Johnson Controls, Inc.

OSS Disclosures

Product name	Object Service
Version	1.0 (MUI 5.0 / Metasys Release 11.0)

This document provides list of all open source software components used in this product and their corresponding licenses.

This product may contain Open Source covered under such licenses as General Public License, Mozilla Public License and Lesser General Public License etc. These licenses may require their source code to be made available to customers. If such source code is not shipped with this release, the same can be obtained by anyone, upon receipt of this information, during the period as applicable, at following address —

Legal Department 5757 N. Green Bay Ave. P.O. Box 591. Milwaukee, WI 53201 USA

JCI may charge you a minimal fees up to \$5 as delivery/handling charges.

Components:

Component Name	License
aspnet/AspNetCore 2.1.1	Apache License 2.0
AspNetCore 2.1.1	Apache License 2.0
Cake (C# Make) 0.22.2	MIT License
Castle Project 4.3.1	Apache License 2.0
dapper-dot-net 1.50.5	Apache License 2.0
DotNet.Build.Sign 2.1.0-preview.3.0.19163.5	MIT License
IdentityModel 3.0.0	Apache License 2.0
IdentityModel.AspNetCore.OAuth2Introspection 3.1.0	Apache License 2.0
IdentityServer4.AccessTokenValidation 2.3.0	Apache License 2.0
JSON Web Token Handler For the Microsoft .Net Framework 4.5 5.3.0	MIT License
Json.NET 12.0.1	MIT License
Libuv 1.10.0	MIT License
Microsoft ASP.NET Core API Versioning 2.1.0	MIT License

Microsoft ASP.NET Web API Client Libraries 5.2.6	Microsoft .NET Library
Misses & Code Courses 46.0.0 marriage 20101205.02	License
Microsoft CodeCoverage 16.0.0-preview-20181205-02	Microsoft .NET Library License
Microsoft CodeCoverage 16.0.1	Microsoft .NET Library
	License
Microsoft CodeCoverage 16.0.2-preview-20190502-01	Microsoft .NET Library
	License
Microsoft SIMD-enabled Vector Types 4.4.0	MIT License
Microsoft.AspNetCore.Antiforgery 2.0.1	Apache License 2.0
Microsoft.AspNetCore.Authentication 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Authentication.Abstractions 2.0.1	Apache License 2.0
Microsoft.AspNetCore.Authentication.Cookies 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Authentication.Core 2.0.1	Apache License 2.0
Microsoft.AspNetCore.Authentication.Facebook 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Authentication.Google 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Authentication.JwtBearer 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Authentication.MicrosoftAccount 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Authentication.OAuth 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Authentication.OpenIdConnect 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Authentication.Twitter 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Authentication.WsFederation 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Authorization 2.0.1	Apache License 2.0
Microsoft.AspNetCore.Authorization.Policy 2.0.1	Apache License 2.0
Microsoft.AspNetCore.CookiePolicy 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Cors 2.0.1	Apache License 2.0
Microsoft.AspNetCore.Cryptography.Internal 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Cryptography.KeyDerivation 2.1.1	Apache License 2.0
Microsoft.AspNetCore.DataProtection 2.1.1	Apache License 2.0
Microsoft.AspNetCore.DataProtection.Abstractions 2.1.1	Apache License 2.0
Microsoft.AspNetCore.DataProtection.Extensions 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Diagnostics 2.0.1	Apache License 2.0
Microsoft.AspNetCore.Diagnostics.Abstractions 2.0.1	Apache License 2.0
Microsoft.AspNetCore.Diagnostics.EntityFrameworkCore 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Hosting 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Hosting.Abstractions 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Hosting.Server.Abstractions 2.0.1	Apache License 2.0
Microsoft.AspNetCore.Html.Abstractions 2.0.0	Apache License 2.0
Microsoft.AspNetCore.Http 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Http.Abstractions 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Http.Extensions 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Http.Features 2.1.1	Apache License 2.0

Microsoft AcabletCore Http://www.ides.2.1.1	Anacha Licanca 2.0
Microsoft AspNetCore HttpOverrides 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Identity 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Identity.EntityFrameworkCore 2.1.1	Apache License 2.0
Microsoft.AspNetCore.JsonPatch 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Localization 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Localization.Routing 2.1.1	Apache License 2.0
Microsoft.AspNetCore.MiddlewareAnalysis 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Mvc 2.1.3	Apache License 2.0
Microsoft.AspNetCore.Mvc.Abstractions 2.1.3	Apache License 2.0
Microsoft.AspNetCore.Mvc.ApiExplorer 2.1.3	Apache License 2.0
Microsoft.AspNetCore.Mvc.Core 2.0.2	Apache License 2.0
Microsoft.AspNetCore.Mvc.Cors 2.0.2	Apache License 2.0
Microsoft.AspNetCore.Mvc.DataAnnotations 2.0.2	Apache License 2.0
Microsoft.AspNetCore.Mvc.Formatters.Json 2.0.2	Apache License 2.0
Microsoft.AspNetCore.Mvc.Formatters.Xml 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Mvc.Localization 2.0.2	Apache License 2.0
Microsoft.AspNetCore.Mvc.Razor 2.0.2	Microsoft .NET Library
	License
Microsoft.AspNetCore.Mvc.Razor.Extensions 2.0.1	Apache License 2.0
Microsoft.AspNetCore.Mvc.RazorPages 2.0.2	Apache License 2.0
Microsoft.AspNetCore.Mvc.TagHelpers 2.0.2	Apache License 2.0
Microsoft.AspNetCore.Mvc.ViewFeatures 2.0.2	Apache License 2.0
Microsoft.AspNetCore.NodeServices 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Owin 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Razor 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Razor.Language 2.0.1	Apache License 2.0
Microsoft.AspNetCore.Razor.Runtime 2.0.1	Apache License 2.0
Microsoft.AspNetCore.ResponseCaching 2.1.1	Apache License 2.0
Microsoft.AspNetCore.ResponseCaching.Abstractions 2.1.1	Apache License 2.0
Microsoft.AspNetCore.ResponseCompression 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Rewrite 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Routing 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Routing.Abstractions 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Server.HttpSys 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Server.IISIntegration 2.0.1	Apache License 2.0
Microsoft.AspNetCore.Server.Kestrel 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Server.Kestrel.Core 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Server.Kestrel.Https 2.0.1	Apache License 2.0
Microsoft.AspNetCore.Server.Kestrel.Transport.Abstractions 2.0.1	Apache License 2.0
Microsoft.AspNetCore.Server.Kestrel.Transport.Libuv 2.0.1	Apache License 2.0
Microsoft.AspNetCore.Server.Kestrel.Transport.Sockets 2.1.1	Apache License 2.0
Microsoft.AspNetCore.Session 2.1.1	Apache License 2.0
	J

Microsoft.AspNetCore.SignalR 1.0.1	Apache License 2.0
Microsoft.AspNetCore.SignalR.Common 1.0.1	Apache License 2.0
Microsoft.AspNetCore.SignalR.Core 1.0.1	Apache License 2.0
· · · · · · · · · · · · · · · · · · ·	Apache License 2.0
Microsoft.AspNetCore.SpaServices 2.1.1	•
Microsoft.AspNetCore.SpaServices.Extensions 2.1.1	Apache License 2.0
Microsoft.AspNetCore.StaticFiles 2.1.1	Apache License 2.0
Microsoft.AspNetCore.WebSockets 2.1.1	Apache License 2.0
Microsoft.AspNetCore.WebUtilities 2.1.1	Apache License 2.0
Microsoft.CodeAnalysis.CSharp 2.8.0	Microsoft .NET Library License
Microsoft.CodeAnalysis.CSharp.Workspaces 2.8.0	Microsoft .NET Library License
Microsoft.CodeAnalysis.Razor 2.1.1	Apache License 2.0
Microsoft.CodeAnalysis.Workspaces.Common 2.8.0	Microsoft .NET Library
	License
Microsoft.CSharp 4.5.0	MIT License
Microsoft.DotNet.PlatformAbstractions 2.0.3	MIT License
Microsoft.EntityFrameworkCore 2.1.1	Apache License 2.0
Microsoft.EntityFrameworkCore.Design 2.1.1	Apache License 2.0
Microsoft.EntityFrameworkCore.InMemory 2.1.1	Apache License 2.0
Microsoft.EntityFrameworkCore.Relational 2.1.1	Apache License 2.0
Microsoft.EntityFrameworkCore.SqlServer 2.1.1	Apache License 2.0
Microsoft.Extensions.Caching.Abstractions 2.1.1	Apache License 2.0
Microsoft.Extensions.Caching.Memory 2.0.0	Apache License 2.0
Microsoft.Extensions.Caching.SqlServer 2.1.1	Apache License 2.0
Microsoft.Extensions.Configuration 2.1.1	Apache License 2.0
Microsoft.Extensions.Configuration.Abstractions 2.0.0	Apache License 2.0
Microsoft.Extensions.Configuration.Binder 2.1.1	Apache License 2.0
Microsoft.Extensions.Configuration.CommandLine 2.0.0	Apache License 2.0
Microsoft.Extensions.Configuration.EnvironmentVariables 2.0.0	Apache License 2.0
Microsoft.Extensions.Configuration.FileExtensions 2.0.0	Apache License 2.0
Microsoft.Extensions.Configuration.Ini 2.1.1	Apache License 2.0
Microsoft.Extensions.Configuration.Json 2.0.0	Apache License 2.0
Microsoft.Extensions.Configuration.UserSecrets 2.0.0	Apache License 2.0
Microsoft.Extensions.Configuration.Xml 2.1.1	Apache License 2.0
Microsoft.Extensions.DependencyInjection 2.0.0	Apache License 2.0
Microsoft.Extensions.DependencyInjection.Abstractions 2.1.1	Apache License 2.0
Microsoft.Extensions.DependencyModel 2.1.0	MIT License
Microsoft.Extensions.DiagnosticAdapter 2.1.0	Apache License 2.0
Microsoft.Extensions.FileProviders.Abstractions 2.0.0	Microsoft .NET Library License
Microsoft.Extensions.FileProviders.Composite 2.0.0	Apache License 2.0
· ·	· ·

