



Installation Guide

Trados GroupShare 2020 SR1

Last modified: April 2024



Legal notice

Copyright and trademark information relating to this product release.

Copyright © 2000–2024 RWS Holdings plc. All rights reserved.

This legal notice applies to RWS Holdings plc and its subsidiaries and affiliates. All intellectual property rights contained herein are the sole and exclusive rights of RWS. All references to RWS shall mean RWS Holdings plc and its subsidiaries and affiliates details of which can be obtained upon written request.

All rights reserved. Unless explicitly stated otherwise, all intellectual property rights including those in copyright in the content of this website and documentation are owned by or controlled for these purposes by RWS. Except as otherwise expressly permitted hereunder or in accordance with copyright legislation, the content of this site, and/or the documentation may not be copied, reproduced, republished, downloaded, posted, broadcast or transmitted in any way without the express written permission of RWS.

Trados GroupShare is a registered trademark of RWS. All other trademarks are the property of their respective owners. The names of other companies and products mentioned herein may be the trademarks of their respective owners. Unless stated to the contrary, no association with any other company or product is intended or should be inferred.

This product may include open source or similar third-party software, details of which can be found by clicking the following link: *"Acknowledgments"* on page 105 .

Although RWS takes all reasonable measures to provide accurate and comprehensive information about the product, this information is provided as-is and all warranties, conditions or other terms concerning the documentation whether express or implied by statute, common law or otherwise (including those relating to satisfactory quality and fitness for purposes) are excluded to the extent permitted by law.

To the maximum extent permitted by law, RWS shall not be liable in contract, tort (including negligence or breach of statutory duty) or otherwise for any loss, injury, claim liability or damage of any kind or arising out of, or in connection with, the use or performance of the Software Documentation even if such losses and/or damages were foreseen, foreseeable or known, for: (a) loss of, damage to or corruption of data, (b) economic loss, (c) loss of actual or anticipated profits, (d) loss of business revenue, (e) loss of anticipated savings, (f) loss of business, (g) loss of opportunity, (h) loss of goodwill, or (i) any indirect, special, incidental or consequential loss or damage howsoever caused.

All Third Party Software is licensed "as is." RWS makes no warranties, express, implied, statutory or otherwise with respect to the Third Party Software, and expressly disclaims all implied warranties of non-infringement, merchantability and fitness for a particular purpose. **In no event will Licensor be liable for any damages, including loss of data, lost profits, cost of cover or other special, incidental, consequential, direct, actual, general or indirect damages arising from the use of the Third Party Software or accompanying materials, however caused and on any theory of liability. This limitation will apply even if Licensor has been advised of the possibility of such damage. The parties acknowledge that this is a reasonable allocation of risk.**

Information in this documentation, including any URL and other Internet website references, is subject to change without notice. Without limiting the rights under copyright, no part of this may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of RWS.

Contents

1	Legal notice	3
2	Installation process overview	1
	About this guide	2
	Intended audience	2
	Other sources of information	2
	Structure of this guide	2
	First steps and pre-installation	2
	Installation	3
	Post-Installation	3
	Reference	3
	Trados GroupShare installed programs	3
	System architecture	3
	Server and server roles in Trados GroupShare	5
	Example: Using different computers for the database and the Trados GroupShare components	5
	Servers	5
	Web Server	5
	MultiTerm Online Server	6
	Application Server	6
	Database Server	6
	System requirements	6
	Computer sizing	6
	Large installations	7
	Operating system requirements	7
	Supported Database Servers	7
	Compatibility	8
	Database size requirements	9
	Third-party software installed	9
	Upgrade notes	10
	Upgrading from SDL Trados GroupShare 2017 to Trados GroupShare 2020 SR1	10
	Upgrading from SDL Studio GroupShare 2015 to Trados GroupShare 2020 SR1	11
3	First steps and prerequisites	13

4	Pre-installation: Configure RabbitMQ	15
5	Pre-Installation: Configure IIS	17
	Configure IIS 10	18
6	Pre-Installation: Configure Microsoft SQL server	21
	Overview of the process	22
	Before you start installing	22
	Preparing the SQL server database manually	23
	Running the scripts	23
	Step 1: Create databases	23
	Step 2: Create a login on the Microsoft SQL Server	24
	Step 3: Run the scripts	24
	GroupShare WebHooks service	26
	Create permission and role tables	28
7	Installation procedure	29
	Information needed before you start	30
	Web Server to Application Server link	30
	Application Server to Database Server link and the application service	30
	Before you start installing	31
	Microsoft .NET Framework	31
	Microsoft WCF	31
	Install RabbitMQ	31
	Web Server protocol: WebSocket installation	32
	License	32
	Operating systems	32
	Recommendation: Do not install client software on Trados GroupShare servers	32
	Create a user account for the server application	32
	Setting up a user account	33
	When installing over multiple computers	33
	Licenses	33
	Order to run the installer on different computers	34
	Open ports	34
	Windows domain	34

Authentication server address	34
Before you install the web server	35
Install Groupshare	35
Choose products to install	35
Choose server roles	36
Select database type	37
Checking prerequisites	38
Choose installation folder	39
Choose folder for storing files	40
Parameters for email notifications	41
Parameters for email templates	41
Services configuration	42
Website parameters	43
Message_ The installer has detected that the website parameters...	45
Ready to install	45
Installing Software	46
Using a multi-tier architecture	47
Specify Message Queue settings	48
Microsoft SQL server configuration	49
Enter Database Server details for Microsoft SQL Server	49
Database Service account details for Microsoft SQL Server	50
Configuring System	50
Administrative Login Required	51
Migrating termbase permissions to Trados GroupShare permissions	52
Configuring Windows authentication	53
8 Post-Installation: Configure IIS	55
Enabling and disabling endpoints	56
User authentication service	56
Router service	56
Discovery service	57
Providing HTTPS Services	57
Get an X.509 certificate	57
Enable HTTPS binding	58
Securing your Trados GroupShare webserver	58

	Fix IIS site binding manually	59
	Run time settings on the client	59
	Disable HTTP binding	59
	Enabling TCP Endpoints	60
9	Post-Installation: Configure MultiTerm	61
	Configure MultiTerm Online-Export	62
	Upgrade from earlier MultiTerm versions	62
	Upgrading from earlier versions of MultiTerm Server	62
	Move termbase data to a new database server	63
	Overview	63
	Detailed procedure	63
	Install MultiTerm Online	63
	Configure MultiTerm Online	65
	Configuring MultiTerm Online to use SSL	67
	Troubleshoot browser connection to MultiTerm Online	68
	Where to change MultiTerm	69
10	Post-installation: Configure TM Server	71
	Overview: Upgrading from earlier TM Server Versions	72
	Upgrading from TM Server 2017	72
	Use Translation Memories Created by Previous TM Server Versions	72
	Post-Upgrade: Check and Decommission Previous Versions	72
11	Post-installation: Configure Notification Service	75
12	Post-installation: Check service health	77
13	Post-installation: Configure Okta SAML2 authentication	81
	Setting up an Okta account	82
	Setting up an application in Okta	82
	Configuring the Trados GroupShare Web UI	83
	Setting up the Token Exchange Web application	83
	Configuring automatic assignment of user roles in SSO login flows	85
	Automatic role assignment	86
	Changing the client secret	88

Encrypt client secret	88
Configure Application Service	88
Configure TokenExchange	89
14 Reference	91
REST API information	92
GroupShare kit	92
Configuration Information	92
Trados GroupShare program installation	92
Log files and other program data	92
Registry keys	93
Unpacked installation files	93
Application Server - restart options	93
Configuring ports for Trados GroupShare	93
Window User Accounts	98
Installer created user accounts and groups	98
Groups and privileges	98
Group assignment	99
Resources and access	99
Groupshare User Accounts	99
Trados GroupShare logon information	100
Installer-created Trados GroupShare user accounts	100
Trados GroupShare standard roles	100
Import user details into Trados GroupShare	100
Running the User Import Tool	101
Importing from an LDAP Server	101
Password Policies	101
Password policy with Windows authentication	101
Password policy with GroupShare passwords	101
Password policy for custom accounts	102
Password policy for service accounts	102
Run Time Access To Trados GroupShare	102
From a browser	102
From Trados Studio or MultiTerm	102
Run Time Access To MultiTerm	103

To open MultiTerm Server from MultiTerm Desktop	103
To open MultiTerm Online from a browser	103
.	103
Digital Certificate Requirements	103
Uninstallation and re-installation	104
To modify or uninstall Trados GroupShare components	104
Re-installing Trados GroupShare	104
15 Acknowledgments	105



Installation process overview

This chapter contains an introduction to Trados GroupShare and an overview of the installation process.

About this guide

Trados GroupShare contains the following components: TM Server, Project Server and MultiTerm Server.

This guide contains instructions for installing all these components.

Intended audience

This guide contains information for whoever is responsible for installing, setting up and maintaining Trados GroupShare on a Microsoft SQL server (usually the Trados GroupShare administrator).

You are assumed to be familiar with standard Windows administration practices, such as managing a Windows user account.

Other sources of information

- Trados GroupShare Help at [Trados GroupShare Help](#)
- Knowledge Base at <https://gateway.sdl.com/>

Structure of this guide

This chapter provides an overview of Trados GroupShare and a description of the various components installed by the installer.

First steps and pre-installation

*The “**First steps**” on page 13 section describes the initial steps of any Trados GroupShare installation.*

*The “**Pre-Installation: Configure RabbitMQ and Erlang**” on page 15 section describes setting up RabbitMQ and Erlang in preparation for installation.*

*The “**Pre-Installation: Configure IIS**” on page 17 section describes setting up IIS in preparation for installation.*

*The “**Pre-Installation: Configure Microsoft SQL Server**” on page 21 section describes the steps you need to perform prior to installing Trados GroupShare on a Microsoft SQL server.*

Installation

The **“Installation Procedure”** on page 29 section describes the detailed steps to install Trados GroupShare.

Post-Installation

The **“Post-Installation: Configure IIS”** on page 55 section describes the optional modifications that you can make to IIS after installation.

The **“Post-Installation: Configure MultiTerm”** on page 61 section describes the additional steps needed after installing MultiTerm.

The **“Post-Installation: Configure TM Server”** on page 71 section describes the additional steps needed after installing TM Server.

The **“Post-Installation: Check service health”** on page 77 section describes the procedures to follow in order to check whether the core services and the Online Editor services work properly.

The **“Post-Installation: Configure Okta authentication”** on page 81 section describes the procedures to follow in order to set up Single-Sign-On (SSO) authentication.

Reference

The **“Reference”** on page 91 section contains reference material regarding policies.

Trados GroupShare installed programs

The installer can install the following programs:

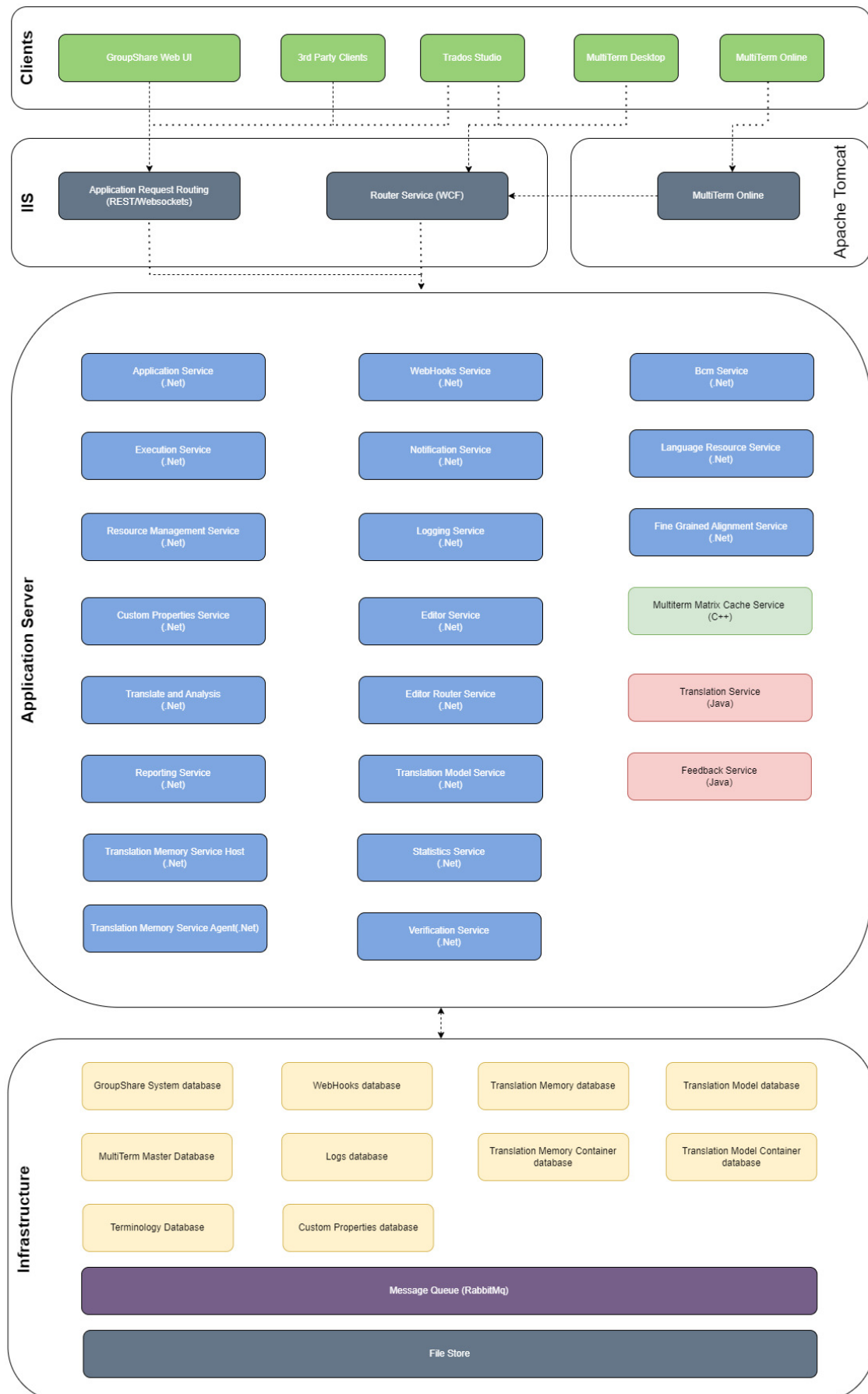
- TM Server
- MultiTerm Server, including MultiTerm Online and MultiTerm Administrator
- Project Server

System architecture

You can install the Trados GroupShare components on one or more computers.

Trados GroupShare Servers

1 Installation process overview



Server and server roles in Trados GroupShare

A Trados GroupShare installation consists of a number of servers. You can set up a multi-computer installation, that is one that has different servers on different computers.

Example: Using different computers for the database and the Trados GroupShare components

A common configuration is as follows:

- One computer has the web site. This computer can be in the DMZ. All access to Trados GroupShare is through this computer.
- The second computer has all the Trados GroupShare components except the web site.
- The third computer contains the database server.

Note: Installing different servers onto different computers enhances performance, and allows you to scale up the system if and when performance requirements grow. Contact Professional Services for more information.

Servers

The available servers are:

- Web Server
- MultiTerm Online Server
- Application Server
- Database Server

Web Server

All requests to an Application Server come through a Web Server.

A computer performing the web Server role needs Microsoft IIS installed and appropriately configured.

You can have one Web Server, which hosts all the Trados GroupShare web services, or two: one to host the TM Server and Project Server web sites, and another to host the Anywhere WCF Router.

MultiTerm Online Server

The MultiTerm Online Server hosts the main MultiTerm Online web application.

It allows users to access MultiTerm Server from a browser.

The MultiTerm Online Server requires Apache Tomcat to be installed and configured. See *Chapter 6 “Post-Installation: Configure MultiTerm”* on page 61.

Application Server

The Application Server hosts application services provided by Project Server, TM Server or MultiTerm.

The Application Server communicates with the Web Server using a TCP connection that is configured during installation.

Database Server

The database server hosts the database and provides the storage for translation memories (TMs) and termbases (TBs) managed by Trados GroupShare.

System requirements

Trados GroupShare supports single CPU and multi-CPU computers on 64-bit operating systems.

Computer sizing

MINIMUM

The minimum to run Trados GroupShare 2020 SR1 is a recent mid-range server with a multi-core Intel Xeon CPU and at least 16 GB of RAM for up to 10 concurrent users.

RECOMMENDED

We generally recommend that SQL Server is on a separate and dedicated server from the Application server to ensure optimum performance.

We recommend a recent mid-range server with a multi-core Intel Xeon CPU and at least 24GB of RAM for the application server and 32GB on the SQL Server.

For deployments with more than 30 concurrent users, we recommend at least 40GB of RAM for the application server and 64GB of RAM on the SQL Server.

Two features delivered with Trados GroupShare have an impact on hardware requirements:

- **Online Editor**- For Online Editor, please calculate 100MB per file and per user. Therefore, for 10 concurrent Online Editor sessions, at least 1GB additional RAM is recommended.

- **upLIFT** - Fragment Alignment (or *FGA*) is a very CPU-intensive task which only runs from 23:00 to 6:00, by default. For setups with large translation memories (TMs), or a large additions to TMs on a daily basis, it is recommended to have a fast multi-core CPU. For very large setups, contact our Technical teams to explore the option of delegating FGA services to a dedicated machine.

Large installations

Large installations vary depending on their type and their dependencies.

The following large installations can occur:

- A large Trados GroupShare installation is one that has more than 50 concurrent users on a regular basis.
- A large TM Server installation is one that has more than 10 million translation units in all and one or more translation memories with more than one million translation units.
- A large MultiTerm installation is one that has more than one million entries in all and one or more termbases with more than 250 000 entries.

For large installations, an appropriate scaling approach should be taken after consultation. The scaling solution should be based on the clients' particular needs regarding the split between the Application Server and the Database Server, on separate computers.

For more help in configuring large installations, contact Professional Services.

Operating system requirements

Trados GroupShare runs on the following platforms:

- Windows Server 2022, with IIS 10
- Windows Server 2019, with IIS 10
- Windows Server 2016, with IIS 10

Please note that servers configured as domain controllers are not supported.

Supported Database Servers

Trados GroupShare supports the following SQL Server versions:

- SQL Server 2022
- SQL Server 2019
- SQL Server 2017

RECOMMENDATION

RWS recommends that you use the latest SP versions of SQL Server 2022 and 2019.

The Trados GroupShare installation does not include Microsoft SQL Server. If you do not have access to a full version of SQL Server, you can download the free SQL Server 2019 Express with Advanced Services from <https://www.microsoft.com/en-us/sql-server/sql-server>

[-editions-express](#). This version includes the full text search engine option which is required for completely supporting the **Full Text Search** option in MultiTerm.

SQL Server 2017 Express with Advanced Services has a limit of 10 GB data storage for each database. If you need more data storage, upgrade to a full version of SQL Server. For more information, see the next section, "Database Size Requirements".

For information on finding the right server hardware (including choice of RAID architecture), contact Professional Services.

Compatibility

Trados GroupShare 2020 SR1 is compatible with various Trados Studio and MultiTerm versions.

Compatibility of Trados GroupShare 2020 SR1 with	Supported	Notes
Trados Studio		
Trados Studio 2022	YES	
Trados Studio 2021	YES	
SDL Trados Studio 2019 SR1 latest CU (after CU4)	NO	Performance improvements in regard to processing large number of files and using TMs
SDL Trados Studio 2019 (before SR1 CU4)	NO	
SDL Trados Studio 2017 latest CU (after CU8)	NO	upLIFT functionality is available with this module.
SDL Trados Studio 2017 (before CU8)	NO	TM enhancements are available with this module.
SDL Trados Studio 2015 CU8	NO	No upLIFT functionality is available with this module.
SDL Trados Studio 2014 or earlier	NO	
MultiTerm		
MultiTerm 2022	YES	
MultiTerm 2021	YES	
SDL MultiTerm 2019	NO	
SDL MultiTerm 2017 CU2	NO	
SDL MultiTerm 2015	NO	
SDL MultiTerm 2014 or earlier	NO	

Database size requirements

A typical translation memory with character-based concordance searching disabled uses from 15 to 20 KB per bilingual translation unit (TU), so a TM with a million TUs needs approximately 16 GB of disk space.

If character-based concordance searching is activated, the TM needs more space. The amount depends on the language: alphabetic writing systems need about 16 KB more disk space per TU than they would need without character-based concordance searching activated.

Recommendation

RWS recommends that, for alphabetic writing systems, you do not enable character-based concordance on TMs with more than 100 000 TUs. This is why you usually do not have character-based concordance searching on server-based TMs.

Third-party software installed

If the installer has online access and the following software is not already installed, the installer will do it (32-bit versions unless otherwise specified).

See the “Before you start installing ” on page 22 section. The following is installed for all Trados GroupShare components.

Included in the installation package

- Microsoft IIS URL Rewrite Module 2.0 (64-bit)
- Microsoft Application Request Routing 3. 1 (64-bit)
- NSSM (if you install Project Server and Online Editor)
- Server JRE (Java Runtime Environment) (x64) (if you install Project Server and Online Editor)
- .NET 4.8
- .NET 6 hosting bundle
- Erlang OTP
- RabbitMQ
- Chef
- Microsoft OLE DB Driver 18 for SQL Server
- Microsoft Visual C++ Redistributable

Trados GroupShare installs the three SQL Server components essential for Trados GroupShare if your current SQL Server version does not include these components:

- Microsoft SQL Server 2012 Management Objects
- Microsoft SQL Server Native Client
- Microsoft SQL Server System CLR Types

Upgrade notes

During the upgrade process, the content of some of the installation folders is overwritten (for example, the FGA or Statistics).

If you know you modified the configuration files inside these folders and you need them for further reference, we recommend that you back them up.

Upgrading from SDL Trados GroupShare 2017 to Trados GroupShare 2020 SR1

Recommendation

RWS recommends users who have the SDL Trados GroupShare 2017 RTM version to first update to SDL Trados GroupShare 2017 CU10, and only then to upgrade to Trados GroupShare 2020 SR1.

Supported upgrades

- From SDL Trados GroupShare 2017 CU10 to Trados GroupShare 2020 (or later CUs) and SR1
- From Trados GroupShare.00. 2017 CU11 to Trados GroupShare 2020 CU1 or later

Unsupported upgrades

- From SDL Trados GroupShare 2017 CU11 to Trados GroupShare 2020 RTM.

Upgrading the database manually

To upgrade the database from SDL Trados GroupShare 2017 CU10 to Trados GroupShare 2020 SR1 manually:

1. Run `Sdl.GroupShare.Database.SdlSystem.dacpac` on the SdlSystem database.
2. Run `Sdl.GroupShare.Database.MTMaster.dacpac` on the MTMaster database.
3. Run all .SQL script files from `TMSERVICE_SYSTEM_UpgradeSchema_1.5.3.sql` to `TMSERVICE_SYSTEM_UpgradeSchema_1.6.9.sql` on the TMSERVICE database.
4. Run all .SQL script files from `tmserver-mssql-8.59-to-9.0.0.sql` to `tmserver-mssql-11.0.35-to-11.0.36.sql` on the TMContainer database.
5. Create **Logs** database.
6. Run `Sdl.GroupShare.Database.Logs.dacpac` on the Logs database.
7. Run `TranslationModelsMain_UpgradeSchema_1.0.1.sql` on the TMMModel database.
8. Run `TranslationModelsMain_UpgradeSchema_1.1.0.sql` on the TMMModel database.
9. Run `Sdl.GroupShare.Database.WebHooks.dacpac` on the WebHooks database.
10. Run `Sdl.GroupShare.Database.CPSService.dacpac` on the CPSService database.

11. Run `LRServiceSystem_UpgradeSchema_1.2.0.sql` on the TMService database.

Note:

For manually deploying dacpac packages you could use `SqlPackage` command. The tool need to be downloaded from Microsoft. An example command to run it (replace the variables): `SqlPackage.exe /a:Publish /sf:{PathToDacpacFile} /tcs:{SQLConnectionString} /p:BlockOnPossibleDataLoss=false`

Upgrading from SDL Studio GroupShare 2015 to Trados GroupShare 2020 SR1

RWS recommends users who have the SDL Studio GroupShare 2015 RTM version to first update to Trados GroupShare 2020 CU1, and only then to upgrade to Trados GroupShare 2020 SR1. Trados GroupShare remembers all your projects, resources and settings when you migrate from any older version of Trados GroupShare to Trados GroupShare 2020 SR1.

2

First steps and prerequisites

If you plan to install Trados GroupShare, there are certain first steps which need to be taken.

Procedure

1. Run the Trados GroupShare installer.
2. Run the PowerShell scripts *GroupSharePrereqW2012* , *GroupSharePrereqW2016*, *GroupSharePrereqW2019* or *GroupSharePrereqW2022* from `C:\ProgramData\Package Cache\SDL\SDLTradosGroupShare2020` as Administrator.

3

Pre-installation: Configure RabbitMQ

RabbitMQ is a message broker software that uses the Advanced Message Queuing Protocol (AMQP). Before starting all other services, make sure RabbitMQ is started and the RabbitMQ management plugin is enabled.

Procedure

1. Install RabbitMQ by using one of the following:
 - Use the helper script in `C:\ProgramData\Package Cache\SDL\Dependencies`, called `GetRabbitMq.ps1`. This helper script will download and install RabbitMQ and Erlang in the default configuration.
 - Run the Trados GroupShare installer to unpack the installation and navigate to `C:\ProgramData\Package Cache\SDL\Dependencies` to locate Erlang and RabbitMQ.
2. Check that the [RabbitMQ management plugin](#) is enabled on the machine where you are installing Trados GroupShare. This plugin enables you to work with the RabbitMQ WebUI and configure a user for Trados GroupShare. Since this plug-in ensures support for core improvements introduced with CU5 for the 2020 SR1 release, the Trados GroupShare installer will enable it automatically if it's not already enabled on your machine.

4

Pre-Installation: Configure IIS

Before installing Trados GroupShare on the web server, make sure the IIS features required for the Trados GroupShare infrastructure are installed on your system.

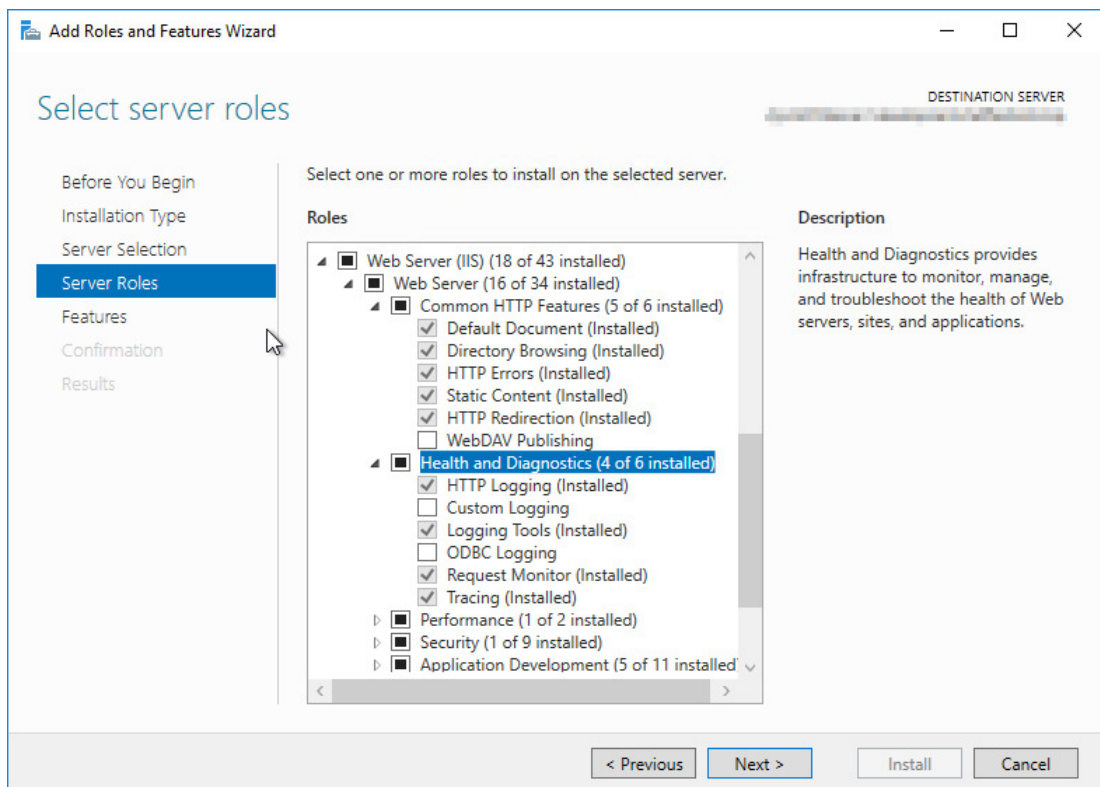
The information in this chapter is intended for users who are familiar with IIS.

