

DataZen Installation

The universal, out-of-band data replication and Change Data Capture engine.

This documentation provides installation and first-time configuration settings of the DataZen Manager application and a DataZen Agent.

Last Updated On: January 10th 2024

Contents

Pre-Requisites	3
DataZen Manager Installation	3
DataZen Agent Deployment	6
Installing and Configuring a New DataZen Agent	6
Finalizing Agent Settings	8
Advanced Agent Configuration1	0
Use HTTP/S for the Agent Listening Port1	0
Specify multiple TCP Ports for an Agent1	1
Configure Remote Monitoring with DataZen Manager1	1

Pre-Requisites

To successfully install and configure DataZen you will need the following:

- A windows server running 2012 or higher
- .NET 4.7.2 framework installed
- SQL Server 2016 or higher (express edition is sufficient for most implementations)

NOTE: You may need additional ODBC drivers depending on the data sources you will be accessing.

DataZen Manager Installation

To Install DataZen Manager the first time, follow these instructions.

https://www.enzounified.com/downloads/releases/datazen/datazenmanager.zip	Download the DataZen Manager Zip file
For example:	Create a Directory where the manager will be installed
C:\Program Files\EnzoUnified\DataZenManager\	

Extract the EXE from the datazenmanager.zip file downloaded
previously. Copy the DataZenManager.exe file in the folder created
aboveExtract and copy the
DataZenManager.exe found in the Zip
file in this directory



Unblock the DataZenManager.exe file

🍬 DataZ	enManager eve	2/7/202/ 7·51 AM
	x (0 (1) (2) 🛈	
	Open	Enter
	🖄 Share	
	📑 Run as administrator	
	🔗 Pin to Start	

Start the DataZenManager.exe as an administrator to allow the application to download its dependencies.

If or when prompted by Windows, click OK and/or Allow to enable the application to start and download files.



C:\tmp\DATASYNC\ C:\tmp\PGP C:\tmp\DLQ

• The DataSync folder will be used as the default location for change logs

- The PGP folder will be used as the default path for finding public and private keys for Change Log encryption (optional)
- The DLQ (Dead Letter Queue) path specifies the default location for failed change logs, if used by a job

Enter the folders	s created above in the three paths provided.	Open the Configuration -> Options screen
If desired, enter remotely; for mo	a Request Timeout in seconds if agents are located ost installations, leave this field blank.	
To prevent Dataz cloud-based HTT Online Updates NOTE: Checking	Zen from detecting automatic updates and using P/S job definitions, check the Disable Automatic box. <i>this box will disable certain features of DataZen.</i>	
Options	- 0 X	
Default Sync File Path:	C:\Tmp\DATASYNC	
Default PGP Path:	C\Tmp\PGP pick Default path where PGP Files are stored	

pick...

OK Cancel

You are now ready to proceed to the agent deployment and configuration.

seconds (takes effect upon restarting the Manager)

C:\Tmp\DLQ

Default Dead Letter Queue Path

Default DLQ Path:

Agents Request Timeout:

Disable automatic online updates

DataZen Agent Deployment

Installing and Configuring a New DataZen Agent

Although DataZen Manager allows you to monitor and upgrade agents remotely (on other machines), installing a new agent requires using DataZen Manager on the machine where the agent is being installed.

DATAZEN MANAGER (Administrator)	
<u>File</u> <u>C</u> onfiguration <u>V</u> iew Help	
Sync Agent 🕨	Connect to existing agent
Unregister Agent	Create and register new agent
Start / Restart Agent Service	
Stop Agent Service	
E <u>x</u> it	

Agent Configuration	http://docslboot
Server Ivanie of IF.	ev: http://iocallost
Det Number	0550
For Number.	1115 por musice available for use
Agent Binaries Location	n
Agent Binaries Location	n
Agent Binaries Location O Download latest	n agent available (recommended)
Agent Binaries Location Download latest Download specifi	n agent available (recommended) ic version:
Agent Binaries Location Download latest Download specifi	n agent available (recommended) ic version:
Agent Binaries Location Download latest Download specifi Installation	n agent available (recommended) ic veniion:
Agent Binaries Location Download latest Download specifi Installation	n agent available (recommended) ic version:
Agent Binaries Location O Download latest O Download specifi	n agent available (recommended) ic version:
Agent Binaries Location Download latest Download specifi Installation	n agent available (recommended) io version:
Agent Binaries Location Download latest Download specifi Installation	n agent available (recommended) ic version:
Agent Binaries Location Download latest Download specifi Installation Installation directory:	n agent available (recommended) ic version:

Select File -> Sync Agent -> Create and register new agent.