Microsoft.Extensions.FileProviders.Embedded 2.1.1	Apache License 2.0
Microsoft.Extensions.FileProviders.Physical 2.2.0	Apache License 2.0
Microsoft.Extensions.FileSystemGlobbing 2.1.1	Apache License 2.0
Microsoft.Extensions.Hosting.Abstractions 2.0.1	Apache License 2.0
Microsoft.Extensions.Identity.Core 2.1.1	Apache License 2.0
•	·
Microsoft.Extensions.Identity.Stores 2.1.1 Microsoft.Extensions.Localization 2.0.1	Apache License 2.0
	Apache License 2.0
Microsoft.Extensions.Localization.Abstractions 2.1.1	Apache License 2.0
Microsoft.Extensions.Logging 2.0.0	Microsoft .NET Library License
Microsoft.Extensions.Logging.Abstractions 2.0.0	Apache License 2.0
Microsoft.Extensions.Logging.Configuration 2.0.0	Apache License 2.0
Microsoft.Extensions.Logging.Console 2.0.0	Apache License 2.0
Microsoft.Extensions.Logging.Debug 2.1.1	Apache License 2.0
Microsoft.Extensions.Logging.EventSource 2.1.1	Apache License 2.0
Microsoft.Extensions.Logging.TraceSource 2.1.1	Apache License 2.0
Microsoft.Extensions.ObjectPool 2.1.1	Apache License 2.0
Microsoft.Extensions.Options 2.1.1	Apache License 2.0
Microsoft.Extensions.Options.ConfigurationExtensions 2.1.1	Apache License 2.0
Microsoft.Extensions.Primitives 2.0.0	Apache License 2.0
Microsoft.Extensions.WebEncoders 2.1.1	Apache License 2.0
Microsoft.IdentityModel.Logging 5.3.0	MIT License
Microsoft.IdentityModel.Protocol.Extensions 5.3.0	MIT License
Microsoft.IdentityModel.Protocols 2.1.4	MIT License
Microsoft.IdentityModel.Protocols.OpenIdConnect 5.2.0	MIT License
Microsoft.IdentityModel.Protocols.WsFederation 5.2.0	MIT License
Microsoft.IdentityModel.Tokens 5.3.0	MIT License
Microsoft.IdentityModel.Tokens.Saml 5.2.0	MIT License
Microsoft.IdentityModel.Xml 5.2.0	MIT License
Microsoft.Net.Http.Headers 2.1.1	Apache License 2.0
Microsoft.NETCore.App 2.1.0	MIT License
Microsoft.VisualBasic 10.3.0	MIT License
Microsoft.VisualStudio.Web.CodeGeneration 2.1.6	Apache License 2.0
Microsoft.VisualStudio.Web.CodeGeneration 2.1.6	Apache License 2.0
Microsoft.VisualStudio.Web.CodeGeneration.Contracts 2.1.6	Apache License 2.0
Microsoft.VisualStudio.Web.CodeGeneration.Core 2.1.6	Apache License 2.0
Microsoft.VisualStudio.Web.CodeGeneration.Design 2.1.6	Apache License 2.0
Microsoft.VisualStudio.Web.CodeGeneration.Templating 2.1.6	Apache License 2.0
Microsoft.VisualStudio.Web.CodeGeneration.Utils 2.1.6	Apache License 2.0
Microsoft.VisualStudio.Web.CodeGenerators.Mvc 2.1.6	Apache License 2.0
Microsoft.Win32.Registry 4.5.0	MIT License

Moq 4.10.0	BSD 3-clause "New" or
	"Revised" License
Newtonsoft.Json.Bson 1.0.1	MIT License
NUnit Framework 2.6.4	Nunit License
Polly 6.0.1	BSD 3-clause "New" or
	"Revised" License
Polly.Extensions.Http 2.0.1	BSD 3-clause "New" or
l' 220	"Revised" License
re-linq 2.2.0	Apache License 2.0
Reinforced.Typings 1.5.0	MIT License
Serilog.AspNetCore 2.1.1	Apache License 2.0
Serilog.Enrichers.Environment 2.1.2	Apache License 2.0
Serilog.Enrichers.Process 2.0.1	Apache License 2.0
Serilog.Enrichers.Thread 3.0.0	Apache License 2.0
Serilog.Extensions.Logging 2.0.0	Apache License 2.0
Serilog.Settings.Configuration 3.0.1	Apache License 2.0
Serilog.Sinks.Async 1.3.0	Apache License 2.0
Serilog.Sinks.Debug 1.0.1	Apache License 2.0
Serilog.Sinks.File 4.0.0	Apache License 2.0
serilog/serilog v2.7.1	Apache License 2.0
SmartCode.CLI 1.18.1	Apache License 2.0
System.AppContext 4.3.0	Microsoft .NET Library
	License
System.Buffers 4.4.0	MIT License
System.Collections.Concurrent 4.3.0	Microsoft .NET Library
	License
System.Collections.Immutable 1.4.0	MIT License
System.Collections.Specialized 4.3.0	Microsoft .NET Library
	License
System.ComponentModel.Annotations 4.5.0	MIT License
System.Composition.AttributedModel 1.0.31	MIT License
System.Composition.Convention 1.0.31	MIT License
System.Composition.Hosting 1.0.31	MIT License
System.Composition.Runtime 1.0.31	MIT License
System.Composition.TypedParts 1.0.31	MIT License
System.Data.SqlClient 4.4.0	MIT License
System.Diagnostics.Contracts 4.3.0	Microsoft .NET Library
	License
System.Diagnostics.DiagnosticSource 4.5.1	MIT License
System.Diagnostics.StackTrace 4.3.0	MIT License
System.Diagnostics.TraceSource 4.0.0	Microsoft .NET Framework
	EULA

System.Dynamic.Runtime 4.3.0	Microsoft .NET Library
System. Dynamic. Numerine 4.3.0	License
System.Globalization.Extensions 4.3.0	Microsoft .NET Library
	License
System.Interactive.Async 3.1.1	Apache License 2.0
System.IO.Compression 4.3.0	MIT License
System.IO.FileSystem.Primitives 4.3.0	Microsoft .NET Library
,	License
System.IO.Pipelines 4.5.0	MIT License
System.Linq 4.3.0	MIT License
System.Ling.Expressions 4.3.0	Microsoft .NET Library
	License
System.Net.Http 4.3.0	MIT License
System.Net.WebSockets.WebSocketProtocol 4.5.1	MIT License
System.ObjectModel 4.3.0	Microsoft .NET Library
	License
System.Reflection.Emit 4.6.0-preview5.19224.8	MIT License
System.Reflection.Emit.ILGeneration 4.6.0-preview.19073.11	MIT License
System.Reflection.Emit.Lightweight 4.6.0-preview.18571.3	MIT License
System.Reflection.Metadata 1.5.0	MIT License
System.Runtime.CompilerServices.Unsafe 4.5.1	MIT License
System.Runtime.InteropServices.RuntimeInformation 4.3.0	Microsoft .NET Library
	License
System.Runtime.Numerics 4.3.0	Microsoft .NET Framework
	1.1 License
System.Runtime.Serialization.Primitives 4.3.0	Microsoft .NET Library
	License
System.Runtime.Serialization.Xml 4.3.0	Microsoft .NET Library
System Security AssessCentral 4.4.0	License MIT License
System.Security.AccessControl 4.4.0	
System.Security.Claims 4.3.0	Microsoft .NET Library License
System.Security.Cryptography.Algorithms 4.3.0	Microsoft .NET Library
System. Security. Cryptography. Aigorithms 4.5.0	License
System.Security.Cryptography.Cng 4.6.0-preview5.19224.8	MIT License
System.Security.Cryptography.Csp 4.3.0	Microsoft .NET Library
	License
System.Security.Cryptography.Encoding 4.3.0	Microsoft .NET Framework
	1.1 License
System.Security.Cryptography.Primitives 4.3.0	Microsoft .NET Library
	License
System.Security.Cryptography.ProtectedData 4.4.0	MIT License
System.Security.Cryptography.X509Certificates 4.3.0	Microsoft .NET Library
	License
System.Security.Cryptography.Xml 4.4.0	MIT License

