

Instruction  
For system administrator  
Setup and configuration «Depersonalization»  
solution

Solution company «TISA»  
Based on Microsoft Dynamics 365

(Version 1.0)

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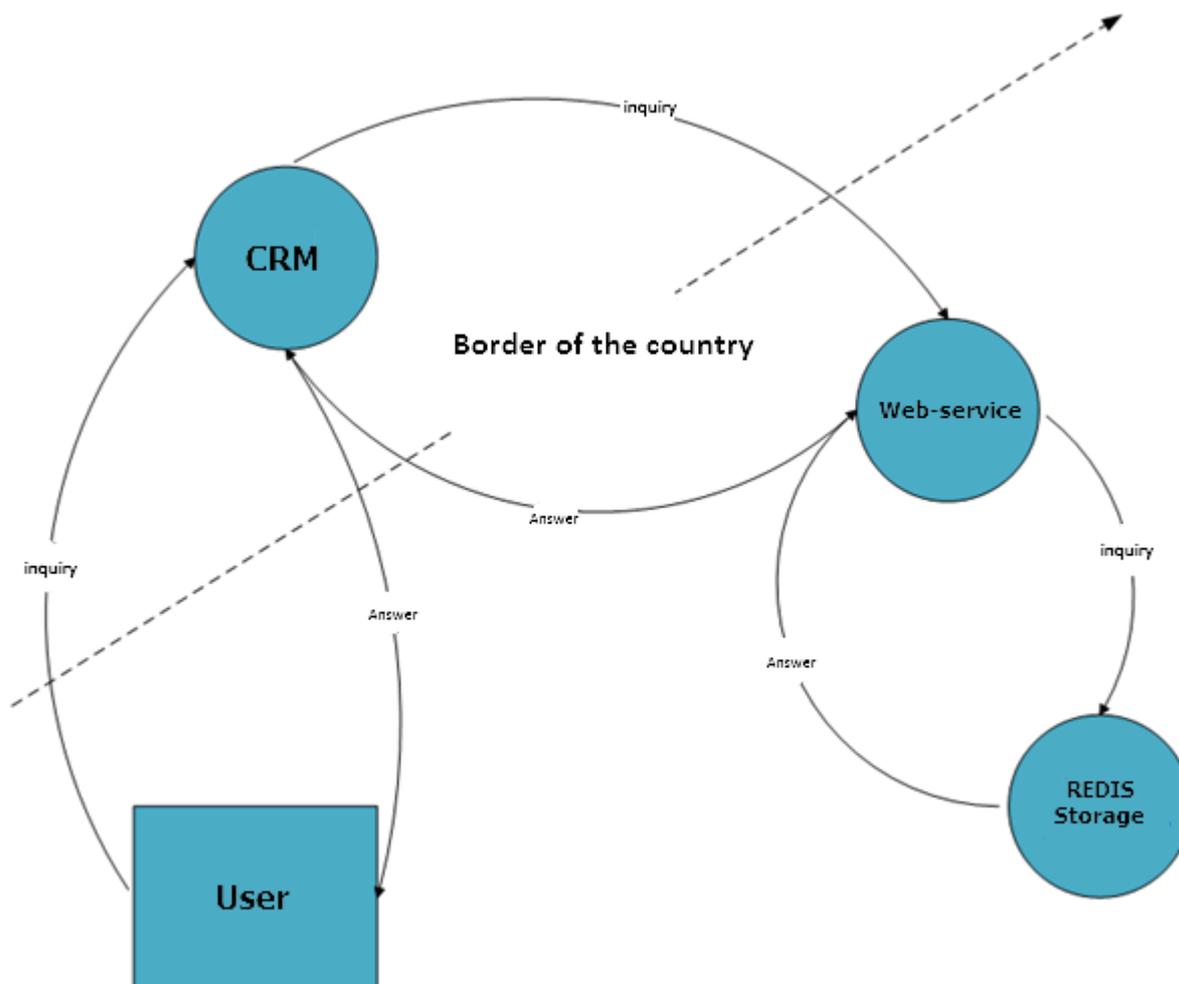
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## About

Main idea of this solution is save personal data in local machine storage when you work In MS Dynamics CRM 365.

Wherever your MS SQL deployed, personal data will be save in local storage.

## Scheme of process interaction system and service depersonalization solution:



## Conditions for deploying the solution

To deploy the solution, you need the following resources:

- Equipment for deploying an intermediary web service and storing personal data. It is possible to install all components on one machine, or on two different machines.
- Access to the CRM system with administrator rights.

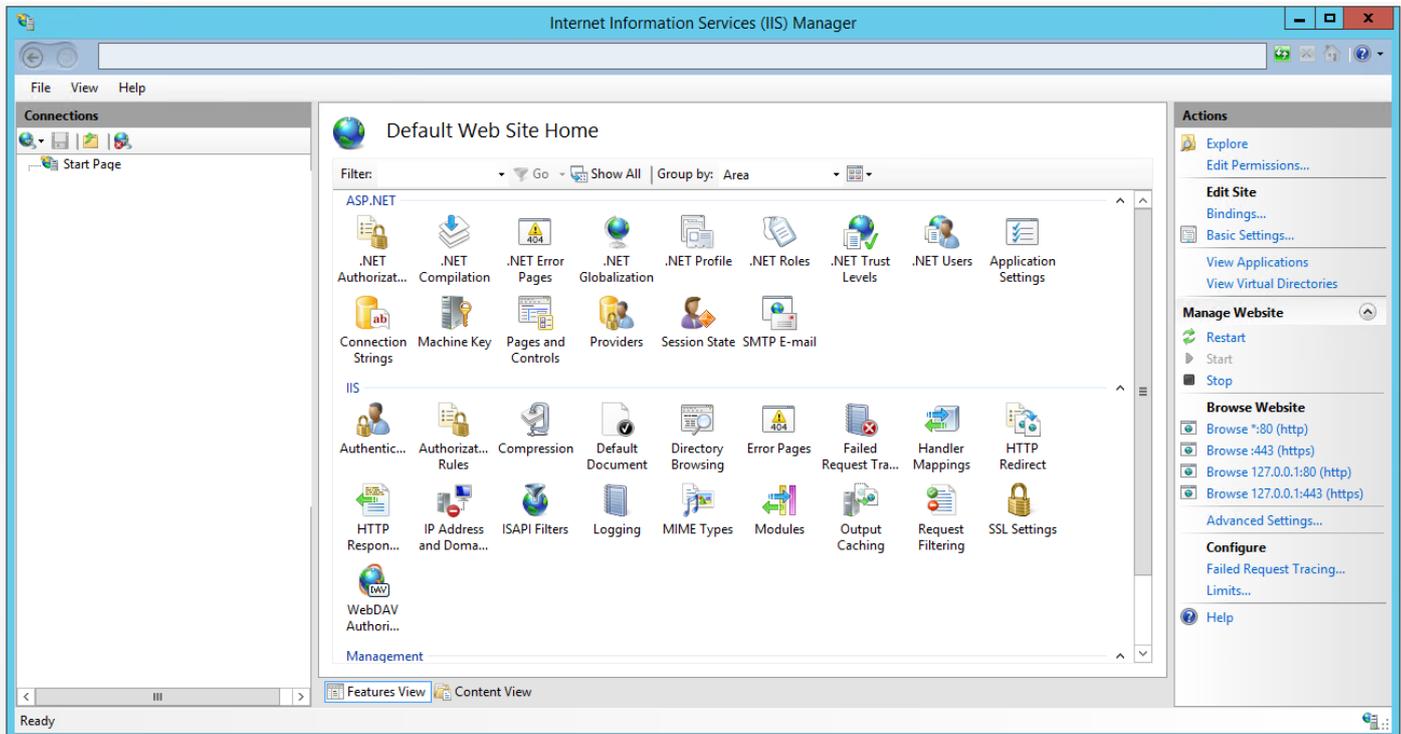
Before installation, you need to check the network availability between all the components of the solution and CRM.

# Setup and configuration solution

## 1. Preparation

This solution assumes the installed component IIS (Internet Information Server - is an extensible [web server](#) created by [Microsoft](#) for use with the [Windows NT](#) family.<sup>[2]</sup> IIS supports [HTTP](#), [HTTPS](#), [FTP](#), [FTPS](#), [SMTP](#) and [NNTP](#). It has been an integral part of the Windows NT family since [Windows NT 4.0](#), though it may be absent from some editions (e.g. Windows XP Home edition), and is not active by default.

IIS must be installed on server or work station where data will be save.



## 2. Installing the software.

One of the key points in the solution of depersonalization is that the correctness of its installation extends to a system without data.

If you are installing for a system with available data, you need a tool that allows you to update the records, after installing the solution to depersonalization.

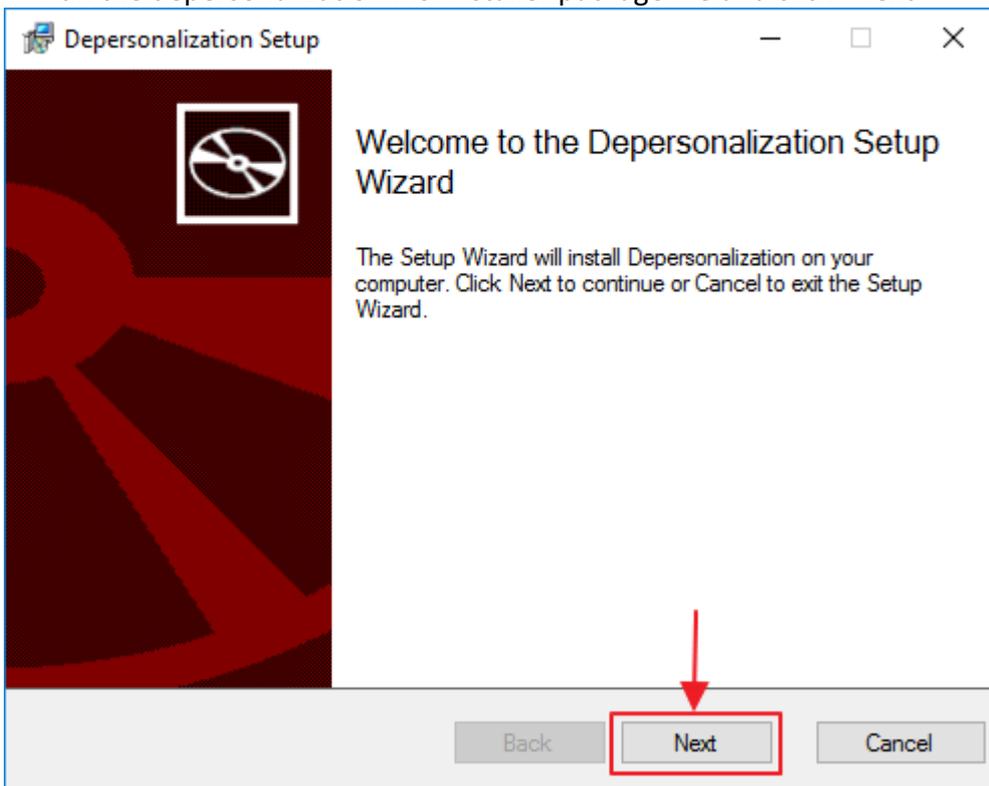
The installation of the depersonalization solution includes three components: Redis storage, a web service and a CRM solution.

### 2.1 Download the installer package for the components of the data depersonalization solution.

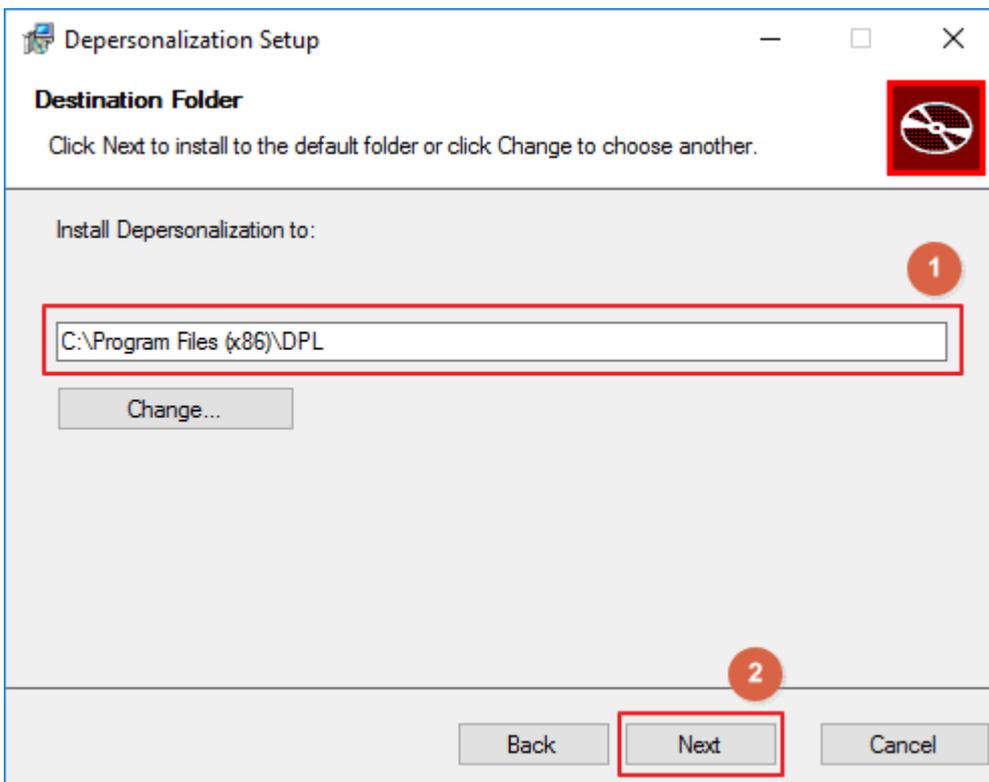
Download the installer package by reference: <http://ootisa.ru/Depersonalization.msi>

