△ ALTAIR

Altair® Monarch Server™ **v2024.0**
SINGLE SERVER INSTALLATION GUIDE

TABLE OF CONTENTS

MONARCH SERVER SYSTEM — INSTALLATION PROCEDURE

This document describes the installation procedure of the following Monarch Server System products:

❏ Automator

❏ Report Warehouse

❏ Report Mining Server (RMS)

The products can be installed on your server together, or each one can be installed separately. Before installing, make sure that the corresponding product is included with the license you obtained.

Note that this install guide provides the steps for installing Monarch Server components in a single server. If you wish to install a distributed setup (i.e., using more than one server), follow the steps detailed in the Monarch Server Advanced Installation Guide instead.

> **NOTE** Monarch Server Single Server is no longer supported for deployment on non-Windows Server-based platforms.

SOFTWARE REQUIREMENTS

Server software:

❏ .NET framework 4.8

❏ SQL Server 2016/2017/2019 (if the Monarch Server database is present on the local machine)

> **NOTE**
> ❏ SQL Server Express is only suitable for RMS or Automator functionality. It is not viable for use with an instance servicing Report Warehouse functionality.
>
> ❏ SQL Server Express versions can be downloaded from the following links:
>
> **SQL Server 2019 Express Edition (English):**
>
> • **Basic (239 MB)**: https://download.microsoft.com/download/7/c/1/7c14e92e-bdcb-4f89-b7cf-93543e7112d1/SQLEXPR_x64_ENU.exe.
>
> • **Advanced (700 MB)**: https://download.microsoft.com/download/7/c/1/7c14e92e-bdcb-4f89-b7cf-93543e7112d1/SQLEXPRADV_x64_ENU.exe.
>
> **SQL Server 2017 Express Edition (English):**
>
> • **Core (275 MB)**: https://download.microsoft.com/download/E/F/2/EF23C21D-7860-4F05-88CE-39AA114B014B/SQLEXPR_x64_ENU.exe.

- **Advanced (710 MB)**:
  https://download.microsoft.com/download/E/F/2/EF23C21D-7860-4F05-88CE-39AA114B014B/SQLEXPRADV_x64_ENU.exe.

SQL Server 2016 with SP2 Express Edition (English):

- **Core (437 MB)**:
  https://download.microsoft.com/download/4/1/A/41AD6EDE-9794-44E3-B3D5-A1AF62CD7A6F/sql16_sp2_dlc/en-us/SQLEXPR_x64_ENU.exe.
- **Advanced (1445 MB)**:
  https://download.microsoft.com/download/4/1/A/41AD6EDE-9794-44E3-B3D5-A1AF62CD7A6F/sql16_sp2_dlc/en-us/SQLEXPRADV_x64_ENU.exe.

Operating systems:

- ❑ Windows Server 2016 (IIS 10.0)
- ❑ Windows Server 2019 (IIS 10.0)
- ❑ Windows Server 2022 (IIS 10.0)

NOTE	Core versions of the above operating systems are NOT supported.

Additional system software components:

The following components are installed automatically by the installation program if not present on the machine. You may consider installing them at the most convenient time (for example, a scheduled maintenance window) as the installation may require system reboots.

- ❑ .NET framework 4.8
- ❑ Microsoft Access 2013 Runtime
- ❑ Microsoft SQL Command Line Utilities 15 for SQL Server (if the Monarch Server database is not present on the local machine)
- ❑ Microsoft ODBC Driver 17 for SQL Server (if the Monarch Server database is not present on the local machine)
- ❑ SQL 2017 Local DB

Client software:

- ❑ One of the following browsers:
  - Mozilla Firefox
  - Google Chrome
  - Microsoft Edge (Chromium)

NOTE	Each release of Monarch Server is tested with the latest publicly available browser versions available at that time. Due to the frequency of browser version updates, Altair does not include specific browser version numbers in the system requirements.

In case of changes in browser functionality affecting UI functionality, Altair will address the same as part of a subsequent patch release.

HARDWARE REQUIREMENTS

Processors:

❑ **Recommended**: Multi-core or multi-processor Intel Xeon 2 GHz w/ 2 MB cache (or better)

Memory:

❑ **Recommended:** 16 GB RAM or greater

Network Adapter:

❑ **Recommended:** Ethernet 100 Mbps or higher (Gigabit recommended)

Hard drive:

❑ **Recommended:** 100 GB or more (depending on processing requirements, report sizes, number of active concurrent users, and mining types). Disk performance has a significant influence on application scalability and viewing response.

NOTE
❑ Additional disk space may be required if leveraging Monarch Classic-based processes. The requirement depends on the number of concurrent processes and the data volumes being processed by each and the subsequent configuration of the SDK Database. Altair Support can assist with identifying the space considerations in such instances.

❑ Monarch Server is a distributed application. Typically, better functionality is obtained by deploying 1+ servers as opposed to increasing the resource of a single server. A single server environment has no provision for failover, has high availability, and has limits with regard to performance optimization.

Monitor

❑ **Recommended:** Screen resolution of 1920 × 1080 (or 1366 × 768 for wide screens)

RECOMMENDED SOFTWARE VERSIONS

The following software versions are recommended for the Monarch Server System.

SOFTWARE	VERSION
Metadata database: MS SQL Server	2019
Application server: • Operating System • IIS • .NET Framework	 • Windows Server 2019 • 10.0 • 4.8

SOFTWARE	VERSION
For end users: Browser	Google Chrome

BEFORE YOU BEGIN

Before you begin the installation process, you should plan your Monarch Server System (Automator, Report Warehouse, and Report Mining Server products) to setup in a manner suited for your tasks.

Distributable and Non-Distributable Components

Monarch Server is a *distributable* system. This means that different *components* of the system can be installed on different machines within a network. There are two types of components: distributable and non-distributable.

Each of the non-distributable components can be installed only once per Monarch Server system.

Distributable components can be installed several times on different computers to form a desired configuration of the Monarch Server system that is tailored to your requirements.

The system consists of the following components:

❑   Configuration Service

❑   Agent Service

❑   Services

❑   Web Application (Admin, Client, RMSClient)

❑   Repository

The **Configuration Service** is a non-distributable component. Install only one instance of the **Configuration Service** per system.

The **Agent Service** is a distributable component. It should be installed on every server used for Monarch Server system installation. All instances of **Agent Service** use a single **Configuration Service**.

The **Agent Service** launches the following services:

❑   `Datawatch.RemoteServices.AdminServicesHost.exe`

❑   `Datawatch.RemoteServices.ClientServicesHost.exe`

❑   `Datawatch.RemoteServices.FilingDispatcherServiceHost.exe`

❑   `Datawatch.RemoteServices.MaintenanceDispatcherServiceHost.exe`

❑   `Datawatch.RemoteServices.NotificationsDispatcherServiceHost.exe`

❑   `Datawatch.RemoteServices.VolumeServicesHost.exe`

❑   `Datawatch.RemoteServices.DataPumpDispatcherServiceHost`

❑   `Datawatch.RemoteServices.DataPumpServicesHost`

❑   `Datawatch.RemoteServices.DataPumpStorageServicesHost`

❑   `Datawatch.RemoteServices.RMSClientServicesHost.exe`

❑   `Datawatch.RemoteServices.RMSContentServiceHost.exe`

These services can run on different servers.

The **Web Application** is a distributable component. It can be installed on different computers, limited by the number of licensed servers.

The **Repository** is a distributable component. It can be installed on different computers. In most cases, only one instance of **Repository** should be installed.

Database Server Preparation

When the Database Service component is chosen during the installation, the setup will create the Monarch Server -> Server database on the database server. For this, you will need to have a special database user that will be used by Monarch Server setup for database creation and under which Monarch Server will further connect to the database.

SQL Server

There are two levels of security that may be set for the Monarch Server database user in SQL Server. They differ in partitioning maintenance task support.

In a Monarch Server database, servicing Report Warehouse functionality, all report-related data are partitioned by date ranges, and each partition can be managed separately (e.g., backed up, removed, and joined with another partition). For Monarch Server to perform these operations automatically, partition maintenance tasks were designed.

For these tasks to function properly, the Monarch Server database user will require more rights. This requirement may be considered unsecure in some environments, particularly when the database server is used for several databases and not only for Monarch Server. In this case, these rights may be assigned temporarily as the partitioning maintenance task is performed. Another option is to perform partitioning maintenance operations manually.

For setup to create the Monarch Server database — and support the partitioning maintenance task functionality — you will need the **Database Creators** server role to be assigned to the user.

NOTE	This role will allow the user to destroy any database in the system (without reading data). Thus, it is recommended to assign this role only during the time of installation and during partitioning maintenance task operations.

To create the user, login to the database server under System Administrator (sa) user, and execute the following commands:

```
exec sp_addlogin 'ES_LOGIN', 'ES_PASSWORD'
exec sp_adduser 'ES_LOGIN', 'ES_USER'
exec sp_addrolemember 'db_ddladmin', 'ES_USER'
exec sp_addrolemember 'db_datareader', 'ES_USER'
exec sp_addrolemember 'db_datawriter', 'ES_USER'
exec sp_addsrvrolemember 'ES_LOGIN', 'dbcreator'
```

If you decide to disable the **Database Creator** role after the Monarch Server database is created (i.e., after installation is complete), you will need to issue the following command under System Administrator:

```
exec sp_dropsrvrolemember 'ES_LOGIN', 'dbcreator'
```

NOTE	The db_owner role may be removed, and the db_executor role may be added. If the db_executor role does not exist, it may be created as follows: CREATE ROLE db_executor GRANT EXECUTE TO db_executor

```
EXEC sp_addrolemember 'db_executor','ES_USER'
```

Installer Preparation

Depending on a computer's local security policies and configuration, the execution of downloaded files might be blocked. In particular, when downloading a file through a Windows OS to an NTFS partition, the Windows OS considers this file as an attachment by default. As a result, the opening, unpacking, or execution of the file is "blocked," resulting in errors. To avoid the installer file of Monarch Server from being blocked, the following steps are recommended.

To unblock the installer file after download

1. Find the ZIP file of the Monarch Server installer.

2. Right-click on the ZIP file, and select **Properties** in the context menu.

3. Navigate to the **Security** section of the **General** tab in the **Properties** window. Find the **Unblock** check box beside the text "This file came from another computer and might be blocked to help protect this computer."