System.Security.Permissions 4.5.0	MIT License
System.Security.Principal 4.3.0	Microsoft .NET Library
	License
System.Security.Principal.Windows 4.4.0	MIT License
System.Text.Encoding.CodePages 4.4.0	MIT License
System.Text.Encodings.Web 4.5.0	MIT License
System.Text.RegularExpressions 4.3.0	Microsoft .NET Library
	Updated License
System.Threading 4.3.0	Microsoft .NET Library
	License
System.Threading.Channels 4.5.0	MIT License
System.Threading.Tasks.Extensions 4.4.0	MIT License
System.Threading.Tasks.Parallel 4.3.0	Microsoft .NET Framework
	1.1 License
System.Threading.Thread 4.3.0	Microsoft .NET Library
	License
System.ValueTuple 4.3.0	MIT License
System.Xml.ReaderWriter 4.3.0	Microsoft .NET Library
	License
System.Xml.XDocument 4.3.0	Microsoft .NET Library
	License
System.Xml.XmlDocument 4.3.0	Microsoft .NET Library
Catan ValVBall 420	License
System.Xml.XPath 4.3.0	Microsoft .NET Framework
Sustan Vml VDath VDasumant 4.2.0	1.1 License
System.Xml.XPath.XDocument 4.3.0	Microsoft .NET Library License
System.Xml.XPath.XmlDocument 4.0.1	MIT License
Windows Installer XML (WiX) toolset 3.11.1	Microsoft Reciprocal
Williams Histalier AME (WIA) toolset 3.11.1	License
xUnit.net [Abstractions] 2.0.3	Apache License 2.0
xUnit.net [Assertion Library] 2.4.1	(Apache License 2.0 AND
Notificate prosection ciorary 2.7.1	MIT License)
xUnit.net [Extensibility:Core] 2.4.1	(Apache License 2.0 AND
	MIT License)
xUnit.net [Extensibility:Execution] 2.4.0	Apache License 2.0
xUnit.net [Visual Studio/TFS Build Runner] 2.4.1	(Apache License 2.0 AND
	MIT License)

Licenses:

Apache License 2.0

(aspnet/AspNetCore 2.1.1, AspNetCore 2.1.1, Castle Project 4.3.1, dapper-dot-net 1.50.5, IdentityModel 3.0.0, IdentityModel.AspNetCore.OAuth2Introspection 3.1.0, IdentityServer4.AccessTokenValidation 2.3.0,

```
Microsoft.AspNetCore.Antiforgery 2.0.1, Microsoft.AspNetCore.Authentication 2.1.1,
Microsoft.AspNetCore.Authentication.Abstractions 2.0.1, Microsoft.AspNetCore.Authentication.Cookies 2.1.1,
Microsoft.AspNetCore.Authentication.Core 2.0.1, Microsoft.AspNetCore.Authentication.Facebook 2.1.1,
Microsoft.AspNetCore.Authentication.Google 2.1.1, Microsoft.AspNetCore.Authentication.JwtBearer 2.1.1,
Microsoft.AspNetCore.Authentication.MicrosoftAccount 2.1.1, Microsoft.AspNetCore.Authentication.OAuth 2.1.1,
Microsoft.AspNetCore.Authentication.OpenIdConnect 2.1.1, Microsoft.AspNetCore.Authentication.Twitter 2.1.1,
Microsoft.AspNetCore.Authentication.WsFederation 2.1.1, Microsoft.AspNetCore.Authorization 2.0.1,
Microsoft.AspNetCore.Authorization.Policy 2.0.1, Microsoft.AspNetCore.CookiePolicy 2.1.1,
Microsoft.AspNetCore.Cors 2.0.1, Microsoft.AspNetCore.Cryptography.Internal 2.1.1,
Microsoft.AspNetCore.Cryptography.KeyDerivation 2.1.1, Microsoft.AspNetCore.DataProtection 2.1.1,
Microsoft.AspNetCore.DataProtection.Abstractions 2.1.1, Microsoft.AspNetCore.DataProtection.Extensions 2.1.1,
Microsoft.AspNetCore.Diagnostics 2.0.1, Microsoft.AspNetCore.Diagnostics.Abstractions 2.0.1,
Microsoft.AspNetCore.Diagnostics.EntityFrameworkCore 2.1.1, Microsoft.AspNetCore.Hosting 2.1.1,
Microsoft.AspNetCore.Hosting.Abstractions 2.1.1, Microsoft.AspNetCore.Hosting.Server.Abstractions 2.0.1,
Microsoft.AspNetCore.Html.Abstractions 2.0.0, Microsoft.AspNetCore.Http 2.1.1,
Microsoft.AspNetCore.Http.Abstractions 2.1.1, Microsoft.AspNetCore.Http.Extensions 2.1.1,
Microsoft.AspNetCore.Http.Features 2.1.1, Microsoft.AspNetCore.HttpOverrides 2.1.1,
Microsoft.AspNetCore.Identity 2.1.1, Microsoft.AspNetCore.Identity.EntityFrameworkCore 2.1.1,
Microsoft.AspNetCore.JsonPatch 2.1.1, Microsoft.AspNetCore.Localization 2.1.1,
Microsoft.AspNetCore.Localization.Routing 2.1.1, Microsoft.AspNetCore.MiddlewareAnalysis 2.1.1,
Microsoft.AspNetCore.Mvc 2.1.3, Microsoft.AspNetCore.Mvc.Abstractions 2.1.3,
Microsoft.AspNetCore.Mvc.ApiExplorer 2.1.3, Microsoft.AspNetCore.Mvc.Core 2.0.2,
Microsoft.AspNetCore.Mvc.Cors 2.0.2, Microsoft.AspNetCore.Mvc.DataAnnotations 2.0.2,
Microsoft.AspNetCore.Mvc.Formatters.Json 2.0.2, Microsoft.AspNetCore.Mvc.Formatters.Xml 2.1.1,
Microsoft.AspNetCore.Mvc.Localization 2.0.2, Microsoft.AspNetCore.Mvc.Razor.Extensions 2.0.1,
Microsoft.AspNetCore.Mvc.RazorPages 2.0.2, Microsoft.AspNetCore.Mvc.TagHelpers 2.0.2,
Microsoft.AspNetCore.Mvc.ViewFeatures 2.0.2, Microsoft.AspNetCore.NodeServices 2.1.1,
Microsoft.AspNetCore.Owin 2.1.1, Microsoft.AspNetCore.Razor 2.1.1, Microsoft.AspNetCore.Razor.Language 2.0.1,
Microsoft.AspNetCore.Razor.Runtime 2.0.1, Microsoft.AspNetCore.ResponseCaching 2.1.1,
Microsoft.AspNetCore.ResponseCaching.Abstractions 2.1.1, Microsoft.AspNetCore.ResponseCompression 2.1.1,
Microsoft.AspNetCore.Rewrite 2.1.1, Microsoft.AspNetCore.Routing 2.1.1,
Microsoft.AspNetCore.Routing.Abstractions 2.1.1, Microsoft.AspNetCore.Server.HttpSys 2.1.1,
Microsoft.AspNetCore.Server.IISIntegration 2.0.1, Microsoft.AspNetCore.Server.Kestrel 2.1.1,
Microsoft.AspNetCore.Server.Kestrel.Core 2.1.1, Microsoft.AspNetCore.Server.Kestrel.Https 2.0.1,
Microsoft.AspNetCore.Server.Kestrel.Transport.Abstractions 2.0.1,
Microsoft.AspNetCore.Server.Kestrel.Transport.Libuv 2.0.1,
Microsoft.AspNetCore.Server.Kestrel.Transport.Sockets 2.1.1, Microsoft.AspNetCore.Session 2.1.1,
Microsoft.AspNetCore.SignalR 1.0.1, Microsoft.AspNetCore.SignalR.Common 1.0.1,
Microsoft.AspNetCore.SignalR.Core 1.0.1, Microsoft.AspNetCore.SpaServices 2.1.1,
Microsoft.AspNetCore.SpaServices.Extensions 2.1.1, Microsoft.AspNetCore.StaticFiles 2.1.1,
Microsoft.AspNetCore.WebSockets 2.1.1, Microsoft.AspNetCore.WebUtilities 2.1.1, Microsoft.CodeAnalysis.Razor
2.1.1, Microsoft.EntityFrameworkCore 2.1.1, Microsoft.EntityFrameworkCore.Design 2.1.1,
Microsoft.EntityFrameworkCore.InMemory 2.1.1, Microsoft.EntityFrameworkCore.Relational 2.1.1,
Microsoft.EntityFrameworkCore.SqlServer 2.1.1, Microsoft.Extensions.Caching.Abstractions 2.1.1,
Microsoft.Extensions.Caching.Memory 2.0.0, Microsoft.Extensions.Caching.SqlServer 2.1.1,
Microsoft.Extensions.Configuration 2.1.1, Microsoft.Extensions.Configuration.Abstractions 2.0.0,
```

