

enaio[®]

Software Documentation enaio[®] Installation

Version 8.50

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Introduction

About this Documentation

This installation documentation is aimed at all users and administrators who are in charge of the installation and maintenance of enaio®.

It serves as useful information on the installation and maintenance of enaio® core components: enaio® server, enaio® client and the administrative tools for basic configuration procedures.

This installation documentation complements the system handbooks in which information on processes, data flows, interactions, structures, and technologies of enaio® can be found.

In turn, the installation documentation is complemented by our technical information leaflet 'Hard- and software requirements of enaio®,' in which information on current versions of the operating systems and databases as well as information on current hardware requirements can be found.

The documents are located under the installation data and can be copied to the documentation directory of an installation during the installation process.

The technical information leaflet 'Hard- and software requirements of enaio®' can be found in our partner portal.

Any documentation will be supplied on demand, as well.

Installation Requirements

The installation requirements of the enaio® system when installed on a single computer are the same as the requirements of more complex system installations: Licenses are required, and hardware and software must be suitable.

For executability of all enaio® components the Microsoft Visual C++ 2008 SP1 Redistributable Package (x86) must be installed. With the Microsoft Visual C++ 2008 SP1 Redistributable Package (x86) all runtime components of Visual C++ libraries required for executing applications, which are developed in Visual C++, are installed at computers not having Visual C++ 2008 implemented.

The Microsoft Visual C++ 2008 SP1 Redistributable Package (x86) is available in the following languages:

- Chinese (Simplified)
- Chinese (Traditional)
- German
- English

- French
- Italian
- Japanese
- Korean
- Russian
- Spanish

Depending on the operating system language the setup will install the German, English and French Redistributable Packages. Install the Redistributable Package of the respective language in case another operating system language has been selected. It can be downloaded it here:

<http://www.microsoft.com/en-us/download/details.aspx?id=5582>

For languages that are not listed install the English Redistributable Package version x86. This can be found in the `Prerequisite` directory of the installation data.

The appendix provides information on installations on systems with code pages other than Western European.

Installing as Administrator

Please note that you must always be logged in to an administrator account to perform installations.

If user account control is active, installations must be run via the context menu option **Run as administrator**.

Without administrative rights, the setups cannot be completed.

Network, Operating Systems, and Databases

All information on supported operating systems and databases as well as network requirements can be found in the technical documentation leaflet 'Hard- and software requirements of enaio®' which is available in our partner portal.

Disabling 8.3 filename creation, recommended by Microsoft to increase file system performance, will lead to errors.

Microsoft MSXML Parser

Microsoft MSXML parser is needed for all server and client components. You can install the parser when using setup, but not when installing with an MSI file. To run the MSXML parser, you need the corresponding Windows rights (read, execute).

Virus Scanner

Antivirus protection has an influence on applications which frequently access the file system. This concerns particularly memories and caches of the enaio® server, databases and the e-mail components. It must be ensured in enaio® that working

and cache areas are only read and described by enaio® components. The use of virus scanners must therefore be coordinated with the surrounding application components, and relevant directories must be excluded from scans.

Maintenance mode

If a user runs the installation program of a product that already exists in his user system, the installation will be run in maintenance mode. The maintenance mode allows users to change features selected at initial installation and repair installed features or remove the entire system.

When updating in maintenance mode, not only enaio® components are recognized but also installed third-party components (see 'Update in Maintenance Mode').

Installation on 64-Bit Systems

Note that, when running the installation on 64-bit systems, the system DSN must not be created via **Control Panel > Administrative Tools > Data Sources (ODBC)**, but with the application `C:\WINDOWS\SysWOW64\odbcad32.exe`.

To disable maintenance mode, you can either execute the `nomaint.vbs` script in the setup directory or delete the following key with the Windows registry editor (`regedit.exe`):

```
HKLM\Software\Wow6432Node\Microsoft\Windows\CurrentVersion\Uninstall  
\{3a8aaadc-193c-4aca-8b05-b1a55b993e27}
```

Installation Data

The enaio® system installation requires installation data and a license file.

The installation data is obtained as a download. It contains all modules necessary for the installations described below. The installation DVD is obtained together with the OPTIMAL SYSTEMS license.

MSI packages for installing a local enaio® client, as well as further MSI packages such as the enaio® MSI package for network installation, are available separately.

The number and type of the purchased licenses can be found in the license certificate or the file `aslic.dat`. The license for enaio® server is only available as a seat license with a fixed GUID or TCP/IP address. If an enaio® server IP address changes, a new license file is required. New license files are also required when purchasing additional licenses.

All information regarding licenses in the documentation is not binding. Only licensing agreements which have been agreed on contractually are binding.

Installation Procedure

enaio® server

The installation requires a computer that the server is installed on and which allows database access. The database can either be installed at the same or at a different

computer. The operating system or the database manufacturer supplies ODBC drivers which enable communication with the databases. A system DSN is required for two reasons: first to allow database access through a database user profile with password and the role 'db_owner', and second to allow database access through the communication configuration between the server and the database computer.

In enaio® documents are not filed in a database but in the WORK area, which is a separate file system. This data area of documents can be administered on the server computer or on another computer.

It is recommended to have the application directory separated from the data storage location as the document volume may require large amounts of storage space.

The server installation offers numerous installation possibilities, from a simple enaio® system that consists of a database and a single application server, to an enaio® system with several server groups, each running multiple servers. Descriptions of the individual expansion levels can be found in the System Manual DMS. If you have any questions about your system, please contact the OPTIMAL SYSTEMS consulting department.

At any time, it is possible to add further servers and server groups to the enaio® system without any difficulty.

When installing and extending your enaio® system, note that each server group has its own data area, while all servers in one group must have access to the same data area. All servers of all enaio® system server groups access the same database. This must be taken into account when performing the enaio® server installation, particularly for information concerning the database.

Servers, core services, and other services should not be installed on computers that perform central tasks on the Windows network. Company-critical services such as domain controllers, e-mail servers, or web servers should run separately from enaio® in order to avoid them interfering with each other in terms of performance and error security.

Core services

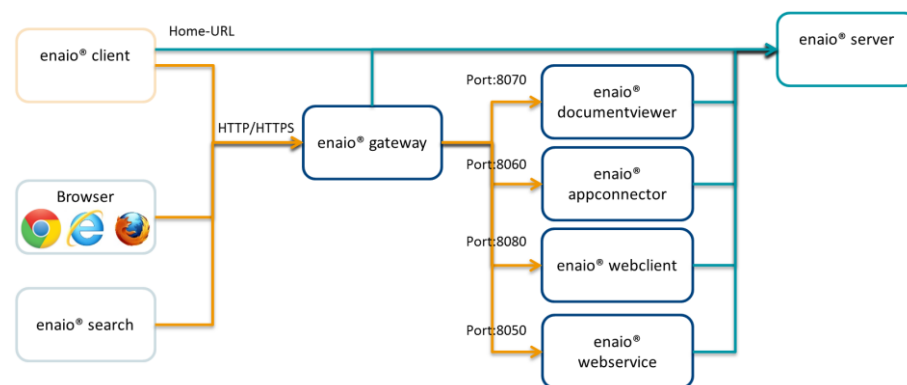
The core services are default components of enaio® and are required for operating the enaio® platform and a proper functioning of the individual enaio® components.

The following enaio® components are core services:

enaio® appconnector	Offers flexible access to index and document data. When used as enaio® detailsviewer, enaio® appconnector shows index data in external applications. Information about installation and configuration can be found in the 'OS_AppConnector_de.pdf' handbook.
---------------------	--

enaio® documentviewer	Creates previews of ECM documents. It also provides viewing and browsing features for document previews. Information about installation and configuration can be found in the Administration manual. enaio® documentviewer is installed with login as the local system account, but must run on an account with administrative rights.
enaio® webservice	Integrates external applications with the ECM system. Information about installation and configuration can be found in the 'OS_WebService_de.pdf' handbook.
enaio® gateway	Offers central proxy and authentication features for other core services.

enaio® gateway is a proxy that is used as a communications interface between the core services.



The core service is a prerequisite for the display of the content and details preview in enaio® client, for the communication and authentication of core services, and for the operation of enaio® webclient.

In disparate environments, enaio® gateway must always be installed after all core services and enaio® webclient, so that enaio® gateway can read the URLs of the other core services from the server registry.

When installing enaio® gateway together with other core services on a computer, setup ensures that enaio® gateway is installed as the last core service.

enaio® gateway uses port 80 by default. If this port is not free, a free port must be specified during installation.

enaio® gateway must be configured to set up the encrypted data transfer (HTTPS), the authentication method, or operation of enaio® webclient. Detailed information about this can be found in the administration guide.

In multi-server systems, the core services should only be registered on a server; in other cases the URL end points of all core services should be unified manually.

enaio® services and service components

Services and service components are required for central functionalities such as full text and text recognition.

service-manager	Management of the service infrastructure
base	Basic services
	Coordination of services
extraction	Service to extract metadata from files
ocr	Service for text recognition with Abbyy FineReader, requires the 'licence' service
licence	Licensing service to manage the Abbyy FineReader license and the licenses for enaio® webclient
mailstorage	Service for e-mail transfer via the Outlook add-in
index	Indexing service for full text
search	Service for full text search

The services are configured and managed via enaio® services admin. enaio® services admin can be accessed in browsers via the address '<service-manager-IP>:<Port>'. The default port is '7273.'

In addition, the full text component 'Elasticsearch' and the OCR component 'Abbyy FineReader' are installed via setups located in the corresponding subdirectories of /Microservices.

The names of computers on which enaio® service-manager and services can be installed may only include the letters 'a' to 'z,' the digits '0' to '9,' and the hyphen, in accordance with international specifications for Internet communications and protocols (see [RFC 952](#)).

enaio® client

The client components consist of administrative tools and enaio® client.

In local installation, the client component files, the network components, and important system files are installed locally.

In a network installation, a connection to enaio® client is set up on the respective workstations (see 'Network installation').

enaio® administrator, enaio® enterprise-manager, and enaio® editor

enaio® administrator, enaio® enterprise-manager, and enaio® editor are administrative tools.

enaio® administrator, enaio® enterprise-manager and enaio® editor will be included in the installation by selecting the component 'enaio® : Admin' in the installation program.

With enaio® administrator you can manage users and the security system, templates and applications for Windows document types, archiving, import and export processes, and much more.

With enaio® enterprise-manager you can manage the security system, the W-module, the license key, individual servers and server groups, the media for archiving, and much more.

With enaio® editor you can manage the object definition and design the index data forms.

It is recommended that you install the administrative tools on the server computer.

enaio® capture

enaio® capture is a specialized workflow application for enaio® which enables a large number of documents to be captured.

Specific hardware requirements may apply due to high performance scanners and automatic indexing with barcode and OCR recognition.

Multiple enaio® capture workstations can be set up. Communication takes place using enaio® server.

Pre-configuration Steps

Once installation is complete, basic configuration steps must be carried out (see 'Basic Configuration Steps').

This includes creating an object definition, defining user access rights and, optionally, designing workflow models.

Given that you have available an object definition file, an access rights file and a workflow model file, these data can be imported during installation.

For a great number of industry sectors, OPTIMAL SYSTEMS offers customizable object definitions.

Data can be alternatively imported from test installations.

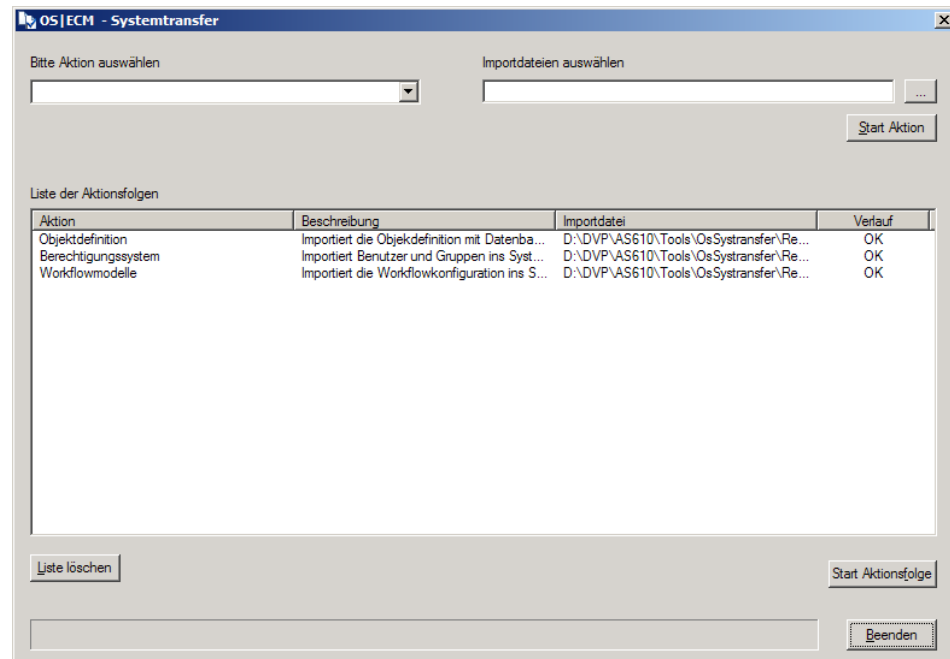
If an object definition file is available – and, optionally, also an access rights file and a workflow process file – these files can be saved to the installation data directory

...Disk1\config.

The directory may include the data as follows:

- asobjdef.xml
Object definition
- userimport.xml
Rights System
- workflow.xml
Workflow Models

enaio® Systemtransfer will start automatically after the installation. The tool allows for importing configuration data.



The following requirements have to be fulfilled for import:

- enaio® server has been started.
- An object definition has been imported before importing rights system data and workflow models.
- A workflow engine must be enabled in order to import workflow models. It is automatically enabled by setup, but can be manually disabled in enaio® enterprise-manager.

Run the import by clicking the **Run action sequence** button.

Communication Components

Although neither enaio® server nor enaio® client needs to be installed on your workstation, enaio® ServerCommunication allows you to connect to enaio® server by installing some library files.

Simply run the installation application `OSServerCommunication.exe` on the desired workstation. This file is found in the `...\components\OS[ServerCommunication]` directory.

Note that you need to install the Microsoft Visual C++ 2008 SP1 Redistributable Package corresponding to the operating system's language beforehand.

The relevant installation application can be found in the `...\components\Redistributable` directory of your installation data.

enaio® Versions and Configurations

As a rule, configurations are upwards compatible with different enaio® versions, that is, configurations created in earlier system versions can also be used in later system versions.

Downward compatibility is by contrast not guaranteed since enaio® platform developments result in new features and extended configurations. As a consequence, configurations created in later system versions cannot be used in earlier system versions.

It is very likely that attempting to import configurations that have been created in earlier system versions will result in feature settings being lost, format incompatibility, and/or program errors. Therefore you must pay attention to system versions when dealing with test, development and productive systems and in any case abstain from attempting to import and activate configurations which have been created in later system versions. This applies to configuration files, in particular to object definitions and workflow models.

Installation

Component Overview

The following components can be installed with the enaio® setup:

1. Server
2. Core services
 - 2.1. enaio® appconnector
 - 2.2. enaio® documentviewer
 - 2.3. enaio® webservice
 - 2.4. enaio® gateway
3. Client components
 - 3.1. enaio® client
 - 3.2. enaio® administrator
 - 3.3. enaio® capture
 - 3.4. Network setup directory
 - 3.5. TAPI Integration
 - 3.6. enaio® media management
4. Documentation
5. E-mail search
6. enaio® communicator
7. MS Office macros (enaio® office-utilities)
 - 7.1. MS Word utilities
 - 7.2. MS Word field editor
 - 7.3. MS Word data transfer
 - 7.4. MS Excel utilities
 - 7.5. MS Excel data transfer
 - 7.6. MS PowerPoint utilities
 - 7.7. enaio® e-mail import (enaio® document-storage)
8. enaio® medicine special
 - 8.1. DICOM Store SCP
 - 8.2. CardioSoft integration
 - 8.3. enaio® service recording
 - 8.4. enaio® laboratory module
 - 8.5. enaio® patient finder
 - 8.6. enaio® data set distribution
9. enaio® PDF printer
10. enaio® black-and-white and color printers
11. MDAC 2.60
12. Jet Engine 3.5
13. enaio® exchange
 - 13.1. enaio® exchange-server
 - 13.2. enaio® exchange-admin

enaio® service-manager

The following components can be installed with enaio® service-manager via the setup file 'os servicemanager_setup.exe', located in the directory

\Microservices\OS_ServiceManager:

1. enaio® service-manager
 - 1.1. Basic: admin, discovery, messaging

- 1.2. extraction
- 1.3. index
- 1.4. licence
- 1.5. mailstorage
- 1.6. ocr
- 1.7. search

For enaio® service-manager and services, you must specify the installation directory, name, port, address and port of enaio® server, and technical user with password.

The names of computers on which enaio® service-manager and services can be installed may only include the letters 'a' to 'z,' the digits '0' to '9,' and the hyphen, in accordance with international specifications for Internet communications and protocols (see [RFC 952](#)).

The technical user for the services usually requires access rights for all folder, register, and document types, as well as the system roles 'Server: Switch job context' and 'Server: Run Ado jobs.'

Distributed Services

If you distribute services across multiple computers, the `application-cloud.yml` configuration file must be adapted for enaio® service-manager:

- If further enaio® service-managers are installed without basic services, the entry for 'defaultZone' must point to the URL of the 'discovery' service.
- If further enaio® service-managers are installed with basic services, the entries for 'defaultZone' must point to the URLs of all 'discovery' services.

Full Text: Elasticsearch

Full text components are installed via the setup file 'elasticsearch_setup.exe', located in the directory `\Microservices\Elasticsearch`.

You must specify the installation directory, port, and index data directory for the full text component.

For management and updates, the directory of the index data must be located outside the installation data. However, it should be created on the computer on which the full text server is installed.

The directory of the index data can be changed via the `path.data` parameter in the following configuration file:

```
...\services\OS_ServiceManager\elasticsearch\config\elasticsearch.yml
```

Example: `path.data: 'C:\VTX\db'`

Full text functionality is configured via the 'index' and 'search' services in enaio® services admin.

URL: `<service-manager-IP>:<Port>`

Abbyy FineReader

Abbyy FineReader is installed via the setup file 'setup.exe', located in the directory \Microservices\Finereader.

