



Standard Requirements

Specification Guide

DocuPhase 6.4

Windows OS Server 2016 (or later)

Last Revised: July 27, 2020

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DISCLAIMER

These recommendations are only provided as a general point of reference for system installations, and may need to be adjusted to meet the demands of your specific situation.

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Revision History

Item #	Release #	Revision Date	Description	Tracking Notes
000		07/15/18	ORIGINAL – 6.4 only <i>The Standard Requirements Specification Guide for 6.3 can be found within the 6.3 online help:</i>	DP-1315

Introduction and Purpose of this Guide

The information contained within this document provides all the basic information needed for anyone considering, or planning, the implementation of the DocuPhase Platform: including overall system requirements for installation, implementation, and maintenance for a typical client environment: either on-premises or virtual/hosted.



IMPORTANT!

Client needs may vary; therefore, specific needs may dictate differences in requirements for both hardware and software.

The recommended specifications provided in this document are provided as a general point of reference for system installations only, and may need to be adjusted to meet the demands of a client's specific system.

Requirements Overview

Requirements for both On-Premises and Virtual/Hosted environments are provided below.

- ✓ Prepare (detach) and perform a full back-up (to a safe location) of all stored data and config files
- ✓ Review the DocuPhase Network Topology - see page 2
- ✓ Perform necessary installations and configurations - see page 3
- ✓ Be sure all Minimum System Requirements are met - see page 8
- ✓ Prepare the DocuPhase environment – refer to the [DocuPhase Installation and Upgrade Admin Guide for 6.4 \(and later\)](#)



IMPORTANT!

- *Because client system needs vary, specific environments may dictate differences in requirements for both hardware and software.*

The recommended specifications provided in this document are provided as a general point of reference for system installations only, and may need to be adjusted to meet the demands of a client's specific system.

- *Administrators can use the information in this guide as if the environments were to be virtual rather than physical. Given that actual performance is dependent on host server loads and hardware, it is up to the client system administrators to ensure adequate sizing and shared resource allocations.*
- *Users who have installed any version prior to 6.4 will notice that prerequisites for the installation of 6.4 have been reduced: making preparations for installation faster and easier.*