Microsoft. Extensions. Configuration. Binder 2.1.1, Microsoft. Extensions. Configuration. Command Line 2.0.0,

2.0.0, Microsoft.Extensions.Configuration.Ini 2.1.1, Microsoft.Extensions.Configuration.Json 2.0.0,

Microsoft.Extensions.Configuration.EnvironmentVariables 2.0.0, Microsoft.Extensions.Configuration.FileExtensions

Microsoft.Extensions.Configuration.UserSecrets 2.0.0, Microsoft.Extensions.Configuration.Xml 2.1.1, Microsoft.Extensions.DependencyInjection 2.0.0, Microsoft.Extensions.DependencyInjection.Abstractions 2.1.1, Microsoft.Extensions.DiagnosticAdapter 2.1.0, Microsoft.Extensions.FileProviders.Composite 2.0.0, Microsoft.Extensions.FileProviders.Embedded 2.1.1, Microsoft.Extensions.FileProviders.Physical 2.2.0, Microsoft.Extensions.FileSystemGlobbing 2.1.1, Microsoft.Extensions.Hosting.Abstractions 2.0.1, Microsoft.Extensions.Identity.Core 2.1.1, Microsoft.Extensions.Identity.Stores 2.1.1, Microsoft.Extensions.Localization 2.0.1, Microsoft.Extensions.Localization.Abstractions 2.1.1, Microsoft.Extensions.Logging.Abstractions 2.0.0, Microsoft.Extensions.Logging.Configuration 2.0.0, Microsoft. Extensions. Logging. Console 2.0.0, Microsoft. Extensions. Logging. Debug 2.1.1, Microsoft.Extensions.Logging.EventSource 2.1.1, Microsoft.Extensions.Logging.TraceSource 2.1.1, Microsoft.Extensions.ObjectPool 2.1.1, Microsoft.Extensions.Options 2.1.1, Microsoft.Extensions.Options.ConfigurationExtensions 2.1.1, Microsoft.Extensions.Primitives 2.0.0, Microsoft.Extensions.WebEncoders 2.1.1, Microsoft.Net.Http.Headers 2.1.1, Microsoft. Visual Studio. Web. Code Generation 2.1.6, Microsoft. Visual Studio. Web. Code Generation ... 2.1.6, Microsoft.VisualStudio.Web.CodeGeneration.Contracts 2.1.6, Microsoft.VisualStudio.Web.CodeGeneration.Core 2.1.6, Microsoft. Visual Studio. Web. Code Generation. Design 2.1.6, Microsoft. Visual Studio. Web. Code Generation. Templating 2.1.6, Microsoft. Visual Studio. Web. Code Generation. Utils 2.1.6, Microsoft.VisualStudio.Web.CodeGenerators.Mvc 2.1.6, re-linq 2.2.0, Serilog.AspNetCore 2.1.1, Serilog. Enrichers. Environment 2.1.2, Serilog. Enrichers. Process 2.0.1, Serilog. Enrichers. Thread 3.0.0, Serilog. Extensions. Logging 2.0.0, Serilog. Settings. Configuration 3.0.1, Serilog. Sinks. Async 1.3.0, Serilog. Sinks. Debug 1.0.1, Serilog.Sinks.File 4.0.0, serilog/serilog v2.7.1, SmartCode.CLI 1.18.1, System.Interactive.Async 3.1.1, xUnit.net [Abstractions] 2.0.3, xUnit.net [Assertion Library] 2.4.1, xUnit.net [Extensibility: Core] 2.4.1, xUnit.net [Extensibility: Execution] 2.4.0, xUnit.net [Visual Studio/TFS Build Runner] 2.4.1)

Apache License
Version 2.0, January 2004

http://www.apache.org/licenses/

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright

Johnson Controls, Inc.

owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

- 2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
- 3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to

which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

- 4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
- a. You must give any other recipients of the Work or Derivative Works a copy of this License; and
- b. You must cause any modified files to carry prominent notices stating that
 You changed the files; and
- c. You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- d. If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do

not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

- 5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.
- 6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
- 7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its

 Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in

tort (including negligence), contract, or otherwise, unless required by

applicable law (such as deliberate and grossly negligent acts) or agreed to in

writing, shall any Contributor be liable to You for damages, including any

direct, indirect, special, incidental, or consequential damages of any character

arising as a result of this License or out of the use or inability to use the

Work (including but not limited to damages for loss of goodwill, work stoppage,

computer failure or malfunction, or any and all other commercial damages or

losses), even if such Contributor has been advised of the possibility of such

damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or

Derivative Works thereof, You may choose to offer, and charge a fee for,

acceptance of support, warranty, indemnity, or other liability obligations and/or

rights consistent with this License. However, in accepting such obligations, You

may act only on Your own behalf and on Your sole responsibility, not on behalf of

any other Contributor, and only if You agree to indemnify, defend, and hold each

Contributor harmless for any liability incurred by, or claims asserted against,

such Contributor by reason of your accepting any such warranty or additional

liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work

To apply the Apache License to your work, attach the following boilerplate

notice, with the fields enclosed by brackets "[]" replaced with your own

identifying information. (Don't include the brackets!) The text should be

enclosed in the appropriate comment syntax for the file format. We also recommend

that a file or class name and description of purpose be included on the same

"printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner] Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

BSD 3-clause "New" or "Revised" License
(Moq 4.10.0, Polly 6.0.1, Polly.Extensions.Http 2.0.1)

Copyright (c) <YEAR>, <OWNER>
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of the <ORGANIZATION> nor the names of its contributors may

be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Microsoft .NET Framework 1.1 License

(System.Runtime.Numerics 4.3.0, System.Security.Cryptography.Encoding 4.3.0, System.Threading.Tasks.Parallel 4.3.0, System.Xml.XPath 4.3.0)

Microsoft .NET Framework 1.1 Redistributable EULA

IMPORTANT: READ CAREFULLY - These Microsoft Corporation ("Microsoft") operating system components, including any "online" or electronic documentation ("OS Components") are subject to the terms and conditions of the agreement under which you have licensed the applicable Microsoft operating system product described below (each an "End User License Agreement" or "EULA") and the terms and conditions of this Supplemental EULA. BY INSTALLING, COPYING OR OTHERWISE USING THE OS COMPONENTS, YOU AGREE TO BE BOUND BY THE TERMS AND CONDITIONS OF THE

APPLICABLE OPERATING SYSTEM PRODUCT EULA AND THIS SUPPLEMENTAL EULA. IF YOU DO NOT AGREE TO THESE TERMS AND CONDITIONS, DO NOT INSTALL, COPY OR USE THE OS COMPONENTS.

NOTE: IF YOU DO NOT HAVE A VALIDLY LICENSED COPY OF ANY VERSION OR EDITION OF MICROSOFT WINDOWS 95, WINDOWS 98, WINDOWS NT 4.0 WINDOWS 2000 OPERATING SYSTEM OR ANY MICROSOFT OPERATING SYSTEM THAT IS A SUCCESSOR TO ANY OF THOSE OPERATING SYSTEMS (each an "OS Product"), YOU ARE NOT AUTHORIZED TO INSTALL, COPY OR OTHERWISE USE THE OS COMPONENTS AND YOU HAVE NO RIGHTS UNDER THIS SUPPLEMENTAL EULA.

Capitalized terms used in this Supplemental EULA and not otherwise defined herein shall have the meanings assigned to them in the applicable OS Product EULA.

General. Each of the OS Components available from this site is identified as being applicable to one or more of the OS Products. The applicable OS Components are provided to you by Microsoft to update, supplement, or replace existing functionality of the applicable OS Product. Microsoft grants you a license to use the applicable OS Components under the terms and conditions of the EULA for the applicable OS Product (which are hereby incorporated by reference except as set forth below), the terms and conditions set forth in this Supplemental EULA, and the terms and conditions of any additional end user license agreement that may accompany the individual OS Components (each an "Individual EULA"), provided that you comply with all such terms and conditions. To the extent that there is a conflict among any of these terms and conditions applicable to the OS Components, the following hierarchy shall apply:

- 1. the terms and conditions of the Individual EULA;
- 2. the terms and conditions in this Supplemental EULA; and

3. the terms and conditions of the applicable OS Product EULA.

Additional Rights and Limitations.