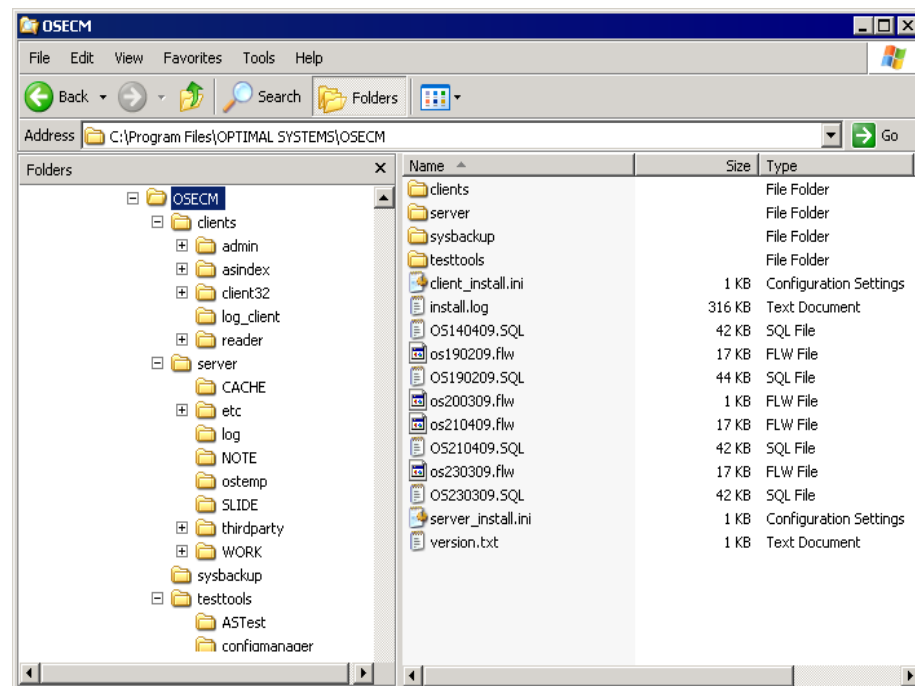
You will require the SMUA license provided by OPTIMAL SYSTEMS to carry out the installation.

The SMUA license is managed by the 'licence' service, which must be installed.

In addition, the 'SMU' license must be integrated via enaio® enterprise-manager.

Installation Structure

Based on the selected installation path the setup structures and files all components in the installation directory.



Do not change this structure in order to avoid problems during updates. Only specify the installation folder when entering paths (e.g. D:\OSECM).

enaio® server

Installation Requirements

- Computer hardware meets minimum requirements.
- The operating system has to be installed and meet minimum requirements.
- The logged-in user has administrative rights on operating system level.
- The logged-in user has to have the right to write in the Windows registry.
- The logged-in user has write access to the %Windir%\System32 directory.

- The logged-in user has write access to the installation directory and all subdirectories, in particular the directories *Work*, *Cache*, *Note*, and *etc*.
- A database system is installed and meets the requirements.
- The database system provides a database that enaio® can use.
- A database user was created with the role 'db_owner'.
- The installation computer provides a system DSN for access to the enaio® database.
- The required enaio® server licenses have been purchased from OPTIMAL SYSTEMS.
- The maintenance mode is turned off. To turn maintenance mode off, you can either execute the *nomaint.vbs* script in the setup directory or delete the following key in the Windows registry editor:

```
HKLM\Software\Microsoft\Windows\CurrentVersion\Uninstall\  
{3a8aaadc-193c-4aca-8b05-b1a55b993e27}
```

Single Server

Install enaio® server in the following way:

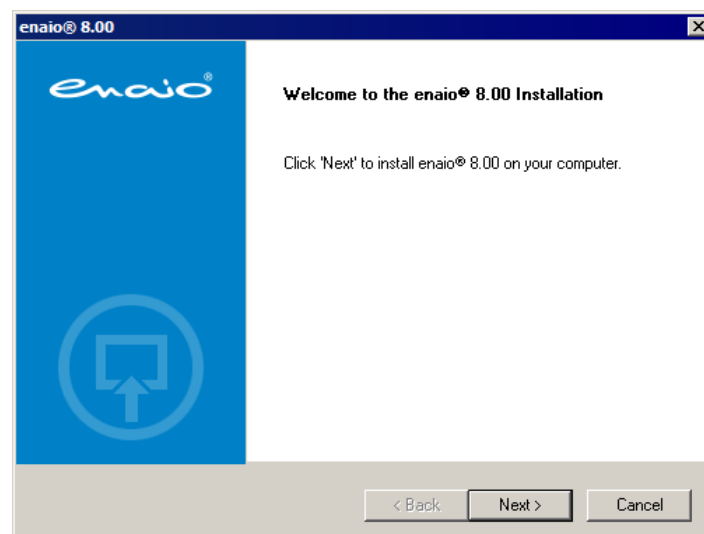
1. Start the setup.

The language selection dialog opens.



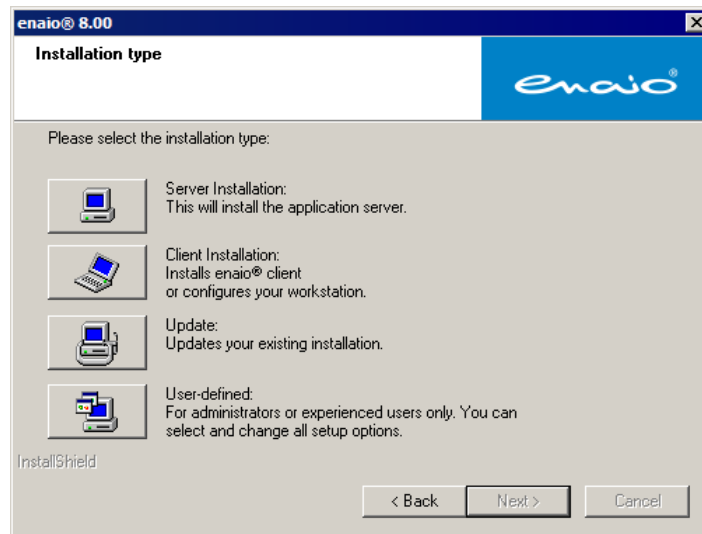
2. Select a setup language and confirm with **OK**.

The **Welcome** dialog will open.



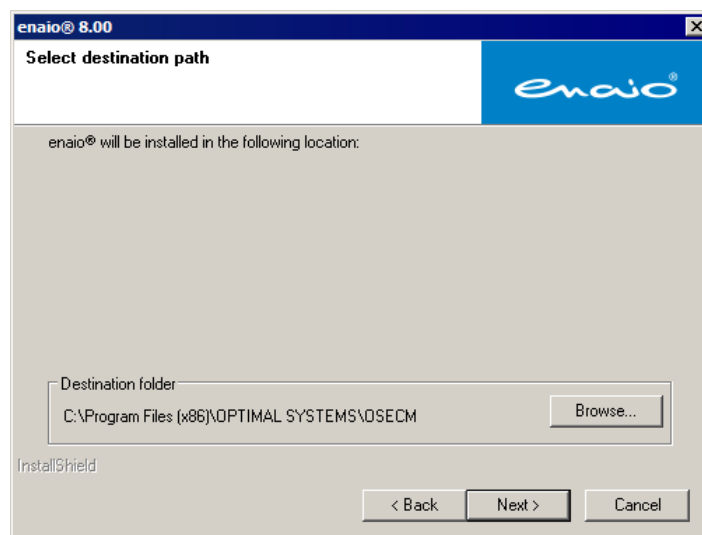
3. Click **Next**.

The **Installation type** dialog will open.



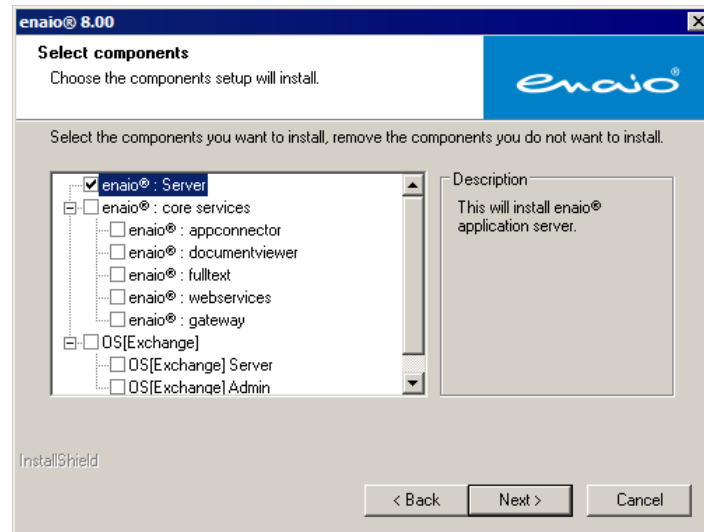
4. Select the **Server installation** radio button.

The **Select destination path** dialog will open.



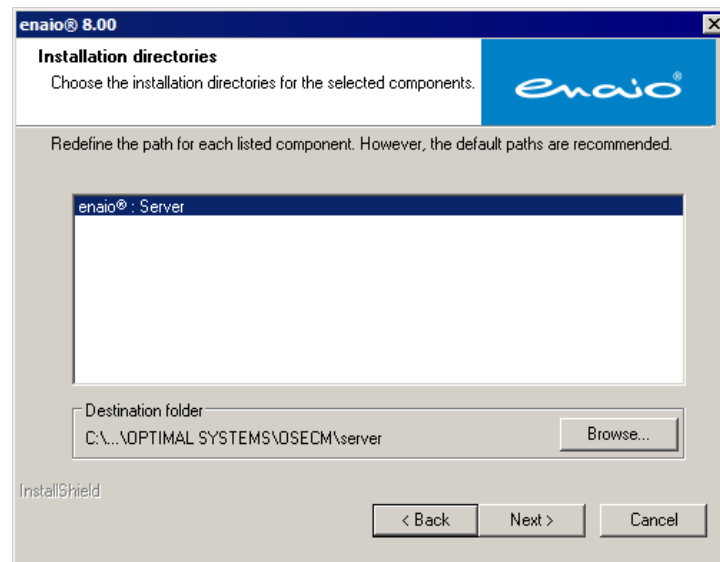
Specify the path where you would like to install enaio® server and click **Next**.

The **Select components** dialog will open, where you can specify the scope of the installation.



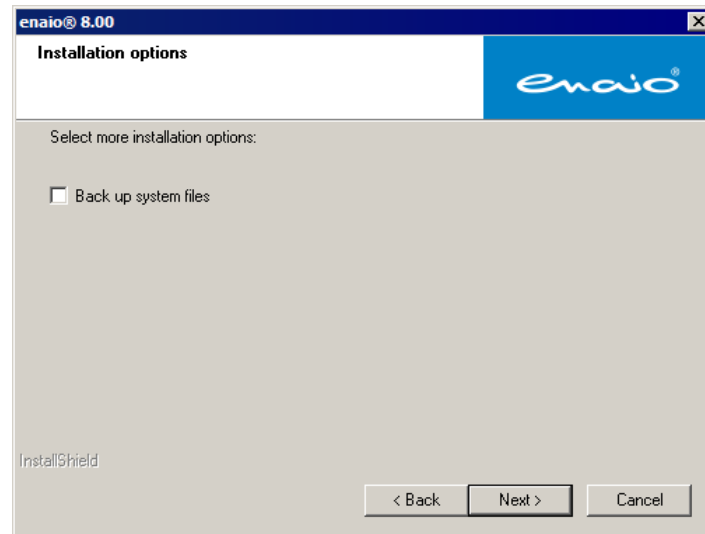
5. Select the components to install and click **Next**.

The **Installation directories** dialog will open.

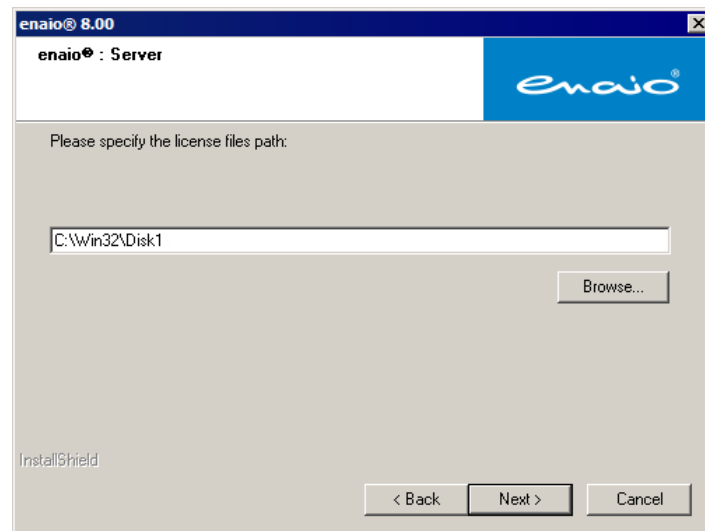


6. If necessary, set different installation paths for the individual components and click **Next**.

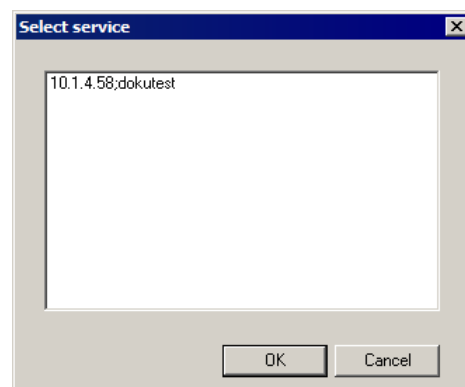
The **Installation options** dialog will open.



7. If required, enable system file backup and click **Next**.
8. The **enaio: Server** dialog for entering the path to the license file will open.



9. Enter the **License files path** and click **Next**.
The **Select service** dialog will open, showing the licenses contained in the license file.



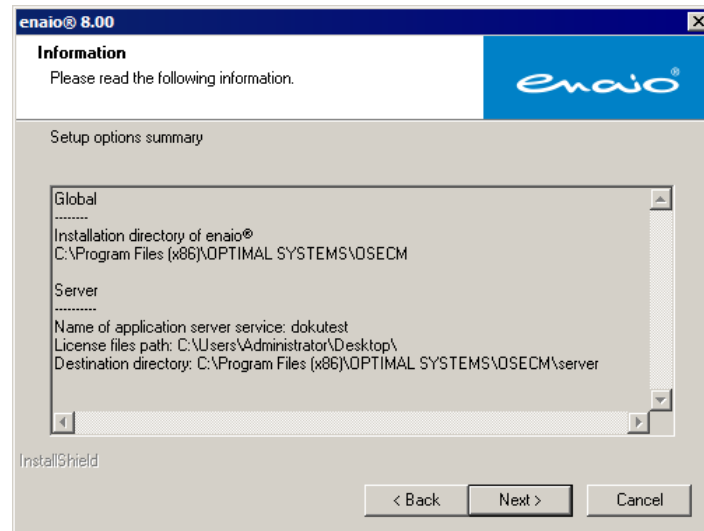
10. Select the service to be installed and click **OK**.

11. If the license file contains a service name, which is already used at the computer, a new service name must be inserted.

Note that the service name must neither contain space characters nor special characters nor umlauts. Otherwise the installation cannot be performed correctly.

12. Click the **Next** button in the relevant dialog.

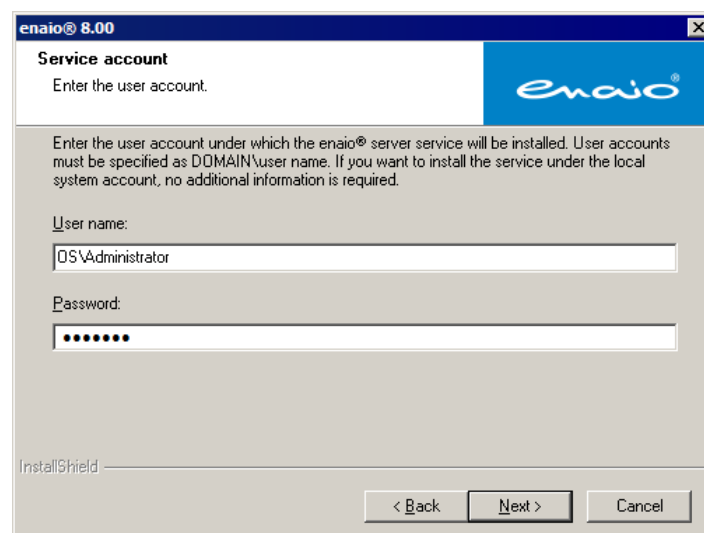
The **Information** dialog will open, showing which components are installed.



13. Check the summary and click **Next**.

The installation is executed.

The **Service account** dialog will open at the end.



14. Enter the user name and password of the user account under which the enaio® server is to be installed.

The user name must be in the format DOMAIN\Username. The domain can also be the computer name. The installation wizard verifies the accuracy of the

data entered. After three wrong entries, enaio® server can either be installed with the Windows system account or the installation can be canceled.

Specified users must have either general permissions for service start via Access Entry in their ACL, or service start permission via the Security Descriptor of the service. These rights are not verified by the installation wizard.

Every user whose account is used to register a service in the Windows services administrative tool will automatically receive the corresponding service start rights.

Note that enaio® server cannot be started correctly if incorrect user data is entered. Incorrect entries must be corrected manually in the Windows services administrative tool after the installation.

If the service is to be installed under the local system account, no input is required.

15. Click **Next**.

The **Database** dialog will open.

The screenshot shows the 'Database' dialog box. The 'Database' tab is selected, displaying the following fields:

- DSN (DataSourceName): osdb (with a 'Select' button)
- User: sysadm
- Password: (masked with dots)
- Password (verification): (masked with dots)
- Database system: Allg. Parser (ODBC) (dropdown menu)

The 'General' tab is also visible, showing the following fields and options:

- TCP/IP Port: 4000
- Server group name: servergruppe1 (with a 'Server group' button)
- Radio buttons for installation options:
 - ☒ Install new server group
 - ☐ Install additional server group
 - ☐ Add server to server group
 - ☐ Additional cluster service
- Data directory: C:\Program Files (x86)\OPTIMAL SYSTEMS\OSEC\ (with a browse button)

At the bottom of the dialog are 'OK' and 'Cancel' buttons.

16. Enter the following information:

- DSN
You can input the DSN or transfer it to the field using the **Select** button.
- User
- Password
- Password (verification)
- Database system
- TCP/IP Port

- Server group name

Click the **Server group** button and enter a name. As no server group exists at initial installation, the combo box does not contain any entries.

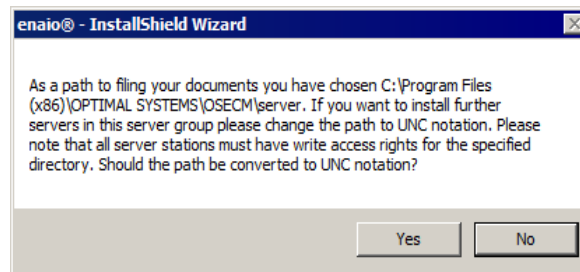
- Install new server group

- Data directory

When separating the application location from the data location, the data directory must be selected in the **Data directory** field. For more information, refer to the chapter 'Installation Procedure/enaio® server'.