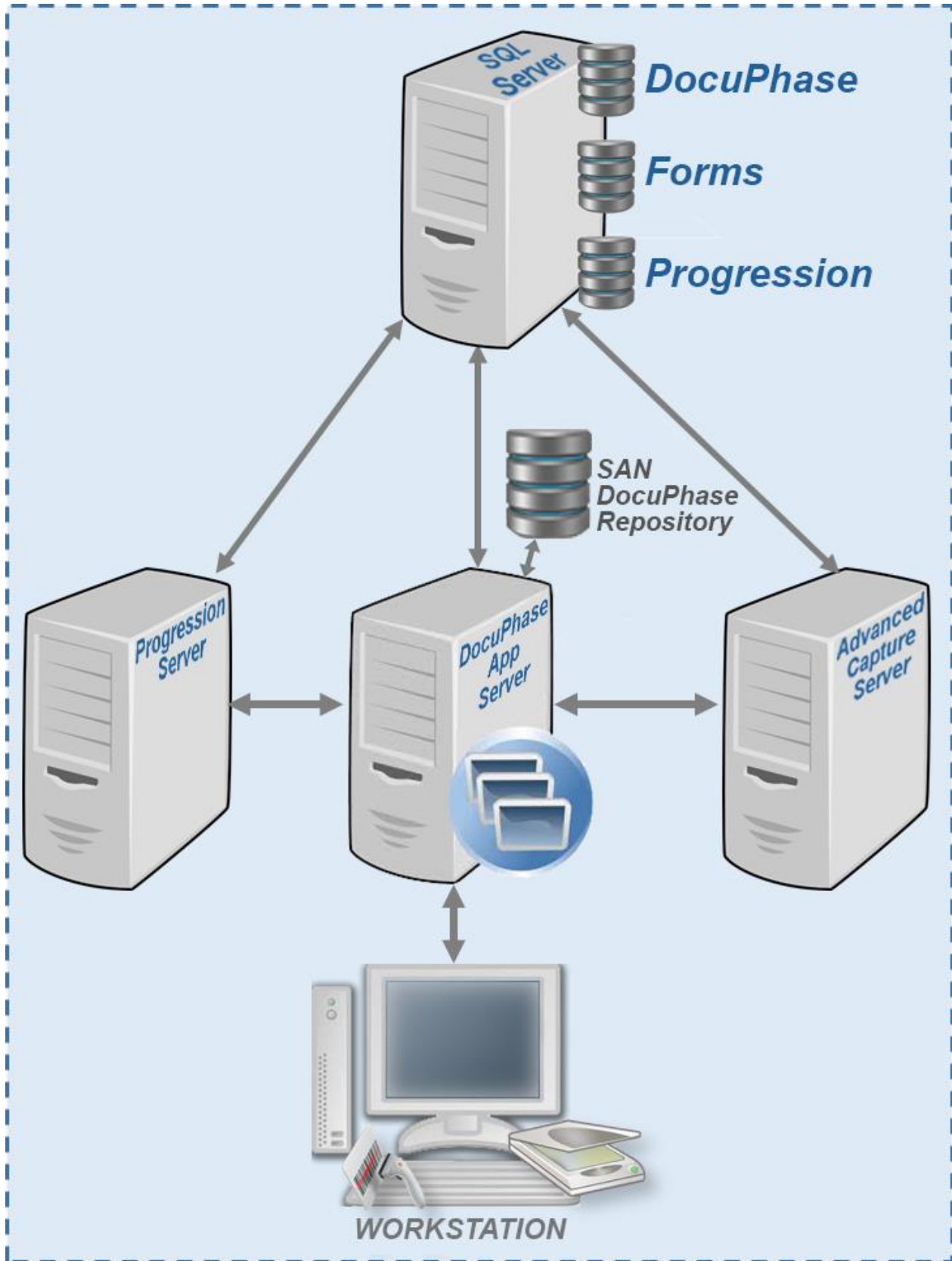


WARNING!

When upgrading to 6.4, DO NOT UNINSTALL any previously installed requirements/components. Some of those items are not included in the 6.4 installation, but may be required for the continued use of other applications installed on the system (e.g., Microsoft).

Only add new items as listed in the Required Installations and Configurations (e.g., OpenJDK, .NET Framework 4.8, etc) on page 3.

Typical DocuPhase Network Topology



Required Installations and Configurations

All of the following ***must be installed and/or configured***:

- ✓ **Microsoft Components (Framework, SQL, Service/Feature Packs, API, Office Add-ins)** - see below
- ✓ **.NET Framework 4.8** - see page 4
- ✓ **OpenJDK** - see page 4
- ✓ **IIS Configuration** - see page 5

Microsoft Components

- ✓ **Microsoft Framework 4.8 for Servers and Clients**
 - Microsoft Visual C++ 2015 Redistributable (x86)

- ✓ **Microsoft SQL Server**

The **minimum** SQL feature installations for DocuPhase include the following:

- SQL Server and its required features, including
 - + Full Text Search
 - + Named pipes (enabled)
 - + TCP/IP Protocol
 - + Mixed Authentication Mode (enabled)
 - + SQL Browser *Service set **Automatic***.
 - + Database Engine
 - + SQL Full Text



BEST PRACTICE

When SQL is on a shared server (rather than a dedicated box), set RAM assignment to SQL to prevent over allocation and competition of RAM.



NOTES

- *In most cases, the client has a full version of SQL installed. However, if/when this is not the case, and the client does not have their own copy, you can perform an install; SQL Express w/ Advance features can be downloaded directly from the Microsoft website. (<http://www.microsoft.com/en-my/download/details.aspx?id=35579>)*
- *If not provided in the initial install, SSMS can be downloaded. Provide SSMS access via Desktop on the server. Additionally, the Application server is the recommended install location.*

- ✓ **Additional Service and Feature Packs, Database API, and Office AddAnalytics**

- Microsoft MSXML 6.0 Parser
- Microsoft SQL Server 2016/2019 ADOMD.NET (64-bit)
- Microsoft AS OLE DB Provider for SQL Server 2016 or later
- Microsoft ODBC API (64-bit)



