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Artsyl docAlpha

Installation Guide

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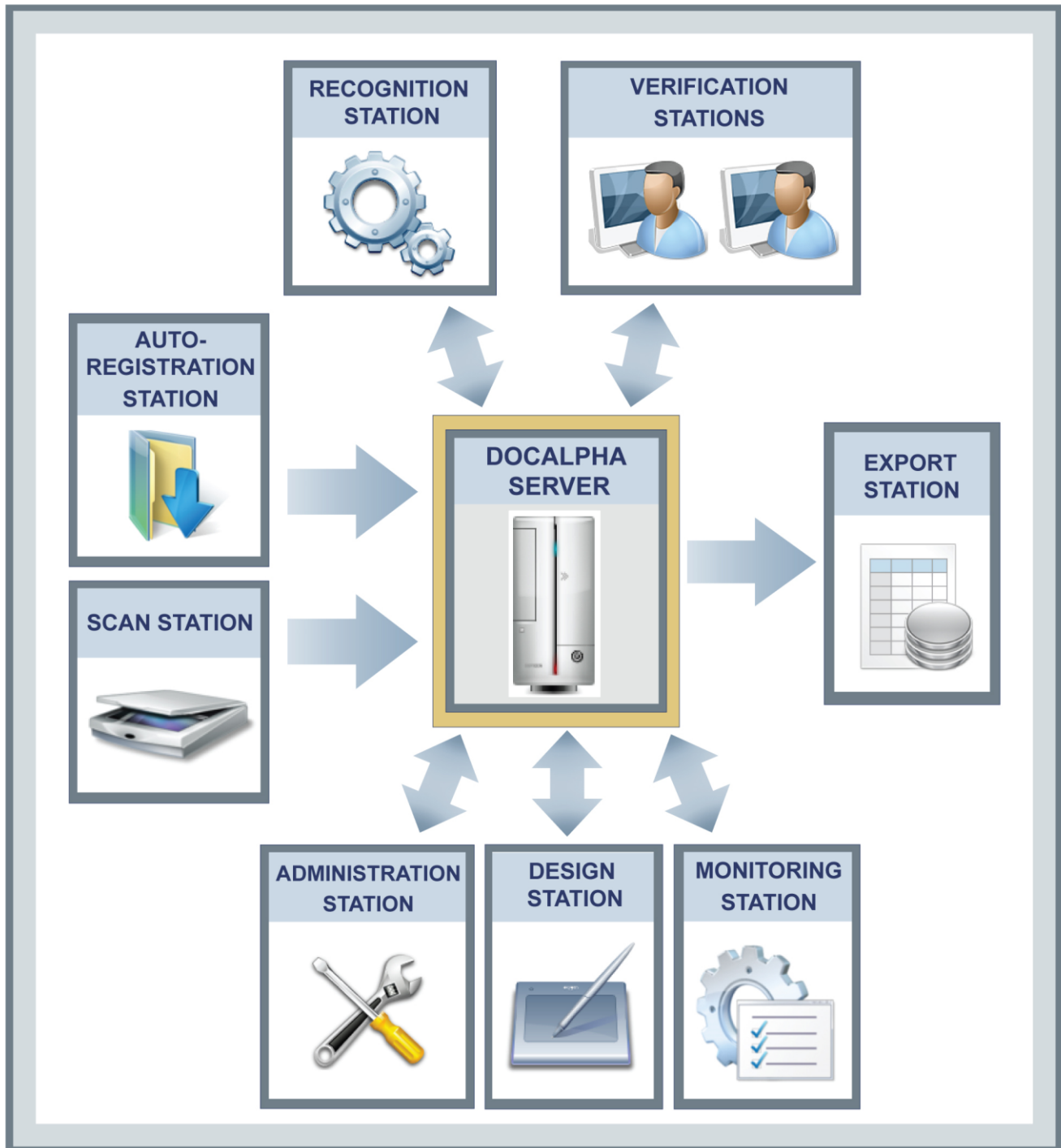
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ARTSYL DOCALPHA INSTALLATION GUIDE

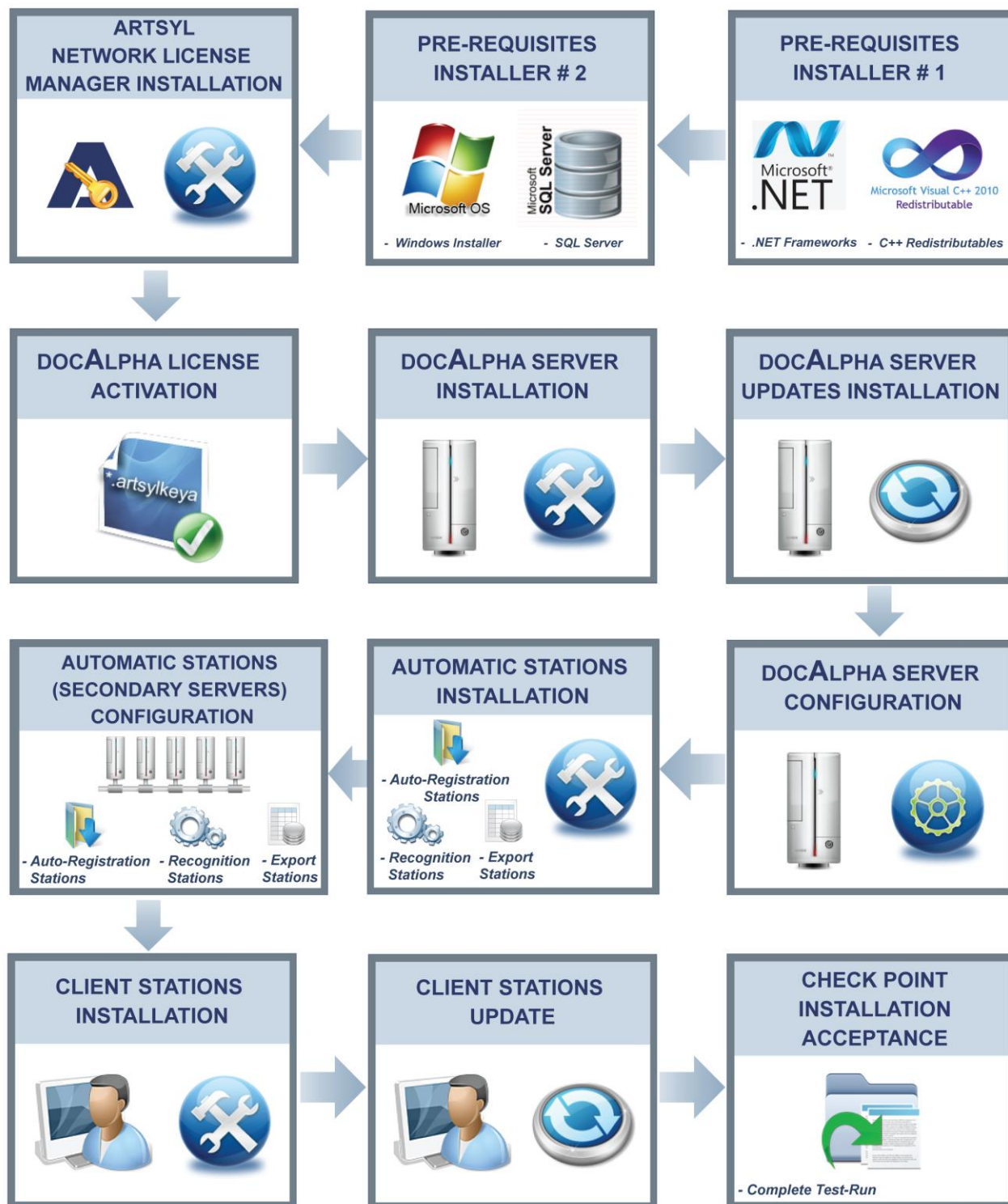
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1. docAlpha Architecture Overview

Artsyl docAlpha is a client-server distributed capture application capable of running on local and global networks. It contains server components and processing stations. Some processing stations can run as unattended Windows Services and so are also often deployed in the server room. The other stations are running in User Interface mode as Windows .NET Applications.



Picture 1. docAlpha Components Diagram



Picture 2. docAlpha Installation Diagram

This **Installation Guide** covers the subjects of hardware and software pre-requisites, installation guidelines, options and selections available in the installation wizards for the Server and the Stations installers, compatibility issues, minimum and recommended environments for the docAlpha installations.

To review the capture scenarios supported by docAlpha, the architecture details, the workflow processing order, creating and managing workflows, document definitions and users, please refer to the **Administration Guide**.

1.1. docAlpha Server Components

The docAlpha Server contains three main components:

- **Application Server:** The docAlpha Server architecture is a .NET Windows Service. It is meant to be run 24/7 with auto-restarting configured with a system account that allows re-launching the server service after system reboots automatically. To be able to visually see the current status of the server service and configure its parameters (licensing, connection to the database server and to the file server, security and encryption parameters, etc.) there is a Server Configuration Utility provided that can connect to the server, start or stop the services and configure all the necessary parameters.
- **Database Server:** SQL Server database is used to store all internal information about batches, events and workflows. The product queries at installation time for a selection of what database to use. It can deploy a new instance of SQL Server 2008 Express as part of the installation process, or, alternatively, it allows to select already installed and configured instance of the SQL Server. Refer to the "[Software Requirements for Artsyl docAlpha 4.5 DB Server](#)" section for supported MS SQL Server versions. Refer to the "[docAlpha Server Installation](#)" section for the database server deployment details.
- **File Server:** The location where the scanned batches in processing are located for all jobs circulating in the system. Can be located on the same or different machine from the Application Server. Allows only a sealed location accessible via the WCF communication layer. Open file share protocol is not allowed by the product.

All three server components can be deployed to the same physical server or they can be deployed up to three different (dedicated) systems. The selected configuration dictates the minimum and recommended hardware parameters for the server where the docAlpha Server component(s) are deployed. Refer to the "[Supported Software and Hardware Platforms](#)" section for the minimum and recommended system configuration details.

1.2. docAlpha Production Environment Stations Overview

The production environment stations include **Scanning, Auto-Registration, Recognition, Verification, and Export Station**. The **Monitoring Station** is not a part of production workflow cycle but it can be used to monitor and impact the processing done on the production environment stations.

Auto-Registration, Recognition and Export stations architecture is **Windows Services**. They can and should be deployed as fully automatic services running on the server room side and auto-restarting with the server re-start. To be able to configure and visually watch the services, docAlpha offers three configuration utilities for those stations - Auto-Registration, Recognition and Export Configuration Utilities. They can also be centrally controlled and configured using the Services Status Utility. The automatic stations can be run on all supported server OS and all

supported workstation OS. Refer to the "[Supported Software and Hardware Platforms](#)" section for the details of system requirements and deployment options for all stations.

Verification and Scanning Stations have architecture of **Windows .NET desktop application**. They can be run on any supported workstation OS. The license used by those stations are called the Concurrent Seat Licenses. Such license can be used to start any of those stations. Once returned by the operator, the same license can be re-used by another operator (concurrent licensing model).

1.3. docAlpha Setup & Administration Stations Overview

The setup & administration environment stations include Administration and Design stations. Two utilities that are installed by docAlpha installers – the Status Monitoring Utility and the Single Sign-Up Utility (docAlpha Startup Panel) also help with setting up, administering and launching other stations and services.

The **Administration** station is used to create and manage workflows, document profiles, setup fields and their properties, define batch splitting and document separation rules, optimize Auto-Find self-learning settings, setup image pre-processing for workflows and setup and manage user accounts. All details of working with the Administration Station are covered in this Administration Guide.

The **Design** Station is used to create fixed form templates and semi-structured document definitions. It is not necessary for running the Basic Capture or Basic Capture plus Auto-Find scenarios. Refer to docAlpha Admin Guide for more details on approaches to process documents in docAlpha and capture scenarios. All details of working with the Design Station are covered in the Design Station Guide.

The **Status Monitoring Utility** can be used to configure and control centrally all Windows-service based stations – including Auto-Registration, Recognition and Export, as well as the docAlpha Server Service. Refer to the Status Monitoring Utility Guide for more information on using the utility.

The **Single Sign-Up Utility** (docAlpha **Startup Panel**) allows signing up just once and then launch any station that the operator has credentials to start without having to re-enter the user name and password:



Refer to the Single Sign-Up Utility Guide for additional information on the utility.

2. docAlpha Server Installation

This section covers the installation of docAlpha Server software and options available during the server-side installation.

2.1. docAlpha Server Pre-Requisites

Refer to the "[Supported Software and Hardware Platforms](#)" section of this Guide for the details of minimum and recommended environment to install and run docAlpha Server components.

Note that requirements differ if you plan to install just the server components, or both the server components and the fully-automatic docAlpha stations on the same server machine.

Before commencing docAlpha Server **update installation**, all docAlpha UI-based stations and utilities need to be closed, the Windows Service-based fully-automatic stations services need to be stopped, and the docAlpha Server service itself should be stopped. All configuration utilities and the License Manager utility have to be closed as well.

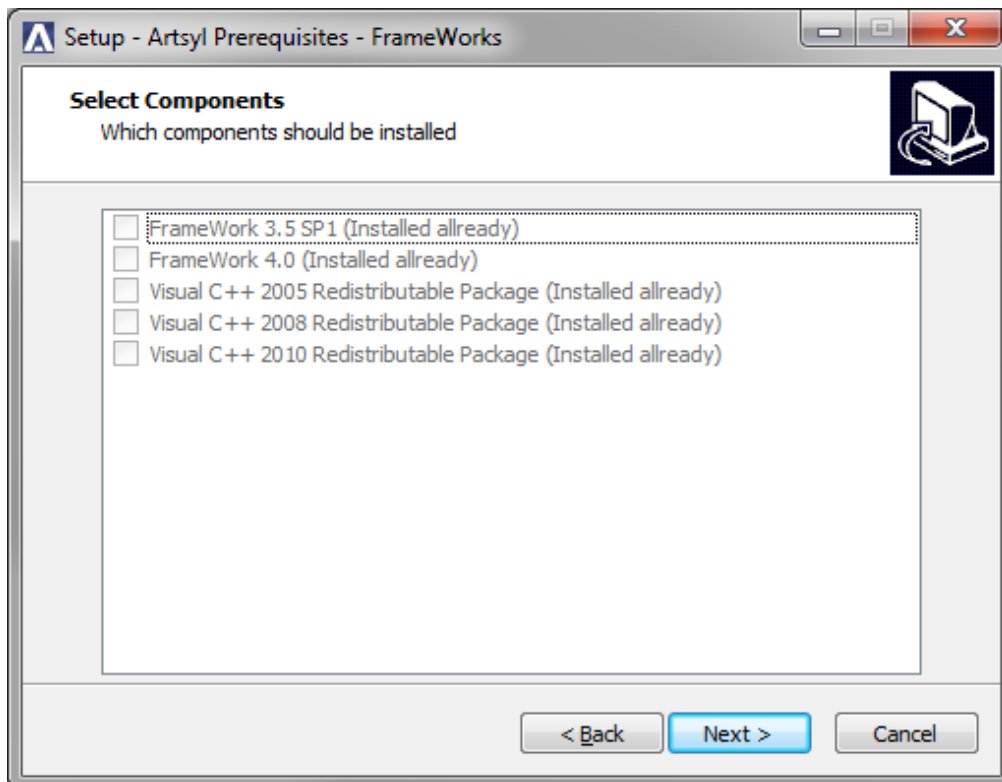
For the installation, you need to use a Windows account with full "Administrative" privileges (use "**Run as Administrator**" option under Windows Vista / Windows 7).

To ensure that the system that is going to host the docAlpha Server has all adequate pre-requisites in place, run the **two pre-requisite installers** that come in the docAlpha installation files set. Make sure you **reboot the server after each** of the pre-requisite installers, unless the installer reports that no components needed installation (were already in place on the hosting machine).