## 2.2 Installing the components of the data depersonalization solution

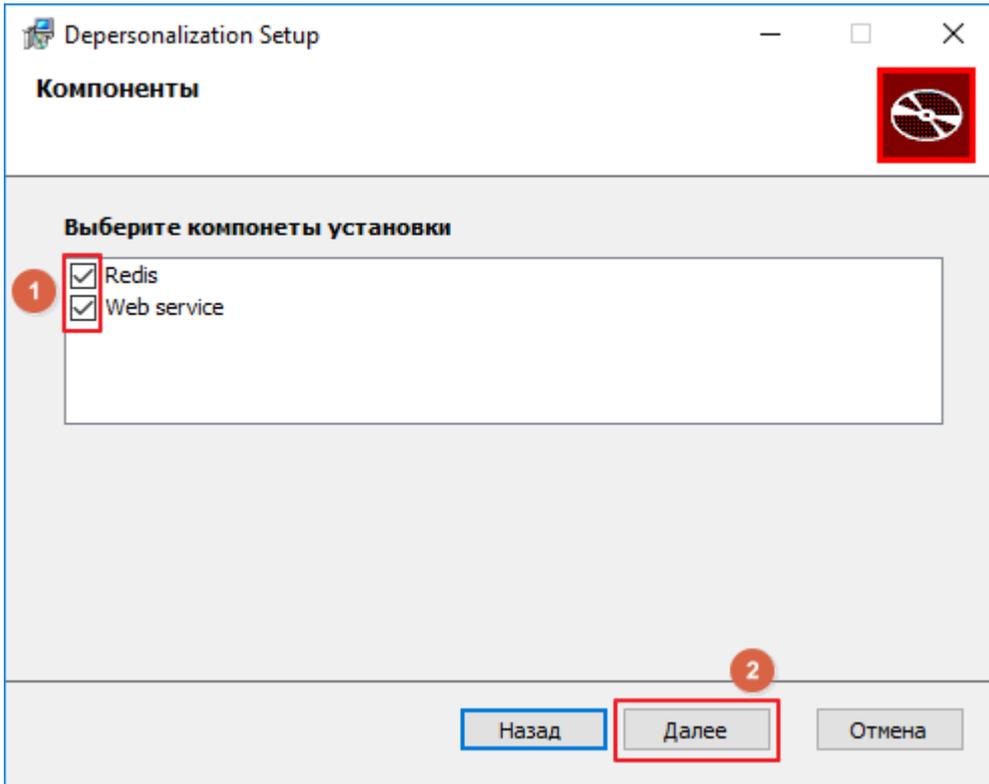
Run the depersonalization.msi installer package file and click "Next"



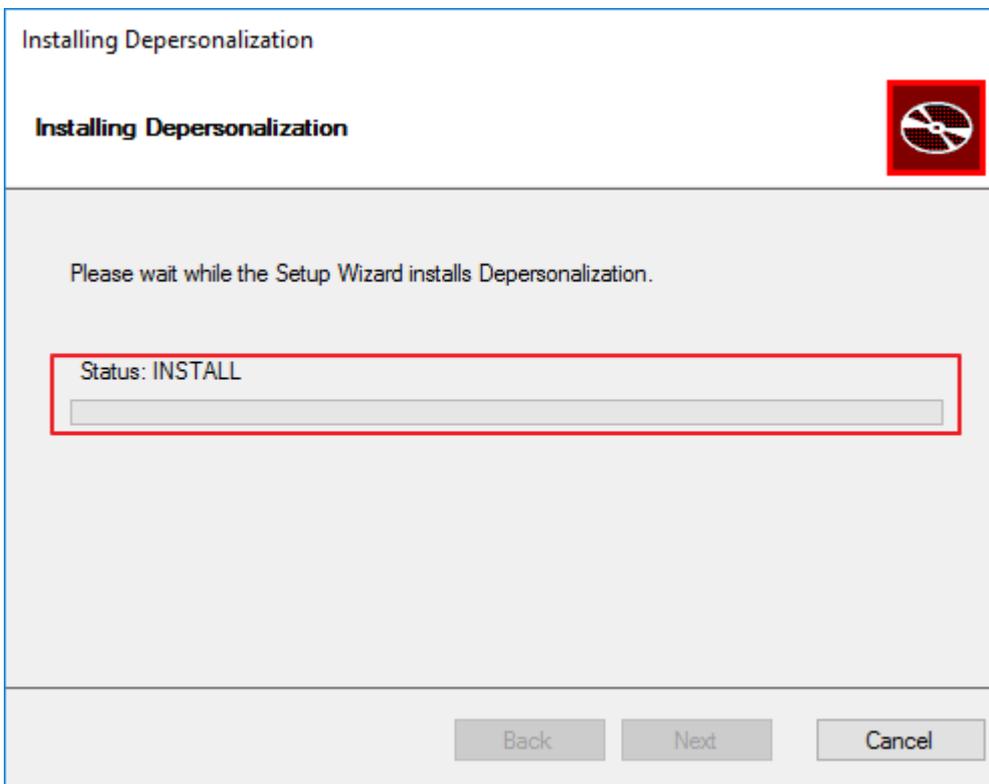
In the opened window, you must specify the installation path and click the "Next" button



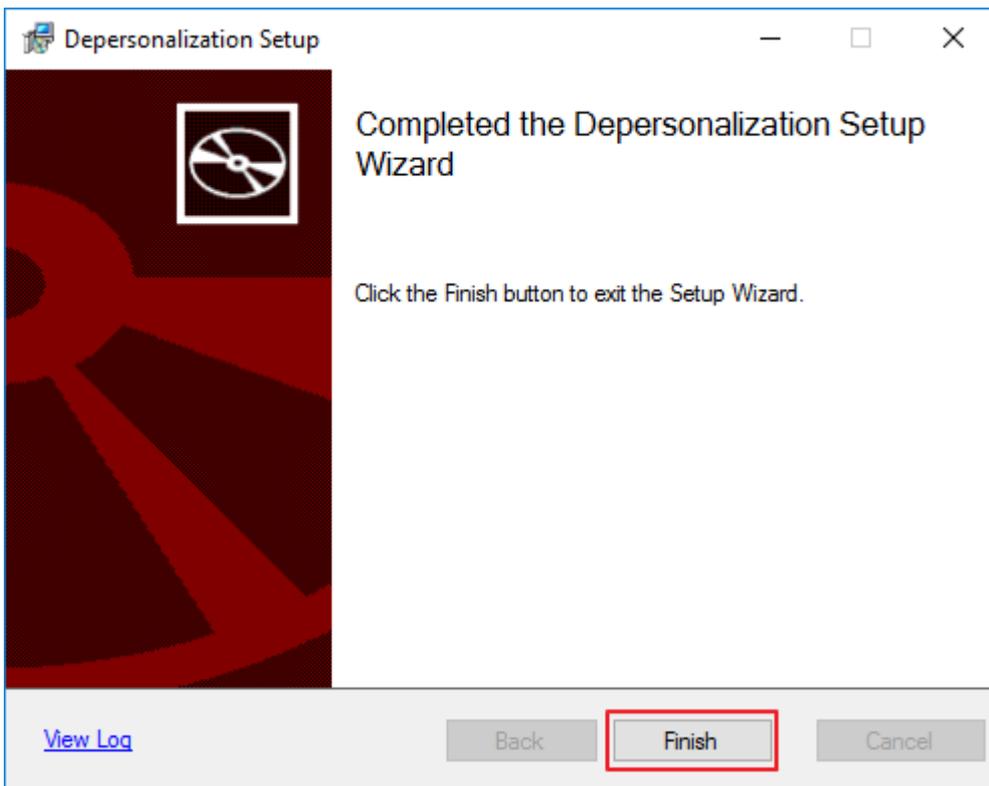
In the "Components" window, it is worth checking that all the elements will be installed. In the case of an error installing one of the elements, you must run the installation again, indicating which items are not installed.



Wait until the installation process is complete, you may need administrator rights to install.



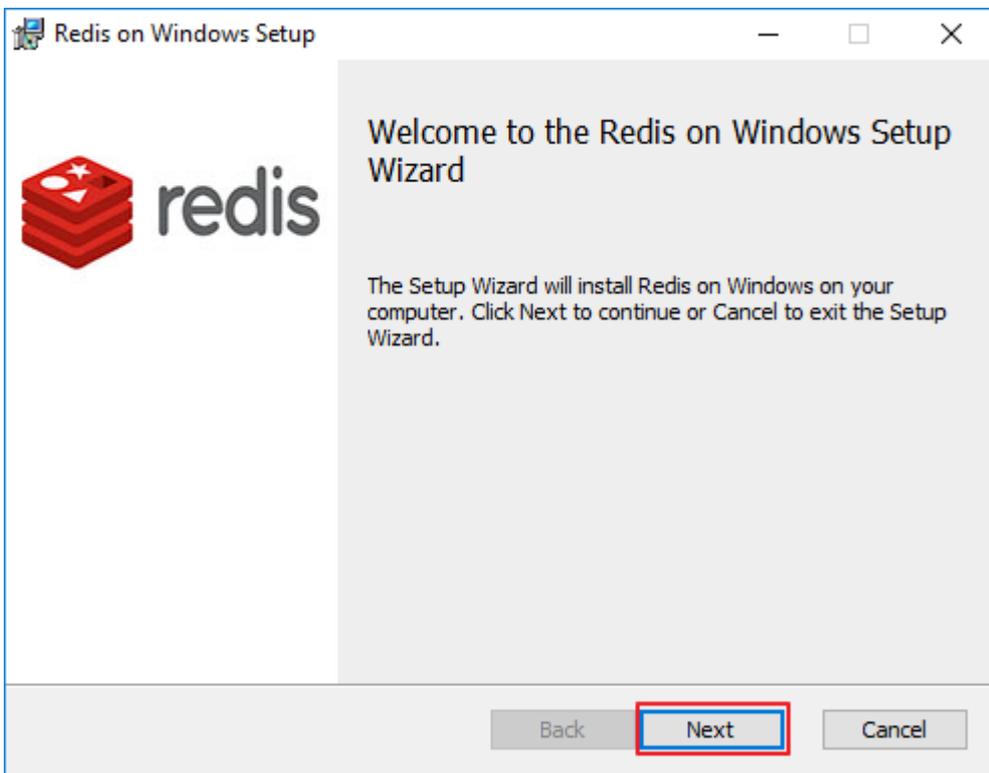
After the installation is complete, you must close the installer window by clicking on the button «Finish».



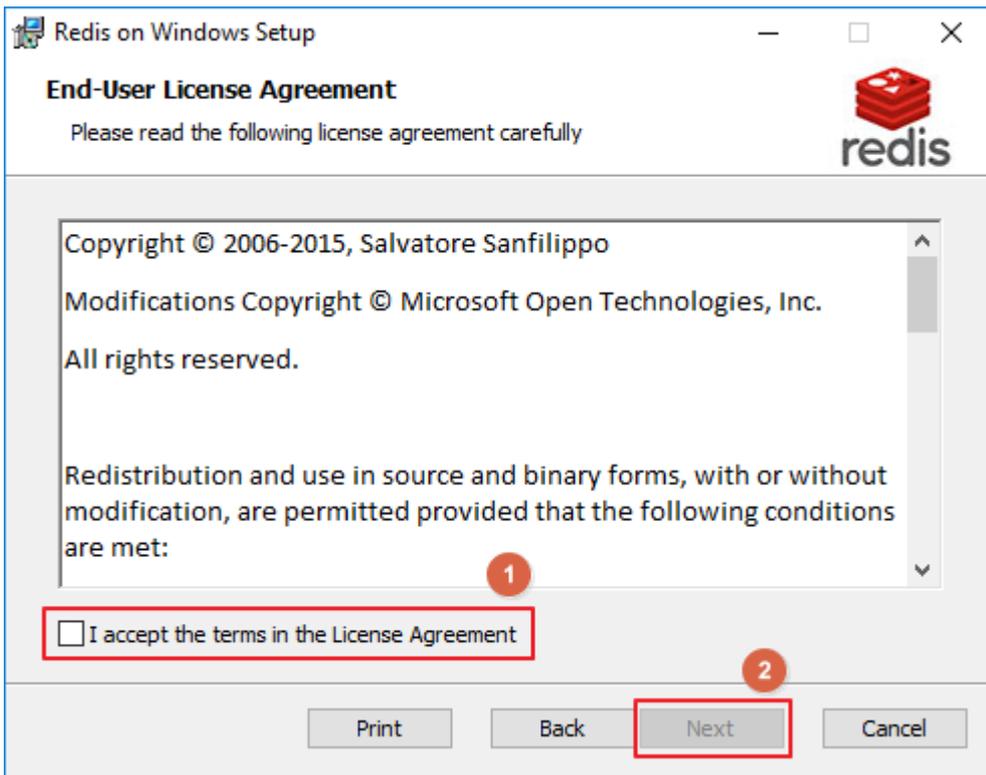
After the installer completes, the installation of the components starts.

### 2.3 Setup Redis storage

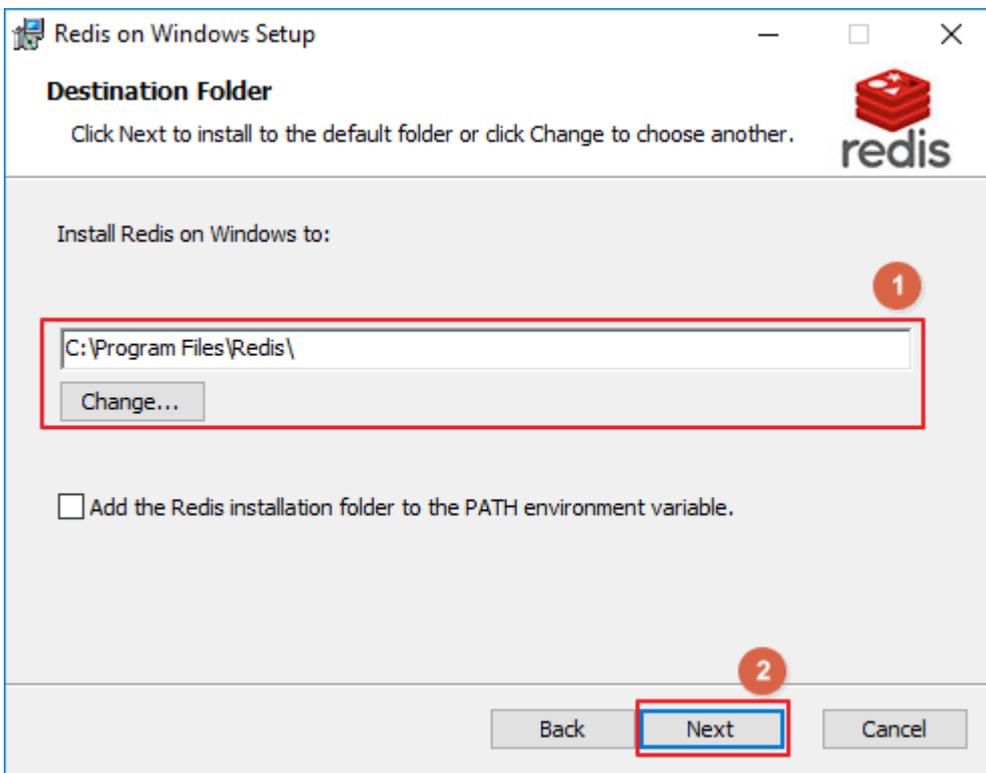
Begin installing Redis by clicking on the button «Next»



Read the license agreement, then tick the "I accept the terms in the License Agreement" field by accepting the agreement, click the "Next" button to continue the installation.