4. Select the **Unblock** check box to activate it.

5. Click **OK** to apply the change.

MONARCH SERVER INSTALLATION

Open the directory with the installation files, and check whether it contains the license file named **ds.lic**. If not, copy this file from the original Monarch Server installation media to the directory from which you are going to install Monarch Server.

|	
NOTE	If the configuration machine name in the license file is not the same as the machine name of the installation, the warning message is displayed: "Cannot install due to mismatch config machine name with current." The installation is aborted.
	For Monarch Server v2024.0, you can proceed with the installation without a license. The licensing can be configured after completing the installation.

Installation Procedure

Steps

1. In the directory with installation files, double-click **MonarchServerInstaller.exe** to launch the Monarch Server Installation Wizard.
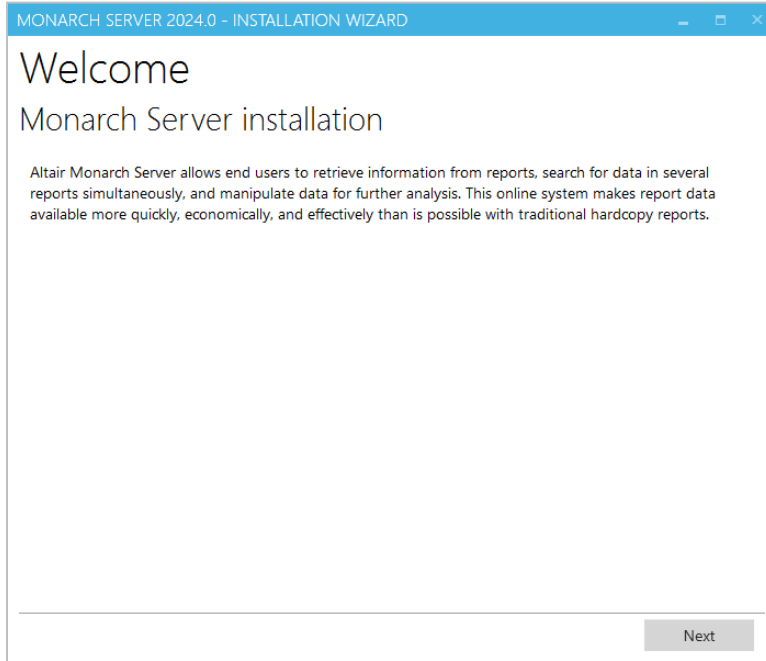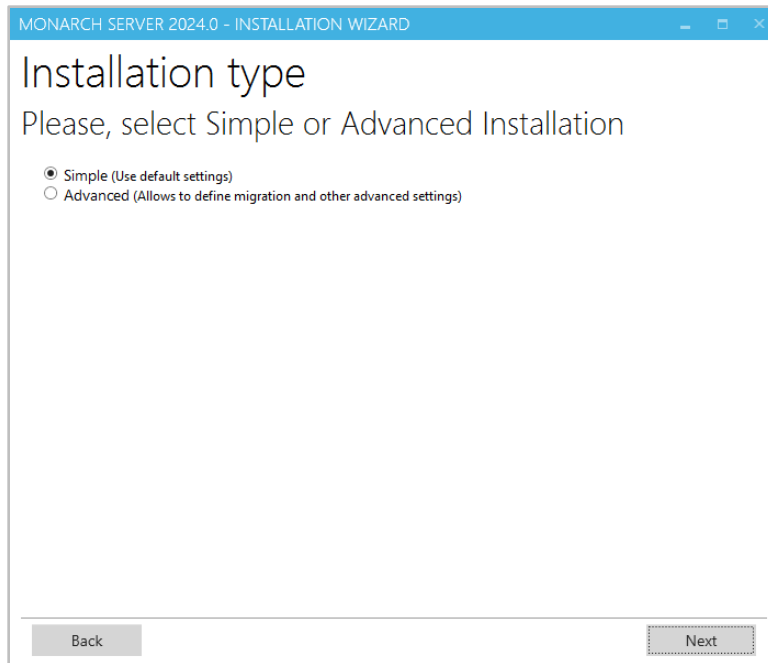

    Click **Next**.

2. The **License Agreement** dialog box appears.
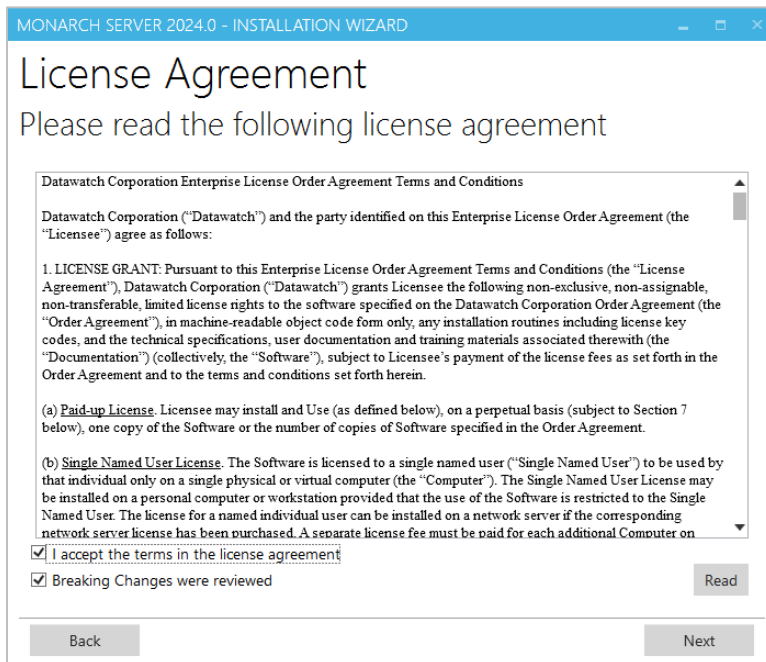
    If you agree to the license terms, select **I accept the terms in the license agreement**, and then click **Next**.

3. The **Installation type** dialog box appears. Choose between *Simple installation* and *Advanced installation*, and then click **Next**.

<table>
<tr><td>**NOTE**</td><td>The **Installation type** dialog box is available only if no previous version is installed.</td></tr>
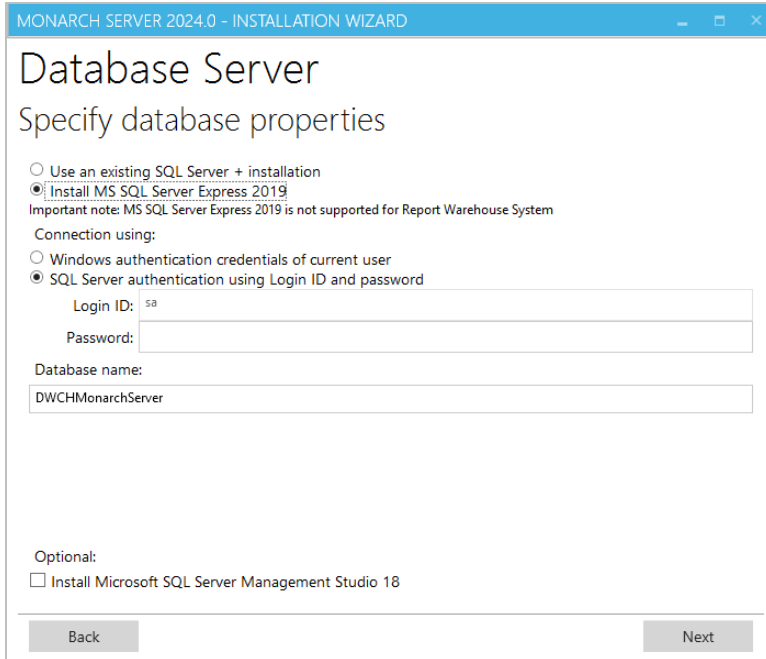</table>

Simple Installation

1. The **Install Location** dialog box appears.

Specify the location settings for Monarch Server installation:

a. In the **Install services to** field, specify the folder for Monarch Server installation.

b. In the **Web Site directory** field, specify the site name where the web applications are to be installed. If you select the **Use services location** check box, the web applications (Admin, Client, and RMS Client) will be installed in the Monarch Server directory.

c. In the **Site** field, specify the site name for the web applications.

d. Under **Admin Virtual Folder**, specify the name of the virtual folder for Administrator web application.

e. Under **Client Virtual Folder**, specify the name of the virtual folder for Client web application.

f. Under **RMS Virtual Folder**, specify the name of the virtual folder for Report Mining Server.

g. In the **Port** field, specify the port for IIS running.

h. In the **Pool** field, specify the name of the application pool to be used by the web applications.
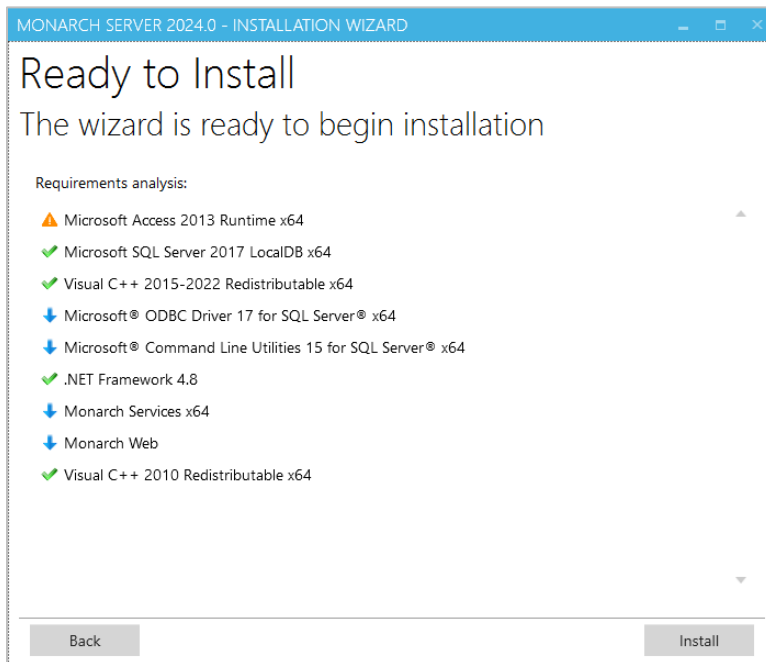
   Click **Next**.