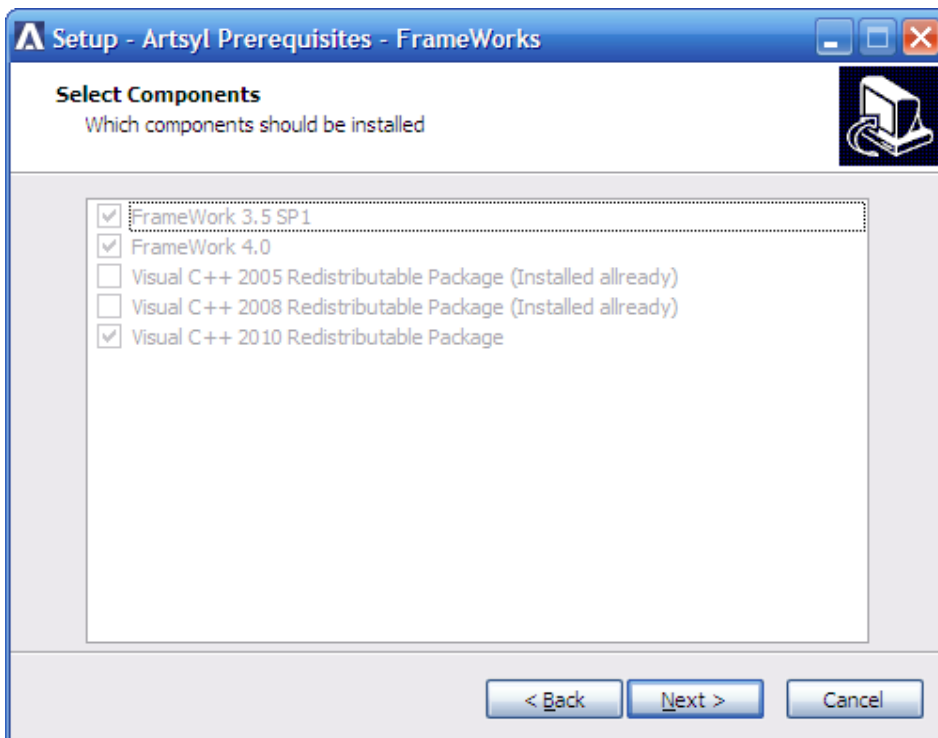
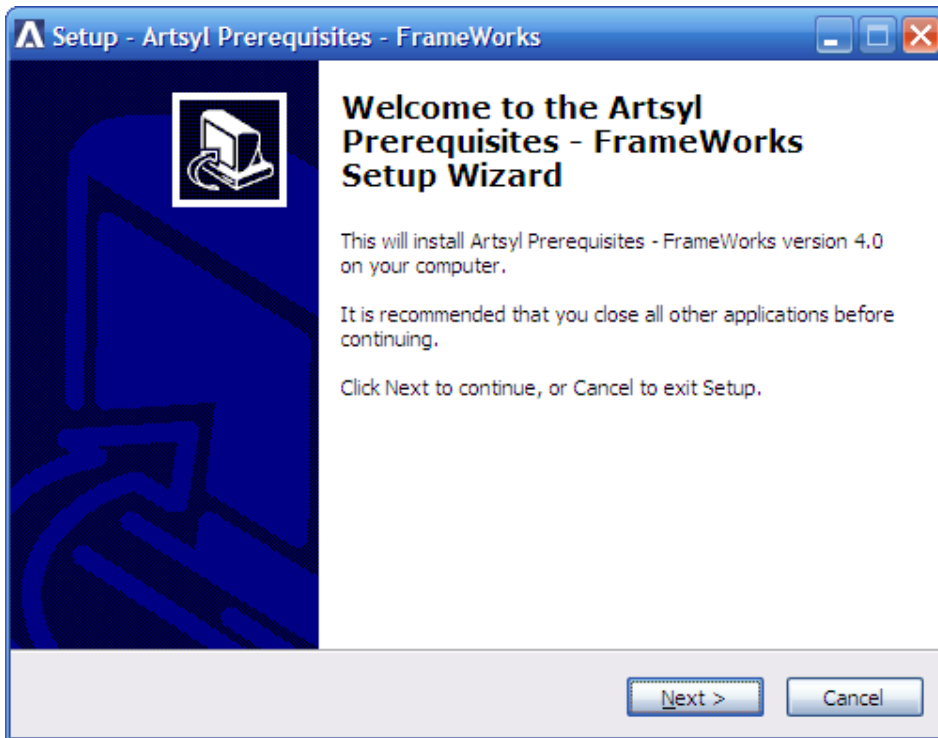
First make sure to run the **Pre-Requisite Installer No 1** that comes within docAlpha installation package:

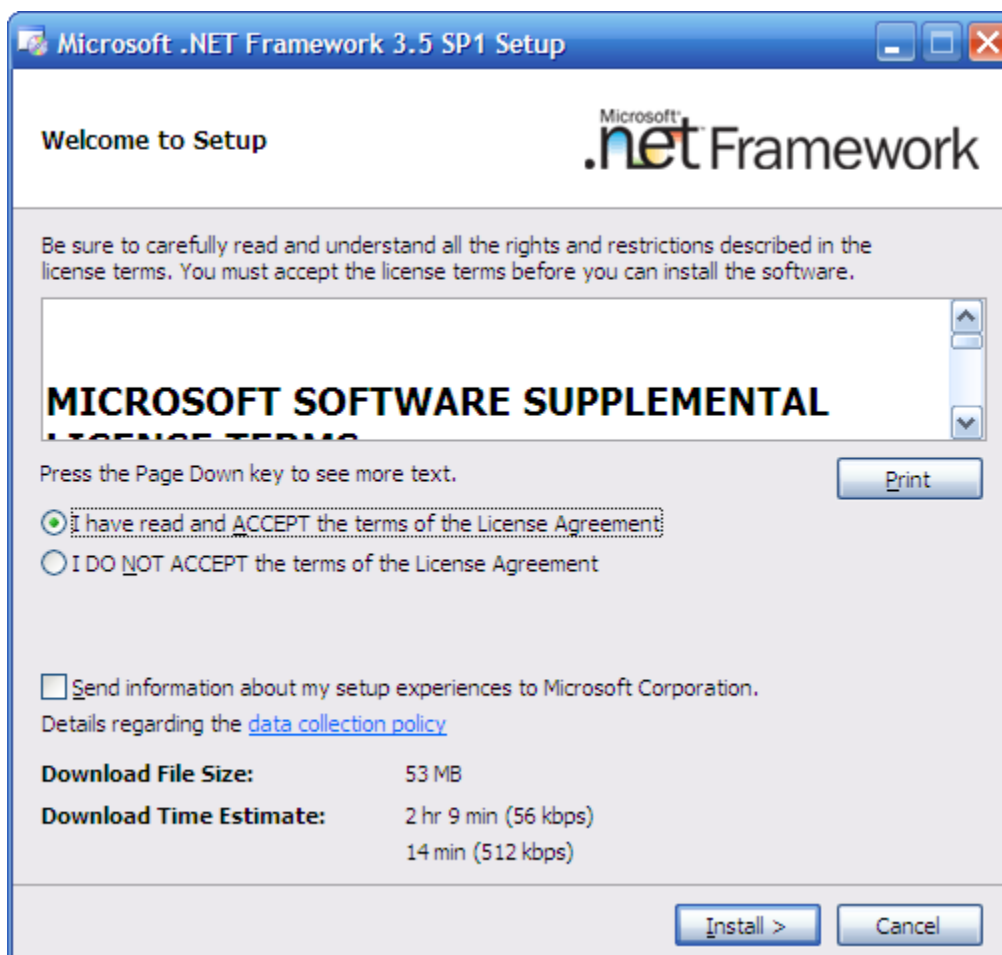
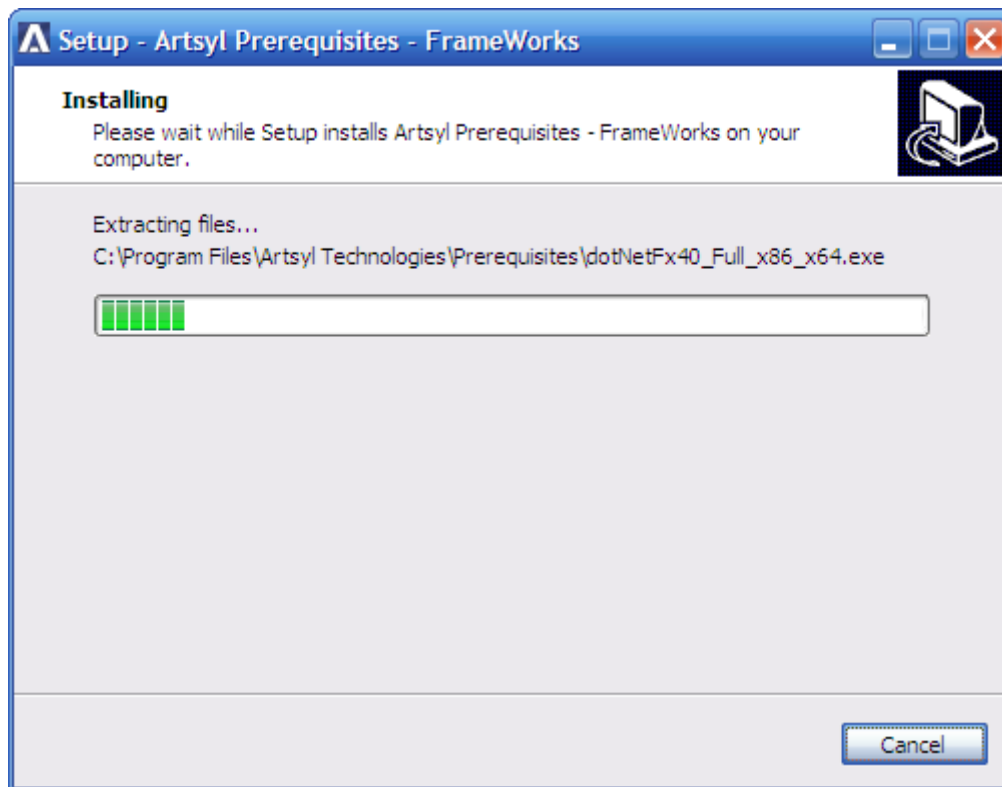
Setup_Artsyl_Prerequisites_1_FrameWorks.exe

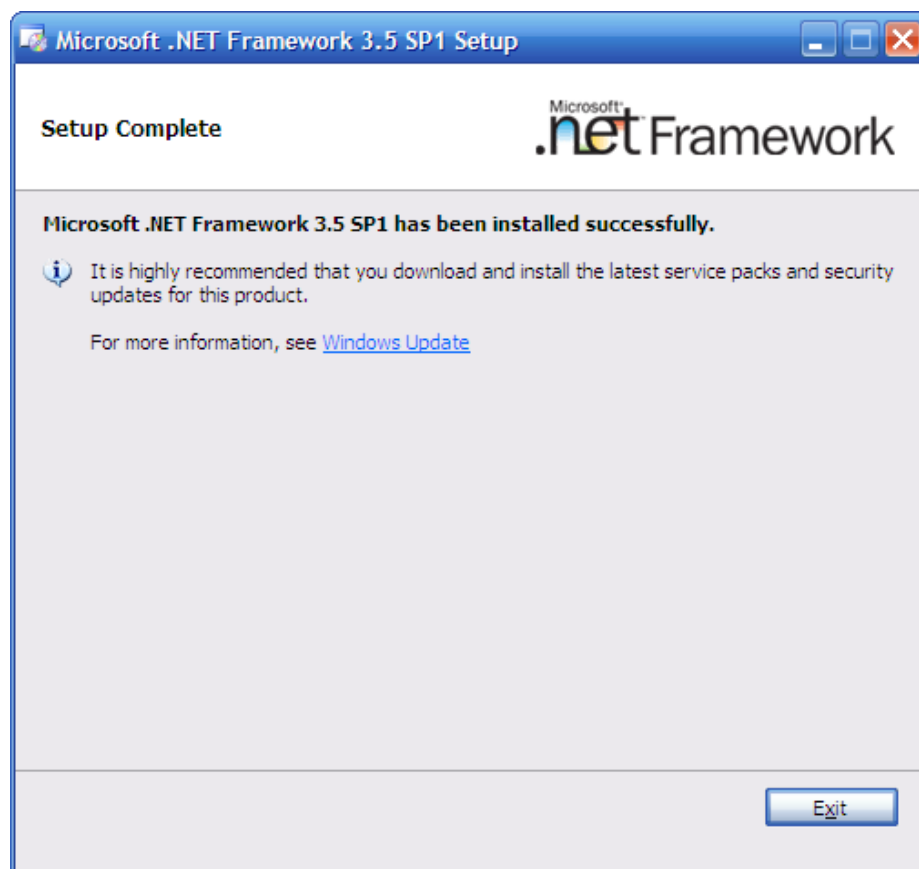
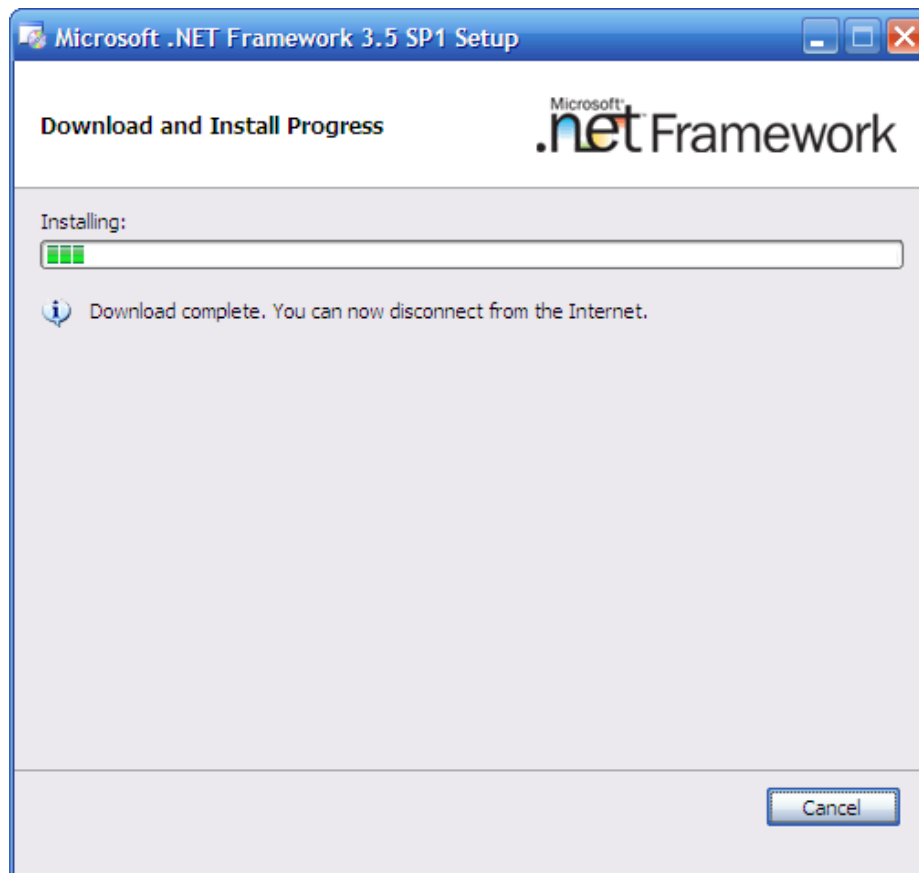
If the system has all necessary pre-requisites in place, the installer will signal this by listing them and indicating that they are already installed:



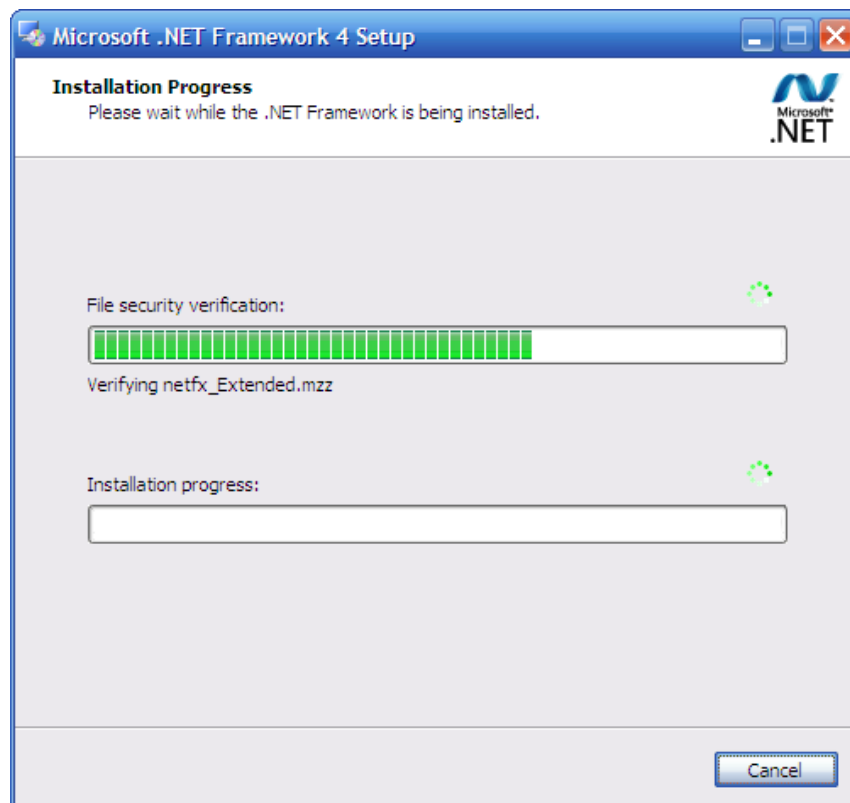
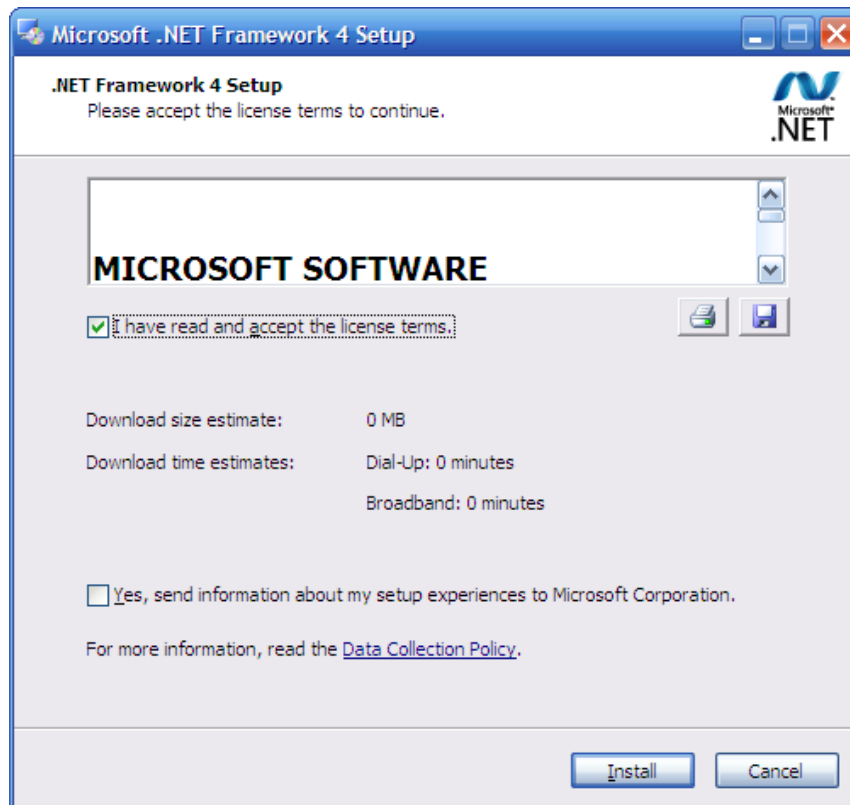
If not, you need to go through the installation, following the Wizard prompts, installing all the missing pre-requisite components and then re-boot the computer after the end of the installation. In the following example, MS .NET Frameworks v 3.5 and 4.5 are found missing, as well as Visual C++ Redistributable 2010 package; the Wizard then guides the process through installation of all missing components:



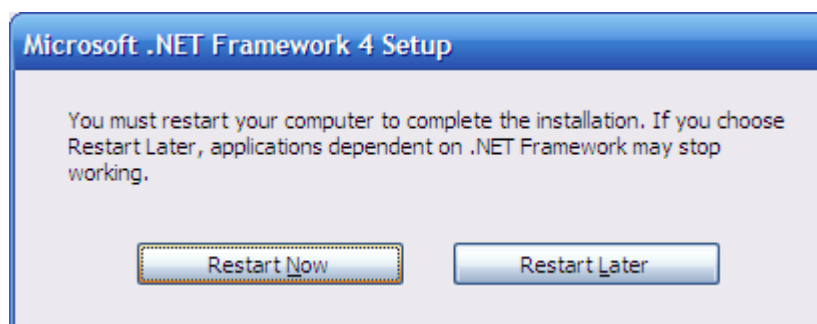
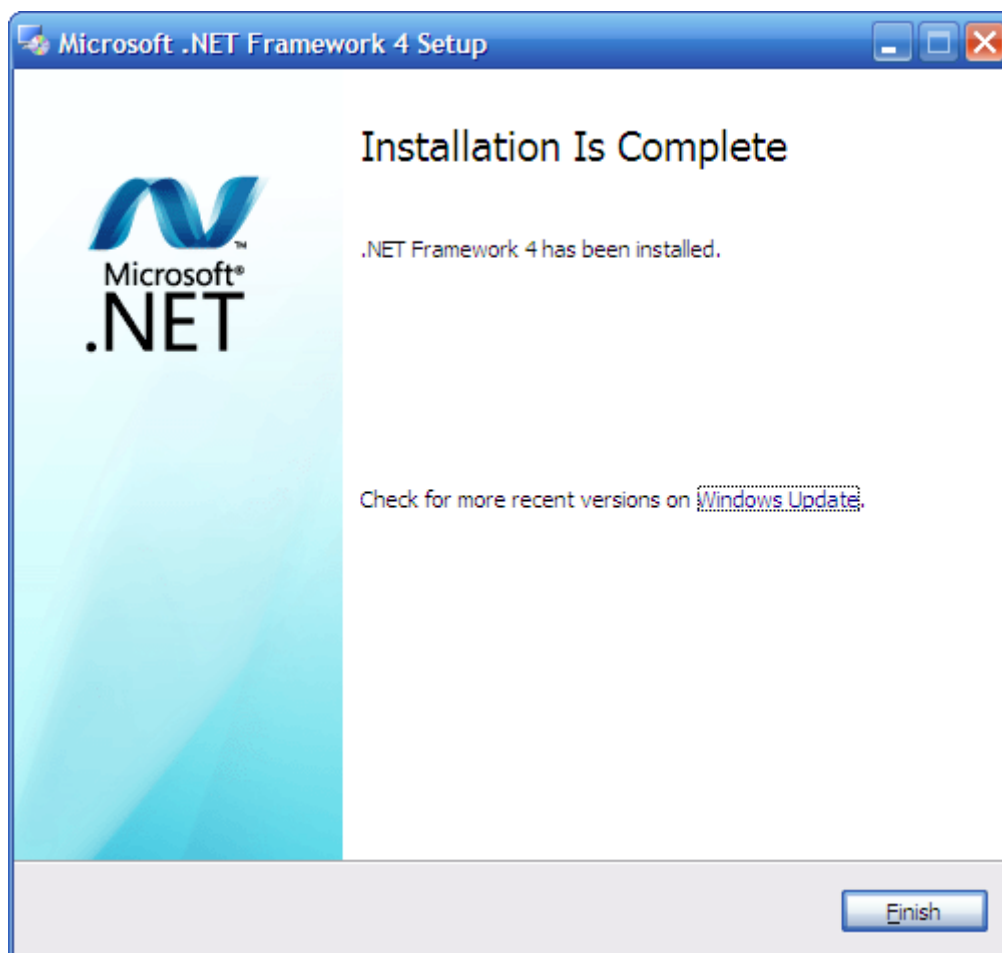




At this point the MS .NET Framework version 3.5 has finished the installation – click “Exit” button to complete its installation wizard and the MS .NET Framework 4.5 installation will start automatically if needed:

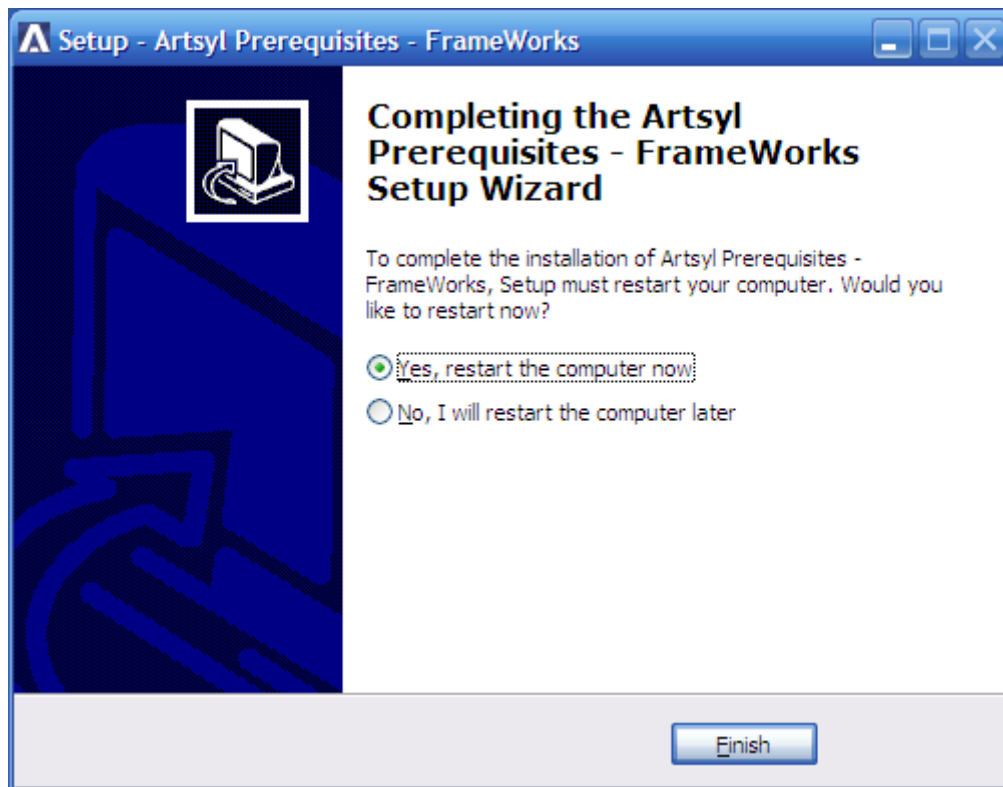


When the MS .NET Framework installation is completed, the computer needs to be re-booted. You may get the prompt to re-boot when clicking on “Finish” button of the .NET Framework 4 Setup:



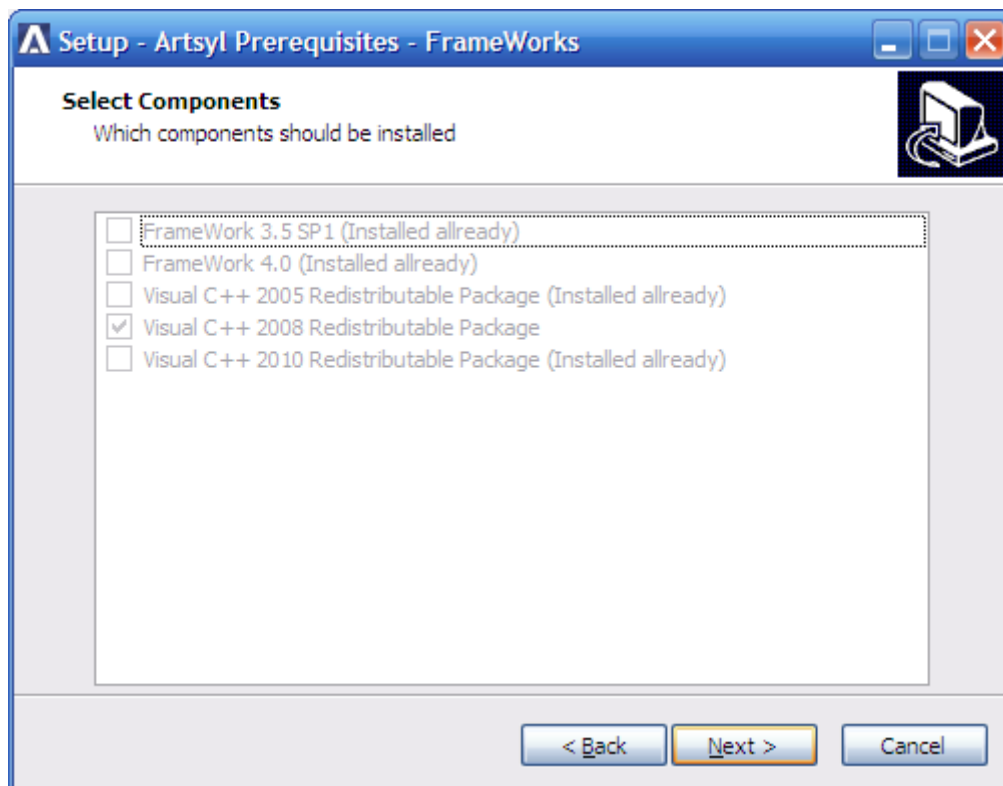
In this case just click “Restart Now” button. When Windows will start, the pre-requisites installer No. 1 will continue, with the installation of the following missing components.

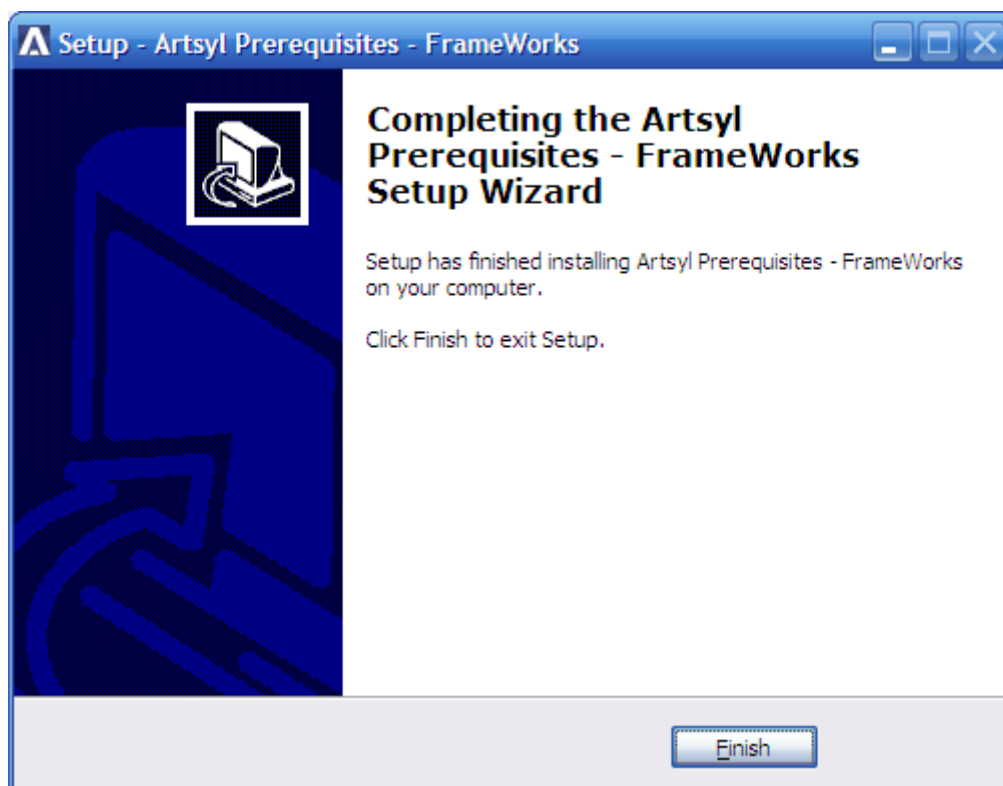
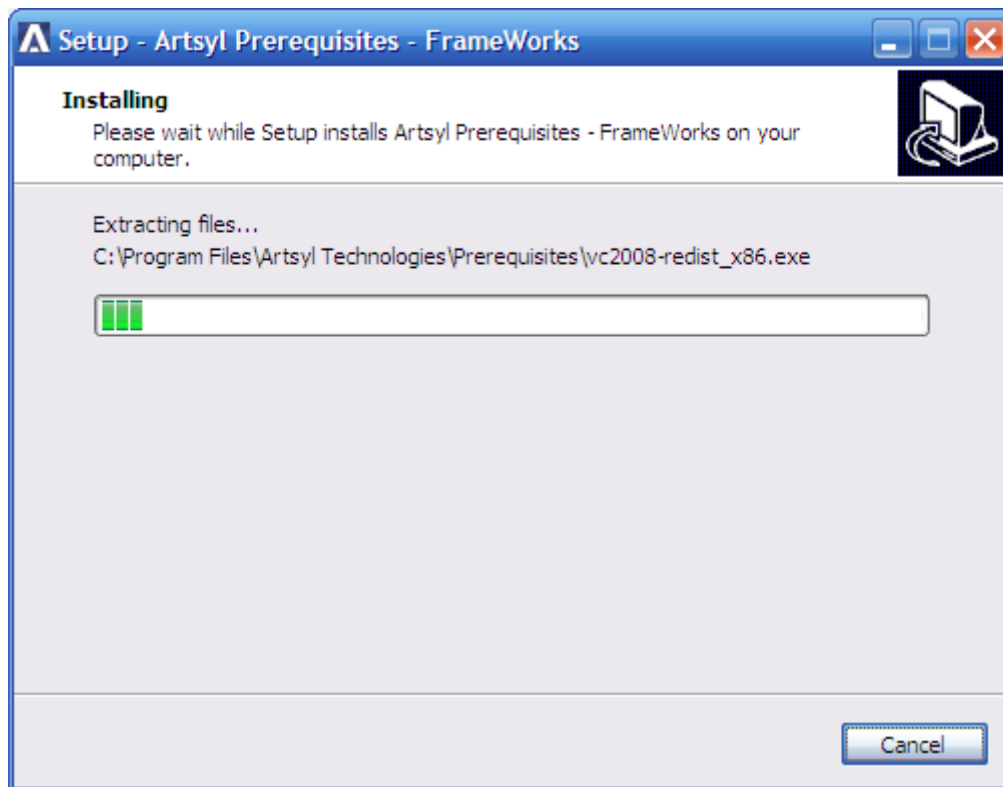
Alternatively, you may receive a prompt to re-boot directly from Artsyl Pre-Requisites Setup Wizard:



Select "Yes, restart the computer now" and click on "Finish" button.

After the computer re-boots, the installation wizard will continue, installing the rest of the missing components:





At this point the installation of Pre-Requisite Installer No. 1 is completed.