NOTE

- *All Server-side lookups via ODBC must be configured in x64, including the following: Barcode, Data Exchange, iDox, Xtractor.*
- *Analytics Installer automatically installs the Analytics prerequisites listed above. Please refer to the Analytics Installation Guide for additional information, as the DocuPhase Installer is not used to install/uninstall/upgrade Analytics.*

- ✓ **Office Add-ins**

- Microsoft Visual Studio Tools for Office Runtime 2010 - **must be manually installed**

Required Installations (continued on next page)

Required Installations (continued)

.NET Framework 4.8

You can download and install the .NET Framework from the Microsoft website (<https://support.microsoft.com/en-us/help/4503548/microsoft-net-framework-4-8-offline-installer-for-windows>).



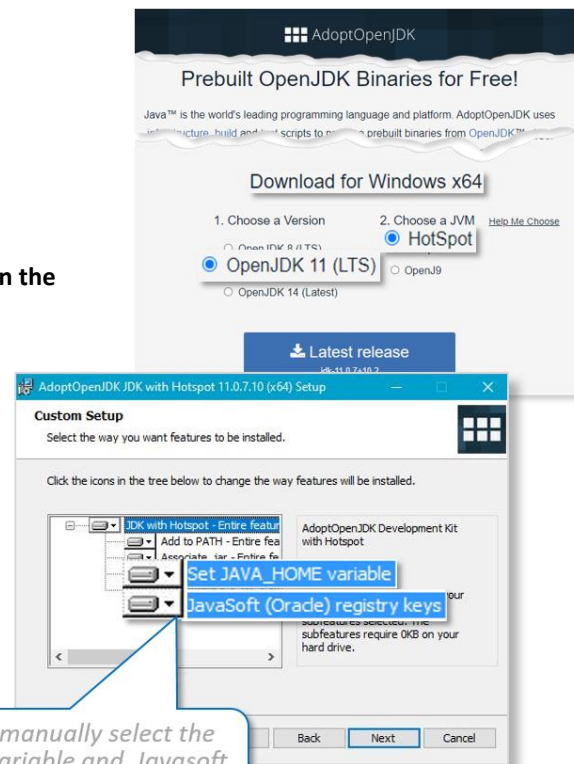
TIP

You can also install .NET Framework 4.8 from the DocuPhase Prerequisite folder. Please refer to the [DocuPhase Installation and Upgrade Admin Guide for version 6.4](#).

OpenJDK

Open JDK can be downloaded and installed from the following URL:
<https://adoptopenjdk.net/?variant=openjdk11&jvmVariant=hotspot>.

- ✓ Download Open JDK with the following options enabled.
 - ✓ OpenJDK 11 (LTS)
 - ✓ HotSpot options enabled.
- ✓ Install the JDK files: manually selecting the following (as shown in the image here):
 - ✓ Java_Home
 - ✓ JavaSoft during the Custom Setup.



Be sure to manually select the JAVA_HOME variable and Javasoftware (Oracle) registry keys options.

IIS Configuration (Server 2016 and later)

The IIS Configuration information below provides a listing of the settings that need to be made from within the Server Manager. For more details about the IIS configuration process, please refer to the [DocuPhase Installation and Upgrade Admin Guide for 6.4](#).