2. The **Database Server** dialog box appears.

a. Specify the database server settings:

♦ Specify whether to use an existing SQL Server or to install one by selecting any of the following:

- **Use an existing SQL Server + installation**: Select this option to use an existing installed SQL Server 2019.

- **Install MS SQL Server Express 2019**: Select this option to install SQL Server Express 2019 on the local machine. In this case, the name of the database server instance will be *DWCHMonarchServer*. Note that SQL Server Express 2014 is not supported for Report Warehouse.

♦ In the **Database server that you are installing to** field, specify the database server instance by doing one of the following:

- Select *(local)* to install the application to the existing database server instance on your local machine.

- Type the database server instance name in the field.

- Click **Find Servers** to find and select instances of the existing database servers that are accessible from the local machine. The found servers populate the **Database server that you are installing to** drop-down list from which you can select.

b. In the **Connection using** field, specify the authentication method by selecting either **current user Windows authentication** or **server authentication**. If you select SQL Server authentication, enter the login ID and password (see the image below).

c. In the **Database name** field, provide a name with which the Monarch Server database will be created.

d. Click **Test Connection** to verify the connection to the server you specified.

   Click **Next**.

3. The **Ready to Install** dialog box appears.

The **Requirements analysis** section shows the third-party components with the possibility to view the license terms:

- Components with green tick marks are those that have been already installed on the local machine.

- Components with blue arrows are those that will be installed on the local machine.

- Components with a yellow exclamation mark are those that may present issues. Hover over the symbol for more information.

To view the license terms for a third-party component, click the **License Terms** button next to the required component.

If you agree to the license terms, select **I accept all the terms in all license agreements**.

Click **Install** to begin the installation.

4. After the installation is complete, the **Process completed** dialog box appears.

If necessary, you can select one of the following check boxes:

- **Open Administrator in default browser:** Select to open the Admin application in the default browser.

- **Open Client in default browser:** Select to open the Client application of the Monarch Server in the default browser.

- **Open RMS Client in default browser:** Select to open the RMS Client application of the Monarch Server in the default browser.

- **View Monarch Server Report Warehouse Administrator's Guide:** Select to open the Monarch Server Report Warehouse Administrator's Guide.

- **View Monarch Server Report Warehouse User's Guide:** Select to open the Monarch Server Report Warehouse User's Guide.

- **View Monarch Server Report Mining Edition Administrator's Guide:** Select to open the Monarch Server Report Mining Edition Administrator's Guide.

- **View Monarch Server Automation Edition User's Guide:** Select to open the Monarch Server Automation Edition User's Guide.

- **Show installation logs:** Select to open the folder containing the installation logs.

5. Click **Finish**.

Advanced Installation

1.   The **Install Location** dialog box appears.

Specify the location settings for Monarch Server installation:

a.   In the **Install services to** field, specify the folder for Monarch Server installation.

b.   In the **Web Site directory** field, specify the site name where the web applications are to be installed. If you select the Use services location check box, the web applications (Admin, Client, and RMS Client) will be installed in the Monarch Server directory.

c.   In the **Site** field, specify the site name for the web applications.

d.   Under **Admin Virtual Folder**, specify the name of the virtual folder for Administrator web application.

e.   Under **Client Virtual Folder**, specify the name of the virtual folder for Client web application.

f.   Under **RMS Virtual Folder**, specify the name of the virtual folder for Report Mining Server.

g.   In the **Port** field, specify the port for IIS running.

h.   In the **Pool** field, specify the name of the application pool to be used by the web applications.

Click **Next**.

2. The **Service Credentials** dialog box appears.

Specify the credentials for the Server administrator:

a. Select the Use "Local System Account" check box if you want to use your local system account.

b. Otherwise, clear the check box and specify a custom user in the **User Name** field in the required format.

c. In the **Password** field, enter the corresponding password for the specified user.

d. To find and select a particular user in your domain, use **Browse**.

Click **Next**.

3. The **Database Server** dialog box appears.

a. Specify the database server settings:

♦ Specify whether to use an existing SQL Server or to install one by selecting any of the following:

- **Use an existing SQL Server + installation:** Select this option to use an existing installed SQL Server 2019.

- **Install MS SQL Server Express 2019:** Select this option to install SQL Server Express 2019 on the local machine. In this case, the name of the database server instance will be DWCHMonarchServer. Note that SQL Server Express 2014 is not supported for Report Warehouse.

♦ In the **Database server that you are installing to** field, specify the database server instance by doing one of the following:

- Select (local) to install the application to the existing database server instance on your local machine.

- Type the database server instance name in the field.

- Click **Find Servers** to find and select instances of the existing database servers that are accessible from the local machine. The found servers populate the Database server that you are installing to drop-down list from which you can select.

b. In the **Connection using** field, specify the authentication method by selecting either **current user Windows authentication** or **server authentication**. If you select SQL Server authentication, enter the login ID and password (see the image below).
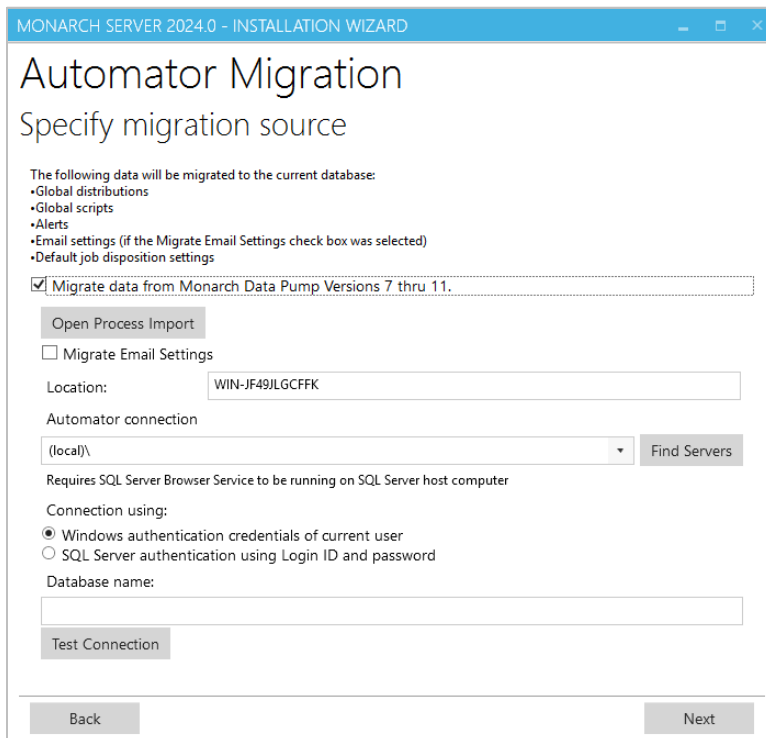

c. In the **Database name** field, provide a name with which the Monarch Server database will be created.

d. Click **Test Connection** to verify the connection to the server you specified.

Click **Next**.

4. A dialog box with **Automator migration** settings appears.
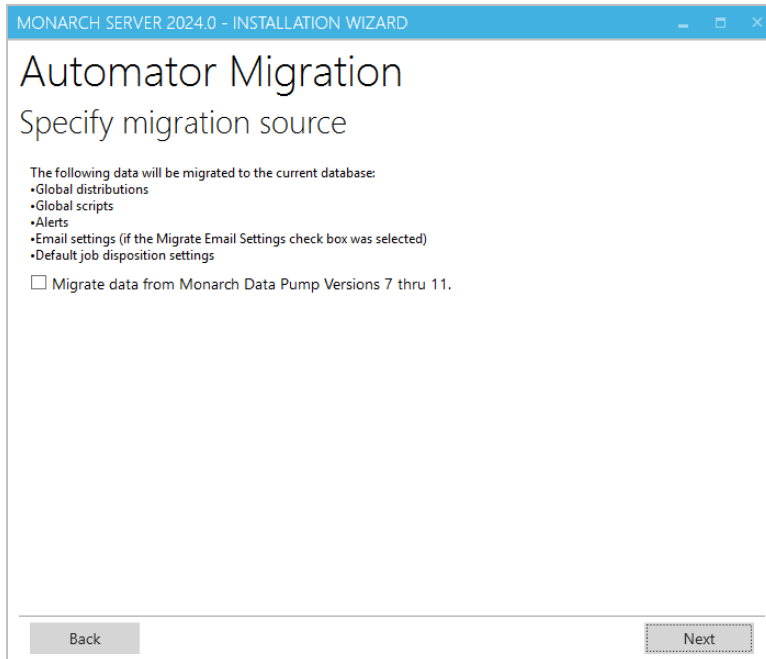
To skip this step, click **Next.**

To migrate your existing data and email settings

a. Select **Migrate data from Monarch Data Pump Version 7 thru 11**, and specify the following migration settings:

b. Click the **Open Process Import** button to import processes. In the displayed **Open** dialog box, choose the file with the processes imported from the previous Monarch Data Pump versions.

> **NOTE** You can select a number of files for migration. You can also delete unnecessary files.

 c. Select the **Migrate Email Settings** check box to transfer settings.

 d. In the **Location** field, enter location name. The specified location will be used for the imported processes.

> **NOTE** By default, the name of the local machine is displayed.

 e. To set connection to the database of the previous Monarch Data Pump version under **Automator Connection**, specify the following parameters:

  • Server Name

  • User Name and Password (in case of server authentication)

  • Database name

 f. To verify the Automator connection string, click **Test Connection**.

Click **Next**.

The following data will be migrated to the current database:

- Global distributions
- Global scripts
- Alerts
- Email settings (if the **Migrate Email Settings** check box was selected)
- Default job disposition settings

To go to the previous step, click **Back**.