17. Click **OK**.

You will be prompted to convert the specified server path into UNC notation. If additional servers are to be added to this server group at a later date, consider whether this conversion is necessary. This folder must then be released.

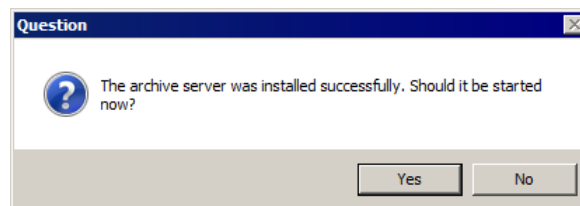


18. Confirm or reject the UNC conversion with **Yes** or **No**.

The required database tables are created and enaio® server is installed.

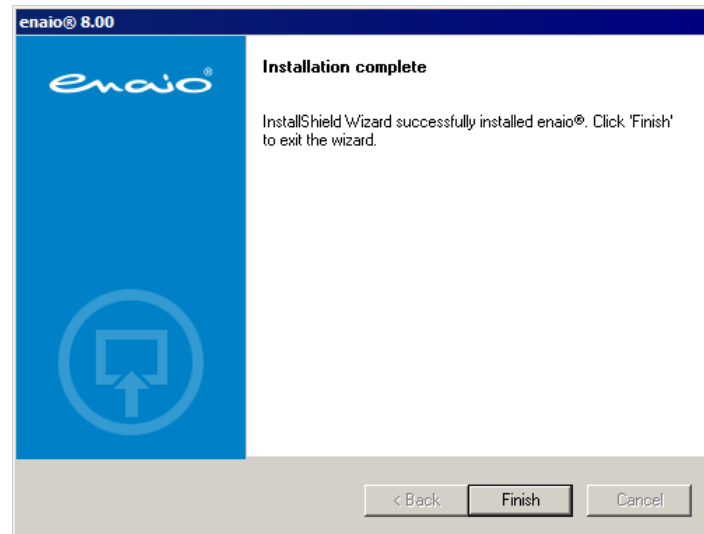
19. Click **Next**.

You are prompted whether the enaio® server service should start.



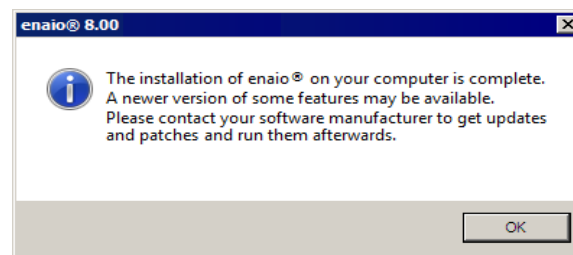
20. Confirm the service start with **Yes**, or decline with **No**.

The corresponding dialog shows that the installation is completed.



21. Click **Finish**.

You are informed that a patch for the enaio® version you've just installed may be available.



22. Click **OK**.

This completes the installation.

Multiple Servers in a Group

The installation of multiple servers in a group requires at least one installed enaio® server.

The installation of multiple servers in a group differs only in a few steps from the installation of individual servers and is therefore only described briefly.

Install multiple servers in a group as follows:

1. Start the setup on the installation computer and carry out steps 1 to 15 of the individual server installation.

The **Database** dialog will open.

2. Enter the information as described in step 16 of the individual server installation, but select an existing server group and the option **Add server to server group**.
 3. Click **OK** and continue with the installation until complete (see steps 18 to 22 of the individual server installation).
 4. In order to connect clients to servers in a group, adapt the configuration file `asinit.cfg` accordingly (see 'The Configuration File 'asinit.cfg)').
- This completes the installation.

Multiple Server Groups

The installation of multiple server groups requires at least one installed enaio® server.

The installation of multiple server groups only differs in a few steps from the installation of individual servers and is therefore only described briefly.

Install multiple server groups as follows:

1. Start the setup on the installation computer and carry out steps 1 to 15 of the individual server installation.

The **Database** dialog will open.

The screenshot shows a 'Database' configuration window with two tabs: 'Database' and 'General'. In the 'Database' tab, the DSN is 'osdb', User is 'sysadm', Password and Password (verification) are masked with dots, and Database system is 'Allg. Parser (ODBC)'. In the 'General' tab, TCP/IP Port is '4000', Server group name is 'servergruppe1', and the 'Install new server group' radio button is selected. The Data directory is 'C:\Program Files (x86)\OPTIMAL SYSTEMS\OSEC\'. At the bottom are 'OK' and 'Cancel' buttons.

2. Enter the information as described in step 16 of the individual server installation, but enter a new server group and select the option **Install additional server group**.
 3. Click **OK** and continue with the installation until complete (see steps 18 to 22 of the individual server installation).
 4. In order to connect clients to servers in a group, adapt the configuration file `asinit.cfg` accordingly (see 'The Configuration File 'asinit.cfg'').
- This completes the installation.

Server Cluster

In case of a breakdown a different computer in the cluster will take over the application and serves the clients.

Server clusters may only be installed by administrators with the corresponding expertise.

In the configuration of the operating system (Windows Server 2008) a virtual IP address is assigned to the cluster which is then resolved to the physical IP addresses of the computers inside the cluster.

Detailed information about this can be found in the enaio® system manual.

The installation of a server cluster requires at least one installed enaio® server.

The installation of a server cluster only differs in a few steps from the installation of individual servers and therefore is only described briefly.

Install a server cluster in the following way:

1. Start the setup on the installation computer and carry out steps 1 to 15 of the individual server installation.

All paths and options must be exactly identical to the computer for which you wish to set up the cluster service, otherwise the cluster service cannot take up operation for the failed server.

The **Database** dialog will open.

2. Enter the information as described in step 16 of the individual server installation, but select an existing server group and the option **Additional cluster service**.
3. Click **OK**.

The **Station name** dialog will open.

4. Specify the computer for which the cluster service is to be set up and click **OK**.

5. Continue with the installation until complete (see steps 18 to 22 of the individual server installation).
6. In order to connect clients to a cluster, adapt the configuration file `asinit.cfg` accordingly (see 'The Configuration File 'asinit.cfg)'). This completes the installation.

enaio® client

Installation Requirements

- Computer hardware meets minimum requirements.
- The operating system has to be installed and meet minimum requirements.
- The logged-in user has administrator rights at operating system level.
- The logged-in user has to have the right to write in the Windows registry.
- The logged-in user has write access to the `%Windir%\System32` directory.
- The logged-in user has to have write access to the installation directory and to all subdirectories.
- enaio® server is installed, started, and provides an IP port.
- A system directory for temporary files places document files in the cache tray and the hard drive has to provide adequate storage volume. The enaio® client user has to have write permission in this directory.
- The maintenance mode is turned off. To turn maintenance mode off, you can either execute the `nomaint.vbs` script in the setup directory or delete the following key in the Windows registry editor:

```
HKLM\Software\Microsoft\Windows\CurrentVersion\Uninstall\{3a8aaadc-193c-4aca-8b05-b1a55b993e27}
```

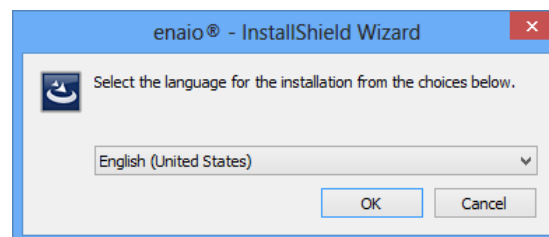
Local Installation

In the installation, the files for the client components, network components, and important system files are installed locally. The required enaio® server details are also written to the configuration file `asinit.cfg`.

Install enaio® client in the following way:

1. Start the setup.

The language selection dialog opens.

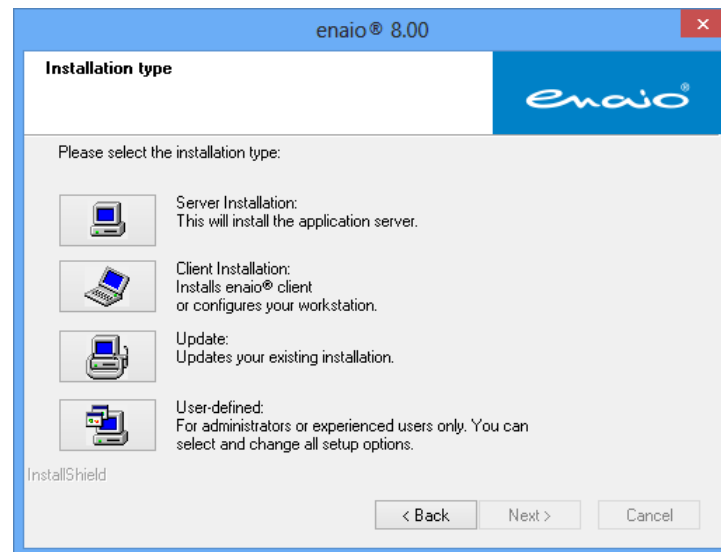


2. Select a setup language and confirm with **OK**.

The **Welcome** dialog will open.

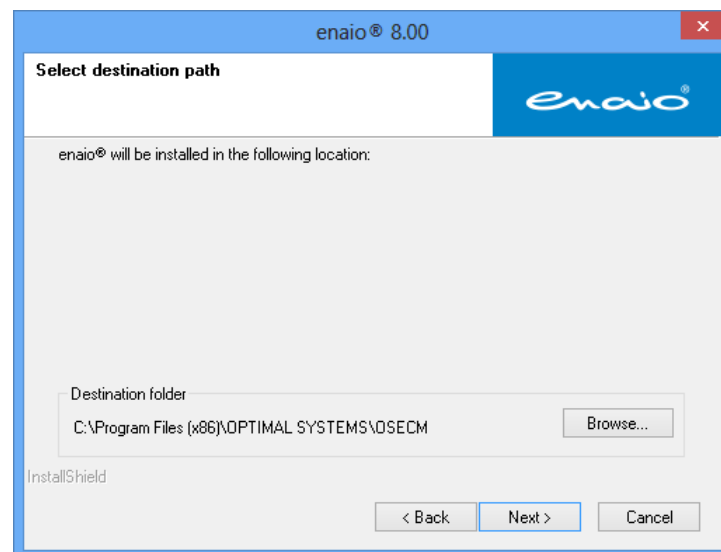
3. Click **Next**.

The **Installation type** dialog will open.



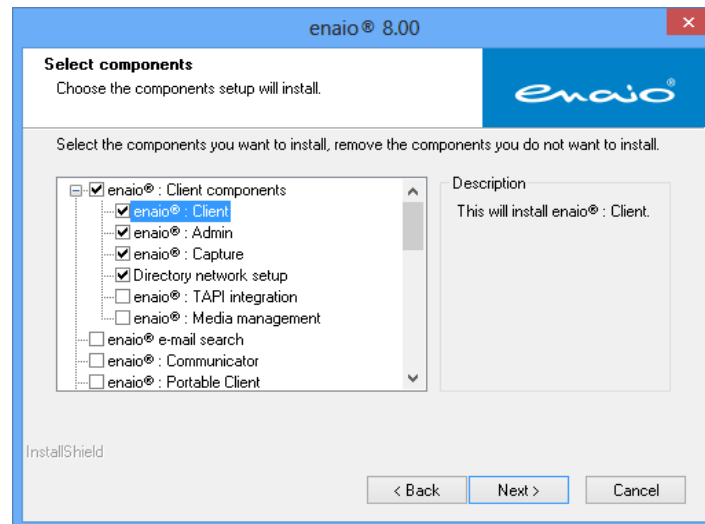
4. Select the **Client installation** radio button.

The **Select destination path** dialog will open.



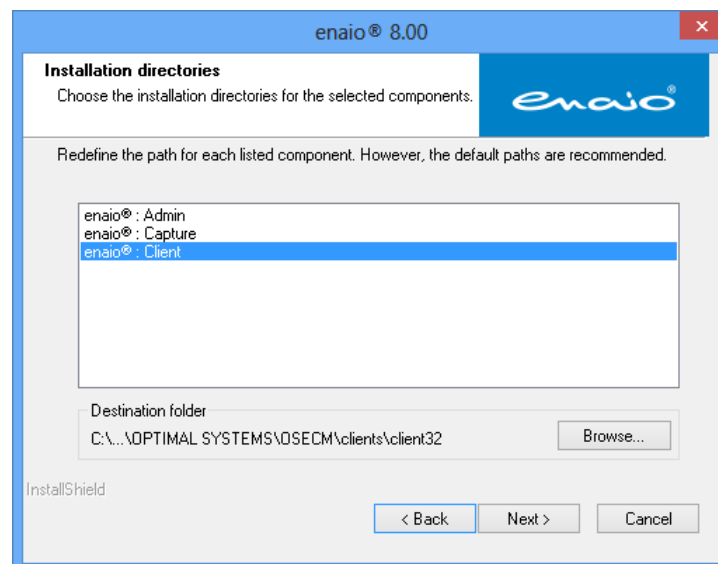
5. Specify the path where you would like to install enaio® client and click **Next**.

The **Select components** dialog will open, where you can specify the scope of the installation.



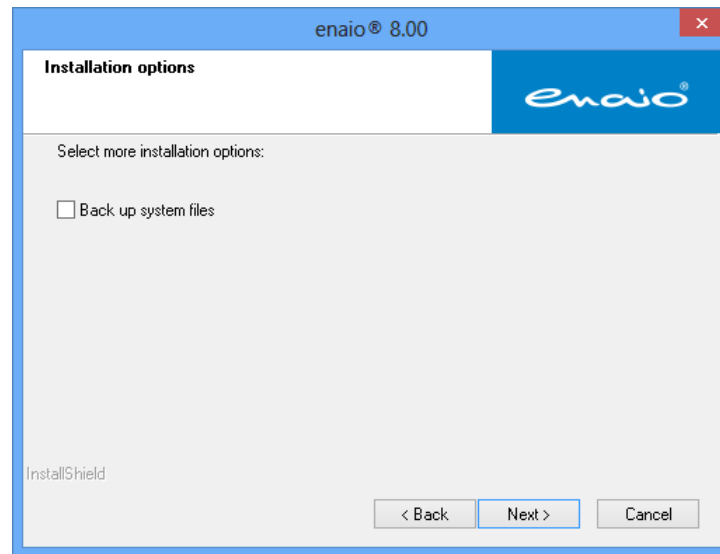
6. Select the components to install and click **Next**.

The **Installation directories** dialog will open.



7. If necessary, set different installation paths for the individual components and click **Next**.

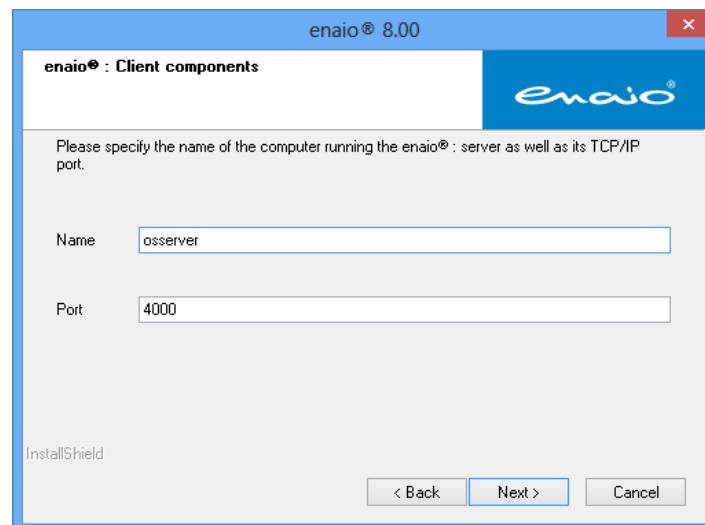
The **Installation options** dialog will open.



8. If required, enable system file backup and click **Next**.

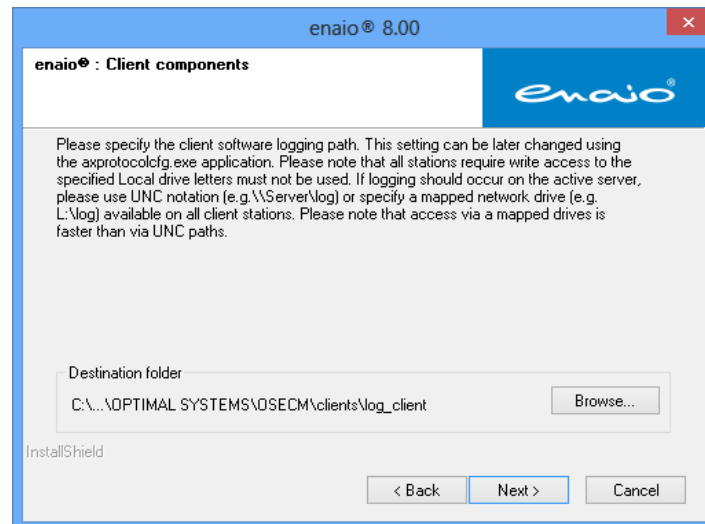
System files will be copied into the installation directory and into the `sysbackup` subdirectory.

The **enaio: Client components** dialog for entering the connection parameters will open.



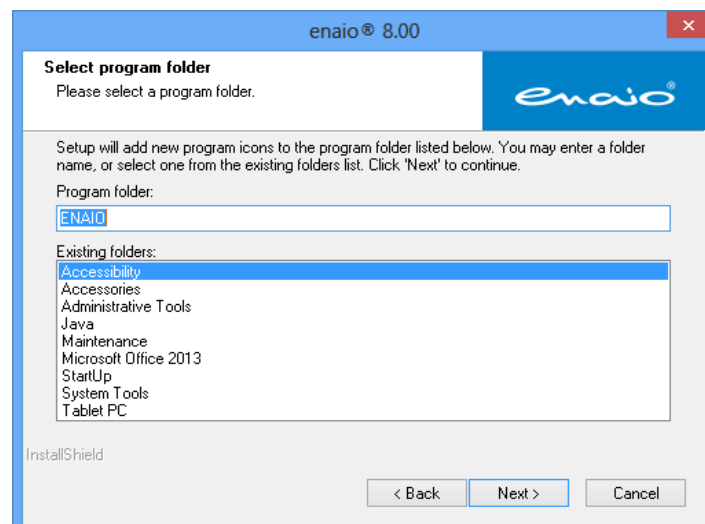
9. Enter the computer name or IP address of the computer on which the enaio® server is installed, as well as the port specified during server installation. Click **Next**.

The **enaio: Client components** dialog for entering the log directories will open.



10. Specify the logging path for the client and click **Next**.

The **Select application folder** dialog will open.



