IKAVA DataService

User Manual

Version 1.0.0 For DataService Version 1.0.0



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System Requirements

Microsoft Windows

Our product has passed all quality tests with the following Windows Versions:

- Windows 10

.NET Framework

Our product has passed all quality tests with the following .NET Framework Versions:

- .NET Framework 4.8

UiPath Platform

Our product has passed all quality tests with the following UiPath Platform Versions:

- UiPath Platform 22.4.7 with Compatibility Mode Legacy
- UiPath Platform 22.10.3 with Compatibility Mode Legacy and Windows

MongoDB

Our product has passed all quality tests with the following MongoDB Versions:

- MongoDB 4.2.23
- MongoDB 6.0.3

Quickstart Tutorial

Installation

MongoDB (Database)

Please download and install a currently supported MongoDB version on your local machine.

You will find supported versions in chapter "MongoDB" in this manual.

Download the free community edition of MongoDB as MSI Package from this page:

https://www.mongodb.com/try/download/community.

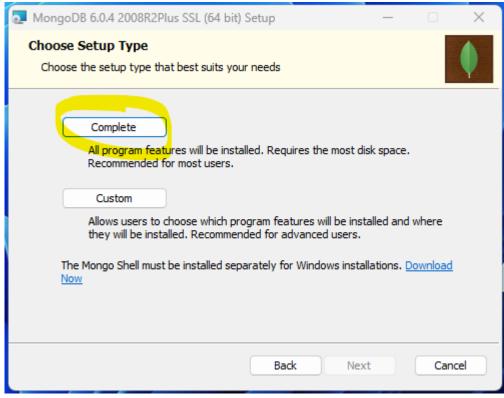
Then install it with the following settings:



Click "Next".

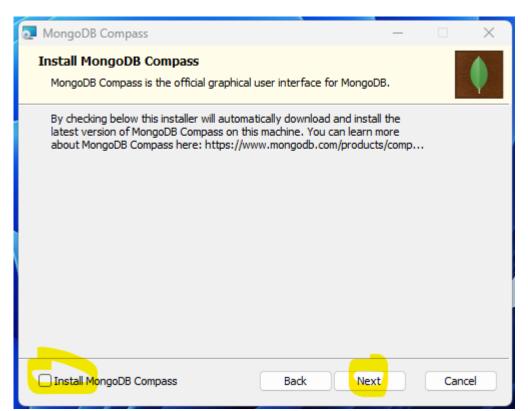
MongoDB 6.0.4 2008R2Plus SSL (64 bit) Setup —	\times			
End-User License Agreement				
Please read the following license agreement carefully	Y.			
	_			
Server Side Public License				
VERSION 1, OCTOBER 16, 2018	1			
Copyright © 2018 MongoDB, Inc.				
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.				
TERMS AND CONDITIONS				
I accept the terms in the License Agreement				
Print Back Next Cano	el			
Accept the terms.				

Click "Next".



Click "Complete"

ervice Configura Specify optional se	tion ettings to configure MongoDB as a service.
Install MongoD as a	a Service
Run service as I	Network Service user
O Run service as	a local or domain user:
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Account Name	: MongoDB
Account Pass	
Service Name:	MongoDB
Data Directory:	C:\Program Files\MongoDB\Server\6.0\data\
Log Directory:	C:\Program Files\MongoDB\Server\6.0\Jog\
	< Back Next > Cancel



MongoDB Compass must not be installed, because we will use Robo3T as GUI. Click "Next".

MongoDB 6.0.4 2008R2Plus SSL (64 bit) Setup —		×
Ready to install MongoDB 6.0.4 2008R2Plus SSL (64 bit)		(
Click Install to begin the installation. Click Back to review or change any of your installation settings. Click Cancel to exit the wizard.		
Back	Cano	el

Click "Install".



Click "Finish".

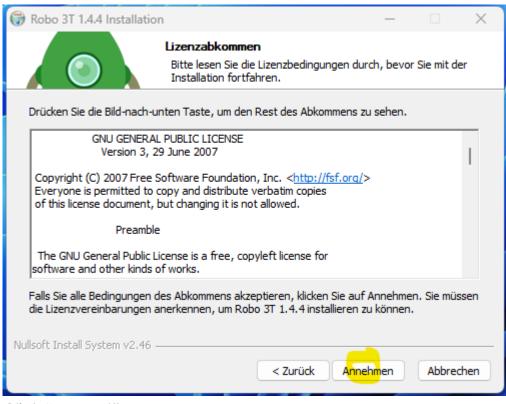
Install Robo3T (GUI for the Database)

Please download and install any GUI for your MongoDB. We recommend Robo3T, because it will be used in this Tutorial. Download Robo3T from this page: <u>https://github.com/Studio3T/robomongo/releases</u>.