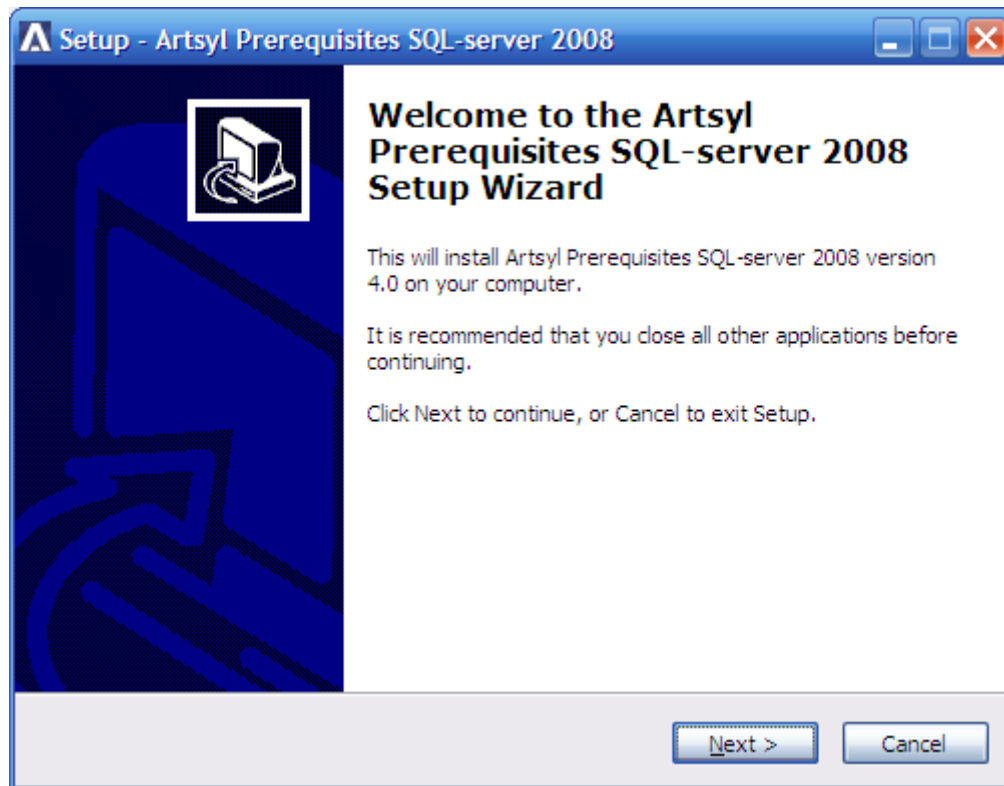
The following step is **optional** – depending on the desired database deployment options. it is only required if the deployment of docAlpha database is planned to be done using the SQL Server 2008 Express DB that comes with

docAlpha product. If you already have a full version of SQL Server 2008 or 2005 installed, an instance of which is already configured and licensed to contain docAlpha product database then you **do NOT need** to run the Pre-Requisites Installer No. 2.

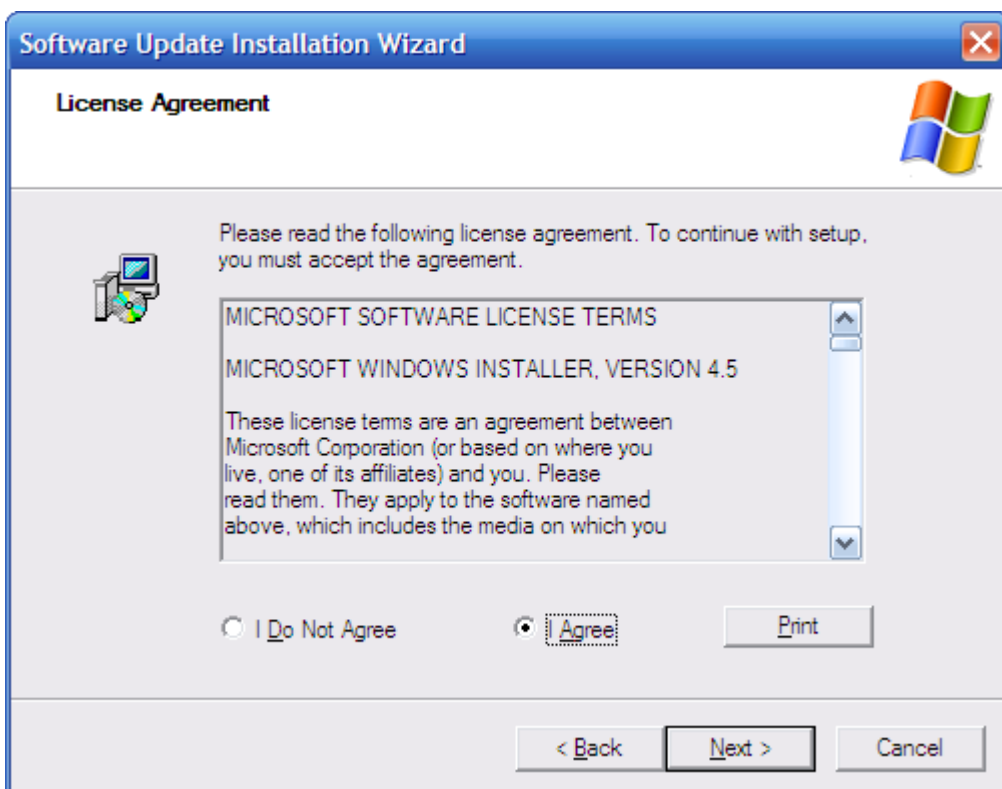
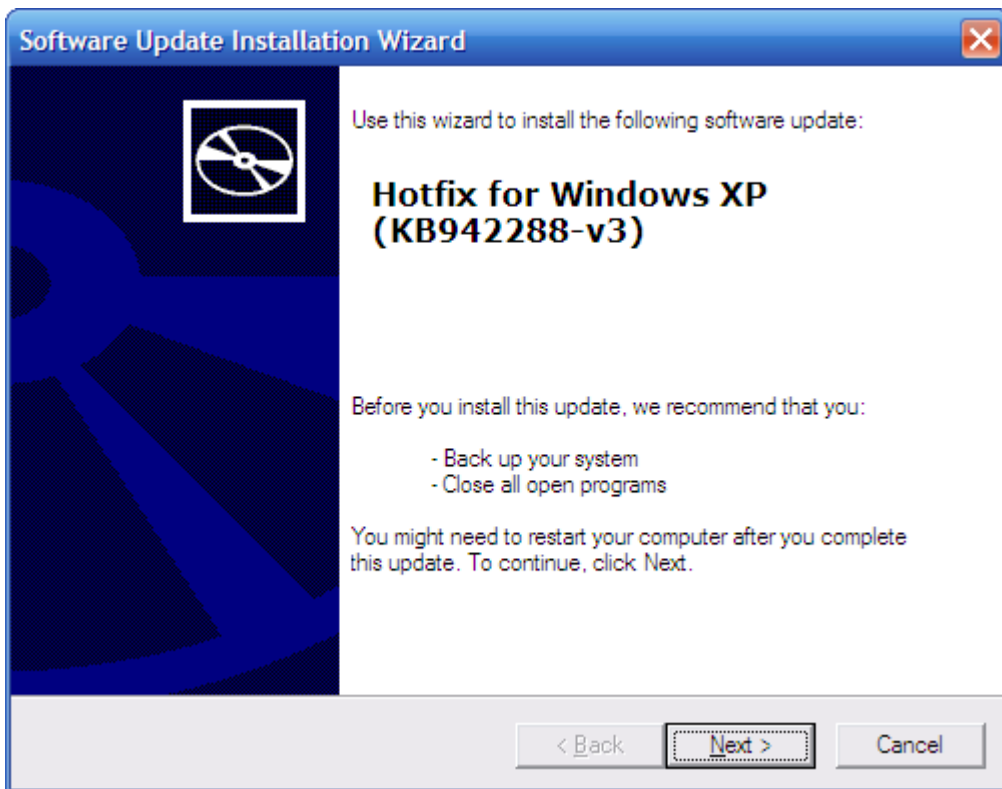
If it is desired to start the second pre-requisite installer, to install the MS SQL Server 2008 Express on the docAlpha Server machine, launch its installation file at this time, using the local administrator user account (use “**Run as Administrator**” option under Windows Vista / Windows 7):

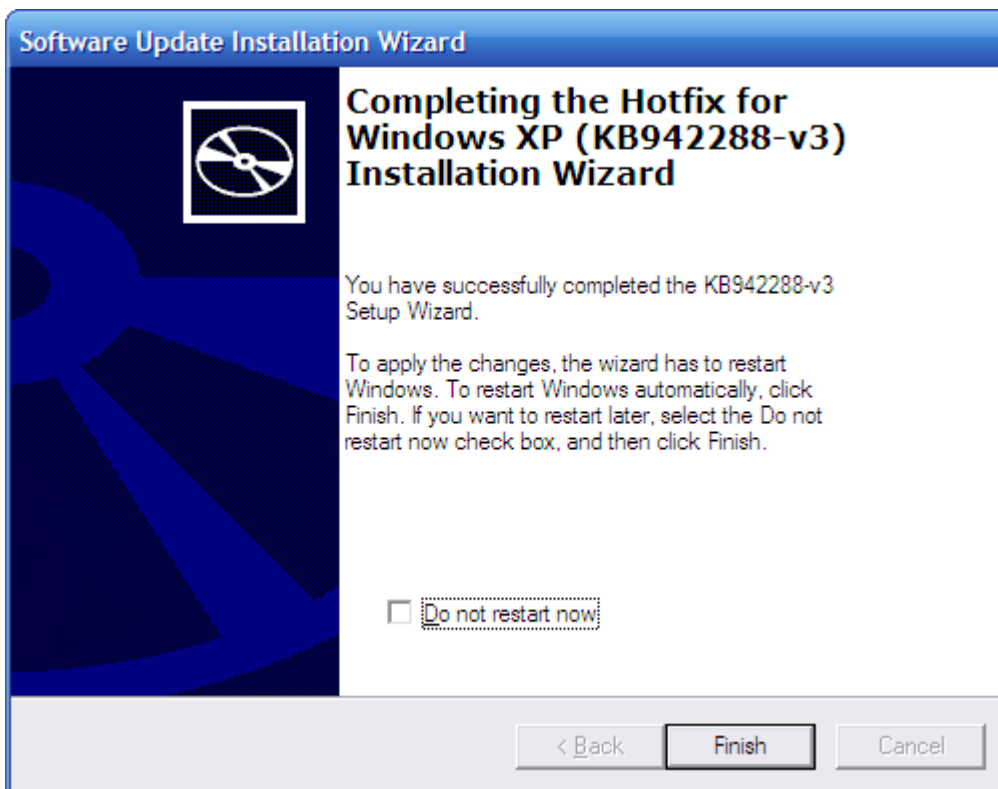
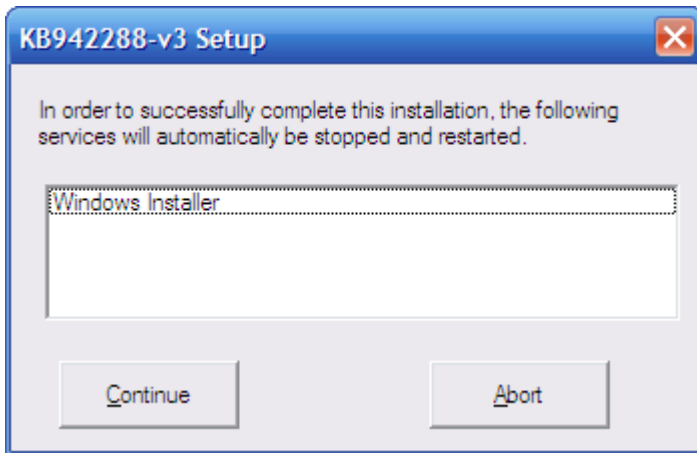
Setup_Artsyl_Prerequisites_2_Database.exe

That launches its installation wizard. Follow the wizard prompts to install the SQL Server database to your machine.



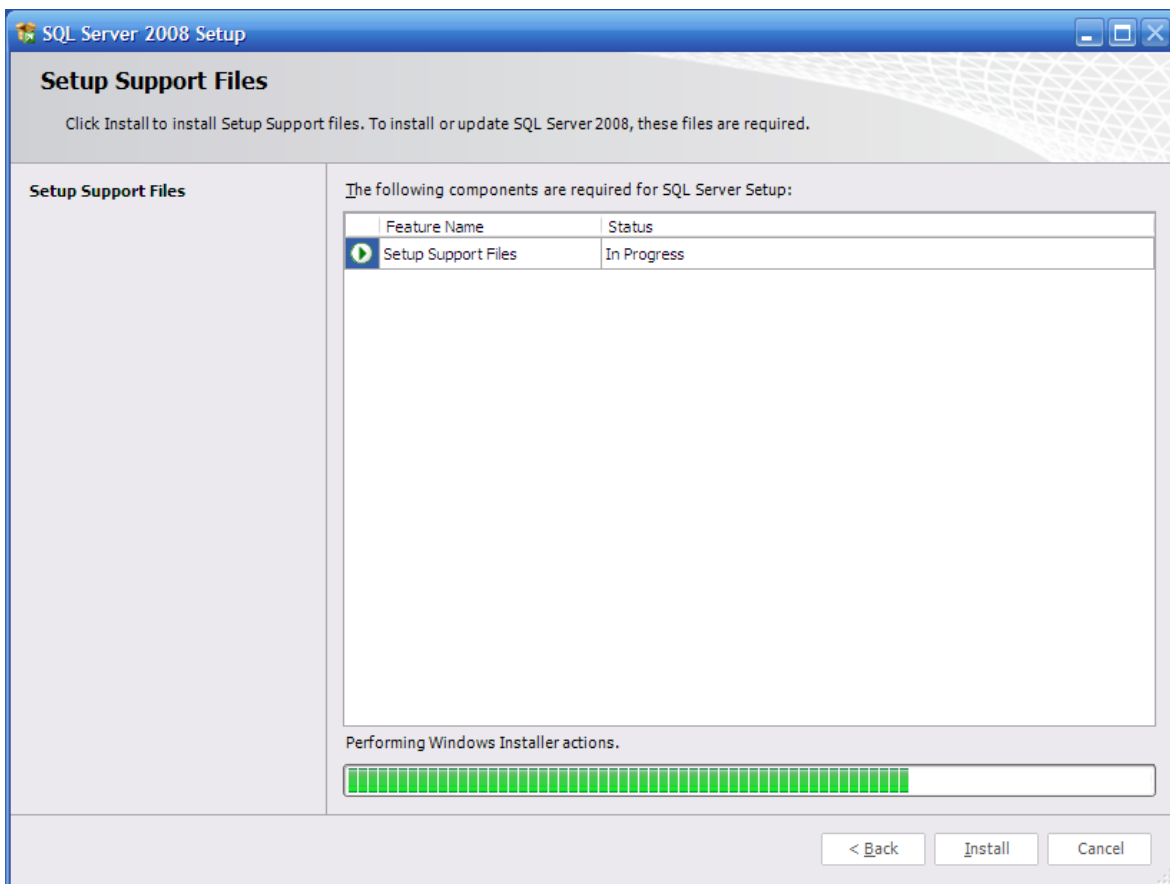
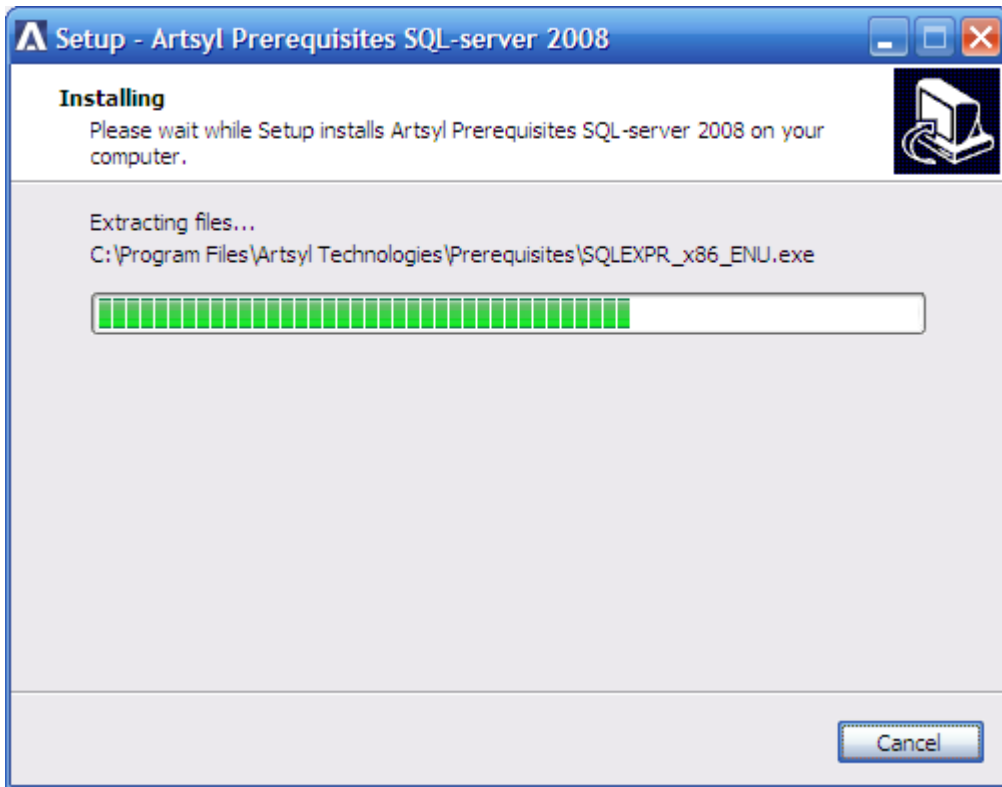
Note: Aside from installing the SQL Server Express 2008, the installer also installs components that are required to run the SQL Server 2008 as pre-requisites. Therefore, for MS Windows XP machines, there will be the necessary updates installed to allow it to host a SQL Server Express 2008, including the Windows Installer version 4.5:



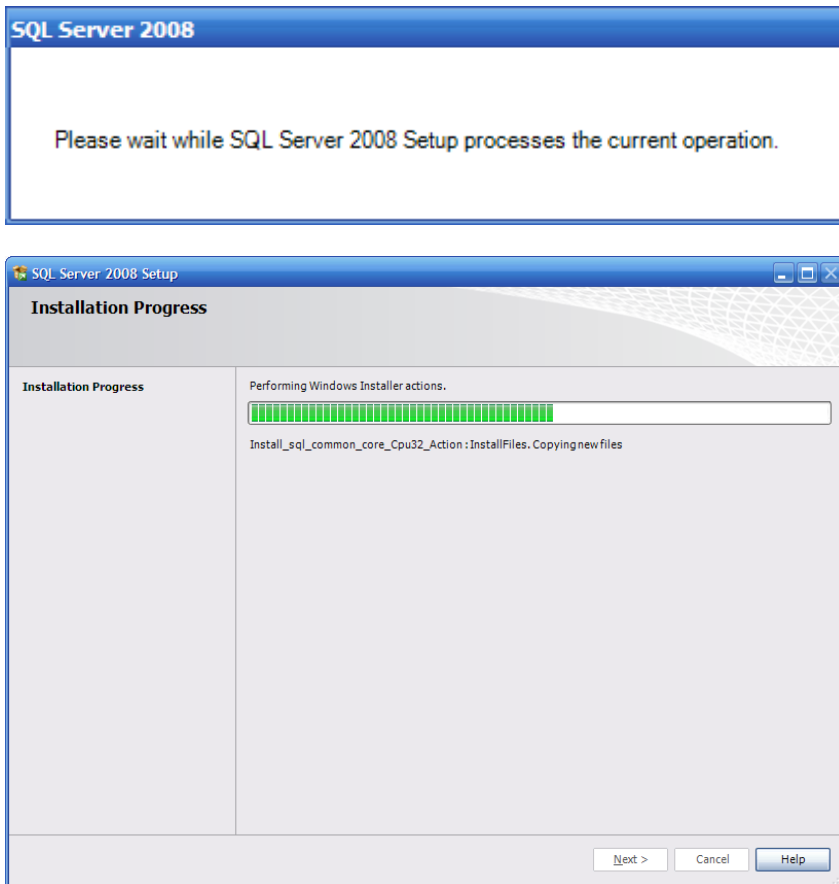


Click "Finish" to complete the pre-requisites installation. Reboot the computer if prompted.