Specify the installation path for Redis, then click "Next".

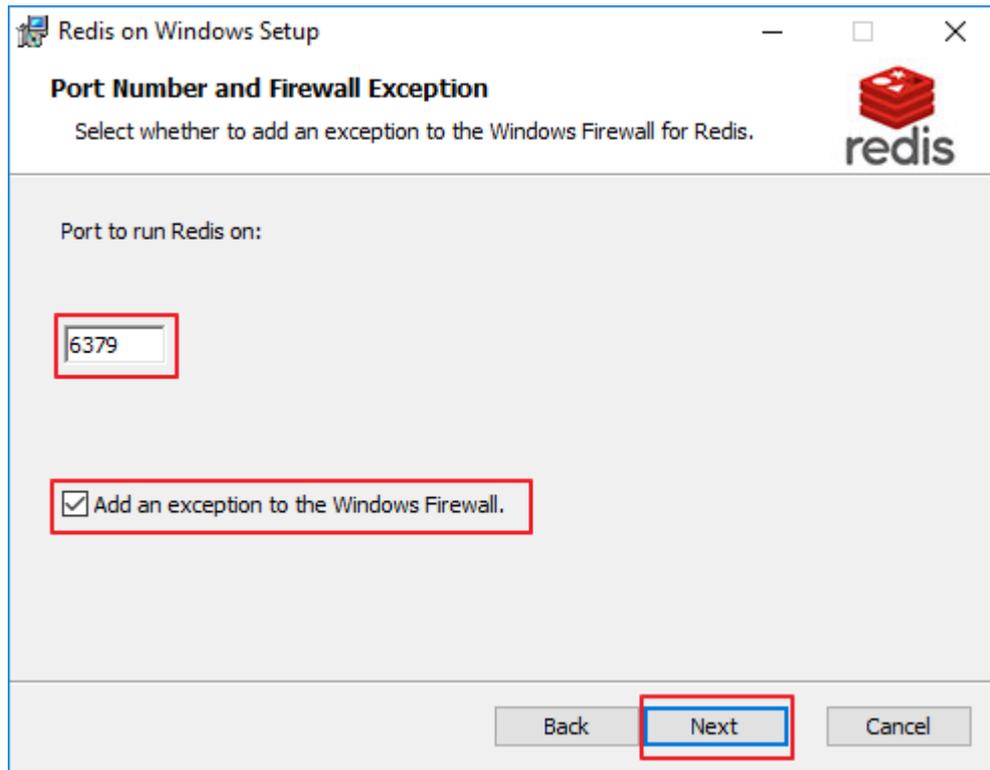


Specify the port or use the proposed installer (if it is free)

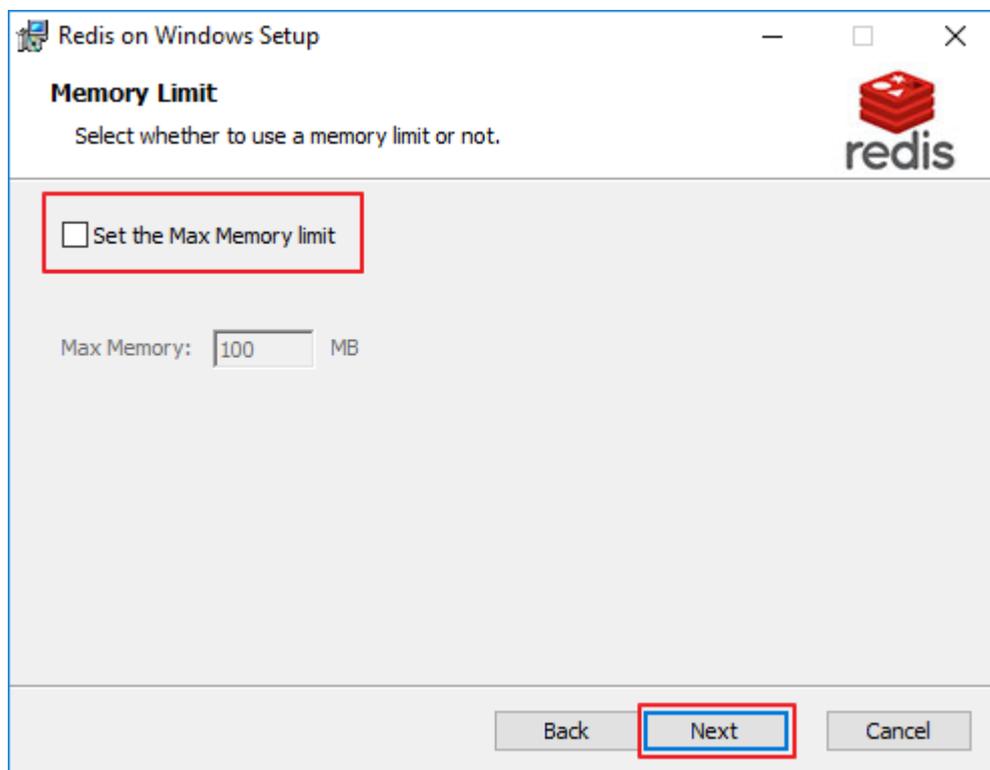
**! Remember this port it is useful in the further configuration.**

Make sure that the "Add an exception to the Windows Firewall"

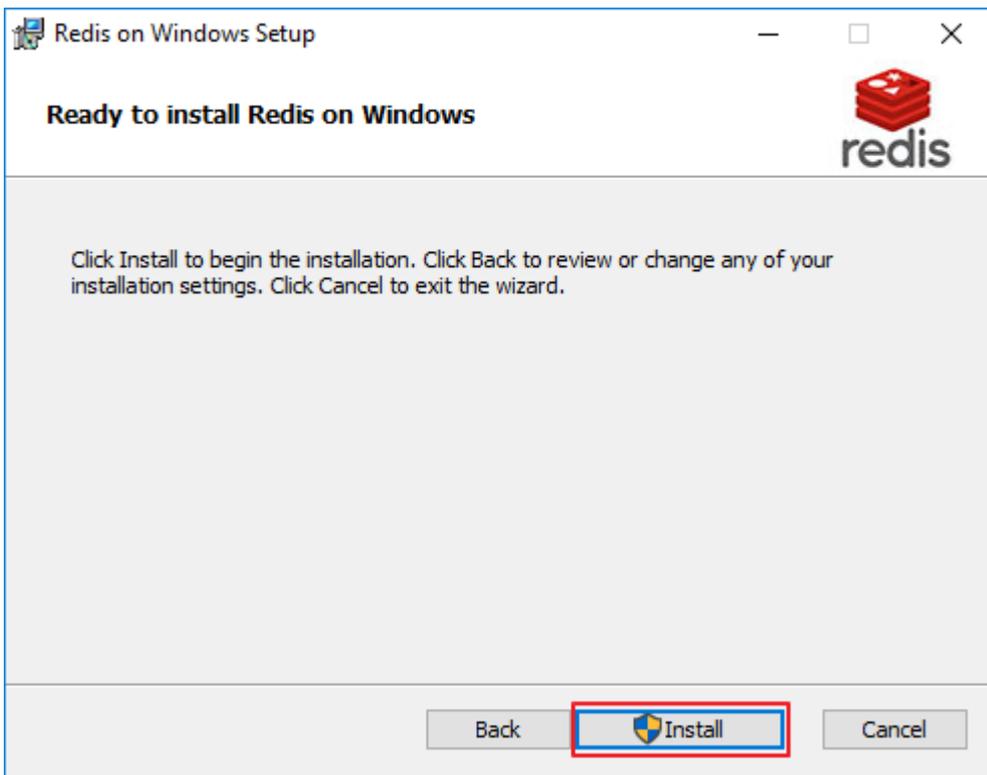
Click "Next" to continue the installation.



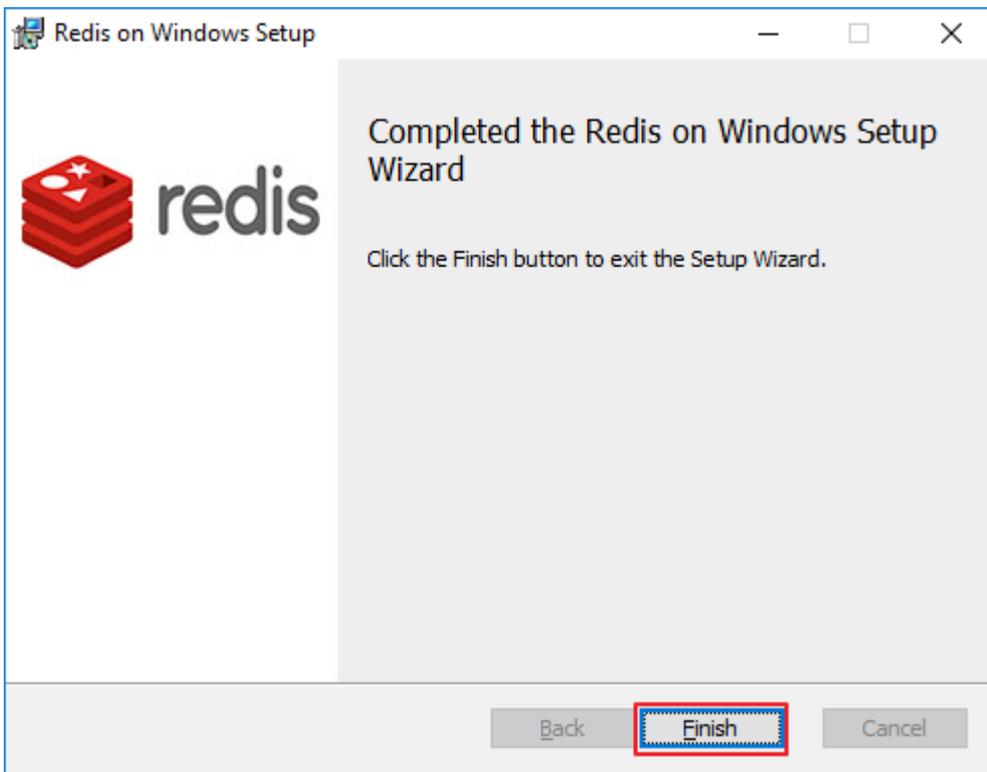
If you need to limit the amount of RAM allocated to Redis on the current machine, click "Next" to continue the installation.



Click the "Install" button to start the installation of the program (Administrator rights will be required).



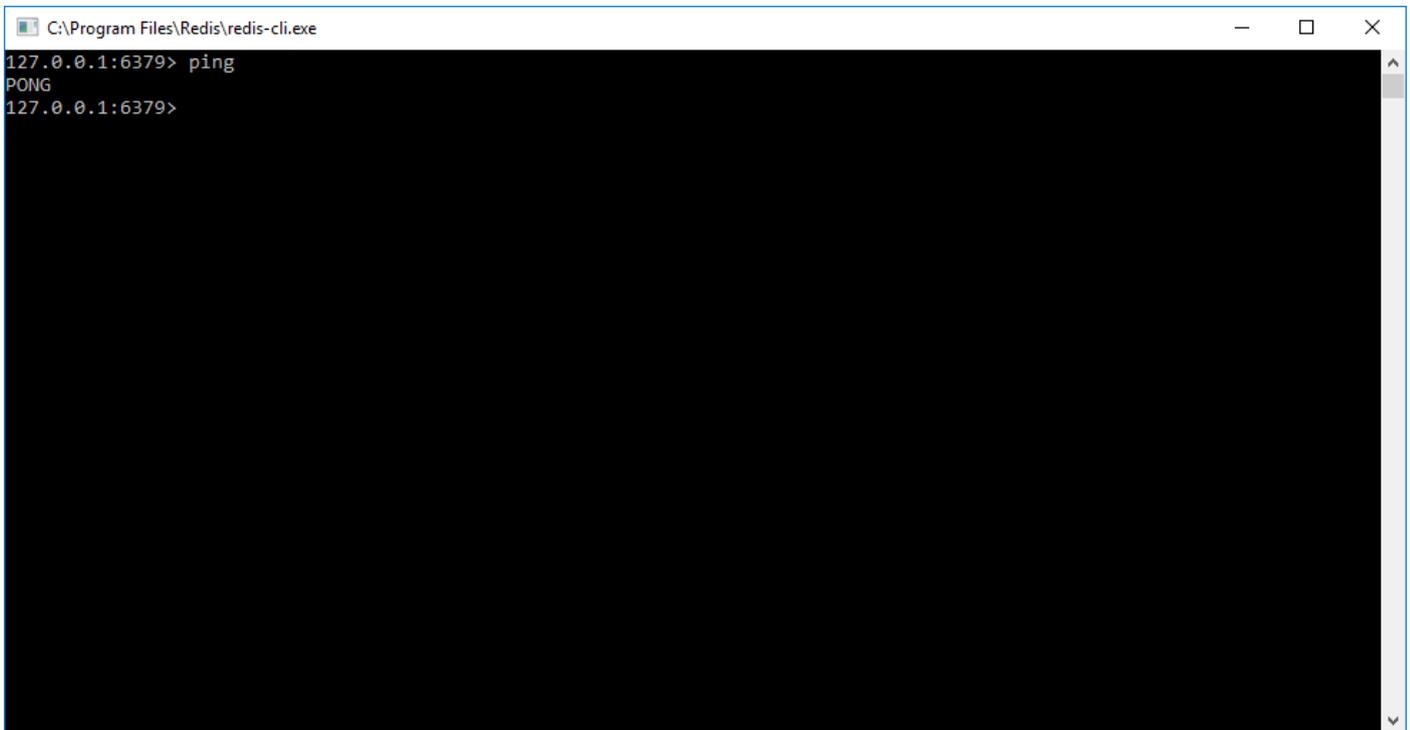
Wait until the installation is complete and close the window by clicking on the "Finish" button



## Test the Redis

- go to the folder where Redis installed
- find **redis-cli.exe**
- start **redis-cli.exe**
- In the appeared console enter the command: "ping".
- The correct answer to the request is: "PONG". It means that everything is running correctly.