6. A dialog box for **RMS migration** appears.
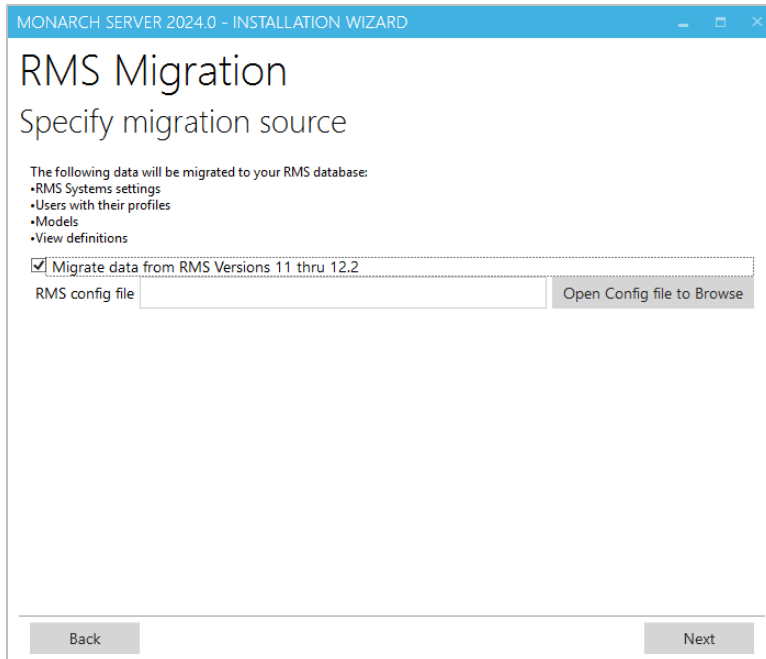
To skip this step, click **Next.**

To migrate your existing data

a. Select Migrate data from RMS Versions 11 thru 12.2

b. Click Open Config file to Browse to select web configuration file from the previous RMS versions that contain storage settings.
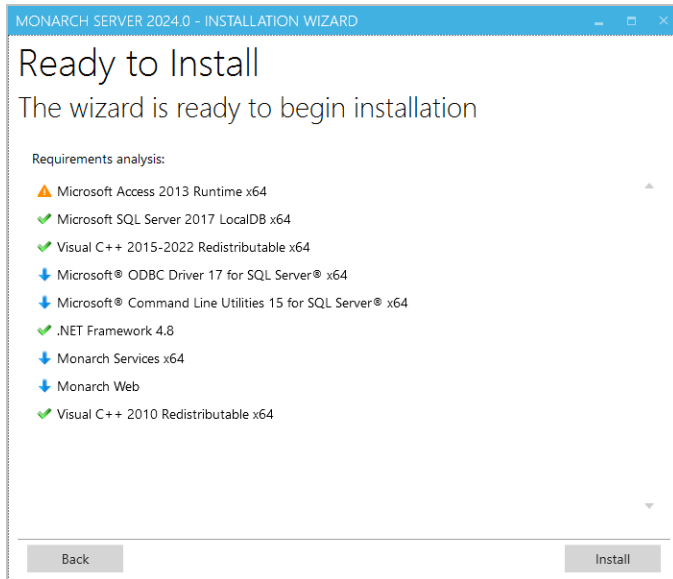
Click **Next**.

The following data will be migrated to your RMS database:

*   RMS system settings

*   Users with their profiles

*   Models

*   View definitions

To go to the previous step, click **Back**.

7. The **Ready to Install** dialog box appears.

The **Requirements analysis** section shows the third-party components with the possibility to view the license terms:
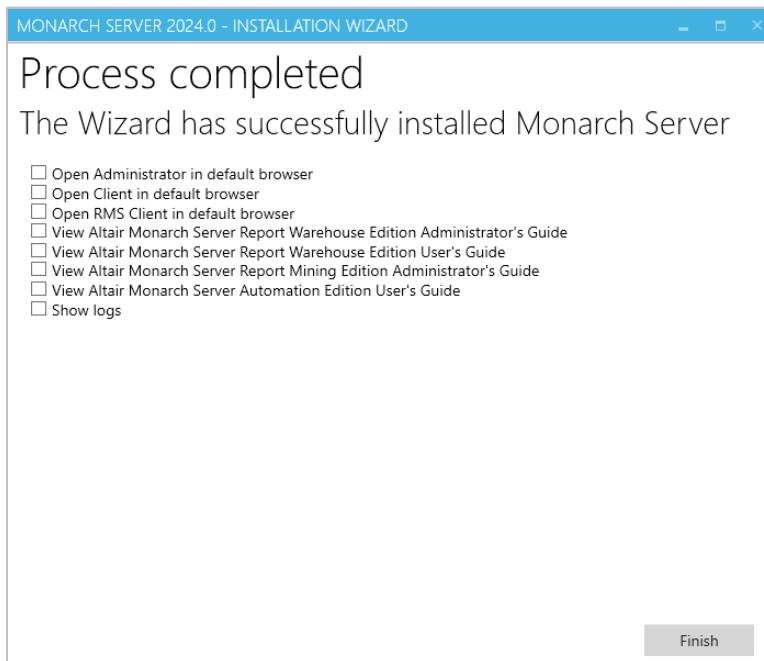
- Components with green tick marks are those that have been already installed on the local machine.

- Components with blue arrows are those that will be installed on the local machine.

- Components with a yellow exclamation mark are those that may present issues. Hover over the symbol for more information.

To view the license terms for a third-party component, click the **License Terms** button next to the required component.

If you agree to the license terms, select **I accept all the terms in all license agreements**.

Click **Install** to begin the installation.

5. After the installation is complete, the **Process completed** dialog box appears.

If necessary, you can select one of the following check boxes:

- **Open Administrator in default browser:** Select to open the Admin application in the default browser.
- **Open Client in default browser:** Select to open the Client application of the Monarch Server in the default browser.
- **Open RMS Client in default browser:** Select to open the RMS Client application of the Monarch Server in the default browser.
- **View Monarch Server Report Warehouse Administrator's Guide:** Select to open the Monarch Server Report Warehouse Administrator's Guide.
- **View Monarch Server Report Warehouse User's Guide:** Select to open the Monarch Server Report Warehouse User's Guide.
- **View Monarch Server Report Mining Edition Administrator's Guide:** Select to open the Monarch Server Report Mining Edition Administrator's Guide.
- **View Monarch Server Automation Edition User's Guide:** Select to open the Monarch Server Automation Edition User's Guide.
- **Show installation logs:** Select to open the folder containing the installation logs.

8. Click **Finish**.

Via the **Start** menu, under **All Programs -> Monarch Server -> Monarch Server**, you can access the following options:

- ❑ Monarch Server Automation Edition Tutorial
- ❑ Monarch Server Automation Edition User's Guide
- ❑ Monarch Server Report Warehouse Administrator's Guide
- ❑ Monarch Server Report Warehouse User's Guide
- ❑ Monarch Server Report Mining Edition Administrator's Guide
- ❑ Monarch Server Report Mining Edition User's Guide
- ❑ Monarch Server Report Mining Edition Developer Guide
- ❑ Monarch Server Single Server Installation Guide
- ❑ Open **Administrator** in default browser
- ❑ Open **Client** in default browser
- ❑ Open **RMS Client** in default browser
- ❑ Run **Agent Service** in console mode
- ❑ Run **Configuration Service** in console mode
- ❑ Run **Configurator**
- ❑ Uninstall

MONARCH SERVER POST-INSTALLATION ACTIONS

CHANGING THE USER ACCOUNT

To change the user account

1. Click Start, select Control Panel, and click Administrative Tools.

2. Double-click Services.

3. Double-click Monarch Server Agent Service.

4. Select the Log On tab and specify account properties.
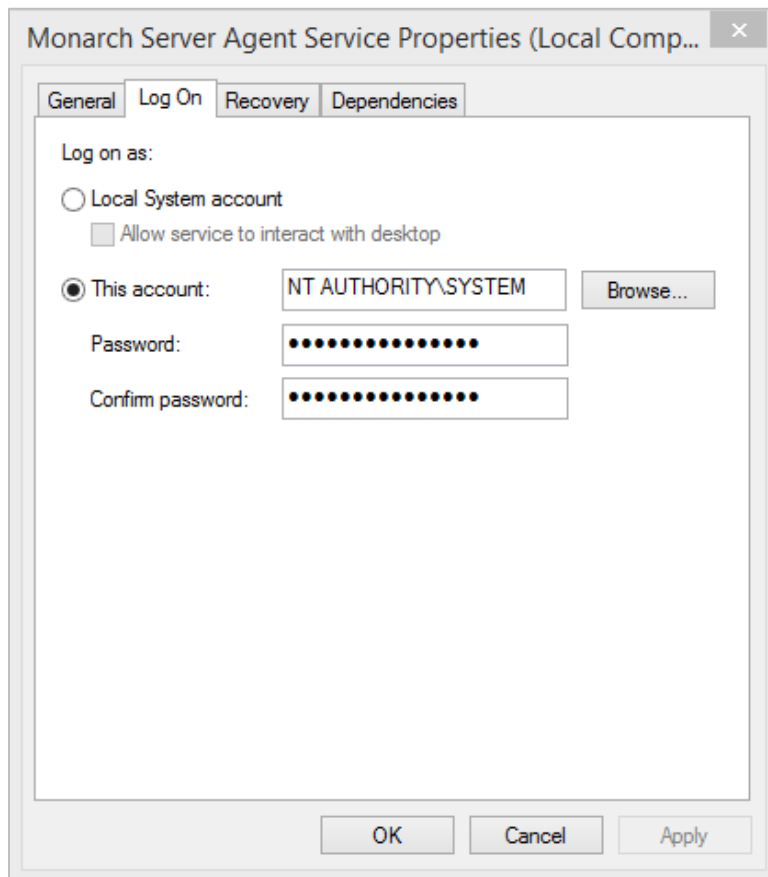
5. Click **OK** to save changes and start the service.

CONFIGURING SSO

To use SSO

1. Open Administrator.

> **NOTE** In Monarch Server that is upgraded from previous versions (e.g., v13.2), the virtual folders could still be labeled as "DSAdmin" (or "DSClient"). In this case, use "DSAdmin" (or "DSClient") instead of "MSAdmin" (or "MSClient") to open the Admin (or Client) page.