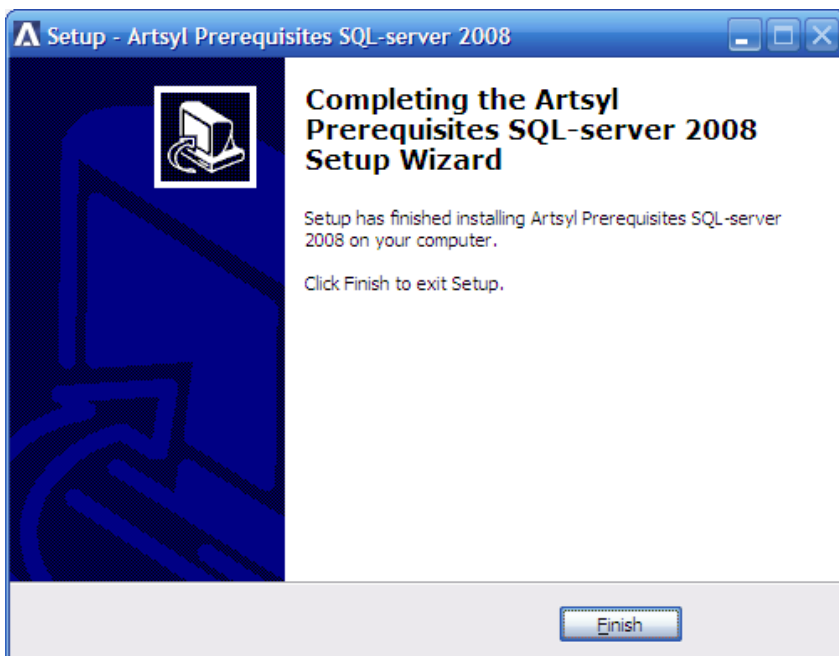
After reboot the installation wizard will continue, installing the SQL Server 2008 Express package:



You may see the following messages for several minutes as the installation wizard performs its steps:



When the process completes, you should see a confirmation of successful installation of the MS SQL Server 2008:



At this point, all pre-requisites are in place and the machine is ready for docAlpha Server installation.

2.2. Artsyl Network License Manager Installation

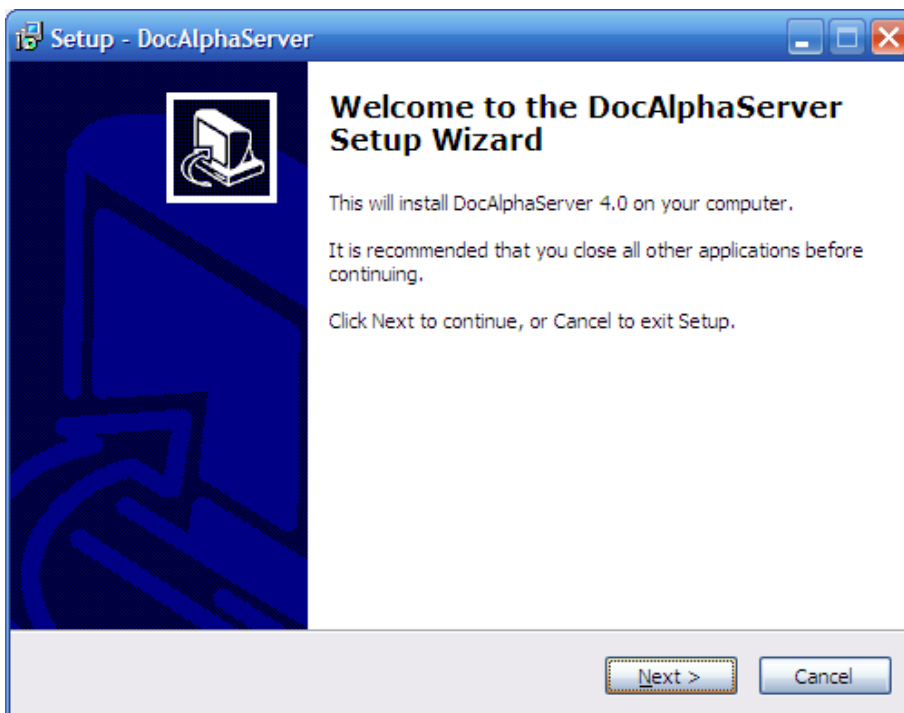
If the Network License Manager is planned to be installed on the same machine as docAlpha Server, run the installation process for it now. Refer to the **Network License Manager Guide** for the full details on installation of it on the same or on a dedicated (separate) machine from docAlpha Application Server.

If docAlpha Server is installed on a physical server, or on a virtualized server that is always hosted on the same physical machine (no automatic moving to another host is enabled in the virtualization environment), then installation of the Network License Manager is recommended to be done **on the same machine** as docAlpha Server. In this case, install just the Network License Manager as described in the Network License Manager Guide. You do not need to re-run the Pre-Requisites Installer No. 1 again at this point since it is already done at this point of installation on this machine.

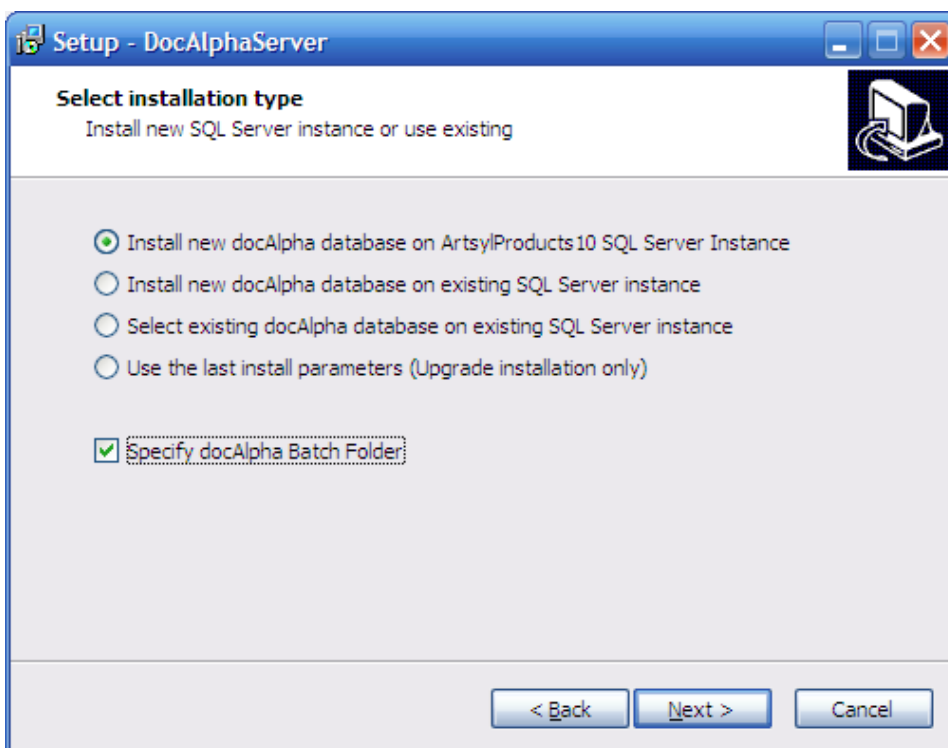
On the other side, if docAlpha Server is installed on a virtual server that may be using automatic moving to another host option (such as V-Motion from VM Ware), the Network License Manager needs to be installed **on its own separate machine**, either physical station or virtual station with V-Motion prohibited (since the licenses bind to the physical host for both physical and virtual installations). In this case, follow all steps of full installation (with pre-requisites) that the Network License Manager requires, as defined in the Network License Manager Guide, to install it on the dedicated machine.

2.3. docAlpha Server Installation Wizard

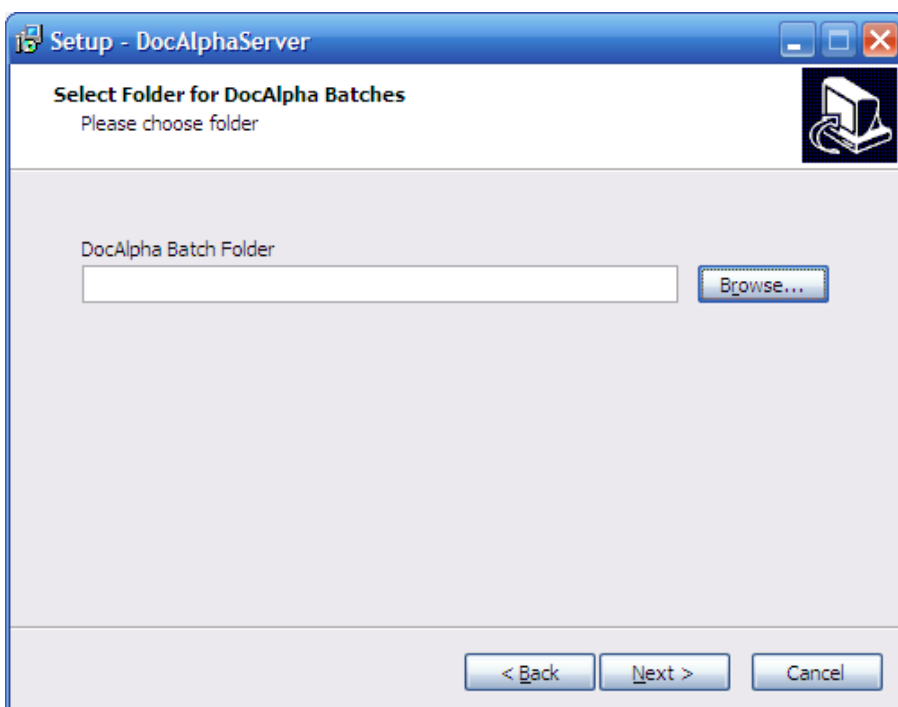
Once both pre-requisites are installed (refer to the Section 2.1 above for details), and the Network License Manager is installed on the same or on a dedicated separate machine (refer to the Section 2.2 above for details), the docAlpha **Full** Server Installation Wizard should be started to install the docAlpha Server:



Once you accept the EULA terms you will see the screen asking to select the type of installation. Refer to the Section 2.3.1 below to select the optimum **Installation Scenario** for docAlpha Server Installation:



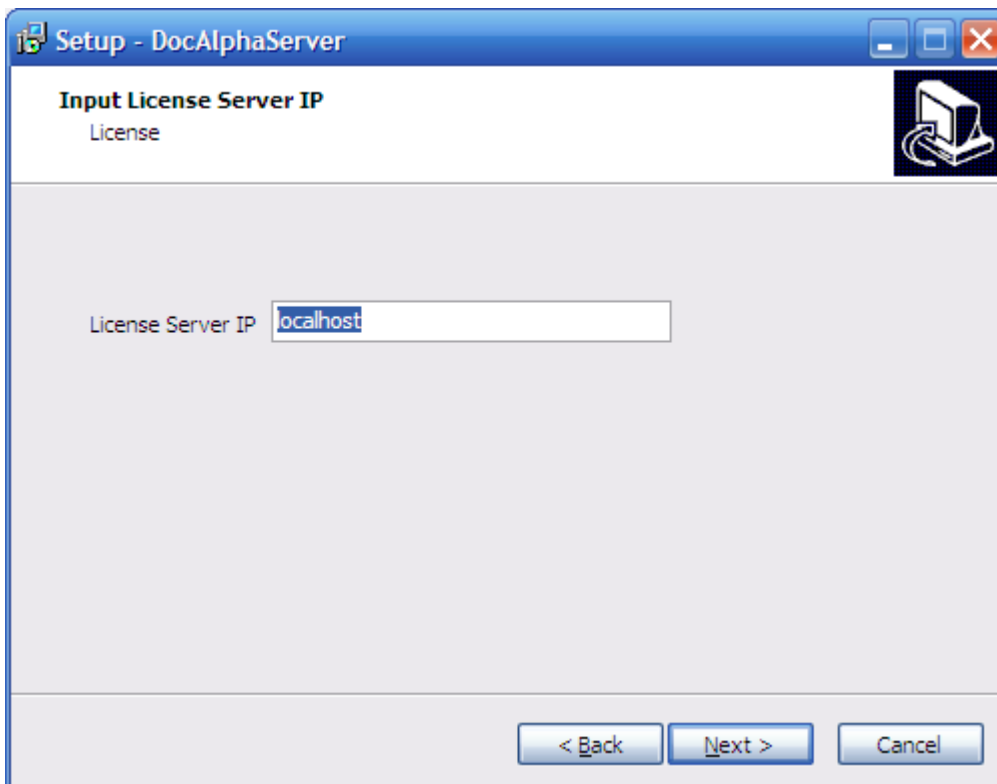
It is recommended to select the “Specify docAlpha Batch Folder” checkmark to set up the **root folder** to contain all **production batches** at this time. If you skip this step, you will need to configure that folder location from the docAlpha Server Configuration Utility later on. Refer to the Section 2.3.2 below for additional details. If selected, you will be prompted to type in or select the folder:



The folder can be local or network folder, and can be situated on the same or different machine.