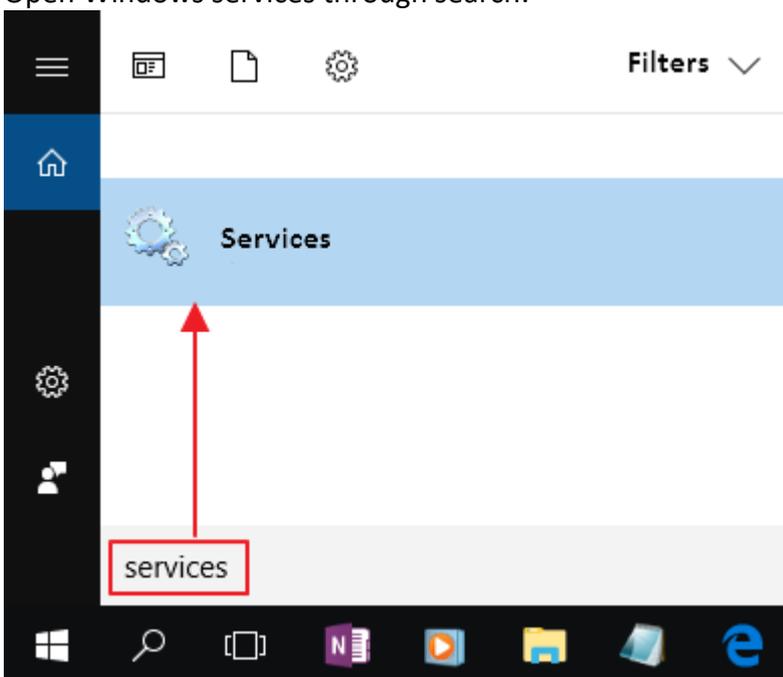
Receiving another response means that there were errors during the installation.



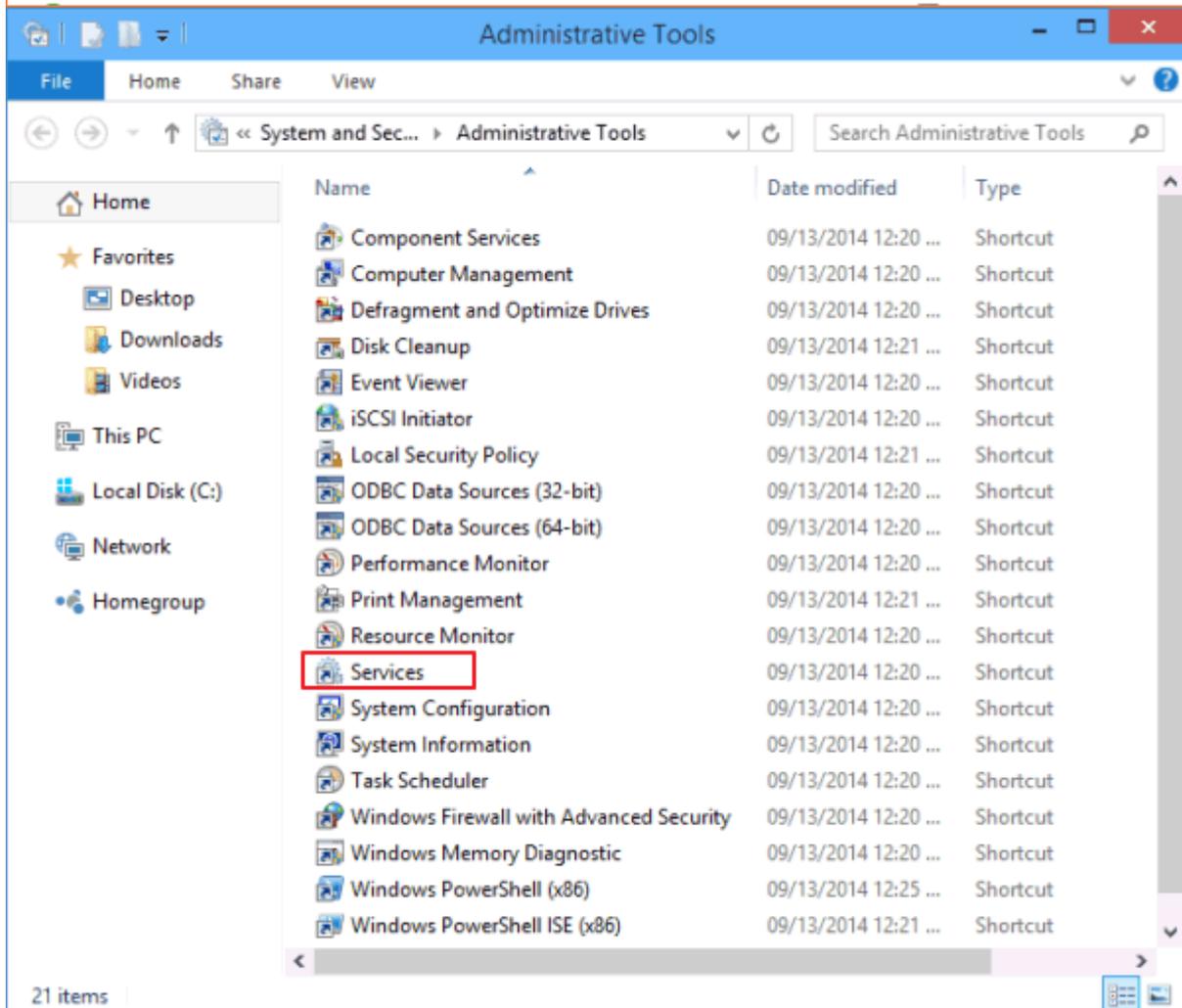
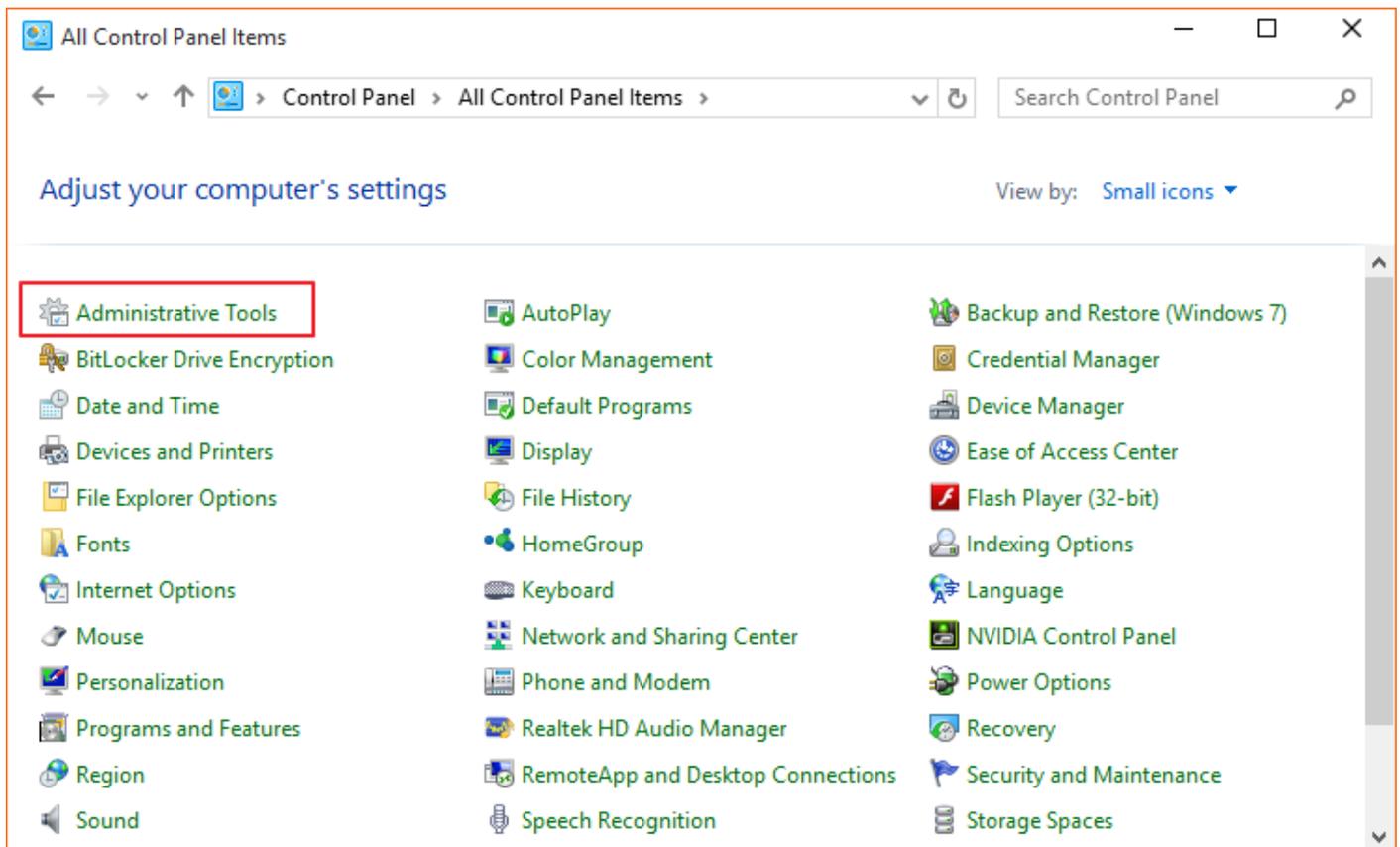
```
C:\Program Files\Redis\redis-cli.exe
127.0.0.1:6379> ping
PONG
127.0.0.1:6379>
```

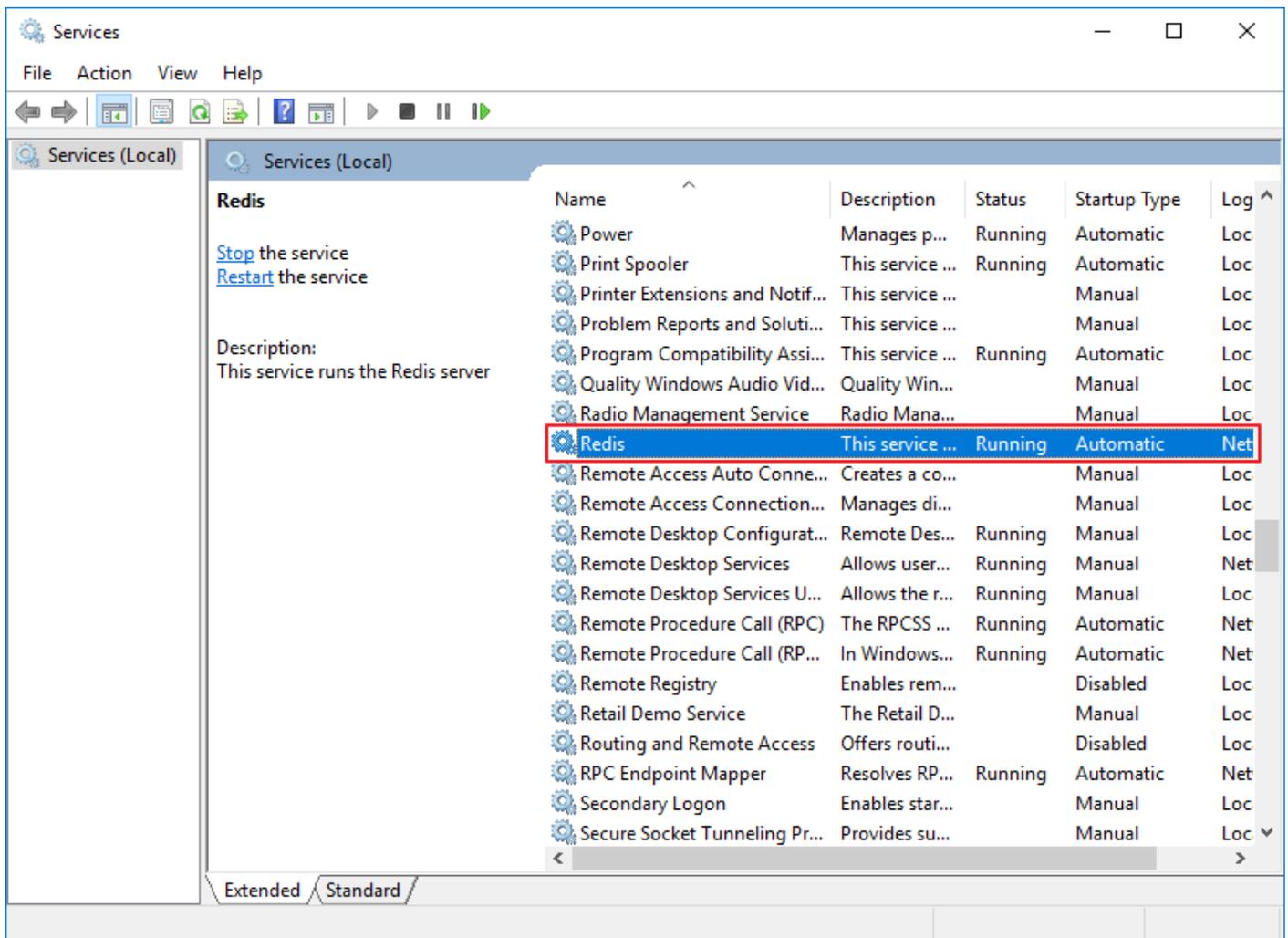
## Configuring Redis storage as a service

To configure Redis as a service, you need:  
Open Windows services through search:



Another way, go to Control Panel \ Administrative Tools \ Services \ Redis

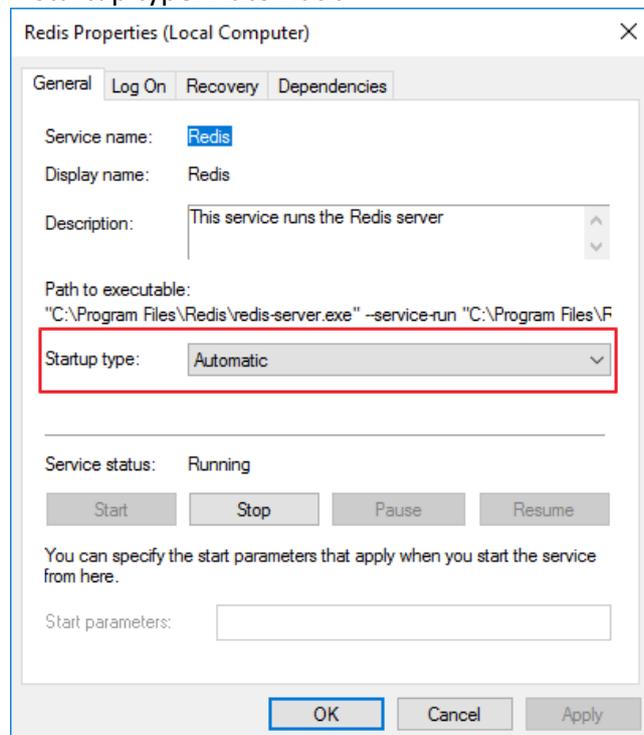




Next you need to set the following settings:

On the General tab:

- startup type: Automatic



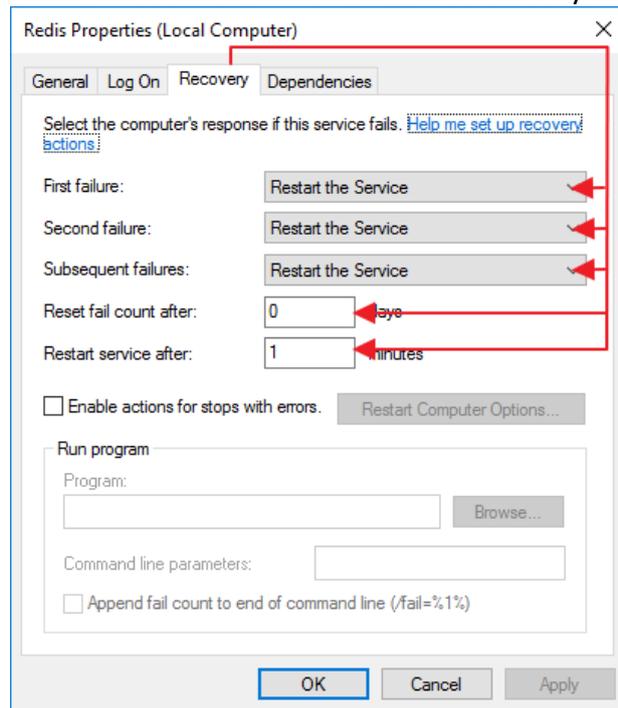
On the Recovery tab:

First failure – Restart the Service;

Second failure – Restart the Service;

Subsequent failure – Restart the Service

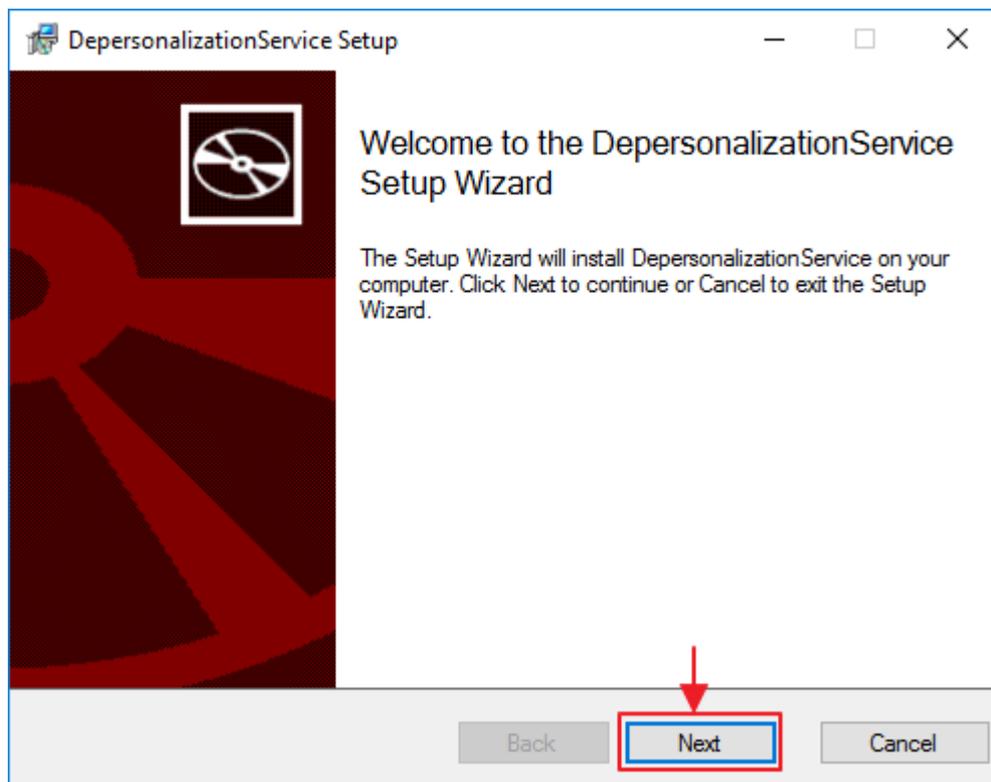
Reset the counter and restart the service by default.



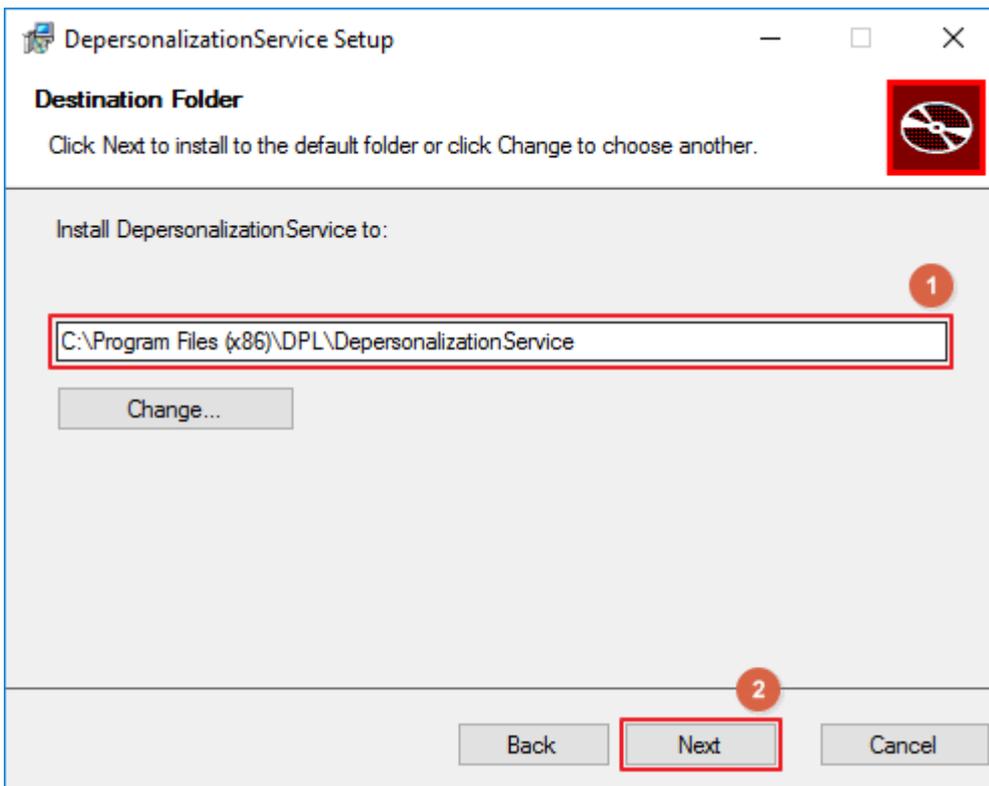
## 2.4 Installation of the web service depersonalization.

DepersonalizationService Setup

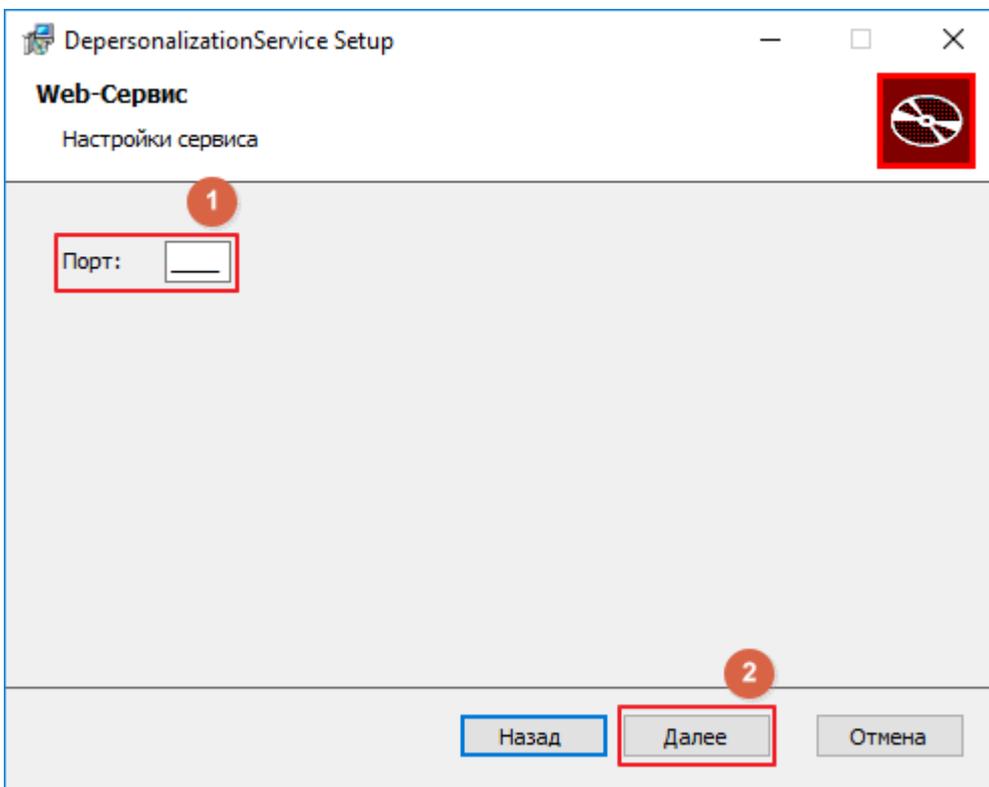
In the window where the component is installed, click "Next" to continue the installation



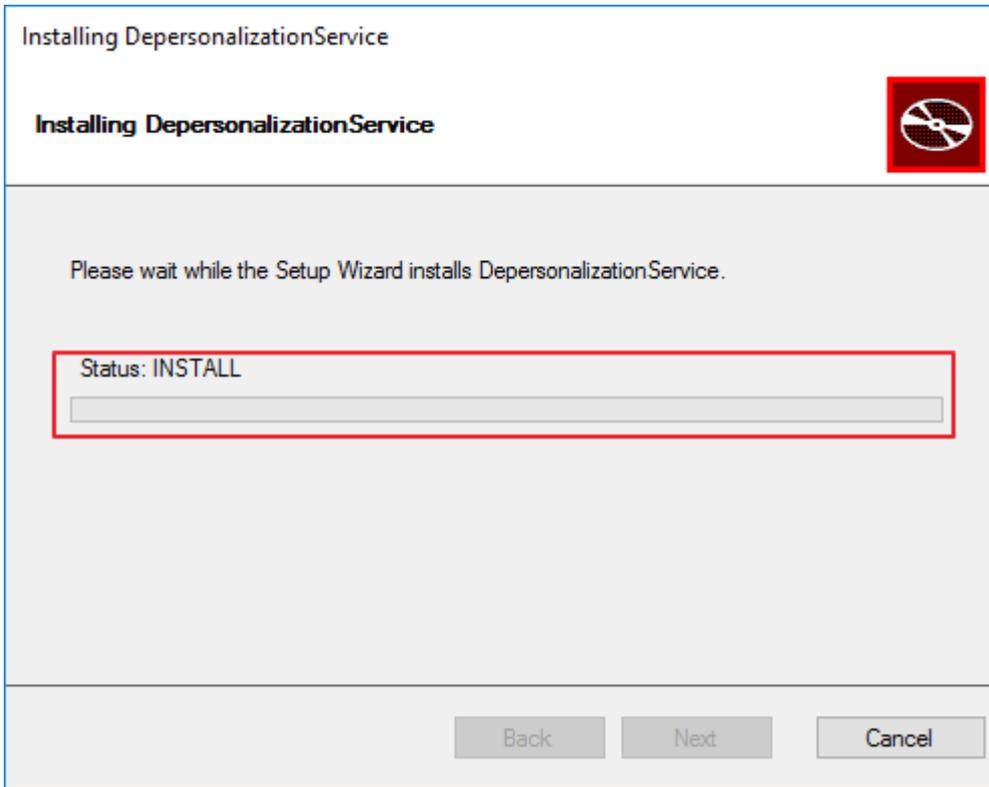
Specify the installation path for the component and click "Next".



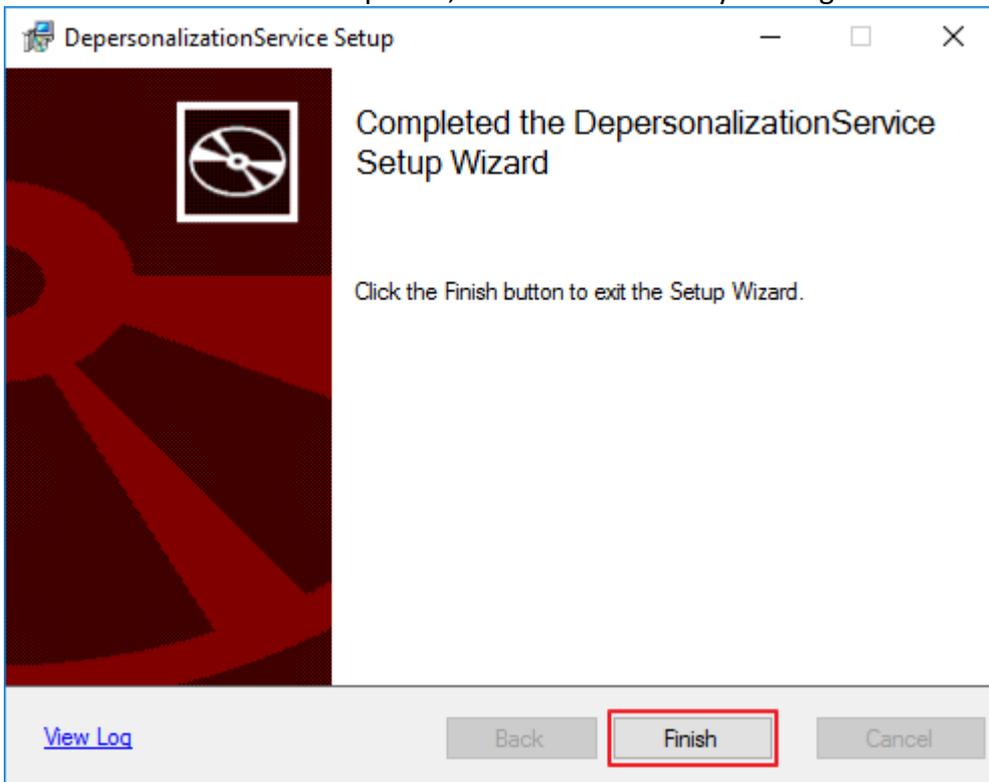
Specify the port («порт») that will be used by the web service for communication between MS CRM and local Redis store, and then click the Next ("Далее") button to start the installation of the component.



