh Zabriskie (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=hugh.zabriskie@gmail.com>)

* [Sean Gillespie (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=sean@pulum.com>)

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* [Frank Gambino (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=frank@daringdev.com>)

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* [David Nissimoff (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=davidni@microsoft.com>)

* [David Fowler (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=davidfowl@gmail.com>)

* [mlabiuk (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=35769704+mlabiuk@users.noreply.github.com>)

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* [Vance Morrison (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=vancem@microsoft.com>)

* [Chris Sienkiewicz (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=chsienki@microsoft.com>)

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* [Victor Zaytsev (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=allisq3@gmail.com>)

* [Buyduck (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=ivan.vagin@partner.samsung.com>)

* [Bruce Bowyer-Smyth (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=bbowyersmyth@live.com.au>)

* [Wes Haggard (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=weshaggard@users.noreply.github.com>)

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- * [Zhukov Maxim (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=my.fsou1@gmail.com>)
- * [antofik (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=antofik@gmail.com>)
- * [nietras (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=nietras@users.noreply.github.com>)
- * [chunseoklee
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- * [Krzysztof Wicher (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=mordotymoja@gmail.com>)
- *
- [Alexandre Teoi
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- * [Kevin Gosse (1)](<https://github.com/dotnet/coreclr/commits/release/2.1?author=krix33@gmail.com>)
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CoreFX

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- * [Ahson Khan (99)](<https://github.com/dotnet/corefx/commits/release/2.1?author=ahkha@microsoft.com>)
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- * [Tomas Weinfurt (43)](<https://github.com/dotnet/corefx/commits/release/2.1?author=tweinfurt@yahoo.com>)
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- *
- [Jeremy Barton (37)](<https://github.com/dotnet/corefx/commits/release/2.1?author=jbarton@microsoft.com>)
- * [Atsushi Kanamori
(34)](<https://github.com/dotnet/corefx/commits/release/2.1?author=AtsushiKan@users.noreply.github.com>)

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*

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* [cod7alex (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=cod7alex@gmail.com>)

* [dajeffri (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=dajeffri@yahoo.com>)

* [Alfred Myers (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=alfredmyers@users.noreply.github.com>)

* [Alexandre Teoi (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=ateoi@users.noreply.github.com>)

* [Alex (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=cod7alex@gmail.com>)

* [Alexander Soldatov (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=soldatov.a@samsung.com>)

* [drawaes (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=seawardtim@gmail.com>)

* [ektrah (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=ektrah@users.noreply.github.com>)

* [huanwu (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=huanwu@microsoft.com>)

* [iamatinkerer (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=iamatinkerer@users.noreply.github.com>)

* [k0st1x (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=k0st1x@ya.ru>)

* [Alexander Kplinger (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=alex.koeplinger@outlook.com>)

* [Kassem Sandarusi (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=kassemsandarusi@gmail.com>)

* [Kasper Fabch Brandt (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=poizan@poizan.dk>)

* [Juan Sebastian Hoyos Ayala (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=juan.s.hoyos@outlook.com>)

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* [Lakshmi Priya Sekar (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=Priya91@users.noreply.github.com>)

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* [madelson (1)](<https://github.com/dotnet/corefx/commits/release/2.1?author=1269046+madelson@users.noreply.github.com>)

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* [Stephen Bonikowsky (41)](<https://github.com/dotnet/wcf/commits/release/2.1.0?author=stebon@microsoft.com>)

* [Matt Connew (11)](<https://github.com/dotnet/wcf/commits/release/2.1.0?author=mconnew@microsoft.com>)

* [Xing Mao (10)](<https://github.com/dotnet/wcf/commits/release/2.1.0?author=shmao@microsoft.com>)

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1.58 microsoft.csharp 4.7.0

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References:

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- <https://opensource.stackexchange.com/questions/1717/why-is-cc-by-sa-discouraged-for-code>
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Martin Richards

23 February 2007

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```
<Project Sdk="Microsoft.Build.NoTargets">
```

```
<UsingTask TaskName="RegenerateThirdPartyNotices" AssemblyFile="$(InstallerTasksAssemblyPath)" />
```

```
<Target Name="RegenerateThirdPartyNotices" AfterTargets="Build">
```

```
<PropertyGroup>
```

```
<TpnFile>$(InstallerProjectRoot)pkg\THIRD-PARTY-NOTICES.TXT</TpnFile>
```

```
</PropertyGroup>
```

```
<!--
```

Repo configuration. Upstreams, but also more: the TPN in dotnet/runtime serves many repos outside its graph, because dotnet/runtime produces the installer that ends up placing the single TPN file in the dotnet home directory.

```
-->
```

```
<ItemGroup>
```

```
<TpnRepo Include="dotnet/runtime" />
```

```
<TpnRepo Include="dotnet/aspnetcore" />
```

```
<TpnRepo Include="dotnet/installer" />
```

```
<TpnRepo Include="dotnet/roslyn-analyzers" />
```

```
<TpnRepo Include="dotnet/templating" />
```

```
<TpnRepo Include="dotnet/winforms" />
```

```
<TpnRepo Include="dotnet/wpf" />
```

```
<!--
```

Additional repos that should be included but don't have any third-party-notices files:

```
dotnet/efcore
```

```
dotnet/emsdk
```

```
dotnet/extensions
```

```
dotnet/icu
```

```
dotnet/sdk
```

```
dotnet/windowsdesktop
```

```
-->
```

```

<TpnRepo Condition="'%(TpnRepo.Branch)' == '' Branch="main" />

<PotentialTpnPath Include="THIRD-PARTY-NOTICES.TXT" />
<PotentialTpnPath Include="THIRD-PARTY-NOTICES.txt" />
<PotentialTpnPath Include="THIRD-PARTY-NOTICES" />
<PotentialTpnPath Include="THIRDPARTYNOTICES.TXT" />
<PotentialTpnPath Include="THIRDPARTYNOTICES.txt" />
</ItemGroup>

<RegenerateThirdPartyNotices
  TpnFile="$(TpnFile)"
  PotentialTpnPaths="@ (PotentialTpnPath)"
  TpnRepos="@ (TpnRepo)" />

<Message Text="$(MSBuildProjectName) -> $(TpnFile)" Importance="High" />
</Target>

</Project>

```

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https://zlib.net/zlib_license.html

/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.2.13, October 13th, 2022

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John R. Hauser
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  <ItemGroup>
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    <Compile Include="..\..\ServerContracts/Server.CoClasses.cs" />
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    <Compile Include="..\..\ServerContracts/ServerGuids.cs" />
  </ItemGroup>
  <ItemGroup>
    <CMakeProjectReference Include="..\..\NativeServer/CMakeLists.txt" />
    <ProjectReference Include="$(TestLibraryProjectPath)" />
  </ItemGroup>
</Project>
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/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.3.1, January 22nd, 2024

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Bit Twiddling Hacks

Bit Twiddling Hacks

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/* zlib.h -- interface of the 'zlib' general purpose compression library
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Bit Twiddling Hacks

By Sean Eron Anderson

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1.62 system.threading.tasks.extensions 4.5.1

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1.63 system.memory 4.5.4

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Martin Richards
23 February 2007

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```
<Project Sdk="Microsoft.Build.NoTargets">
```

```
<UsingTask TaskName="RegenerateThirdPartyNotices" AssemblyFile="$(InstallerTasksAssemblyPath)" />
```

```
<Target Name="RegenerateThirdPartyNotices" AfterTargets="Build">
```

```
<PropertyGroup>
```

```
<TpnFile>$(InstallerProjectRoot)pkg\THIRD-PARTY-NOTICES.TXT</TpnFile>
```

```
</PropertyGroup>
```

```
<!--
```

Repo configuration. Upstreams, but also more: the TPN in dotnet/runtime serves many repos outside its graph, because dotnet/runtime produces the installer that ends up placing the single TPN file in the dotnet home directory.

```
-->
```

```
<ItemGroup>
```

```
<TpnRepo Include="dotnet/runtime" />
```

```
<TpnRepo Include="dotnet/aspnetcore" />
```

```
<TpnRepo Include="dotnet/installer" />
```

```
<TpnRepo Include="dotnet/roslyn-analyzers" />
```

```
<TpnRepo Include="dotnet/templating" />
```

```
<TpnRepo Include="dotnet/winforms" />
```

```
<TpnRepo Include="dotnet/wpf" />
```

```
<!--
```

Additional repos that should be included but don't have any

third-party-notices files:

- dotnet/efcore
- dotnet/emsdk
- dotnet/extensions
- dotnet/icu
- dotnet/sdk
- dotnet/windowsdesktop

-->

```
<TpnRepo Condition="'%(TpnRepo.Branch)' == ''" Branch="main" />
```

```
<PotentialTpnPath Include="THIRD-PARTY-NOTICES.TXT" />
```

```
<PotentialTpnPath Include="THIRD-PARTY-NOTICES.txt" />
```

```
<PotentialTpnPath Include="THIRD-PARTY-NOTICES" />
```

```
<PotentialTpnPath Include="THIRDPARTYNOTICES.TXT" />
```

```
<PotentialTpnPath Include="THIRDPARTYNOTICES.txt" />
```

```
</ItemGroup>
```

```
<RegenerateThirdPartyNotices
```

```
  TpnFile="$(TpnFile)"
```

```
  PotentialTpnPaths="@ (PotentialTpnPath)"
```

```
  TpnRepos="@ (TpnRepo)" />
```

```
<Message Text="$(MSBuildProjectName) -> $(TpnFile)" Importance="High" />
```

```
</Target>
```

```
</Project>
```

```
<Project Sdk="Microsoft.NET.Sdk">
```

```
<PropertyGroup>
```

```
<OutputType>Exe</OutputType>
```

```
<ApplicationManifest>App.manifest</ApplicationManifest>
```

```
</PropertyGroup>
```

```
<ItemGroup>
```

```
<Compile Include="Program.cs" />
```

```
<Compile Include="..\..\ServerContracts/Server.CoClasses.cs" />
```

```
<Compile Include="..\..\ServerContracts/Server.Contracts.cs" />
```

```
<Compile Include="..\..\ServerContracts/ServerGuids.cs" />
```

```
</ItemGroup>
```

```
<ItemGroup>
```

```
<CMakeProjectReference Include="..\..\NativeServer/CMakeLists.txt" />
```

```
<ProjectReference Include="$(TestSourceDir)Common/CoreCLRTestLibrary/CoreCLRTestLibrary.csproj" />
```

```
</ItemGroup>
```

```
</Project>
```

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/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.2.13, October 13th, 2022

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Chris Re (cmr28@cornell.edu) and Werner Vogels (vogels@cs.cornell.edu)

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The punycode implementation

is based on the sample code in RFC 3492

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