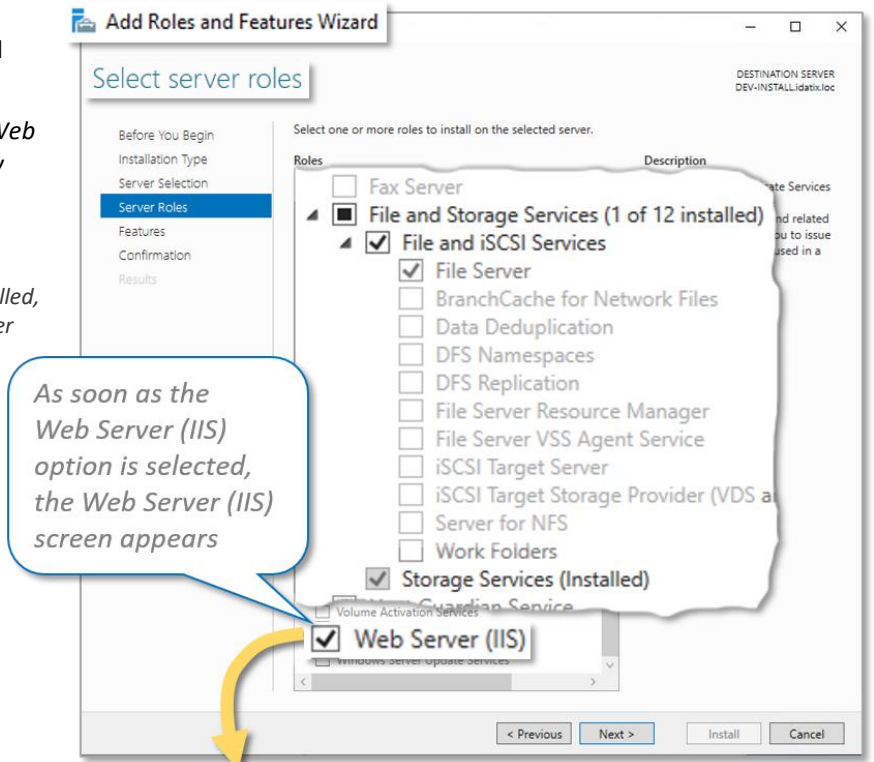
IMPORTANT!
 Some options in this configuration described here have already been installed by default by Microsoft (indicated with or) , However, make sure that all options in the lists shown below are selected.

Within the Server Manager, make sure the following settings are made from:

Server Roles

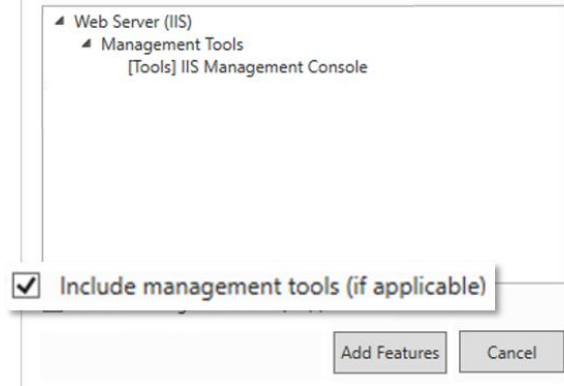
- ✓ File and Storage Services sub-options: File and iSCSI Services and File Server.
- ✓ Web Server (IIS)* - *As soon as you select the Web Server option, a Features window immediately appears.*
 - Include Management Tools

**If this option was previously installed, please review related settings shown under Application Server ► Role Services on page 7.*



Add features that are required for Web Server (IIS)?

The following tools are required to manage this feature, but do not have to be installed on the same server.



IIS Configuration (continued on next page)

Features



WARNING!

DocuPhase does not recommend the installation of IIS 8 on any Server releases prior to Windows Server 2012.



IMPORTANT!