Then install it with the standard settings:



Click "Next".



Click "Accept".

🗑 Robo 3T 1.4.4 Installatic	n	—		\times
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Click "Next".

🕞 Robo 3T 1.4.4 Installatio	'n	—		×
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	-Ordner für die Programmverknüpfungen au geben Sie dessen Namen ein.	us. Falls Si	e einen ne	euen
7-Zip Accessibility Accessories Administrative Tools Atlassian Cisco HitFilm Maintenance Microsoft Office Tools Notepad++ OBS Studio				
Keine Verknüpfungen e Nullsoft Install System v2.46		allieren	Abbre	chen

Click "Install".



Click "Finish".

Then robo3T should start.

How to connect it with MongoDB will be explained in the "Usage" Chapter.

DataService NuGetPackage

1.Download

You can order the IKAVA.DataService directly from the UiPath Marketplace:

https://cloud.uipath.com/ikavabnpvnvu/marketplace_/listings/ikavadataservice-onpremises-dataservice5757

If the direct link is broken, search for IKAVA.DataService from the UiPath Marketplace: <u>https://marketplace.uipath.com/</u>

You can also directly download the DataService from our website:

https://www.ikava.ch/downloads/

If you download the package directly, please contact IKAVA AG for a license key.

2.Installation

Please copy your downloaded IKAVA.DataService NuGetPackage into your preferred NuGetPackages folder or alternatively upload to your Orchestrator. The Windows standard NuGetPackage folder is **"%userprofile%\.nuget\packages"**.

Usage

Add DataService Package to your project

- 1. Open a UiPath Studio Project.
- 2. Go to Manage Packages.
- 3. Select "All Packages" and search for IKAVA.DataService.
- 4. Click install.
- 5. Click save.

Insert "DataService Configuration" Activity into your project

- 1. Go to the Activities-Tab in Project-Explorer.
- 2. Navigate to IKAVA/DataService/Configuration.
- 3. Select the "DataService Configuration" Activity and place it somewhere in your UiPath Studio project.
- 4. Click "Start..."

Create a unique "MailEntity"

We are now creating the following DataService-Project step-by-step:

5 IKAVA	.DataService								_		×
Generato	Advanced Settings										
Project -											
File											
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	Version:	0.0.0									
	Authors:	IKAVA AG									
	Owners:	IKAVA AG									
	Description:	IKAVA AG Project									
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\Entities(OfExampleProject.0.0.1	json			,,		,,		, , , , , , , , , , , , , , , , , , , ,		
	2022/10/10 17:14:48 File imported. 2022/10/10 17:14:48 Check License										
2022/10/	2022/10/10 17:14:48 License valid until: 2023/01/01. 82 days left.										
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2022/10/	io mini-co input not	anoweu, riease use the	ionowing ionnat. numbe	innomber number, exa	mpice 0.0.10						

- 1. Move your cursor to the "Entities" GroupBox and click "Add".
- 2. Now "Entity1" should appear in the "Entities" Groupbox.
- 3. Double-Click Entity1 and rename it to "MailEntity".
- 4. Move your cursor to the "Fields" GroupBox and click "Add".
- 5. Now "Field1" should appear in the "Fields" Groupbox.
- 6. Double-Click Field1 and rename it to "MessageField".
- 7. Move your cursor to the "Project" GroupBox and click "Build".
- 8. You will be asked if you wish to save. Please click "Yes".
- 9. Building might take some time. When everything went fine, then a "Build Successful" message should appear.
- 10. Insert the newly created NuGetPackage to your project according to the popped up instructions window.

Use the newly created "MailEntity" in your Studio Project

We are now modelling the following sequence step by step:

🚊 Create entity 🔗
Output Entity
MailEntity1
A+B Assign
MailEntity1.Messag = "Dummy Message
🛱 Create entity record 🛛 🗞
Input Entity
MailEntity1
Mongo Connection String
"mongodb://localhost:27017"

- 1. Go to the Activities-Tab in Project-Explorer.
- 2. Navigate to IKAVA/DataService/Entity.
- 3. Select the "Create Entity" Activity and place it in your UiPath Studio project.
- 4. A popup window should appear.