Configure IIS 10

The following IIS versions must be configured on the following Windows Server editions: IIS 10 on Windows Server 2019, IIS 10 on Windows Server 2016.

Procedure

1. Open **Server Manager** > **IIS group**.
2. Click **Manage** and choose **Add Roles and Features** from the drop-down menu. The **Add Roles and Features** wizard is displayed:



3. On the **Server Roles** page, expand **web server (IIS)** > **Web server** and make sure the following roles are installed:

Common HTTP Features

- Default Document
- Static Content

Health and Diagnostics

- HTTP Logging
- Logging Tools

- Request Monitor

Security

- Request Filtering

Application Development

- WebSocket Protocol
- .NET Extensibility 4.6 (4.5 for IIS 8 and 8.5)
- Application Initialization
- ASP.NET 4.6 (4.5 for IIS 8 and 8.5)
- ISAPI Extensions
- ISAPI Filters

For more information about configuring IIS on Windows Server, see the following links:

- IIS 10 on Windows Server 2019 and 2016: <https://docs.microsoft.com/en-us/iis/get-started/whats-new-in-iis-10/new-features-introduced-in-iis-10>

5

Pre-Installation: Configure Microsoft SQL server

Perform these steps prior to installing Trados GroupShare on Microsoft SQL Server.

Overview of the process

This chapter describes the steps you must perform prior to installing Trados GroupShare on Microsoft SQL Server.

Procedure

1. Prepare the database. See “Before you start installing ” on page 22.
2. Install the standard prerequisites. See “Required third-party software ” on page 9.
3. Install Trados GroupShare. See “Install Trados GroupShare ” on page 35.

Note: If you have a locked down enterprise installation with heavy usage requirements and you are planning to select the **Use existing Microsoft SQL Server and configure manually option during installation.**, manually create the databases and users and then run the scripts to set up the environment. See “Preparing the Microsoft SQL Server Database Manually ” on page 23.

Before you start installing

Ensure that several items related to the Database Server are addressed before you install TM Server.

The Database Server is installed

As part of the installation, you provide the details of an existing database server.

The Database Server has an appropriate user account

At runtime, GroupShare needs a user account on the Database Server with the SQL Server privilege `dbcreator`.

The GroupShare installer can connect to the Database Serve

The installer will create the required databases and sets all permissions.

To do this, it needs a user account with the sql server role `sysadmin`. You can disable the account used for installation when installation is complete. You may need this account later if you wish to re-install, repair or upgrade this product.

If you are creating the databases by hand, either ensure the Trados GroupShare installer has the SQL Server privilege `db_owner` on each database, or run the SQL installation scripts and give the service account access to each database and the server privilege `dbcreator`.

RECOMMENDATION

Where possible, you should use Windows authentication to access an SQL database server.

Put the Database Server and the Application Server in the same Windows domain (or have a suitable trust relationship set up), so that you can use Windows authentication.

The Trados GroupShare installation does not include Microsoft SQL Server. If you do

not have access to a full version of SQL Server, you can download the free SQL Server 2019 Express version for small deployments. This version includes the full text search engine option required for fully supporting **Full Text Search** in MultiTerm.

Note: If the Database Server is in a different and untrusted domain from the Application Server, or if the Application Server is on a machine in a workgroup, you may need to use SQL authentication rather than Windows authentication.

Preparing the SQL server database manually

This section contains instructions for manually creating databases and the order in which scripts should be run for this process.

You only need to do this if you are planning to select the **Use existing Microsoft SQL Server and configure manually option during installation**. Use this option for a locked down enterprise installation with heavy usage requirements.

Note: If you are using Windows Integrated Security, the login that you create on the database server has to be the same Windows account that runs the services on the application server.

Running the scripts

Step 1: Create databases

Procedure

1. Create the following databases:
 - SDLSysSystem (required for Project, TM and MultiTerm Server)
 - TMService
 - MtMaster (required for MultiTerm server)
 - TMContainer
 - TMModel
 - WebHooks
 - CPSService
 - Logs

Step 2: Create a login on the Microsoft SQL Server

Procedure

1. Add the server role 'dbcreator'
2. Add user mappings (SDLSystem: 'db_owner' and MTMaster: 'db_owner')

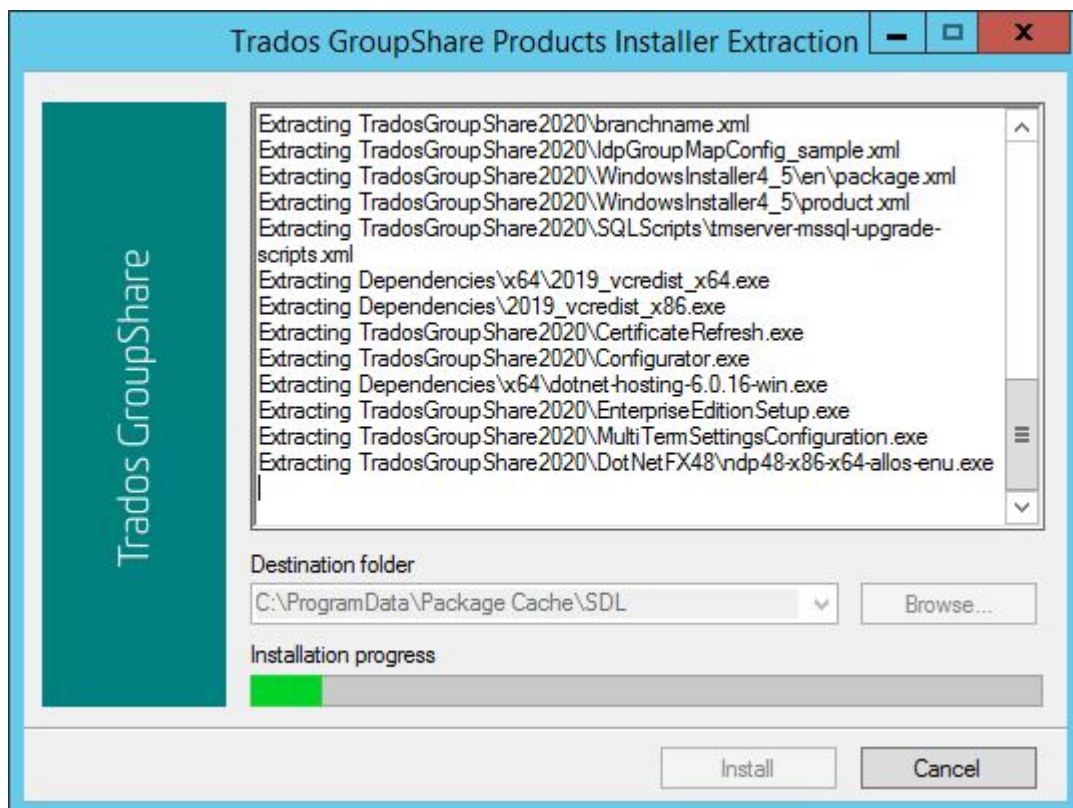
Step 3: Run the scripts

Before you begin

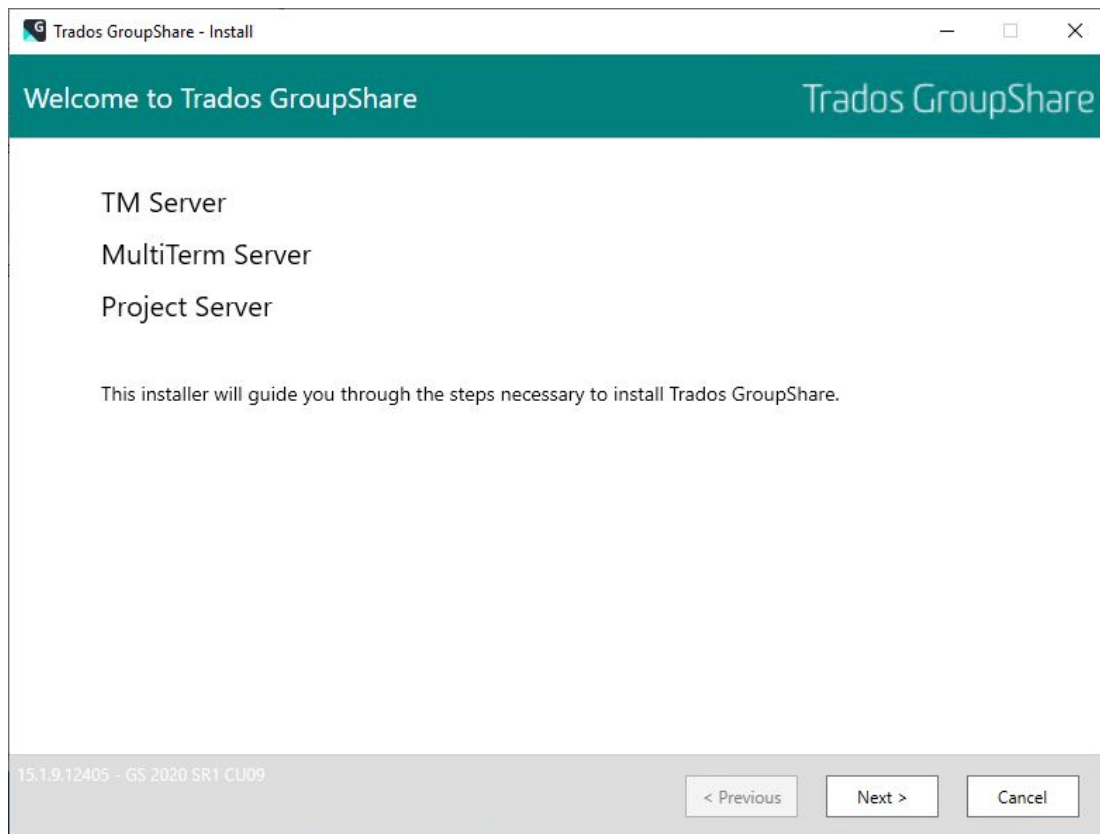
If TM Server or MultiTerm is required, the platform must be installed first.

Procedure

1. Download the installer for Trados GroupShare from the **Downloads** section of the **SDL Account**.
2. Double-click on the TradosGroupShare.exe file to extract the binaries, and the required SQL scripts and .DAC packages.



3. If .NET Framework 4.8 is not installed on your machine, then you will get a notification to install missing framework and you will be redirected to web page to download the framework. You could also use the .NET Framework 4.8 that comes in the installation kit.
4. Leave the installer on the startup screen.



5. Run the required DAC packages and SQL scripts in the order specified in the table below. By default, these files are available at the following locations:

- .DACPAC files: %ProgramData%\Package Cache\SDL\SDLTradosGroupShare2020
- SQL scripts: %ProgramData%\Package Cache\SDL\SDLTradosGroupShare2020\SQLScripts\SQL Server

DACPAC/Script	Required for installing	Deploy on database	Folder in default location
Sdl.GroupShare.Database.SdlSystem.dacpac	Project Server TM Server MultiTerm Server	SDLSystem	SDLTradosGroupShare2020
Sdl.GroupShare.Database.MTMaster.dacpac	MultiTerm Server	MTMaster	SDLTradosGroupShare2020
TMServiceSystem_CreateSchema.sql	TM Server MultiTerm Server	TMService	SQL Server
TranslationModelsMain_CreateSchema.sql	TM Server	TMMModel	SQL Server

DACPAC/Script	Required for installing	Deploy on database	Folder in default location
Sdl.GroupShare.Database.WebHooks.dacpac	Project Server	WebHooks	SDLTradosGroupShare2020
Sdl.GroupShare.Database.CPSService.dacpac	Project Server MultiTerm Server	CPSService	SDLTradosGroupShare2020
LRServiceSystem_UpgradeSchema_1.1.0.sql	TM Server	TMService	SQL Server
LRServiceSystem_UpgradeSchema_1.2.0.sql	TM Server	TMService	SQL Server
Sdl.GroupShare.Database.Logs.dacpac	Project Server TM Server MultiTerm Server	Logs	SDLTradosGroupShare2020
TMServiceSystem_CasingFix.sql	TM Server	TMService	SDLTradosGroupShare2020

6. Create the TMContainer database.
7. After you have finished running the scripts and installing the other prerequisites, return to the Trados GroupShare installer to finish the installation.
8. On the **Select Database Type** page, select **Use existing Microsoft SQL Server and configure manually**.
9. When presented with the database configuration screens, enter the information for the databases and users that you have created manually.
10. Once the Trados GroupShare installer finishes configuring the database, click **Finish** and close the installation wizard.
11. Run ProjectServerAutomaticRoles.sql on the SDLSysSystem database. The script is available at C:\ProgramData\Package Cache\SDL\SDLTradosGroupShare2020\SQLScripts\SQLServer.

GroupShare WebHooks service

The GroupShare WebHooks service provides a publish/subscribe model for connecting services and Web APIs. You can subscribe to GroupShare events and get notified when that event happens through a callback.

WebHooks database

The GroupShare WebHooks service uses its own database, which you can configure on the **Select Database Server** page of the installer.

Trados GroupShare - Install

Select Database Server Trados GroupShare

Database Server Details
Specify the database server to use.

Database Type
Microsoft SQL Server

Server or Instance Name SQLServerName	TM Service Database Name SQLServerName_TMService
System Database Name SQLServerName_SDLSystem	TM Container Database Name SQLServerName_TMContainer
MultiTerm Database Name SQLServerName_MTMaster	TM Container Name Default TM Container
WebHooks Database Name SQLServerName_WebHooks	TM Model Database Name SQLServerName_TMMModel
CPS Database Name SQLServerName_CPSService	Groupshare Logs Database Name SQLServerName_Logs

15.1.9.12405 - GS 2020 SR1 CU09

< Previous Next > Cancel

WebHooks configuration file

The `Sdl.GroupShare.WebHooksService.exe.config` file is located here: `C:\Program Files\SDL\SDL Server\WebHooks Service`. By default, after installation, the configuration file contains the right values.

Important: Users can change the values in the configuration file only if they know what is affected.

The settings available in the configuration file, which you may change or consult are:

- `RestHostUrl` - This is the URL and port number (41239, by default) the service listens to. Change the port if needed. The port is only used to communicate with the WebHooks Service Rest API.
- `MS_SqlStoreConnectionString` - This is the database connection string.
- `serilog:write-to:RollingFile.pathFormat` - This is the log file which is located here: `C:\ProgramData\SDL\Service\logs\WebHooks.Log`.
- `MessageQueueHost`, `MessageQueueUserName`, `MessageQueuePassword` - These are the host, user and password used with RabbitMQ. The password is AES encrypted and you

cannot make any changes unless you know the AES encryption key.

Create permission and role tables

When manually preparing the database, you need to make sure the right permission and role tables are created.

Procedure

1. Open Trados GroupShare Console and go to **Settings > Trados GroupShare**.
2. Select **Grant permissions automatically when assigning files to a user** under the Automatic Role Assignment section
3. Make sure **The default role for users assigned on a project** is selected.

6

Installation procedure

This chapter describes the installation of all the Trados GroupShare components on the current computer. It also describes some of the steps you need to perform prior to installing Trados GroupShare.

Ensure that you have configured a database server with the latest SP versions of Microsoft SQL Server 2017, or 2019, preferably SQL Server 2022.

Typically, but not necessarily, the Database Server is on another computer. Be aware that the installer will need to make changes to the Database Server. You provide the location of the Database Server to the installer as part of the installation process.

You can install Trados GroupShare on a single computer, or install different components of the product on separate computers.

Information needed before you start

During installation you will be asked to provide information that the installer needs.

The information needed depends on which of the following servers are installed on each computer. (See also *Chapter 1 “Servers and server roles in Trados GroupShare”* on page 5. Hence, you should decide which servers you install on each computer before you start.

You may need to provide the following information:

- Web Server to Application Server link
- Application Server to Database Server link and the application service

Web Server to Application Server link

- If the Web Server and Application Server will be on different computers, provide the fully qualified host name of the computer on which you will install the Application Server.
- If you do not plan to use the default TCP port for Application Server (41000), provide the port that you plan to use.

Note: Irrespective of which port the Application Server uses, if the Application Server is behind a firewall, ensure that your firewall settings allow incoming TCP connections on this port.

Application Server to Database Server link and the application service

- Provide the SQL Server instance name that you will be using. This is often the same as the host name of the Database Server, but may not be. Consult your database administrator.
- Provide details of the user account that you will use for the application server service.

Before you start installing

Before you run the installation procedure on any computer, check the following items.

Microsoft .NET Framework

Microsoft.NET framework is needed on all Trados GroupShare computers.

On computers using Windows Server 2022, **enable** Microsoft .NET Frameworks: In the Windows Server Manager, use the Add Roles and Features Wizard and select .NET Framework 4.8.

For Windows Server 2016 and 2019, **install** .NET Framework 4.8. The installer can be found in `C:\ProgramData\Package Cache\SDL\TradosGroupShare2020\DotNetFX48`.

Microsoft WCF

Microsoft WCF (Windows Communication Foundation) non-HTTP activation is needed on all Trados GroupShare.

In Windows Server 2012, open the *Add Roles and Features* wizard. Under the *Application Server* role > *Windows Process Activation Service* feature, enable the *Windows Process Activation Service Support* role service with the HTTP Activation and TCP Activation.

If you do not install WCF, you will get an error message similar to the one shown, which says: 'The WCF Activation - Non-HTTP Activation Feature is not installed'.

Install RabbitMQ

RabbitMQ is a message broker software that uses the Advanced Message Queuing Protocol (AMQP). Trados GroupShare 2020 SR1 needs this to work.

Important! RabbitMQ must be started before starting all other services.

You need to install RabbitMQ and Erlang. There is a helper script in `c:\ProgramData\Package Cache\SDL\Dependencies`, called `GetRabbitMq.ps1`. This helper script will download and install RabbitMQ in the default configuration.

Trados GroupShare also requires the RabbitMQ Management plugin to support core improvements introduced with the 2020 SR1 CU5 release. If this plug-in is not already enabled on your machine, the Trados GroupShare installer will enable it automatically. After installation, open the RabbitMQ Management plug-in to work with the RabbitMQ WebUI and configure a user for Trados GroupShare.

See more information at <https://www.rabbitmq.com/install-windows.html>.

Web Server protocol: WebSocket installation

WebSocket is a TCP computer communication protocol, which enables a two-way, ongoing interaction between a browser and a web server. Via *WebSocket*, communications are done over the following TCP ports: 80 and 443. *WebSocket* is compatible with HTTP and is supported by major browsers such as: Google Chrome, Microsoft Edge, Internet Explorer, Firefox, Safari and Opera. This is a feature to IIS under Web Server\Application Development.

License

A trial license is provided for 30 days, with all features enabled. After this period a license will be required to be activated on the Application Server. You need a separate license for each Application Server.

One license will cover all the Trados GroupShare applications on a one server.

See the .

Operating systems

Ensure you are running one of the operating systems listed in “*Chapter 1, Installation process overview*” on page 1.

Recommendation: Do not install client software on Trados GroupShare servers

The following client components of Trados GroupShare should not be installed on the GroupShare server. These products are:

- Trados Studio
- MultiTerm Desktop

Create a user account for the server application

The server application needs a Windows user account so that it can log on at run time.

When you install the server application, you will need to provide this user name.

Create a non-privileged user account. The Trados GroupShare installer will give that account all the required privileges.

Recommendation: use a Windows domain account

If you are in a Windows domain, create a domain wide user account for this purpose, not a local user account. A domain wide account means you can use Windows authentication for the Database Server and also means that at run time, Trados GroupShare users will be able to use Windows domain features. For example, they will be able to use Windows Active Directory to create another Trados GroupShare user.

Tip: RWS recommends that you set up the passwords for the server application user account and for other service accounts so that they never expire. If the passwords expire (perhaps in accordance with a security policy), then when they do so, the service will not work and diagnosis can be difficult.

Setting up a user account

About this task

These manual steps are only necessary if you are setting up Trados GroupShare system manually or the account used for running Trados GroupShare services. To enable a Windows domain account or a local user to run Trados GroupShare services:

Procedure

1. Grant the right to **Log On As A Service**.
2. Grant access to all the SDL databases:
 - a. Click **Server Roles** enable **public** and **sysadmin**.
 - b. Under **User Mapping** to Trados GroupShare databases enable the **db_owner** and **public** options.
3. Add the user to **SDL Server Users** group to grant URL reservation. This enables the user to run service using a specific port.
4. Grant permission to read the **identity.sdl.com** certificate.
 - a. Go to **Certificates (Local Computer) > Personal > Certificates**
 - b. Right-click on **identity.sdl.com > All Tasks > Manage Private Keys** and add the user with Read or Full Control permission.
5. Add the user to **Performance Monitor Users** group by running *net localgroup "Performance Monitor Users " <user> /add* command.

When installing over multiple computers

If you install different components of Trados GroupShare on different computers, follow the next guidelines.

Licenses

You need a separate license for each computer that runs an application server.

You do not need an Trados GroupShare license for the web server or database server.

Order to run the installer on different computers

To install Trados GroupShare over multiple computers, run the installer separately on each computer.

When you run the installer, you choose the server roles that are to be installed on that computer.

When installing on multiple computers, it is usual to install the Application Servers before the Web Server. However you can install the server roles in any order. You may need to restart services on the Web Server after you install an Application Server.

Note: If you install the Web Server before you install the Application Server, and you enter incorrect details in the Website parameters for the host name or port number, re-install the Web Server.

Open ports

Make sure you leave open the firewall ports needed for the Web tier to work.

The REST API ports that the Web tier uses need to be opened through any firewall to the Application tier.

Windows domain

Follow these instructions for setting the Windows domain.

Ensure that all computers:

- are in the same Windows domain, or are in a trust relationship.
- use the same user account directory, typically Windows Active Directory.

Ensure that all Trados GroupShare services in the configuration:

- use the same name for the Trados GroupShare web site.
- run under the same Windows user account.

Authentication server address

When installing Trados GroupShare in a multitier architecture, you need to point the Authentication Server address to the Web Server if not installed on the same machine or if the Trados GroupShare website is not bound to port 80 (for example if HTTP is disabled in favor of HTTPS).

The Authentication Server address (`C:\Program Files\SDL\SDL Server\Custom Properties Service\Sdl.CustomPropertiesService.AuthProviderImplementation.dll.config` key=

"AuthenticationServerAddress") is set to value="http://localhost:41234/" during installation.

You can also change this value to point to the Web Server.

Before you install the web server

Before you install the Web Server, do the following:

- Ensure that the web site name is registered in DNS.
- Configure IIS. See "Pre-installation: Configure IIS " on page 17. The installer will not complete until IIS is configured appropriately.

Install Groupshare

Browse to the download folder and double-click the installation file. The installer extracts files in preparation for the install.

Note: The extracted files are needed for the installation and also for uninstalling. If you delete these files, you will need to download and extract them again to uninstall GroupShare.

The installer runs in two phases: installation and configuration. In the installation phase, you can install GroupShare Web Server and Application Server. After installation has finished, the installer proceeds to the configuration of the Database Server.

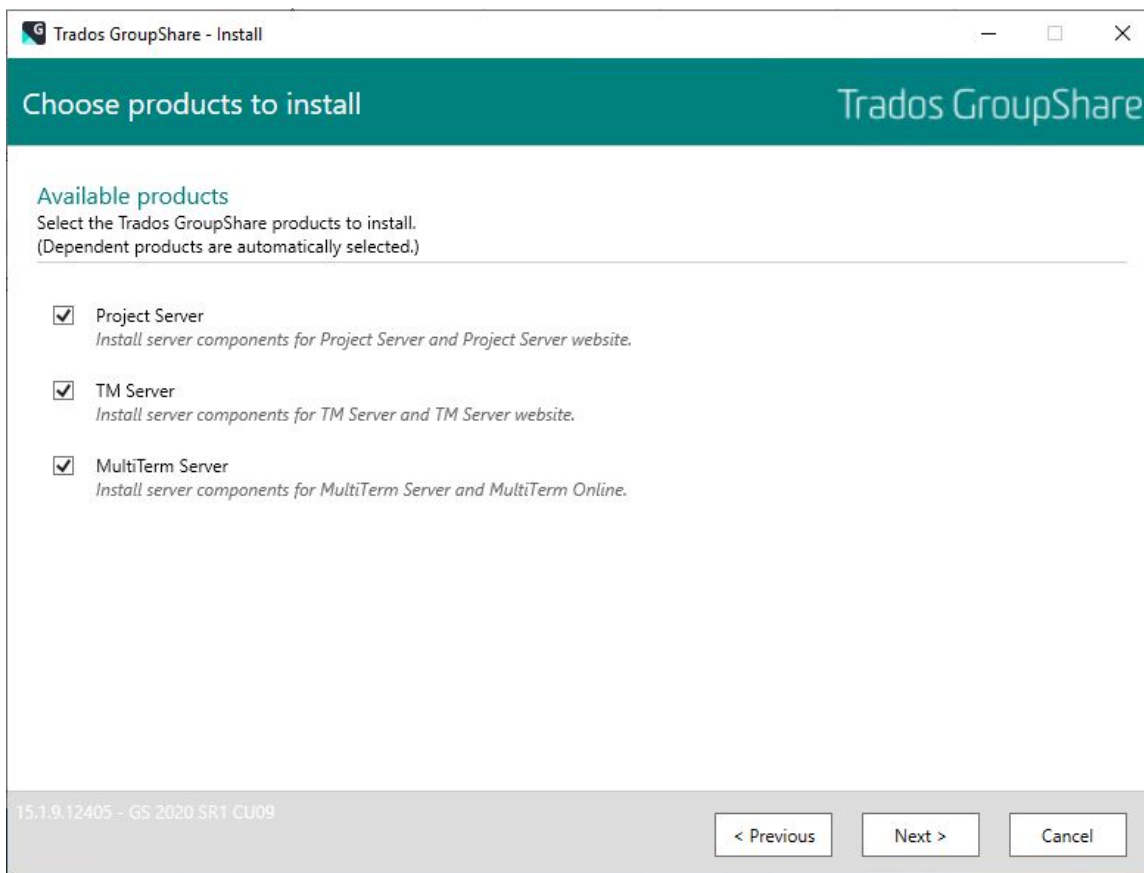
Fill in the pages in the order that they are displayed. Afterwards, you can go backwards and forwards to change details as desired.

Note that depending on the options you choose, different pages are displayed. For example, the **Platform Website Parameters** page is displayed only if you choose to install the Web Server.

Choose products to install

Select the Trados GroupShare components:

- Project Server (If you select Project Server, TM Server is automatically selected as well)*
- TM Server
- MultiTerm Server



* Note that if you install Project Server (and Online Editor), NSSM and Server JRE (Java Runtime Environment) (x64) are automatically installed with Trados GroupShare.

Choose server roles

On this page choose server roles for the current computer. The choice of server roles determines which components are installed on the computer.

Note: For more information about server roles, see “Overview of the installation process ” on page 1.