11. Specify the program folder in which enaio® client is to be installed.

The enaio® applications will then be listed in the Windows start menu under **Programs**, in the application folder specified here.

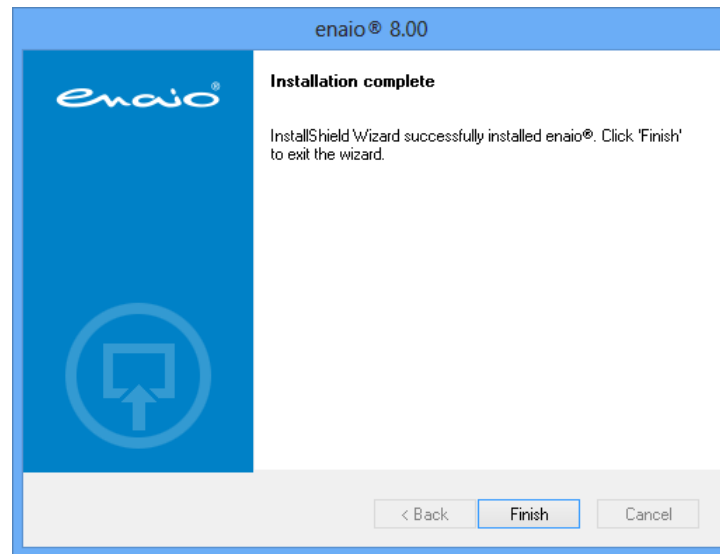
12. Click **Next**.

The **Information** dialog will open, showing which components are installed.

13. Check the summary and click **Next**.

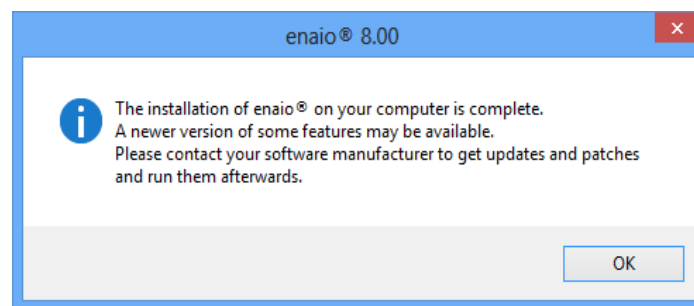
The installation is executed.

The corresponding dialog shows that the installation is completed.



14. Click **Finish**.

You are informed that a patch for the enaio® version you've just installed may be available.



15. Click **OK**.

This completes the installation.

Network installation

For a network installation, only the local components required for operating enaio® client are installed. These are the lead tools for displaying documents, required system files, a program group, and the links they contain to the applications.

The following additional installation requirements must be fulfilled for the network installation:

- enaio® server is installed, started, and provides an IP port.
- enaio® client: Sufficient directory sharing allowing the enaio® client workstation to access the enaio® client installation is required, as well as read access to the directory.
- enaio® server and enaio® capture: Sufficient directory sharing allowing the enaio® client workstation to access the enaio® client installation is required, as well as write access to the directory.

Each locally installed enaio® client can be released for network workstations.

Perform a network installation of an enaio® client workstation in the following way:

1. Perform a user-defined installation, only installing the **Network installation** component (see 'User-defined installation').

The network setup is extracted to a directory that was specified in the user-defined installation.

2. Open the directory where the network setup has been extracted and execute the network setup.

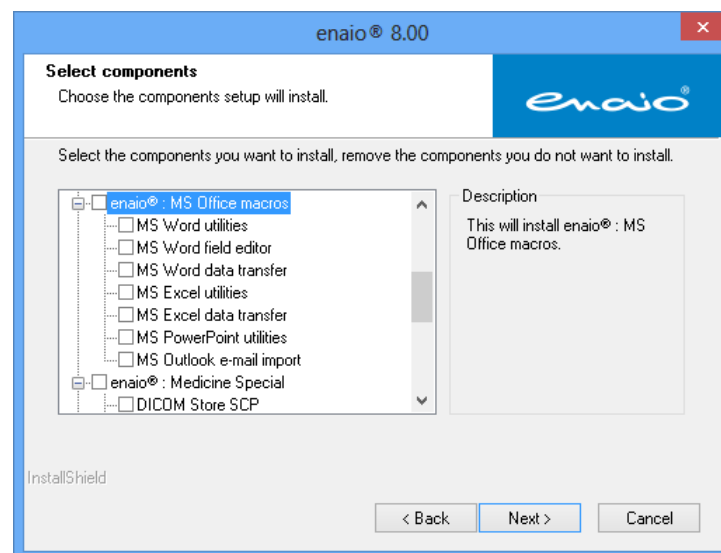
The language selection dialog opens.

3. Select a setup language and confirm with **OK**.

The **Welcome** dialog will open.

4. Click **Next**.

The **Select components** dialog will open.



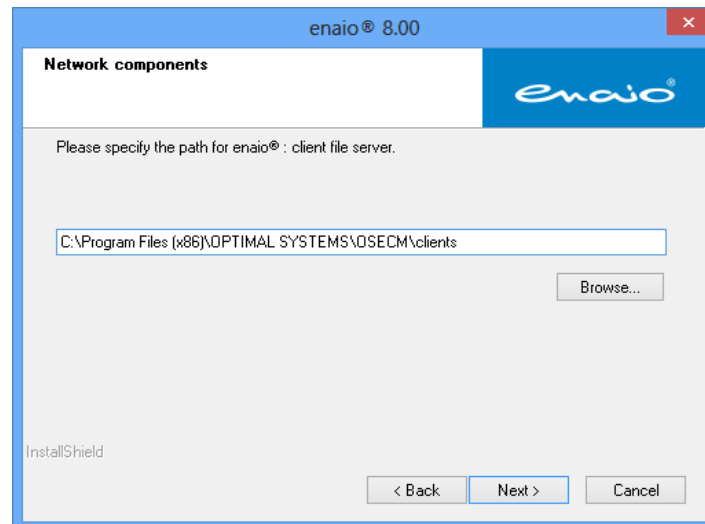
5. Select the components to install for the enaio® client workstation and click **Next**.

The **Installation options** dialog will open.

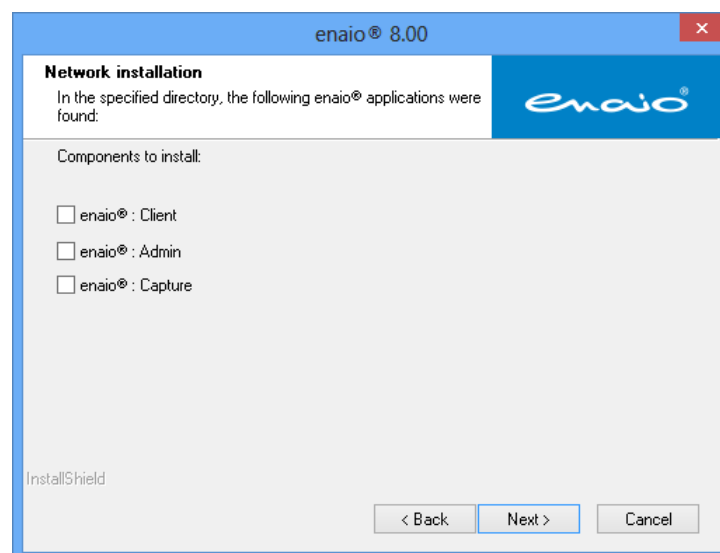
6. If required, enable system file backup and click **Next**.

System files will be copied into the installation directory and into the sysbackup subdirectory.

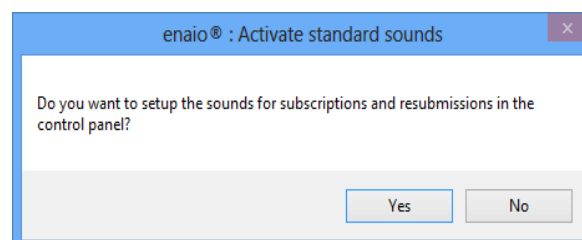
The **Network components** dialog will open.



7. Enter the path to the central enaio® client installation and click **Next**.
The **Network installations** dialog will open, showing the centrally installed enaio® client components.



8. Select the components for which a link is to be created on this computer and click **Next**.
9. Having chosen enaio® client, the following dialog will ask whether to activate system sounds which will inform about new subscriptions and follow-ups.



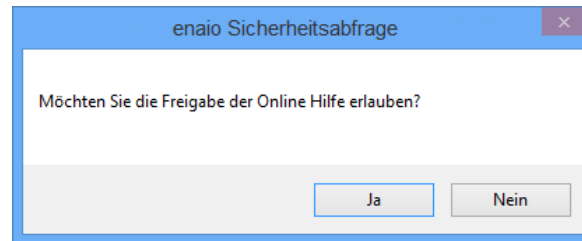
10. Confirm the activation of system sounds with **Yes**, or decline with **No**.
The **Select application folder** dialog will open.

11. Specify the application folder in which the enaio® client workstation should be installed, and click **Next**.

The **Information** dialog will open, showing which components are installed.

12. Check the summary and click **Next**.

The installation is executed and you are prompted to release the online help. The online help is distributed in CHM format and can be opened on the workstation from the respective enaio® component by pressing **F1** or opening the **Help** menu.



Due to current security restrictions in different versions of Microsoft Windows and Internet Explorer, access to CHM files in networks is not possible. The security restrictions on the workstation will relax slightly only after you allow document sharing, and the online help can then be shown on the enaio® client workstation (see 'Online Help').

13. Allow sharing of the online help with **Yes** or decline it with **No**.

The corresponding dialog shows that the installation is completed.

14. Click **Finish**.

This completes the installation.

User-defined installation

Custom installation is an installation type for experienced users. The user who carries out this type of installation can install all enaio® components included in the setup on the current computer and specify the installation location for every single enaio® component.

The hardware and software requirements are due to the components installed. If several components are installed, the highest component requirements apply in each case. The more components are installed and used on the computer, the higher the hardware requirements.

Installation requirements result of the selected components which are to be installed. For that reason, check the respective requirements before running the custom installation.

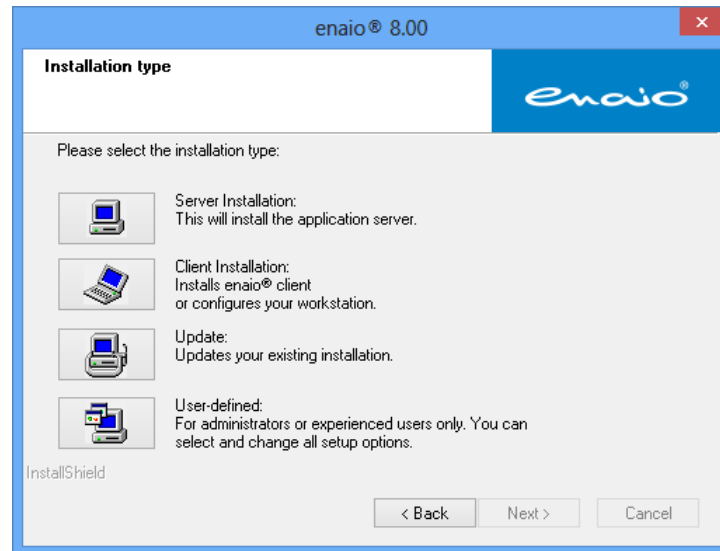
This document contains the following installation requirements:

- for the application server installation
- for the enaio® client installation
- for the network installation

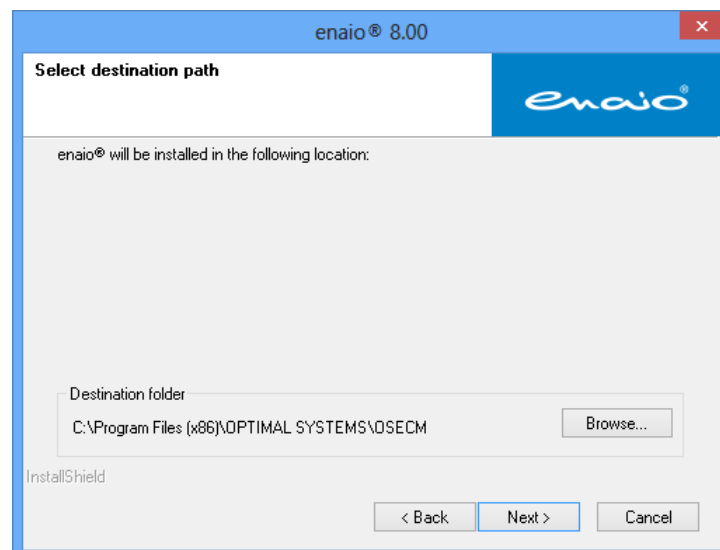
Perform a user-defined installation as follows:

1. Start the setup.
The language selection dialog opens.
2. Select a setup language and confirm with **OK**.
The **Welcome** dialog will open.
3. Click **Next**.

The **Installation type** dialog will open.



4. Select the **User-defined** radio button.
The **Select destination path** dialog will open.



5. Specify the path where you would like to install the enaio® components and click **Next**.

The **Select components** dialog will open, where you can specify the scope of the installation.

Subject to the selected components required installation steps will be performed.

6. Follow the installation instructions and click **Finish** to complete the installation.

This completes the installation.

Version Notes

If enaio® client is run under Windows 7 or Windows 8.x, there may be display errors on the enaio® client user interface in RDP sessions with the disabled option **Visual styles**, and in Citrix sessions. To avoid these display errors, it is recommended to set the user interface of Windows operating systems to the Windows Aero Theme.

enaio® webclient

The enaio® webclient can be installed via `oswebclient_setup.exe`, located in the directory `OSWEB`.

Miscellaneous

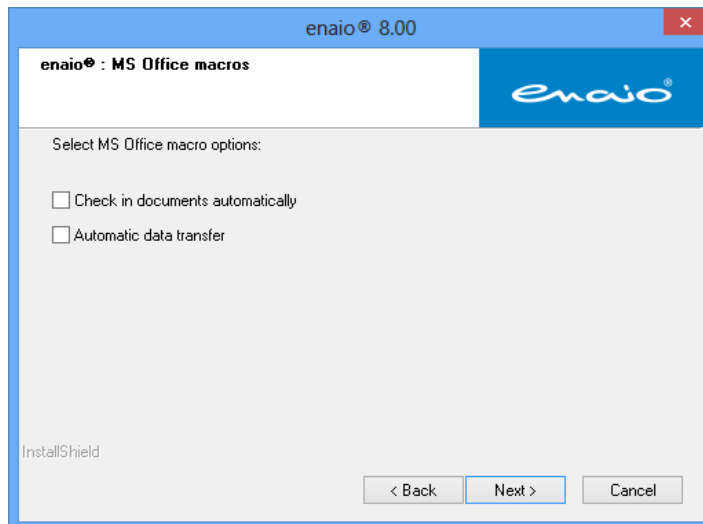
Installation of enaio® MS Office Macros

The enaio® MS Office macros installation will install components that work with MS Office applications, provided these applications are present on the workstation.

Components for Microsoft Word, Excel, PowerPoint, and Project will be installed.

On enaio® client workstations (see 'Network installation') the components for the enaio® MS Office macros require a stable and interruption-free network connection to the central enaio® client. If the network connection cannot be provided, error messages and other malfunctions may occur when working with applications into which enaio® components are integrated.

If you have selected enaio® MS Office macros for installation, the following dialogs will prompt you to specify the settings for the enaio® MS Office macros.



Select the desired settings and click **Next**.

Office and Outlook Add-Ins

Office and Outlook add-ins are also available in addition to the enaio® MS Office macros. These provide a small number of essential functions and can be installed on workstations where the complex and extensive MS Office macros are not required.

The installation data for the add-ins is located in the installation data in the `components` directory. The installation takes place via MSI packages.

The Outlook add-in requires the services 'mailstorage' and 'extraction' – the assignment of specific e-mail data to fields of the e-mail object types must be configured using these services.

The index data form is not opened when transferring e-mails via the Outlook add-in. If the object type also contains fields without assignments, these will remain empty. If these include mandatory fields, the e-mail will not be transferred.

enaio® MS Office macros and the Office add-in, as well as e-mail import for Outlook (enaio® document-storage) and the Outlook add-in, are not mutually exclusive from a technical point of view, and can be installed on the same workstation. If this is the case, users can enable the component they wish to use via the add-in administration of the Office application.

Like enaio® office-utilities, enaio® Office add-ins will carry out an automatic data transfer if the properties of a document contain 'OS_Autoübernahme' with the value 'yes'.

Installation of enaio® Adobe Acrobat Utilities

The enaio® Adobe Acrobat Utilities extension for Adobe Acrobat must be installed on the workstation manually. Adobe Reader which is available for free is not supported.

Installation requirements: Microsoft Office and enaio® MS Office macros must be installed on the workstation.

To integrate the **OPTIMAL SYSTEMS** toolbar into Adobe Acrobat, copy the file `oxpdfutils.api`, located in the installation directory `\components\Oxpdfutils`, into the Plug-Ins directory of your Adobe Acrobat installation.

Also copy the logging files `oxrpt.dll` and `oxrpt.cfg` to the Adobe Acrobat application folder.

The **OPTIMAL SYSTEMS** toolbar will be available in the menu the next time you start Adobe Acrobat.

Adobe Acrobat must be run once as administrator, even for users with limited user rights.

When installing enaio® MS Office macros, the included library `oxvbofficeutil.dll` will be registered automatically by the setup. Without enaio® MS Office macros, the library must be registered for Adobe Acrobat Utilities. To do this, use the registry tool `regsvrutil.exe` located in the application directory `...\clients\client32`.

The functions will be shown in German by default. You can modify registry entries on the workstation to switch the language to English or French:

```
HKEY_CURRENT_USER>Software>Optimal Systems>MS-Office-Anbindung>OS-Adobe-Acrobat-Utilities>Benutzer>Sprache
```

Set the value to '2' for English, '3' for French, and '1' for German again.

enaio® sync

enaio® sync can be installed on the workstation using an MSI located in the directory `\components\enaio_sync`. enaio® sync enables access to favorites via Windows Explorer. The favorites are copied to the file system and can be edited. Modified files are sent back to enaio® by enaio® sync.

enaio® sync is installed as a startup application, and can be controlled via the notification area of the taskbar. Data is transferred via enaio® appconnector. Names of favorites in Windows Explorer are defined via automatic field selection, but can also be configured in enaio® appconnector using a mapping file. Details can be found in the enaio® appconnector manual.

Synchronization occurs automatically every 5 minutes by default, but can also be started by the user via the taskbar. If favorites were changed in enaio®, the data on the workstation will be updated during synchronization. If favorites were changed on the workstation, the data will be updated in enaio®. If favorites were changed both on the workstation and in enaio®, the user must specify which action should be taken.