Delete Entity Record by ID Create Entity Record	Select Types ? ×	<
🛱 Delete Entity From List by ID	CreateEntity <tentity></tentity>	
✓ Available	TEntity	
 App Integration 	Browse for Types	-
 Computer Vision 	OK Cancel	
> Data		_
✓ IKAVA		
✓ DataService		
 Configuration 		
✓ Entity		
🛱 Create Entity		

Googla.Apis.PlatformServices [1.55.0.0] HarmonySharedState [0.0.0] HarmAgiltyPack [1.1.30.0] ICSharpCode.SharpZipLib [1.3.3.11] IKAVA.DataService.Library [1.0.1.0] IKAVA.DataService.Library [1.0.1.0] IKAVA.DataService.Projects.EntitiesOfExampleProject [0.0.0.0] # EntitiesOfExampleProject MaliEntity Interop.Domino.UPath [1.2.0.0] MailKi 13.1.0.0] Microsoft.AspNetSignalR.Client [2.4.0.0] Microsoft.AspNetSignalR.Client [2.4.0.0] Microsoft.AspNetSore.Http.Connections.Client [6.0.0.0] Microsoft.AspNetCore.Http.Catures [3.1.6.0] Microsoft.AspNetCore.Http.Features [3.1.6.0] Microsoft.AspNetCore.Http.Features [3.1.6.0] Microsoft.AspNetCore.Http.Features [3.1.6.0] Microsoft.AspNetCore.Http.Features [3.1.6.0]

oogle.Apis.PeopleService.v1 [1.55.0.256/]

Click "Browse for Types" and select your newly created "MailEntity" as type. (Note: The selected type can never be changed again unless you reinsert the whole activity)

5. Click the Output Entity Field in your newly inserted activity and press ctrl + k to create a new variable. Name the new variable "MailEntity1" and press enter.

🛱 Create entity	*
Output Entity	
MailEntity1	

 Now add an assign Activity to your project and write: Left side: "MailEntity1.MessageField". Right side: "Dummy Message".

MailEntity1.Messag = "Dummy Message"

- 7. Select the "Create Entity Record" Activity and place it in your UiPath Studio project.
- 8. A popup window should appear. Again select the type.
- 9. Write "MailEntity1" into the "Input Entity" field and we are done.

Run your Automation

- Make sure that the MongoDB-Service has been started in the background. To check this, go to the Windows Taskbar and enter "Services". The MongoDB service has to be in the running state.
- 2. "Run" your UiPathStudio Project.
- 3. After termination without errors, you can open Robo3T (or any other GUI for MongoDB) and check the results of your first DataService usage.

Debugging with Robo3T (GUI for MongoDB)

Start Robo3T.

🙈 EULA	?	\times			
End-User License Agreement					
GNU GENERAL PUBLIC LICENSE					
Version 3, 29 June 2007					
Copyright © 2007 Free Software Foundation, Inc. < <u>http://fsf.org/</u> >					
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.					
Preamble					
The GNU General Public License is a free, copyleft license for software and other kinds of works.					
The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a programto make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.					
When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the free distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the s or use pieces of it in new free programs, and that you know you can do these things.					
To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.					
For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you recover you must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.	ceived.				
Developers that use the GNU GPL protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License giving you lega	1				
● I agree ○ I don't agree					
Back Next Cancel	Finis	sh			

Select "I Agree".

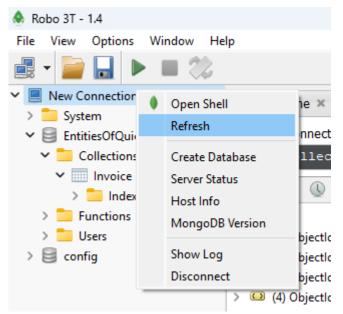
Click "Next".

EULA	?	×
Thank you for choosing Robo 3T!		
Share your email address with us and we'll keep you up-to-date with updates from us and new features as they come out.		
First Name:		
Last Name:		
Email: Phone:		_
Company:		
By submitting this form I agree to 3T Software Labs <u>Privacy Policy</u> .		
Back Next Car	ncel Finish	

Enter your data or leave it blank. Click "Finish".

MongoDB Connections								
Create, edit, remove, clone or reorder connections via drag'n'drop.								
Name	Address	Attributes	Auth. Database / User					
New Connection	ocalhost:27017							
i Connection settings have bee	en imported (1 record)		Connect Cance	el				

Select "localhost:27017". Click "Connect".