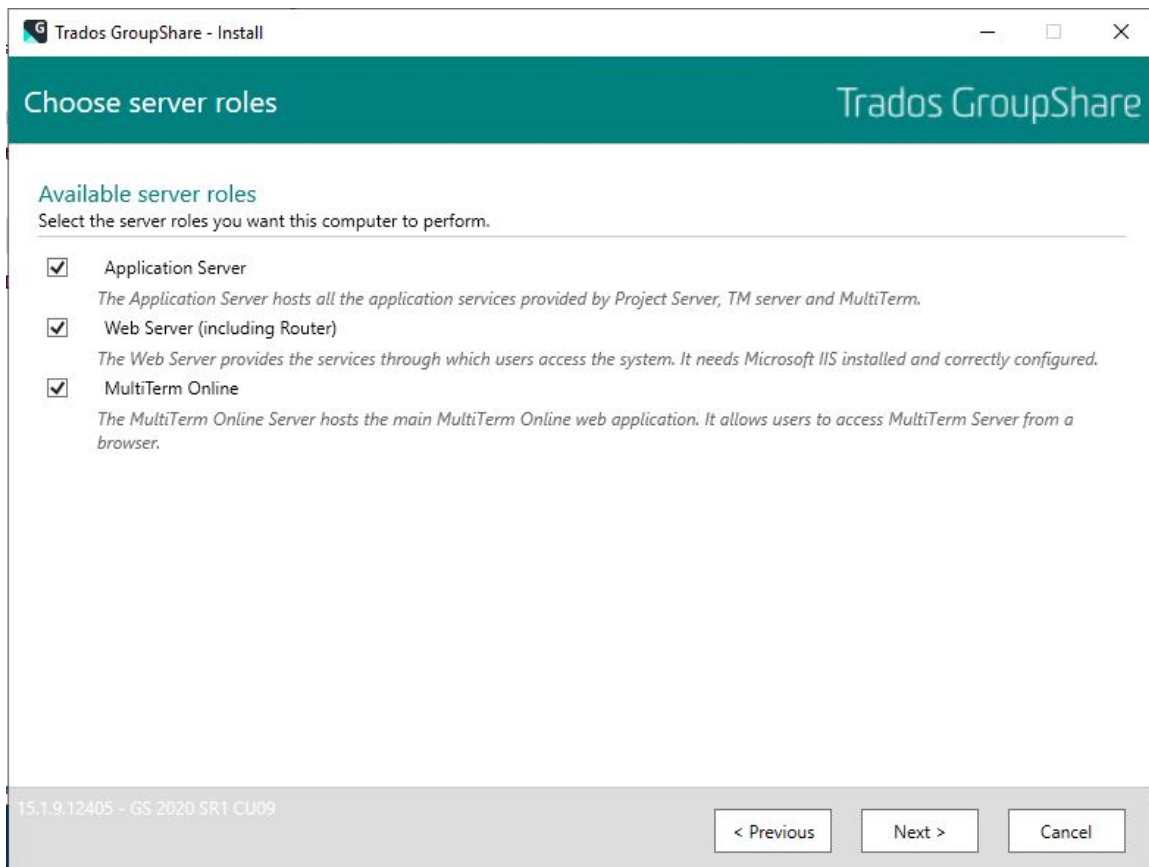
The available server roles are:

- Application Server

Note: The Trados GroupShare Console is automatically installed when this role is used.

Note: The Application Server restarts once the activation screen is closed.

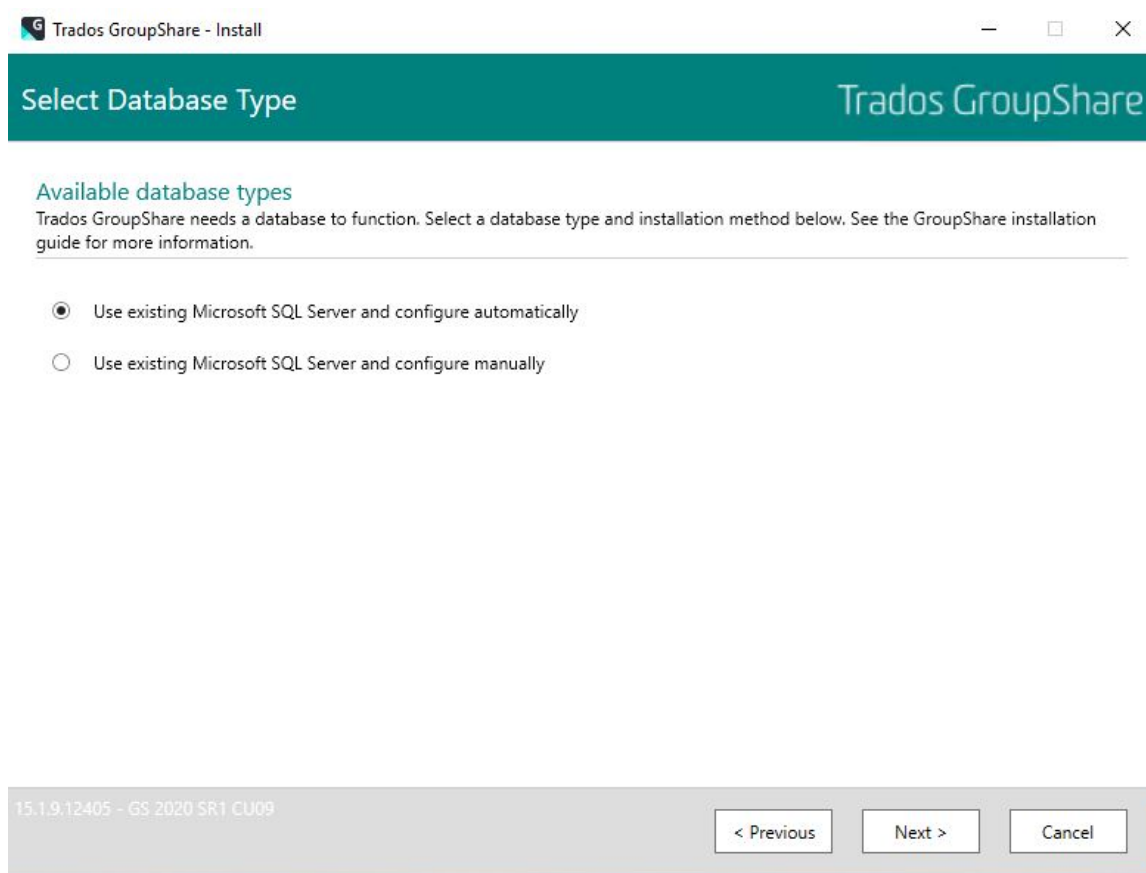
- Web Server
- MultiTerm Online



Select database type

On this page select the database type and installation method.

- **Use existing Microsoft SQL Server and configure automatically** - This option performs all the configuration needed to run Trados GroupShare against an existing SQL Server.
- **Use existing Microsoft SQL Server and configure manually** - Select this option only if your DBA has already pre-configured your SQL Server to run Trados GroupShare by following the installation instructions. Use this option for a locked-down enterprise installation.



Checking prerequisites

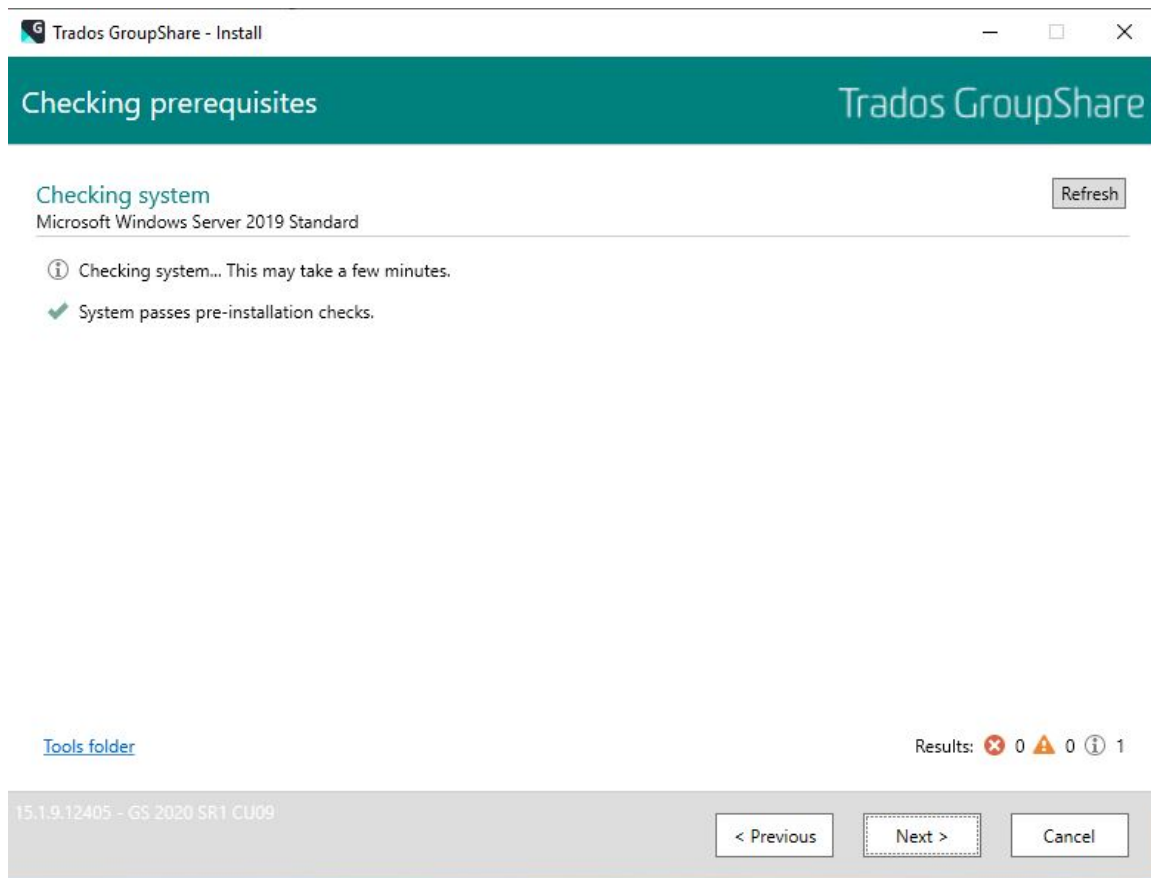
At this stage, the installer checks that you have all of the prerequisites installed.

If one or more of the prerequisites are missing, it will notify you of the missing prerequisites. You must then install these prerequisites on the computer yourself. To make sure your Windows Server is ready for installation and has all the prerequisites installed, find the helper scripts in the installer folder. Click the *Tools folder* link to open the folder with the scripts.

Look in `C:\ProgramData\Package Cache\SDL\TradosGroupShare2020` for
`GroupsharePrereqW2019.ps1` (for machines with Windows Server 2019),
`GroupsharePrereqW2016.ps1` (for machines with Windows Server 2016) or
`GroupSharePrereqW2022` (for machines with Windows Server 2022).

Once you install all prerequisites, return to the wizard and select **Refresh**. If all of the prerequisites are installed, the **Next** button becomes active so that you can continue with the installation.

Note: See the "Required software " on page 9 section for more information about what prerequisites are needed.



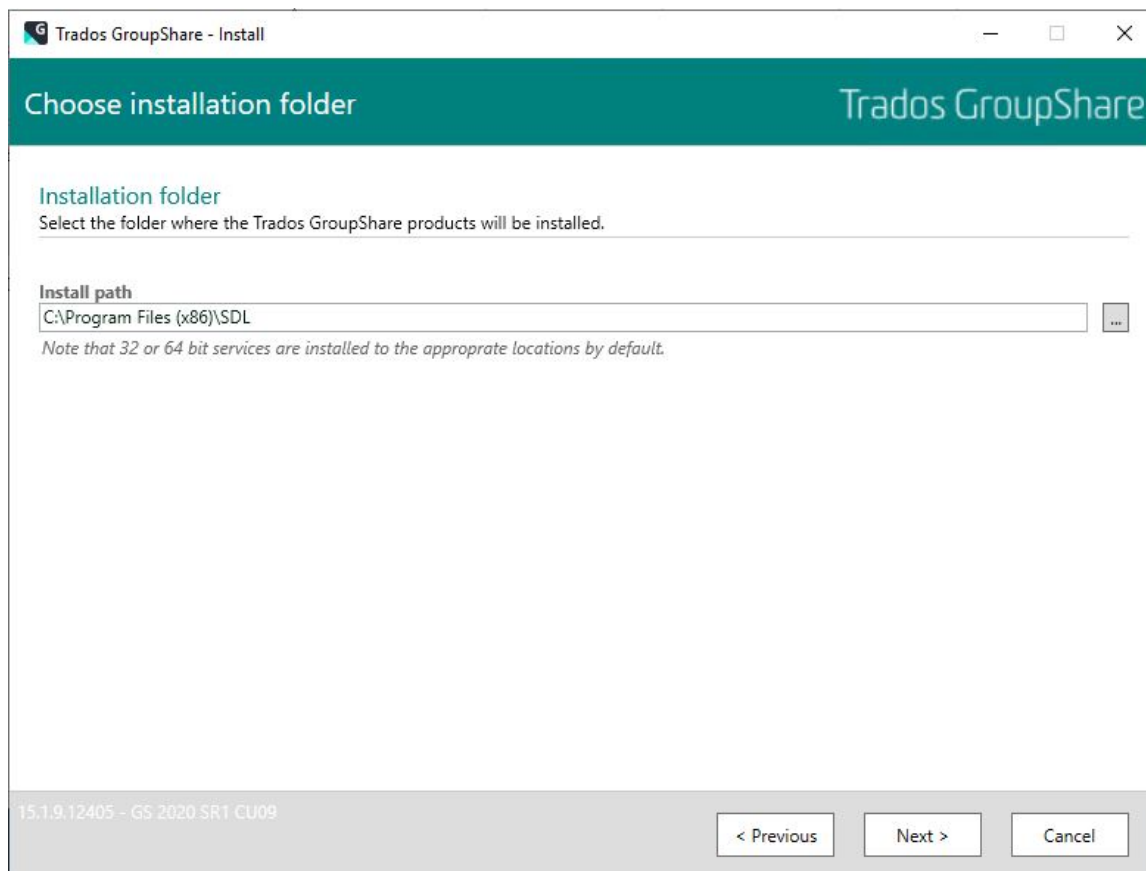
Choose installation folder

On this page choose the folder under which to store the Trados GroupShare program files.

The default folder is:

- (32-bit machines) %ProgramFiles%\SDL
- (64-bit machines) %ProgramFiles(x86)%\SDL

Note that, if you install to %ProgramFiles%, some components will go in the 32-bit ProgramFiles folder, while other components will go in the 64-bit ProgramFiles folder.



Choose folder for storing files

Here you can specify the folder where you want to save:

- Project files and project packages published to Trados GroupShare
- Termbases imported/exported from MultiTerm Online
- Translation memories imported/exported from TM Server

The Trados GroupShare installer cannot check if network (UNC) paths are valid. If you provide a UNC path name, make sure that the folder you specify exists, and that the folder permissions allow to store files in that location.

The default storage location is:

C:\ProgramData\SDL\SDLServer1\FileStore

Parameters for email notifications

This page is displayed if you choose to install the Application Server on the **Choose Server Roles** page.

Trados GroupShare requires a working Simple Mail Transfer Protocol (SMTP) server in order to send out notification emails when file assignments are created and edited in SDL Trados Studio 2014 and later. Specify the settings for the SMTP server you want to use for sending email notifications.

You can change these settings at any time, from the Trados GroupShare Console MMC snap-in.

Parameters for email notifications Trados GroupShare

Project server SMTP settings
Optional settings used to send email notifications. Change these settings through GroupShare Console.

Email sender display name Trados GroupShare notification ⓘ	Sender email address notifications@sdl.com ⓘ
SMTP host address hostexample ⓘ	SMTP port 25 ⓘ
SMTP user ⓘ	SMTP password ⓘ
SMTP server requires SSL/TLS connection <input type="checkbox"/> ⓘ	

15.1.9.12405 - GS 2020 SR1 CU09

< Previous Next > Cancel

Parameters for email templates

This page is displayed if you chose to install the Application Server on the **Choose Server Roles** page.

Trados GroupShare uses a predefined email template which defines how the notification emails look like and what information they contain. You can use your own email template to customize the email notifications that Trados GroupShare sends out when file assignments are created and edited in Studio 2014 and later. Specify what server address will be indicated

for the assignments and where Trados GroupShare can find your customized email templates.

The external server address is now also used to populate settings for Online Editor too. Enter the Web Server address in the **External server address** field.

Important! If you do not specify the **External server address** field, you will not get email notification links and Online Editor will not work properly.

Trados GroupShare - Install

Parameters for email templates Trados GroupShare

Email templates settings
Location of email templates and additional data for notifications.

External server address (used in the notification emails and online editing)
http://important-external-server-address

Notification templates path (the folder to store the notification templates)
C:\ProgramData\SDL\SDLServer1\Templates

15.1.9.12405 - GS 2020 SR1 CU09

< Previous Next > Cancel

Services configuration

This page is displayed if you chose the Application Server role for this computer.

Provide the Windows user account that you have created for run time access. The installer creates the local Windows group `SDL Server Users` and makes the specified account a member of that group.

The installer assigns those privileges that are required to run the server application to the group. For details on assigned privileges, see "Reference" on page 91.

The Application service port must be the same port specified for the application service on the Website parameters details.

Note: If the application server computer has a firewall, or is behind a firewall, ensure that the firewall allows connections on the port that you specify.

The TM Service hostname and port should be specified. Leave as the default for a local TM Service installation.

Services configuration Trados GroupShare

Service user account details
Enter the details of an existing user account to be used by Trados GroupShare's services.

Windows domain
DEVELOPMENT

Windows user name
[Empty field]

Password
[Empty field]

Application service port
Enter the TCP port number that the application server will use to accept incoming connections from the Web Server.

TCP port
41000

TM Service details
Provide the fully qualified address or the IP number and port of the machine where the TM Service is running. Use 'localhost' if the application server is running on this machine.

Hostname
localhost

TCP port
41235

15.1.9.12405 - GS 2020 SR1 CU09

< Previous Next > Cancel

Website parameters

This page is displayed if you are installing the SDL Web Server on this computer.

Custom website location URI:

specify the full URI (including any subfolders) where you want to deploy the Trados GroupShare website. If you leave this field empty, the Trados GroupShare website is deployed under the IIS website **SDL Server**.

Website host header:

if the SDL Web Server is the only web site on this computer, you can leave this field empty. However, if other web services on this computer use the same port, set a host header to distinguish between them.

Website http port:

Usually the default port number is satisfactory. However, you might need to change it to accord with your company security policy. For example, you need to ensure that the firewall does not block access to the specified port numbers.

Application Server Name and Port:

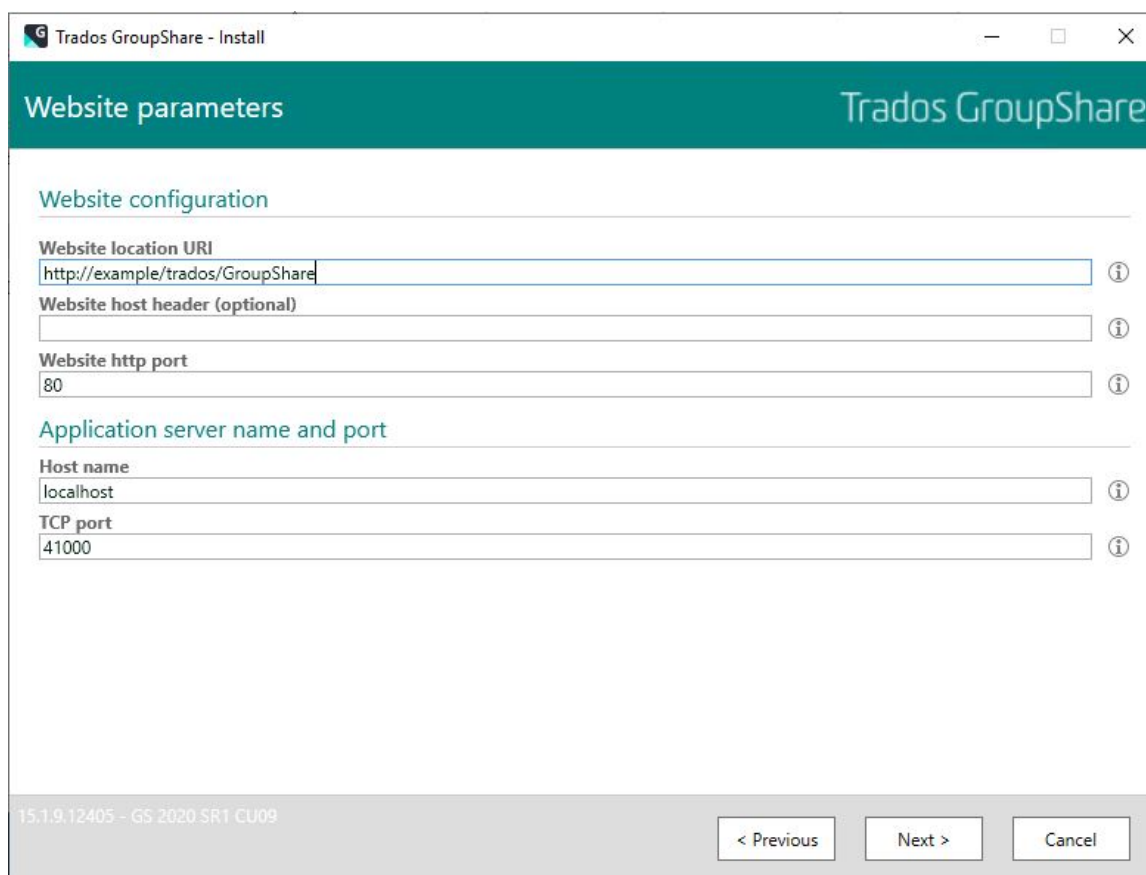
Set the host name and TCP port of the Application Server. If you have not yet installed the Application Server, enter the details that you plan to use for that server.

Host name:

if you install the Application Server on this computer, enter `localhost`. If the Application Server is on another computer, use the fully qualified name of that computer. The default name is `localhost`.

TCP port:

Ensure that the TCP Port number you specify here matches the one you specify for the Application Server in the Platform Service Parameters page.



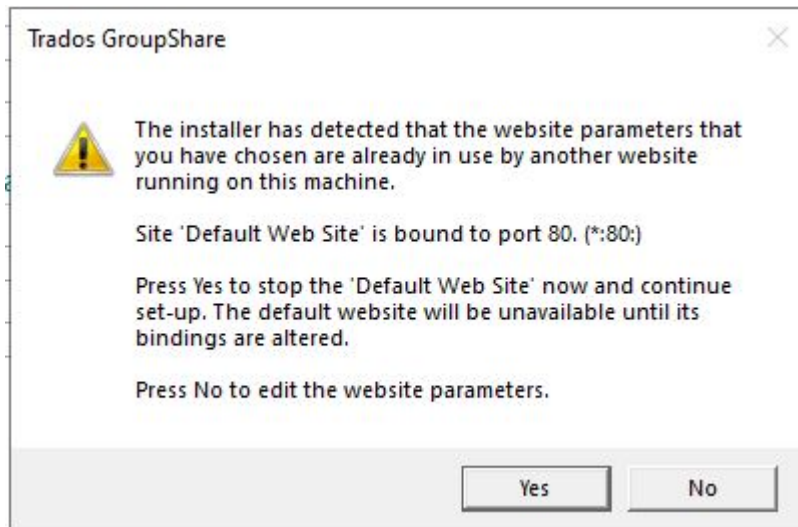
The screenshot shows the 'Trados GroupShare - Install' window. The title bar includes the Trados logo and the text 'Trados GroupShare - Install'. The window has a teal header bar with 'Website parameters' on the left and 'Trados GroupShare' on the right. Below the header, there is a section titled 'Website configuration' with three input fields: 'Website location URI' (containing 'http://example/trados/GroupShare'), 'Website host header (optional)' (empty), and 'Website http port' (containing '80'). Each field has an information icon (i) to its right. Below this is a section titled 'Application server name and port' with two input fields: 'Host name' (containing 'localhost') and 'TCP port' (containing '41000'), each with an information icon (i) to its right. At the bottom of the window, there is a status bar with the text '15.1.9.12405 - GS 2020 SR1 CU09' on the left and three buttons: '< Previous', 'Next >', and 'Cancel' on the right.

Note: The Web Server does not include a configuration screen to change these details after installation. If you run the installer to completion with incorrect details for the Application Server, or if you move the Application Server to another computer, re-install the Web Server.

Message_ The installer has detected that the website parameters...

IIS already has a website running on this port.

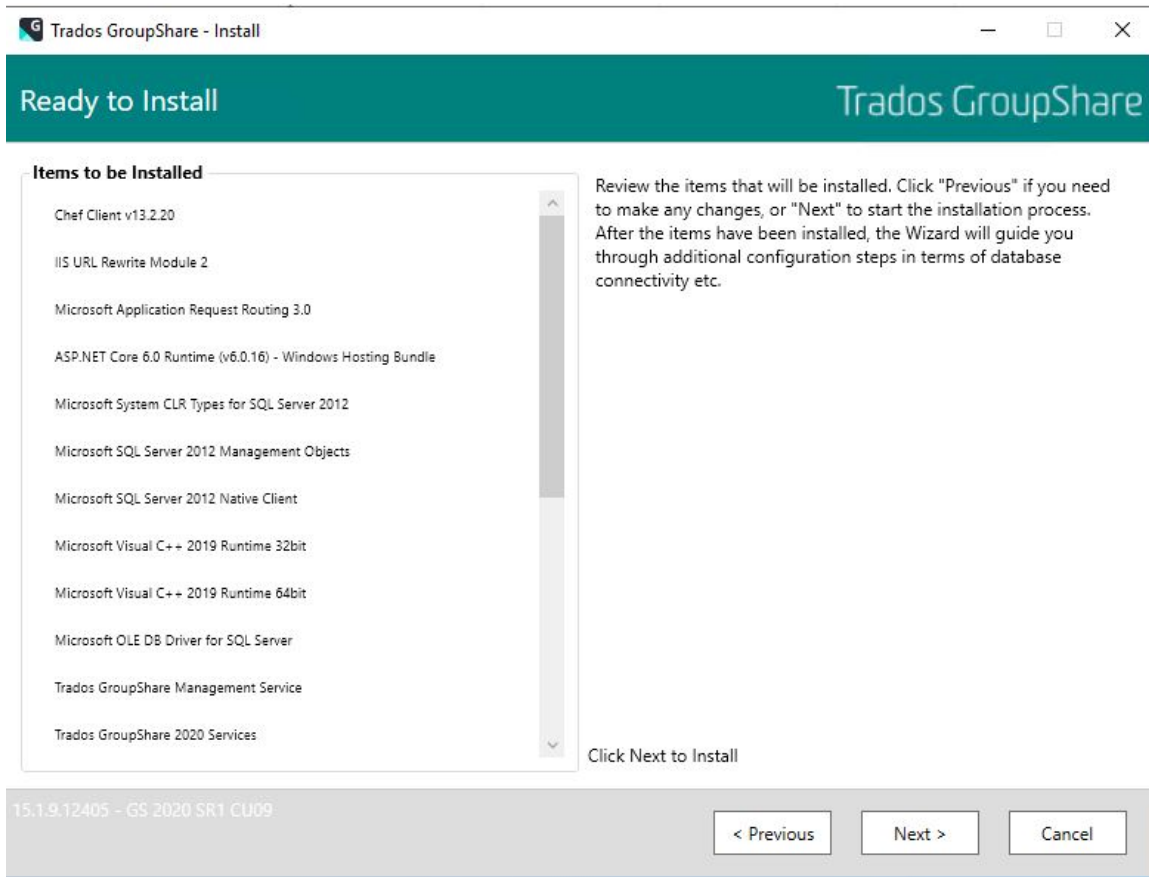
If you have just set up IIS as part of this installation, select **Yes** and continue. If you have other web sites already running on this computer, select **No** to edit the settings.



Ready to install

These pages allow you to review the items that are to be installed and change them before you go ahead with the installation.