- * If you have multiple validly licensed copies of any OS Product, you may reproduce, install and use one copy of the applicable OS Components as part of the applicable OS Product on all of your computers running validly licensed copies of the applicable OS Product, provided that you use such additional copies of such OS Components in accordance with the terms and conditions above. For each validly licensed copy of the applicable OS Product, you also may reproduce one additional copy of the applicable OS Components solely for archival purposes or reinstallation of the OS Components on the same computer as the OS Components were previously installed. Microsoft retains all right, title and interest in and to the OS Components. All rights not expressly granted are reserved by Microsoft.
- * If you are installing the OS Components on behalf of an organization other than your own, prior to installing any of the OS Components, you must confirm that the end-user (whether an individual or a single entity) has received, read and accepted these terms and conditions.
- * The OS Components may contain technology that enables applications to be shared between two or more computers, even if an application is installed on only one of the computers. You may use this technology with all Microsoft application products for multi-party conferences. For non-Microsoft applications, you should consult the accompanying license agreement or contact the licensor to determine whether application sharing is permitted by the licensor.

- * You may conduct internal benchmark testing of the .NET Framework component of the OS Components (".NET Component"). You may disclose the results of any benchmark test of the .NET Component, provided that you comply with the following terms:
 - 1. you must disclose all the information necessary for replication of the tests, including complete and accurate details of your benchmark testing methodology, the test scripts/cases, tuning parameters applied, hardware and software platforms tested, the name and version number of any third party testing tool used to conduct the testing, and complete source code for the benchmark suite/harness that is developed by or for you and used to test both the .NET Component and the competing implementation(s);
 - you must disclose the date(s) that you conducted the benchmark tests, along with specific version information for all Microsoft software products tested, including the .NET Component;
 - your benchmark testing was performed using all performance tuning and best practice guidance set forth in the product documentation and/or on Microsoft's support web sites, and uses the latest updates, patches and fixes available for the .NET Component and the relevant Microsoft operating system;
 - 4. it shall be sufficient if you make the disclosures provided for above at a publicly available location such as a website, so long as every public disclosure of the results of your benchmark test expressly identifies the public site containing all required disclosures; and
 - 5. nothing in this provision shall be deemed to waive any other right that you may have to conduct benchmark testing.

The foregoing obligations shall not apply to your disclosure of the results of any customized benchmark test of the .NET Component, whereby such disclosure is made under confidentiality in conjunction with a bid request by a prospective customer, such customer's application(s) are specifically tested and the results are only disclosed to such specific customer.

Notwithstanding any other agreement you may have with Microsoft, if you disclose such benchmark test results, Microsoft shall have the right to disclose the results of benchmark tests it conducts of your products that compete with the .NET Component, provided it complies with the same conditions above.

IF THE APPLICABLE OS PRODUCT WAS LICENSED TO YOU BY MICROSOFT OR ANY OF ITS WHOLLY OWNED SUBSIDIARIES, THE LIMITED WARRANTY (IF ANY) INCLUDED IN THE APPLICABLE OS PRODUCT EULA APPLIES TO THE APPLICABLE OS COMPONENTS PROVIDED THE APPLICABLE OS COMPONENTS HAVE BEEN LICENSED BY YOU WITHIN THE TERM OF THE LIMITED WARRANTY IN THE APPLICABLE OS PRODUCT EULA. HOWEVER, THIS SUPPLEMENTAL EULA DOES NOT EXTEND THE TIME PERIOD FOR WHICH THE LIMITED WARRANTY IS PROVIDED.

IF THE APPLICABLE OS PRODUCT WAS LICENSED TO YOU BY AN ENTITY OTHER THAN MICROSOFT OR ANY OF ITS WHOLLY OWNED SUBSIDIARIES, MICROSOFT DISCLAIMS ALL WARRANTIES WITH RESPECT TO THE APPLICABLE OS COMPONENTS AS FOLLOWS:

DISCLAIMER OF WARRANTIES. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, MICROSOFT AND ITS SUPPLIERS PROVIDE TO YOU THE OS COMPONENTS, AND ANY (IF ANY) SUPPORT SERVICES RELATED TO THE OS COMPONENTS ("SUPPORT SERVICES") AS IS AND WITH ALL FAULTS; AND MICROSOFT AND ITS SUPPLIERS HEREBY DISCLAIM WITH RESPECT TO THE OS COMPONENTS AND SUPPORT SERVICES ALL WARRANTIES AND CONDITIONS, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, ANY (IF ANY) WARRANTIES, DUTIES OR CONDITIONS OF OR RELATED TO: MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, LACK OF VIRUSES, ACCURACY OR COMPLETENESS OF RESPONSES,

RESULTS, WORKMANLIKE EFFORT AND LACK OF NEGLIGENCE. ALSO THERE IS NO WARRANTY, DUTY OR CONDITION OF TITLE, QUIET ENJOYMENT, QUIET POSSESSION, CORRESPONDENCE TO DESCRIPTION OR NON-INFRINGEMENT. THE ENTIRE RISK ARISING OUT OF USE OR PERFORMANCE OF THE OS COMPONENTS AND ANY SUPPORT SERVICES REMAINS WITH YOU.

EXCLUSION OF INCIDENTAL, CONSEQUENTIAL AND CERTAIN OTHER DAMAGES. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL MICROSOFT OR ITS SUPPLIERS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE OR CONSEQUENTIAL DAMAGES WHATSOEVER (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR: LOSS OF PROFITS, LOSS OF CONFIDENTIAL OR OTHER INFORMATION, BUSINESS INTERRUPTION, PERSONAL INJURY, LOSS OF PRIVACY, FAILURE TO MEET ANY DUTY (INCLUDING OF GOOD FAITH OR OF REASONABLE CARE), NEGLIGENCE, AND ANY OTHER PECUNIARY OR OTHER LOSS WHATSOEVER) ARISING OUT OF OR IN ANY WAY RELATED TO THE USE OF OR INABILITY TO USE THE OS COMPONENTS OR THE SUPPORT SERVICES, OR THE PROVISION OF OR FAILURE TO PROVIDE SUPPORT SERVICES, OR OTHERWISE UNDER OR IN CONNECTION WITH ANY PROVISION OF THIS SUPPLEMENTAL EULA, EVEN IF MICROSOFT OR ANY SUPPLIER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

LIMITATION OF LIABILITY AND REMEDIES. NOTWITHSTANDING ANY DAMAGES THAT YOU MIGHT INCUR FOR ANY REASON WHATSOEVER (INCLUDING, WITHOUT LIMITATION, ALL DAMAGES REFERENCED ABOVE AND ALL DIRECT OR GENERAL DAMAGES), THE ENTIRE LIABILITY OF MICROSOFT AND ANY OF ITS SUPPLIERS UNDER ANY PROVISION OF THIS SUPPLEMENTAL EULA AND YOUR EXCLUSIVE REMEDY FOR ALL OF THE FOREGOING SHALL BE LIMITED TO ACTUAL DAMAGES INCURRED BY YOU BASED ON REASONABLE RELIANCE UP TO THE GREATER OF THE AMOUNT ACTUALLY PAID BY YOU FOR THE OS COMPONENTS OR U.S.\$5.00. THE FOREGOING LIMITATIONS, EXCLUSIONS AND DISCLAIMERS SHALL APPLY TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EVEN IF ANY REMEDY FAILS ITS ESSENTIAL PURPOSE.

Microsoft .NET Framework EULA

(System.Diagnostics.TraceSource 4.0.0) MICROSOFT SOFTWARE SUPPLEMENTAL LICENSE TERMS .NET FRAMEWORK AND ASSOCIATED LANGUAGE PACKS FOR MICROSOFT WINDOWS OPERATING **SYSTEM** ______ Microsoft Corporation (or based on where you live, one of its affiliates) licenses this supplement to you. If you are licensed to use Microsoft Windows operating system software (the "software"), you may use this supplement. You may not use it if you do not have a license for the software. You may use this supplement with each validly licensed copy of the software. The following license terms describe additional use terms for this supplement. These terms and the license terms for the software apply to your use of the supplement. If there is a conflict, these supplemental license terms apply. By using this supplement, you accept these terms. If you do not accept them, do not use this supplement. If you comply with these license terms, you have the rights below.

1. DISTRIBUTABLE CODE. The supplement is comprised of Distributable Code.

"Distributable Code" is code that you are permitted to distribute in programs

you develop if you comply with the terms below.

a. Right to Use and Distribute.