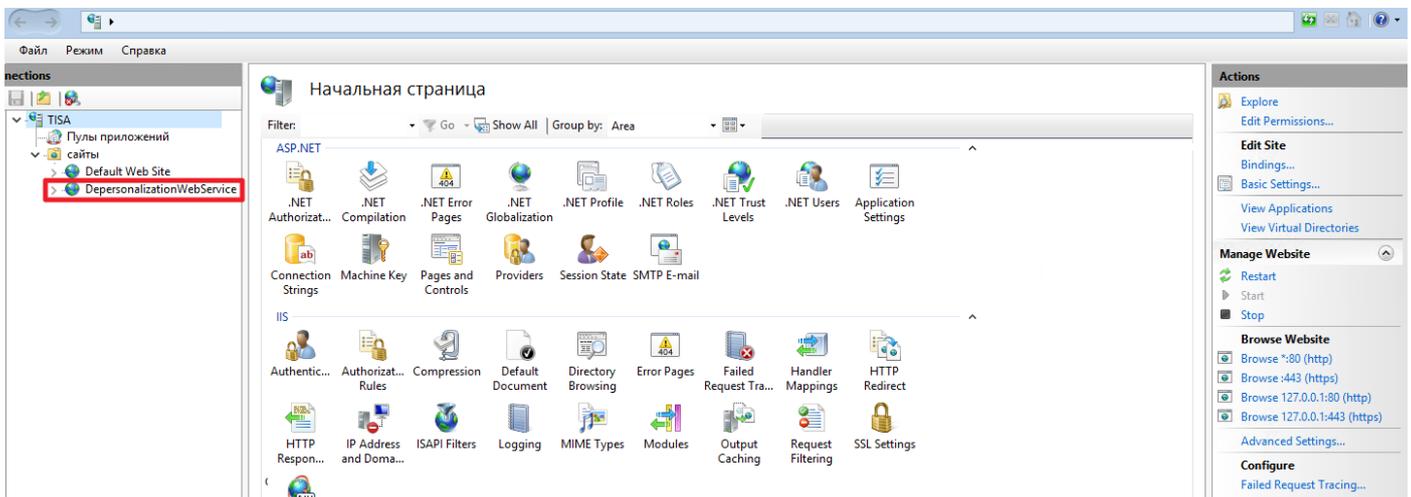
Wait until the installation process is complete. Installation may require administrator privileges.



After the installation is completed, close the window by clicking on the "Finish" button



A new web application (web service) will appear in IIS:DepersonalizationWebService  
The application is tied to the port that was specified during the installation.

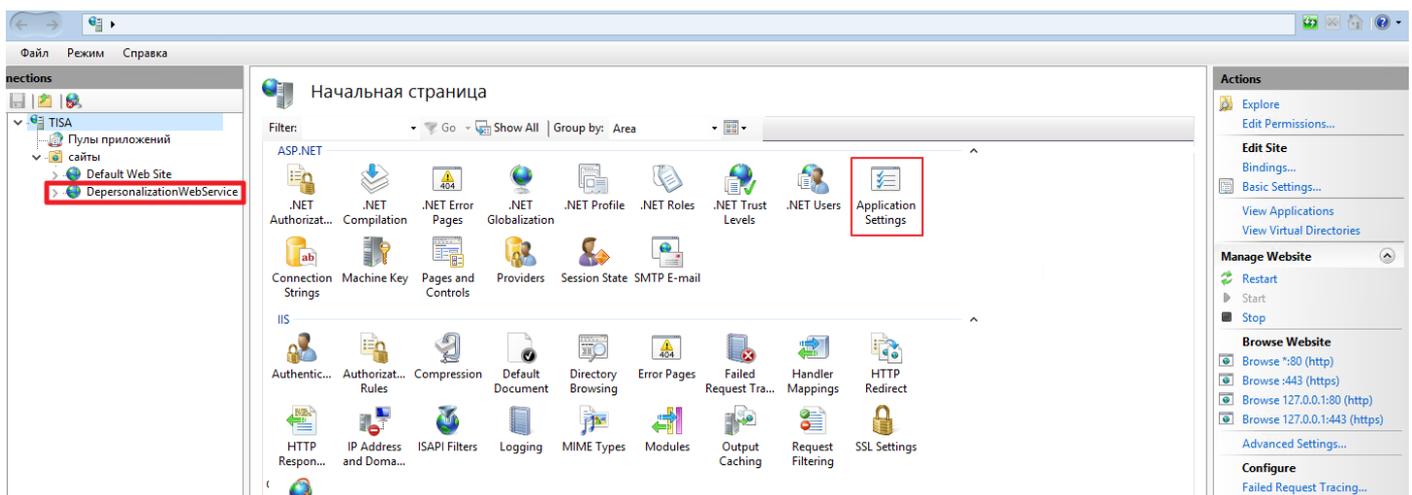


Check the functionality of the service by going to it using a browser.

If the opened window contains a blank screen without errors, then the service is working properly.

## 2.5 Installing the Web storage service and placing it in IIS Manager

After the installation of the web service "Depersonalization service" was completed, a service was created in the IIS Manager



In the RedisPort field, you must enter the port value specified during the installation.



## Application Settings

Use this feature to store name and value pairs that managed code applications can use at runtime.

Group by: No Grouping

Name	Value	Entry Type
RedisPort	6379	Local
RedisUrl	localhost	Local

To connect the authentication of web service users, you must set the "Windows Authentication" setting to Enabled.



# DepersonalizationWebService Home

Filter:

Go Show All Group by: Area

## ASP.NET

ASP.NET icons and labels:

- .NET Authorizat...
- .NET Compilation
- .NET Error Pages
- .NET Globalization
- .NET Profile
- .NET Roles
- .NET Trust Levels
- .NET Users
- Application Settings
- Connection Strings
- Machine Key
- Pages and Controls
- Providers
- Session State
- SMTP E-mail

## IIS

IIS icons and labels:

- ASP
- Authenticati on
- Compression
- Default Document
- Error Pages
- Handler Mappings
- HTTP Respon...
- ISAPI Filters
- Logging
- MIME Types
- Modules
- Output Caching
- Request Filtering
- SSL Settings

## Management



# Authentication

Group by: No Grouping

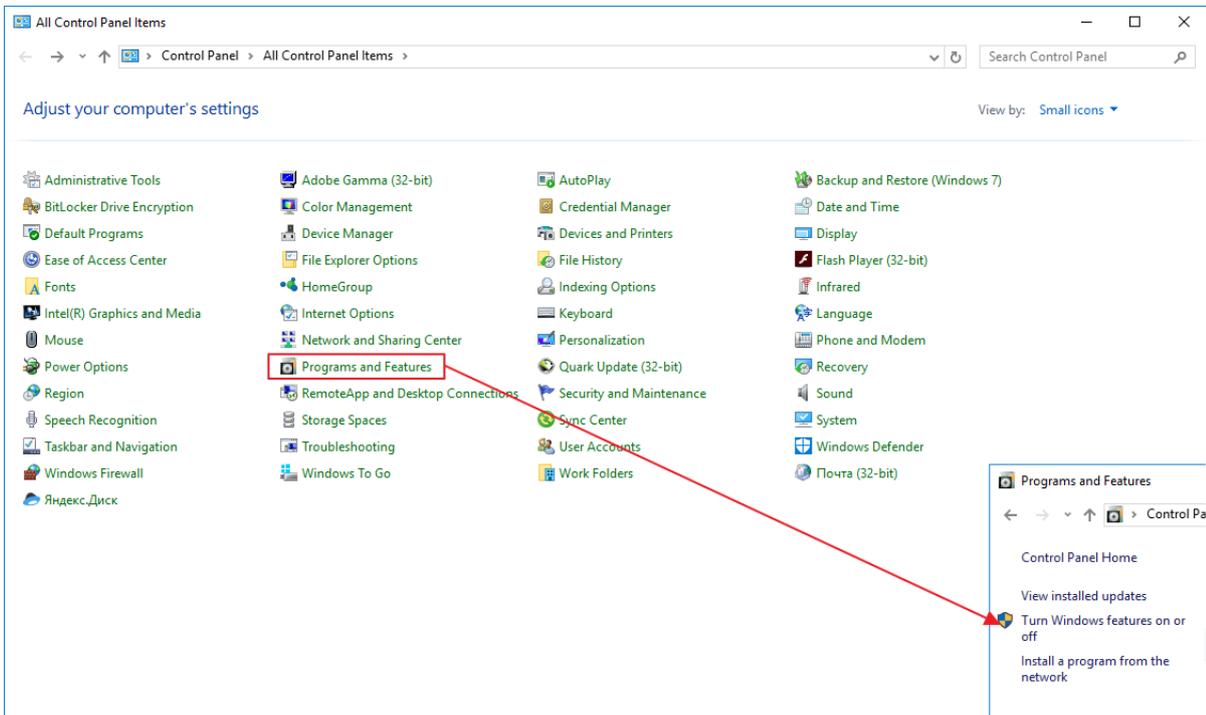
Name	Status	Response Type
Anonymous Authentication	Enabled	
ASP.NET Impersonation	Disabled	
Basic Authentication	Disabled	HTTP 401 Challenge
Forms Authentication	Disabled	HTTP 302 Login/Redirect
Windows Authentication	Enabled	HTTP 401 Challenge

## Important!

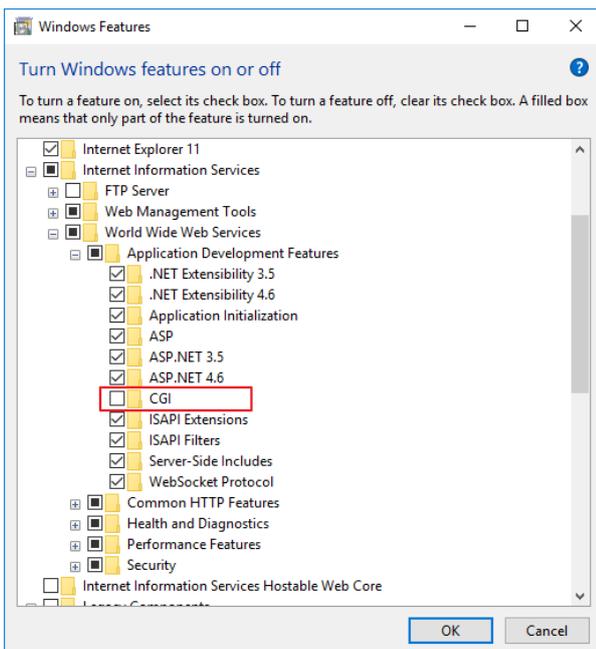
- If the address of the personal data storage web service is not available from the Internet, you must contact the local network administrator to publish the local web service address as external.
- For the service to work properly, you need to enable all IIS properties from the "Application Development Features" section.

To do this, you must perform the following steps on the Depersonalization Service installation server:

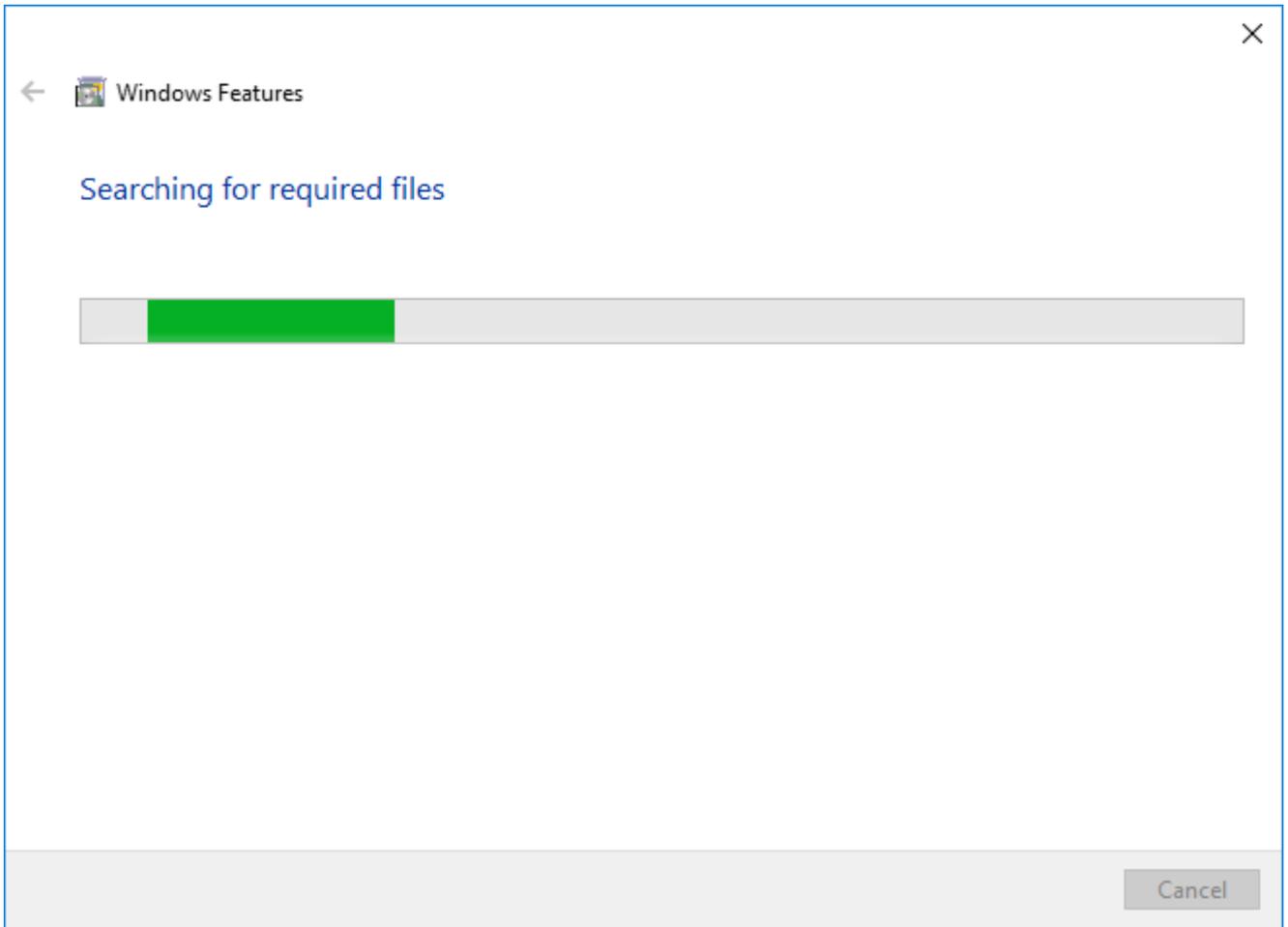
You must follow the following path: Control Panel \ Programs and Components \



- Select all properties (enable), except CGI.