The synchronization interval can be changed on the workstation via the 'Interval' parameter in the configuration file `enaio_sync.library.dll.config`. The value '0' disables automatic synchronization.

enaio® sync requires the 'OFS' license.

Installation of E-Mail Search with enaio® search

enaio® search can either be installed via the enaio® setup with enaio® client, or via the MSI package (see 'MSI Package for enaio search Installation').

An installation via enaio® setup without enaio® client causes errors due to missing registry data.

Third-party components

Additional third-party components are required for the execution of particular enaio® components.

This is Microsoft.NET Framework for:

- enaio® filesystem
- enaio® communicator

The setup will execute the required installation programs when selecting these enaio® components.

Follow the installation instructions of the respective components.

Silent Installation

Silent installation offers the possibility to run an enaio® setup on each computer without user input. This is particularly recommended for local client or network installation.

A silent installation is performed in two steps. First, a generic and dialog-controlled enaio® installation is run on a reference computer and recorded by the setup. Restart if required in record mode. After restart turn off the maintenance mode and record the setup again. Run the setup with the `-r` parameter to start the record mode:

```
S:\OSECInstall\Setup.exe -r
```

This will create a text file called `setup.iss` in the Windows directory. All configurations of the dialog-controlled setup are logged in this file.

Copy this text file into the setup directory containing the file `setup.exe`. Add write permissions to this setup directory, as the setup generates a `setup.log` file there at runtime. The default name of the silent installation log file is `setup.log`. If the setup cannot write to the directory, it exits without installing.

If the setup is launched with the parameter `-s`, the recorded setup will be run in silent mode, e.g.:

```
S:\OSECInstall\setup.exe -s
```

The installation is run in the same way as it was recorded. That is why conditions need to be the same at both the computer at which silent setup is to be executed and the computer at which it was recorded.

Setup log file contains the following three sections.

The initial [InstallShield Silent] section indicates the version of InstallShield Silent used in the silent setup. It also identifies the file as a log file.

The [Application] section identifies the name and version of the installed application, as well as the company name.

The [ResponseResult] section contains the result code indicating if the silent setup was successful. An integer value is assigned to the ResultCode key name in the [ResponseResult] section. InstallShield places one of the following return values in the ResultCode key:

- 0 Success.
- 1 General error.
- 2 Invalid mode.
- 3 The required data could not be found in the file `Setup.iss`.
- 4 Not enough memory available.
- 5 File does not exist.
- 6 Unable to write to response file.
- 7 Unable to write to log file.
- 8 Invalid path to InstallShield Silent response file (ISS file).
- 9 Invalid list type (string or number).
- 10 Invalid data type.
- 11 Unknown error during setup.
- 12 Incorrect dialog box order.
- 51 The specified folder cannot be created.
- 52 Unable to access the specified file or folder.
- 53 Invalid option selected.

One of the most frequent errors occurring during silent setup is that both computers, the one on which silent setup was recorded and the second one whereon silent setup was run, have different configurations.

This error appears as follows in the `Setup.log` file:

```
[ResponseResult]
ResultCode=-3
```

Identical computer conditions exclusively refer to the same installation state of the software to be installed and to the configuration to which the installation refers.

Example:

As the installed Office components are queried and displayed accordingly in the local client or network installation, these must be the same on the computers. Running silent installation on a computer having installed only Word and Excel

will fail if the setup was recorded on a computer having installed only Word or Word, Excel, and PowerPoint.

The silent mode will not initialize a restart after setup.

The silent setup cannot check if system files were exchanged. For that reason, it is generally recommended to restart the client computer. After restart, a user with local administration rights must log on to Windows, otherwise necessary entries cannot be created in the Windows registry.

When installing enaio® printers on workstations with Windows 7 SP1, OPTIMAL SYSTEMS GmbH is not recognized as a trusted publisher due to an error on Microsoft's part, and must be manually confirmed as a trusted publisher. To enable silent installations, a hotfix from Microsoft can be installed to fix this error. Further details and the download link can be found in the following knowledge base entry: <https://support.microsoft.com/en-us/kb/2921916>

MSI Package for enaio® client Installation

This MSI package allows enaio® client to be installed conveniently in Microsoft operating systems. It is ideally suited for installation using software distribution tools on the computers of multiple users without any user input.

The MSI package installs the following components by default:

- enaio® client
- enaio® document-storage (e-mail import for Outlook)
- enaio® office-utilities (MS Office macros)
- enaio® printers (PDF, black-and-white, and color printers)
- enaio® media management

The registry entries required for the use of the enaio® office-utilities are added as well.

If you already installed an earlier version of the client using the MSI package, this will be updated. But if paths to the enaio® server or client have been changed, you must uninstall the MSI package before updating.

For installation of the MSI package, the enaio® server that is set up and the MSI package or patch to be installed must have the same version.

The MSI package `enaio Clientinstallation.msi` can be found in the `...\LokalerClientMSI\DISK1` directory of your installation data.

In this document, only the standard installation procedure is described. For project-specific installations, please contact the OPTIMAL SYSTEMS support department.

For a standard installation, you can use command line parameters not only to specify which of the components in the MSI package should be installed, but also to uninstall enaio® components that are already installed. Note that configuration

with command line parameters is not supported by all software distribution tools. For example, policy-based software distribution in an Active Directory does not support passing command line parameters.

Installation

Before installing the MSI package, you need to install the Microsoft Visual C++ 2008 SP1 Redistributable Package (x86) on all computers, in the version corresponding to your operating system language. The German, English, and French Redistributable Packages can be found in the ...\\Win32\\Disk1\\Prerequisite directory of your installation data. You can also download these and the Redistributable Packages in other languages from the following Web page:

<http://www.microsoft.com/en-us/download/details.aspx?id=5582>

For languages that are not listed install the English Redistributable Package version x86. This can be found in the Prerequisite directory of the installation data.

The MSI package installation also requires .NET Framework 4.

By default, the installation will not check whether these requirements are met. You can enable the requirement check with the command line parameter `CHECK_PREREQUISITE=1`.

Before you distribute the MSI package with the software distribution tool of your choice, you must make the following modification:

- Enter the connection data for the enaio® server. The configuration file `asinit.cfg` can be found in the ...\\LokalerClientMSI\\Disk1\\program files\\OPTIMAL SYSTEMS\\OSECM\\clients\\client32 directory of your installation data. Open the file and type the computer name or the IP address of the enaio® server computer, as well as the port specified during installation, into the ARCHIV section. enaio® server must be running during the MSI package installation.
- Optionally, you can adjust the logging settings. The configuration file `oxrpt.cfg` can be found in the ...\\LokalerClientMSI\\DISK1\\program files\\OPTIMAL SYSTEMS\\OSECM\\clients\\client32 directory of your installation data.

Administrators who are familiar with enaio® logging and the parameters of the configuration file `oxrpt.cfg` can adjust all logging settings.

Detailed information about logging can be found in the Administration handbook.

Once you have made this modification, you can distribute the MSI package to all computers on which enaio® client and the components mentioned above are installed.

The MSI package installs all the included components to the directory `C:\\Program Files\\OPTIMAL SYSTEMS\\OSECM\\clients\\client32` by default.

To enable logging of enaio® client, the directory ... \clients\log_client is entered in the configuration file oxrpt.cfg.

The following command line parameters allow you to individually configure the installation procedure.

Add the /qb command line parameter to show a progress bar:

```
msiexec.exe /i "C:\enaio Clientinstallation.msi" /qb
```

Add the /qn command line parameter to hide all installation dialog boxes:

```
msiexec.exe /i "C:\enaio Clientinstallation.msi" /qn
```

The INSTALLDIR command line parameter lets you specify a new installation path, for example to install all components included in the MSI package to the directory C:\OSECM\clients\client32:

```
msiexec.exe /i "C:\enaio Clientinstallation.msi"
INSTALLDIR=C:\OSECM
```

The ADDLOCAL command line parameter allows you to specify which of the components included in the MSI package will be installed:

```
msiexec.exe /i "C:\enaio Clientinstallation.msi" ADDLOCAL=Client
```

To install only the components that you require, use the following values for the ADDLOCAL parameter:

Value:	Description:
Client	Only enaio® client and enaio® mediamanagement will be installed.
OutlookAddin	The enaio® document-storage component for e-mail import will be installed.
MakroDllClient	The MS Office macros (enaio® office-utilities) are installed.
OSPrinter	The enaio® printers (black-and-white/color printers) will be installed.
PDFPrinter	The enaio® PDF printer will be installed.

If you want to install more than one component, separate the values with a comma.

If you only specify the components OutlookAddin, MakroDllClient, and/or OSPrinter as values for the ADDLOCAL command line parameter, the enaio® client component will be installed automatically.

Thanks to this set of freely combinable command line parameters, you can customize the installation procedure as required:

```
msiexec.exe /i "C:\enaio Clientinstallation.msi"
INSTALLDIR=C:\OSECM ADDLOCAL=Client,MakroDllClient /qn
```

More command line parameters can be found on the following Web page:

[http://technet.microsoft.com/en-us/library/cc759262\(WS.10\).aspx](http://technet.microsoft.com/en-us/library/cc759262(WS.10).aspx)

In Windows Vista and Windows 7, the 'Remotedesktopservices' Windows services must be launched in order to use enaio® printers.

Once installation is complete, the MSI package offers a maintenance mode. In maintenance mode, you can add or remove single components or run a software update using your software distribution tool. The latter is also possible via the Windows control panel.

If the `client32` directory on a user's computer contains other enaio® components in addition to the components installed by the MSI package, updates must be installed manually on this computer, as otherwise only the components contained in the MSI package will be updated.

Patches

All hotfixes for enaio® client are provided as patch packages (MSP files) for the MSI package. If necessary, these packages are created once a week and, like MSI packages, can be distributed to and installed on several computers without user input.

MSP files are defined service packs for MSI packages. Installing the cumulative msp files you provide your system with all the hotfixes and service packs previously released by OPTIMAL SYSTEMS.

In addition to the MSP file, the patch package contains a text file with version and installation notes as well as a list of fixed errors. The names of the patch file and the corresponding text file follow the syntax `Patch[version].msp` and `Patch[version].txt`.

When installing a patch package you must not add any of the parameters that are available for MSI package installation, otherwise hotfix installation will fail.

If a patch package is already available when you install the MSI package, you can install both packages together. Patch files are found in the `...\LokalerClientMSI` directory of your installation data.

With the `PATCH` command line parameter you specify that a patch package is included in the installation:

```
msiexec /i "enaio Clientinstallation.msi" PATCH="Patch610.msp"
INSTALLDIR=C:\OSECM /qn
```

Uninstalling enaio® imap

Just like the installation of the MSI package, the uninstallation is performed by the software distribution tool of your choice. By default, all installed components are removed from the users' computers.

The following command line parameter is used to customize the uninstall procedure, so that you only remove certain components from the users' computers. Only components that were previously installed using the MSI package can be uninstalled.

With the `REMOVE` parameter you uninstall selected components:

```
msiexec /i "enaio Clientinstallation.msi" INSTALLDIR=C:\OSECM
REMOVE=MakroDllClient /qn
```

If you want to uninstall more than one component, separate the values with commas.

enaio® document-storage / MSI / Lotus Notes

Before installation via MSI, you must manually enter the LDAP server data in the configuration file `os-Dx12Ima.dll.config`. The configuration file can be found in the `...\clients\client32` directory. Enter the name or the IP address and port of the LDAP server as values of the `ldapServer` parameter.

For installation under Lotus Notes, please note that `axvbdocstorage.exe`, located in the directory `clients\client32`, must be registered.

enaio® document-storage / MSI / GroupWise

enaio® document-storage for GroupWise is installed via a separate MSI package, located in the directory `\components\GroupWise`.

MSI Package for enaio search Installation

With this MSI package, you can install enaio® search on the computers of several users using a software distribution tool.

enaio® search is an optional component of enaio® which is integrated with Microsoft Outlook and can access e-mails that are managed in enaio® from within Microsoft Outlook.

enaio® search can either be installed via the enaio® setup with an enaio® client or via the MSI package. An installation via enaio® setup without enaio® client causes errors due to missing registry data.

The MSI package installation requires .NET Framework 4 and MS Outlook 2007 or later.

The MSI package `enaio search Installation.msi` is located in the `...\OSSearchMSI\DISK1` directory of the installation data.

Before you distribute the MSI package with the software distribution tool of your choice, you must make the following modification:

- Enter the connection data for the enaio® server. The `asinit.cfg` configuration file can be found in the `...\OSSearchMSI\DISK1\program files\OPTIMAL SYSTEMS\OSECM\OSSearch` directory of the installation data. Open the file and type the computer name or the IP address of the enaio® server computer, as well as the port specified during installation, into the `ARCHIV` section. enaio® server must be running during the MSI package installation.
- The configuration file `AxOutlookPreview.exe.config` can be found in the same directory. The file controls the display of OS files and the document preview. Generally it does not need to be adapted. If there are display problems in Microsoft Outlook, parameters can be adapted (see administration manual, chapter 'Display of OS Files').

The MSI package only distributes enaio® search to the workstations. If enaio® client was previously installed on the workstations by a different setup, you must adapt the `AxOutlookPreview.exe.config` configuration file as follows before installing the MSI package: Replace the `@@clientpath@@` placeholder with the path to enaio® client, e.g. `C:\Program Files (x86)\optimal systems\osecm\clients\client32\ax.exe`.

When you have made this modification, you can distribute the MSI package to all computers on which enaio® search is to be installed.

On installation the core service URLs are automatically read from the specified enaio® server registry and saved to the local client registry.

The MSI package is patched and uninstalled in the same way as the MSI package used to install enaio® client (see 'Patches' and 'Uninstalling enaio® imap').

Further information on the configuration of OS|Search can be found in the 'OS_Mail-Management' handbook, whereas the enaio® client handbook explains how to use enaio® search.

MSI Package for Network Installation

This installation suite runs a network installation on a computer and has been exclusively designed for unattended installation using a software distribution tool.

By default, the MSI package for network installation sets up an enaio® client workstation on the user computers. This installs the local components that are required for operation – LeadTools for displaying documents, necessary system files, and program links to a local enaio® client.

If you already set up an earlier version of the local client using this MSI package, this version is updated. However, if paths to the enaio® server or client have been changed, you must uninstall the MSI package before updating.

The following requirements must be met before installing the MSI package for network installation:

- enaio® server is installed, started, and provides an IP port.
- The users' computers have read and write access to the directories of the local client installation.
- enaio® server and the msi package to be installed have the same version.
- .NET Framework 4

The MSI package `enaio_Netzwerkinstallation.msi` is located in the `...\NetSetupMSI\DISK1` directory of the installation data.

Installing and Uninstalling

Before installing the MSI package for network installation, you must have installed the Microsoft Visual C++ 2008 SP1 Redistributable Package (x86) on all computers in the language compatible with the operating system. The German, English, and French Redistributable Packages can be found in the

...\Win32\Disk1\Prerequisite directory of your installation data. You can also download these and the Redistributable Packages in other languages from the following Web page:

<http://www.microsoft.com/en-us/download/details.aspx?id=5582>

For languages that are not listed install the English Redistributable Package version x86. This can be found in the Prerequisite directory of the installation data.

With the install.cfg configuration file, you can customize the workstation setup before distributing the network installation MSI package with the software distribution tool of your choice. The install.cfg file is found in the ...\\NetSetupMSI\\DISK1 directory of your installation data.

The install.cfg file has the following structure:

```
[INSTALL]
Directory=\\Fileserver\\Program files\\OPTIMAL
SYSTEMS\\OSEC\\clients\\client32
Office=1
Outlook=0
```

The meaning of the parameters specified in the configuration file is as follows:

- | | |
|-----------|--|
| Directory | The full path to the ax.exe file of the local client. Here you can either type a UNC path entry or a connected network drive. |
| Office | Specify whether after installation the Office components (enaio® office-utilities) will be available.
0 = The Office add-ins are not registered so that enaio® office-utilities will not be available.
1 = The Office add-ins are registered so that users can use enaio® office-utilities. |
| Outlook | Specify whether the e-mail import component (enaio® document-storage) will be available after installation.
0 = The Outlook add-in will not be registered, meaning that enaio® document-storage will not be available.
1 = The Outlook add-in will be registered, and users will be able to use enaio® document-storage. |

The enaio® printer and the lead tools are also installed as standard. The lead tools are required. If you do not wish to install the enaio® printers, use the command line parameter ADDLOCAL=LeadTools to specify that only the lead tools should be installed.

Example

```
C:\enaio Clientinstallation.msi" ADDLOCAL=LeadTools
```

When you have made all the modifications, you can distribute the MSI package for network installation to all computers that are to be set up as enaio® client workstations.

In addition to the enaio Netwerkinstallation.msi package, the ...\\NetSetupMSI\\DISK1 directory of the installation data also contains the Netinstall.bat and Netuninstall.bat batch files, which execute a sample unattended installation or uninstallation over the network.

Uninstallation is performed using the software distribution tool of your choice, similar to the installation of the network installation MSI package. By default, the registration of the previously set up components is consequently undone.

Logging

Logging for the installation of the MSI package is set up using command line parameters.

The /L* logfile parameter is used to create a log file containing all information on the installation procedure:

```
msiexec.exe /i "C:\\enaio Clientinstallation.msi" /L*  
C:\\logfile.log
```

To specify the log level, use the parameters as follows:

/Li logfile Status messages are logged.
/Lw logfile Warnings are logged.
/Le logfile Error messages are logged.

More command line parameters can be found on the following Web page:

[http://technet.microsoft.com/en-us/library/cc759262\(WS.10\).aspx](http://technet.microsoft.com/en-us/library/cc759262(WS.10).aspx)

Printer Installation

Printer drivers can be installed during the enaio® installation. Users can use these drivers to transfer files to enaio® as PDF or image documents from any application with a print function.

The enaio® black and white printer prints in black and white in TIF G4 or PDF format, the enaio® color printer prints in color in JPEG or PDF format, and the enaio® PDF printer prints text PDFs.

enaio® PDF printer requires a PostScript PDF component, such as Ghostscript, to be installed on the computer on which enaio® documentviewer is installed.

The printer drivers can be installed with the following setups:

- enaio® Setup
You can choose which printer drivers are installed.
The enaio® setup can be downloaded from the OPTIMAL SYSTEMS [partner portal](#), the service portal for partners and customers of the OPTIMAL SYSTEMS group.
- Network setup
You can choose which printer drivers are installed.

The network setup can be installed with the enaio® setup (see 'Network installation').

- MSI package for enaio client installation

The printer drivers will be installed.