A new window will become visible, allowing you to install and configure an agent on the same machine where DataZen Manager has been installed.

The Service Settings tab allows you to specify how the service will start and which port it will use.

Server Name or IP: The URL DataZen Manager will use to connect to the agent

Port Number: The TCP Port the agent will bind to

Agent Binary Location: The version of the agent to install

Installation Directory: the path where the agent binaries will be installed

Although optional, a good practice is to use the port number as part of the folder name of the DataZen agent; this is particularly useful if multiple agents will be deployed on the same machine.

For this example, this folder indicates the agent is listening on port 9559.

C:\Program Files\EnzoUnified\EnzoDS9559\

This wizard insta	lls and configures a new	DataSync Agent on the local	machine. Each agent requies a sepa	arate license.
Service Settings	License & Registration	Stage Database Connection	Windows Service Registration	
Enter the licen Contact info@	se key for the adapter be enzounified.com to purch	elow. nase a license.	Generate free 30-day license	
				*

Enter your license key on the License & Registration tab.

To purchase a license, please contact <u>info@enzounified.com</u>.

If you are trying DataZen for the first time, click on the **Generate a free 30-day License** button. Doing so will show another screen asking you to fill out your email, name and other details. Once you have entered this information, a 30-day Enterprise evaluation license key will be generated and filled out automatically on this screen.

NOTE: An email will be sent to the email address provided with a copy of your license key. NOTE: The 30-day trial edition requires the use of SQL Server LocalDB

The second lead		Data Cara Arrada antika karata		to Passa
This wizard inst	alls and configures a new	Data Sync Agent on the local r	nachine. Each agent requies a s	separate license.
ervice Settings	License & Registration	Stage Database Connection	Windows Service Registration	
Stage Connec	ction String:			-
			ab	configure
The connectio	n string to the Stage SQL	Server database.		
The Stage Da	tabase stores the definitio	n of jobs, change tracking, and	historical information	
A NOTE I				
NOTE: L	ocalDB is only suppor	ted for testing/evaluation	purposes. Itabase for production use.	
NOTE: L If you ha	ocalDB is only suppor ave a paid license, ple	ted for testing/evaluation ease use a SQL Server da	purposes. Itabase for production use.	
NOTE: L If you ha	ocalDB is only suppor ave a paid license, plo	ted for testing/evaluation ease use a SQL Server da	purposes. tabase for production use.	
A NOTE: L If you ha	ocalDB is only suppor ave a paid license, plo	ted for testing/evaluation ease use a SQL Server da	purposes. tabase for production use.	
NOTE: L If you ha	ocalDB is only suppor ave a paid license, ple	ted for testing/evaluation ease use a SQL Server da	purposes. tabase for production use.	
A NOTE: L If you ha	ocalDB is only suppor ave a paid license, plo	ted for testing/evaluation ease use a SQL Server da	purposes. tabase for production use.	
1 NOTE: L If you ha	ocalDB is only suppor ave a paid license, plo	ted for testing/evaluation asse use a SQL Server da	purposes. tabase for production use.	
NOTE: L If you ha	ocalDB is only suppor ave a paid license, plo	ted for testing/evaluation asse use a SQL Server da	purposes. tabase for production use.	
A NOTE: L If you ha	ocalDB is only suppor	ted for testing/evaluation nase use a SQL Server da	nacosan nonnego, purposes, tabase for production use.	
A NOTE: L If you ha	ocaIDB is only suppor	red for testing/evaluation ease use a SQL Server da	nacocae internacionality purposes. tabase for production use.	
NOTE: L If you ha	ocaIDB is only suppor	ted for testing/evaluation asse use a SQL Server da	purposes.	