- Click OK

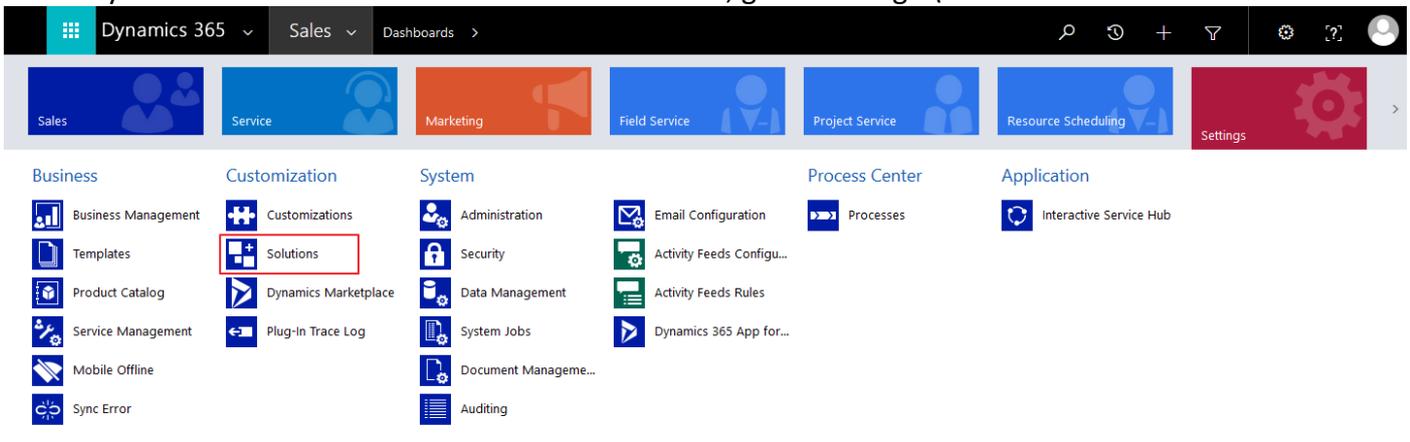


- Wait until the components are installed.

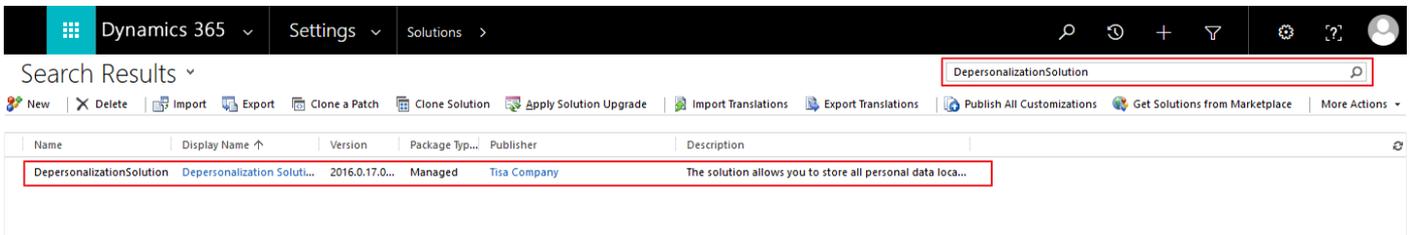
### 3. Actions performed in the CRM system

#### 3.1 Setup solution in to MS Dynamics CRM 365

- Follow <https://appsource.microsoft.com/en-us/> and setup «DepersonalizationSolution»
- Verify that the installation was successful. To do this, go to Settings \ Solutions



- Next, in the list of solutions, find DepersonalizationSolution

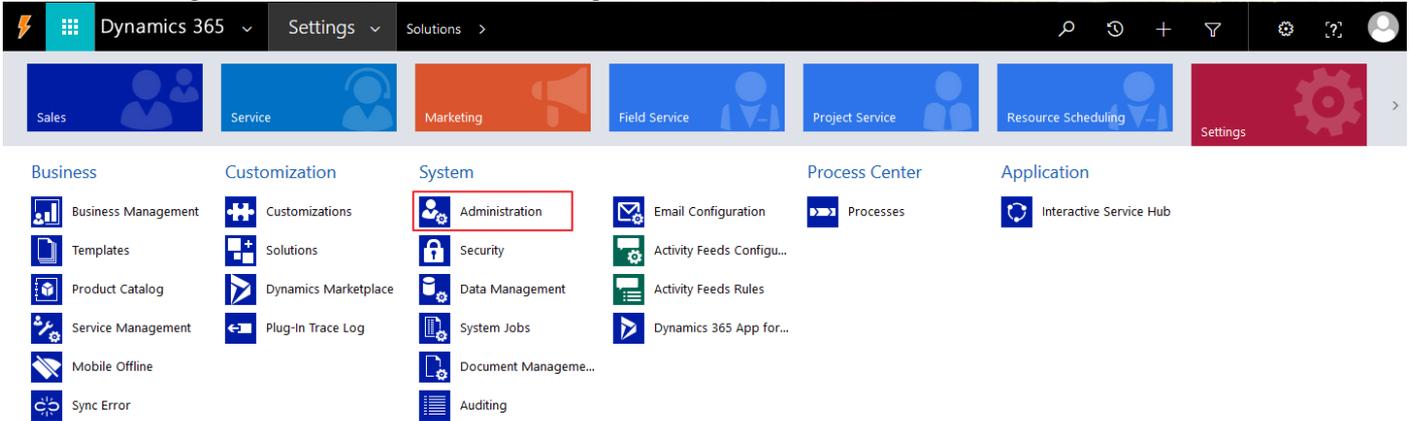


- If the solution is on the list, then the installation was successful.

### 3.2 Installation of Russian language support

If CRM is not localized in ru-ru. You need to install support for the Russian language.

To do this, go to the \ administration settings



Go to the "Languages" section

#### Administration

Which feature would you like to work with?



**Announcements**  
Create, edit, and delete announcements that appear in the Workplace area.



**System Settings**  
Set the format for various values, such as numbers, the calendar, and currency. Select the email tracking, marketing, and customization options for your organization. Set Microsoft Dynamics 365 for Outlook options. Manage report categories.



**Privacy Preferences**  
Set the privacy preferences for the organization.



**System Notifications**  
View important system messages such as scheduled outage notifications.



**Yammer Configuration**  
Connect Microsoft Dynamics 365 to your enterprise Yammer network



**Microsoft Social Engagement Configuration**  
Connect Microsoft Dynamics 365 to Microsoft Social Engagement for Social Insights



**Auto-Numbering**  
Specify the prefix numbers for contracts, cases, quotes, orders, articles, invoices, and campaigns. Select the suffix length for contracts, cases, quotes, orders, and invoices.



**Languages**  
Add or remove support for additional languages.



**Subscription Management**  
See payment and billing options, and purchase additional licenses. You must be a member of an appropriate security role to do these tasks.



**Resources In Use**  
View details about your organization's use of storage, custom entities, and workflows and dialogs.

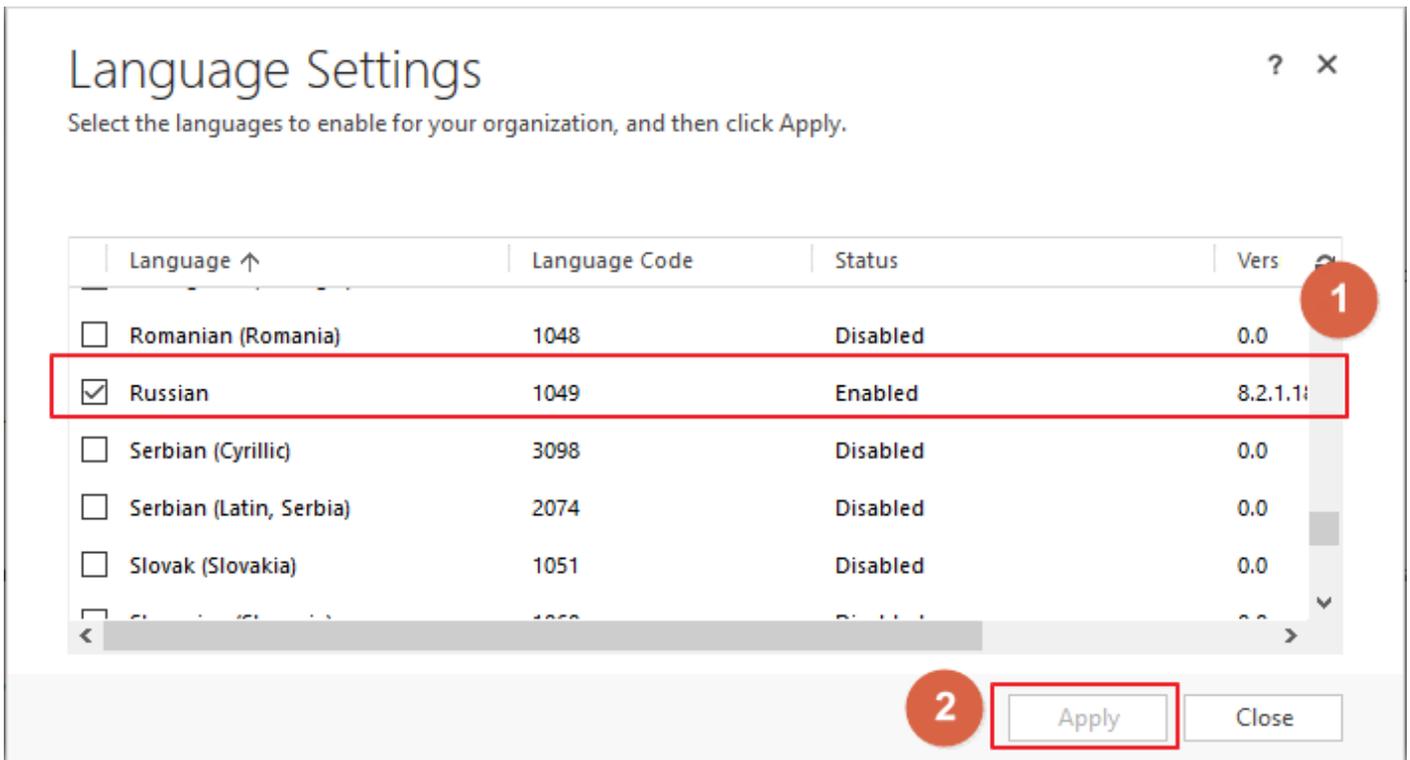


**Data Performance**  
Review, analyze, and optimize the data access performance of components in your organization.



**Mobile Offline Configuration**  
You can only enable Mobile Offline synchronization in a production instance of Microsoft Dynamics 365. You're currently on a trial, sandbox or preview instance.

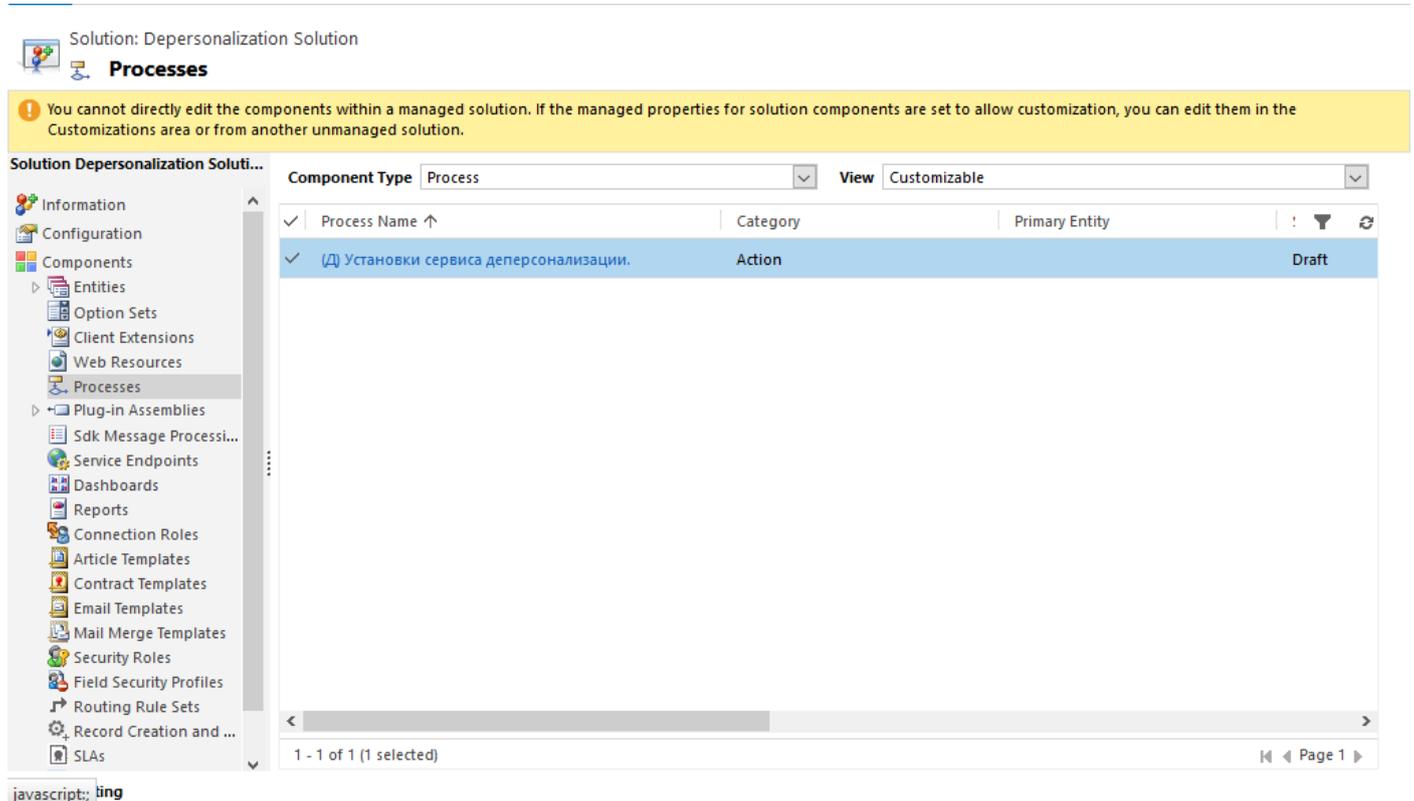
Check "Russian" and click "Apply".