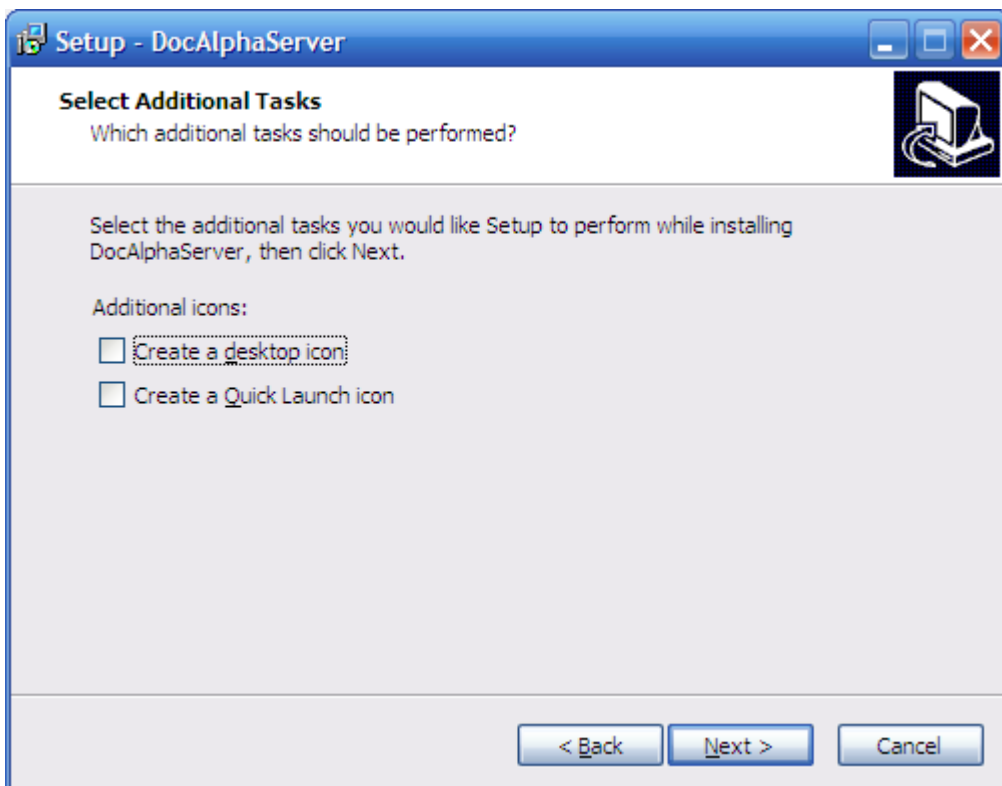
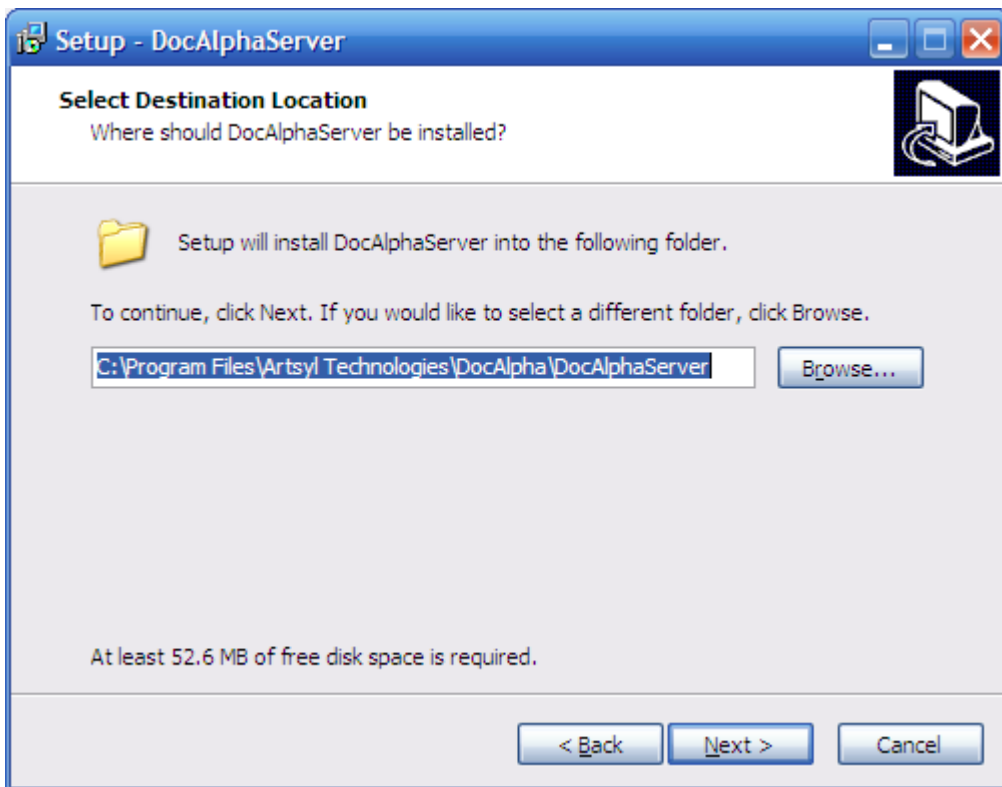
Note: If the hardware parameters of the docAlpha Server machine allow for enough hard drive space to contain production batches there, it is recommended to use that same machine folder since there will be reduced network traffic of image files in such case.

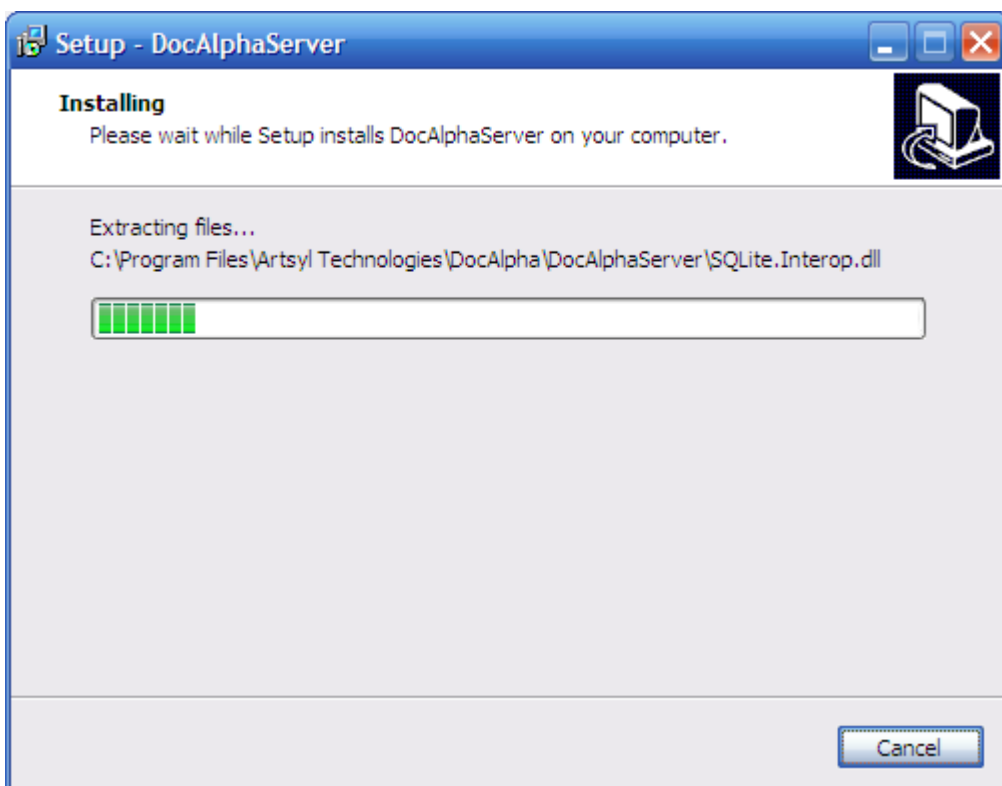
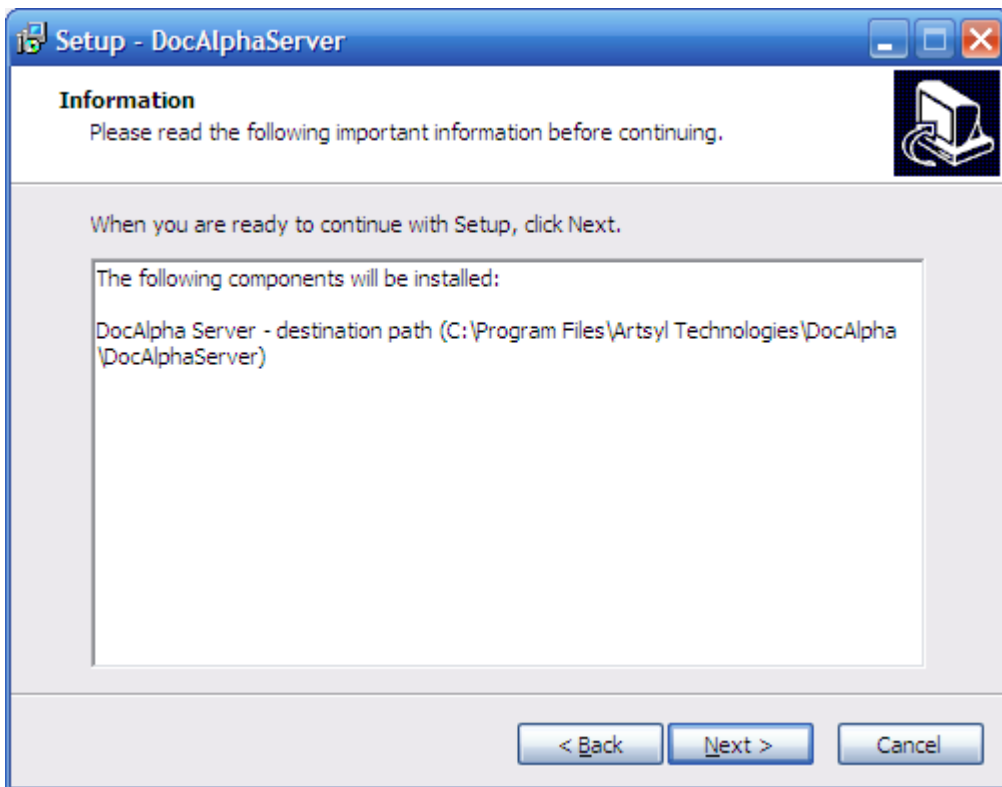
Next, the Installation Wizard will prompt to enter the IP address of the machine that hosts the Network License Manager (refer to the Section 2.2 above and the Network License Manager Guide for details of its installation, configuration and docAlpha licenses activation and management). If the Network License Manager is hosted on the same machine, you can keep the default value of “**localhost**”. Otherwise, type in the IP of the machine that hosts the Artsyl Network License Manager here:



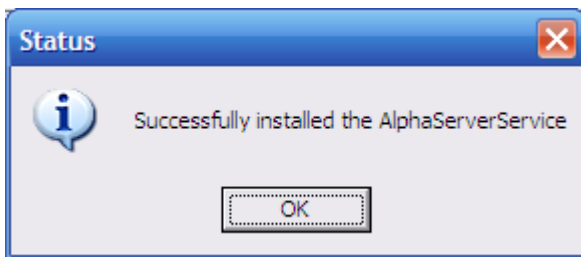
Note: One Network License Manager can manage multiple docAlpha licenses, including even for multiple docAlpha Servers, each with its own system of stations. Such option is convenient when there is one IT group that wants to control and configure all licenses that are used across the enterprise, in multiple branch offices. Please refer to the Network License Manager Guide for the details how to manage multiple licenses with the Network License Manager.

The next step of the installation is selecting the destination installation directory, options such as creating Desktop and Quick Launch icons, and starting the installation process:

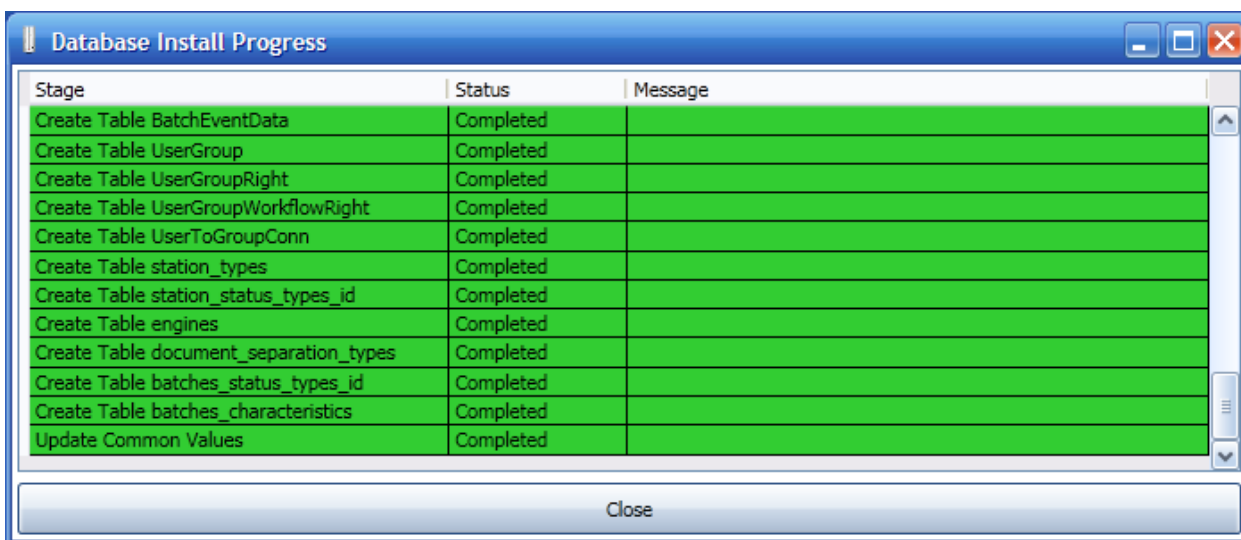




The docAlpha Server architecture is a Windows Service. After its installation files are copied to the destination directory, the Installer then installs and configures the docAlpha Windows Services. After it is installed and registered with the system, you will see the confirmation message:



The next step in the Wizard is installation of docAlpha database. The progress of the database installation is detailed on the screen. Each step is marked as green (successful), yellow (skipped) or red (failed):

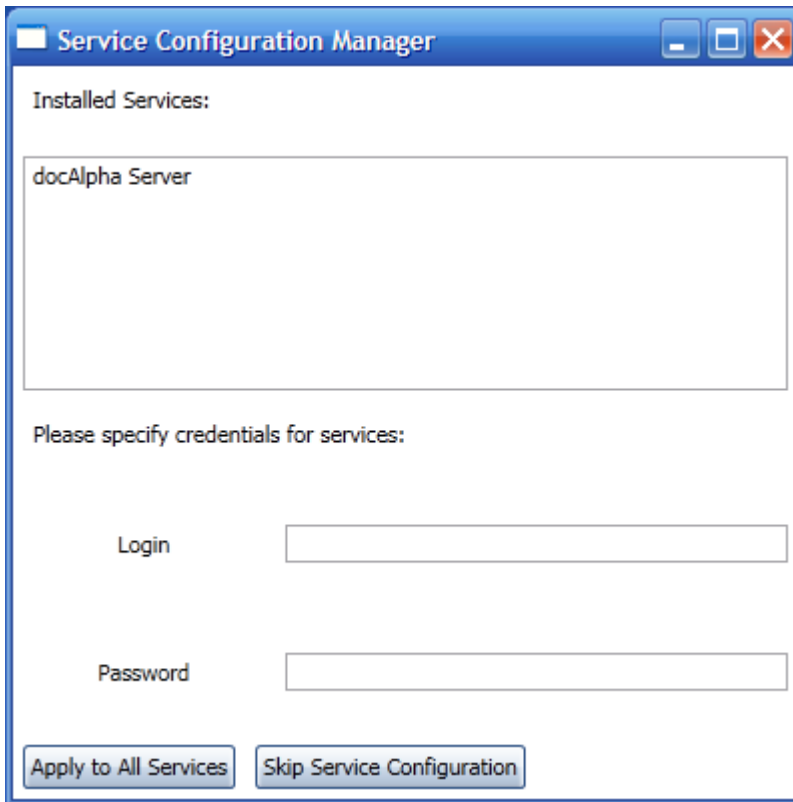


Note: if any steps are failed or skipped (red or yellow), you will need to finish the configuration of the database from docAlpha Server Configuration Utility after the installation.

On the next step the Wizard offers to configure the automatic Windows services with an administrative account so that the services can be automatically started when Windows OS is starting.

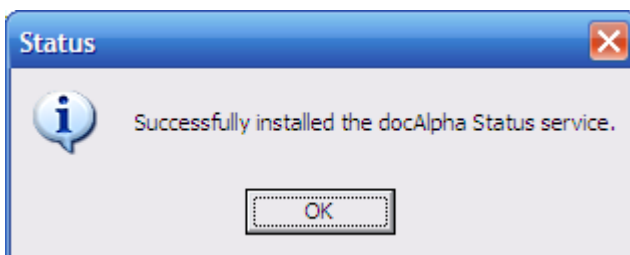
Note: only administrator-level account can be used to start an automatic Windows services. Make sure that the account used here has full administrative privileges and that its expiration policy won't prevent it to start the docAlpha Server Service properly.

If this step is skipped, the docAlpha Server Windows service can be later configured with the standard Windows means of services configuration, for example, by right-clicking on "My Computer" icon, selecting "Manage", opening the "Services" node and right-clicking on docAlpha Server Service in the list of services to modify its log on properties.

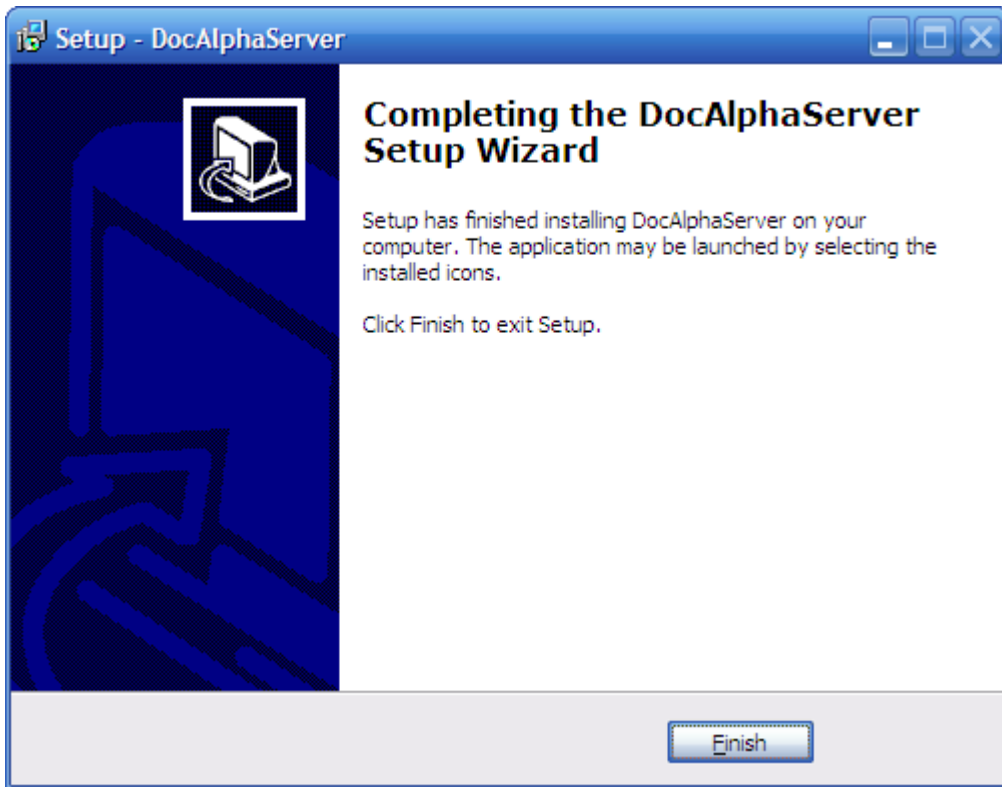


The account is verified and if it is confirmed as existing by the system, a credentials change confirmation message appears on the screen.