2. Under the Navigation Tree, click **Show Advanced Options**.
3. Click on Rights and Privileges, and then choose Security Provider.
4. Under Security Providers, select **Active Directory**, and then select **Show SSO**.
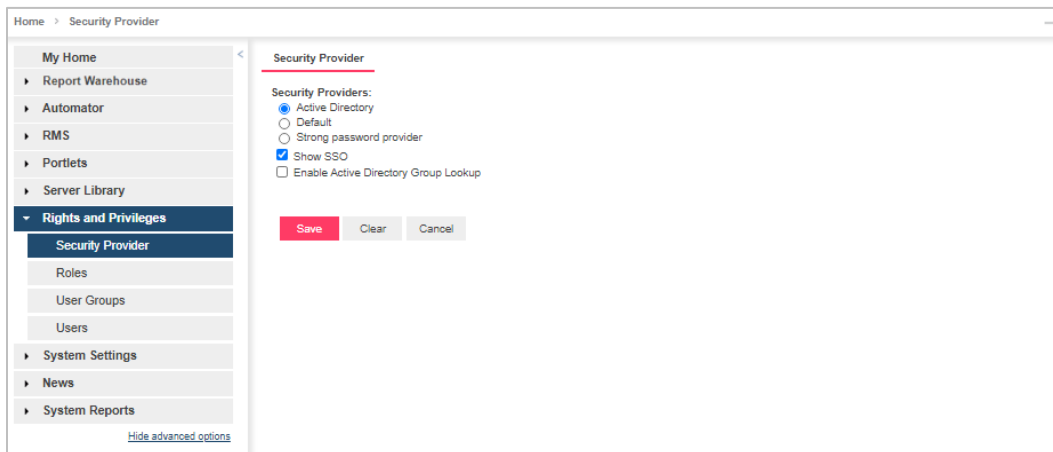
> **NOTE**
> ❑ Mapping/aliasing of at least one administrator user is required. If there are no users mapped (MS and AD users are the same), the MS application is inaccessible without direct database modification of Configuration table to the default state.
>
> ❑ To add an administrator user account, choose **Users** under Rights and Privileges in the Navigation Tree. In the *Users* window, click on "+" to add a new user.

In the *User* window, provide the necessary details. To check if the user account you are creating already exists, click on **Check User**. Do not forget to click **Save**.

5. Modify the file **web.config** of the Administrator and Client applications (the paths are `C:\inetpub\wwwroot\MSAdmin` and `C:\inetpub\wwwroot\MSClient`, respectively).

> **NOTE** This step is crucial. One simple mistake can result in serious application issues. To avoid potential problems, make a backup of the **web.config** file before making any changes.

1. Disable the following code:

```
<authentication mode="Forms">
    <forms loginUrl="~/Login/LoginRedirect" defaultUrl="~/Login/LoginIndex"
cookieless="UseCookies" timeout="15" name=".ASPXFORMSAUTH"
slidingExpiration="true"/>
</authentication>
```

c. Enable the following code:

```
<authentication mode= "Windows" />
<authorization>
    <deny users="?" />
</authorization>
```

6. Make sure that **Windows, ASP.NET Impersonation** authentication on IIS for the Administrator and Client applications is disabled.

1. Go to **Start > All apps > Windows Administrative Tools > Internet Information Services (IIS) Manager**.
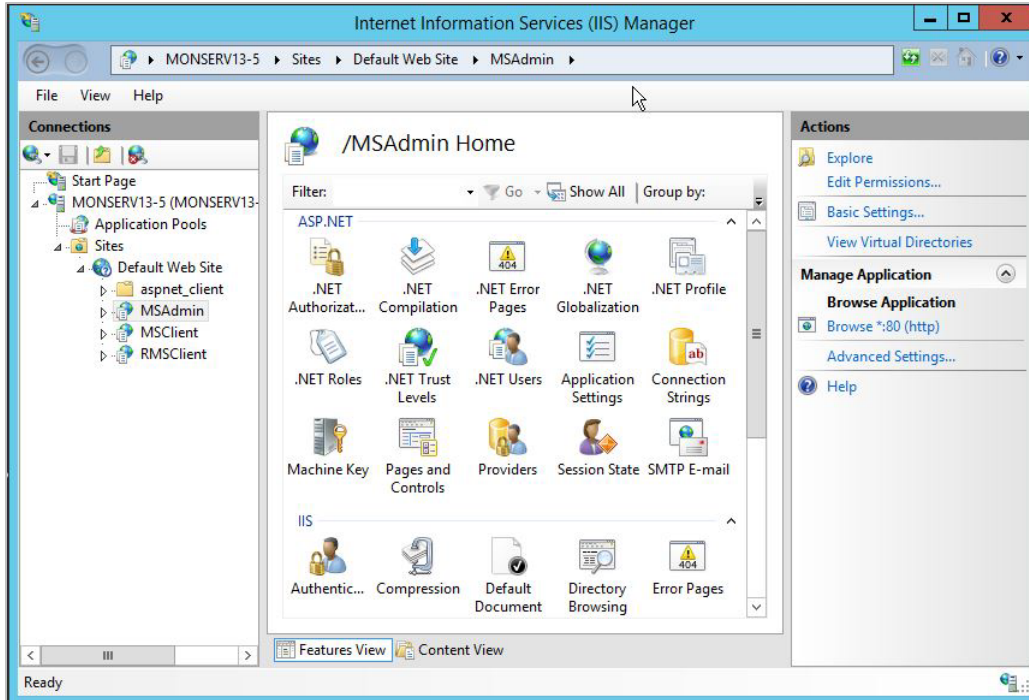
d. Go to **MSAdmin > Authentication**, and disable ASP.NET Impersonation status.

Go to **MSClient > Authentication**, and disable ASP.NET Impersonation status.

7. Restart the Monarch Server Config and Monarch Server Agent Services, IIS.

8. On the login page of the Administrator and Client applications, click the **SSO** button.

NOTE	If you fail to define at least one administrator user and cannot login to the Administrator page, edit the Configuration table, and set the OptionValue of SecurityProvider to DEFAULT. The steps are as follows:
	a. Open Microsoft SQL Server Management Studio.
	b. In the Object Explorer panel, click Databases, and choose the database you are using. (You may check the database name using the Monarch Server Configurator. Under Configurator, click the Instances tab. The Database Name is shown in the Global Settings window. Refer to the image below.)
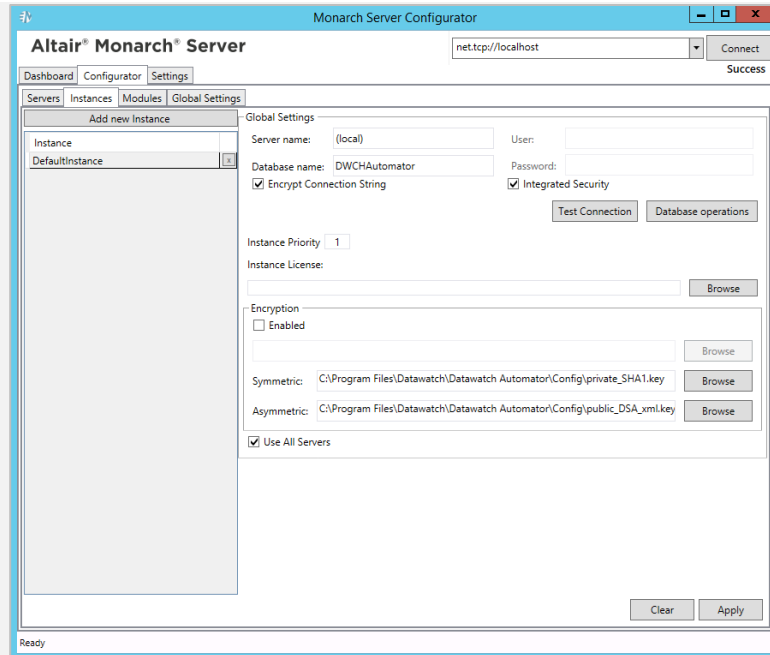
c. Under **Tables**, right-click on **dbo.configuration**, and then choose **Edit Top 200 Rows**.

d. Look for the OptionId "SecurityProvider," and then change its **OptionValue** to **DEFAULT** (case sensitive).
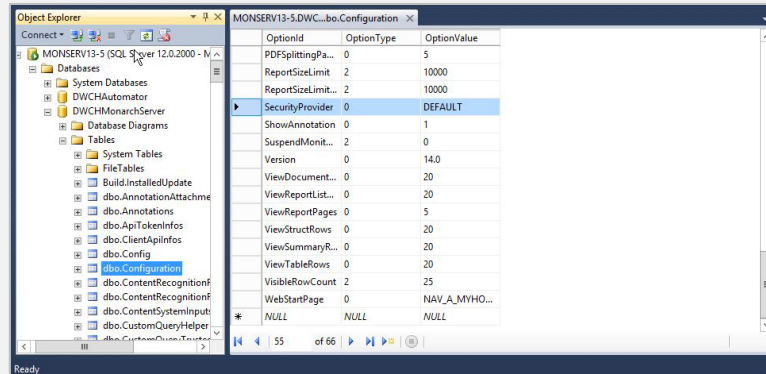
SETTING USER SESSION TIMEOUT

The server provides two parameters that allow setting up a timeout period, after which user sessions within the application expire and need to be renewed. These parameters are stored in the file **web.config**, the paths to which are as follows:

❑ C:\inetpub\wwwroot\MSAdmin

❑ C:\inetpub\wwwroot\MSClient

❑ C:\inetpub\wwwroot\RMSClient

One parameter is located in the authentication mode **Forms**; this parameter checks the time of the last request from the user when half the time defined in the parameter passes (for example, if the specified time is 10 minutes, the check will be performed after 5 minutes).

The other parameter is located in the Session State mode **In Proc**; this parameter checks when the last request was sent. Session timeout period is the amount of time from the last request.

In the Monarch Server applications, the parameter used by the system is the one with the smaller value.

SETTING ADMINISTRATOR PASSWORD AND E-MAIL ADDRESS

Before using the Monarch Server System, you should set the password and e-mail address for the administrator account.

1. Open a browser and type the MSAdmin address in the address bar (for example, http://localhost/MSAdmin).

2. Log in using the default administrator account (the login name is "admin," and the password is "password").

3. On the Navigation Tree, double-click **Rights and Privileges**, and select **Users**.

4. Click **admin**.

5. Type a password in the **Password** and **Confirm Password** boxes, then click **Save**.

6. Click **Save** on the User page to save the changes.

7. On the Navigation Tree, double-click **System Settings**, and select the **Application Settings** tab at the top of the page.