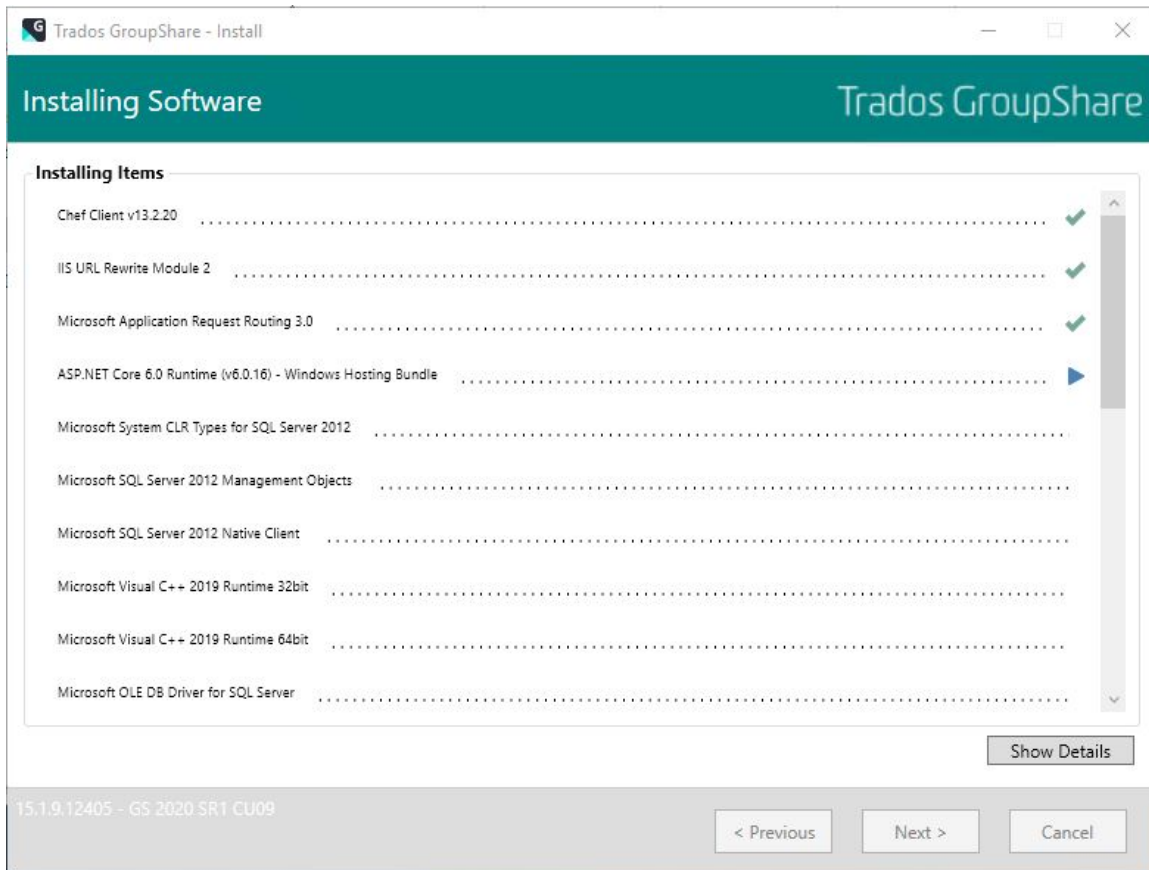
6 Installation procedure



Installing Software

The installation program installs the components.

If a reboot is required you will be notified at the end of the configuration section.



Using a multi-tier architecture

This is a set of instructions for performing the installation in a multi-tier architecture.

About this task

The instructions below describe a three-tier architecture with a Web tier, an Application tier and a Database server (the Database server can be remote).

Procedure

1. Install the *Application* tier:
 - a. Select to install all products.
 - b. On the roles setup step, only select the **Application Server** role.
 - c. All other installation steps remain the same as for a normal installation.
2. Go through the entire installation and configuration, close the installation wizard and apply a license (or use the trial).
3. Move to the server dedicated to the *Web* tier and install it:
 - a. Select to install all products.
 - b. On the roles setup step, only select **Web Server** role (and optionally, **MultiTerm Online**).
 - c. On the Web Server Settings page of the wizard, specify the NetBIOS name or FQDN

of the *Application Server* tier under **Host Name**.

- d. All other installation steps remain the same as for a normal installation.
4. Go to your browser and access the *Web* tier for test. Also test the server by setting it up in Trados Studio.

Specify Message Queue settings

This is how you configure the Message Queue.

About this task

After the installation wizard has installed the Trados GroupShare Web Server or Application Server, you need to configure the Message Queue Settings.

Procedure

1. Set RabbitMQ connection details.
2. Set RabbitMQ host and port details.

Trados GroupShare - Install

Message Queue Settings

Trados GroupShare

Rabbit MQ connection details

Enter the details of a Rabbit user account to be used by Trados GroupShare's services.

User name
guest

Password
•••••

Rabbit MQ host details

Provide the fully qualified address or the IP number the machine where the Rabbit MQ Service is running. Use 'localhost' if the application server is running on this machine.

Hostname TCP port
localhost 5672

15.1.9.12405 - GS 2020 SR1 CU09

< Previous Next > Cancel

Microsoft SQL server configuration

After the installation wizard has installed the Trados GroupShare Web Server or Application Server the Message Queue Settings were completed, it prompts for the Database Server details.

Follow these instructions to configure the SQL Server database.

Enter Database Server details for Microsoft SQL Server

Complete this page with details of the Database Server, as follows:

1. Fill in the **Server** box with the name of an existing database server.
2. When you click **Next**, the installer program validates the name of the Database Server. At this stage, it does not attempt to connect to the database.

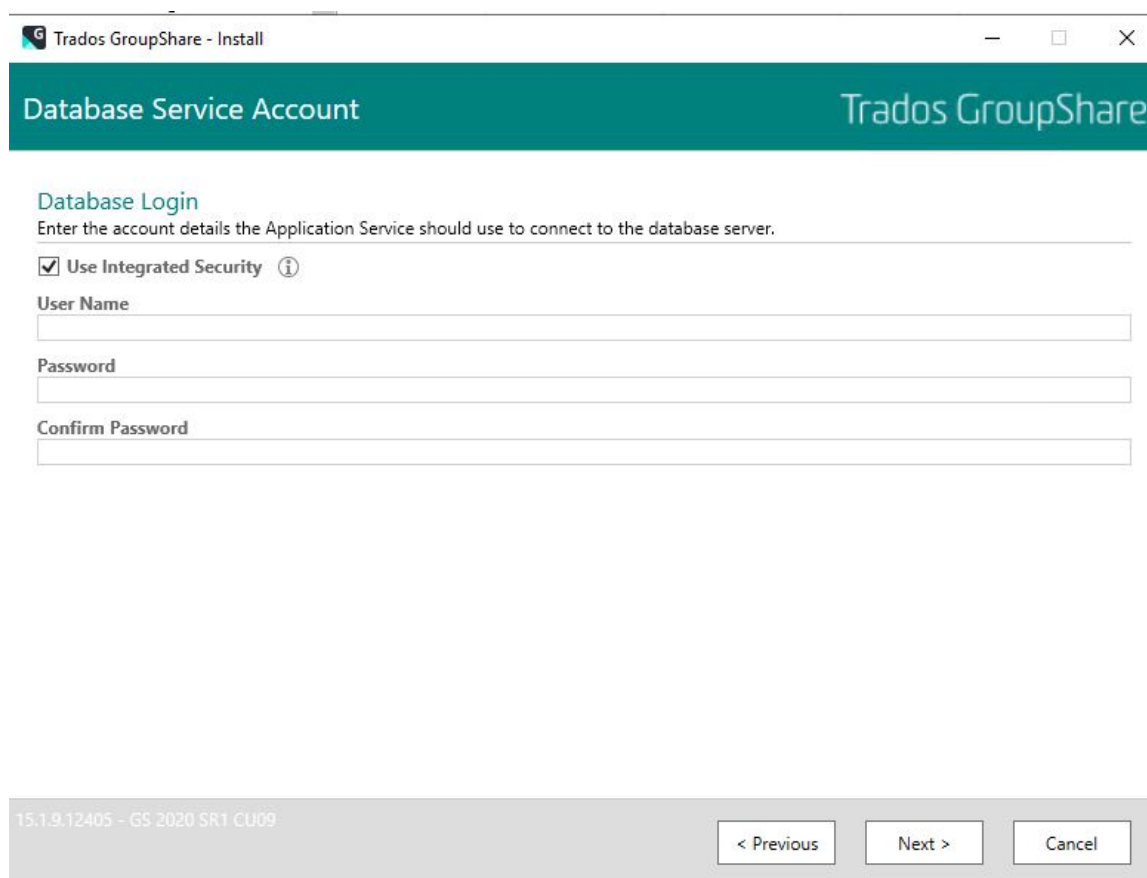
Remember: You can create a new database and deploy the WebHooks service from the installer by filling in the **WebHooks Database Name** field.

Database Service account details for Microsoft SQL Server

Choose the appropriate authentication method.

If you choose **Use Integrated Security** (recommended), the application uses Windows authentication, meaning that at run time the Application Server will use the service account details to log onto the Database Server.

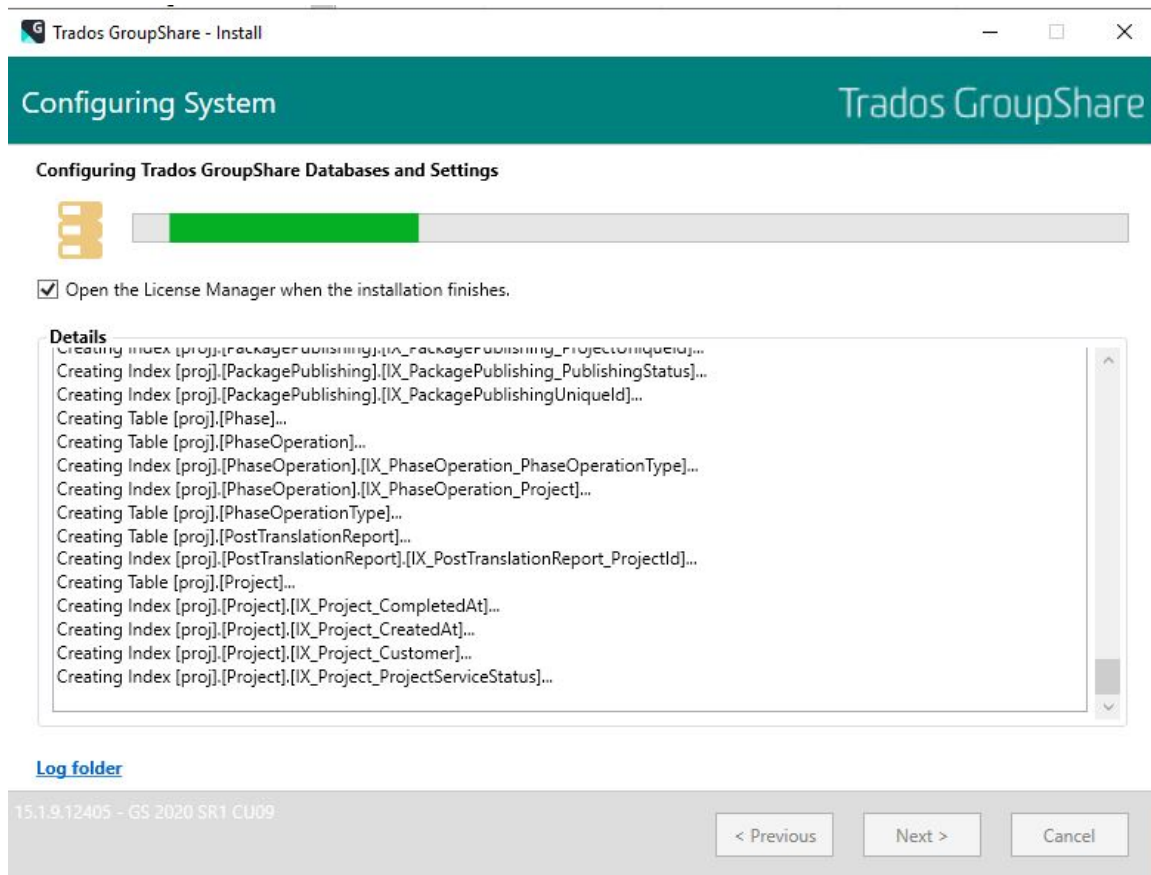
If you do not choose **Use Integrated Security**, the application will use SQL Server authentication at run time. Be aware that in that case the password is not encrypted, and that the application does not check password strength.



The screenshot shows a Windows installer window titled "Trados GroupShare - Install". The window has a teal header bar with the text "Database Service Account" on the left and the "Trados GroupShare" logo on the right. Below the header, the section "Database Login" is displayed, followed by the instruction: "Enter the account details the Application Service should use to connect to the database server." There is a checkbox labeled "Use Integrated Security" which is checked, with an information icon to its right. Below this are three text input fields labeled "User Name", "Password", and "Confirm Password". At the bottom of the window, a grey bar contains the version string "15.1.9.12405 - GS 2020 SR1 CU09" on the left and three buttons: "< Previous", "Next >", and "Cancel" on the right.

Configuring System

The installer displays a progress screen.



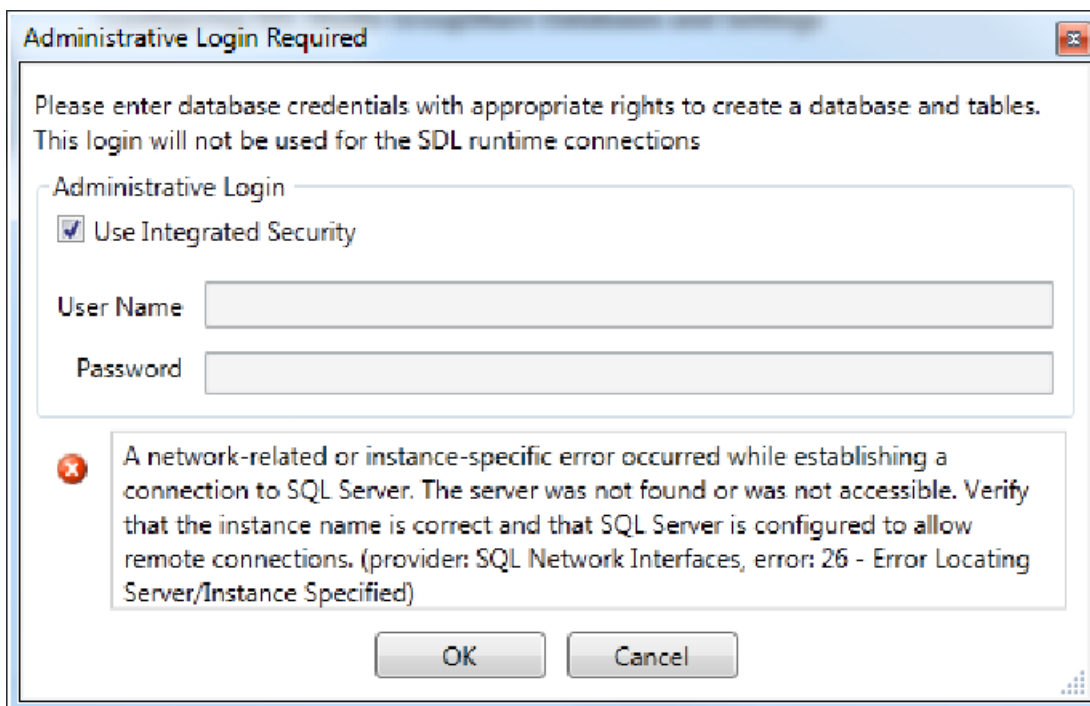
Administrative Login Required

The **Administrator Login Required** dialog is displayed if the account you are logged in with does not have sufficient user privileges to create the database.

Either restart the installation with a user account that has sufficient privileges on the Database Server, or enter the details of an SQL account that has these privileges.

Note that this account is only used during the installation process.

If you now have given permissions to the installing account on the database, you could retry **Use Integrated Security**.



Migrating termbase permissions to Trados GroupShare permissions

Starting with Trados GroupShare 2017, termbase role and permissions management moves from MultiTerm Administrator to Trados GroupShare.

About this task

If you are upgrading an older supported version of Trados GroupShare, at the end of the installation process, a wizard will assist you in assigning termbases to Trados GroupShare organizations and mapping existing termbase roles into Trados GroupShare roles.

Procedure

1. On the Termbase Migration Wizard welcome page, select **Next**.
2. On the Organize Termbases wizard page:
 - a. Use the commands on the right to manage the Trados GroupShare organization structure.
 - b. Select orphan termbases on the left and assign them as resources in the Trados GroupShare organization structure.
3. On the Update Roles wizard page, create new Trados GroupShare roles and map them to existing termbase roles.

The termbase roles are grouped under Trados GroupShare roles. The users that were members of a termbase role will be members of the corresponding Trados GroupShare role in the organization where the termbase was assigned in Step 2.

The **New role** option is enabled when you select one or more termbase roles from the same group. It creates a new Trados GroupShare role and moves the selected termbase roles under it.

Configuring Windows authentication

For Windows authentication to work on the Trados GroupShare server, you need to set a Server Principal Name (SPN) to identify the account running Trados GroupShare services with the fully qualified domain name (FQDN) of the web application.

Before you begin

Note: Make sure you open HTTP port 41000.

You need an account that has Domain Admin permissions or has the **Validated write to service principal names** permission delegated.

Procedure

1. Launch an elevated command line session.
2. Run:

```
setspn -S http/servername serviceaccount
```

Where `servername` is the fully qualified domain name and `serviceaccount` is the account running the Trados GroupShare services.

This is an example of how the syntax could look like:

```
setspn -S http/gssserver.sdl.com global\adminuser
```


7

Post-Installation: Configure IIS

After installation you can make additional changes to IIS.

It is assumed that the reader of this chapter is familiar with IIS.

Enabling and disabling endpoints

You enable or disable endpoints related to HTTP, HTTPS and TCP connections.

- Enable or disable HTTP or HTTPS.
- Enable or disable TCP connections.

To enable or disable endpoints in the GroupShare web site, edit the file `C:\Program Files (x86)\SDL\SDL Server\Platform\web.config`.

The GroupShare website has three services and each service has definitions for each endpoint for that service (HTTPS, HTTP and, perhaps, TCP).

The general procedure to enable endpoints is to uncomment the lines for that endpoint in all the Trados GroupShare services. Find the endpoint definitions by looking for the associated comment line that starts each definition.

User authentication service

Find the endpoint definitions by looking for the associated comment line that starts each definition.

Service tag:

- `<service name="Sdl.Enterprise2.Platform.Router.UserManagerRouter" behaviorConfiguration="routerServiceBehavior">`

Each endpoint definition is headed by one of the following comment lines:

- `<!-- Identity Router http endpoint -->`
- `<!-- Identity Router http endpoint -->`

Router service

Find the endpoint definitions by looking for the associated comment line that starts each definition.

Service tag:

- `<servicename="Sdl.Enterprise2.Platform.Router.IssuedTokenRouter" behaviorConfiguration="routerServiceBehavior">`

Each endpoint definition is headed by one of the following comment lines:

- `<!-- Issued Token Router http endpoint -->`
- `<!-- Issued Token Router http endpoint -->`
- `<!-- Issued Token Router http endpoint -->`

Discovery service

Find the endpoint definitions by looking for the associated comment line that starts each definition.

Service tag:

- `C<service name="Sdl.Enterprise2.Platform.Router.DiscoveryService" behaviorConfiguration="routerServiceBehavior">`

Each endpoint definition is headed by one of the following comment lines:

- `<!-- Discovery Service https endpoint -->`
- `<!-- Discovery Service https endpoint -->`

Providing HTTPS Services

The default configuration for Trados GroupShare is to use HTTP endpoints. You can set up IIS to support HTTPS services.

To do this:

1. Get an X.509 certificate.
2. Enable HTTPS binding.

Tip: If you enable HTTPS services, disable HTTP. If both HTTPS and HTTP connections are available, Trados GroupShare will work but the interaction is liable to be confusing for the user.

Get an X.509 certificate

The first step is to get an X.509 certificate from an established Certificate Authority (CA).

An X.509 certificate contains details such as the web site. It also certifies that the CA has publicly committed that those details belong to you, and that they have not been tampered with.

For details on how to get a certificate, contact a trusted root CA. All browsers contain a list of trusted root CAs. For example, in Internet Explorer, open **Internet Options**, click the **Content** tab, and then **Certificates > Trusted Root Certification Authorities**.

Enable HTTPS binding

Edit the web config file.

By default the installer configures the GroupShare web site to handle HTTP traffic on port 80. Configure the website to support SSL by editing the file `SDL\SDL Server\Platform\web.config`.

Under each of the `<services>` tag you will see HTTPS endpoint definitions, commented out. The endpoint definitions are headed by the appropriate comment line for the service, as follows:

```
<!-- Issued Token Router https endpoint -->
```

```
<!-- Issued Token Router https endpoint -->
```

```
<!-- Issued Token Router https endpoint -->
```

Each endpoint definition has two parts:

`Https....RequestReply`allows client access via HTTPS.

`Https....Metadata`allows webservice querying via HTTPS.

Uncomment these endpoint definitions.

Edit the list of web sites in the Windows Server manager.

From the **Windows 2016/2012 Server Manager**, open the list of web sites, right-click the web site that is going to provide the HTTPS service, and select **Edit bindings**. Add an HTTPS binding, choosing the X.509 certificate that you obtained.

Securing your Trados GroupShare webserver

You can use HTTP Strict Transport Security (HSTS) policy to protect against man-in-the-middle attacks, such as protocol downgrade attacks and cookie hijacking.

About this task

To enable HSTS and secure cookies:

Procedure

1. Navigate to `C:\ProgramData\Package Cache\SDL\SDLTradosGroupShare2020\`
2. Locate the **EnableHSTS.ps1** and **SecureCookie.ps1** powershell scripts and run them as administrator.

Fix IIS site binding manually

After the installation is finished, you need to fix the site binding manually in IIS. This will enable you to have Trados GroupShare 2020 SR1 deployed on HTTPS.

Procedure

1. Open GroupShare console => set External Server Address to the correct URL with HTTPS.
2. Go to IIS.
3. On the Edit Site Binding page:

The screenshot shows the 'Edit Site Binding' dialog box. It has three main sections: 'Type', 'IP address', and 'Port'. The 'Type' dropdown is set to 'https'. The 'IP address' dropdown is set to 'All Unassigned'. The 'Port' text box contains '443'. Below these is the 'Host name' text box, which is empty. There is a checkbox for 'Require Server Name Indication' which is unchecked. At the bottom, there is an 'SSL certificate' dropdown set to '-SHA2', with 'Select...' and 'View...' buttons next to it.

- a. Select the HTTPS type and the correct port.
- b. Select the correct SSL certificate.

Run time settings on the client

Applying the settings described above enables a client-server connection to be HTTPS.

When you run the client program (for example, Trados Studio) and select a server, the client will allow you to choose whether to use HTTPS for the new connection.

Disable HTTP binding

1. Comment out HTTP endpoints

For all three services listed in Enabling and Disabling Endpoints, comment out the endpoint definition lines, that is, the definition lines headed by the following comments:

- `<!-- Identity Router http endpoint -->`
- `<!-- Issued Token Router http endpoint -->`
- `<!-- Discovery Service http endpoint -->`

2. Edit router service behavior

Change the router service behavior to:

```
serviceMetadata httpGetEnabled="false".
```

```
<behaviors>
  <serviceBehaviors>
    <behavior name="routerServiceBehavior">
      <serviceMetadata httpGetEnabled="false" />
      <serviceDebug includeExceptionDetailInFaults="false" />
    </behavior>
  </serviceBehaviors>
</behaviors>
```

Enabling TCP Endpoints

By default, Trados GroupShare does not support TCP endpoints on IIS.

You normally use TCP endpoints if you have users on your LAN, because TCP endpoints enhance client-server communication performance.

To enable the use of TCP endpoints, edit the file `SDL\SDL Server\Platform\web.config` and uncomment the TCP endpoint definitions. These are headed by the following comment line:

```
<!-- Issued Token Router tcp endpoint -->
```

The endpoint definition has two parts:

`Tcp...RequestReply` allows client access via TCP.

`Tcp...Metadata` allows webservice querying via TCP.

Uncomment both of these parts. Also, make sure that the TCP bindings in IIS are enabled.

You do not need to modify the client.

8

Post-Installation: Configure MultiTerm

If you are not installing MultiTerm, you can skip this chapter.

If you are installing MultiTerm, you may need to configure it after you install Trados GroupShare.

Configure MultiTerm Online-Export

The default folder for file transfers between MultiTerm Online and MultiTerm Server is:
`%ProgramData%\SDL\SDLServer1\FileStore\MultiTerm`

MultiTerm Online stores all imported files and exported files in this location.

You can specify a different folder in Trados GroupShare Console from **Trados GroupShare > Settings > File Storage**

- The user account that runs the Application Service.
- The user account that runs Apache Tomcat.

If you are working with a split installation scenario, make sure to create a network location to enable import and export between MultiTerm Server and MultiTerm Online. The same read-write access conditions as mentioned above apply.

Note: In previous versions of MultiTerm, this folder was specified in Trados GroupShare Console under `%WINDIR%\Temp\Transfer`

Upgrade from earlier MultiTerm versions

Upgrading from earlier versions of MultiTerm Server

The Trados GroupShare 2020 SR1 installer automatically upgrades MultiTerm Server 2017 and 2015 to MultiTerm Server 2020 SR1.

Run the installer on each computer, starting with the Application Server.

MultiTerm Server 2017 and 2015 data is compatible with MultiTerm Server 2020 SR1.

Note: Deactivate your Trados GroupShare license before upgrading to Trados GroupShare 2020.

Before upgrading to Trados GroupShare 2020 SR1, make sure that your Trados GroupShare 2017 version is using CU10 (or higher).

Move termbase data to a new database server

Overview

The following procedure moves termbase data to a different database server. It does not conserve other MultiTerm data such as catalog objects.

1. Export the data from the existing termbase.
2. Create a termbase on the target database server.
3. Import the exported data into the new termbase.

Note: To upgrade a 2009 termbase, use the **Upgrade** wizard in MultiTerm GroupShare. *Upgrade From Earlier MultiTerm Versions.*

Detailed procedure

1. From the **Catalog** view in MultiTerm select the termbase you are moving.
2. In the **Navigation** pane, select **Definition**. From the **Catalog** menu, select **Save** to save the definition file (as a *.xdt file).
3. In the **Navigation** pane, select **Export**, and then choose one of the Export definitions available in the work pane.
4. From the **Catalog** menu, select **Process** to export the termbase data using the **Export Wizard**.
5. Run MultiTerm Desktop and connect to the desired MultiTerm server. Use the **Create New Termbase** wizard to create a new termbase, using the definition file you saved in step 2.
6. From the **Catalog** view in MultiTerm select a new termbase.
7. In the **Navigation** pane, select **Import**, and then choose one of the import definitions available in the work pane.
8. From the **Catalog** menu, select **Process** to import the termbase data using the **Import Wizard**.

Install MultiTerm Online

MultiTermOnline is a web server application that allows users to access MultiTerm Server over the Internet, through a browser interface.

About this task

You can install MultiTerm Online on the same computer as the MultiTerm Server or on a different computer.

To install MultiTerm Online, log in with Administrator privileges and do the following steps:

Procedure

1. Install Apache Tomcat 9. We recommend installing the latest version of Apache Tomcat 9. Apache Tomcat is not part of Trados GroupShare installer. On 64-bit systems, you need the 64-bit version of Apache Tomcat.
2. Run the installer and select MultiTerm Online. Run the installer to completion.
3. Copy the `MultiTerm.war` file to the `Webapps` folder of the Tomcat installation directory. This triggers the unpacking process. You do not need to restart the Tomcat service.

Note: `MultiTerm.war` is located in the `Online` folder under the MultiTerm Server installation folder (usually `%ProgramFiles%\SDL\SDL Server\SDL MultiTerm\MultiTerm17\Online`). Trados GroupShare installs the `*.war` file alongside native 64-bit components, in the `Program Files` folder. All the other Trados GroupShare and MultiTerm components are installed in `Program Files (x86)` folder.

4. To specify the location and port number of the SDL Anywhere router, edit the properties `mtonline.router.host` and `mtonline.router.portNumber` in the file `mtonline.properties`, as described in the next section, "Configure Multiterm Online" on page 65.
5. Run **Configure Tomcat** as an Administrator (usually you can find this from the Start menu under **Apache Tomcat**) and click the **Java** tab.

- Add the following line in the **Java Options** box:

```
-Djava.library.path=MultiTermJNIConnectorPath
```

Here `MultiTermJNIConnectorPath` is the folder which contains the `SDL.MultiTerm.Client.JNIConnector.dll` file (usually `$ProgramFiles\SDL\SDL Server\SDL MultiTerm\MultiTerm17`.)

Example:

```
-Djava.library.path=C:\Program Files\SDL\SDL Server\SDL MultiTerm\MultiTerm17
```

- Add the following line:

```
-Dorg.apache.el.parser.SKIP_IDENTIFIER_CHECK=true
```

6. Restart the Tomcat service.

Note: For Upgrade users: When distributing the new `MultiTerm.war`, all content of the `%ProgramFiles%\Apache Software Foundation\Tomcat X.0\webapps\multiterm` folder is overwritten. If necessary information or customization are required for further reference (e.g. to rebuild new profiles of layouts) ensure you make a backup of the `%ProgramFiles%\Apache Software Foundation\Tomcat X.0\webapps\multiterm` folder before extracting the `MultiTerm.war`.