The next step is installation of docAlpha Status Service. The Status Services allows monitoring and configuring docAlpha Server service as well as docAlpha automatic station services (Auto-Registration, Recognition and Export), if they are installed on the same server machine. Once installed, a confirmation message will be displayed:



At this point the installation of the full docAlpha Server installer is completed. Click "Finish" and proceed with the following installation steps (installing docAlpha Stations Full Installer, docAlpha Server Updates, and docAlpha Stations Updates).



2.3.1. docAlpha Server installation scenarios

- **Install new docAlpha database on ArtsylProducts10 SQL Instance:**

Select this scenario if you already installed and fully configured an instance of SQL Server 2008 to hold the docAlpha database, for example using the SQL installation package deployed by the Artsyl Pre-Requisite Installer No. 2 and running it in a UI-based (not silent) mode. This installation scenario will install docAlpha database to the SQL Server 2008 named instance ARTSYLPRODUCTS10 with the predefined user “sa” and the predefined password “**Artsyl0154dA**” and will populate the database with all the necessary tables and data. The docAlpha Application Server service will be installed as well, along with the Status Monitoring Utility service, and both services will be registered with the Windows OS.

- **Install new docAlpha database on existing SQL Server instance:**

Select this scenario to install a **new docAlpha installation** that uses your existing **named instance of MS SQL Server**. This scenario allows you to select a local or remote MS SQL Server. Refer to the "[Software Requirements for Artsyl docAlpha 4.5 DB Server](#)" section for supported MS SQL Server versions.

The installer will deploy the docAlpha internal databases and tables to the selected named instance of SQL Server and populate them with the necessary data. Then it will install docAlpha Application Server service and the Status Monitoring Utility service and register both services as the Windows services registered to run on this server machine.

NOTE: If the docAlpha internal database already exists on that selected named instance, the installer will update the database to the most up-to-date state. During such an update, all user-defined structures (workflows, batches, user accounts) are preserved. The docAlpha server service and the License Manager are also updated to the most recent version with this scenario. Because of this, this scenario should be selected for installation of **all major updates** that impact internal database, the Server service and licensing.

- **Select existing docAlpha database on existing SQL Server instance:**

Seldom-used installation scenario that only updates the existing docAlpha database but does not update the docAlpha Server Windows Service and other server components. Select it only for running update installers where the release notes specify explicitly to update the DB portion only.

The installer will update the docAlpha internal databases and tables on the selected named instance of SQL Server and populate them with the necessary data.

- **Use the last install parameters (Upgrade installation only):**

Select this scenario to **update an existing docAlpha installation**. This scenario will automatically update the server that you installed previously, based on all information on user accounts and other parameters that you selected during the previous installation session.

The installer will update the docAlpha Server Windows Service, internal docAlpha database and other server-side utilities on your existing docAlpha installation. Because of this, this scenario is most commonly used for update installation of **all minor updates** that impact application and services components only, but not the internal data structures. If any update of docAlpha does not specify the installation scenario implicitly, it infers using this scenario for installation of the updates. This is the most commonly used updates installation scenario.

2.3.2. docAlpha Batches Location

The option to "**Specify docAlpha Batch Folder**" location allows you to select the file server machine (if different from the server where docAlpha Application Server component is installed) and the network path to the location of the root folder where all batches currently in production will be stored as sub-folders.

Selecting this option allows doing the setting right at the installation time. If not selected, the same option can be configured using the docAlpha Server Configuration Utility options section after the installation. This needs to be done **before the server service is started**.

NOTE: Scanned batches can take considerable disk space so this location needs to be capable of meeting demand to store all scanned images and temporary structures of batches for all workflows and all operators that will use the docAlpha system.

WARNING: Make sure your hard drive which hosts the "Batches" folder has at least 1GB of free space for normal daily operation at any time. Lack of free disk space may lead to stopping of the services due to inability to process the batches of documents through the workflow steps.

NOTE: You can **estimate the required hard drive space** for the “Batches” folder using the following guidelines: any batch that is still listed in monitoring station (is still under processing, or has been processed but is still under the Retention Policy) will require up to 25 MB of hard drive space per each document page when it is listed on the “Batches” Tab of the Monitoring Station, and 1 to 7 MB of hard drive space per each document page when it has been moved to the “Recycle Bin” tab of the Monitoring Station.

3. docAlpha Stations Installation

This section covers the installation of docAlpha Stations software and options available during the installation.

docAlpha Stations installer can be run on any machine that needs one or more docAlpha stations installed. It should be run after the Server installer already is finished. More than one docAlpha station can be installed on the same machine. Some or all stations can be also installed on the same machine that runs docAlpha Server components. Refer to the section "[Minimum & Recommended Environment for Artsyl docAlpha 4.5 Operation](#)" of this Guide for details of stations installation requirements.

3.1. Pre-Requisites

Refer to the "[Supported Software and Hardware Platforms](#)" section of this Guide for the details of minimum and recommended environment to install and run docAlpha Stations.

Note that requirements differ for different type of stations. For the fully-automatic stations, the requirements also depend on your plan to install just the automated stations, or both the server components and the fully-automatic docAlpha stations on the same server machine.

Before commencing docAlpha Stations **update installation**, all docAlpha UI-based stations need to be closed, and the Windows Service-based fully-automatic stations services need to be stopped. All automatic-station configuration utilities have to be closed as well.

If docAlpha Stations installer is run on the same machine where docAlpha Server is already installed, there is no need to run any pre-requisite installers since the Stations pre-requisites are a sub-set of docAlpha Server pre-requisites.

If docAlpha Stations installer is run on a different machine from docAlpha Server, then prior to installing the Stations, you need to run the Artsyl Pre-Requisites Installer No. 1 on the machine, using a local administrator user account (use “**Run as Administrator**” option under Windows Vista / Windows 7):

Setup_Artsyl_Prerequisites_1_FrameWorks.exe

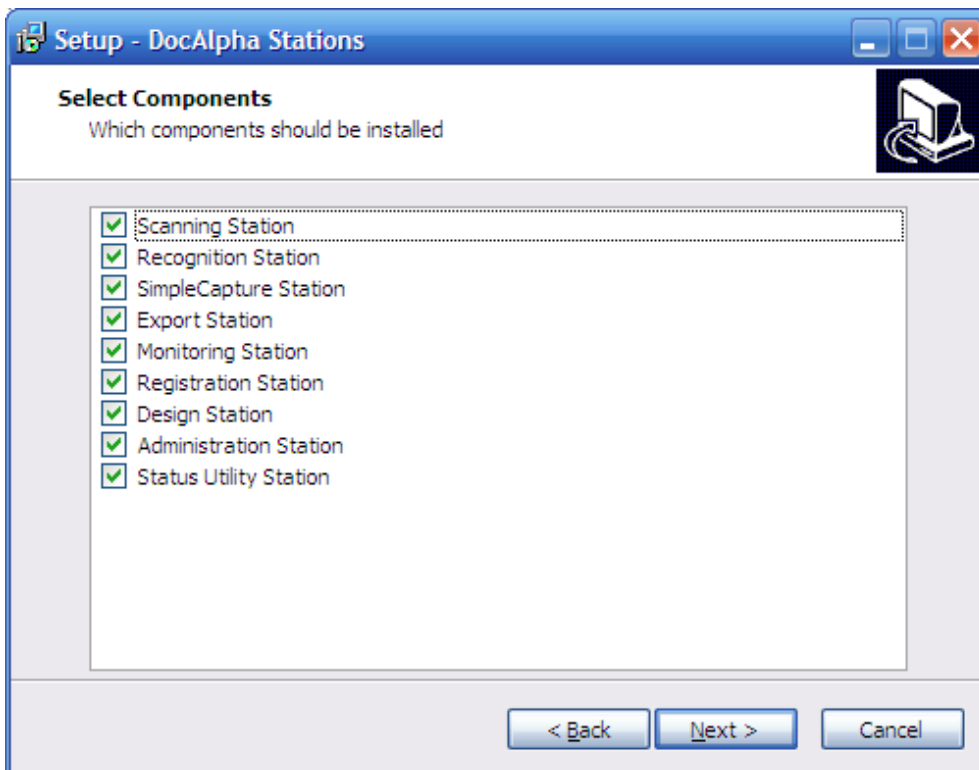
Refer to the section 2.1 above on details of the Pre-Requisites No. 1 installation.

You do **NOT** need to run the Pre-Requisites No. 2 for the Stations installer (it contains the components necessary only for docAlpha Server and not needed for docAlpha Stations).

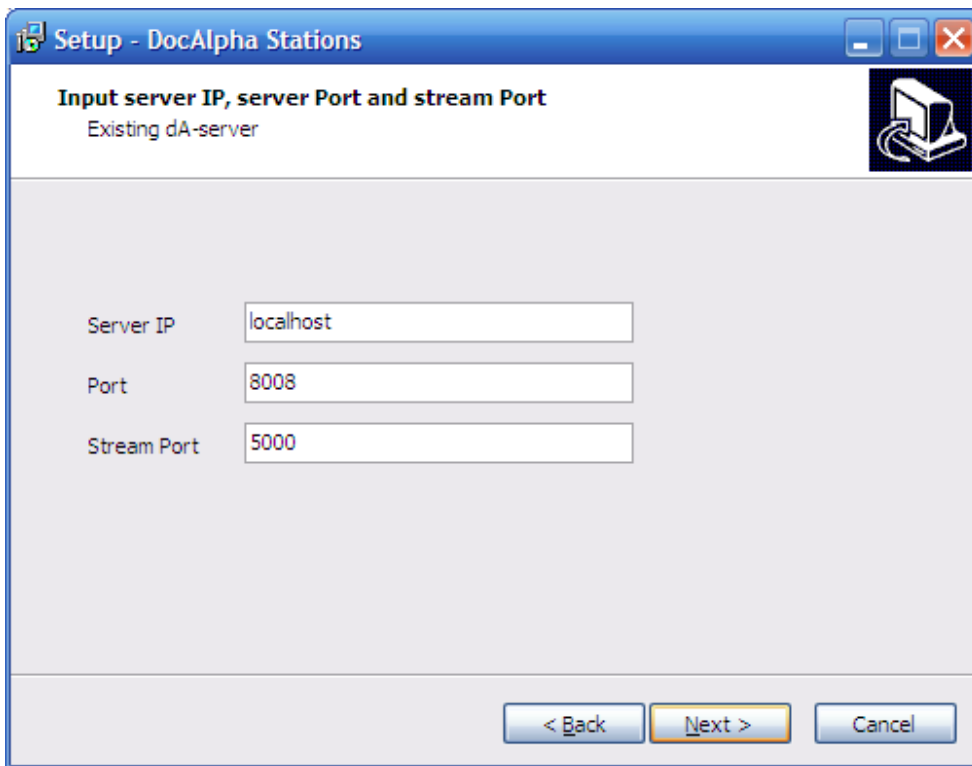
3.2. docAlpha Stations Installation Wizard

To start the docAlpha Stations installation, launch the "**SetupDocAlphaStations_Full**" installer by right-clicking on the file and selecting "**Run as Administrator**" option. That will launch docAlpha Stations Installation Wizard. Follow the prompts of the Installation Wizard to select which stations you want to install and to complete the stations installation.

Once you accept the EULA terms you will see the screen asking to select the stations that you want to install on this computer. By default all stations are selected to be installed:



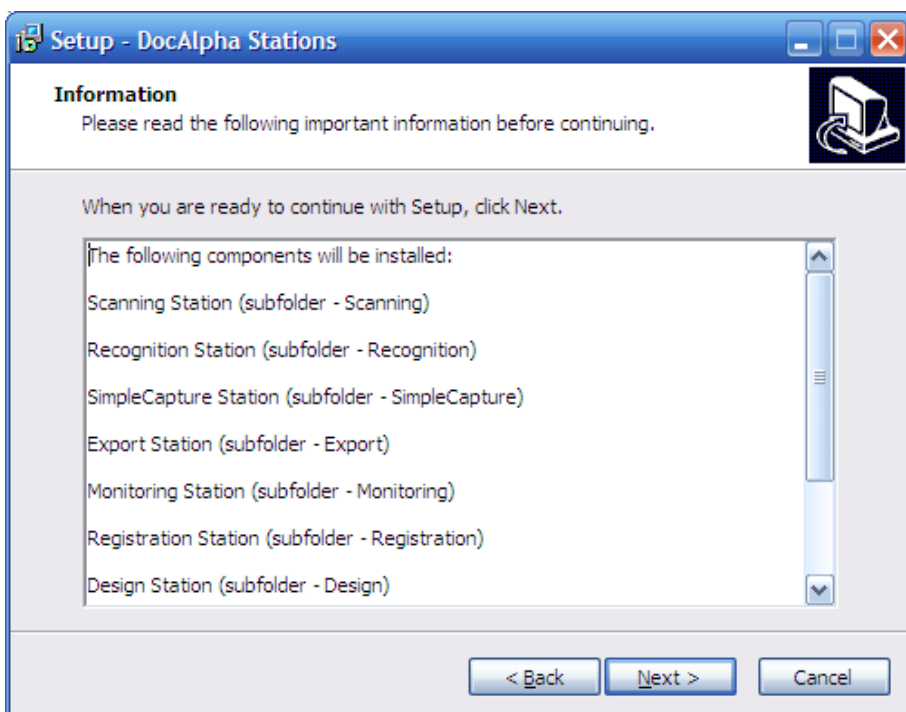
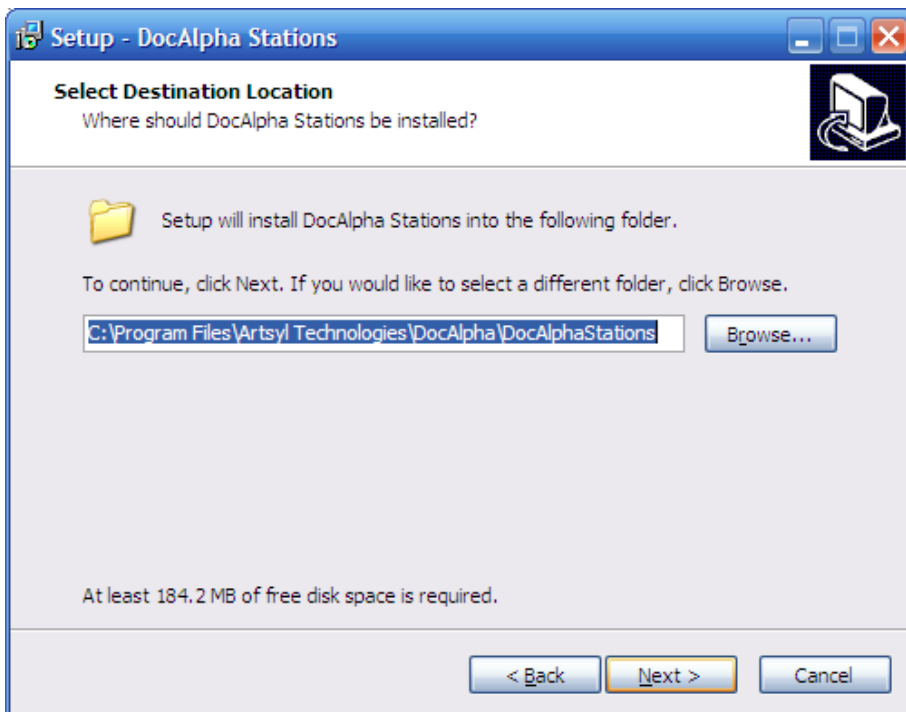
Next, the Wizard will ask about the IP address, communication port number and data stream port number to access docAlpha Server:

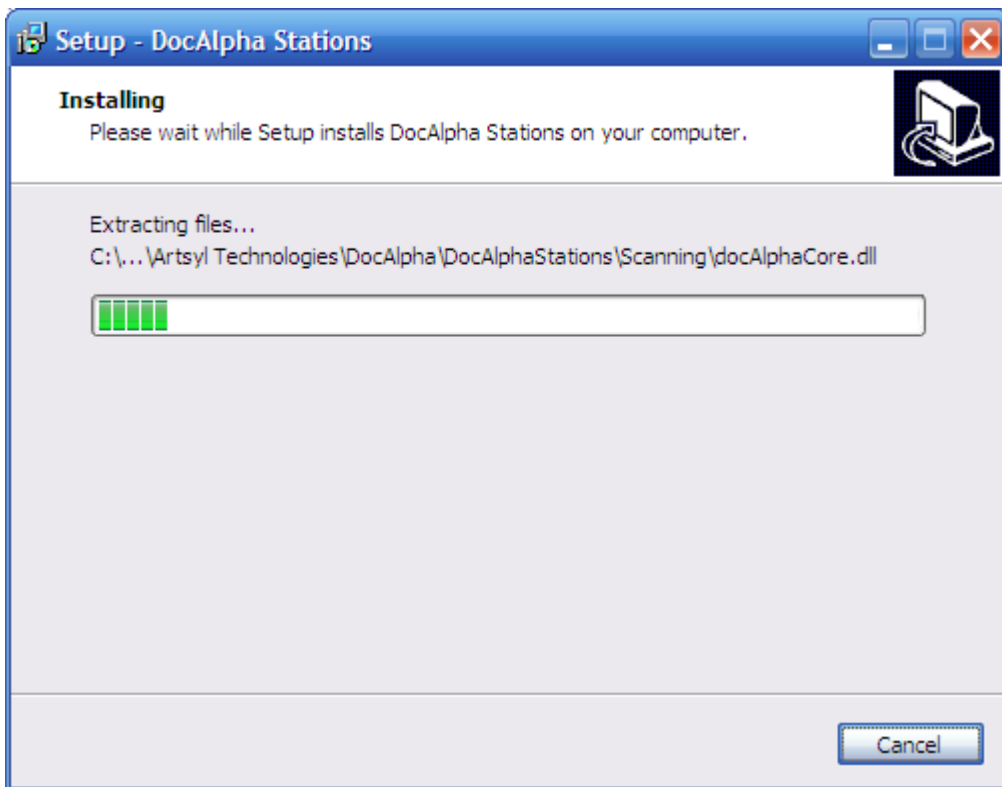


The default communication port is 8008 and the default stream port is 5000. Note that those ports might need to be properly configured in the Windows Firewall settings to allow the correct communication and data exchange with docAlpha Server.

