

# Integration Objects' OPC UA Interface for Databases

## OPC UA Server for Databases

Version 1.1 Rev. 0

## QUICK USER GUIDE

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### **ABOUT THIS USER GUIDE**

This guide is a step by step guide on how to install, configure and run OPC UA Server for Databases.

#### **INSTALLING OPC UA SERVER FOR DATABASES**

In order to properly run the OPC UA Server for databases, install .NET Framework 4.6 on the target system.

To install the OPC UA Server for Databases, run the installation executable using an administrator account and the wizard will guide you through the different installation steps.

#### **CONFIGURING OPC UA SERVER FOR DATABASES**

Go to Start => Programs => Integration Objects => OPC UA Server for Databases => OPC UA Server for Databases and start the OPC UA Server for Databases



Figure 1: OPC UA Server for Databases Start Menu

#### **STEP 1: ADD NEW DATABASE LINK**

Using the configuration tool, right click on the "Server Configuration" node, and select "**New** database link" from the displayed server menu.



Figure 2: New Database Link

Then, the new database link wizard will be prompted.



# STEP 2: NAME THE DATABASE LINK AND CHOOSE THE SOURCE TYPE

Type a name to define your database link, select the source type and specify how to retrieve OPC tags as shown in the figure below:

🔂 New Database link		х
Database	link	
Enter the Database	ink name and select your source type	
Name	SqlServerLink	
Source Type	SQL Server	
OPC Tags	Retrieve From Historian Table	
	Load Tags from CSV file Import Tags	el

Figure 3: Configure the Database Link

Click the next button to configure the connection string related to the selected database provider.

## **STEP 3: CONFIGURE DATABASE CONNECTION**

Set server connection settings by typing the server instance name, the authentication mode and the database name.



🐼 New Database link	x
SQL Server Connection Settings	
Choose your Server Name and the authentication type :	
Server Name : Nsqlexpress	
Authentication: Windows Authentication	
Password :	
Database Name : TestArchiver	]
Test Connection	
< Back Next >	Cancel

Figure 4: Configure Server Connection Settings

### **STEP 4: MAP TABLE FIELDS**

Map the table fields with the standard OPC tags attributes.



6	New Database link	x	c					
1116	Mapping table fields							
		Use Separate Definition Table						
	Table Name							
	Tag ID							
	Tag Name							
	Тад Туре							
	Table Name	Table_1						
	Tag Name*	TagName Configure Tags						
	Tag Value*	Value						
	Tag Timestamp*	TagTimeStamp						
		Unix Time						
	Tag Timestamp MilliSec							
	Tag Quality							
	Тад Туре							
	Default Type	String						
		Export Tags						
	[	Use Separate Table for Real-time Data						
	Table Name							
	Interpolation							
		5						
		< Back Next > Cancel						



#### Figure 5: Map Table Fields

Then, click the **Configure Tags** button. A window will be displayed to choose the tags that will be included in the server address space.

### **STEP 5: CHOOSE TAGS**

Select the tags that will be added to the Database link and then click **OK**.

🥜 Configure Tags	_ = X
Select All Items	X
ItemID	
🖉 [master].dbo.[Table_1]/Tag1	
[master].dbo.[Table_1]/Tag2	
Master].dbo.[Table_1]/Tag3	
[master].dbo.[Table_1]/Tag5	
[master].dbo.[Table_1]/Tag6	
[master].dbo.[Table_1]/Tag7	
ОК	Cancel

Figure 6: Choose Tags





## **STEP 6: SAVE THE CONFIGURATION**

Click the **Save** Button to save the current configuration.

💡 Integration Objects' OPC UA Serve	r for Databases	_ = X
File OPC UA Server Settings	Help	
New Open Save Save Cle	Aar Exit	
G <sup>…</sup> Server Configuration ✓ SqlServerLink	Server Endpoint URLs	
	Sessionid Name Hear Last Contact	
	Jessioniu Indine User Last Contact	
	Subscriptions	
	Status: Stopped Current Time: 00:00:00 Sessions: 0	Subscriptions: 0

Figure 7: Save the Configuration

Click **Yes** when prompted to restart the application and then connect to the OPC UA Server for Databases through an OPC UA Client.



									I	ntegratior
Home										
New Open Save Save	ct Disconnect	Settings UA	Settings	? Help	(1) About	Define Remove		Certificate Manager		
File	Session	Configuration		Help		Default Configuration (		Certific	ertificate	
Sessions	Data View	History View E	Event View							
⊡ Sessions	Display Name		Node Id			Value		Da	ata Type	
🗄 🥔 Session0	SolServerLink/Tag1		ns=2:s=SalServerLink/Tag1			22		Stri	String	
Subscription0	SolServerLink/Tag2		ns=2;s=S	glServerLink	k/Tag2	22		Stri	String	
	SqlServerLink/	Tag3	ns=2;s=SalServerLink/Tag3		k/Tag3	22			String	
	SqlServerLink/Tag4		ns=2;s=SqlServerLink/Tag4		22		Stri	String		
	SqlServerLink/Tag5		ns=2;s=S	ns=2;s=SqlServerLink/Tag5		22			String	
	SqlServerLink/Tag6		ns=2;s=SqlServerLink/Tag6		22			String		
	SqlServerLink/Tag7		ns=2;s=SqlServerLink/Tag7		22		Stri	String		
Forward										

Figure 8: Connect to OPC UA Server for Databases through an OPC UA Client



For additional information on this guide, questions or problems to report, please contact:

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