Note: (optional) If you run the application with Tomcat 9.0 or higher and you are using Internet Explorer, go to the `conf` folder under the Tomcat folder example (`C:\Program Files\Apache Software Foundation\Tomcat 9\conf`) and edit the `context.xml` file adding the following inside the Context tag: `<CookieProcessor className="org.apache.tomcat.util.http.LegacyCookieProcessor" />`. This is required for Internet Explorer because the browser does not work with the new cookies implementation. The `CookieProcessor` tag is pointing to an older version of implementation that Internet Explorer handles.

Configure MultiTerm Online

You can change most MultiTerm Online settings from MultiTerm Online, in the **Administration view**.

Home Terms Termbase Management Administration

Overview Site Configuration Automatic Login User Profiles Job Administration

MultiTerm Online Administration Overview

You are logged in as a MultiTerm Administrator and you can customize MultiTerm Online. This page shows how the web server is currently set up. Click the **Help** button for more information about the items in the Administration menu or click on an individual menu item. If you do not have the rights to modify the `mtonline.properties` file, contact your system administrator.

About MultiTerm Online Setup

MultiTerm Router URL:	127.0.0.1
Session timeout (in minutes):	30
Initial GUI language:	en
Show edit buttons in toolbar:	true
Support Mailto Address:	https://www.trados.com/support
Allow passwords in links:	false
Automatically select all termbases:	false
Display verbose errors:	true
Remote file transfer folder:	Refer settings.xml on MultiTerm Server(MultiTerm\MTJobsSettings\jobsFolderLocation)

See next section for information about using SSL in MultiTerm Online.

However, to change some settings, you need to edit the following file:

`tomcatfolder\webapps\multiterm\WEB-INF\mtonline.properties` Where `tomcatfolder` is the folder of the Apache Tomcat Server installation.

The following table lists these settings.

Setting	Description
<code>mtonline.router.host</code>	<p>Specifies the name of the SDL Anywhere server. Default is 127.0.0.1 "localhost" is not supported.</p> <p>Change the host value to the full server name if SDL Anywhere server is configured to run on HTTPS.</p>
<code>mtonline.router.path</code>	<p>Specifies any subfolders in the URL of the website where the Trados GroupShare server is deployed.</p> <p>Default is empty, meaning that the Groupshare administrator deployed the GroupShare server to a URL which does not contain any subfolders.</p>
<code>mtonline.router.portNumber</code>	<p>Specifies the port number for the SDL Anywhere server Default 80.</p> <p>Change port number to 443 if SDL Anywhere is configured to run on https. If SDL Anywhere is running on https on a non-standard port, specify the port number here and add https:// as a prefix to the server name mentioned above.</p>
<code>mtonline.webservice.sessionTime</code>	<p>Specifies the number of minutes that an inactive user remains logged in to MultiTerm Online.</p> <p>This setting should correspond to the setting in the <code><session-timeout></code> element in the file <code>web.xml</code>, in the same folder as <code>mtonline.properties</code>.</p> <p>Minimum is 2.</p> <p>Default is 30.</p>
<code>mtonline.webservice.language</code>	<p>Specifies the MultiTerm Online user interface language. Valid values are: <code>en</code> <code>de</code> <code>fr</code>.</p> <p>Default is <code>en</code>.</p>
<code>mtonline.webservice.editEnabled</code>	<p>Specifies whether the MultiTerm Online toolbar displays Editing tools. Editing tools allow termbase entries to be edited.</p> <p>Default is <code>true</code>.</p>
<code>mtonline.webservice.supportAddress</code>	<p>Specifies an email address or website for the Contact Support link.</p> <p>Default is http://www.sdl.com/support/</p>

Setting	Description
<code>mtonline.webservice.enableLinkPassword</code>	<p>If true, MultiTerm Online will use any password included in a link URL. If false, MultiTerm Online will prompt for the password.</p> <p>Default is <code>false</code>.</p>
<code>mtonline.webservice.displayVerboseErrors</code>	<p>Specifies whether MultiTerm Online displays verbose error messages.</p> <p>This is primarily a support tool, not an end user tool.</p> <p>Default is <code>false</code>.</p>
<code>mtonline.webservice.toggleFullForm</code>	<p>If True, the default display for editing termbase entries is to show all available fields. If false, only used fields are displayed.</p> <p>Default is <code>false</code>.</p>
<code>mtonline.webservice.publicHost</code>	<p>Specifies the external web address that the user will use to access MultiTerm Online. Required if MultiTerm Online is behind a reverse proxy.</p> <p>Default is <code>empty</code>.</p>

Configuring MultiTerm Online to use SSL

Procedure

- Using the Certificates MMC snap-in, export the SSL certificate (and its full certificate chain if there is one) into a PKCS12 keystore (a PFX file in Windows). It is important to include the Private Key for the certificate. The Export Certificate wizard will prompt for a password to use to encrypt the keystore and this password will be used in the next step, so you may want to take a copy.
- Edit the `conf\Server.xml` file in the Tomcat installation folder, as follows:
 - Uncomment the SSL HTTP connector definition.
 - In the SSL HTTP connector definition, add the following parameters:

```
SSLEnabled="true"
keystoreFile="<full pathname for the stored PKCS12 keystore file>"
keystorePass="<password that you used to encrypt the file>"
keystoreType="PKCS12"
```

- If you chose Native option when you installed Tomcat, disable the APR listener by commenting out the following line:

```
<Listener className="org.apache.catalina.core.AprLifecycleListener"
/>
If you do not do this, any attempt to access the MultiTerm logon
page will produce an HTTP 500 error with the detail:
```

```
ssl_error_rx_record_too_long.
```

3. Restart Tomcat.

SSL HTTP connector definition example:

```
<Connector port="8443" maxHttpHeaderSize="8192"
maxThreads="150" minSpareThreads="25" maxSpareThreads="75"
enableLookups="false" disableUploadTimeout="true"
acceptCount="100" scheme="https" secure="true"
clientAuth="false" sslProtocol="TLS"
SSLEnabled="true"
keystoreFile="C:\Program Files\Apache Software Foundation
\SelfSSLCert.pfx"
keystorePass="MyPassword"
keystoreType="PKCS12" />
```

Troubleshoot browser connection to MultiTerm Online

First, ensure that the database server, MultiTerm Server, SDL Anywhere and MultiTerm Online components are in place.

About this task

Tip: RWS recommends that you create a sample termbase before checking the online connection.

If these are in place, check each step of the connection between a client browser and MultiTerm Online, as follows:

Procedure

1. In your browser, enter the MultiTerm Online URL, for example *http://servername:portnumber/multiterm/* where *servername* is the name of the MultiTerm Online Server and *portnumber* is the port number that Tomcat listens on.
2. Log in to MultiTerm Online using the login for the guest user account: User name *guest*. Password *guest*.
3. MultiTerm Online displays a list of available termbases; select the termbase that you created. If the termbase page opens, all the connections between MultiTerm Online, MultiTerm Server and the database server are working correctly.

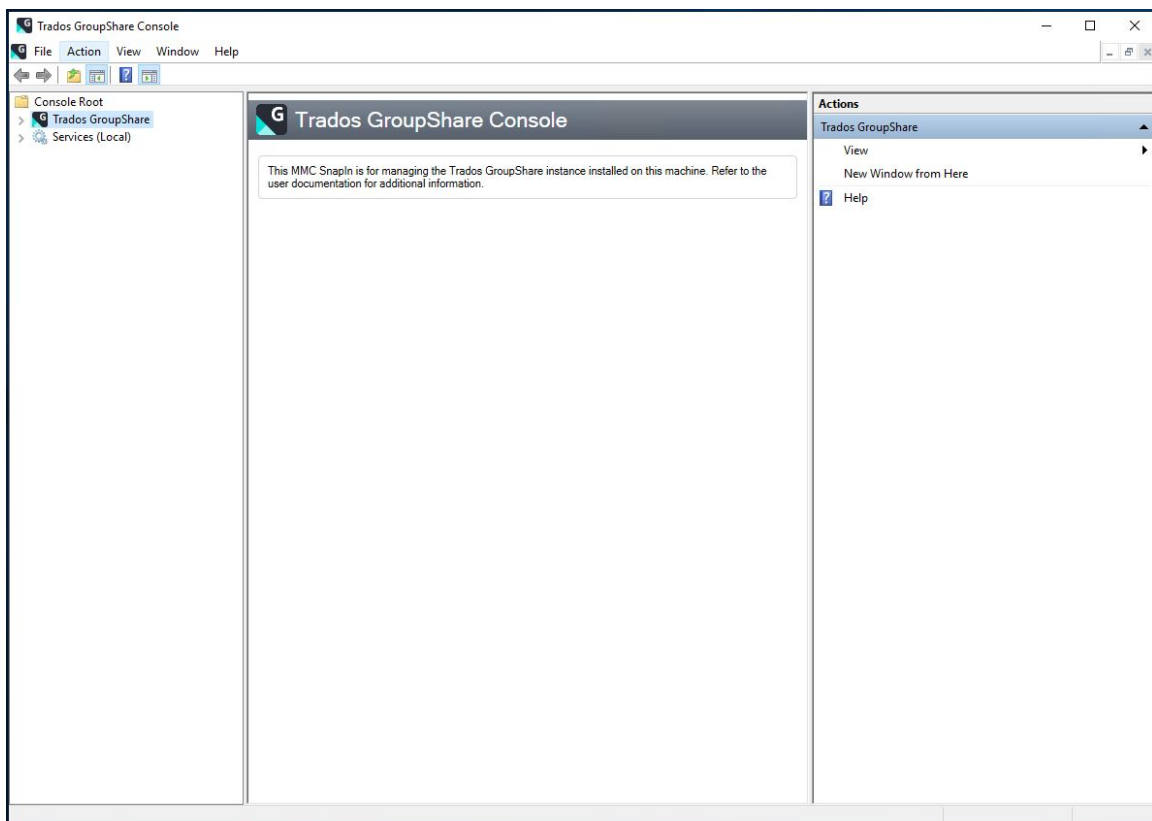
Also, for diagnostic purposes, set `mtonline.webservice.displayVerboseErrors=true` in the file `mtonline.properties` (as described in the "Configure MultiTerm Online" on page 65 section) and restart Tomcat server. The error messages are displayed in the browser.

Where to change MultiTerm

To display and change MultiTerm server settings, use the Trados GroupShare Console, which is installed on any Trados GroupShare machine that includes the *Application Server* role.

To find the program search for Trados GroupShare Console 2020 SR1 under Windows **Start > All Programs**.

For more information, see the help installed with Trados GroupShare Console.



9

Post-installation: Configure TM Server

If you are not installing TM Server, you can skip this chapter.

If you are installing TM Server, you may need to configure it after you have installed Trados GroupShare.

Overview: Upgrading from earlier TM Server Versions

Upgrading from TM Server 2017

Trados GroupShare 2020 SR1 upgrades TM Server 2017 to TM Server 2020 SR1.

Run the installer on each computer, starting with the application server.

TM Server 2017 data is compatible with TM Server 2020 SR1.

Note: Deactivate your Trados GroupShare license before upgrading to Trados GroupShare 2020 SR1. Before upgrading to Trados GroupShare 2020 SR1, make sure that your Trados GroupShare 2017 version is using CU10 (or higher).

Use Translation Memories Created by Previous TM Server Versions

Translation memories created by TM Server 2011 are compatible with TM Server 2020 SR1.

In TM Server, translation memories are held in containers, so for TM Server 2020 SR1 to access translation memories, you need to register the containers of those translation memories with TM Server 2020 SR1.

Note: You do not register each translation memory separately; when you register a container that contains translation memories, you thereby register all translation memories in the container.

Post-Upgrade: Check and Decommision Previous Versions

To check access to the user details and translation memories, log in to Trados GroupShare as an administrator.

For information on administrator log in, see "Reference " on page 91.

For more information on viewing translation memories and user details after you have logged in, see the .

When you have confirmed that you have imported user details and that you can access translation memory from a browser, check that you can do the same from Trados Studio or MultiTerm as appropriate, then decommission your older versions of TM Server.

10

Post-installation: Configure Notification Service

Notification Service is not installed in all scenarios. Skip this chapter if Notification Service is not present on your installation.

To defend against cross-site WebSocket hijacking a new setting was added to Notification Service configuration file, that needs to be updated manually if the website is to be accessed via more than one URL.

The default location of the configuration file is C:\Program Files\SDL\SDL Server\Notification Service\appsettings.json. The setting under Host.AllowedOrigins is set by default to the external server address. It supports a list of comma separated values. Requests to Notification Service are validated and if the origin is not in the list of AllowedOrigin the response will be HTTP 403 Forbidden.

If the website is to be accessed via more than one URL, perform the following steps:

1. Open the Notification Service appsettings.json (default folder: C:\Program Files\SDL\SDL Server\Notification Service) for editing.
2. Set Host.AllowedOrigins to a comma separated list of all origins (scheme, hostname, and port) used to access the GroupShare website (e.g. "AllowedOrigins": "https://servername.company.corp,http://servername:81").

11

Post-installation: Check service health

You can check the status of service health after installation.

About this task

Health endpoints work if the port for each service is open. Some services might appear DOWN if the RabbitMQ management plugin is not installed, as the services call RabbitMQ on port 15672 to verify the connection.

Procedure

1. Check core services:
 - a. Authenticate via a POST request with valid credentials on `http://<host>/api/authentication/token`.
 - b. Check the license status via a GET request to `http://<host>/api/management/v2/license`
2. To verify the status of each individual service do an HTTP GET request to the URL mentioned in the following table:

GroupShare Health Status	URL
Application Service	<code>http://localhost/api/management/health</code>
Execution Service	<code>http://localhost:41233/api/projectserver/execution/health</code>
TM Service	<code>http://localhost:41235/api/tmservice/health</code>
ResourceManagement Service	<code>http://localhost:41236/api/resource-management/v1/health</code>
Language Resource Service	<code>http://localhost:41238/api/language-resource-service/health</code>
WebHooks Service	<code>http://localhost:41239/api/health</code>
Notification Service	<code>http://localhost:41240/notification-service/health</code>
FGA Service	<code>http://localhost:41250/api/fga-service/health</code>
Translation Model Service	<code>http://localhost:41251/api/translation-model-service/healthh</code>
BCM Service	<code>http://localhost:41253/api/statistics/health</code>
Statistics Service	<code>http://localhost:41254/api/statistics/health</code>
Editor Service Router	<code>http://localhost:41255/api/esrouter/health</code>
Editor Service	<code>http://localhost:41256/api/es/health</code>
Translation Service	<code>http://localhost:41258/health</code>
Feedback Service	<code>http://localhost:41259/health</code>
Custom Properties Service	<code>http://localhost:41261/api/properties-service/health</code>

GroupShare Health Status	URL
Verification Service	<code>http://localhost:41262/api/verification/health</code>
Reporting Service	<code>http://localhost:41263/api/reports/health</code>
Logging Service	<code>http://localhost:41265/health</code>
TM Service Agent	<code>http://localhost:41266/api/tmserviceagent/health</code>
T&A Service	<code>http://localhost/ta/api/health</code>

12

Post-installation: Configure Okta SAML2 authentication

You can enable the Okta SAML2 provider for your Trados GroupShare instance.

Setting up an Okta account

SAML2 SSO with Okta is one of several SSO options that Trados GroupShare supports. To configure additional identity providers like Auth0, JWT-based flows (supporting OpenID Connect), or a custom authentication flow, contact our Professional Services. Starting with GroupShare 2020 SR1 CU8 we support both IdP and SP initiated SAML2 SSO login flows.

Before you begin

Before you start configuring the Okta provider, you first need to create an Okta account.

Procedure

1. Go to the Okta website and sign up for an account: <https://www.okta.com/free-trial/> or <https://developer.okta.com/signup/> /
After completing the signup, you will receive a confirmation email.
2. Get the link to your Okta account from the signup confirmation email (<https://dev-<nnn>.okta.com/>).

Setting up an application in Okta

The next step to add the Okta SSO provider to Trados GroupShare is to create a new application in your Okta account.

Procedure

1. Follow the instructions from https://developer.okta.com/standards/SAML/setting_up_a_saml_application_in_okta to add a new application to your Okta account.
 - In the Configure SAML step of the Create SAML Integration wizard, fill in the **Single sign on URL** with `http://<server-name>/TokenExchange`. This is the location where the SAML assertion will be sent as a POST request.
 - Fill in `GroupShare` as the **Audience URI (SP Entry ID)**.
 - In the Attribute Statements section, add optional attributes. These will be sent with the SAML assertion so that Trados GroupShare can extract the following attribute statements for configuring user details:

Name	Format	Value
FirstName	Unspecified	user.firstName
LastName	Unspecified	user.lastName
Email	Unspecified	user.email

2. After you finish the wizard and the configuration is done, go to the **Sign On** tab on the application's detail page. Download the XML file from the **Identity Provider metadata** link. You will need this later on.
3. Go to **Directory > People** and add people to the directory.

People are users that can be assigned to application in Okta later on (i.e. used to sign in through Okta).

4. Go back to the application and assign the added users to the Trados GroupShare app.
5. Optionally, set up a group or role membership to ensure automatic assignment of user roles on log in. For more information, see the "Configuring Application Service for SSO" on page 85 section and the [Manually assign people to a group](#) topic in the Okta documentation.

Configuring the Trados GroupShare Web UI

You need to configure Trados GroupShare Web UI to work with third-party login providers.

Procedure

1. GO to `C:\Program Files (x86)\SDL\SDL Server\Web\resources` and edit `loginProvidersConfig.json` as in this example:

```
[
  {
    "name": "GroupShare",
    "url": "GroupShare"
  },
  {
    "name": "{okta}",
    "signInUrl": "{Sign-in URL}",
    "signOutRedirectUrl": "{URL to redirect to after sign-out}"
  }
]
```

Description of JSON properties:

- `name` - specifies what is displayed in the **Login provider** field on the Log in screen.
- `signInUrl` - the URL where the user will be redirected to authenticate. If configuring - IdP initiated SAML SSO - set this value to be equal to the IdP's URL for sign-in that creates a SAML response to be consumed by GroupShare. In Okta you can find this as the "App Embed Link". - SP initiated SAML SSO - set this value to "{GroupShare Server URL}/TokenExchange/InitiateSaml".
- `signOutRedirectUrl` - any URL where the user will be redirected after logging out.

Setting up the Token Exchange Web application

The installer automatically deploys TokenExchange as a web application.

Before you begin

After installing Trados GroupShare, check that application works by accessing `http://<GroupShare-server>/TokenExchange`.

You should see a blank screen with No SAML Authn response received message. This is the endpoint that Okta will send the SAML response to. This will convert it to an OAuth bearer token and will redirect to Trados GroupShare Web UI.

About this task

To configuring the Token Exchange:

Procedure

1. Go to `C:\Program Files (x86)\SDL\SDL Server\Web\TokenExchange` and open the `web.config` XML file .
2. Update `web.config`, under **appSettings** correct the **GroupShareUrl** value, to point to the Web UI address:

```
<add key="GroupShareUrl" value="{GroupShare Server URL}" />
```

3. Update `saml.config` - correct the `GroupShareUrl` value, to point to the Web UI address:

ServiceProvider section

```
<ServiceProvider Name="GroupShare"
  Description="Token exchange"
  AssertionConsumerServiceUrl="AssertionConsumerServiceUrl="{GroupShare Server URL}"/TokenExchange">
```

PartnerIdentityProvider section

```
<PartnerIdentityProvider Name="http://www.okta.com/exkd1jxbtoCCFeImW0h7"
  Description="Okta"
  DisableAudienceRestrictionCheck="true"
  SignAuthnRequest="false"
  SignLogoutRequest="true"
  SignLogoutResponse="true"
  WantLogoutRequestSigned="true"
  WantLogoutResponseSigned="true"
  SingleSignOnServiceBinding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-POST"
  SingleSignOnServiceUrl=""
  SingleLogoutServiceBinding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-POST"
  SingleLogoutServiceUrl="">
  <PartnerCertificates>
    <Certificate FileName="Certificates\okta.cer" />
  </PartnerCertificates>
</PartnerIdentityProvider>
```

To correct the values in this section, use the information from the Identity Provider metadata file, that you downloaded from Okta. Correct the `Name (=entityID in metadata file)` property using the metadata file. `PartnerCertificates` element is for inbound signature verification.

4. Update the certificates under `Certificates` folder. Go to Okta and under Trados GroupShare application, Sign On method page, select **View Setup Instructions**. This has the SSO URL that you could use above. Download the certificate (`okta.cert`) and

place it under the Certificates folder. Make sure that the `FileName` in the `PartnerCertificates` element in `saml.config` matches the path correctly.

5. (Split installation only) On the machine where the Web server is installed, add the following two registry keys, with their respective string values:
 - a. `HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\SDL\Platform\Rest\Authorization:ServerUrl` "http://{appServer}:{port}/authentication/api/token"
 - b. `HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\SDL\Platform\Rest\SamlToken:ServerUrl` "http://{appServer}:{port}/authentication/api/samltoken"
 - {appServer} is the server where Sdl.Application service is installed.
 - {port} is the port where Sdl.Application service is running. Default is 41234.
6. For HTTPS, secure the cookie used between login redirects by opening the `AuthnRedirect.cshtml` file under `C:\Program Files (x86)\SDL\SDL Server\Web\TokenExchange\Views\AuthnResponse`, and adding the `Secure` flag for the following cookies:

```
<script type='text/javascript'>
  document.cookie = 'sso_user=@Model.Username;secure;path='/';
  document.cookie = 'sso_token=@Html.Raw(@Model.Token);secure;
  path='/';
  document.cookie = 'sso_saml_token=@Html.Raw(@Model.SamlToken);
  secure;path='/';
  window.location.replace('@Html.Raw(@Model.GsUrl)');
</script>
```

Configuring automatic assignment of user roles in SSO login flows

Before you begin

To configure the Application Service for SSO:

Procedure

1. GO to `C:\Program Files (x86)\SDL\SDL Server\Application` and open the `ApplicationService.exe.config` file.
2. Add the GUID of your organization by replacing the default value `00000000-0000-0000-0000-000000000000` in the `key= "defaultUserOrganizationId"` parameter.

You can find the GUID of an organization in the database table `[SDLSysSystem].[sts].[ResourceGroup]`.

```
<add key="IdentityProviders" value="[URL specified in the
PartnerIdentityProvider section]" />
<add key="defaultUserOrganizationId" value="00000000-0000-0000-0000-
000000000000" />
```

3. If you want to create users automatically, enable the following parameter: `<add key="CreateIdpUser" value="true" />`.
4. Add the following element in the `<configuration>` element, after `<configSections>` (replace values as needed):

```
<identityProviderConfiguration>
  <identityProviders>
    <identityProvider
      name="{Identity Provider Name}"
      displayName="{Idp display name - as desired}"
      signInUrl="{Sign-In URL}" />
    </identityProviders>
  </identityProviderConfiguration>
```

5. Check that the `configSections` contains the following:

```
<section name="identityProviderConfiguration" type="Sdl.StudioServer.
Authorization.AuthorizationServer.RestApi.IdentityProviders.Configura-
tion.IdentityProviderConfigurationSection, Sdl.StudioServer.Authoriza-
tion.AuthorizationServer.RestApi" />
```

6. To log into Trados GroupShare 2020 SR1 from Trados Studio 2022 SR2 (CU02 or later) using SSO, add the following in the `ApplicationService.exe.config` configuration, replacing the relevant data in the `name`, `displayName` and `signInUrl` attributes:

```
<identityProviderConfiguration>
  <identityProviders>
    <identityProvider
      name="http://www.Okta.com/exkd1jxbtoccFeImW0h7"
      displayName="{Okta}"
      signInUrl="https://dev-<nnn>.Okta.com/app/sdldev<nnn>_
groupsharewebui_1/exkd1jxbtoccFeImW0h7/sso/saml" />
    </identityProviders>
  </identityProviderConfiguration>
```

Automatic role assignment

Starting with the 2020 CU6 release, Trados GroupShare supports the automatic assignment of user roles in SSO login flows. To enable this, set up a group or role membership in the identity provider:

Procedure

1. GO to `C:\Program Files (x86)\SDL\SDL Server\Application` and open the `ApplicationService.exe.config` file.
2. To update user's roles automatically, enable `<add key="UpdateIdpMembershipInfo" value="true" />`. This ensures that user roles are automatically updated in Trados GroupShare when users are moved to a different group in Okta.
3. To ensure users are assigned the correct role when logging into Trados GroupShare using Okta:
 - a. Add users to a relevant group in Okta. For example: `CorpTranslator`. For information about working with Okta group roles, see the [Okta documentation](#).
 - b. Configure the Group Attribute Statement for your Trados GroupShare app configuration. This will pass all the groups to which the authenticated user belongs. Example configuration:

Name	Name Format	Filter
roles	Unspecified	Matches regex: (.*)

For more information see [How to define and configure a custom SAML attribute statement](#) in the Okta documentation.

- c. Assign the group (for example `CorpTranslator`) to the Trados GroupShare Application. For information on how to do this, see [Assign Group to Application](#) in the Okta documentation.
- d. Go to `C:\Program Files (x86)\SDL\SDL Server\` and enable the following property in the `ApplicationService.exe.config` file: `<add key="CreateIdpUser" value="true" />`. This will automatically create users on login
- e. Go to `C:\Program Files (x86)\SDL\SDL Server\Application` and map the user groups in the `IdpGroupMapConfig.xml` file. For example, in the sample below, a user belonging to the `CorpTranslator` role in Okta, will be logged in as a `Translator` role in `OrgA` and `Guest` in `Suborg`:

```
<?xml version="1.0" encoding="utf-8" ?>
<!--this is a sample of idpGroupMap, change the map and rename the
file by removing '_sample' of the file name -->
<Mappings>
  <Mapping IdpGroup = "CorpTranslator">
    <GSMembership OrganizationPath="/OrgA" Role="Translator" />
    <GSMembership OrganizationPath="/OrgB/Suborg" Role="Guest" />
  </Mapping>
  <Mapping IdpGroup = "Admin">
    <GSMembership OrganizationPath="/" Role="Administrator" />
  </Mapping>
</Mappings>
```

Note:

- make sure to create the organizations before users log into Trados GroupShare via Okta.
- restart the SDL Application Service after creating the organizations or changing any properties in the `ApplicationService.exe.config` file. Otherwise, role assignment will not work.
- make sure to map the Trados GroupShare membership organization path and not the organization name or its ID.

- f. Go to `C:\Program Files (x86)\SDL\SDL Server\Web\TokenExchange\WebConfig.com` and set the value of the `IdpGroupSamlAttributeName` property to the value of the name attribute statement specified in step 3b.

Changing the client secret

If an SSO login provider is configured, the client secret can be used to authenticate with the server and to retrieve a bearer token (see “Testing authentication endpoint with client_credentials grant” on page 0). It is mandatory that the client secret is changed in any production environment where an SSO login provider is configured.

Encrypt client secret

About this task

In the `Package Cache` folder there's a utility called `Configurator.exe`. You can use this utility in the command line with the `encrypt` argument to encrypt a password for the configuration files.

Procedure

1. Choose a string as a client secret.
2. On the Trados GroupShare server, open Command Prompt with administrative privileges.
3. Change to folder `C:\ProgramData\Package Cache\SDL\SDLTradosGroupShare2020`

```
cd "C:\ProgramData\Package Cache\SDL\SDLTradosGroupShare2020"
```

4. Run command:

```
Configurator.exe encrypt <client secret>
```

where `<client secret>` is the client secret.

5. Copy the last line of the output, which is the encrypted client secret consisting of Base64 characters.

Configure Application Service

Procedure

1. Open `C:\Program Files (x86)\SDL\SDL Server\Application\ApplicationService.exe.config` for editing.
2. Find the `<add key="AuthorizationClientSecret" value="[value]" />` line and replace `[value]` with the encrypted client secret.
3. Save your changes.
4. Restart the Application Service.

Configure TokenExchange

Procedure

1. Open `C:\Program Files (x86)\SDL\SDL Server\Web\TokenExchange\Web.config` for editing.
2. Find the `<add key="AuthorizationClientSecret" value="[value]" />` line and replace the `[value]` with the encrypted client secret.
3. Save your changes.



Reference

Reference information.

REST API information

REST API information is hosted in Swagger. The information can be used interactively to learn more about the actions that can be performed on projects, translation memories, termbases and any other resources.

Interactive REST API endpoints documentation: <http://host/documentation/api/index>

GroupShare kit

The kit includes two types of available information: .NET library for Trados GroupShare REST API and TM Search and Terminology Editing using REST API.