8. Enter a valid e-mail address in the **Administrator E-mail Address** field.

9. Click **Save**.

INSTALLATION MAINTENANCE

This section describes how to add or remove Monarch Server components on a computer and how to repair a damaged installation.

> **NOTE**   You must shut down Monarch Server services before you attempt to do any of the tasks below.

REPAIRING A DAMAGED INSTALLATION

The Repair function of the Installation Wizard repeats the last installation to replace missing or damaged files of the Monarch Server System. Use this option if you accidentally deleted some Monarch Server System files or Monarch Server System became unworkable due to damaged files.

> **NOTE**   The Repair function removes all changes you made in property files or registry settings. Therefore, before beginning a repair, backup all property files and registry keys first.

Warning: Do not try to work with the system registry if you are unfamiliar with it. Incorrect actions can render your system unusable.

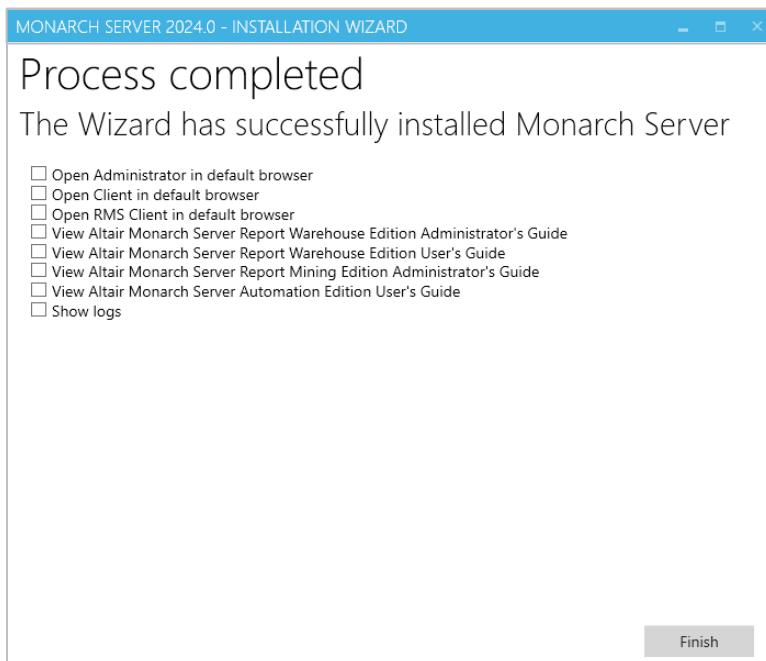**To repair a damaged installation**

1. Run the **MonarchServerInstaller.exe** file from your installation media, or use the **Add/Remove Programs** feature in the system's **Control Panel**. The Monarch Server Installation Wizard appears with program maintenance options.
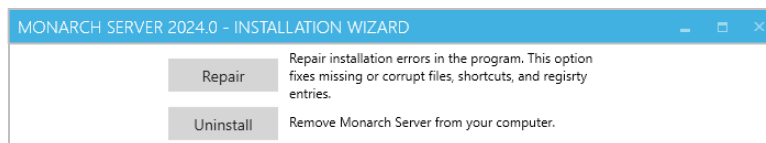
2. Click **Repair**. The following dialog box appears, showing the installation progress.
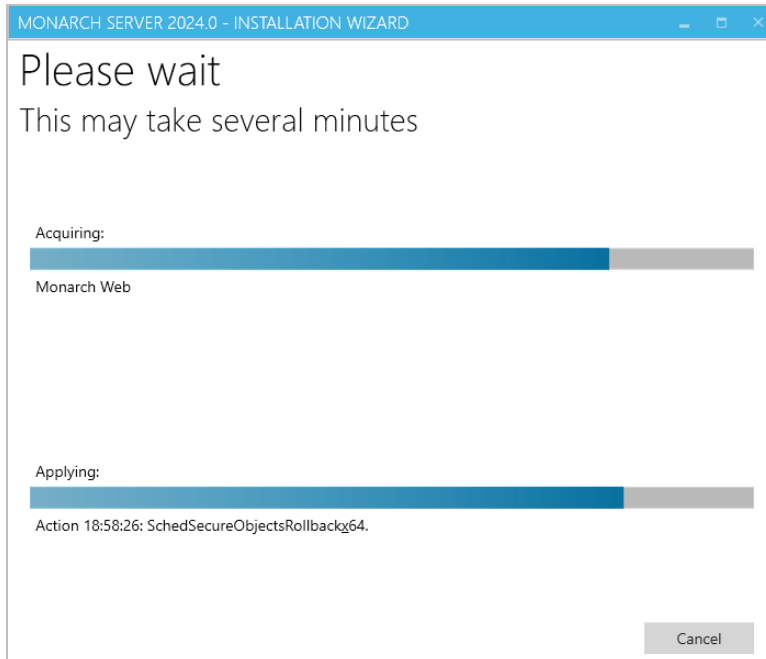
3. When the repair is complete, the corresponding message will appear.

4. Click **Finish** to exit the Installation Wizard.

REMOVING ALL SYSTEM COMPONENTS

If necessary, you can remove all Monarch Server components and files installed on the computer.

To remove system components and files

1. Run the **MonarchServerInstaller.exe** file from your installation media, or use the **Add/Remove Programs** feature in the system's **Control Panel**. The Monarch Server Installation Wizard is launched.

2. Click **Uninstall**. When the operation is complete, the corresponding message will appear.

3. Click **Finish** to exit the Installation Wizard.

UPGRADING INSTALLATION

UPGRADING THE EXISTING INSTALLATION

If you have the Monarch Server application v12.2+ installed on your computer and need to upgrade it to the latest version, launch the Monarch Server installer and follow the steps below.

NOTE	☐ Before uninstalling the previous version, ensure that you are able to restore the original environment, either wholly (e.g., full server/resource backups) or at minimum; the backups of the Monarch Server database; and all file-based resources dependent on the RMS, Automator, and Report Warehouse functionalities being utilized.
	☐ During an upgrade, customized settings such as authentication options and timeout settings in the web.config files (MSAdmin, MSClient, RMSClient) from the previous installation are retained and transferred to the new web.config file. A backup file labeled as **web.config.bak** is also created; this may be used when the current web.config file becomes unrecoverable or when no other "working copy" exists on the machine.

1. In the directory with installation files, double-click **MonarchServerInstaller.exe** to launch the Monarch Server Installation Wizard.
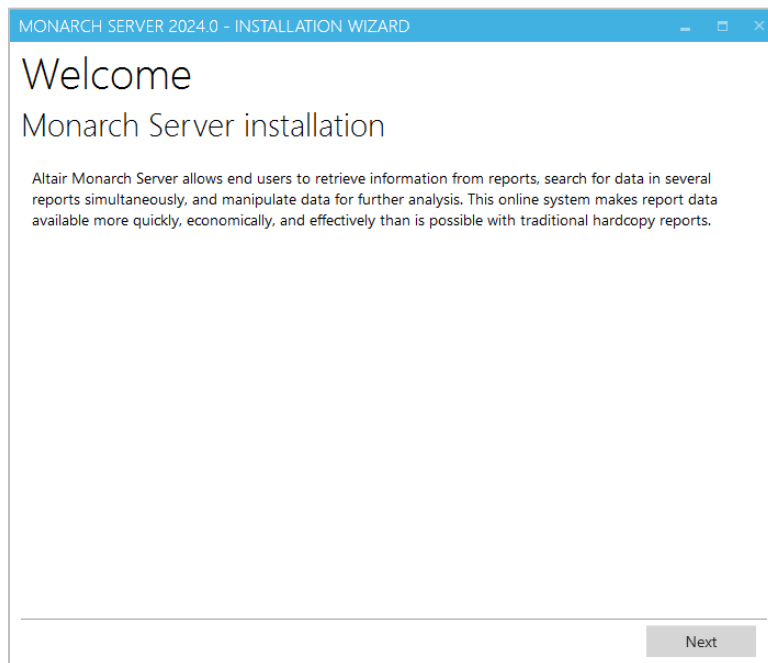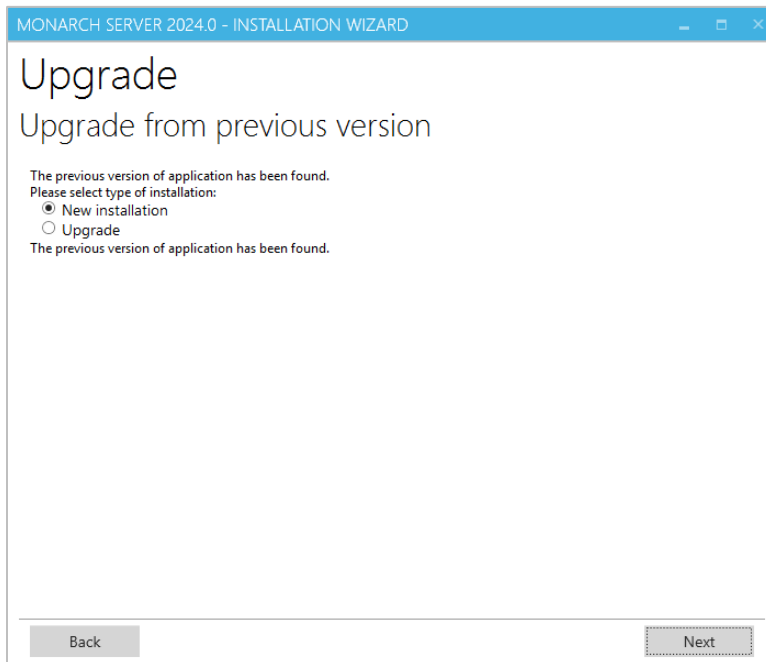

Click **Next**.

2. The **License Agreement** dialog box appears.

If you agree to the license terms, select **I accept the terms in the license agreement**, and then click **Next**.

3. The **Upgrade** dialog box appears. To upgrade the current application version, specify the **Upgrade** option.


Click **Next**.

| NOTE | The existing database remains, and it is upgraded to the new version. The application directory remains.