- * You may copy and distribute the object code form of the supplement.
- * Third Party Distribution. You may permit distributors of your programs to copy and distribute the Distributable Code as part of those programs.
- 2. Distribution Requirements. For any Distributable Code you distribute, you must
 - * add significant primary functionality to it in your programs;
 - * for any Distributable Code having a filename extension of .lib, distribute only the results of running such Distributable Code through a linker with your program;
 - * distribute Distributable Code included in a setup program only as part of that setup program without modification;
 - * require distributors and external end users to agree to terms that protect it at least as much as this agreement;
 - * display your valid copyright notice on your programs; and
 - * indemnify, defend, and hold harmless Microsoft from any claims, including attorneys' fees, related to the distribution or use of your programs.
- 3. Distribution Restrictions. You may not
 - * alter any copyright, trademark or patent notice in the Distributable Code;

- * use Microsoft's trademarks in your programs' names or in a way that suggests your programs come from or are endorsed by Microsoft;
- * distribute Distributable Code to run on a platform other than the Windows platform;
- * include Distributable Code in malicious, deceptive or unlawful programs; or
- * modify or distribute the source code of any Distributable Code so that any part of it becomes subject to an Excluded License. An Excluded License is one that requires, as a condition of use, modification or distribution, that
 - * the code be disclosed or distributed in source code form; or
 - * others have the right to modify it.
- * SUPPORT SERVICES FOR SUPPLEMENT. Microsoft provides support services for this software as described at www.support.microsoft.com/common/international.aspx.

Microsoft .NET Library License

(Microsoft ASP.NET Web API Client Libraries 5.2.6, Microsoft CodeCoverage 16.0.0-preview-20181205-02, Microsoft CodeCoverage 16.0.1, Microsoft CodeCoverage 16.0.2-preview-20190502-01, Microsoft.AspNetCore.Mvc.Razor 2.0.2, Microsoft.CodeAnalysis.CSharp 2.8.0, Microsoft.CodeAnalysis.CSharp.Workspaces 2.8.0, Microsoft.CodeAnalysis.Workspaces.Common 2.8.0, Microsoft.Extensions.FileProviders.Abstractions 2.0.0, Microsoft.Extensions.Logging 2.0.0, System.AppContext 4.3.0, System.Collections.Concurrent 4.3.0, System.Collections.Specialized 4.3.0, System.Diagnostics.Contracts 4.3.0, System.Dynamic.Runtime 4.3.0, System.Globalization.Extensions 4.3.0, System.IO.FileSystem.Primitives 4.3.0, System.Linq.Expressions 4.3.0, System.ObjectModel 4.3.0, System.Runtime.Serialization.Primitives 4.3.0, System.Runtime.InteropServices.RuntimeInformation 4.3.0, System.Runtime.Serialization.Primitives 4.3.0,

System.Runtime.Serialization.Xml 4.3.0, System.Security.Claims 4.3.0, System.Security.Cryptography.Algorithms 4.3.0, System.Security.Cryptography.Primitives 4.3.0, System.Security.Cryptography.X509Certificates 4.3.0, System.Security.Principal 4.3.0, System.Threading 4.3.0, System.Threading.Thread 4.3.0, System.Xml.ReaderWriter 4.3.0, System.Xml.XDocument 4.3.0, System.Xml.XDocument 4.3.0, System.Xml.XDocument 4.3.0)