The following information is available:

- .NET library for REST API: <https://github.com/sdl/groupsharekit.net>
- TM Search and Terminology Editing using REST API:
<http://groupsharekitsampleweb.azurewebsites.net/Account/Login?ReturnUrl=%2F>

Configuration Information

Trados GroupShare program installation

By default, Trados GroupShare programs are installed under:

- %ProgramFiles%\SDL\ (64-bit machines)
- %ProgramFiles(x86)%\SDL\ (32-bit machines)

Note: The `MultiTerm.war` file which is used by the Tomcat service is installed alongside native 64-bit components, under `%.ProgramFiles%\SDL\`.

Log files and other program data

These files are installed under: `%ProgramData%\SDL\Service\Logs`.

Registry keys

The install creates and sets registry keys under: `HKEY_LOCAL_MACHINE\SOFTWARE\SDL\` (32-bit machines)

`HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\SDL\` (64-bit machines)

Unpacked installation files

By default, the installer unpacks the installation files into folders under: `%ProgramData%\Package Cache\SDL\`.

Note: These files are needed for the installation and also for uninstalling. If you delete these files, you will need to download and extract them again to uninstall Trados GroupShare.

Application Server - restart options

The Application Server may restart or not depending on the changes you make to the configuration or the licensing options.

Generally, the Application Server restarts once the activation screen is closed.

The Application Server restarts automatically if:

- a different license is activated
- the same license is activated after changes to its configuration

The Application Server does not restart automatically if:

- the license is only viewed
- the license is deactivated and (and no trial license is active)

Configuring ports for Trados GroupShare

Trados GroupShare relies on specific network ports in order for it to run correctly and be accessed internally. This documentation outlines the default TCP ports required for incoming traffic. These default values can be customized to match your needs.

Make sure to allow access to ports based on configuration needs. Certain ports may require outside traffic access, while others may only be necessary for split installation.

Simple installation

When all servers (web, application, SQL, and RabbitMQ) are installed on the same machine, incoming traffic from clients must use specific ports.

Clients include:

- RWS desktop applications (Trados Studio, MultiTerm Desktop, Passolo);
- browsers accessing (GroupShare website, MultiTerm Online);
- any third-party clients using the GroupShare RestAPI.

Port	Description	Condition
80	Standard HTTP Port for Groupshare	HTTP is used by users to connect to GroupShare
443	Standard HTTPS Port for Groupshare	HTTPS is used by users to connect to GroupShare
808	Optionally used for net.tcp binding for WCF	net.tcp binding is enabled in IIS
8080	Default Apache Tomcat port for Multiterm Online	MultiTerm Online is installed and used via HTTP
8443	Apache Tomcat HTTPS port for Multiterm Online	MultiTerm Online is installed and used via HTTPS
41000	Port used by Application Service (WCF)	Windows authentication used in Trados Studio or MultiTerm Desktop (Not required if the option "Authenticate with different user" is used by all users.)

Split installation

Installations with web server, application server, SQL Server, and/or RabbitMQ installed on separate machines require these ports:

Open Ports Web Server

The web server (where IIS and optionally Apache Tomcat are installed) requires these open ports:

Port	Description	Traffic incoming from	Condition
8443	Apache Tomcat HTTPS port for MultiTerm Online	Clients (browser)	MultiTerm Online is installed and used via HTTPS
8080	Default Apache Tomcat port for MultiTerm Online	Clients (browser)	MultiTerm Online is installed and used via HTTP

Port	Description	Traffic incoming from	Condition
808	Optionally used for net.tcp binding for WCF	Clients; Application Server	net.tcp binding is enabled in IIS
80	Standard HTTP port for GroupShare	Clients; Application Server	HTTP is used by users to connect to GroupShare
443	Standard HTTPS port for GroupShare	Clients; Application Server	HTTPS is used by users to connect to GroupShare

Open Ports Application Server

The GroupShare services require the following ports to be open on the application server. It is important that you do not open any ports numbered 41234 or higher to traffic that may be potentially hostile.

Ports used internally, all TCP (Application Server)	Description	Traffic incoming from	GS version
41265	Port used by Logging Service	Web Server	
41263	Port used by Reporting Service	Web Server	
41262	Port used by Verification Service	Web Server	
41261	Port Custom Property Service	Web Server	
41260	Port used by Translate and Analysis Service	Web Server	
41256	Port used by Editor Service	Web Server	
41255	Port used by Editor Service Router	Web Server	
41240	Port used by Notification Service (SignalR)	Web Server	GroupShare 2020 SR1
41239	Port used by WebHooks Service	Web Server	
41238	Port used by Language Resource Service	Web Server	

Ports used internally, all TCP (Application Server)	Description	Traffic incoming from	GS version
41237	Port used by Authentication Service (part of Application Service)	Web Server	
41236	Port used by Resource Management Service	Web Server	
41235	Port used by TMService	Web Server	
41234	Port used by the Trados GroupShare REST API	Web Server	
41000	Port used by Application Service (WCF)	Web Server and Clients, only if Windows authentication is used in Trados Studio or MultiTerm Desktop. Not required if clients use the Authenticate with different user option.	

Open Ports Infrastructure Servers

Machines where SQL Server or RabbitMQ are installed require the following ports. If RabbitMQ is installed on the same machine as the application server, no RabbitMQ ports need to be opened.

Ports used internally, all TCP (Application Server)	Description
1443*	Port used by SQL Server database engine
5672	Port used by RabbitMQ
15672	Port used by RabbitMQ Management

* Default port (may vary in several scenarios). See [Configure the Windows Firewall to allow SQL Server access](#) for details on which ports are actually required to be opened.

Internal Ports Application Server

The application server is using some ports that are not needed for regular GroupShare functionality. These ports should not be opened for potentially harmful traffic.

Port	Description	Remarks	GS version
41233	Port used by Execution Service	(1)	
41244	HTTPS port used by the SDL Trados GroupShare REST API	(2)	
41245	HTTPS port used by TMSservice	(2)	
41246	HTTPS port used by Management Service	(2)	
41247	HTTPS port used by Authentication Service	(2)	
41248	HTTPS port used by Language Resource Service	(2)	
41250	Port used by Fine Grained Alignment Service	(1)	
41251	Port used by Translation Model Service	(1)	
41253	Port used by BCM Service	(1)	
41254	Port used by Statistics Service	(1)	
41258	Port used by Translation Service	(1)	
41259	Port used by Feedback Service	(1)	
41266	Port used by TM Service Agent (info and health endpoint only)	(1) (3)	GroupShare 2020 CU09
41333	HTTPS port used by Execution Service	(2)	
41350	HTTPS port used by Fine Grained Alignment Service	(2)	
41351	HTTPS port used by Translation Model Service	(2)	

Port	Description	Remarks	GS version
41353	HTTPS port used by BCM Service	(2)	
41354	HTTPS port used by Statistics Service	(2)	
41355	HTTPS port used by Editor Service Router	(2)	
41356	HTTPS port used by Editor Service	(2)	
41357	HTTPS port used by File processing service	(2)	
41360	HTTPS port used by Translate and Analysis service	(2)	
41363	HTTPS port used by Reporting Service	(2)	

(1) You can open these ports to access the health and information endpoints of the services.

(2) The application server does not use HTTPS ports, but the web server supports incoming communication through HTTPS. However, HTTPS is not used for communication between the web server and the application server.

(3) This port was introduced in GS 2020 CU9 with a value of 5000. Starting from GS CU10, the value will be changed to 41266.

Window User Accounts

Installer created user accounts and groups

Groups and privileges

The installer creates the `SDL Server Users` Windows group, which has read-only permissions to the `system32\inetsrv\config\` folder, to access the `redirect.config` file.

The user account that runs SDL services has the privilege "Log on as a service".

Group assignment

When you install MultiTerm, the installer puts the MultiTerm user account into the group SDL Server Users.

Resources and access

The following table shows access to resources for English language, 32-bit versions of Windows.

Other versions will have equivalent resource names.

Resource	Identity	Access level
HKEY_LOCAL_MACHINE\Software\SDL\Platform	Everyone	Full Control
C:\Windows\Temp	SDL Server Users	Full Control
C:\ProgramData\All Users\Application data\SDL	SDL Server Users	Full Control
C:\Windows\System32\inetsrv\Config IIS 7.5 only	SDL Server Users	Read Only
C:\Windows\System32\inetsrv\Config\redirection.config IIS 7.5 only	SDL Server Users	Read Only
C:\Windows\System32\inetsrv\Config\applicationHost.config IIS 7.5 only	SDL Server Users	Read Only
C:\ProgramData\All Users\Application Data\Microsoft\Crypto\RSA\MachineKeys IIS 7.5 only Only applies to the generated certificate file in this folder.	SDL Server Users	Full Control

Groupshare User Accounts

Trados GroupShare logon information

The Trados GroupShare server ensures that user credentials are valid across all its components.

A user account created in Trados GroupShare is visible in MultiTerm Administrator, and can be made a user of a termbase.

For more information about managing users in Trados GroupShare, see the Trados GroupShare Help available at [Trados GroupShare Help](#).

Installer-created Trados GroupShare user accounts

When you install Trados GroupShare, the installer creates the following Trados GroupShare users:

- System User (This is used by the server and is not for interactive users.)
- System Administrator (User name: sa, Password: sa)

Trados GroupShare standard roles

Trados GroupShare groups together permissions into roles, which are then assigned to users.

Depending on what components of Trados GroupShare you install, the following standard roles are automatically created during installation:

- Administrator
- Power User
- Translator
- External Translator
- Guest
- Project Manager
- MultiTerm Guest

Import user details into Trados GroupShare

Trados GroupShare includes a utility program, **User Import Tool**.

This imports user and organization details into Trados GroupShare from Windows Active Directory (or any other LDAP Server).

Running the User Import Tool

Run the *User Import Tool* on same computer as the Application Server and use the same user account that you used to run the Trados GroupShare installer.

The *User Import Tool* is in the same folder as Trados GroupShare.

When you run the tool, it prompts you to import details from an LDAP Server such as Windows Active Directory.

Importing from an LDAP Server

When you choose this option, the *User Import Tool* prompts you for a Windows domain and then displays the list of users in that domain.

You can use the standard shortcut keys to select users from the list, as follows:

- `Ctrl-click` to select multiple users
- `Shift-click` to select a range of users
- `Ctrl+A` to select all users.

The tool prompts you to provide a Trados GroupShare organization and roles for the imported users. The tool imports the user details (name, description and encoded password), assigns the users to the specified organization, and gives them the specified roles.

Note: You might find it useful to run the *User Import Tool* a number of times. Each time you run it, you can assign to the users a different combination of organization and roles.

Password Policies

Password policy with Windows authentication

If you choose Windows authentication, you get Windows password enforcement.

Password policy with GroupShare passwords

A password for a user in Trados GroupShare must include at least one each of the following:

- An uppercase letter
- A lowercase letter
- A digit

This is by default installed, but the password complexity can be modified from GroupShare Console.

Password policy for custom accounts

Companies with a Trados GroupShare custom authentication provider plug-in can use their corporate user management system authentication to create custom user accounts and log into Trados GroupShare.

The credentials for custom users are managed outside Trados GroupShare. Trados GroupShare does not impose any format requirements for passwords created for custom users.

Password policy for service accounts

Tip: RWS recommends that the password for the server application user account, and for other service accounts, should never expire. This is because, if the service password does expire, the service will not work and diagnosis can be difficult.

Run Time Access To Trados GroupShare

From a browser

In a web browser, enter the computer name of the web server that you provided in the installation. If you provided a host header in the installation, use that.

For example, enter:

- `http://www.example.com/sdltrados/groupshare` if you have used a custom location URI.
- `http://computername` if you have not specified a custom location or a host header.

GroupShare displays its start screen and prompts you for a user name and password. For more information, see the Trados GroupShare Help at [Trados GroupShare Help](#).

From Trados Studio or MultiTerm

In Windows, run the client application, Trados Studio or MultiTerm.

When the application starts, click **File > Setup > Servers**, and choose the action (**Add, Edit** or **Check Server Availability**). Provide the connection details as required.

For further details, see the online Help in Trados Studio and in MultiTerm on <http://docs.sdl.com>.

Run Time Access To MultiTerm

To open MultiTerm Server from MultiTerm Desktop

In Windows, run the MultiTerm Desktop.

This is usually under **Start > All Programs > SDL > SDL MultiTerm ...**

When the application starts, it displays the **Connect to MultiTerm Server** dialog box. Complete the dialog box as required.

To open MultiTerm Online from a browser

In a web browser, enter: `http://servername:portnumber/multiterm/`

`servername` is the name of the computer that hosts the MultiTerm Online pages.

`portnumber` is the port number used to communicate with that computer.

Digital Certificate Requirements

All GroupShare, MultiTerm Online code, and installer files are digitally signed.

Make sure your list of approved root certificates is up-to-date and includes the root certificate from the Certification Authority that generates RWS's code signing certificate.

- For computers with access to the Internet:
 - Windows Vista or later - Go to <https://www.digicert.com> . and add the new root certificate to your **Trusted Root Certification Authorities** certificate store.
 - Windows XP or earlier - Go to <http://catalog.update.microsoft.com/v7/site/Home.aspx> . and search for either `root update` or `KB931125` to find the correct cumulative Root Update package to install.
- For computers in a locked down corporate environment without access to the Internet: Follow the **Root update package installation on disconnected environments** instructions available at <http://support.microsoft.com/kb/931125> .
You can also download the specific root certificates directly from <https://www.digicert.com/digicert-root-certificates.htm> . and apply the certificates to each locked down workstation manually or by group policy. At the time of writing, GroupShare and MultiTerm Online require DigiCert Assured ID Root CA and DigiCert Assured ID Code Signing CA-1.

Uninstallation and re-installation

To modify or uninstall Trados GroupShare components

Use the Windows control panel program **Add or remove programs**, and choose GroupShare (not a GroupShare component) to uninstall or modify Trados GroupShare.

After uninstallation you can remove the Trados GroupShare registry keys and the unpacked installation files.

If you use **Add or remove programs** to modify Trados GroupShare, you can add components to Trados GroupShare, but you cannot remove components.

Re-installing Trados GroupShare

You can continue with the previous GroupShare database when you reinstall Trados GroupShare.

If you want to re-use the previous database, ensure you use the same installation details. The installation recognizes that a database already exists and uses it.

14

Acknowledgments

Trados GroupShare 2020 SR2 CU11 includes the following open-source, licensed or similar third-party software:

AlphaFS

Version: 2.2.6

Vendor: Peter Palotas, Jeffrey Jangli, Alexandr Normuradov

Copyright: Copyright (c) 2008-2018 Peter Palotas, Jeffrey Jangli, Alexandr Normuradov

License type: MIT

License details: [\[MIT\] MIT license \(MIT\)](#)

Antlr

Version: 3.5.0.2

Vendor: Sam Harwell, Terence Parr

Copyright: Copyright (c) 2011 The ANTLR Project

License type: BSD4CLAUSE

License details:

AOP alliance

Version: 1

Vendor:

Copyright:

License type: PDC

License details: <https://aopalliance.sourceforge.net/>

Apache Axis2 - Kernel

Version: 1.8.0

Vendor: Apache

Copyright: Copyright© 2020, the Apache Software Foundation. Licensed under the Apache License, Version 2.0

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Apache Commons FileUpload

Version: 1.5

Vendor: Apache

Copyright: Copyright© 2020, the Apache Software Foundation. Licensed under the Apache License, Version 2.0

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Apache Commons IO

Version: 2.11.0

Vendor: Apache

Copyright: Copyright© 2020, the Apache Software Foundation. Licensed under the Apache License, Version 2.0

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Apache Commons Lang

Version: 3.12.0

Vendor: Apache

Copyright: Copyright© 2020, the Apache Software Foundation. Licensed under the Apache License, Version 2.0

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Apache Commons Logging

Version: 1.0.4

Vendor: Apache

Copyright: Copyright© 2020, the Apache Software Foundation. Licensed under the Apache License, Version 2.0

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Apache Commons Text

Version: 1.10.0

Vendor: Apache

Copyright: Copyright© 2020, the Apache Software Foundation. Licensed under the Apache License, Version 2.0

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Apache James :: Mime4j :: Core

Version: 0.8.4

Vendor: Apache

Copyright: Copyright© 2020, the Apache Software Foundation. Licensed under the Apache License, Version 2.0

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Apache Log4j 1.x Compatibility API

Version: 2.17.1

Vendor: Apache

Copyright: Copyright© 2020, the Apache Software Foundation. Licensed under the Apache License, Version 2.0

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Apache Log4j API

Version: 2.17.1

Vendor: Apache

Copyright: Copyright© 2020, the Apache Software Foundation. Licensed under the Apache License, Version 2.0

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Apache Log4j Commons Logging Bridge

Version: 2.17.1

Vendor: Apache

Copyright: Copyright© 2020, the Apache Software Foundation. Licensed under the Apache License, Version 2.0

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Apache Log4j Core

Version: 2.17.1

Vendor: Apache

Copyright: Copyright© 2020, the Apache Software Foundation. Licensed under the Apache License, Version 2.0

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Apache Neethi

Version: 3.1.1

Vendor: Apache

Copyright: Copyright© 2020, the Apache Software Foundation. Licensed under the Apache License, Version 2.0

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

App.Metrics.Abstractions

Version: 4.3.0

Vendor: Allan Hardy

Copyright: Allan Hardy 2016

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

App.Metrics.Abstractions

Version: 4.1.0

Vendor: Allan Hardy

Copyright: Allan Hardy 2016

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

App.Metrics.Concurrency

Version: 4.3.0

Vendor: Allan Hardy

Copyright: Allan Hardy 2016

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

App.Metrics.Concurrency

Version: 2.0.1

Vendor: Allan Hardy

Copyright: Allan Hardy 2016

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

App.Metrics.Core

Version: 4.3.0

Vendor: Allan Hardy

Copyright: Allan Hardy 2016

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

App.Metrics.Core

Version: 4.1.0

Vendor: Allan Hardy

Copyright: Allan Hardy 2016

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

App.Metrics.Formatters.Ascii

Version: 4.3.0

Vendor: Allan Hardy

Copyright: Allan Hardy 2016

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

App.Metrics.Formatters.Ascii

Version: 4.1.0

Vendor: Allan Hardy

Copyright: Allan Hardy 2016

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

App.Metrics.Formatters.Graphite

Version: 4.3.0

Vendor: Allan Hardy

Copyright: Allan Hardy 2016

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

App.Metrics.Formatters.Graphite

Version: 4.1.0

Vendor: Allan Hardy

Copyright: Allan Hardy 2016

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

App.Metrics.Reporting.Graphite

Version: 4.3.0

Vendor: Allan Hardy

Copyright: Allan Hardy 2016

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

App.Metrics.Reporting.Graphite

Version: 4.1.0

Vendor: Allan Hardy

Copyright: Allan Hardy 2016

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Aspose.Cells

Version: 23.8.0

Vendor: Aspose

Copyright: © Aspose Pty Ltd 2001-2021. All Rights Reserved.

License type: Commercial

License details: <https://about.aspose.com/legal/eula>

Aspose.Diagram

Version: 23.2.0

Vendor: Aspose

Copyright: © Aspose Pty Ltd 2001-2021. All Rights Reserved.

License type: Commercial

License details: <https://about.aspose.com/legal/eula>

Aspose.Imaging

Version: 23.7.0

Vendor: Aspose

Copyright: © Aspose Pty Ltd 2001-2021. All Rights Reserved.

License type: Commercial

License details: <https://about.aspose.com/legal/eula>

Aspose.PDF

Version: 23.12.0

Vendor: Aspose

Copyright: © Aspose Pty Ltd 2001-2021. All Rights Reserved.

License type: Commercial

License details: <https://about.aspose.com/legal/eula>

Aspose.PSD

Version: 22.12.0

Vendor: Aspose

Copyright: © Aspose Pty Ltd 2001-2021. All Rights Reserved.

License type: Commercial

License details: <https://about.aspose.com/legal/eula>

Aspose.Slides.NET

Version: 23.8.0

Vendor: Aspose

Copyright: © Aspose Pty Ltd 2001-2021. All Rights Reserved.

License type: Commercial

License details: <https://about.aspose.com/legal/eula>

Aspose.Words

Version: 23.9.0

Vendor: Aspose

Copyright: © Aspose Pty Ltd 2001-2021. All Rights Reserved.

License type: Commercial

License details: <https://about.aspose.com/legal/eula>

Autofac

Version: 4.8.1

Vendor: Autofac

Copyright: Copyright © 2015 Autofac Contributors

License type: MIT

License details: <https://opensource.org/license/mit/>

AutoMapper

Version: 7.0.1

Vendor: Jimmy Bogard

Copyright: Copyright (c) 2010 Jimmy Bogard

License type: MIT

License details: <https://opensource.org/license/mit/>

Axiom API

Version: 1.3.0

Vendor: Apache

Copyright: Copyright ©2004–2022 The Apache Software Foundation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

axis-jaxrpc

Version: 1.4

Vendor: Apache

Copyright: Copyright © 2000-2015 The Apache Software Foundation. All Rights Reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

axis-saaj

Version: 1.4

Vendor: Apache

Copyright: Copyright © 2000-2015 The Apache Software Foundation. All Rights Reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

AXP.Web.Optimization

Version: 1.0.0

Vendor: AntoXa.PRO

Copyright:

License type: UNKNOWN

License details:

Azure.Core

Version: 1.37.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Azure.Core

Version: 1.38.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Azure.Core

Version: 1.24.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Azure.Identity

Version: 1.10.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Azure.Identity

Version: 1.6.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

BouncyCastle.NetCore

Version: 1.9.0

Vendor: Chris Huang

Copyright:

License type:

License details:

Castle.Core

Version: 5.1.1

Vendor: <http://www.castleproject.org/>

Copyright: Copyright (c) 2004-2019 Castle Project

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Castle.Core

Version: 5.0.0

Vendor: <http://www.castleproject.org/>

Copyright: Copyright (c) 2004-2019 Castle Project

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

CommandLineParser

Version: 1.9.71

Vendor:

Copyright:

License type: MIT

License details: <https://opensource.org/license/mit/>

CommandLineParser

Version: 2.9.1

Vendor:

Copyright:

License type: MIT

License details: <https://opensource.org/license/mit/>

Common.Logging

Version: 3.4.1

Vendor: <https://net-commons.github.io/common-logging/>

Copyright: Copyright 2006-2011 the Common Infrastructure Libraries Team

License type: Apache 2.0

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Common.Logging.Core

Version: 3.4.1

Vendor: <https://net-commons.github.io/common-logging/>

Copyright: Copyright 2006-2011 the Common Infrastructure Libraries Team

License type: Apache 2.0

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Commons Discovery

Version: 0.2

Vendor: Apache

Copyright: Copyright © 2002-2011 The Apache Software Foundation. All Rights Reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Commons Lang

Version: 2

Vendor: Apache

Copyright: Copyright © 2001-2021 The Apache Software Foundation. All Rights Reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

CompareNETObjects

Version: 4.76.0

Vendor: Kellerman Software

Copyright: Copyright © 2022 Kellerman Software

License type: MSPL

License details: <https://opensource.org/license/ms-pl-html/>

CompareNETObjects

Version: 4.63.0

Vendor: Kellerman Software

Copyright: Copyright © 2022 Kellerman Software

License type: MSPL

License details: <https://opensource.org/license/ms-pl-html/>

Confluent.Kafka

Version: 1.8.2

Vendor: Confluent

Copyright: Copyright 2016-2020 Confluent Inc., Andreas Heider

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Confluent.Kafka

Version: 2.0.2

Vendor: Confluent

Copyright: Copyright 2016-2020 Confluent Inc., Andreas Heider

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Confluent.Kafka

Version: 1.9.2

Vendor: Confluent

Copyright: Copyright 2016-2020 Confluent Inc., Andreas Heider

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

coverlet.collector

Version: 6.0.0

Vendor: tonerdo

Copyright: Copyright (c) 2018 Toni Solarin-Sodara

License type: MIT

License details: <https://opensource.org/license/mit/>

coverlet.collector

Version: 3.1.2

Vendor: tonerdo

Copyright: Copyright (c) 2018 Toni Solarin-Sodara

License type: MIT

License details: <https://opensource.org/license/mit/>

coverlet.collector

Version: 3.2.0

Vendor: tonerdo

Copyright: Copyright (c) 2018 Toni Solarin-Sodara

License type: MIT

License details: <https://opensource.org/license/mit/>

devprime.cli

Version: 6.0.0

Vendor: Devprime

Copyright:

License type:

License details: <https://devprime.io/legal/tools/cli>

devprime.cli

Version: 5.2.1

Vendor: Devprime

Copyright:

License type:

License details: <https://devprime.io/legal/tools/cli>

Diga.WebView2.Wrapper

Version: 9.0.1

Vendor: Dipl.-Ing.(FH) Guido Agnesmeyer

Copyright: Copyright (c) 2021 Dipl.-Ing.(FH) Guido Agnesmeyer

License type: MIT

License details: <https://opensource.org/license/mit/>

DnsClient

Version: 1.7.0

Vendor: Michael Conrad

Copyright: Copyright (c) 2021 Michael Conrad

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

DocumentFormat.OpenXml

Version: 3.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

DocumentFormat.OpenXml

Version: 2.15.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

DocumentFormat.OpenXml.Framework

Version: 3.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

DotNetOpenAuth.Core

Version: 4.3.4.13329

Vendor: Andrew Arnott

Copyright: Copyright © 2012 Outercurve Foundation

License type: MSPL

License details: <https://opensource.org/license/ms-pl-html/>

DotNetOpenAuth.OAuth.Common

Version: 4.3.4.13329

Vendor: Andrew Arnott

Copyright: Copyright © 2012 Outercurve Foundation

License type: MSPL

License details: <https://opensource.org/license/ms-pl-html/>

DotNetOpenAuth.OAuth2.AuthorizationServer

Version: 4.3.4.13329

Vendor: Andrew Arnott

Copyright: Copyright © 2012 Outercurve Foundation

License type: MSPL

License details: <https://opensource.org/license/ms-pl-html/>

DotNetOpenAuth.OAuth2.Client

Version: 4.3.4.13329

Vendor: Andrew Arnott

Copyright: Copyright © 2012 Outercurve Foundation

License type: MSPL

License details: <https://opensource.org/license/ms-pl-html/>

DotNetOpenAuth.OAuth2.ClientAuthorization

Version: 4.3.4.13329

Vendor: Andrew Arnott

Copyright: Copyright © 2012 Outercurve Foundation

License type: MSPL

License details: <https://opensource.org/license/ms-pl-html/>

DotNetOpenAuth.OAuth2.Core

Version: 4.3.4.13329

Vendor: Andrew Arnott

Copyright: Copyright © 2012 Outercurve Foundation

License type: MSPL

License details: <https://opensource.org/license/ms-pl-html/>

DotNetOpenAuth.OAuth2.ResourceServer

Version: 4.3.4.13329

Vendor: Andrew Arnott

Copyright: Copyright © 2012 Outercurve Foundation

License type: MSPL

License details: <https://opensource.org/license/ms-pl-html/>

Elmah.MVC.ODataLogs.dll

Version: 1.0.0

Vendor: akomarov

Copyright:

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

EnterpriseLibrary.TransientFaultHandling

Version: 6.0.1304

Vendor: Microsoft

Copyright: © 2013 Microsoft Corporation

License type: MSPL

License details: <https://opensource.org/license/ms-pl-html/>

EnterpriseLibrary.TransientFaultHandling.Data

Version: 6.0.1304.1

Vendor: Microsoft

Copyright: © 2013 Microsoft Corporation

License type: MSPL

License details: <https://opensource.org/license/ms-pl-html/>

EntityFramework

Version: 6.4.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

EntityFrameworkCoreMock.NSubstitute

Version: 2.4.0

Vendor: huysentruitw

Copyright: Copyright 2017-2021 Cup of Tea

License type: MIT

License details: <https://opensource.org/license/mit/>

EntityFrameworkCoreMock.NSubstitute

Version: 1.0.0.26

Vendor: huysentruitw

Copyright: Copyright 2017-2021 Cup of Tea

License type: MIT

License details: <https://opensource.org/license/mit/>

Evolve.Tool

Version: 2.3.0

Vendor: Philippe Lécaillon

Copyright: Copyright © P.Lécaillon 2019

License type: MIT

License details: <https://opensource.org/license/mit/>

Flee

Version: 1.2.2

Vendor: Muhammet Parlak

Copyright: Copyright 2017

License type:

License details:

FluentValidation

Version: 11.2.2

Vendor: Jeremy Skinner

Copyright: Copyright (c) Jeremy Skinner, .NET Foundation, and contributors 2008-2022

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

FluentValidation

Version: 8.5.0

Vendor: Jeremy Skinner

Copyright: Copyright (c) Jeremy Skinner, .NET Foundation, and contributors 2008-2022

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

HiNetCloud.System.Web.Http.SelfHost

Version: 23.9.5.9

Vendor: jszyong

Copyright: Hangzhou NetCloud Technology Co., Ltd

License type: MIT

License details: <https://opensource.org/license/mit/>

HtmlAgilityPack

Version: 1.11.59

Vendor: ZZZ Projects

Copyright: Copyright © ZZZ Projects Inc.