With Monarch Server v2024.0, the 32-bit application could no longer be installed on a 64-bit operating system. When attempting to upgrade a Monarch Server 32-bit |

application, the following notification is displayed:

Monarch Server 32-bit application is already installed. Upgrading to the newer version is not possible as 32-bit support has been deprecated. Please install the Monarch Server 64-bit application to proceed. Please refer to Altair Support for guidance if desired.
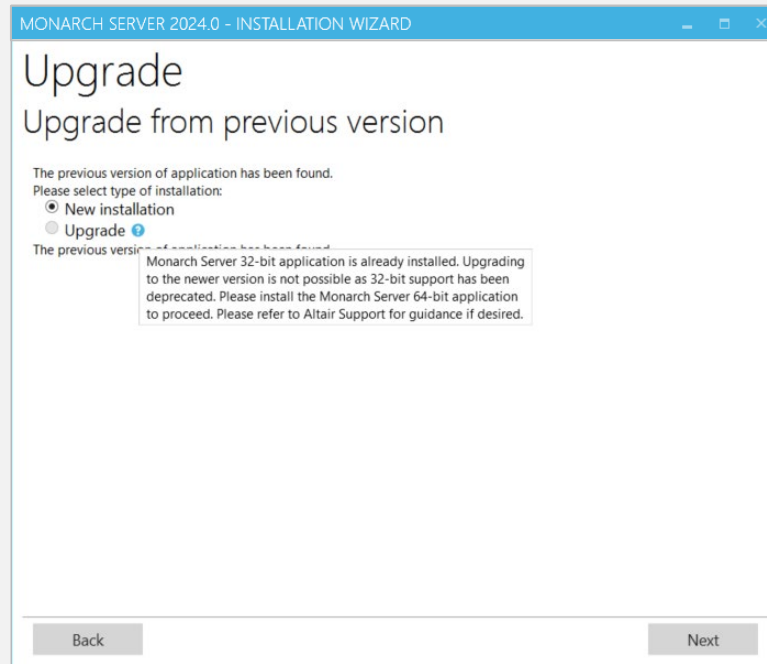
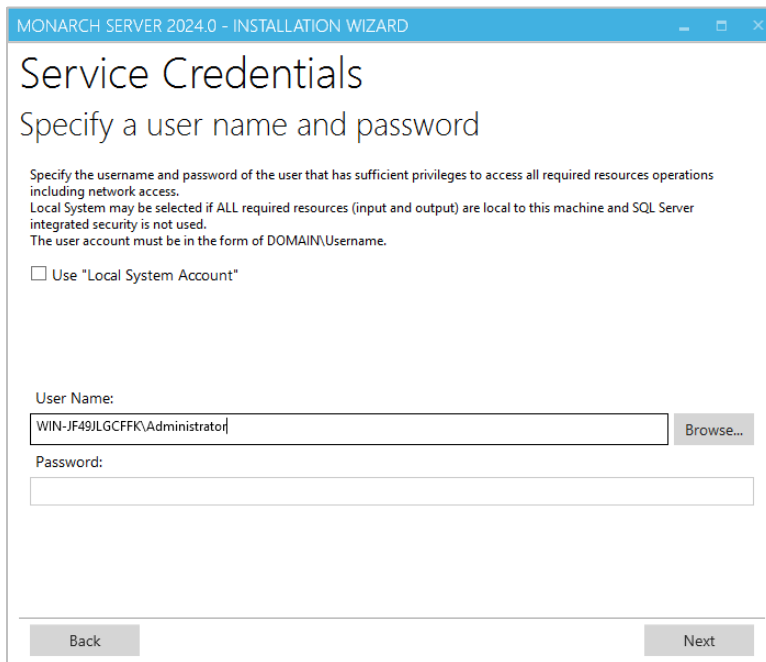

4. The **Install Location** dialog box appears.

NOTE	If the license includes the Automator component only, then the installation location step is skipped. If other components are installed, e.g., RMS and/or Report Warehouse, their available settings are displayed.
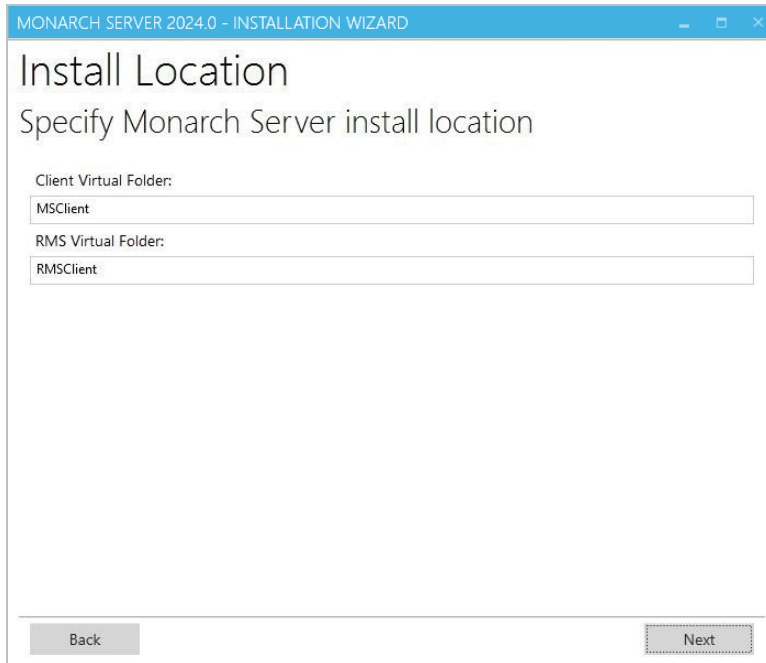
Click **Next**.
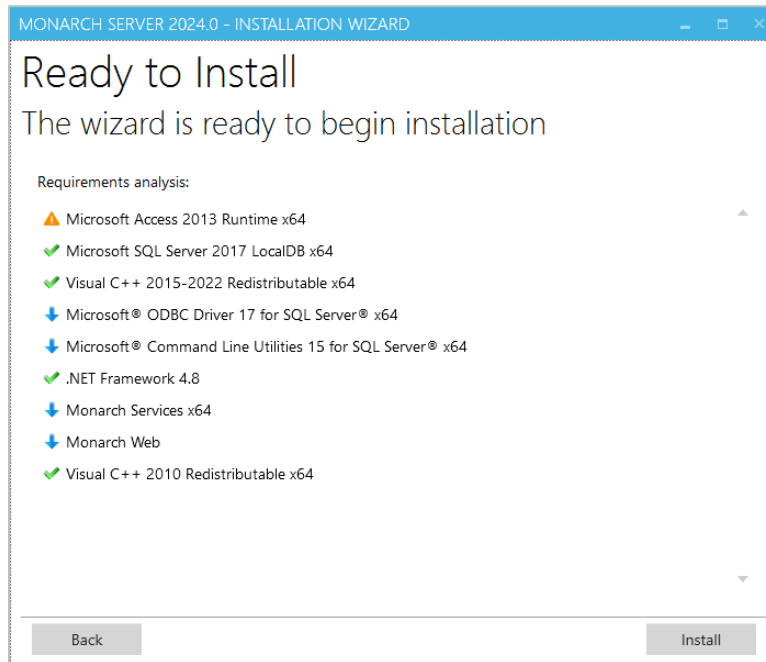
5. The **Service Credentials** dialog box appears.

Specify the credentials for the Server administrator:

a. Select the **Use "Local System Account"** checkbox if you want to use your local system account. Otherwise, clear the check box and specify a custom user in the User Name field in the required format.

b. In the Password field, enter the corresponding password for the specified user.

c. To find and select a particular user in your domain, use Browse.

Click **Next**.

6. The **Ready to Install** dialog box appears.

The **Requirements analysis** section shows the third-party components with the possibility to view the license terms:

- Components with green tick marks are those that have been already installed on the local machine.

- Components with blue arrows are those that will be installed on the local machine.

- Components with a yellow exclamation mark are those that may present issues. Hover over the symbol for more information.

To view the license terms for a third-party component, click the **License Terms** button next to the required component.

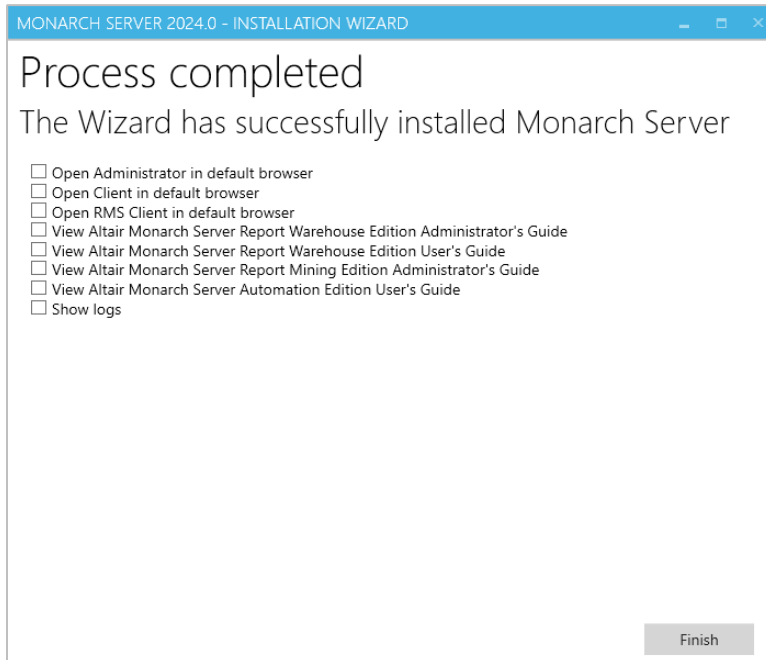If you agree to the license terms, select **I accept all the terms in all license agreements**.

Click **Install** to begin the installation.