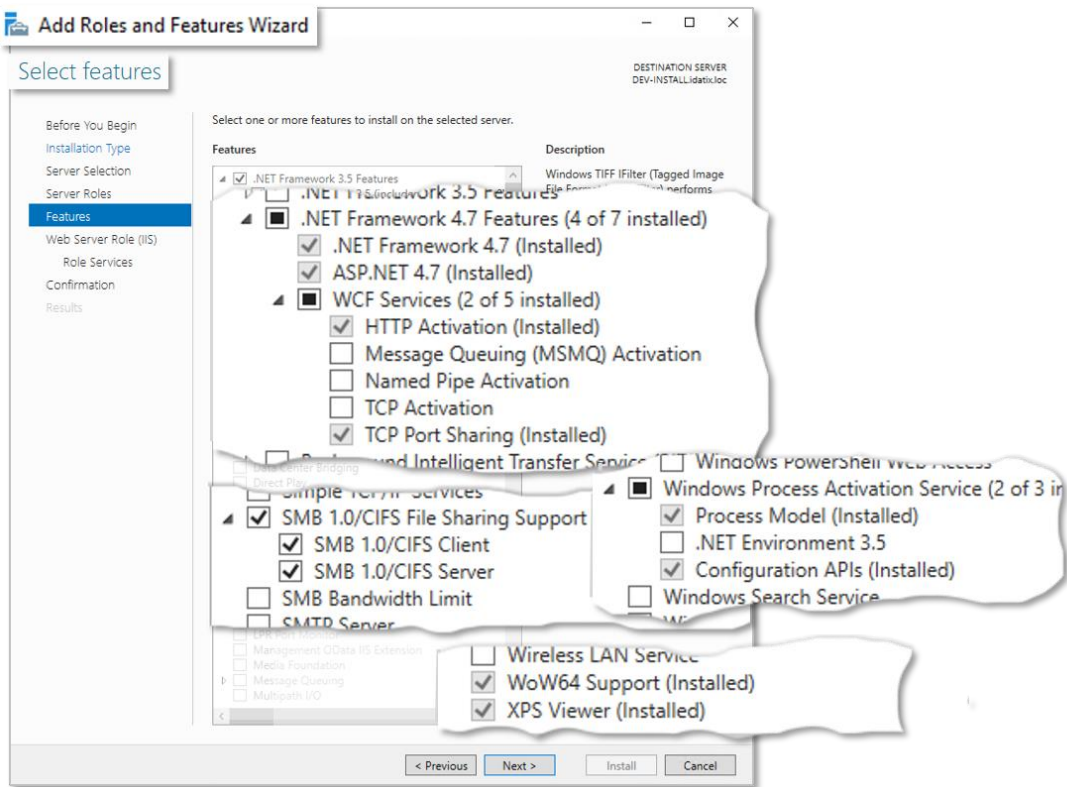
Successful installation is based on IIS and SQL being installed correctly.



NOTE

For more information about IIS go to the following Microsoft documentation link: <https://docs.microsoft.com/en-us/iis/get-started/introduction-to-iis/introduction-to-iis-architecture>.

- ✓ NET Framework 4.x Features, and sub-option ASP .NET 4.x*
- ✓ Windows Process Activation Service, and sub-options
- ✓ SMB/CIFS File Sharing Support, and sub-options
- ✓ WoW64 Support
- ✓ XPS Viewer