MICROSOFT SOFTWARE LICENSE TERMS
MICROSOFT .NET LIBRARY
=======================================
These license terms are an agreement between Microsoft Corporation (or based on
where you live, one of its affiliates) and you. Please read them. They apply to
the software named above, which includes the media on which you received it, if
any. The terms also apply to any Microsoft
* updates,
* supplements,
* Internet-based services, and
* support services
for this software, unless other terms accompany those items. If so, those terms
apply.
~~~··
BY USING THE SOFTWARE, YOU ACCEPT THESE TERMS. IF YOU DO NOT ACCEPT THEM, DO NOT
USE THE SOFTWARE.
IF YOU COMPLY WITH THESE LICENSE TERMS, YOU HAVE THE PERPETUAL RIGHTS BELOW.

Johnson Controls, Inc.

### 1. INSTALLATION AND USE RIGHTS.

- a. Installation and Use. You may install and use any number of copies of the software to design, develop and test your programs. You may modify, copy, distribute or deploy any .js files contained in the software as part of your programs.
- b. Third Party Programs. The software may include third party programs that Microsoft, not the third party, licenses to you under this agreement. Notices, if any, for the third party program are included for your information only.
- 2. ADDITIONAL LICENSING REQUIREMENTS AND/OR USE RIGHTS.
  - a. DISTRIBUTABLE CODE. In addition to the .js files described above, the software is comprised of Distributable Code. "Distributable Code" is code that you are permitted to distribute in programs you develop if you comply with the terms below.
    - i. Right to Use and Distribute.
      - * You may copy and distribute the object code form of the software.
      - * Third Party Distribution. You may permit distributors of your programs to copy and distribute the Distributable Code as part of those programs.
  - b. Distribution Requirements. For any Distributable Code you distribute, you must

- * use the Distributable Code in your programs and not as a standalone distribution;
- * require distributors and external end users to agree to terms that protect it at least as much as this agreement;
- * display your valid copyright notice on your programs; and
- * indemnify, defend, and hold harmless Microsoft from any claims, including attorneys' fees, related to the distribution or use of your programs.
- c. Distribution Restrictions. You may not
  - * alter any copyright, trademark or patent notice in the Distributable Code:
  - * use Microsoft's trademarks in your programs' names or in a way that suggests your programs come from or are endorsed by Microsoft;
  - * include Distributable Code in malicious, deceptive or unlawful programs; or
  - * modify or distribute the source code of any Distributable Code so that any part of it becomes subject to an Excluded License. An Excluded License is one that requires, as a condition of use, modification or distribution, that
    - * the code be disclosed or distributed in source code form; or

- * others have the right to modify it.
- * SCOPE OF LICENSE. The software is licensed, not sold. This agreement only gives you some rights to use the software. Microsoft reserves all other rights. Unless applicable law gives you more rights despite this limitation, you may use the software only as expressly permitted in this agreement. In doing so, you must comply with any technical limitations in the software that only allow you to use it in certain ways. You may not
  - * work around any technical limitations in the software;
  - * reverse engineer, decompile or disassemble the software, except and only to the extent that applicable law expressly permits, despite this limitation;
  - * publish the software for others to copy;
  - * rent, lease or lend the software; or
  - * transfer the software or this agreement to any third party.
- * BACKUP COPY. You may make one backup copy of the software. You may use it only to reinstall the software.
- * DOCUMENTATION. Any person that has valid access to your computer or internal network may copy and use the documentation for your internal, reference purposes.
- * EXPORT RESTRICTIONS. The software is subject to United States export laws and regulations. You must comply with all domestic and international export laws and regulations that apply to the software. These laws include

restrictions on destinations, end users and end use. For additional information, see www.microsoft.com/exporting

- * SUPPORT SERVICES. Because this software is "as is," we may not provide support services for it.
- * ENTIRE AGREEMENT. This agreement, and the terms for supplements, updates,
  Internet-based services and support services that you use, are the entire
  agreement for the software and support services.
- * APPLICABLE LAW.
  - a. United States. If you acquired the software in the United States,

    Washington state law governs the interpretation of this agreement and
    applies to claims for breach of it, regardless of conflict of laws
    principles. The laws of the state where you live govern all other claims,
    including claims under state consumer protection laws, unfair competition
    laws, and in tort.
  - b. Outside the United States. If you acquired the software in any other country, the laws of that country apply.
- * LEGAL EFFECT. This agreement describes certain legal rights. You may have other rights under the laws of your country. You may also have rights with respect to the party from whom you acquired the software. This agreement does not change your rights under the laws of your country if the laws of your country do not permit it to do so.
- * DISCLAIMER OF WARRANTY. THE SOFTWARE IS LICENSED "AS-IS." YOU BEAR THE RISK

  OF USING IT. MICROSOFT GIVES NO EXPRESS WARRANTIES, GUARANTEES OR CONDITIONS.

  YOU MAY HAVE ADDITIONAL CONSUMER RIGHTS OR STATUTORY GUARANTEES UNDER YOUR

LOCAL LAWS WHICH THIS AGREEMENT CANNOT CHANGE. TO THE EXTENT PERMITTED UNDER YOUR LOCAL LAWS, MICROSOFT EXCLUDES THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.

FOR AUSTRALIA – YOU HAVE STATUTORY GUARANTEES UNDER THE AUSTRALIAN CONSUMER LAW AND NOTHING IN THESE TERMS IS INTENDED TO AFFECT THOSE RIGHTS.

* LIMITATION ON AND EXCLUSION OF REMEDIES AND DAMAGES. YOU CAN RECOVER FROM MICROSOFT AND ITS SUPPLIERS ONLY DIRECT DAMAGES UP TO U.S. \$5.00. YOU CANNOT RECOVER ANY OTHER DAMAGES, INCLUDING CONSEQUENTIAL, LOST PROFITS, SPECIAL, INDIRECT OR INCIDENTAL DAMAGES.

This limitation applies to

- * anything related to the software, services, content (including code) on third party Internet sites, or third party programs; and
- * claims for breach of contract, breach of warranty, guarantee or condition, strict liability, negligence, or other tort to the extent permitted by applicable law.

It also applies even if Microsoft knew or should have known about the possibility of the damages. The above limitation or exclusion may not apply to you because your country may not allow the exclusion or limitation of incidental, consequential or other damages. Please note: As this software is distributed in Quebec, Canada, some of the clauses in this agreement are provided below in French.

Remarque : Ce logiciel étant distribué au Québec, Canada, certaines des clauses dans ce contrat sont fournies ci-dessous en français.

EXONÉRATION DE GARANTIE. Le logiciel visé par une licence est offert « tel quel ». Toute utilisation de ce logiciel est à votre seule risque et péril.

Microsoft n'accorde aucune autre garantie expresse. Vous pouvez bénéficier de droits additionnels en vertu du droit local sur la protection des consommateurs, que ce contrat ne peut modifier. La ou elles sont permises par le droit locale, les garanties implicites de qualité marchande, d'adéquation à un usage particulier et d'absence de contrefaçon sont exclues.

LIMITATION DES DOMMAGES-INTÉRÊTS ET EXCLUSION DE RESPONSABILITÉ POUR LES DOMMAGES. Vous pouvez obtenir de Microsoft et de ses fournisseurs une indemnisation en cas de dommages directs uniquement à hauteur de 5,00 \$ US. Vous ne pouvez prétendre àaucune indemnisation pour les autres dommages, y compris les dommages spéciaux, indirects ou accessoires et pertes de bénéfices.

#### Cette limitation concerne:

- * tout ce qui est relié au logiciel, aux services ou au contenu (y compris le code) figurant sur des sites Internet tiers ou dans des programmes tiers ; et
- * les réclamations au titre de violation de contrat ou de garantie, ou au titre de responsabilité stricte, de négligence ou d'une autre faute dans la limite autorisée par la loi en vigueur.

Elle s'applique également, même si Microsoft connaissait ou devrait connaître l'éventualité d'un tel dommage. Si votre pays n'autorise pas l'exclusion ou la limitation de responsabilité pour les dommages indirects, accessoires ou de quelque nature que ce soit, il se peut que la limitation ou l'exclusion ci-dessus ne s'appliquera pas à votre égard.

EFFET JURIDIQUE. Le présent contrat décrit certains droits juridiques. Vous pourriez avoir d'autres droits prévus par les lois de votre pays. Le présent contrat ne modifie pas les droits que vous confèrent les lois de votre pays si celles-ci ne le permettent pas.

---

Microsoft .NET Library Updated License (System.Text.RegularExpressions 4.3.0)

MICROSOFT SOFTWARE LICENSE TERMS MICROSOFT .NET LIBRARY These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft * updates, * supplements, * Internet-based services, and * support services for this software, unless other terms accompany those items. If so, those terms apply. BY USING THE SOFTWARE, YOU ACCEPT THESE TERMS. IF YOU DO NOT ACCEPT THEM, DO NOT USE THE SOFTWARE. IF YOU COMPLY WITH THESE LICENSE TERMS, YOU HAVE THE PERPETUAL RIGHTS BELOW. 1. INSTALLATION AND USE RIGHTS. a. Installation and Use. You may install and use any number of copies of the software to design, develop and test your programs. b. Third Party Programs. The software may include third party programs that Microsoft, not the third party, licenses to you under this agreement. Notices, if any, for the third party program are included for your information only. 2. DATA. The software may collect information about you and your use of the software, and send that to Microsoft. Microsoft may use this information to improve our products and services. You can learn more about data collection and use in the help documentation and the privacy statement at http://go.microsoft.com/fwlink/?LinkId=528096 . Your use of the software operates as your consent to these practices. 3. ADDITIONAL LICENSING REQUIREMENTS AND/OR USE RIGHTS. a. DISTRIBUTABLE CODE. The software is comprised of Distributable Code. "Distributable Code" is code that you are permitted to

distribute in programs you develop if you comply with the terms below. i. Right to Use and Distribute. * You may copy and distribute the object code form of the software. * Third Party Distribution. You may permit distributors of your programs to copy and distribute the Distributable Code as part of those programs. ii. Distribution Requirements. For any Distributable Code you distribute, you must * add significant primary functionality to it in your programs; * require distributors and external end users to agree to terms that protect it at least as much as this agreement; * display your valid copyright notice on your programs; and * indemnify, defend, and hold harmless Microsoft from any claims, including attorneys' fees, related to the distribution or use of your programs. iii. Distribution Restrictions. You may not * alter any copyright, trademark or patent notice in the Distributable Code; * use Microsoft's trademarks in your programs' names or in a way that suggests your programs come from or are endorsed by Microsoft; * include Distributable Code in malicious, deceptive or unlawful programs; or * modify or distribute the source code of any Distributable Code so that any part of it becomes subject to an Excluded License. An Excluded License is one that requires, as a condition of use, modification or distribution, that * the code be disclosed or distributed in source code form; or * others have the right to modify it. 4. SCOPE OF LICENSE. The software is licensed, not sold. This agreement only gives you some rights to use the software. Microsoft reserves all other rights. Unless applicable law gives you more rights despite this limitation, you may use the software only as expressly permitted in this agreement. In doing so, you must comply with any technical limitations in the software that only allow you to use it in certain ways. You may not * work around any technical limitations in the software; * reverse engineer, decompile or disassemble the software, except and only to the extent that applicable law expressly permits, despite this limitation; * publish the software for others to copy; * rent, lease or lend the software; * transfer the software or this agreement to any third party; or * use the software for commercial software hosting services. 