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.af

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.ar

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.az

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.bg

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.bn-BD

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.cs

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.da

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.de

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.el

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.es

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.fa

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.fi-FI

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.fr

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.fr-BE

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.he

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.hr

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.hu

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.hy

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.id

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.is

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.it

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.ja

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.ko-KR

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.ku

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.lv

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.ms-MY

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.mt

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.nb

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.nb-NO

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.nl

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.pl

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.pt

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.ro

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.ru

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.sk

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.sl

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.sr

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.sr-Latn

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.sv

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.th-TH

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.tr

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.uk

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.uz-Cyrl-UZ

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.uz-Latn-UZ

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.vi

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.zh-CN

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.zh-Hans

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

Humanizer.Core.zh-Hant

Version: 2.14.1

Vendor: Humanizer, .NET Foundation

Copyright: Copyright 2012-2016

License type: MIT

License details: <https://opensource.org/license/mit/>

ICSharpCode.Decompiler

Version: 7.1.0.6543

Vendor: ICSharpCode

Copyright: Copyright 2011-2021 AlphaSierraPapa

License type: MIT

License details: <https://opensource.org/license/mit/>

icu.net

Version: 2.9.0

Vendor: SIL International

Copyright: Copyright © 2007-2019 SIL International

License type: MIT

License details: <https://opensource.org/license/mit/>

Icu4c.Win.Full.Lib

Version: 59.1.15

Vendor: SIL International

Copyright: Copyright (c) 2016-2017 SIL International

License type: ICU

License details: <https://spdx.org/licenses/ICU.html>

IIS.Microsoft.Web.Administration

Version: 8.5.9600.17042

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation. All rights reserved.

License type:

License details:

J2N

Version: 2.0.0

Vendor: Shad Storhaug

Copyright: Copyright © 2019 - 2022 J2N

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Jakarta Activation API

Version: 1.2.1

Vendor: Jakarta

Copyright:

License type: EDL

License details: <https://www.eclipse.org/org/documents/edl-v10.php>

Java Servlet API

Version: 3.0.1

Vendor:

Copyright:

License type: CDDL10

License details: <https://opensource.org/license/cddl-1-0/>

JavaBeans(TM) Activation Framework

Version: 1.1

Vendor:

Copyright:

License type: CDDL10

License details: <https://opensource.org/license/cddl-1-0/>

JavaMail API (compat)

Version: 1.4

Vendor:

Copyright:

License type: CDDL10

License details: <https://opensource.org/license/cddl-1-0/>

javax.transaction-api

Version: 1.3

Vendor:

Copyright:

License type: CDDL10

License details: <https://opensource.org/license/cddl-1-0/>

jaxen

Version: 1.2.0

Vendor:

Copyright:

License type: BSD2

License details: <https://opensource.org/license/bsd-2-clause/>

JSON.simple

Version: 1.1

Vendor:

Copyright:

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

jsr311-api

Version: 1.1.1

Vendor:

Copyright:

License type: CDDL10

License details: <https://opensource.org/license/cddl-1-0/>

jstl

Version: 1.1.2

Vendor:

Copyright:

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

jstl

Version: 1.1.2

Vendor:

Copyright:

License type: CDDL10 GPL20

License details: [\[CDDL10\] Common Development and Distribution License 1.0 \(CDDL-1.0\)](#)
[\[GPL20\] GNU General Public License version 2.0 \(GPL-2.0\)](#)

JUnit

Version: 3.8.1

Vendor:

Copyright:

License type: CPAL10

License details: https://opensource.org/license/cpal_1-0/

librdkafka.redist

Version: 1.8.2-RC5

Vendor: math, edenhill, confluent

Copyright: Copyright 2012-2017

License type: MIT

License details: <https://opensource.org/license/mit/>

librdkafka.redist

Version: 1.8.2

Vendor: math, edenhill, confluent

Copyright: Copyright 2012-2017

License type: MIT

License details: <https://opensource.org/license/mit/>

LLOM

Version: 1.3.0

Vendor:

Copyright:

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

log4net

Version: 2.0.16

Vendor: The Apache Software Foundation

Copyright: Copyright 2004-2017 The Apache Software Foundation

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

log4net

Version: 2.0.14

Vendor: The Apache Software Foundation

Copyright: Copyright 2004-2017 The Apache Software Foundation

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Lucene.Net

Version: 4.8.0-beta00016

Vendor: ApacheLuceneNet

Copyright: Copyright © 2006 - 2022 The Apache Software Foundation

License type: MIT

License details: <https://opensource.org/license/mit/>

Lucene.Net.Analysis.Common

Version: 4.8.0-beta00016

Vendor: ApacheLuceneNet

Copyright: Copyright © 2006 - 2022 The Apache Software Foundation

License type: MIT

License details: <https://opensource.org/license/mit/>

Lucene.Net.Queries

Version: 4.8.0-beta00016

Vendor: ApacheLuceneNet

Copyright: Copyright © 2006 - 2022 The Apache Software Foundation

License type: MIT

License details: <https://opensource.org/license/mit/>

Lucene.Net.QueryParser

Version: 4.8.0-beta00016

Vendor: ApacheLuceneNet

Copyright: Copyright © 2006 - 2022 The Apache Software Foundation

License type: MIT

License details: <https://opensource.org/license/mit/>

Lucene.Net.Sandbox

Version: 4.8.0-beta00016

Vendor: ApacheLuceneNet

Copyright: Copyright © 2006 - 2022 The Apache Software Foundation

License type: MIT

License details: <https://opensource.org/license/mit/>

MangoSeed

Version: 1.0.0

Vendor: Giovanni Galbo

Copyright: Copyright (c) 2021 Giovanni Galbo

License type: MIT

License details: <https://opensource.org/license/mit/>

Markdig.Signed

Version: 0.31.0

Vendor: Alexandre Mutel

Copyright: Alexandre Mutel

License type: BSD2

License details: <https://opensource.org/license/bsd-2-clause/>

mesMagic.Template

Version: 1.0.0

Vendor:

Copyright:

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.ApplicationInsights

Version: 2.22.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNet.Mvc

Version: 5.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.AspNet.Razor

Version: 3.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.AspNet.WebApi.Client

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.AspNet.WebApi.Core

Version: 5.2.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.AspNet.WebApi.Owin

Version: 5.2.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.AspNet.WebApi.OwinSelfHost

Version: 5.2.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.AspNet.WebApi.Tracing

Version: 5.2.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.AspNet.WebHooks.Common

Version: 1.2.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.AspNet.WebHooks.Custom

Version: 1.2.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.AspNet.WebHooks.Custom.Api

Version: 1.2.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.AspNet.WebHooks.Custom.SqlStorage

Version: 1.2.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.AspNet.WebPages

Version: 3.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.AspNetCore.Authentication.Abstractions

Version: 2.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Authentication.Abstractions

Version: 2.1.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Authentication.Core

Version: 2.1.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Authorization

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Authorization.Policy

Version: 2.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Authorization.Policy

Version: 2.1.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Connections.Abstractions

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.Connections.Abstractions

Version: 6.0.15

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.Cors

Version: 2.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Cryptography.Internal

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.DataProtection

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.DataProtection.Abstractions

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.Hosting.Abstractions

Version: 2.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Hosting.Abstractions

Version: 2.1.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Hosting.Server.Abstractions

Version: 2.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Hosting.Server.Abstractions

Version: 2.1.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Hosting.WindowsServices

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.Http

Version: 2.1.34

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Http

Version: 2.2.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Http.Abstractions

Version: 2.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Http.Abstractions

Version: 2.1.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Http.Connections

Version: 1.0.15

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Http.Connections.Common

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.Http.Extensions

Version: 2.1.21

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Http.Extensions

Version: 2.1.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Http.Features

Version: 5.0.17

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Http.Features

Version: 3.1.32

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Identity.EntityFrameworkCore

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.JsonPatch

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.JsonPatch

Version: 7.0.14

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.JsonPatch

Version: 6.0.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.JsonPatch

Version: 5.0.17

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Metadata

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.Mvc.Abstractions

Version: 2.1.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Mvc.Abstractions

Version: 2.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Mvc.Core

Version: 2.1.38

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Mvc.Core

Version: 2.2.5

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Mvc.NewtonsoftJson

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.Mvc.NewtonsoftJson

Version: 6.0.26

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.Mvc.NewtonsoftJson

Version: 6.0.5

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.Mvc.NewtonsoftJson

Version: 6.0.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.Mvc.NewtonsoftJson

Version: 5.0.17

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Mvc.Testing

Version: 6.0.6

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.OData

Version: 8.0.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.OData

Version: 8.0.11

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.OData

Version: 8.0.10

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.Razor.Language

Version: 6.0.26

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.Razor.Language

Version: 6.0.28

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.ResponseCaching.Abstractions

Version: 2.1.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Routing

Version: 2.1.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Routing.Abstractions

Version: 2.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.Routing.Abstractions

Version: 2.1.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.SignalR

Version: 1.0.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.SignalR

Version: 1.1.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.SignalR.Common

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.SignalR.Common

Version: 6.0.15

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.SignalR.Core

Version: 1.1.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.SignalR.Protocols.Json

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.SignalR.Protocols.NewtonsoftJson

Version: 6.0.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.TestHost

Version: 6.0.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.AspNetCore.WebSockets

Version: 2.1.7

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.AspNetCore.WebUtilities

Version: 2.1.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.Bcl

Version: 1.1.10

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.Bcl.AsyncInterfaces

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Bcl.AsyncInterfaces

Version: 5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Bcl.Build

Version: 1.0.21

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.Bcl.HashCode

Version: 1.1.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Bcl.TimeProvider

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Build

Version: 17.8.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Build.Framework

Version: 17.8.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.Analyzers

Version: 3.3.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.AnalyzerUtilities

Version: 3.3.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.Common

Version: 4.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.Common

Version: 4.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.Common

Version: 4.3.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.CSharp

Version: 4.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.CSharp

Version: 4.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.CSharp

Version: 4.3.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.CSharp.Features

Version: 4.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.CSharp.Scripting

Version: 4.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.CSharp.Workspaces

Version: 4.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.Elfi

Version: 1.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.Features

Version: 4.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.NetAnalyzers

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.Razor

Version: 6.0.28

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.Scripting.Common

Version: 4.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.Scripting.Common

Version: 4.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.VisualBasic

Version: 4.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeAnalysis.Workspaces.Common

Version: 4.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeCoverage

Version: 17.9.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.CodeDom.Providers.DotNetCompilerPlatform

Version: 1.0.5

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.CSharp

Version: 4.7.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Data.Edm

Version: 5.8.5

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT0

License details: <https://github.com/aws/mit-0>

Microsoft.Data.Edm

Version: 5.8.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Data.OData

Version: 5.8.5

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT0

License details: <https://github.com/aws/mit-0>

Microsoft.Data.OData

Version: 5.8.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Data.SqlClient

Version: 5.1.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Data.SqlClient

Version: 5.1.5

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Data.SqlClient

Version: 5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Data.SqlClient

Version: 5.1.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Data.SqlClient

Version: 5.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Data.SqlClient.SNI

Version: 5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.Data.SqlClient.SNI.runtime

Version: 5.1.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.Data.SqlClient.SNI.runtime

Version: 5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.Data.Sqlite.Core

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Diagnostics.Tracing.EventSource.Redist

Version: 1.1.28

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.DiaSymReader

Version: 2.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.DiaSymReader.Native

Version: 17.0.0-beta1.21524.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSPRSDK

License details: <https://www.nuget.org/packages/Microsoft.DiaSymReader.Native/17.0.0-beta1.21524.1/License>

Microsoft.DotNet.PlatformAbstractions

Version: 3.1.6

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.DotNet.PlatformAbstractions

Version: 2.1.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.DotNet.Scaffolding.Shared

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.DotNet.UpgradeAssistant.Extensions.Default.Analyzers

Version: 0.4.421302

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.DotNet.UpgradeAssistant.Extensions.Default.Analyzers

Version: 0.4.346202

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore

Version: 6.0.26

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore

Version: 2.1.14

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.EntityFrameworkCore

Version: 7.0.15

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore

Version: 6.0.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore

Version: 6.0.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.Abstractions

Version: 6.0.26

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.Abstractions

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.Abstractions

Version: 2.1.14

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.EntityFrameworkCore.Abstractions

Version: 7.0.15

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.Abstractions

Version: 6.0.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.Analyzers

Version: 6.0.26

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.Analyzers

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.InMemory

Version: 6.0.11

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.Relational

Version: 6.0.26

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.Relational

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.Relational

Version: 2.1.14

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.EntityFrameworkCore.Relational

Version: 7.0.15

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.Relational

Version: 6.0.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.Sqlite

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.Sqlite.Core

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.SqlServer

Version: 6.0.26

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.SqlServer

Version: 2.1.14

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.EntityFrameworkCore.SqlServer

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.SqlServer

Version: 7.0.15

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.SqlServer

Version: 6.0.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.EntityFrameworkCore.SqlServer

Version: 6.0.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.ApiDescription.Server

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Caching.Abstractions

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Caching.Abstractions

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Caching.Memory

Version: 6.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Caching.Memory

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Configuration

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Configuration.Abstractions

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Microsoft.Extensions.Configuration.Binder

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Microsoft.Extensions.Configuration.CommandLine

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Microsoft.Extensions.Configuration.EnvironmentVariables

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Microsoft.Extensions.Configuration.EnvironmentVariables

Version: 6.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Microsoft.Extensions.Configuration.FileExtensions

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Configuration.Json

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Configuration.UserSecrets

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Configuration.UserSecrets

Version: 6.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.DependencyInjection

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.DependencyInjection

Version: 7.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.DependencyInjection.Abstractions

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.DependencyInjection.Abstractions

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.DependencyInjection.Abstractions

Version: 7.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.DependencyInjection.Abstractions

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.DependencyModel

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.DependencyModel

Version: 2.1.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Diagnostics

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Diagnostics.Abstractions

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Diagnostics.HealthChecks

Version: 8.0.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Diagnostics.HealthChecks

Version: 6.0.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Diagnostics.HealthChecks.Abstractions

Version: 8.0.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Diagnostics.HealthChecks.Abstractions

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Diagnostics.HealthChecks.Abstractions

Version: 6.0.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Diagnostics.HealthChecks.Abstractions

Version: 6.0.5

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Features

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Features

Version: 6.0.15

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.FileProviders.Abstractions

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.FileProviders.Physical

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.FileSystemGlobbing

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Hosting

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Hosting

Version: 6.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Hosting.Abstractions

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Hosting.Abstractions

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Hosting.WindowsServices

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Hosting.WindowsServices

Version: 6.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Hosting.WindowsServices

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Http

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Http

Version: 7.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Logging

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Logging

Version: 7.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Logging

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Logging.Abstractions

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Logging.Abstractions

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Logging.Abstractions

Version: 7.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Logging.Configuration

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Logging.Console

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Logging.Debug

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Logging.EventLog

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Logging.EventSource

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.ObjectPool

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Options

Version: 8.0.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Options

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Options

Version: 7.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Options.ConfigurationExtensions

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.PlatformAbstractions

Version: 1.1.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.Extensions.Primitives

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Extensions.Primitives

Version: 7.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.FeatureManagement.AspNetCore

Version: 2.5.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.ICU.ICU4C.Runtime

Version: 68.2.0.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: ICU

License details: <https://spdx.org/licenses/ICU.html>

Microsoft.ICU.ICU4C.Runtime.linux-arm64

Version: 68.2.0.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: ICU

License details: <https://spdx.org/licenses/ICU.html>

Microsoft.ICU.ICU4C.Runtime.linux-x64

Version: 68.2.0.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: ICU

License details: <https://spdx.org/licenses/ICU.html>

Microsoft.ICU.ICU4C.Runtime.win-arm64

Version: 68.2.0.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: ICU

License details: <https://spdx.org/licenses/ICU.html>

Microsoft.ICU.ICU4C.Runtime.win-x64

Version: 68.2.0.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: ICU

License details: <https://spdx.org/licenses/ICU.html>

Microsoft.ICU.ICU4C.Runtime.win-x86

Version: 68.2.0.9

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: ICU

License details: <https://spdx.org/licenses/ICU.html>

Microsoft.Identity.Client

Version: 4.59.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Identity.Client

Version: 4.45.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Identity.Client.Extensions.Msal

Version: 4.59.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Identity.Client.Extensions.Msal

Version: 2.19.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Microsoft.IdentityModel.Abstractions

Version: 7.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Microsoft.IdentityModel.Abstractions

Version: 7.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Microsoft.IdentityModel.Abstractions

Version: 7.4.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Microsoft.IdentityModel.Abstractions

Version: 7.3.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Microsoft.IdentityModel.Abstractions

Version: 6.23.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.IdentityModel.JsonWebTokens

Version: 7.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.IdentityModel.JsonWebTokens

Version: 7.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.IdentityModel.JsonWebTokens

Version: 7.4.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.IdentityModel.JsonWebTokens

Version: 6.23.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.IdentityModel.Logging

Version: 7.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.IdentityModel.Logging

Version: 7.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.IdentityModel.Logging

Version: 7.4.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.IdentityModel.Logging

Version: 6.23.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.IdentityModel.Protocols

Version: 7.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.IdentityModel.Protocols

Version: 7.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.IdentityModel.Protocols

Version: 7.3.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.IdentityModel.Protocols

Version: 6.21.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Microsoft.IdentityModel.Protocols.OpenIdConnect

Version: 7.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Microsoft.IdentityModel.Protocols.OpenIdConnect

Version: 7.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Microsoft.IdentityModel.Protocols.OpenIdConnect

Version: 7.3.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Microsoft.IdentityModel.Protocols.OpenIdConnect

Version: 6.21.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Microsoft.IdentityModel.Tokens

Version: 7.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.IdentityModel.Tokens

Version: 7.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.IdentityModel.Tokens

Version: 7.4.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.IdentityModel.Tokens

Version: 6.23.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Net.Compilers

Version: 4.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Net.Http

Version: 2.2.29

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.Net.Http.Headers

Version: 2.1.14

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.NET.StringTools

Version: 17.8.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.NET.Test.Sdk

Version: 17.9.0

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.NET.Test.Sdk

Version: 17.5.0

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.NET.Test.Sdk

Version: 17.2.0

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.NET.Test.Sdk

Version: 17.6.0

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.NET.Test.Sdk

Version: 17.4.1

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.NET.Test.Sdk

Version: 17.3.2

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.NET.Test.Sdk

Version: 16.4.0

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.NET.Test.Sdk

Version: 17.1.0

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.NETCore.Platforms

Version: 7.0.4

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.NETCore.Platforms

Version: 1.1.1

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.NETCore.Targets

Version: 1.1.3

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.NETCore.Targets

Version: 3.1.0

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.OData.Core

Version: 7.9.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT0

License details: <https://github.com/aws/mit-0>

Microsoft.OData.Edm

Version: 7.9.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT0

License details: <https://github.com/aws/mit-0>

Microsoft.OData.ModelBuilder

Version: 1.0.8

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.OpenApi

Version: 1.6.12

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.OpenApi

Version: 1.6.13

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Owin

Version: 4.2.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.Owin.Host.HttpListener

Version: 4.2.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.Owin.Hosting

Version: 4.2.2

Vendor: Microsoft

Copyright: Copyright (c) .NET Foundation and Contributors

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Microsoft.QualityTools.Testing.Fakes

Version: 16.11.230815

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.Reactive.Testing

Version: 4.4.1

Vendor: rxteam, dotnetfoundation

Copyright: Copyright (c) .NET Foundation and Contributors.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Reactive.Testing

Version: 5.0.0

Vendor: rxteam, dotnetfoundation

Copyright: Copyright (c) .NET Foundation and Contributors.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Spatial

Version: 7.9.4

Vendor: Microsoft

Copyright: Copyright (c) 2018 Microsoft. All rights reserved.

License type: MIT0

License details: <https://github.com/aws/mit-0>

Microsoft.SqlServer.Assessment

Version: 1.1.17

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSHPCPACK2019

License details: <https://www.nuget.org/packages/Microsoft.SqlServer.Assessment/1.0.305-preview/License>

Microsoft.SqlServer.Assessment.Authoring

Version: 1.1.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSHPCPACK2019

License details: <https://www.nuget.org/packages/Microsoft.SqlServer.Assessment/1.0.305-preview/License>

Microsoft.SqlServer.DacFx

Version: 150.5282.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSRTW

License details:

Microsoft.SqlServer.DacFx.x64

Version: 150.5282.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSRTW

License details:

Microsoft.SqlServer.DacFx.x86

Version: 150.4200.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSRTW

License details:

Microsoft.SqlServer.Server

Version: 1.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.SqlServer.SqlManagementObjects

Version: 170.23.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.SqlServer.SqlManagementObjects

Version: 161.47027.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MICROSOFTSQL

License details:

Microsoft.Testing.Extensions.Telemetry

Version: 1.0.0-preview.24068.6

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Testing.Extensions.TrxReport.Abstractions

Version: 1.0.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Testing.Extensions.VSTestBridge

Version: 1.0.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Testing.Platform

Version: 1.0.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Testing.Platform.MSBuild

Version: 1.0.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.TestPlatform.AdapterUtilities

Version: 17.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.TestPlatform.ObjectModel

Version: 17.9.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.TestPlatform.ObjectModel

Version: 17.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.TestPlatform.TestHost

Version: 17.9.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.TestPlatform.TestHost

Version: 17.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Tpl.Dataflow

Version: 4.5.24

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.VisualStudio.Azure.Containers.Tools.Targets

Version: 1.19.6

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSVS2017

License details:

<https://www.nuget.org/packages/Microsoft.VisualStudio.Azure.Containers.Tools.Targets/1.19.6/License>

Microsoft.VisualStudio.Azure.Containers.Tools.Targets

Version: 1.15.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSPRSDK

License details:

<https://www.nuget.org/packages/Microsoft.VisualStudio.Azure.Containers.Tools.Targets/1.15.0/License>

Microsoft.VisualStudio.Azure.Containers.Tools.Targets

Version: 1.17.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSPRSDK

License details:

<https://www.nuget.org/packages/Microsoft.VisualStudio.Azure.Containers.Tools.Targets/1.17.2/License>

Microsoft.VisualStudio.Azure.Containers.Tools.Targets

Version: 1.17.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSPRSDK

License details:

<https://www.nuget.org/packages/Microsoft.VisualStudio.Azure.Containers.Tools.Targets/1.17.0/License>

Microsoft.VisualStudio.Azure.Containers.Tools.Targets

Version: 1.15.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSPRSDK

License details:

<https://www.nuget.org/packages/Microsoft.VisualStudio.Azure.Containers.Tools.Targets/1.15.1/License>

Microsoft.VisualStudio.Threading.Analyzers

Version: 17.8.14

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.VisualStudio.Threading.Analyzers

Version: 17.5.22

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.VisualStudio.Web.CodeGeneration

Version: 6.0.16

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.VisualStudio.Web.CodeGeneration.Core

Version: 6.0.16

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.VisualStudio.Web.CodeGeneration.Design

Version: 6.0.16

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.VisualStudio.Web.CodeGeneration.EntityFrameworkCore

Version: 6.0.16

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.VisualStudio.Web.CodeGeneration.Templating

Version: 6.0.16

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.VisualStudio.Web.CodeGeneration.Utils

Version: 6.0.16

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.VisualStudio.Web.CodeGenerators.Mvc

Version: 6.0.16

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Web.Administration

Version: 7.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type:

License details:

Microsoft.Web.Infrastructure

Version: 2.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.Web.WebView2

Version: 1.0.864.35

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: BSD3

License details: <https://www.nuget.org/packages/Microsoft.Web.WebView2/1.0.2470-prerelease/License>

Microsoft.Win32.Primitives

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

Microsoft.Win32.Registry

Version: 5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Win32.SystemEvents

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

Microsoft.Win32.SystemEvents

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

mockobjects-core

Version: 0.09

Vendor:

Copyright:

License type:

License details:

MongoDB.Bson

Version: 2.13.2

Vendor: MongoDB

Copyright: Copyright © 2019–present MongoDB Inc.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.31>

MongoDB.Bson

Version: 2.19.1

Vendor: MongoDB

Copyright: Copyright © 2019–present MongoDB Inc.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.31>

MongoDB.Driver

Version: 2.13.2

Vendor: MongoDB

Copyright: Copyright © 2019–present MongoDB Inc.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.32>

MongoDB.Driver

Version: 2.19.1

Vendor: MongoDB

Copyright: Copyright © 2019–present MongoDB Inc.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.32>

MongoDB.Driver.Core

Version: 2.13.2

Vendor: MongoDB

Copyright: Copyright © 2019–present MongoDB Inc.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.33>

MongoDB.Libmongocrypt

Version: 1.2.2

Vendor: MongoDB

Copyright: Copyright © 2019–present MongoDB Inc.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.34>

Mono.TextTemplating

Version: 2.3.1

Vendor: Mono

Copyright:

License type: MIT

License details: <https://opensource.org/license/mit/>

MSTest.TestAdapter

Version: 3.2.2

Vendor: Microsoft

Copyright: Copyright (c) 2020 Microsoft Corporation

License type: MIT

License details: <https://opensource.org/license/mit/>

MSTest.TestAdapter

Version: 3.0.2

Vendor: Microsoft

Copyright: Copyright (c) 2020 Microsoft Corporation

License type: MIT

License details: <https://opensource.org/license/mit/>

MSTest.TestAdapter

Version: 2.2.10

Vendor: Microsoft

Copyright: Copyright (c) 2020 Microsoft Corporation

License type: MIT

License details: <https://opensource.org/license/mit/>

MSTest.TestFramework

Version: 3.2.2

Vendor: Microsoft

Copyright: Copyright (c) 2020 Microsoft Corporation

License type: MIT

License details: <https://opensource.org/license/mit/>

MSTest.TestFramework

Version: 3.0.2

Vendor: Microsoft

Copyright: Copyright (c) 2020 Microsoft Corporation

License type: MIT

License details: <https://opensource.org/license/mit/>

MSTest.TestFramework

Version: 2.2.10

Vendor: Microsoft

Copyright: Copyright (c) 2020 Microsoft Corporation

License type: MIT

License details: <https://opensource.org/license/mit/>

murmurhash-signed

Version: 1.0.3

Vendor: Darren Kopp

Copyright: Copyright 2013 Darren Kopp

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.36>

NETStandard.Library

Version: 2.0.3

Vendor: Microsoft

Copyright: .NET Foundation and Contributors

License type: MIT

License details: <https://opensource.org/license/mit/>

Newtonsoft.Json

Version: 13.0.3

Vendor: James Newton-King

Copyright: Copyright © James Newton-King 2008

License type: MIT

License details: <https://opensource.org/license/mit/>

Newtonsoft.Json

Version: 13.0.2

Vendor: James Newton-King

Copyright: Copyright © James Newton-King 2008

License type: MIT

License details: <https://opensource.org/license/mit/>

Newtonsoft.Json

Version: 13.0.1

Vendor: James Newton-King

Copyright: Copyright © James Newton-King 2008

License type: MIT

License details: <https://opensource.org/license/mit/>

Newtonsoft.Json.Bson

Version: 1.0.2

Vendor: James Newton-King

Copyright: Copyright © James Newton-King 2008

License type: MIT

License details: <https://opensource.org/license/mit/>

Nexlib.Net

Version: 7.22.9.1

Vendor: Gennaro Cannolicchio

Copyright: Gennaro Cannolicchio

License type: MIT

License details: <https://opensource.org/license/mit/>

Ninject

Version: 3.3.6

Vendor: Ninject Project Contributors

Copyright: 2007-2010 Enkari, Ltd. 2010-2017 Ninject Project Contributors.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Ninject