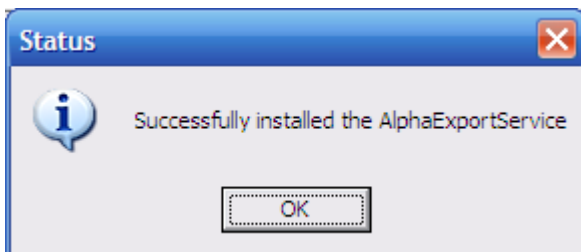
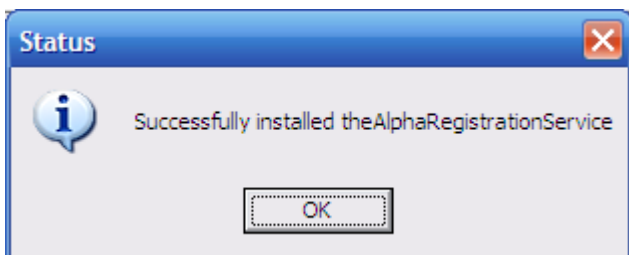
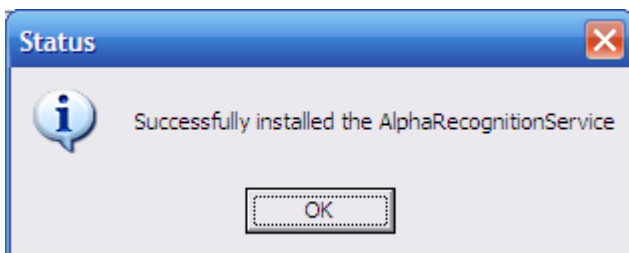
If the server is installed on the same machine, keep the “localhost” as the server address. Otherwise, type in the correct network IP address for the machine where docAlpha Server is installed.

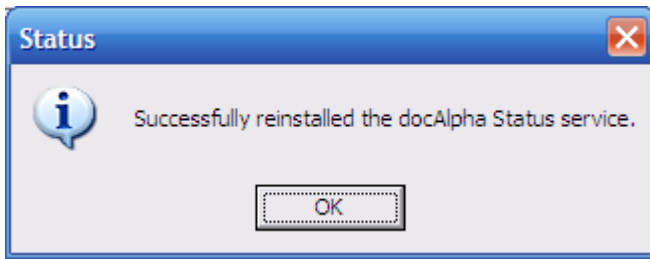
Select the destination installation folder and launch the installation process:



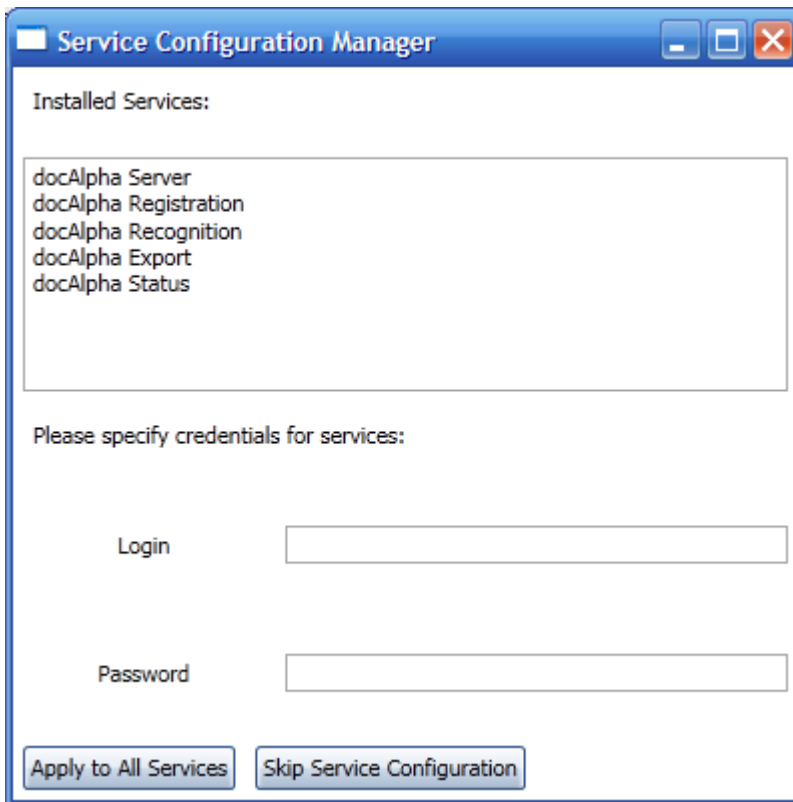


After copying the stations files, the installer installs the Windows Services for the service-architecture automatic docAlpha Stations, including Auto-Registration, Recognition, Export Stations and docAlpha Status Service:





The next step of the Wizard offers to configure the account to be used to automatically start the Windows Service-architecture stations when the Windows OS starts.



Note: only administrator-level account can be used to start an automatic Windows services. Make sure that the account used here has full administrative privileges and that its expiration policy won't prevent it to start the docAlpha Server Service properly.

If this step is skipped, the docAlpha services can be later configured one by one with the standard Windows means of services configuration, for example, by right-clicking on "My Computer" icon, selecting "Manage", opening the "Services" node and right-clicking on docAlpha service to be configured in the list of services to modify its log on properties. However, doing it in the installer has an added benefit to type in the user just once and apply the credentials to ALL services log on parameters in one simple step.

The account is verified and if it is confirmed as existing by the system, a credentials change confirmation message appears on the screen. At this point the Stations Installer is completed. If desired, you may continue to installing docAlpha Server Updates and docAlpha Stations Updates.

4. Supported Software and Hardware Platforms

This section covers the software and hardware platforms supported for installation and use of docAlpha product, the minimum and recommended options for server and station components installation.

4.1. Minimum & Recommended Environment for Artsyl docAlpha 4.5 Operation

4.1.1. Supported Operating Systems

4.1.1.1. docAlpha Server

The following operating systems are most recommended for docAlpha server components installation:

- **MS Windows 2003 Server** (the most recommended option for the server) , 32 bit and 64 bit
- **MS Windows 2008 Server R2** (fully supported but longer to configure) , 32 bit and 64 bit
- **MS Windows 2012 Server** (fully supported but longer to configure), 64 bit

Also fully supported for the docAlpha Server but **not recommended for the server use** are:

- **MS Windows XP SP3+**, 32 bit and 64 bit
- **MS Windows Vista SP1+**, 32 bit and 64 bit
- **MS Windows 7**, 32 bit and 64 bit
- **MS Windows 8**, 64 bit

4.1.1.2. docAlpha Automatic Stations

Fully-automated (Windows Services-Based) stations can run on the server operating systems suited for docAlpha Server, with the same recommendations (MS Windows Server 2003/2008 as the most recommended platform).

4.1.1.3. docAlpha UI-Based Stations

The stations that involve active interaction with operators include **Verification Station**, **Scanning Station**, as well as **Administration**, **Monitoring** and **Design Stations**.

The following operating systems are supported for the above-mentioned UI-based docAlpha stations:

- **MS Windows XP SP3+**, 32 bit and 64 bit
- **MS Windows Vista SP1+**, 32 bit and 64 bit
- **MS Windows 7**, 32 bit and 64 bit
- **MS Windows 8**, 64 bit
- **MS Windows 2003 Server**, 32 bit and 64 bit
- **MS Windows 2008 Server R2**, 32 bit and 64 bit
- **MS Windows 2012 Server**, 64 bit

Recommended OS for the UI-based docAlpha stations:

- **Windows XP SP3+** and **Windows 7** provide the best speed and reliability with all other parameters on par.

4.1.2. Supported Virtual Environments

docAlpha Server and Stations support the following virtualized environments:

- **VM Ware**, 32 bit and 64 bit
- **Citrix XenApp**, 64 bit

Note: the basic versions of the mentioned virtualized environments are tested for compatibility. Customized or special versions are not guaranteed for full compatibility.

Virtualized environments never provide the same productivity as installing the stations directly on the main OS. Depending on a VM used, the drop in productivity can be from about 10% to about 70% in worst cases (depending on the configuration and proper allocation of CPU and memory resources, as well as on the overall efficiency of the VM with the file system operations).

4.1.3. Minimum and Recommended Hardware

4.1.3.1. docAlpha Server

CPU Qty: 4 x P4 (or quad-core) minimum.

Recommended: Xeon Dual Quad-Core (eight cores total) or equivalent and higher.

NOTE: If all automatic docAlpha stations are also installed on the same physical server machine then 8 CPUs (cores) are the minimum.

CPU speed: 2 GHz minimum (higher clock rate is recommended if the Recognition Station is installed on the same server as that is the most CPU-intensive docAlpha component).

RAM: 6 GB minimum, 8 GB recommended for Server-Only option, 8 GB minimum, 16 GB recommended for Server + all automatic stations installed on the same server machine.

Hard drive: 500 GB minimum, adjust to meet the space requirements to store batches if used as the batches file server according to the expected scanned batches volume per day and the retention policy used. Refer to the **Administration Guide** for the details on the setting up and using retention policies in docAlpha.

WARNING: If the hard drive that hosts the “Batches” Folder has less than 1GB of free space you may experience frequent services stops.

NOTE: You can **estimate the required hard drive space** for the “Batches” folder using the following guidelines: any batch that is still listed in monitoring station (is still under processing, oh has been processed but is still under the Retention Policy) will require up to 25 MB of hard drive space per each document page when it is listed on the “Batches” Tab of the Monitoring Station, and 1 to 7 MB of hard drive space per each document page when it has been moved to the “Recycle Bin” tab of the Monitoring Station.

4.1.3.2. docAlpha Stations

docAlpha 4.5 **Recognition** and **Export** Stations:

- **CPU Qty:** 2 (or dual-core) minimum, 4 (or quad-core) **highly** recommended per each station
- **RAM:** 4 GB minimum, 6+ GB recommended

docAlpha 4.5 **Scan, Auto-Registration, Verification** and **Design** Stations:

- **CPU Qty:** 2 (or dual-core) minimum and recommended
- **RAM:** 3 GB minimum, 4+ GB recommended

docAlpha 4.5 **Administration** and **Monitoring** Stations:

- **CPU Qty:** 1 x P4 minimum, 2 (or dual-core) recommended

- **RAM:** 2 GB minimum, 4+ GB recommended

Hard drive: 80 GB minimum for any of the stations if you perform services re-starting at least once a week. Please note that services re-starting is important because during such re-starting all temporary folder files clean-up is performed. It is recommended to schedule the re-starting of the automatic station services to enable the timely clean-up of the service temporary folders and avoid excessive use of the disc space by old temporary files.

Screen resolution: 1280 x 1024 minimum for UI-based stations.

4.2. Software Requirements for Artsyl docAlpha 4.5 DB Server

If docAlpha server is installed based on the existing MS SQL Server, make sure that the **MS SQL Server** is version **2005** or **2008** and the **communication tools are installed**.

The supported versions are **SQL Server 2005** and **SQL Server 2008**, both 32-bit and 64-bit versions. The most recommended version of the DB engine is **SQL Server 2008**.

If docAlpha server installs a new instance of SQL Server, the version installed will be **MS SQL Server Express 2008**.

For **SQL Server 2008**-based installation, make sure the following components are installed **prior to** running the installation of docAlpha Server installer **on the SQL Server host machine**:

- Microsoft SQL Server 2008 Management Objects (SMO)
- Microsoft SQL Server 2008 Native Client
- Microsoft SQL Server System CLR Types

All those components can be downloaded from the Microsoft support site.

Note: the **account** under which docAlpha Server will access the instance of SQL Server used to store the docAlpha databases, should have **dba access rights**.

4.3. Network Requirements for Artsyl docAlpha 4.5

docAlpha requires an active and enabled network connection to function. It is required even if the server and all stations are installed on the same machine.

To be exact, the following network components need to be configured, enabled and accessible for docAlpha:

- Network interface
- IP Address
- Gateway

4.4. Supported Incoming Document (Image) Formats

TIFF, JPG, BMP, PNG or PDF scanned with resolution from **200 dpi** up to **600 dpi**

For the list of supported image compressions for each format, see [section 4.3.2](#) below.

4.4.1. Most Recommended Incoming Image Format

The most recommended for OCR accuracy and speed is **TIFF** image format.

The most recommended compression for TIFF image format is **CCITT Group 4**.

For the list of all supported image compressions for each format, see the [section 4.3.2](#) below.

The most recommended **scanning resolution** is **300 dpi**.

Note: In case the page contains very small text (pitch size below 8) then scanning at 400 dpi or 600 dpi will increase the OCR accuracy for small text.

Note: In case verification by operator is included in the workflow, the high-resolution color scan images may slow down significantly the processing speed for the operator. Refer to the **Administration Guide** for applying format conversion to scanned documents during processing and preserving the original images for exporting purposes after the processing by the workflow.

4.4.2. Supported Image Compressions per Scan Type for JPEG and TIFF

Scan Type	Image Format	Compatibility with SC
BW	jpeg color	Fully compatible
BW	jpeg gray	Fully compatible
BW	jpeg-2000 color	Not compatible
BW	jpeg-2000 gray	Not compatible
BW	tiff BW LZW compression	Fully compatible
BW	tiff BW group3	Fully compatible
BW	tiff BW group3 fax	Fully compatible
BW	tiff BW group4	Fully compatible
BW	tiff BW group4 fax	Fully compatible
BW	tiff BW Huffman RLE compression	Fully compatible
BW	tiff BW packbits	Fully compatible
BW	tiff BW unpacked	Fully compatible

Scan Type	Image Format	Compatibility with SC
BW	tiff BW ZIP compression	Not compatible
BW	tiff color JPEG compression	Not compatible
BW	tiff color unpacked	Fully compatible
BW	tiff color ZIP compression	Not compatible
BW	tiff gray JPEG compression	Not compatible
BW	tiff gray packbits	Fully compatible
BW	tiff gray unpacked	Fully compatible
BW	tiff gray ZIP compression	Possible but NOT recommended
Color	jpeg color	Fully compatible
Color	jpeg gray	Fully compatible
Color	jpeg-2000 color	Not compatible
Color	jpeg-2000 gray	Not compatible
Color	tiff BW LZW compression	Fully compatible
Color	tiff BW group3	Fully compatible
Color	tiff BW group3 fax	Fully compatible
Color	tiff BW group4	Fully compatible
Color	tiff BW group4 fax	Fully compatible
Color	tiff BW Huffman RLE compression	Fully compatible
Color	tiff BW packbits	Fully compatible
Color	tiff BW unpacked	Fully compatible
Color	tiff BW ZIP compression	Not compatible
Color	tiff color JPEG compression	Not compatible
Color	tiff color unpacked	Fully compatible
Color	tiff color ZIP compression	Not compatible
Color	tiff gray JPEG compression	Not compatible
Color	tiff gray packbits	Possible but NOT recommended
Color	tiff gray unpacked	Fully compatible
Color	tiff gray ZIP compression	Not compatible
Grayscale	jpeg color	Fully compatible

Scan Type	Image Format	Compatibility with SC
Grayscale	jpeg gray	Fully compatible
Grayscale	jpeg-2000 color	Not compatible
Grayscale	jpeg-2000 gray	Not compatible
Grayscale	tiff BW LZW compression	Fully compatible
Grayscale	tiff BW group3	Fully compatible
Grayscale	tiff BW group3 fax	Fully compatible
Grayscale	tiff BW group4	Fully compatible
Grayscale	tiff BW group4 fax	Fully compatible
Grayscale	tiff BW Huffman RLE compression	Fully compatible
Grayscale	tiff BW packbits	Fully compatible
Grayscale	tiff BW unpacked	Fully compatible
Grayscale	tiff BW ZIP compression	Not compatible
Grayscale	tiff color JPEG compression	Not compatible
Grayscale	tiff color unpacked	Fully compatible
Grayscale	tiff color ZIP compression	Not compatible
Grayscale	tiff gray JPEG compression	Not compatible
Grayscale	tiff gray packbits	Possible but NOT recommended
Grayscale	tiff gray unpacked	Fully compatible
Grayscale	tiff gray ZIP compression	Possible but NOT recommended

Note: “Possible but NOT recommended” (four orange items above) indicate known issues with formats. Files in those formats **can** be processed with the docAlpha system but cause warning messages, extra clicks by an operator, or significantly slower processing speed.