Select the Stage Database Connection tab.

By default, a LocalDB connection string will be specified.

If you are using a paid license, click on the **configure...** link

The Stage Database must be SQL Server 2016 or higher, any edition, and should preferably be located on the same server where the agent is being installed for best performance. The database size may grow significantly depending on the use of Change Data Capture and the amount of data being captured. As a result, while SQL Server Express edition is supported, it may not be sufficient for situations where large data sets are being replicated with Change Data Capture engaged.

Contact Enzo Support for further information.

Database Connecti	on — 🗆 🗙
Enter connection strin	na settings below and click OK
Sustan	COL Caura (Native Devided) at
System.	SQL Server (Native Provider) ~
Port:	1433 (leave empty for default port)
Database Server:	localhost
Authentication:	Windows Authentication \checkmark
User Id:	
Password:	
Connect Timeout:	15
D.1. N	
Database Name:	datazen_9559
	Create the database if it doesn't exist
New DataSync Agent	
This wizard installs and con	figures a new DataSync Agent on the local machine. Each agent requies a separate license.
Service Settings License &	Registration Stage Database Connection Windows Service Registration
Register this agent a	is a Windows Service
If not registered as a W	/indows Service, this agent may need to be started manually
Service Name Suffi	x: EnzoDS_ [9559 Spaces will be removed and special characters are not allowed.

In the Database Connection screen, enter the following information.

Database Server: The database server name and optionally the instance name to connect to **Authentication**: Database credentials to use (use Windows Authentication if possible)

Database Name: Enter the name of a database to create (it will be created later automatically if needed)

Click OK to close the Database Connection screen and fill out the connection string.

In the Windows Service Registration tab, check the **Register this agent as a Windows Service**. This setting is optional; however, if this agent is not registered as a service, it will not start automatically when the machine restarts. To start the agent manually, simply run the **EnzoDS.exe** file in the directory where the agent was installed.

Service Name Suffix: Enter a suffix for the windows service name. Using the port number of the agent is generally a good practice.

Once all the information has been filled out, click OK to install the agent. This operation may take a few minutes.

Installing new agents requires administrative privileges; it is recommended to run the DataZen Manager as an Administrator to ensure a successful installation.

Finalizing Agent Settings

To edit the configuration of an existing agent or change its default security settings, follow these steps.



Modify the settings below and click OK to save. Changes take effect immediately

Modify the settings below and click OK to save. Changes take effect immediately

Stage Database Security License Key Shared Access Keys

The connection string to the Stage SQL Server database. The Stage Database stores the definition of jobs, change tracking, and historical information. WARNING: Other than security credentials, updating this setting is not recommended once jobs have been created.

Stage Database Security License Key Shared Access Keys

Stage Connection String:

DataSync Agent Settings

Security Groups Allowed:

Select the agent to reconfigure, and choose Configuration -> Agent Settings...

This screen allows you to change/edit the connection string to the Stage database, change security settings, and change the license key.

NOTE: Changing the Stage Connection String is not recommended; loss of data is possible. Please contact Enzo for guidance.

To change access control settings, choose the **Security** tab.

BUILTIN\Administrators are always allowed access to the agent.

By default, NT AUTHORITY\Authenticated Users can administer agents. However, adding specific groups will limit access to the agents as specified.

To change your license key, choose the License Key tab and paste it in the license key box.

201 configure...

OK Cancel

Add Remove Selected	These Windows Security Groups will be able to manage all features of this Erno Sync Agent, including creating/deleting jobs and viewing job history. Enter one security group per line. If empty the following security group will be used: INTAUTHORITY/Authenticated Users Members of BUILTINAdministrators will always be able to manage agents.
	OK Cancel

atasync Agent settings		-	 ×
Modify the settings below and clic	k OK to save. Changes take effect immediately.		
tage Database Security Licen	se Key Shared Access Keys		
Shared Access Keys allow you	to access agents using HTTP Requests.		
Primary Access Key:		atil rotate key	
Secondary Access Key:		and rotate key	
Access Level:	None (no access allowed) \checkmark		
	HTTP API Access is disabled		
Limit access to GET op	erations (read-only)		

To enable remote registration of agents from another DataZen Manager, or to enable HTTP/S access using Token-based authentication, change the Access Level specified in the **Shared Access Keys** tab.