Select your connection and right click with your mouse. Click "Refresh".

Robo 3T - 1.4	
File View Options Window He	lp
🛃 • 📄 🔜 🕨 🔳 🖏	
🗸 📃 New Connection (4)	Welcome × Ødb.getCollection('Invoice') ×
> 🚞 System	
✓	New Connection 📃 localhost:27017 📄 EntitiesOfQuickstartDemo
 Collections (1) 	db.getCollection('Invoice').find({})
Invoice	
> 🚞 Indexes	Invoice 🕔 0.021 sec.
> 📒 Functions	Key
> 📒 Users	> 🖾 (1) Objectld("6400d5b7663d5d3fab91a4a8")
> 🗐 config	> 🖾 (2) Objectld("6400d5b7663d5d3fab91a4a9")
	> 🖾 (3) Objectld("6400d5b7663d5d3fab91a4aa")
	> 🖾 (4) Objectld("6400d5b7663d5d3fab91a4ab")
	> 🖾 (5) Objectld("6400d5b7663d5d3fab91a4ac")
	> 🖾 (6) Objectld("6400d5b7663d5d3fab91a4ad")
	> 🖾 (7) Objectld("6400d5b7663d5d3fab91a4ae")
	> 🖾 (8) Objectld("6400d5b7663d5d3fab91a4af")
	> 💷 (9) Objectld("6400d5b7663d5d3fab91a4b0")
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	> 🖾 (12) Objectld("6400d5b7663d5d3fab91a4b3")
	> 🖾 (13) Objectld("6400d5b7663d5d3fab91a4b4")
	> 🖾 (14) Objectld("6400d5b7663d5d3fab91a4b5")

Now your collection with the created objects should appear. (They might be different than in the screenshot)

Activities

Configuration

DataService Configuration

This activity does absolutely nothing during automation runtime.

You need it to create and manage Entities that you can use within our project.

5 IKAVA.E	lataService		· · ·									_		×
Generator	Advanced Settings	;												
Project -	Project													
File	File													
New	Import	Export Build												
Save	Destination:	C:\Users\pascal.federicc	C:\Users\pascal.federico.IKAVA\OneDrive - IKAVA AG\Dokumente\UiPath\ExampleProject\/KAVA\DataService\Projects\EntitiesOfExampleProject\0.0.0\EntitiesOfExampleProject.0.0.0.json											
	Name:	EntitiesOfExampleProje	t											
	Version:	0.0.0												
	Authors:	IKAVA AG												
	Owners:	IKAVA AG												
	Description:	IKAVA AG Project												
Entities						ields								
Add	Del					Add Del								
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Entity1						ID	Text	.,,		System built-in field		id().ToSt	ring()	
						CreateTime	DateTime			System built-in field	DateTime.No	w	-	
						RecordID	Text			System built-in field				
						RecordCreateTime	DateTime			System built-in field				
						RecordUpdateTime	DateTime			System built-in field				
						RecordInProgress	YesNo			System built-in field				
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2022/10/1	2022/10/10 15:17:19 File import: C:\Users\pascal.federico.IKAVA\OneDrive - IKAVA AG\Dokumente\UiPath\ExampleProject\IKAVA\DataService\Session.json													
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	0 15:17:19 File impo 0 15:17:20 File impo		.IKAVA\AppData\Roaming\IKAVA\D	ataService\AdvancedSetting:	s.jso	on								-

Entity

Create Entity

Creates a new Entity during automation runtime.

EntityList

Add Entity to List

Adds an Entity to a List of type Entity during automation runtime.

Create Entity List

Creates an empty List of type Entity during automation runtime.

Delete Entity from List by ID

Deletes an Entity from a List of type Entity during automation runtime.

20

EntityRecord

Create Entity Record

Takes an Entity and stores/records it on the database during automation runtime.

Delete Entity Record by ID

Takes the ID of an Entity and deletes its corresponding record (by ID) from the database during automation runtime.

Get Entity Record by ID

Takes the ID of an Entity and gets its corresponding record from the database during automation runtime.

Update Entity Record

Takes an Entity and updates its corresponding record (by ID) in the database during automation runtime.

EntityRecordList

Create Entity Record List

Takes a List of type Entity and stores/records it on the database during automation runtime.

Delete Entity Record List

Takes a List of type Entity and deletes its corresponding records (by ID) on the database during automation runtime.

Get Entity Record List

Gets a List of type Entity from the Database during automation runtime. Queries can be used to filter the Entities.