5. BACKUP COPY. You may make one backup copy of the software. You may use it only to reinstall the software. 6. DOCUMENTATION. Any person that has valid access to your computer or internal network may copy and use the documentation for your internal, reference purposes. 7. EXPORT RESTRICTIONS. The software is subject to United States export laws and regulations. You must comply with all domestic and international export laws and regulations that apply to the software. These laws include restrictions on destinations, end users and end use. For additional information, see www.microsoft.com/exporting. 8. SUPPORT SERVICES. Because this software is "as is," we may not provide support services for it. 9. ENTIRE AGREEMENT. This agreement, and the terms for supplements, updates, Internet-based services and support services that you use, are the entire agreement for the software and support services. 10. APPLICABLE LAW. a. United States. If you acquired the software in the United States, Washington state law governs the interpretation of this agreement and applies to claims for breach of it, regardless of conflict of laws principles. The laws of the state where you live govern all other claims, including claims under state consumer protection laws, unfair competition laws, and in tort. b. Outside the United States. If you acquired the software in any other country, the laws of that country apply. 11. LEGAL EFFECT. This agreement describes certain legal rights. You may have other rights under the laws of your country. You may also have rights with respect to the party from whom you acquired the software. This agreement does not change your rights under the laws of your country if the laws of your country do not permit it to do so. 12. DISCLAIMER OF WARRANTY. THE SOFTWARE IS LICENSED "AS-IS." YOU BEAR THE RISK OF USING IT. MICROSOFT GIVES NO EXPRESS WARRANTIES, GUARANTEES OR CONDITIONS, YOU MAY HAVE ADDITIONAL CONSUMER RIGHTS OR STATUTORY GUARANTEES UNDER YOUR LOCAL LAWS WHICH THIS AGREEMENT CANNOT CHANGE. TO THE EXTENT PERMITTED UNDER YOUR LOCAL LAWS, MICROSOFT EXCLUDES THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. FOR AUSTRALIA -- YOU HAVE STATUTORY GUARANTEES UNDER THE AUSTRALIAN CONSUMER LAW AND NOTHING IN THESE TERMS IS INTENDED TO AFFECT THOSE RIGHTS. 13. LIMITATION ON AND EXCLUSION OF REMEDIES AND DAMAGES. YOU CAN RECOVER FROM MICROSOFT AND ITS SUPPLIERS ONLY DIRECT DAMAGES UP TO U.S. \$5.00. YOU CANNOT RECOVER ANY OTHER DAMAGES, INCLUDING CONSEQUENTIAL, LOST PROFITS, SPECIAL, INDIRECT OR INCIDENTAL

DAMAGES. This limitation applies to * anything related to the software, services, content (including code) on third party Internet sites, or third party programs; and * claims for breach of contract, breach of warranty, guarantee or condition, strict liability, negligence, or other tort to the extent permitted by applicable law. It also applies even if Microsoft knew or should have known about the possibility of the damages. The above limitation or exclusion may not apply to you because your country may not allow the exclusion or limitation of incidental, consequential or other damages. Please note: As this software is distributed in Quebec, Canada, some of the clauses in this agreement are provided below in French. Remarque : Ce logiciel étant distribué au Québec, Canada, certaines des clauses dans ce contrat sont fournies ci-dessous en français. EXONÉRATION DE GARANTIE. Le logiciel visé par une licence est offert « tel quel ». Toute utilisation de ce logiciel est à votre seule risque et péril. Microsoft n'accorde aucune autre garantie expresse. Vous pouvez bénéficier de droits additionnels en vertu du droit local sur la protection des consommateurs, que ce contrat ne peut modifier. La ou elles sont permises par le droit locale, les garanties implicites de qualité marchande, d'adéquation à un usage particulier et d'absence de contrefacon sont exclues. LIMITATION DES DOMMAGES-INTÉRÊTS ET EXCLUSION DE RESPONSABILITÉ POUR LES DOMMAGES. Vous pouvez obtenir de Microsoft et de ses fournisseurs une indemnisation en cas de dommages directs uniquement à hauteur de 5,00 \$ US. Vous ne pouvez prétendre à aucune indemnisation pour les autres dommages, y compris les dommages spéciaux, indirects ou accessoires et pertes de bénéfices. Cette limitation concerne: * tout ce qui est relié au logiciel, aux services ou au contenu (y compris le code) figurant sur des sites Internet tiers ou dans des programmes tiers ; et * les réclamations au titre de violation de contrat ou de garantie, ou au titre de responsabilité stricte, de négligence ou d'une autre faute dans la limite autorisée par la loi en vigueur. Elle s'applique également, même si Microsoft connaissait ou devrait connaître l'éventualité d'un tel dommage. Si votre pays n'autorise pas l'exclusion ou la limitation de responsabilité pour les dommages indirects, accessoires ou de quelque nature que ce soit, il se peut que la limitation ou l'exclusion ci-dessus ne s'appliquera

pas à votre égard. EFFET JURIDIQUE. Le présent contrat décrit certains droits juridiques. Vous pourriez avoir d'autres droits prévus par les lois de votre pays. Le présent contrat ne modifie pas les droits que vous confèrent les lois de votre pays si celles-ci ne le permettent pas.

---

Microsoft Reciprocal License

(Windows Installer XML (WiX) toolset 3.11.1)

Microsoft Reciprocal License (Ms-RL)

_____

This license governs use of the accompanying software. If you use the software, you accept this license. If you do not accept the license, do not use the software.

## 1. Definitions

The terms "reproduce," "reproduction," "derivative works," and "distribution" have the same meaning here as under U.S. copyright law.

A "contribution" is the original software, or any additions or changes to the software.

A "contributor" is any person that distributes its contribution under this license.

"Licensed patents" are a contributor's patent claims that read directly on its contribution.

## 2. Grant of Rights

A. Copyright Grant- Subject to the terms of this license, including the license conditions and limitations in section 3, each contributor grants

you a non-exclusive, worldwide, royalty-free copyright license to reproduce its contribution, prepare derivative works of its contribution, and distribute its contribution or any derivative works that you create.

B. Patent Grant- Subject to the terms of this license, including the license conditions and limitations in section 3, each contributor grants you a non-exclusive, worldwide, royalty-free license under its licensed patents to make, have made, use, sell, offer for sale, import, and/or otherwise dispose of its contribution in the software or derivative works of the contribution in the software.

#### 3. Conditions and Limitations

A. Reciprocal Grants- For any file you distribute that contains code from the software (in source code or binary format), you must provide recipients the source code to that file along with a copy of this license, which license will govern that file. You may license other files that are entirely your own work and do not contain code from the software under any terms you choose.

- B. No Trademark License- This license does not grant you rights to use any contributors' name, logo, or trademarks.
- C. If you bring a patent claim against any contributor over patents that you claim are infringed by the software, your patent license from such contributor to the software ends automatically.
- D. If you distribute any portion of the software, you must retain all copyright, patent, trademark, and attribution notices that are present in the software.

E. If you distribute any portion of the software in source code form, you may do so only under this license by including a complete copy of this license with your distribution. If you distribute any portion of the software in compiled or object code form, you may only do so under a license that complies with this license.

F. The software is licensed "as-is." You bear the risk of using it. The contributors give no express warranties, guarantees or conditions. You may have additional consumer rights under your local laws which this license cannot change. To the extent permitted under your local laws, the contributors exclude the implied warranties of merchantability, fitness for a particular purpose and non-infringement.

---

### MIT License

(System.Composition.AttributedModel 1.0.31, System.Composition.Convention 1.0.31, System.Composition.Hosting 1.0.31, System.Composition.Runtime 1.0.31, System.Composition.TypedParts 1.0.31, System.Diagnostics.StackTrace 4.3.0, System.IO.Compression 4.3.0, System.Linq 4.3.0, System.Net.Http 4.3.0, System.ValueTuple 4.3.0, System.Xml.XPath.XmlDocument 4.0.1)

1. .NET Core (https://github.com/dotnet/core/)

.NET Core

Copyright (c) .NET Foundation and Contributors

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE

---

MIT License

(Libuv 1.10.0)

====

Copyright (c) 2015-present libuv project contributors.

Permission is hereby granted, free of charge, to any person obtaining a copy

of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE

---

MIT License

(DotNet.Build.Sign 2.1.0-preview.3.0.19163.5, JSON Web Token Handler For the Microsoft .Net Framework 4.5 5.3.0, Microsoft ASP.NET Core API Versioning 2.1.0, Microsoft.IdentityModel.Logging 5.3.0, Microsoft.IdentityModel.Protocols 2.1.4, Microsoft.IdentityModel.Protocols.OpenIdConnect 5.2.0, Microsoft.IdentityModel.Protocols.WsFederation 5.2.0, Microsoft.IdentityModel.Tokens 5.3.0, Microsoft.IdentityModel.Tokens.Saml 5.2.0, Microsoft.IdentityModel.Xml 5.2.0, Newtonsoft.Json.Bson 1.0.1, xUnit.net [Assertion Library] 2.4.1, xUnit.net [Extensibility: Core] 2.4.1, xUnit.net [Visual Studio/TFS Build Runner] 2.4.1)

The MIT License

=========

Copyright (c) <year> <copyright holders>

Permission is hereby granted, free of charge, to any person obtaining a copy of

this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

---

# MIT License

(Microsoft SIMD-enabled Vector Types 4.4.0, Microsoft.CSharp 4.5.0, Microsoft.VisualBasic 10.3.0, Microsoft.Win32.Registry 4.5.0, System.Buffers 4.4.0, System.Collections.Immutable 1.4.0, System.ComponentModel.Annotations 4.5.0, System.Data.SqlClient 4.4.0, System.Diagnostics.DiagnosticSource 4.5.1, System.IO.Pipelines 4.5.0, System.Net.WebSockets.WebSocketProtocol 4.5.1, System.Reflection.Emit 4.6.0-preview5.19224.8, System.Reflection.Emit.ILGeneration 4.6.0-preview.19073.11, System.Reflection.Emit.Lightweight 4.6.0-preview.18571.3, System.Reflection.Metadata 1.5.0, System.Runtime.CompilerServices.Unsafe 4.5.1, System.Security.AccessControl 4.4.0, System.Security.Cryptography.Cng 4.6.0-preview5.19224.8, System.Security.Cryptography.ProtectedData 4.4.0, System.Security.Cryptography.Xml 4.4.0, System.Security.Permissions 4.5.0, System.Security.Principal.Windows 4.4.0, System.Text.Encoding.CodePages 4.4.0, System.Text.Encodings.Web 4.5.0, System.Threading.Channels 4.5.0, System.Threading.Tasks.Extensions 4.4.0)

Copyright (c) .NET Foundation and Contributors

All rights reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE

---

MIT License

(Cake (C# Make) 0.22.2)

Copyright (c) .NET Foundation and Contributors

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE

---

MIT License

(Microsoft.DotNet.PlatformAbstractions 2.0.3, Microsoft.Extensions.DependencyModel 2.1.0, Microsoft.NETCore.App 2.1.0)

Copyright (c) 2015 .NET Foundation

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE

---

MIT License

(Reinforced.Typings 1.5.0)

The MIT License (MIT)

Copyright (c) 2019 Reinforced Opensource Products Family and Pavel B. Novikov personally

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE

---

MIT License

(Json.NET 12.0.1)

The MIT License (MIT)

Copyright (c) 2007 James Newton-King

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE

---

MIT License

(Microsoft.IdentityModel.Protocol.Extensions 5.3.0)

The MIT License (MIT)

Copyright (c) Microsoft Corporation

All rights reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN

CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE

---

**Nunit License** 

(NUnit Framework 2.6.4)

**Nunit License** 

=========

Copyright © 2002-2012 Charlie Poole

Copyright © 2002-2004 James W. Newkirk, Michael C. Two, Alexei A. Vorontsov Copyright © 2000-2002 Philip A. Craig

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment (see the following) in the product documentation is required.

Portions Copyright © 2002-2012 Charlie Poole or Copyright © 2002-2004 James W. Newkirk, Michael C. Two, Alexei A. Vorontsov or Copyright © 2000-2002 Philip A. Craig

2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.	
3. This notice may not be removed or altered from any source distribution.	
Johnson Controls, Inc.	Restricted