See the online documentation for more information about these settings.

Advanced Agent Configuration

The following configuration settings require manual changes and may cause the agent to stop operating successfully; as a result, it is recommended to reach out to the Enzo support team before making these changes. The settings below require changing settings in the **EnzoDS.Exe.config** file where the agent is installed.

The use of the **listenerPort** setting is no longer recommended and will be retired in a future release. Remove this setting from the configuration file and instead use the full URL (including the port information) in the **listenerUrl** setting. For example, the following setting tells the agent to listen on localhost port 9559.

<add key="listenerUrl" value="http://localhost:9559">

Separating URLs with a comma tells the agent to bind and listen on multiple HTTP ports.

For more detailed instructions and overview of the DataZen Agent API visit https://www.enzounified.com/docs/datazen/datazen-security

Use HTTP/S for the Agent Listening Port

By default, a DataZen agent listens on port 9559, which is not encrypted. While sensitive data (such as connection string settings) are encrypted by DataZen internally, using an HTTP/S endpoint provides additional security. To use port 443 change the **listenerUrl** setting accordingly.

```
<add key="listenerUrl" value="https://SERVERNAME" />
```

Specify multiple TCP Ports for an Agent

You may configure a DataZen agent to listen on multiple TCP Ports. Although DataZen Manager only communicates on a single port you may choose to enable the agent to use multiple ports to accept HTTP/S requests. For example, the following setting tells the agent to listen on both port 443 (HTTPS) and 9559 (HTTP).

```
<add key="listenerUrl" value="https://SERVERNAME,http://localhost:9559" />
```

Configure Remote Monitoring with DataZen Manager

DataZen Manager supports accessing and managing agents remotely; this allows you to manage jobs and agent configuration settings remotely. To enable an agent for remote access the agent needs to be configured to allow the **Administrative** Access Level.

You will also need to copy one of the access tokens as it will be needed in the instructions below.

This setting must be changed using DataZen Manager located on the machine where the agent is running.

See this link to see how to change this setting: <u>https://www.enzounified.com/docs/datazen/datazen-security</u>

Once remote administrative access has been enabled, you can configure another DataZen Manager to register a remote agent.

	-			
<u>F</u> ile	<u>Configuration</u> <u>View</u> Help			
	Sync Agent		Connect	to existing agent
	Unregister Agent		Create ar	nd register new agent
	Start / Restart Agent Service	-	Ē	0000
	Stop Agent Service			Name
	Exit			

Start DataZen Manager on a remote server and choose **Connect to existing agent...**

Register an existing	Enzo DataSync Agent.		
Server Name or IP:	http://devlap04:9558		
	ex: http://localhost:9559		
Authentication:	Token-Based Authentication		
Token:	•••••		
All Agent Settings ar	of Connection Strings are sent encounted with or without SSI		

File Configuration	View	Help			
RUNNING 2.0.5760.19804 (LocalDB)/MSSQLLocalDB http://devlap04:9558 Enterprise Edition	⊘ ⊡	II X	New • 2 🔄)	Status	🕚 History 🦘 D System
RUNNING 2.0.8794.30729 devlap05\enzo -> datazen_9600 http://localhost:9600	8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	II X	(general) itest-mysql Job Count: 1	ready	MySQL

In the **Server Name** field, enter the URL of the agent. This URL must be accessible from the machine where you are running the DataZen Manager application.

Select Token-Based Authentication and paste the access token of the agent.

Click Register

Once registered, you will see the agent listed and will be able to manage its jobs remotely.

To edit the registration if this agent, click on the gear icon.

NOTE: If the URL or the port of the agent changes, you will need to unregister the agent and re-register it using the new URL.