Version: 3.3.4

Vendor: Ninject Project Contributors

Copyright: 2007-2010 Enkari, Ltd. 2010-2017 Ninject Project Contributors.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Ninject.MockingKernel.NSubstitute

Version: 3.3.0

Vendor: Ninject Project Contributors

Copyright: Copyright (c) 2011 Andre Loker IT Services. 2012-2017 Ninject Project Contributors.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.38>

NLog

Version: 5.2.8

Vendor: Jarek Kowalski, Kim Christensen, Julian Verdurmen

Copyright: Copyright (c) 2004-2020 NLog Project - <https://nlog-project.org/>

License type: BSD3

License details: <https://opensource.org/license/bsd-3-clause/>

NLog

Version: 4.7.15

Vendor: Jarek Kowalski, Kim Christensen, Julian Verdurmen

Copyright: Copyright (c) 2004-2020 NLog Project - <https://nlog-project.org/>

License type: BSD4CLAUSE

License details: <https://spdx.org/licenses/BSD-4-Clause.html>

NLog.Database

Version: 5.2.8

Vendor: Jarek Kowalski, Kim Christensen, Julian Verdurmen

Copyright: Copyright (c) 2004-2020 NLog Project - <https://nlog-project.org/>

License type: BSD3

License details: <https://opensource.org/license/bsd-3-clause/>

NLog.Extensions.Logging

Version: 5.3.8

Vendor: Microsoft, Julian Verdurmen

Copyright: Copyright (c) 2016, NLog

License type: BSD2

License details: <https://opensource.org/license/bsd-2-clause/>

NLog.Extensions.Logging

Version: 1.7.4

Vendor: Microsoft, Julian Verdurmen

Copyright: Copyright (c) 2016, NLog

License type: BSD2

License details: <https://opensource.org/license/bsd-2-clause/>

NLog.Web.AspNetCore

Version: 5.3.8

Vendor: Jarek Kowalski, Kim Christensen, Julian Verdurmen

Copyright: Copyright (c) 2004-2020 NLog Project - <https://nlog-project.org/>

License type: BSD3

License details: <https://opensource.org/license/bsd-3-clause/>

NLog.Web.AspNetCore

Version: 4.14.0

Vendor: Jarek Kowalski, Kim Christensen, Julian Verdurmen

Copyright: Copyright (c) 2004-2020 NLog Project - <https://nlog-project.org/>

License type: BSD3

License details: <https://opensource.org/license/bsd-3-clause/>

NLog.Web.AspNetCore

Version: 4.15.0

Vendor: Jarek Kowalski, Kim Christensen, Julian Verdurmen

Copyright: Copyright (c) 2004-2020 NLog Project - <https://nlog-project.org/>

License type: BSD3

License details: <https://opensource.org/license/bsd-3-clause/>

Npgsql

Version: 8.0.1

Vendor: Npgsql

Copyright: Copyright 2019 © The Npgsql Development Team

License type: POSTGRESQL

License details:

Npgsql

Version: 8.0.2

Vendor: Npgsql

Copyright: Copyright 2021 © The Npgsql Development Team

License type: POSTGRESQL

License details:

Npgsql

Version: 6.0.7

Vendor: Npgsql

Copyright: Copyright 2021 © The Npgsql Development Team

License type: POSTGRESQL

License details:

Npgsql

Version: 6.0.9

Vendor: Npgsql

Copyright: Copyright 2021 © The Npgsql Development Team

License type: POSTGRESQL

License details:

Npgsql.EntityFrameworkCore.PostgreSQL

Version: 6.0.4

Vendor: Npgsql

Copyright: Copyright 2021 © The Npgsql Development Team

License type: POSTGRESQL

License details:

NSubstitute

Version: 5.1.0

Vendor: David Tchepak

Copyright: Copyright (c) 2009 Anthony Egerton (nsubstitute@delfish.com) and David Tchepak (dave@davesquared.net)

License type: BSD3

License details: <https://opensource.org/license/bsd-3-clause/>

NSubstitute

Version: 4.4.0

Vendor: David Tchepak

Copyright: Copyright (c) 2009 Anthony Egerton (nsubstitute@delfish.com) and David Tchepak (dave@davesquared.net)

License type: BSD3

License details: <https://opensource.org/license/bsd-3-clause/>

NSubstitute

Version: 4.3.0

Vendor: David Tchepak

Copyright: Copyright (c) 2009 Anthony Egerton (nsubstitute@delfish.com) and David Tchepak (dave@davesquared.net)

License type: BSD3

License details: <https://opensource.org/license/bsd-3-clause/>

NSubstitute

Version: 4.2.2

Vendor: David Tchepak

Copyright: Copyright (c) 2009 Anthony Egerton (nsubstitute@delfish.com) and David Tchepak (dave@davesquared.net)

License type: BSD3

License details: <https://opensource.org/license/bsd-3-clause/>

NSubstitute.Analyzers.CSharp

Version: 1.0.15

Vendor: NSubstitute

Copyright: Copyright (c) 2018 Tomasz Podolak

License type: MIT

License details: <https://opensource.org/license/mit/>

NuGet.Common

Version: 6.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

NuGet.Configuration

Version: 6.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

NuGet.DependencyResolver.Core

Version: 6.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

NuGet.Frameworks

Version: 6.8.0

Vendor: Jean-Pierre Briedé

Copyright: Copyright (c) .NET Foundation and Contributors.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

NuGet.Frameworks

Version: 6.8.1

Vendor: Jean-Pierre Briedé

Copyright: Copyright (c) .NET Foundation and Contributors.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

NuGet.LibraryModel

Version: 6.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

NuGet.Packaging

Version: 6.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

NuGet.ProjectModel

Version: 6.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

NuGet.Protocol

Version: 6.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

NuGet.Versioning

Version: 6.8.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Owin

Version: 1.0.0

Vendor: Louis DeJardin

Copyright:

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

PactNet

Version: 4.1.0

Vendor: Pact Foundation

Copyright: Copyright 2021 (c) Pact Foundation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

PDFsharp

Version: 1.50.5147

Vendor: PDFsharp

Copyright:

License type: MIT

License details: <https://opensource.org/license/mit/>

PDFsharp-MigraDoc

Version: 1.50.5147

Vendor: PDFsharp

Copyright:

License type: MIT

License details: <https://opensource.org/license/mit/>

Pipelines.Sockets.Unofficial

Version: 2.2.0

Vendor: Marc Gravell

Copyright: Marc Gravell 2018

License type: MIT

License details: <https://opensource.org/license/mit/>

Polly

Version: 8.2.1

Vendor: Michael Wolfenden, App vNext

Copyright: Copyright (c) 2021, App vNext

License type: BSD3

License details: <https://opensource.org/license/bsd-3-clause/>

Polly

Version: 8.3.0

Vendor: Michael Wolfenden, App vNext

Copyright: Copyright (c) 2021, App vNext

License type: BSD3

License details: <https://opensource.org/license/bsd-3-clause/>

Polly

Version: 7.2.3

Vendor: Michael Wolfenden, App vNext

Copyright: Copyright (c) 2021, App vNext

License type: BSD3

License details: <https://opensource.org/license/bsd-3-clause/>

Polly.Contrib.WaitAndRetry

Version: 1.1.1

Vendor: App vNext and contributors

Copyright: Copyright (c) 2020, App vNext and contributors

License type: BSD3

License details: <https://opensource.org/license/bsd-3-clause/>

Polly.Core

Version: 8.2.1

Vendor: App vNext

Copyright: Copyright (c) 2024, App vNext

License type: BSD3

License details: <https://opensource.org/license/bsd-3-clause/>

Polly.Core

Version: 8.3.0

Vendor: App vNext

Copyright: Copyright (c) 2024, App vNext

License type: BSD3

License details: <https://opensource.org/license/bsd-3-clause/>

Polly-Signed

Version: 5.9.0

Vendor: App vNext

Copyright: Copyright © 2018, App vNext

License type: BSD4CLAUSE

License details: <https://spdx.org/licenses/BSD-4-Clause.html>

Quartz

Version: 3.0.7

Vendor: Marko Lahma, Quartz.NET

Copyright: Copyright Marko Lahma

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.50>

RabbitMQ.Client

Version: 6.8.1

Vendor: VMware

Copyright: Copyright © 2007-2020 VMware, Inc. or its affiliates.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

RabbitMQ.Client

Version: 5.1.2

Vendor: VMware

Copyright: Copyright © 2007-2020 VMware, Inc. or its affiliates.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

RabbitMQ.Client

Version: 6.5.0

Vendor: VMware

Copyright: Copyright © 2007-2020 VMware, Inc. or its affiliates.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

RazorEngine.NetCore

Version: 3.1.0

Vendor: RazorEngine

Copyright: RazorEngine Copyright © RazorEngine Project 2011-2020

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Remotion.Linq

Version: 2.2.0

Vendor: rubicon IT

Copyright: Copyright (c) rubicon IT GmbH, www.rubicon.eu

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

RichardSzalay.MockHttp

Version: 6.0.0

Vendor: Richard Szalay

Copyright: Copyright 2018 Richard Szalay

License type: MIT

License details: <https://opensource.org/license/mit/>

RichardSzalay.MockHttp

Version: 5.0.0

Vendor: Richard Szalay

Copyright: Copyright 2018 Richard Szalay

License type: MIT

License details: <https://opensource.org/license/mit/>

runtime.debian.8-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.debian.8-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.debian.9-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.fedora.23-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm**runtime.fedora.23-x64.runtime.native.System.Security.Cryptography.OpenSsl**

Version: 4.3.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm**runtime.fedora.24-x64.runtime.native.System.Security.Cryptography.OpenSsl**

Version: 4.3.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm**runtime.fedora.24-x64.runtime.native.System.Security.Cryptography.OpenSsl**

Version: 4.3.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm**runtime.fedora.27-x64.runtime.native.System.Security.Cryptography.OpenSsl**

Version: 4.3.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm**runtime.fedora.28-x64.runtime.native.System.Security.Cryptography.OpenSsl**

Version: 4.3.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.native.System

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.native.System

Version: 4.3.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.native.System.Data.SqlClient.sni

Version: 4.7.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.native.System.IO.Compression

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.native.System.IO.Compression

Version: 4.3.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.native.System.Net.Http

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.native.System.Net.Http

Version: 4.3.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.native.System.Security.Cryptography.Apple

Version: 4.3.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.opensuse.13.2-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.opensuse.13.2-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.opensuse.42.1-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.opensuse.42.1-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.opensuse.42.3-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.osx.10.10-x64.runtime.native.System.Security.Cryptography.Apple

Version: 4.3.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.osx.10.10-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.osx.10.10-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.rhel.7-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.rhel.7-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.ubuntu.14.04-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.ubuntu.14.04-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.ubuntu.16.04-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.ubuntu.16.04-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.ubuntu.16.10-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.ubuntu.16.10-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.ubuntu.18.04-x64.runtime.native.System.Security.Cryptography.OpenSsl

Version: 4.3.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.win-arm64.runtime.native.System.Data.SqlClient.sni

Version: 4.4.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.win-x64.runtime.native.System.Data.SqlClient.sni

Version: 4.4.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

runtime.win-x86.runtime.native.System.Data.SqlClient.sni

Version: 4.4.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

sautinsoft.pdffocus

Version: 2023.5.10

Vendor: SautinSoft

Copyright: Copyright(C) 2002-2023

License type:

License details:

Serilog

Version: 3.1.1

Vendor: Serilog Contributors

Copyright: Copyright © 2016 Serilog Contributors

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Serilog.Settings.AppSettings

Version: 2.2.2

Vendor: Serilog Contributors

Copyright: Copyright © 2016 Serilog Contributors

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Serilog.Sinks.Console

Version: 5.0.1

Vendor: Serilog Contributors

Copyright: Copyright © 2016 Serilog Contributors

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Serilog.Sinks.File

Version: 5.0.0

Vendor: Serilog Contributors

Copyright: Copyright © 2016 Serilog Contributors

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

SerilogTraceListener

Version: 3.2.0

Vendor: Serilog Contributors

Copyright: Copyright © 2016 Serilog Contributors

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

SharpCompress

Version: 0.23.0

Vendor: Adam Hathcock

Copyright: Copyright (c) 2014 Adam Hathcock

License type: MIT

License details: <https://opensource.org/license/mit/>

SharpZipLib

Version: 1.4.1

Vendor: SharpDevelop

Copyright: Copyright © 2000-2019 SharpZipLib Contributors

License type: MIT

License details: <https://opensource.org/license/mit/>

SharpZipLib

Version: 1.4.2

Vendor: SharpDevelop

Copyright: Copyright © 2000-2019 SharpZipLib Contributors

License type: MIT

License details: <https://opensource.org/license/mit/>

siccarcmd

Version: 1.0.0

Vendor: Siccar

Copyright: Wallet.Services (Scotland) Limited

License type:

License details:

SpecFlow.Assist.Dynamic

Version: 1.4.2

Vendor: Marcus Hammarberg

Copyright: Copyright © Marcus Hammarberg 2020

License type: MIT

License details: <https://opensource.org/license/mit/>

SpecFlow.MsTest

Version: 3.9.74

Vendor: SpecFlow Team

Copyright: Copyright © SpecFlow Team

License type: BSD4CLAUSE

License details: <https://spdx.org/licenses/BSD-4-Clause.html>

spring

Version: 1.1.3

Vendor:

Copyright:

License type:

License details:

Spring.Core

Version: 3.0.2

Vendor: Spring

Copyright: Copyright 2002-2021 Spring.NET Framework Team.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

spring-mock

Version: 1.1.3

Vendor:

Copyright:

License type:

License details:

SQLitePCLRaw.bundle_e_sqlite3

Version: 2.1.7

Vendor: Eric Sink

Copyright: Copyright 2014-2022 SourceGear, LLC

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

SQLitePCLRaw.core

Version: 2.1.7

Vendor: Eric Sink

Copyright: Copyright 2014-2018 Zumero, LLC

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

SQLitePCLRaw.lib.e_sqlite3

Version: 2.1.7

Vendor: Eric Sink

Copyright: Copyright 2014-2023 SourceGear, LLC

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

SQLitePCLRaw.provider.e_sqlite3

Version: 2.1.7

Vendor: Eric Sink

Copyright: Copyright 2014-2023 SourceGear, LLC

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

StackExchange.Redis

Version: 2.2.88

Vendor: Stack Exchange

Copyright: 2014 - 2023 Stack Exchange, Inc.

License type: MIT

License details: <https://opensource.org/license/mit/>

StackExchange.Redis

Version: 2.5.43

Vendor: Stack Exchange

Copyright: 2014 - 2023 Stack Exchange, Inc.

License type: MIT

License details: <https://opensource.org/license/mit/>

StackExchange.Redis.StrongName

Version: 1.2.6

Vendor: Stack Exchange, Inc., marc.gravell

Copyright: 2017 Stack Exchange, Inc.

License type: MIT

License details: <https://opensource.org/license/mit/>

Stax2 API

Version: 4.2.1

Vendor:

Copyright:

License type: BSD3

License details: <https://opensource.org/license/bsd-3-clause/>

Steeltoe.Common

Version: 3.2.0

Vendor: Steeltoe

Copyright: Copyright 2023 Steeltoe

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.65>

Steeltoe.Common.Abstractions

Version: 3.2.0

Vendor: Steeltoe

Copyright: Copyright 2023 Steeltoe

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.65>

Steeltoe.Common.Http

Version: 3.2.0

Vendor: Steeltoe

Copyright: Copyright 2023 Steeltoe

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.65>

Steeltoe.Connector.Abstractions

Version: 3.2.0

Vendor: Steeltoe

Copyright: Copyright 2023 Steeltoe

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.65>

Steeltoe.Connector.ConnectorBase

Version: 3.2.0

Vendor: Steeltoe

Copyright: Copyright 2023 Steeltoe

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.65>

Steeltoe.Discovery.Abstractions

Version: 3.2.0

Vendor: Steeltoe

Copyright: Copyright 2023 Steeltoe

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.65>

Steeltoe.Discovery.ClientBase

Version: 3.2.0

Vendor: Steeltoe

Copyright: Copyright 2023 Steeltoe

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.65>

Steeltoe.Discovery.Eureka

Version: 3.2.0

Vendor: Steeltoe

Copyright: Copyright 2023 Steeltoe

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.65>

Steeltoe.Extensions.Configuration.Abstractions

Version: 3.2.0

Vendor: Steeltoe

Copyright: Copyright 2023 Steeltoe

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.65>

Stub.System.Data.SQLite.Core.NetStandard

Version: 1.0.118

Vendor: SQLite

Copyright: Copyright © 2004-2008 Hipp, Wyrick & Company, Inc.

License type: Public

License details: <https://www.sqlite.org/copyright.html>

Swashbuckle.AspNetCore

Version: 6.5.0

Vendor: Richard Morris

Copyright: Copyright (c) 2016 Richard Morris

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Swashbuckle.AspNetCore.Swagger

Version: 6.5.0

Vendor: Richard Morris

Copyright: Copyright (c) 2016 Richard Morris

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Swashbuckle.AspNetCore.SwaggerGen

Version: 6.5.0

Vendor: Richard Morris

Copyright: Copyright (c) 2016 Richard Morris

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Swashbuckle.AspNetCore.SwaggerUI

Version: 6.5.0

Vendor: Richard Morris

Copyright: Copyright (c) 2016 Richard Morris

License type: MIT

License details: <https://opensource.org/licenses/mit/>

Swashbuckle.Core

Version: 5.6.0

Vendor: Richard Morris

Copyright: Copyright (c) 2013, Richard Morris

License type: BSD4CLAUSE

License details:

System.AppContext

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Buffers

Version: 4.5.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.ClientModel

Version: 1.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.CodeDom

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.CodeDom

Version: 4.7.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.CodeDom

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Collections

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Collections.Concurrent

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Collections.Immutable

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Collections.Immutable

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.ComponentModel.Annotations

Version: 4.7.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.ComponentModel.Annotations

Version: 4.5.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.ComponentModel.EventBasedAsync

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Composition

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Composition.AttributedModel

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Composition.Convention

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Composition.Hosting

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Composition.Runtime

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Composition.TypedParts

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Configuration.Abstractions

Version: 2.0.2.45

Vendor: David Whitney

Copyright: Copyright 2015

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Configuration.ConfigurationManager

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Configuration.ConfigurationManager

Version: 4.7.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Configuration.ConfigurationManager

Version: 6.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Console

Version: 4.3.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Data.DataSetExtensions

Version: 4.5.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Data.SqlClient

Version: 4.8.6

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Data.SqlClient

Version: 4.8.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Data.SqlClient

Version: 4.8.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Data.SQLite.Core

Version: 1.0.118

Vendor: SQLite

Copyright: Public domain

License type:

License details:

System.Data.SQLite.Core

Version: 1.0.111

Vendor: SQLite

Copyright: Public domain

License type:

License details:

System.Diagnostics.Contracts

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Diagnostics.Debug

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Diagnostics.DiagnosticSource

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Diagnostics.DiagnosticSource

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Diagnostics.EventLog

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Diagnostics.PerformanceCounter

Version: 5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Diagnostics.Tools

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Diagnostics.Tracing

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Drawing.Common

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Drawing.Common

Version: 5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Drawing.Common

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Formats.Asn1

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Globalization

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Globalization.Calendars

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Globalization.Extensions

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.IdentityModel.Tokens.Jwt

Version: 7.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.IdentityModel.Tokens.Jwt

Version: 7.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.IdentityModel.Tokens.Jwt

Version: 7.4.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.IdentityModel.Tokens.Jwt

Version: 6.23.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Interactive.Async

Version: 3.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

System.IO

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.IO.Abstractions

Version: 16.1.26

Vendor: Tatham Oddie

Copyright: Copyright © Tatham Oddie 2010

License type: MIT

License details: <https://opensource.org/license/mit/>

System.IO.Compression

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.IO.Compression.ZipFile

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.IO.FileSystem

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.IO.FileSystem.AccessControl

Version: 5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.IO.FileSystem.Primitives

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.IO.Packaging

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.IO.Pipelines

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.IO.Pipelines

Version: 6.0.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Linq

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Linq.Async

Version: 6.0.1

Vendor: Microsoft

Copyright: Copyright (c) .NET Foundation and Contributors.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Linq.Expressions

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Management

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

System.Management.Automation.dll

Version: 10.0.10586

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type:

License details:

System.Memory

Version: 4.5.5

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

System.Memory.Data

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/licenses/mit/>

System.Memory.Data

Version: 1.0.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Net.Http

Version: 4.3.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Net.Http.Formatting.Extension

Version: 5.2.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSL

License details: <https://github.com/FINRAOS/MSL/blob/master/LICENSE>

System.Net.Primitives

Version: 4.3.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Net.Sockets

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Net.WebSockets.WebSocketProtocol

Version: 5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Net.WebSockets.WebSocketProtocol

Version: 4.5.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Numerics.Vectors

Version: 4.5.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.ObjectModel

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Private.DataContractSerialization

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Private.ServiceModel

Version: 4.10.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Reactive

Version: 5.0.0

Vendor: .NET Foundation and Contributors

Copyright: Copyright (c) .NET Foundation and Contributors.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Reactive.Linq

Version: 5.0.0

Vendor: Microsoft

Copyright: Copyright (c) .NET Foundation and Contributors.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Reflection

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Reflection.Emit

Version: 4.7.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Reflection.Emit

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Reflection.Emit.ILGeneration

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Reflection.Emit.ILGeneration

Version: 4.7.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Reflection.Emit.Lightweight

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Reflection.Emit.Lightweight

Version: 4.7.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Reflection.Extensions

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Reflection.Metadata

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Reflection.MetadataLoadContext

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Reflection.MetadataLoadContext

Version: 4.6.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Reflection.Primitives

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Reflection.TypeExtensions

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Reflection.TypeExtensions

Version: 4.7.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Resources.Extensions

Version: 5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Resources.ResourceManager

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Runtime

Version: 4.3.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Runtime.Caching

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Runtime.Caching

Version: 5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Runtime.CompilerServices.Unsafe

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Runtime.Extensions

Version: 4.3.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Runtime.Handles

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Runtime.InteropServices

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Runtime.InteropServices.RuntimeInformation

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Runtime.Numerics

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Runtime.Serialization.Primitives

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Runtime.Serialization.Xml

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Security.AccessControl

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Security.AccessControl

Version: 5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Security.Cryptography.Algorithms

Version: 4.3.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Security.Cryptography.Algorithms.Extensions

Version: 1.0.0

Vendor: Thierry Habart

Copyright:

License type:

License details:

System.Security.Cryptography.Cng

Version: 5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Security.Cryptography.Cng

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Security.Cryptography.Csp

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Security.Cryptography.Encoding

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Security.Cryptography.OpenSsl

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Security.Cryptography.OpenSsl

Version: 5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Security.Cryptography.Pkcs

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Security.Cryptography.Primitives

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Security.Cryptography.ProtectedData

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Security.Cryptography.ProtectedData

Version: 4.7.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Security.Cryptography.ProtectedData

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Security.Cryptography.X509Certificates

Version: 4.3.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Security.Cryptography.Xml

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Security.Cryptography.Xml

Version: 7.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Security.Permissions

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Security.Permissions

Version: 4.7.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Security.Permissions

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Security.Principal.Windows

Version: 5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.ServiceModel.Primitives

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.ServiceModel.Primitives

Version: 4.10.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.ServiceModel.Primitives

Version: 4.10.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.ServiceModel.Security

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.ServiceModel.Security

Version: 4.10.3

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.ServiceModel.Security

Version: 4.10.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.ServiceProcess.ServiceController

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.ServiceProcess.ServiceController

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Spatial

Version: 5.8.5

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT0

License details: <https://github.com/aws/mit-0>

System.Spatial

Version: 5.8.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Text.Encoding

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Text.Encoding.CodePages

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Text.Encoding.CodePages

Version: 7.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Text.Encoding.CodePages

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Text.Encoding.Extensions

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Text.Encodings.Web

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Text.Json

Version: 8.0.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Text.Json

Version: 8.0.2

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Text.RegularExpressions

Version: 4.3.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Threading

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Threading.Channels

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Threading.Channels

Version: 7.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Threading.Tasks

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Threading.Tasks.Dataflow

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Threading.Tasks.Dataflow

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Threading.Tasks.Extensions

Version: 4.5.4

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Threading.Timer

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.ValueTuple

Version: 4.5.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Windows.Extensions

Version: 8.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Windows.Extensions

Version: 4.7.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Windows.Extensions

Version: 6.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://opensource.org/license/mit/>

System.Xml.ReaderWriter

Version: 4.3.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Xml.XDocument

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Xml.XmlDocument

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

System.Xml.XmlSerializer

Version: 4.3.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

TimeZoneConverter

Version: 6.1.0

Vendor: Matt Johnson-Pint

Copyright: Copyright (c) 2017 Matt Johnson-Pint

License type: MIT

License details: <https://opensource.org/license/mit/>

Validation

Version: 2.5.51

Vendor: Andrew Arnott

Copyright:

License type: MSPL

License details: <https://opensource.org/license/ms-pl-html/>

Validation

Version: 2.4.22

Vendor: Andrew Arnott

Copyright:

License type: MSPL

License details: <https://opensource.org/license/ms-pl-html/>

Validation

Version: 2.4.18

Vendor: Andrew Arnott

Copyright:

License type: MSPL

License details: <https://opensource.org/license/ms-pl-html/>

Wdc.System.Net.Http.Formatting.NetStandard

Version: 1.0.7

Vendor: Atila Tosta

Copyright: Copyright 2017, Atila Tosta

License type: UNKNOWN

License details:

Wdc.System.Net.Http.Formatting.NetStandard

Version: 1.0.4

Vendor: Atila Tosta

Copyright: Copyright 2017, Atila Tosta

License type: UNKNOWN

License details:

Web Services Metadata 2.0

Version: 1.1.3

Vendor:

Copyright:

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

WebGrease

Version: 1.6.0

Vendor: Microsoft

Copyright: Copyright © Microsoft 2012

License type: MSEULA

License details: https://www.microsoft.com/web/webpi/eula/net_library_eula_enu.htm

wix

Version: 3.14.0

Vendor: .NET Foundation

Copyright: Copyright (c) .NET Foundation and contributors. All rights reserved.

License type: MSRL

License details: <https://licenses.nuget.org/MS-RL>

Woden - Core

Version: 1.0M10

Vendor:

Copyright:

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

Woodstox

Version: 6.5.1

Vendor:

Copyright:

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

WSDL4J

Version: 1.6.2

Vendor:

Copyright:

License type: CPL10

License details: <https://opensource.org/license/cpl1-0-txt/>

XmlSchema Core

Version: 2.2.5

Vendor:

Copyright:

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit

Version: 2.6.6

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit

Version: 2.7.0

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit

Version: 2.4.1

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: MIT

License details: <https://opensource.org/license/mit/>

xunit

Version: 2.4.2

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit.abstractions

Version: 2.0.3

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: MIT

License details: <https://opensource.org/license/mit/>

xunit.analyzers

Version: 1.10.0

Vendor: James Newkirk, Brad Wilson

Copyright: Copyright (C) .NET Foundation

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit.analyzers

Version: 1.11.0

Vendor: James Newkirk, Brad Wilson

Copyright: Copyright (C) .NET Foundation

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit.assert

Version: 2.6.6

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit.assert

Version: 2.7.0

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit.core

Version: 2.6.6

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit.core

Version: 2.7.0

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit.extensibility.core

Version: 2.6.6

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit.extensibility.core

Version: 2.7.0

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit.extensibility.execution

Version: 2.6.6

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit.extensibility.execution

Version: 2.7.0

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit.runner.reporters

Version: 2.7.0

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit.runner.utility

Version: 2.7.0

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit.runner.visualstudio

Version: 2.5.6

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit.runner.visualstudio

Version: 2.5.7

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: APACHE20

License details: <https://www.apache.org/licenses/LICENSE-2.0>

xunit.runner.visualstudio

Version: 2.4.3

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: MIT

License details: <https://opensource.org/license/mit/>

xunit.runner.visualstudio

Version: 2.4.5

Vendor: Brad Wilson

Copyright: Copyright (c) .NET Foundation and Contributors All Rights Reserved

License type: MIT

License details: <https://opensource.org/license/mit/>

YamlDotNet

Version: 8.1.0

Vendor: Microsoft

Copyright: Copyright (c) 2008, 2009, 2010, 2011, 2012, 2013, 2014 Antoine Aubry and contributors

License type: MIT

License details: <https://opensource.org/license/mit/>