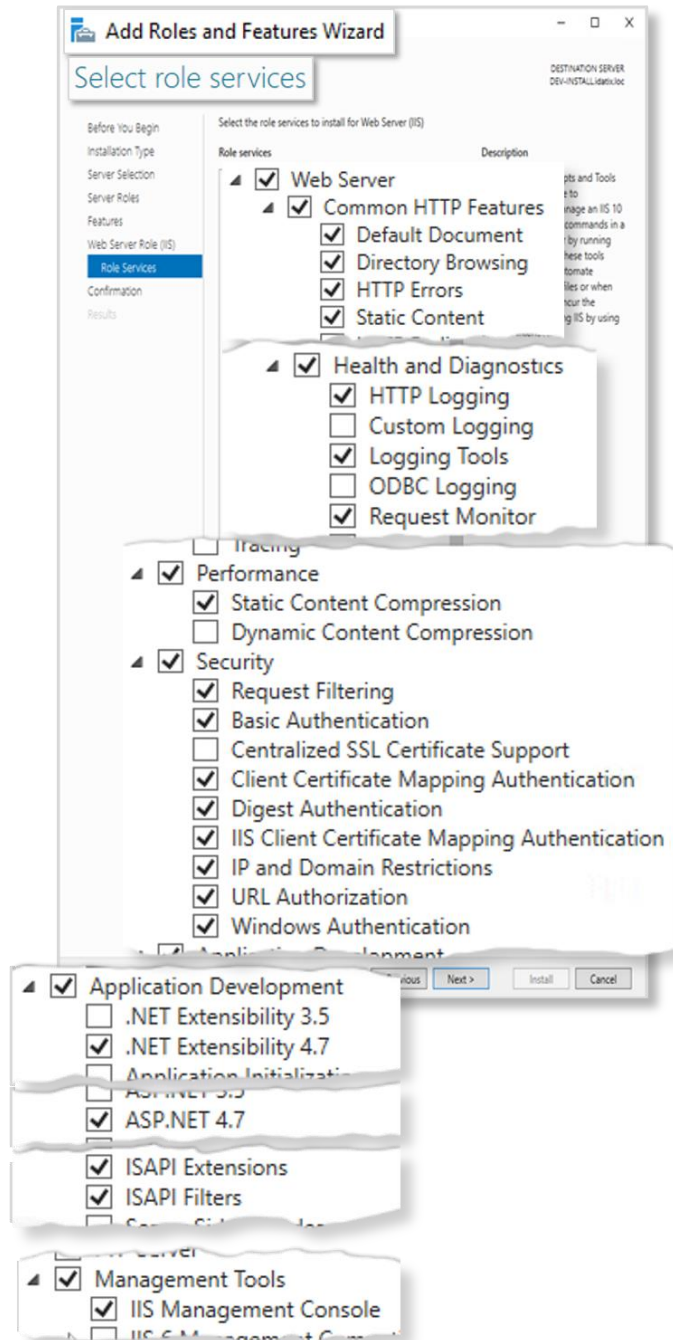


IIS Configuration (continued on next page)

IIS Configuration (continued)

Web Server Role (IIS) and Role Services

- ✓ Web Server and the following sub-options:
 - Common HTTP Features
 - + Default Document
 - + Directory Browsing
 - + HTTP Errors
 - + Static Content
 - Health and Diagnostics
 - + HTTP Logging
 - + Logging Tools
 - + Request Monitor
 - Performance
 - + Static Content Compression
 - Security
 - + Request Filtering
 - + Basic Authentication
 - + Client Certificate Mapping Authentication
 - + Digest Authentication
 - + IIS Client Certificate Mapping Authentication
 - + IP and Domain Restrictions
 - + URL Authorization
 - + Windows Authentication
 - Application Development
 - + .NET Extensibility 4.7
 - + ASP .NET 4.7
 - + ISAPI Extensions
 - + ISAPI Filters
- ✓ Management Tools
 - IIS Management Console



NOTE

All Server-side lookups via ODBC must be configured in x64, including the following: Barcode, Data Exchange, iDox, Progression, and xTractor.

Minimum System Requirements

- ✓ **Servers** – see below
- ✓ **Network** – see page 10
- ✓ **Workstation** – see page 11
- ✓ **Browser** – see page 11
- ✓ **Virtual/Hosted** – see page 12

Servers

! **IMPORTANT!**
 Please remember that these recommendations are only provided as a general point of reference for system installations, and may need to be adjusted to meet the demands of your specific implementation.
 Requirements may also be impacted by the number of concurrent users, use and configuration of Progression, and/or any use of Advanced Capture.

SQL

! **IMPORTANT! Microsoft SQL installation:**
 Please be aware that if SQL is migrated to a newer version, an update to the database's compatibility level may be required. For more information, please review the following information from Microsoft:
<https://docs.microsoft.com/en-us/sql/t-sql/statements/alter-database-transact-sql-compatibility-level?view=sql-server-2017#compatibility-levels-and-sql-server-upgrades>

NOTES

- Please follow Microsoft's Best Practices: placing each database and log file on separate physical drives or separate LUNs.
- These should be separate from each other, as well as from other database files.
- RAID 10 configuration is recommended/preferred.

Item	Based on: Data Volume Value				Based on: Approx. Progression Work Item Queue Size * (per User)			
	≤10 GB	50-100 GB	250 GB	1000 GB	50-100	250	1000	>2000
CPU	2 GHZ Quad Core	2 GHZ 2x Quad Core	2 GHZ 3x Quad Core	2 GHZ 4x Quad Core	2 GHZ Quad Core	2 GHZ 2x Quad Core	2 GHZ 3x Quad Core	2 GHZ 4x Quad Core**
Memory	16 GB	32 GB	32 GB	64 GB	32 GB	32 GB	32 GB	64 GB
Storage	100 GB	250 GB	500 GB	1,250 GB	250 GB	250 GB	500 GB	500+ GB
Service	<ul style="list-style-type: none"> • SQL Full Text Service 							
Software	<ul style="list-style-type: none"> • SQL 2016 (or later) Standard or later • Server 2016 (or later) or later 							