7. The previous version of Monarch Server is removed.
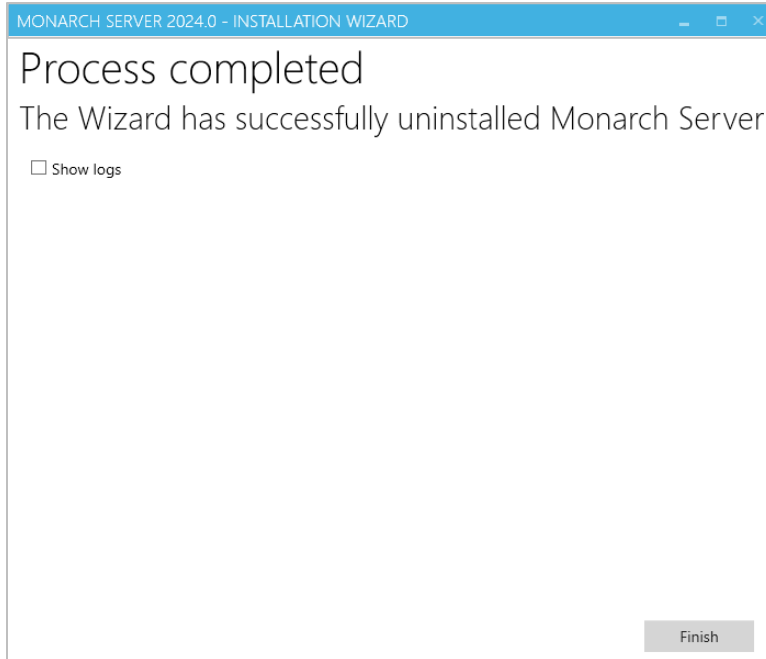
Click **Finish**.

8. After the installation is complete, the **Process completed** dialog box appears.

If necessary, you can select one of the following check boxes:

- **Open Administrator in default browser:** Select to open the Admin application in the default browser.

- **Open Client in default browser:** Select to open the Client application of the Monarch Server in the default browser.

- **View Monarch Server Report Mining Edition User's Guide:** Select to open the Monarch Server Report Mining Edition User's Guide.

- **View Monarch Server Automation Edition User's Guide:** Select to open the Monarch Server Automation Edition User's Guide.

- **Show installation logs:** Select to open the folder containing the installation logs.

Click **Finish**.

NEW INSTALLATION

If you need to install the latest version to a new directory using a new database, launch the Monarch Server installer and follow the steps below.

1. In the directory with installation files, double-click **MonarchServerInstaller.exe** to launch the Monarch Server Installation Wizard.
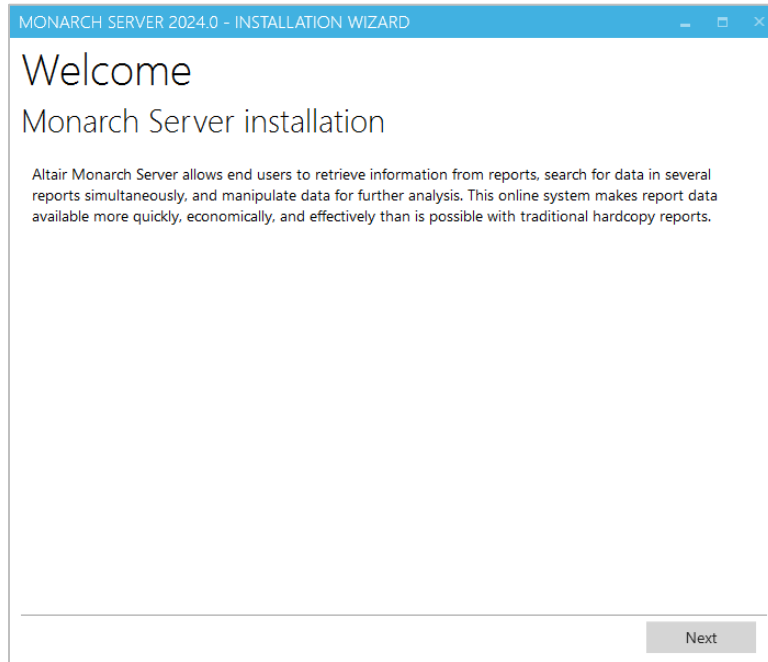
   Click **Next**.

2. The **License Agreement** dialog box appears.
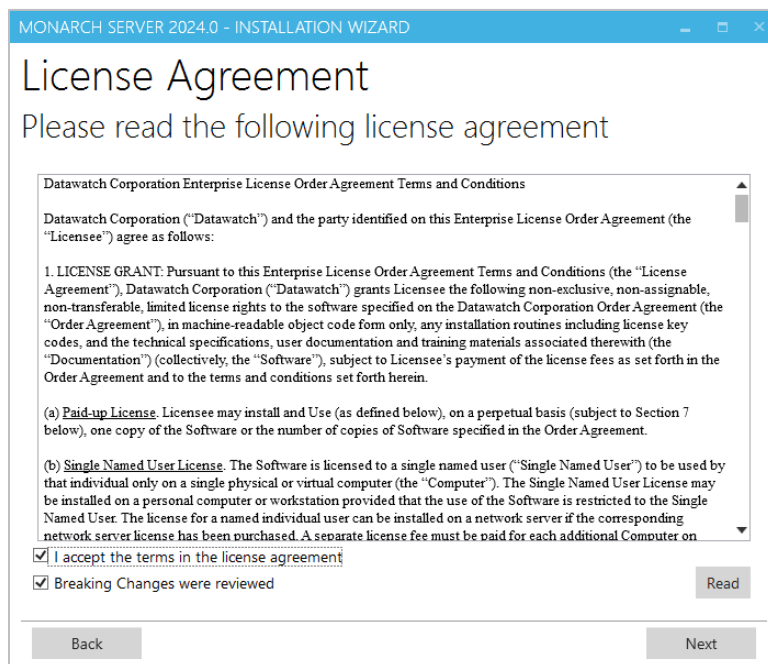
   If you agree to the license terms, select **I accept the terms in the license agreement**, and then click **Next**.

3. The **Upgrade** dialog box appears. To install the latest application version to a new directory, specify the **New Installation** option.
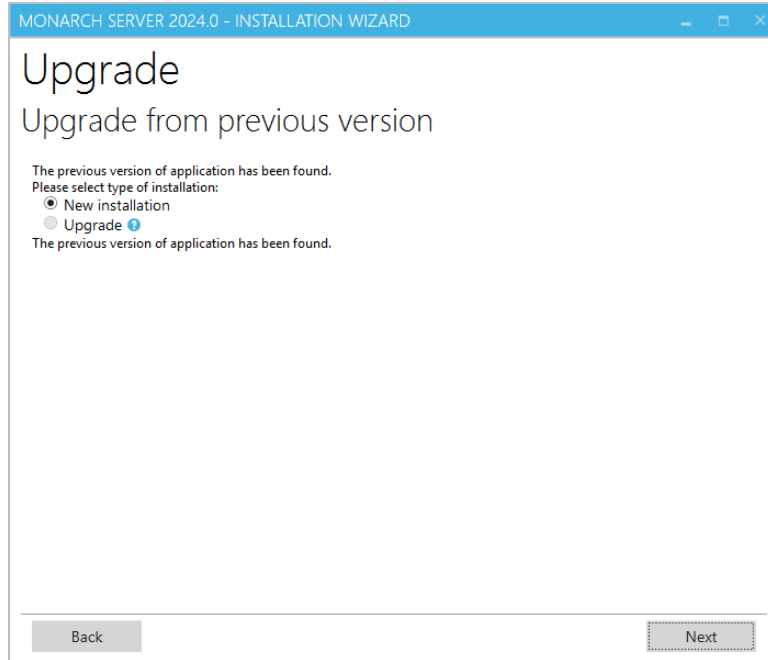
Click **Next**.

4. The **Install Location** dialog box appears. Proceed to steps 2 to 8 of the Advanced Installation.

CONFIGURING WEB APPLICATIONS

After installing Monarch Server, you can manually edit some of Clients applications' parameters in the web.config file.

CLIENT

The default path to the file is C:\inetpub\wwwroot\MSClient\web.config.

The parameters listed below are located in the <appSettings> of the MSClient.

The recording format of each of the parameters is as follows:

```
<add key="parameterName" value="parameterValue" />
```

PARAMETER NAME	DESCRIPTION	DEFAULT VALUE
allowXformPdfView	Enable ES Style PDF View.	true
enableTrainingLink	Enable Lesson link.	true
ClientEndSessionRedirectUrl	URL to be opened upon clicking End Session link.	
usePdfSubgroupHeaders	Enable Subgroup Headers in PDF export from Dynamic View.	true
loginOutOnBrowserCloseEnabled	Enable immediate session termination when the browser or browser tab is closed.	false
loginOutOnBrowserCloseTimeout	Waiting time for the termination of current session after the browser or browser tab is closed.	5000 (ms)

RMSCLIENT

The default path to the file is C:\inetpub\wwwroot\RMSClient\web.config.

The parameters listed below are located in the <appSettings> of the RMSClient.

The recording format of each of the parameters is as follows:

```
<add key="parameterName" value="parameterValue" />
```

PARAMETER NAME	DESCRIPTION	DEFAULT VALUE
userGroupName	Name of the group whose rights are applied to users when logging in to RMS Client.	RMSGroup
exportPDFInSameWindowEnabled	Enable export to PDF in the current window.	true
usePdfSubgroupHeaders	Enable Subgroup Headers in PDF export from Dynamic View.	true

PARAMETER NAME	DESCRIPTION	DEFAULT VALUE
loginOutOnBrowserCloseEnabled	Enable immediate session termination when the browser or browser tab is closed.	false
loginOutOnBrowserCloseTimeout	Waiting time for the termination of current session after the browser or browser tab is closed.	5000 (ms)

ADMIN

The default path to the file is C:\inetpub\wwwroot\MSAdmin\web.config.

The parameters listed below are located in the <appSettings> of the MSAdmin.

The recording format of each of the parameters is as follows:

```
<add key="parameterName" value="parameterValue" />
```

PARAMETER NAME	DESCRIPTION	DEFAULT VALUE
loginOutOnBrowserCloseEnabled	Enable immediate session termination when the browser or browser tab is closed.	false
loginOutOnBrowserCloseTimeout	Waiting time for the termination of current session after the browser or browser tab is closed.	5000 (ms)

CONTACT US

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We'd love to hear from you. Here's how you can reach us.

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