The MSI package `enaio Clientinstallation.msi` can be found in the `...\LokalerClientMSI\DISK1` directory of your installation data.

- MSI Package for Network Installation

The printer drivers will be installed.

The MSI package `enaio Netzwerkinstallation.msi` is located in the `...\NetSetupMSI\DISK1` directory of the installation data.

- AS printer setup

The printer drivers will be installed.

The AS printer setup is located in the `...Win32\Disk1\components\AS-Drucker` directory of the installation data.

The installation with MSI package can be individually adapted with command line parameters. You can find out about the available command line parameters in the chapters on MSI packages (see 'MSI Package for enaio® client Installation' and 'MSI Package for Network Installation').

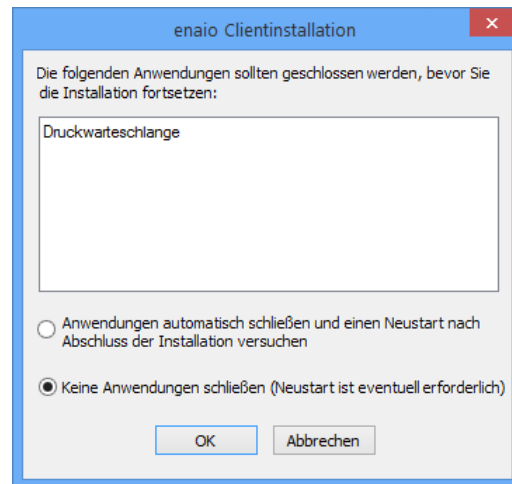
In Windows Vista and Windows 7, the 'Remotedesktopservices' Windows services must be launched in order to use enaio® printers.

During an update by setup or MSI package, the earlier versions of the printer are removed by the setup and the new versions installed. The printer configurations are therefore not transferred.

During an update or uninstallation of the printer drivers, the Microsoft Restart Manager must be disabled so that it does not close the print queue. Regardless of whether the print queue is full or empty, the enaio® printer drivers cannot otherwise be uninstalled.

Disable the Microsoft Restart Manager as follows:

- If you are performing an update or uninstallation with installation dialogs, the option **Do not close applications** must be selected in the following dialog.



- If you are performing an update or uninstallation without installation dialogs, enter the command line parameter `MSIRESTARTMANAGERCONTROL=Disable`. This disables the Microsoft Restart Manager for executing the setup or MSI package.

Example:

```
msiexec /x "enaio Clientinstallation.msi"
MSIRESTARTMANAGERCONTROL=Disable /qn
```

- Alternatively, the Microsoft Restart Manager can be switched off completely via the registry.

Command Line Switches

In addition to the setup's default command line switches such as `-s`, which runs a setup in silent mode, further script-defined command line switches can be used.

`/P [Path]` – This will save an extended log to the specified log path.

`/NOF` – No MS Office macros will be installed.

`/?` – Lists the script-defined command line switches.

Run `Setup.exe` file with the appropriate command line switches.

Example for setting extended logging:

```
S:\7.00\as700\as7.00.130\Win32\Disk1\Setup.exe /P C:\tmp
```

The specified directory must exist and you have to have write access to it. The installation process will be logged in detail and the `install.log` log file will be written to the specified directory. This option suits best when the installation did not yield intended results. In this case, run the installation with the command line switch. The log file may provide information on errors.

Call for installation without Office macros:

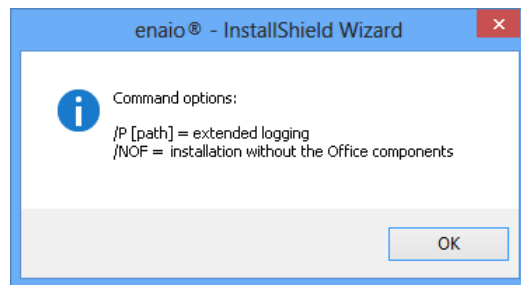
```
S:\8.00\as800\as8.00.130\Win32\Disk1\Setup.exe /NOF
```

This prevents the Office components installed on your computer from being loaded when the setup is initialized, and stops MS Office macros from being offered for installation.

This call lists script-defined command line switches:

```
S:\8.00\as800\as8.00.130\Win32\Disk1\Setup.exe /?
```

This displays script-defined command line switches in an info box.



Click **OK** to exit the setup.

Script-defined command line switches cannot be combined with each other but a combination of default command line switches of the setup and a script-defined command line switch is possible. Hereby, the default command line switch needs to be specified first.

Example:

```
S:\8.00\as800\as8.00.130\Win32\Disk1\Setup.exe -r /NOF
```

Information on a silent installation is recorded without installing the MS Office macros. Note that the silent installation mode requires the `/NOF` parameter to be set:

```
S:\8.00\as800\as8.00.130\Win32\Disk1\Setup.exe -s /NOF
```

Separate command line parameters with space characters but do not enter space characters between command line switches.

Setup Logs

Different logs are written during enaio® installation depending on the installed modules. A log file named `install.log` is written during all installations. This is in the user's temporary area. Additionally, further logs are written during installation and update of enaio® server. The initial enaio® server installation is logged in the `oxkrnins.rep` file, which is located in the server installation directory.

Furthermore, database operations are logged in the `os[yymmdd].flw` and `OS[yymmdd].SQL` files during the initial installation and update of the enaio® server. During installation these are located in the user's temporary area, e.g. in:

```
C:\Documents and Settings\Administrator\Local Settings\Temp\LOG
```

After successful installation, these logs are moved to the installation directory.

Online Help

The online help is provided in CHM format and can be opened on the workstation from the respective enaio® component by pressing **F1** or opening the **Help** menu.

Due to current security restrictions in different versions of Microsoft Windows and Internet Explorer, CHM files located in networks can be accessed only if security restrictions are adapted as follows:

You can allow sharing of the online help while the network setup is running (see 'Network installation'). Setup then adapts the workstations accordingly.

Alternatively, you can enable access by editing the following registry key:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\HTMLHelp\1.x\ItssRestrictions\MaxAllowedZone = 1
```

```
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\HTMLHelp\1.x\HHRestrictions\MaxAllowedZone = 1
```

The default value for `MaxAllowedZone` is '0.' When this value is set to '1,' access to sites in the 'Local intranet' zone will be permitted.

Basic Configuration Steps

Database

Usually, database adaptations are not required.

In systems with a large dataset, creating the user-specific list of recently edited object may take some time. You can significantly reduce the amount of time by setting up a combined index on the 'osobjhist' table.

If you have any questions, please contact the OPTIMAL SYSTEMS consulting department.

Object definition

enaio® object definitions of folder, register and document types are managed in the database.

Use enaio® editor to create and manage object definitions.

Create and import an object definition with enaio® editor and then perform a database adaption.

For more information, see the 'OS_Editor_eng.pdf' manual.

User Administration and Login

Use enaio® administrator for user administration and login.

Create new users with roles in enaio® administrator and assign groups as well as folder, register and document types of your object definition to them.

For more information, see the 'OS_Administrator_eng.pdf' manual.

License Management

Use enaio® enterprise-manager to manage the license system.

During the enaio® installation, license files will be passed automatically to the database. Create new workstations according to the obtained license type (floating or seat license) and assign necessary modules to them.

For more information, see the 'OS_Administrator_eng.pdf' manual.

W-Template Administration

In enaio® administrator, W-document types created in enaio® editor must be assigned to Windows applications and Windows templates. A user can then choose between the configured Windows templates when creating a W-Document.

For more information on W-template management, see the 'OS_Administrator_eng.pdf' manual.

Server Configuration

Use enaio® enterprise-manager to manage the server configuration.

After successful installation, any configuration is not need to be changed here.

Service Manager

Use enaio® services admin to configure the services.

enaio® services admin can be accessed in browsers via the URL '<service-manager-IP>:<Port>'. The default port is '7273.'

Client Configuration

Clients do not need to be configured additionally after installation. When connection parameters for enaio® server are entered, the setup will write the respective parameters to a file called `asinit.cfg` in the client directory.

A description of `asinit.cfg` can be found in the appendix (see 'The Configuration File 'asinit.cfg)'). It also describes the settings required for connecting enaio® client to different servers.

Logging

Use `axprotocolcfg.exe` to configure the logging process. It can be found in the respective installation directories of the server and the client components.

After successful installation, any configuration is not need to be changed here.

Systems Using Foreign Languages

enaio® supports multilingualism on the user interface, in the object definition and in the administrative components. German is set as default language and English and French are also available.

The applications multilingualism feature is by default activated after installation.

Data forms with more than 240 elements might cause errors in enaio® client when multilingualism is enabled. In this case, please contact the support team of OPTIMAL SYSTEMS.

Multilingualism is implemented through TRA files and can be deactivated after the installation or an update. To do so, remove the multi-language TRA files for enaio® client (`ax_eng.tra`, `ax_fra.tra`, `axcyr_eng.tra`, and `axcyr_fra.tra`) manually from the application directory. If the enaio® setup is executed again in the update mode after removing the files, all TRA language files are once more added to the program directory and have to be removed again.

enaio® editor permits you to create index data forms in several languages. Even though only a monolingual object definition is required, a version with the default language 'German' must be created regardless of the intended language.

The language of enaio® client applications and the object definition can be set in enaio® client under **Settings > Workspace**. Note that this language setting only applies to the interface of the logged-on user.

Testing the Installation

After successful installation, it must be possible to start enaio® server.

Perform all configuration steps and start enaio® client.

Import data for each document type and set up respective test documents. Then search for these documents.

If more than one OS server has been installed, test the connection between these servers.

Update and Repair

It is recommended to use the setup-maintenance program to update enaio®. During the installation of enaio® the setup saves information on a successful installation in the Windows registry. If a newer setup is run, it will recognize the existing installation and offer the options **Modify**, **Update**, and **Remove**. To perform an update, select the **Update** option, which is also available for the following installation types:

- Server installation
- Local client installation
- Network installation

It is not possible to update versions lower than 5.50 in maintenance mode.

The update replaces all executable files (*.exe), runtime libraries (*.dll), documentation, help files, etc. Neither modified configurations and captured documents nor database entries will be affected by the update.

If maintenance mode is turned off, it is still possible to update the installation. Update without maintenance mode corresponds to the update procedure of older enaio® versions (e.g. optimal_AS® 3.60).

Some enaio® components can be updated with enaio® client-updater as an alternative to using the setup (see 'enaio® client-updater').

Backup

Backups must always be run prior to an update.

This particularly involves the following areas:

- Registry entries (from the subkey `HKLM\Software\OPTIMAL SYSTEMS` onwards at least)
- Database
- WORK, NOTE, and CACHE area
- Application directories of the server and the client
- The etc directory of the server containing the configuration files

Update Requirements

The following requirements have to be fulfilled for the update:

- Computer hardware meets minimum requirements.
- The operating system has to be installed and meet minimum requirements.
- The logged-in user has administrator rights at operating system level.

- The logged-in user has to have the right to write in the Windows registry.
- The logged-in user can write to the %Windir%\System32 directory.
- The logged-in user has to have write access to the installation directory and to all subdirectories.
- Adequate directory sharing properties allowing client workstations to access the local client: Read access is required.
- All files to be replaced are currently not used. To make sure of this, close all enaio® applications and all applications that lock enaio® components, e.g. MS Word, Outlook, etc. In addition, all network user sessions must be closed to ensure that enaio® components are not locked due to network access.
- Hash values must be SHA-256-coded for checking for identical documents and for enaio® DocumentViewer.

If document files were last edited in a version earlier than 5.20, no hash values or MD4-coded hash values are available for these documents. In this case, check the hash values using the automatic action 'Hash check'. If documents are not SHA-256-coded, you must create new hash values for these documents with the automatic action 'Sign'.

The actions can be executed before or after an update.

Further information about the automatic actions can be found in the Administration handbook.

Update Without Maintenance Mode

Updates should always be run in maintenance mode. If you wish to update a version earlier than enaio® 7.50, please contact the OPTIMAL SYSTEMS consulting team.

Proceed as follows to execute an update without maintenance mode:

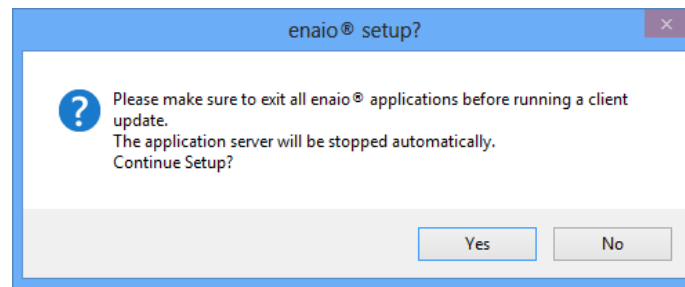
1. Execute the script `nomaint.vbs` in the setup directory. It disables the maintenance mode.

Alternatively delete the following key in the Windows registry editor:

```
HKLM\Software\Microsoft\Windows\CurrentVersion\Uninstall\{3a8aaadc-193c-4aca-8b05-b1a55b993e27}
```

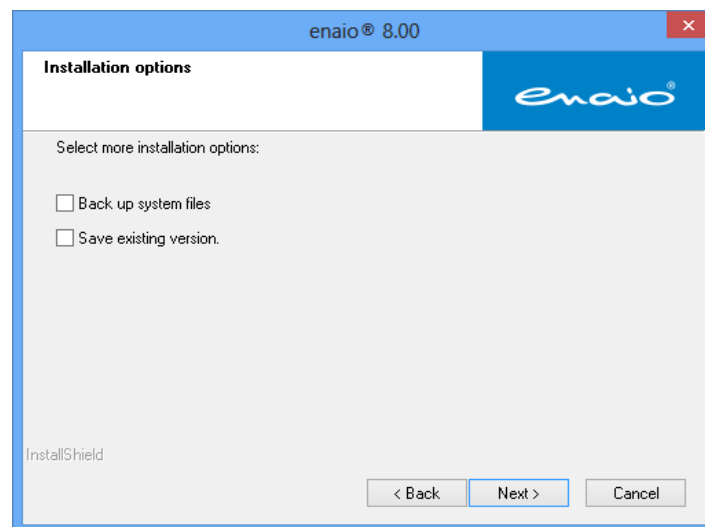
2. Start the setup.
The language selection dialog opens.
3. Select a setup language and confirm with **OK**.
The **Welcome** dialog will open.
4. Click **Next**.
The **Installation type** dialog will open.
5. Select the **Update** radio button.

The dialog indicates that all applications should be closed.



6. Confirm the dialog with **Yes**.

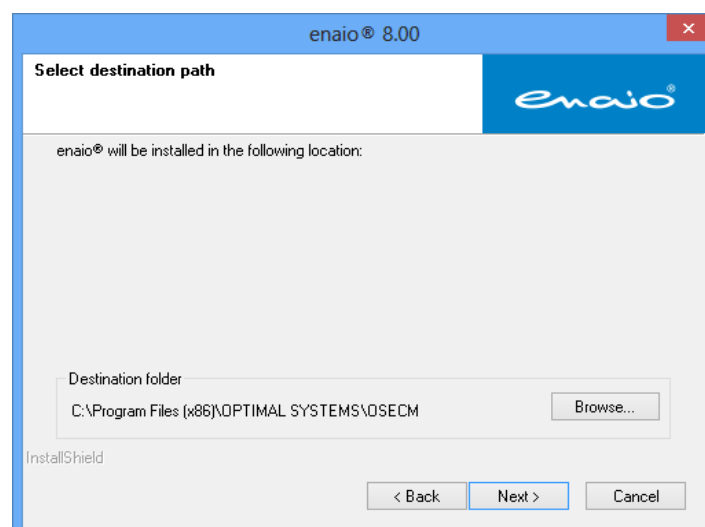
The **Installation options** dialog will open.



7. If required, enable the backup of system files and the previous version and click **Next**.

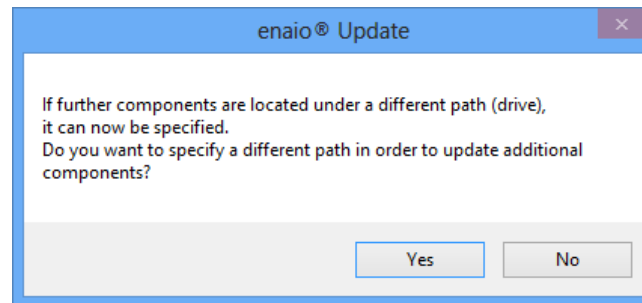
Files of a previous version will be saved in the local temporary directory. System files will be copied into the installation directory and into the `sysbackup` subdirectory.

The **Select destination path** dialog will open.



8. Enter the path to the previous installation and click **Next**.

You have the option to include components which have been installed in other directories in the update.



9. If you have installed the components in different directories, click **Yes** and repeat step 8, otherwise click **No**.

The **Select application folder** dialog will open.

10. Select the program folder which contains the components to be updated.

The program folder is not created. An entry is created in the program group upon subsequent installation of network components on this computer.

The **Installation data** dialog will open, showing the components that are updated.

11. Click **Next**.

The update is executed. Current components are then installed.

The database tables are adapted when the enaio® server is updated.

12. If a network setup is required, you will be advised to execute it on the enaio® client computers.

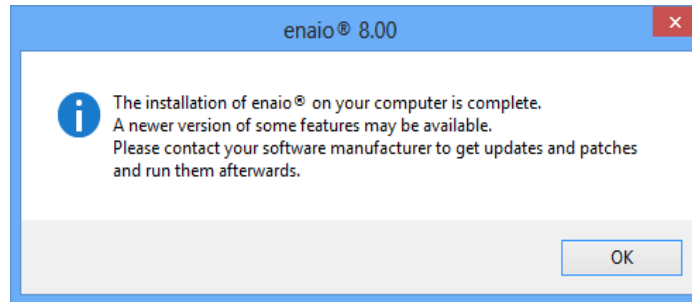
The update without maintenance mode only recognizes enaio® modules but not installed third-party components. It is important that the lead tools are updated as required for the new enaio® version, in order to guarantee perfect display and editing of documents in enaio® client.

13. Confirm by clicking **OK**.

The corresponding dialog shows that the update is complete.

14. Click **Finish**.

You are informed that a patch for the enaio® version you've just installed may be available.



15. Click **OK**.

This completes the installation.

Update in Maintenance Mode

In the initial installation of enaio®, setup adapts the registry of the computer so that subsequent installations are automatically executed in maintenance mode.

Maintenance mode facilitates simple addition, updating, and removal of enaio® components.

In contrast to the update without maintenance mode, not only enaio® components are recognized but also installed third-party components. Hence, the lead tools are, for example, also updated as required for the new enaio® version.

At initial installation the setup-maintenance program is not available.

In maintenance mode the following options are selectable:

- **Modify:** Use this option to install new application components or remove components selected during the previous installation.
- **Update:** Use this option to bring the current installation up to date. It can be used for repairing existing installations by copying the existing installation files again.
- **Remove:** Use this option to remove the enaio® installation. This cannot be done via the **Software** entry in the Windows Control Panel.

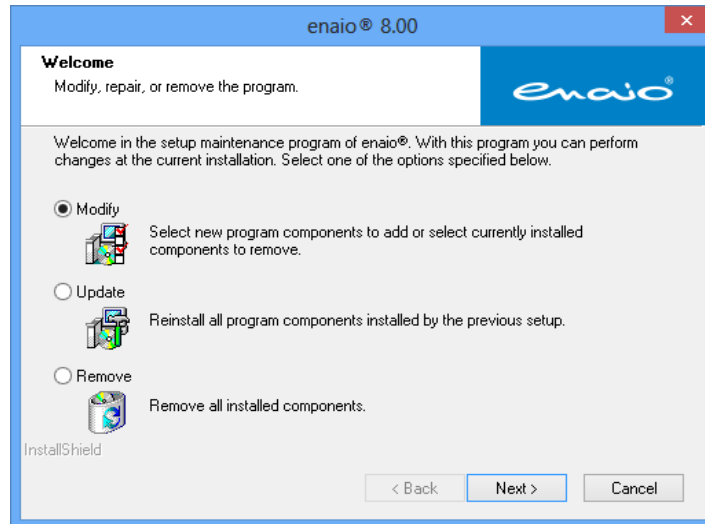
The following installation actions are not possible in maintenance mode:

- Adding a new enaio® server to a server group.
- Creating a new server group with a new enaio® server.
- Setting up a new cluster service.
- Installing further enaio® versions.

Execute an update with maintenance mode as follows:

1. Start the setup.

The **Welcome** dialog will open.



2. Select the **Update** entry and click **Next**.

The **Information** dialog will open, showing which components will be updated.

3. Click **Next**.

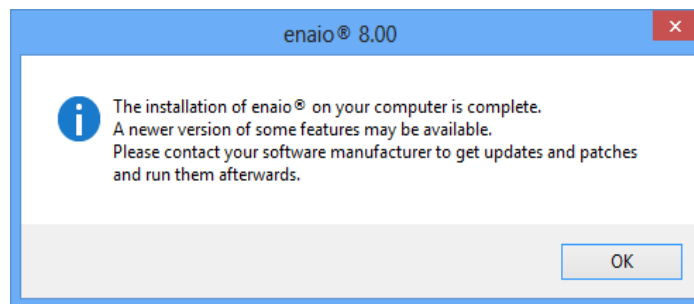
The update is executed.

The database tables are adapted when the enaio® server is updated.

The corresponding dialog shows that the update is complete.

4. Click **Finish**.

You are informed that a patch for the enaio® version you've just installed may be available.



5. Click **OK**.

This completes the installation.

enaio® client-updater

With enaio® client-updater, you can update all enaio® components that are located in the subdirectories `admin`, `asindex`, and `client32` of the application directory `...\OSECM\clients`.

Applications that are not in these directories, such as enaio® server and the core services, can only be updated using the enaio® setup.

Use of enaio® client-updater is optional. enaio® setup can also be used to update the enaio® components as usual (see 'Update Without Maintenance Mode').

The enaio® client-updater executable `axClientUpdater.exe` is located in the `components\OsClientUpdater` directory of the installation data, along with the manual explaining its installation and use (`OS_Clientupdater_de.pdf`).

Version Notes

If enaio® client is run under Windows 7 or Windows 8.x, there may be display errors on the enaio® client user interface in RDP sessions with the disabled option **Visual styles**, and in Citrix sessions. To avoid these display errors, it is recommended to set the user interface of Windows operating systems to the Windows Aero Theme.

SP Directory

The SP directory on `...\Disk1` contains the latest files. In these files, errors found after distribution of the respective version have been rectified. The SP directory is only valid for the respective enaio® version including the service pack in which it is located.

To install the latest files in your system, start the setup and execute an update in maintenance mode (see 'Update in Maintenance Mode'). Up-to-date files will be consequently copied from the SP directory into the respective directories.

In addition, patches are regularly provided that allow files and hotfixes to be installed silently (see 'Patch').

Patch

After release and only if necessary, further adaptations to the components are provided by patches.

Patches can be downloaded from the OPTIMAL SYSTEMS [partner portal](#), the service portal for partners and customers of the OPTIMAL SYSTEMS group.

It is possible that a patch is already included in the `Patch` directory of the installation data you received or downloaded. In this case the installation wizard of the patch will be started automatically after the execution of the enaio® setup allowing you to install the patch.

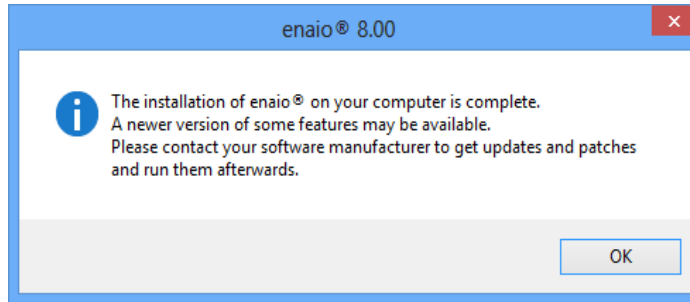
A new patch always contains all the files that were included in previous patch versions. The patch version is indicated in the file name. A patch file name has the following structure: `OSECM_Patch_x.y.zzzzz.exe`

Here `x.y` stands for the enaio® version and `zzzzz` stands for the build number. The build number increases with every new patch version.

A patch installation will only replace the files of the existing version that have changed in the current version with new files. Updating the software to a newer version using a patch is not possible.

Before replacing, it is checked whether adequate file versions are available at patch installation. If this is not the case or a newer patch was already installed, no files will be replaced. The patch installation is canceled and the wizard notifies you, that installed components have a wrong version.

After executing the enaio® setup installation file `setup.exe`, you will always be informed whether a new patch is available for the newly installed enaio® version.



After installing a patch, the enaio® setup can no longer be executed by double-clicking the `setup.exe` installation file, since it now contains obsolete data. To install additional components, modify the installation, or uninstall components, you must start the installation wizard from the control panel (**Programs > Programs and Features > OS|ECM > Change**).

Alternatively to the patch mechanism, it is still possible to use the hotfixes and files in the SP directory to update an installation via the enaio® setup (see 'SP Directory').

Note that, as soon as an installation has been patched, the `...\SP` directory will not be read out during future updates anymore. A patch installation cannot be undone.

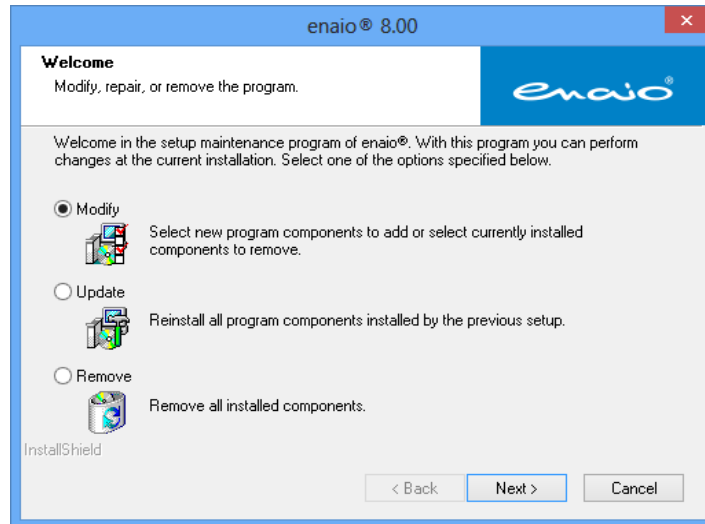
Subsequent Installation of Components

Subsequent installation of components is only possible in maintenance mode (see 'Maintenance mode').

You can add enaio® components subsequently as follows:

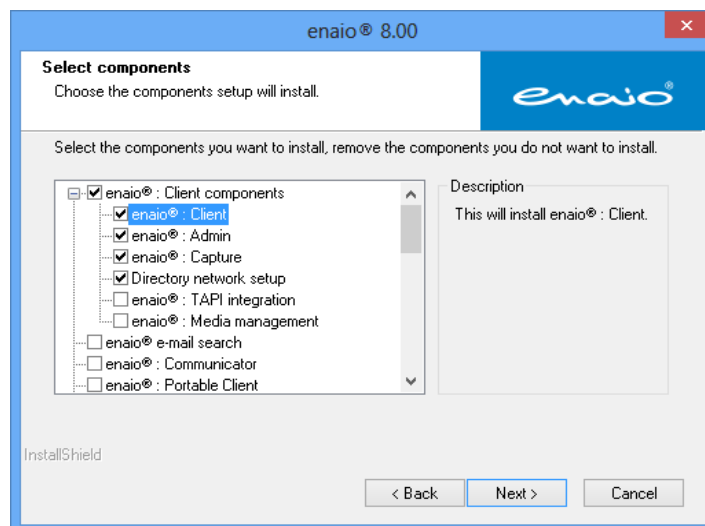
1. Start the setup.

The **Welcome** dialog will open.



2. Select **Modify** and click **Next**.

The **Select components** dialog will open, showing the currently installed enaio® components.



3. Select the components that you would like to add and click **Next**.

Do not deactivate already installed components as they will be then uninstalled. This option may be used to remove single components.

Subject to the selected components required installation steps will be performed.

4. Follow the installation instructions and click **Finish** to complete the installation.

This completes the installation.

Attachment

Installation Instructions for Systems not Using Western European Code Pages

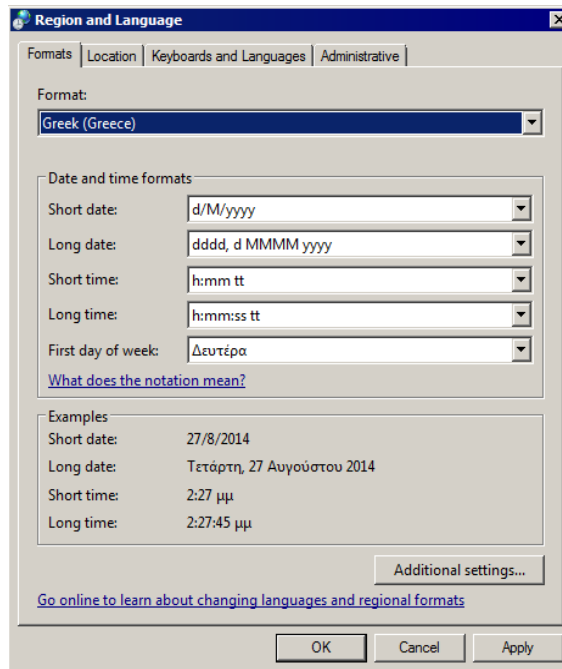
enaio® was approved and released to be used on Windows operating systems using the 1252 Windows Western European code page. If all components of an infrastructure use the same 8-bit code page, enaio® projects performing just a limited range of functions may be realized exclusively after consultation with and technical review by the professional service and development team of OPTIMAL SYSTEMS GmbH, respectively. The deployment of enaio® in infrastructures with different code pages is not supported. The infrastructure includes all computers involved in enaio® data processing, in particular, application computers, enaio® servers, and database servers.

Installation – Language Adjustments

As enaio® server and enaio® client work with different code pages, these must be adapted before installing the enaio® software. This adjustment must take place before the installation of the MS SQL database or the Oracle database. All systems must use the same **Regional and Language Options**. System synchronization is performed on the Windows server on which the database server and enaio® server will be installed later.

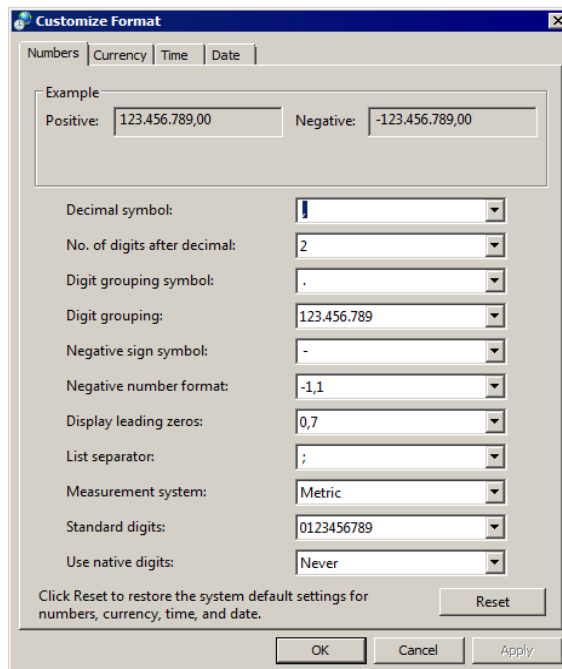
Open the **Regional and Language Options** on the server.

Start > Settings > Control Panel > Regional and Language Options



On the **Regional Options** tab, set the language to the same language used in the client (**Greek** in this case). The location must also be changed (to **Greece** here).

Then open the **Advanced** tab.



Change the language as before (to **Greek** again here). Make sure all checkboxes are selected under **Code page conversion tables**.

Also select the checkbox under **Default user account settings**. Confirm changes with **OK** and follow the instructions on the monitor.

Having applied all changes, restart the server.

Now, the regional and language options have to be same for enaio® server and enaio® client.

Keyboard Adjustment

Besides identical language options, enaio® server and enaio® client must also use the same keyboard input language. These settings are set using the language options. Open these in the following way:

Start > Settings > Control Panel > Regional and Language Options > Languages > Details

Database Server Installation and Database Creation

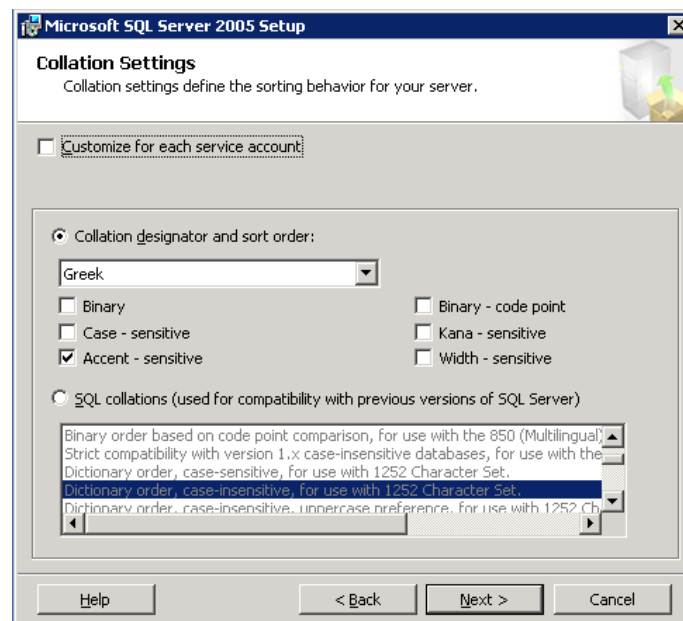
SQL Server and Database

If Microsoft SQL server 2005 is used, proceed as follows.

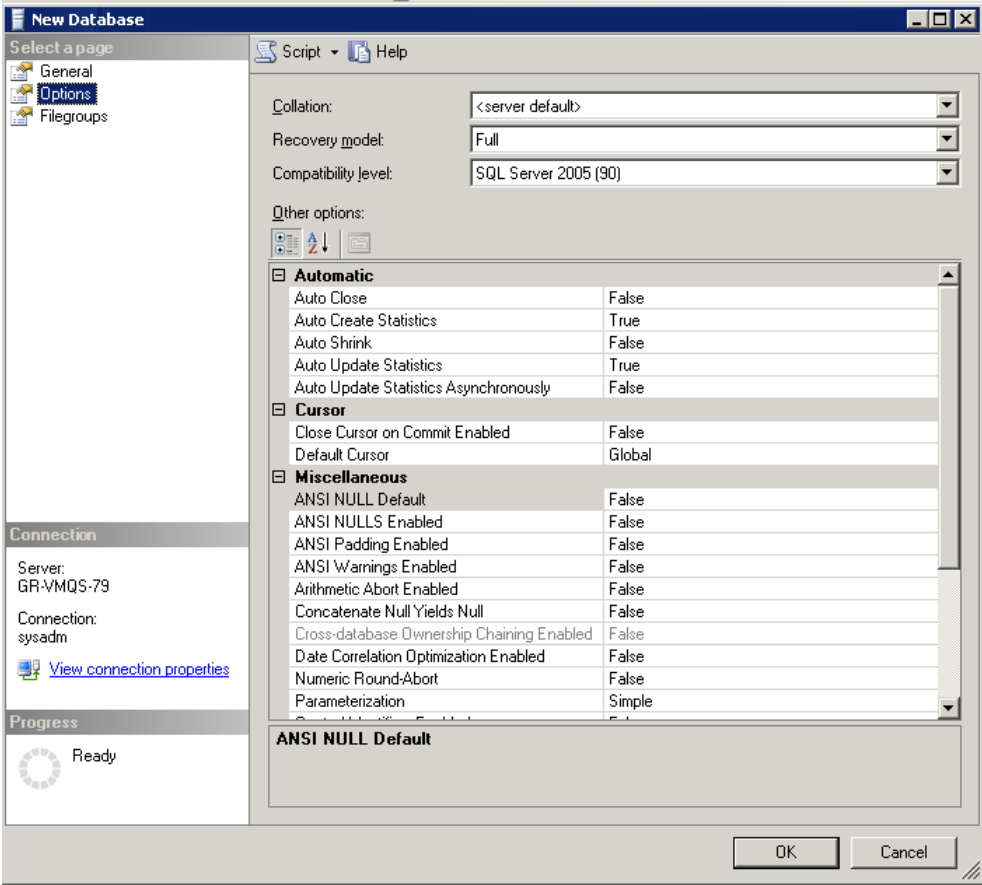
The MS SQL server installation requires computer names not to be set up with country-specific characters.

The database server can only be installed once the language options have been adjusted accordingly (see 'Installation – Language Adjustments').

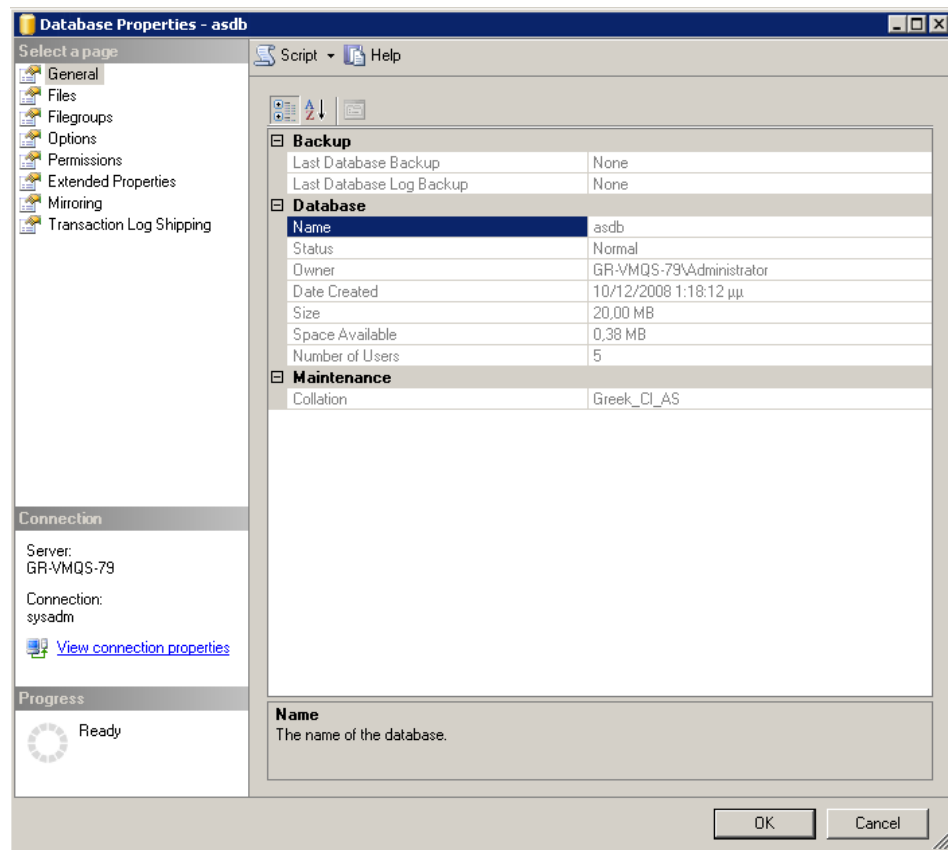
When installing the MS SQL server, the language of the **collation designator** must be changed to match the system language.



In our example, the system language is **Greek**, so change the **collation designator** language to **Greek**.



This setting can be checked by use of the database properties displayed in the next illustration.

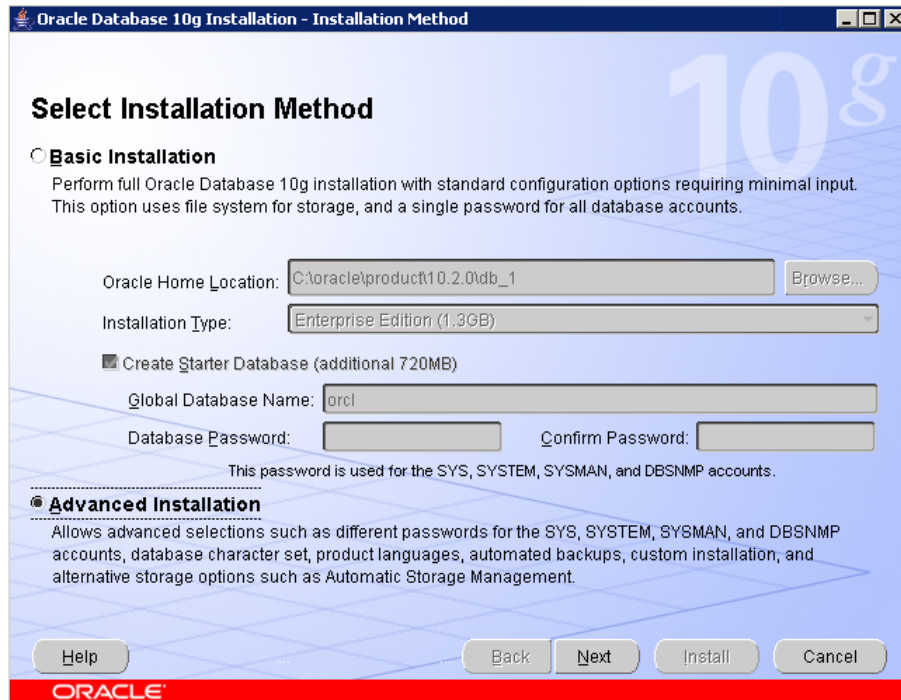


Oracle Database Server and Database

If you use an Oracle database, carry out instructions as follows.

The database server can only be installed once the language options have been adjusted accordingly (see 'Installation – Language Adjustments').

Run an **advanced installation** to install the Oracle database server.



Oracle Database 10g Installation - Installation Method

Select Installation Method

☐ **Basic Installation**
Perform full Oracle Database 10g installation with standard configuration options requiring minimal input. This option uses file system for storage, and a single password for all database accounts.

Oracle Home Location:

Installation Type:

☒ **Create Starter Database (additional 720MB)**

Global Database Name:

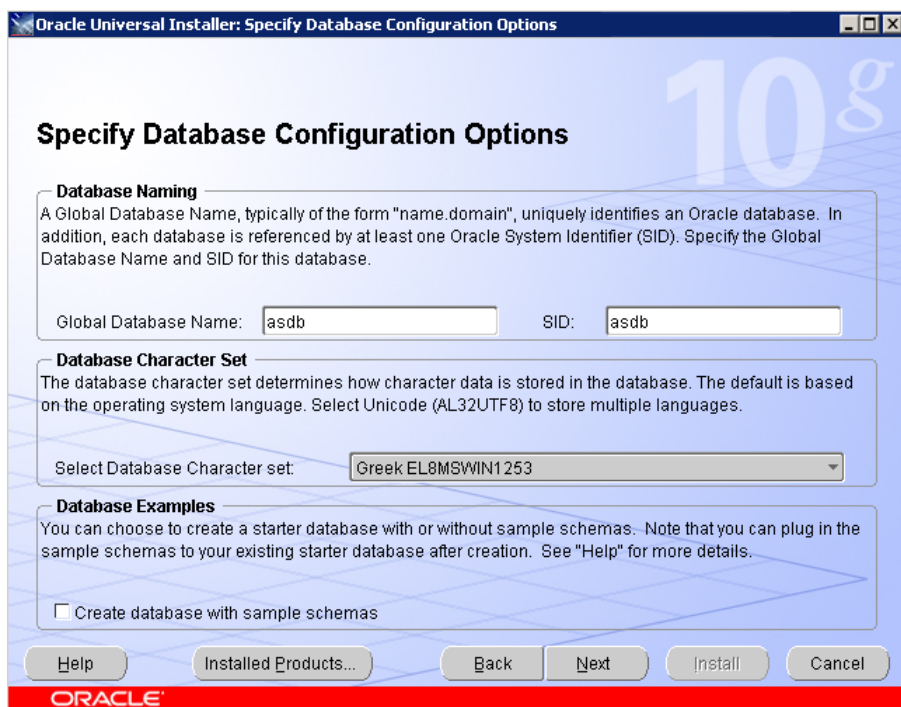
Database Password: Confirm Password:

This password is used for the SYS, SYSTEM, SYSMAN, and DBSNMP accounts.

☐ **Advanced Installation**
Allows advanced selections such as different passwords for the SYS, SYSTEM, SYSMAN, and DBSNMP accounts, database character set, product languages, automated backups, custom installation, and alternative storage options such as Automatic Storage Management.

ORACLE

The database will be created later on during the installation. It is important that the database receives a system-dependent character set. In our example, this is once again **Greek**.



Oracle Universal Installer: Specify Database Configuration Options

Specify Database Configuration Options

Database Naming
A Global Database Name, typically of the form "name.domain", uniquely identifies an Oracle database. In addition, each database is referenced by at least one Oracle System Identifier (SID). Specify the Global Database Name and SID for this database.

Global Database Name: SID:

Database Character Set
The database character set determines how character data is stored in the database. The default is based on the operating system language. Select Unicode (AL32UTF8) to store multiple languages.

Select Database Character set:

Database Examples
You can choose to create a starter database with or without sample schemas. Note that you can plug in the sample schemas to your existing starter database after creation. See "Help" for more details.

☐ Create database with sample schemas

ORACLE

Customize the Client PC

Depending on the operating system language the setup will install the German, English and French Redistributable Packages. Install the Redistributable Package of the respective language in case another operating system language has been

selected. Further Redistributable Packages can be downloaded on the following Web page:

<http://www.microsoft.com/en-us/download/details.aspx?id=5582>

For languages that are not listed install the English Redistributable Package version x86. This can be found in the `Prerequisite` directory of the installation data.

Configuration

Language Settings

You can change the language of the user interface in enaio® client to English or French. The language of the object definition must also be English or French, respectively. To find out how to change the language of the user interface and the object definition in enaio® client, please refer to the 'enaio® client' handbook. enaio® administrator and enaio® editor adopt the language settings of enaio® client.

When using an operating system with non-Western European code pages, specific tra files must be used to receive correct English display. By default, these are installed and available for the following applications:

- enaio® client
- enaio® administrator
- enaio® editor
- enaio® capture
- enaio® file-system-archiver
- enaio® manager-for-logfiles
- enaio® protocol-viewer
- enaio® service-manager
- enaio® server-monitor
- enaio® administrator-for-workflow
- enaio® editor-for-workflow
- enaio® workflow-script

When using an operating system with non-Western European code pages, specific tra files must be used to receive correct French display in the following applications:

- enaio® client
- enaio® editor
- enaio® capture
- enaio® administrator-for-workflow
- enaio® editor-for-workflow
- enaio® workflow-script

The following examples show how to launch enaio® applications that use the specific tra files.

For enaio® client, the German axcyr.tra file, the English axcyr_eng.tra file, and the French axcyr_fra.tra file are copied to the application directory ...\\OSEC\\clients\\client32. The client is then launched as follows:

```
"C:\\Programme\\OPTIMAL SYSTEMS\\OSEC\\clients\\client32\\ax.exe" -
TRA axcyr
```

For enaio® administrator, the files axadmincyr.tra and axadmincyr_eng.tra are copied to the application directory ...\\OSEC\\clients\\admin. The administrative program is then launched as follows:

```
"C:\\Programme\\OPTIMAL SYSTEMS\\OSEC\\clients\\admin\\AXAdmin.exe" -
TRA axadmincyr
```

For enaio® editor, the files axgreditcyr.tra, axgreditcyr_eng.tra, and axgreditcyr_fra.tra are copied to the application directory ...\\OSEC\\clients\\admin. The editor component is then launched as follows:

```
"C:\\Programme\\OPTIMAL SYSTEMS\\OSEC\\clients\\admin\\AxGrEdit.exe"
-TRA axgreditcyr_eng
```

For enaio® start, the files axadmincyr.tra and axadmincyr_eng.tra are copied to the application directory ...\\OSEC\\clients\\admin. enaio® start is then launched as follows:

```
"C:\\Programme\\OPTIMAL SYSTEMS\\OSEC\\clients\\admin\\axauto.exe"
/TRA axadmincyr
```

Note that the parameter syntax for calling up enaio® start differs slightly – a forward slash is used instead of a hyphen.

All applications are launched without .tra appended.

For example, to launch enaio® applications such as enaio® capture with the special tra files without using command line parameters, remove the original tra files axindex.tra, axindex_eng.tra, and axindex_fra.tra from the application directory ...\\OSEC\\clients\\asindex, and rename the files axindexcyr.tra, axindexcyr_eng.tra, and axindexcyr_fra.tra in the same directory to axindex.tra, axindex_eng.tra, and axindex_fra.tra.

The tra files for enaio® manager-for-logfiles and enaio® protocol-viewer are copied to any directory containing enaio® components during installation. For that reason, you must replace the original tra files in all directories with enaio® components.

The following table presents the tra files for which special tra files are available plus the program directory in which the original tra files must be replaced.

Application	tra files	Directory
enaio® client	ax.tra ax_eng.tra ax_fra.tra	...\\clients\\client32
enaio® administrator	axadmin.tra axadmin_eng.tra	...\\clients\\admin

enaio® editor	axgredit.tra axgredit_eng.tra axgredit_fra.tra	...\clients\admin
enaio® capture	axindex.tra axindex_eng.tra axindex_fra.tra	...\clients\asindex
enaio® file-system-archiver	axFsArch.tra axfsarch_eng.tra	...\clients\client32
enaio® manager-for-logfiles	axprotocolcfg.tra axprotocolcfg_eng.tra	...\clients\admin ...\clients\client32 ...\clients\asindex ...\server
enaio® protocol-viewer	axrptview.tra axrptview_eng.tra	...\clients\admin ...\clients\client32 ...\clients\asindex ...\server
enaio® service-manager	axsktray.tra axsktray_eng.tra	...\server
enaio® server-monitor	axsvcmr.tra axsvcmr_eng.tra	...\server
enaio® administrator-for-workflow	axwfadm.tra axwfadm_eng.tra axwfadm_fra.tra	...\clients\admin
enaio® editor-for-workflow	axwfedit.tra axwfedit_eng.tra axwfedit_fra.tra	...\clients\admin
enaio® workflow-script	axwfscript.tra axwfscript_eng.tra axwfscript_fra.tra	...\clients\admin

As soon as you update your enaio® installation, you must again delete all tra files and rename the tra files names.

Creating Users

Users can be created with the language-specific character set or with Latin characters.

Object definition

The object definition can be also created with the language-specific character set as such entries will be transcribed. To do so, the object language **English** or **French** must be added.

To guarantee correct functionality objects must be named in German, English and French.

workflow

As in the object definition in enaio® editor, the forms in enaio® editor-for-workflow can also be provided with the language-specific character set. However, the English character set must be used for variable names. Process steps can be provided with country-specific names.

Full text

You can install the full text services to enable full text functionality. Thus, full text queries can be issued against index data and document contents. The search language does not matter here.

Date, Time, and Number Formats

Once the installation is complete, time and number formats are saved in the same format as set up on the server in the **Regional and Language Options** menu. To use the formats of the respective client, change the **UseUserLocaleDate** and the **UseUserLocaleNumber** settings in the server's registry entries accordingly. These can be found in enaio® enterprise-manager under **Registry entries > DMSOptions**.

E-mail archiving

When adding an e-mail object to the object definition in enaio® editor, the necessary e-mail object fields are preset. In doing so, adjust the field names to the respective language. Do not change the internal name, however.

As the systems do not use Western European code pages display errors of umlauts, such as ä, ö, ü, ß, and special characters may occur if these are used in e-mail texts or subject lines.

These characters are not shown if used in index data and when showing e-mails in IMAP format. When archiving an e-mail in msg format, only index data including these characters will not be depicted correctly. The e-mail itself will be displayed correctly in the corresponding default e-mail program.

ADO CursorType

The ADO CursorType was set to 'Dynamic' for versions up to and including version 7.50. After the 7.50 hotfix version, it is set to 'ForwardOnly' for new installations.

Updates will not change the ADO CursorType.

If you installed enaio® for the first time with a version earlier than 7.50 hotfix, please check the ADO CursorType setting in enaio® enterprise-manager via **Server properties > Category: Data > ADO database access**.

We recommend the ADO CursorType 'ForwardOnly.' If you have any questions, please contact the consulting or support teams.

The Configuration File 'asinit.cfg'

The configuration file `asinit.cfg` contains the connection data for the enaio® server. During installation, the file is installed in each client directory with the connection data entered. As a rule it must not be modified.

If clients should connect to different servers when starting, such as a test system or a production system, or if multiple servers are installed in a group or multiple server groups, then the configuration file `asinit.cfg` must be adapted accordingly.

An example of a configuration file for connecting to a server:

```
[ARCHIV]
COMSTRING=<ip>#<port>      Computer name or IP address of the computer
                             on which the enaio® server is installed, and the
                             port, and the cluster address in the event of
                             clusters.

COMMODULE=axavapps.dll      Preset entry for all configurations

[REGISTRATION]              Area for modules to register when starting

MODULE0=oxvbscript.dll      The modules are entered automatically
                             according to the installation options.
MODULE1=axaddxmltree.dll
MODULE2= ...                If no registration is necessary when starting, the
                             following can be entered in the [archive] area:

NOREGISTER=1
```

Optionally the [CLIENT] area can be added with the following entries:

```
[CLIENT]
OSTEMP=                      The OSTEMP directory for temporary data is
                             created as a default within the user-specific
                             temporary directory.
                             Example:
                             C:\Users\<User>\AppData\Local\Temp\
                             You can enter a different directory.

MAXREQUESTTHREADS=          The number of threads or database connections
MAXPOOLEDDBCONNECTIONS=    may only be entered when authorized by the
                             support or consulting team.
                             Entries only apply for enaio® client.
```

Example of a configuration file for connecting to different servers via a selection dialog:

```
[ARCHIV]
```

```
COMSTRING=<ip>#<port>
```

Default server

```
[SERVER]
```

Area for the available servers

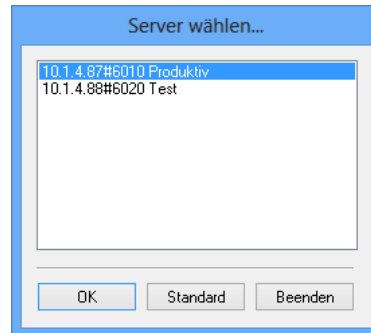
```
SERVER0=<ip>#<port>
```

```
Production
```

Integrated numbered list of servers. A label which is also shown in the selection dialog can be attached.

```
SERVER1=<ip>#<port>
```

```
Test
```



Example of a configuration file for connecting to a server from a server group:

```
[ARCHIV]
```

```
COMSTRING=GRUPPE
```

Entry of any group label; the group may not be labeled with 'SERVER.'

```
[GRUPPE]
```

Area for the available servers in the server group.

```
SERVER0=<ip>#<port>,<probability>
```

Integrated numbered list of servers in the group with connection probability in percent.

```
SERVER1=<ip>#<port>,<probability>
```

Example of a configuration file for connecting to one of multiple server groups using a selection dialog:

```
[ARCHIV]
```

```
COMSTRING=GRUPPE1
```

Default server group for the selection dialog.

```
[SERVER]
```

Area for the available servers in the server group

```
SERVER0=GRUPPE_A
```

```
SERVER1=GRUPPE_B
```

Integrated numbered list of server groups. An area is created for each server group.

```
[GRUPPE_A]
```

```
SERVER0=<ip>#<port>,<probability>  
SERVER1=<ip>#<port>,<probability>
```

Integrated numbered list of servers in the group with connection probability in percent.

```
[GRUPPE_B]
```

```
SERVER0=<ip>#<port>,<probability>  
SERVER1=<ip>#<port>,<probability>
```

Integrated numbered list of servers in the group with connection probability in percent.

If only one server is in a group, then the connection probability does not have to be specified.