Servers (continued on next page)

Servers (continued)

DocuPhase/Forms

Item	Number of Concurrent Users					
	≤10	25	50	75	100	100+
CPU	2 GHZ Quad Core	2 GHZ 2x Quad Core	2 GHZ 2x Quad Core	2 GHZ 2x Quad Core	2 GHZ x3 Quad Core	2 GHZ x4 Quad Core
Memory	16 GB	32 GB	32 GB	64 GB	64 GB	64 GB
Storage	250* GB	250 GB	250 GB	250 GB	250 GB	250 GB
Software	<ul style="list-style-type: none"> SQL 2016 (or later) Standard Server 2016 or later 					
Allocation Notes	<ul style="list-style-type: none"> Server runs IIS, as well as Apache Tomcat with Java 8+. It is strongly recommended that the Repository be placed on a SAN. Storage requirements assume that the repository is placed on a SAN. If Repository is placed on the server, storage requirements will be greater. 					

*Based on approximate, maximum number of documents/tasks processed at any given time.

**More may be required.

Progression



IMPORTANT!

- The size of the Progression work item queue, the number of processes and tasks, as well as the size of an application all affect hardware requirements of a performant system.
- During implementation, hardware requirements may need to be adjusted based on a variety of system factors.
- Because Progression utilizes SQL Server to handle Progression data sets, large Progression workloads may entail additional SQL Server requirements. See page 8 of this document for more information about SQL Server requirements.

Item	Number of Processes and Tasks			
	50-100	250	1000	1000+
CPU	2 GHZ Quad Core	2 GHZ 2x Quad Core	2 GHZ 3x Quad Core	2 GHZ 4x Quad Core
Memory	16 GB	16 GB	24 GB	32 GB
Storage	100 GB	200 GB	200 GB	200 GB
Software	Server 2016 or later			
Allocation Info	Server runs IIS			

Servers (continued on next page)

Servers (continued)

OCR (Advanced Data Capture)

! **IMPORTANT!**

- *These recommendations are only provided as a general point of reference for system installations and may need to be adjusted to meet the demands of your specific system.*
- *Requirements may also be impacted by number of concurrent users, volume of data, and/or use and configuration of Progression.*

✓

Server/Hard Drive	Value for up to 100,000 Pages Per Year*	Value for up to 1,000,000 Pages Per Year*
Server #1	<ul style="list-style-type: none"> • CPU Cores: 8 (CPU should be Xeon E5-2620 Processor @ 2.2 GHz or greater) • RAM: 16 GB Minimum • Installed Applications: OCR Server, e-mail Import Service, File Import service, Web Client 	<ul style="list-style-type: none"> • CPU Cores: 8 (CPU should be Xeon E5-2620 Processor @ 2.2 GHz or greater) • RAM: 16 GB Minimum • Installed Applications: OCR Server, e-mail Import Service, File Import service, Web Client
Server #2	N/A	<ul style="list-style-type: none"> • CPU Cores: 8 (CPU should be Xeon E5-2620 Processor @ 2.2 GHz or greater) • RAM: 16 GB Minimum • Installed Applications: OCR Automated Clients
SQL Server	<ul style="list-style-type: none"> • 4 additional CPU cores minimum (8 recommended) on the existing SQL server, and 16 GB RAM minimum. • If a new dedicated SQL Server instance is to be installed, then it should be installed on the same server where OCR Server service is installed, and the number of CPU cores should be increased to 12 minimum, RAM should be increased to 24 GB minimum 	<ul style="list-style-type: none"> • 4 additional CPU cores minimum (8 recommended) on the existing SQL server, and 16 GB RAM minimum. • If a new dedicated SQL Server instance is to be installed, then it should be installed on the same server where OCR Server service is installed, and the number of CPU cores should be increased to 12 minimum, RAM should be increased to 24 GB minimum
Hard Drive Disk Space	<ul style="list-style-type: none"> • The drive space should be high-speed, such as SSD or Fiber/NAS, and the drives should provide a minimum of 500 GB of available drive space. 	<ul style="list-style-type: none"> • If the OCR master image folder is to be created on the OCR server, it should be located on Server #1. • The drive space should be high-speed, such as SSD or Fiber/NAS, and the drives should provide a minimum of 500 GB of available drive space.
Software	Server 2016 or later	

Network

! **IMPORTANT!**

DocuPhase system performance and functionality can be impacted by the way your network is set up (e.g., the use of group policies, threat management gateways, and other network routing configurations). Therefore, the configuration of your network must be carefully reviewed on a case-by-case basis when implementing any other systems.