### 3.3 Solution configuration

- Open solution «DepersonalizationSolution»
- Go to the processes, then click on the action «(Д) Установки сервиса деперсонализации»

**ATTENTION!** If this type of business process is disabled, then all data is stored by default in MS CRM 365.



The action contains 6 configurable parameters. To configure, click the "Set properties" button next to the desired parameter.

- 1) ServiceURL – Specify the address of the web service for processing personal data.  
The "Value" field specifies a link to the service and port

The screenshot shows a configuration window titled "General". The "Statement Label" field contains the text "Указывается адрес веб-сервиса по обработке персональных данных.". Under the "Assign Value Details" section, the "Name" dropdown is set to "ServiceUrl" and the "Value" field contains "http://test.ru:6060/". To the right is a "Form Assistant" panel with a "Dynamic Values" dropdown. Below it, the "Operator" is set to "Set to", "Look for" is "Arguments", and "OnlySave" is set to "False". There is an "Add" button and a list area with up/down arrows. At the bottom of the panel is a "Default value" field and an "OK" button.

- 2) OnlySave - Indicates the indicator for storing personal data in the Dynamics Crm repository.  
If it is true, then all personal data will remain in the CRM.  
\*true = Saving personal data online.  
\*\*false = Saving personal data in local storage.

The screenshot shows a configuration window titled "General". The "Statement Label" field contains the text "Указывается индикатор сохранения персональных данных в хранилище Dynamics Crm. Если стори". Under the "Assign Value Details" section, the "Name" dropdown is set to "OnlySave" and the "Value" field has radio buttons for "False" (selected) and "True". To the right is a "Form Assistant" panel with a "Dynamic Values" dropdown. Below it, the "Operator" is set to "Set to", "Look for" is "Arguments", and "OnlySave" is set to "False". There is an "Add" button and a list area with up/down arrows. At the bottom of the panel is a "Default value" section with radio buttons for "False" (selected) and "True", and an "OK" button.

- 3) ServiceUserName - Specifies the name for accessing the web service.  
In the "Value" field, you must specify a user to access the web service

The screenshot shows a configuration window with the following elements:

- General** section: Statement Label \*
- Assign Value Details** section: Name \* ; Value \*
- Form Assistant** section: Dynamic Values dropdown; Operator: Set to; Look for: Arguments; OnlySave; Add button; Default value:

- 4) ServicePassword - Specifies the password for accessing the web service.  
In the "Value" field, enter the password for accessing the web service.

The screenshot shows a configuration window with the following elements:

- General** section: Statement Label \*
- Assign Value Details** section: Name \* ; Value \*
- Form Assistant** section: Dynamic Values dropdown; Operator: Set to; Look for: Arguments; OnlySave; Add button; Default value:

- 5) ServiceDomain - Specifies the domain for accessing the web service.  
Specify the domain in the Value field for accessing the web service.

The screenshot shows a configuration window titled 'General'. The 'Statement Label' field contains the text 'Указывается домен для доступа к веб-сервису.'. Under the 'Assign Value Details' section, the 'Name' dropdown is set to 'ServiceDomain' and the 'Value' text box contains 'tisa'. To the right is a 'Form Assistant' panel with a 'Dynamic Values' dropdown. Below it, the 'Dynamic Values' section includes fields for 'Operator' (Set to), 'Look for' (Arguments), and 'OnlySave', along with an 'Add' button and a list area with up/down arrows. At the bottom of the panel is a 'Default value' field and an 'OK' button.

- 6) WritePerformance - Indicates an indicator for storing the statistics of the execution of plugins on the side of the web service.  
\*true – Logging on.  
\*\*false – Logging off.

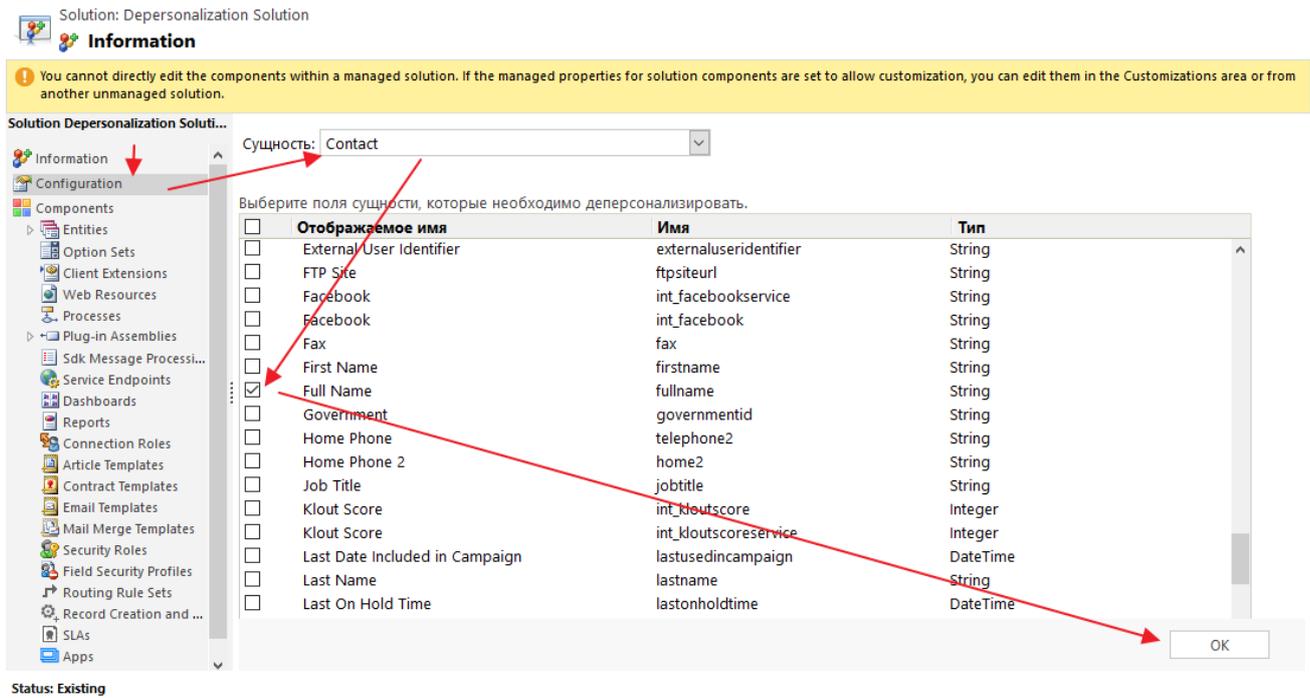
The screenshot shows a configuration window titled 'General'. The 'Statement Label' field contains the text 'Указывается индикатор сохранения статистики выполнения плагинов на стороне веб-сервиса.'. Under the 'Assign Value Details' section, the 'Name' dropdown is set to 'WritePerformance' and the 'Value' section has radio buttons for 'False' (selected) and 'True'. To the right is a 'Form Assistant' panel with a 'Dynamic Values' dropdown. Below it, the 'Dynamic Values' section includes fields for 'Operator' (Set to), 'Look for' (Arguments), and 'OnlySave', along with an 'Add' button and a list area with up/down arrows. At the bottom of the panel is a 'Default value' section with radio buttons for 'False' and 'True', and an 'OK' button.

### 3.4 Setting up depersonalization fields

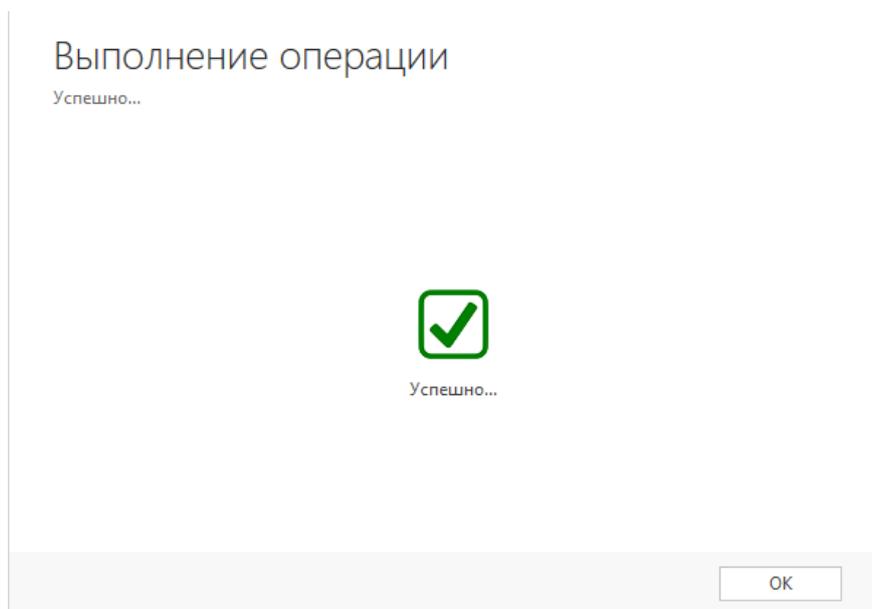
To work the solution it is necessary to specify which fields in the system will be depersonalized, in the information of which will be stored locally in the repository.

To specify the required fields, you need to go to the solution «DepersonalizationSolution»

- Go to Settings
- Select an entity containing the required fields
- Select fields
- Click OK



- Wait for the operation to finish (Operation creates in essence a "Depersonalization field" records, as well as additional fields in entities whose fields need to be depersonalized, so the execution time may be stretched depending on the number of selected fields)
- When the operation is completed, a window appears about the successful execution.

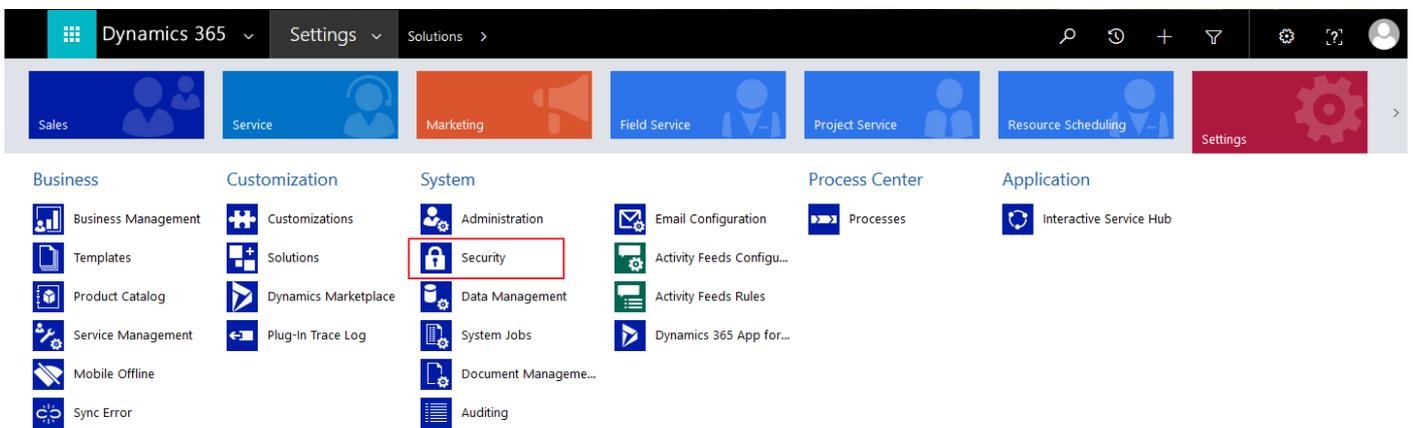


**WARNING!**

- If you mark fields such as, "Name", "Last name" and "Patronymic" in the Contact entity, you should also tick the "Full name" field.
- If the field is of type Lookup, you must mark the field for depersonalization in both entities. Example: the client field in the contract refers to the physical. Person of the entity (Contact) - it is necessary in essence Agreement to mark this field and make sure that in essence the Contact is marked with the fields "Name", "Last name", "Middle name", "Full name".C
- Created records in the essence of "Fields of depersonalization" is strictly prohibited to delete in order to avoid loss of depersonalization of data contained in these fields.
- Do not select too many fields for depersonalization; This affects the performance of the system.

**3.5 Configure the security role.**

For the correct operation of the solution, you must configure security roles. Go to Settings \ Security \ Security Roles



**Security**

Which feature would you like to work with?

- Users**  
Add new users. Edit information about users and deactivate user records. Manage the teams, roles, and licenses assigned to users.
- Security Roles**  
Create new security roles. Manage and delete existing security roles for your organization.
- Field Security Profiles**  
Manage user and team permissions to read, create, or write information in secured fields.
- Positions**  
Add new Position. Modify the Position description.
- Teams**  
Add new teams and new members to existing teams. Modify the team description and delete members from teams.
- Business Units**  
Add new business units. Edit and deactivate existing business units. Change the parent business unit.
- Hierarchy Security**  
Configure hierarchy security, including enabling hierarchy modeling and selecting the model. You can also specify how deep the hierarchy goes, and specify the entities to exclude from a hierarchy.
- Access Team Templates**  
Add new team templates. Modify the team template description.

- Select security role
- Click the "Custom Entities" tab
- Specify for the entity "Depersonalization field" the rights to read (level: organization)

Entity	Create	Read	Write	Delete	Append	Append To	Assign	Share
Поле деперсонализации	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>					
Account Project Price List	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Actual	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Actual Data Export (Deprecated)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agreement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agreement Booking Date	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>