Item	Value
Bandwidth	≥ 100 Mbps
Optimal Performance	≥ 1 Gbps

Workstation



IMPORTANT!

- All stated requirements are for the desktop application's installation.
- The recommended hardware requirements vary depending on a number of factors: including the workstation roles that are installed and the anticipated load that will be placed on the workstation.

Standard DocuPhase Station

Item	Value
CPU	2 GHZ Quad Core
Memory	4 GB
Software	Windows 8.1, Windows 10
Allocation Info	This station is designed for a DocuPhase user that is working in the web application searching for documents, completing tasks, or performing administrative tasks.

Scan Station

Item	Value
CPU	2 GHZ 2x Quad Core
Memory	8 GB
Available Disk Space	1 GB
Software	Windows 8.1, Windows 10

Browser

All of the following are supported browsers for the DocuPhase solution.



NOTES

- Not all functionality available in all browsers.
- While the DocuPhase Legacy (Heavyweight) Viewer is only available with IE10 and above, the HTML5 viewer can be used on any of the listed browsers.

Browser	Version
Microsoft Internet Explorer	11
Microsoft Edge (Chromium)	84 (or latest release)
Google Chrome	84 (or latest release)
Mozilla Firefox	78 (or latest release)

Virtual/Hosted

Environment

DocuPhase is fully supported in virtualized environments. Administrators can use the information in this guide as if the environments were to be virtual rather than physical. Given that actual performance is dependent on host server loads and hardware, it is up to the client system administrators to ensure adequate sizing and shared resource allocations.



IMPORTANT!

Because Virtual environments may run on different physical servers, DocuPhase licensing takes this potential re-allocation of physical servers into account: allowing such physical reconfiguration to occur dynamically without violating iDatix/DocuPhase software licenses.

Hosted Integrations

The purpose of the requirements shown is for the real-time exchange of data between DocuPhase and other applications, systems, and repositories: unifying information components for optimization of business processes.



IMPORTANT!

When using either ADFS or OKTA, ADIS should also be used. ADIS in either of these two situations allows for syncing the User table in order to avoid the need to manually maintain the table for synchronization of a non-Active Directory utilized for Users and Groups.

A VPN Tunnel is required for hosted clients since the client's machine must communicate with the OCR repository (located on the hosted OCR serve).

Integration	VPN Tunnel Required	Join to Domain Required	IIS8 / SMTP Relay Feature
ADIS	Y	Y	N
ADFS (SSO)	Y	Y	N
OKTA (SSO)	Y	Y	N
AP Solution (Great Plains)	Y	N	N
AP Solution (Work Day)	Y	N	N
AP Solution (NetSuite)	N	N	N
Advanced Capture (OCR)	Y	N	N
SMTP Relay	N	N	Y

Questions?

If you have specific questions or need more information about the requirements as described in this document, please contact DocuPhase using one of the following methods:

Email: helpdesk@docuphase.com

Phone: (727) 441-8228

Website: <https://www.docuphase.com/contact-us>

**TIP**

If/when sending an email please use the following format:

- ***In the Subject line: "Need more information about System Requirements"***
- ***In the Body of the email:***
 - + *Give a brief description of the information you are looking to obtain.*
 - + *Provide the best contact name, phone number, and email address.*

Addendum – Client Acknowledgement of Requirements

Your signature below constitutes the acknowledgement that you (the DocuPhase Client) have reviewed and understands **all** requirements described in this document.

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If you have questions regarding the content of this document, please be sure to contact DocuPhase prior to signing this acknowledgement.

Client Signature:

Company/Organization Name (Please Print)

Date

Name (Please Print)

Title/Position (Please Print)

Signature