

Installation Guide

process backbone

Exigen Workflow 5.6

Process Control Services

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Preface

This preface is an introduction to the Exigen Workflow Installation Guide.

The following topics are included in this preface:

- <u>Audience</u>
- Related Information
- Typographic Conventions

Audience

This guide is intended for all users who install Exigen Workflow.

To effectively use this guide, a good understanding of database systems and general computer terminology is required.

Related Information

The following table lists guides that provide related information about Exigen Workflow:

Related Information	
Document title	Contents
Exigen Workflow User's Guide	Describes how to work with specific Exigen Workflow features. It is useful as a reference for the Exigen Workflow end user.
Exigen Workflow Administrator's Guides I-III	Describes how to administer Exigen Workflow. Administrators can manage users within the system and change basic workflow features and project tables. It also describes several utilities within Exigen Workflow.
Exigen Workflow Web User's Guide	Describes how to use the Exigen Workflow Internet solution.
Exigen Workflow Web Administrator's Guide	Describes how to administer Exigen Workflow Web.

Typographic Conventions

The following styles and conventions are used in this guide:

Typographic styles	Typographic styles and conventions		
Convention	Description		
Bold	 Represents user interface items such as check boxes, command buttons, dialog boxes, drop-down list values, field names, menu commands, menus, option buttons, perspectives, tabs, tooltip labels, tree elements, views, and windows. Represents keys, such as F9 or CTRL+A. Represents a term the first time it is defined. 		
Courier	Represents file and directory names, code, system messages, and command-line commands.		
Courier Bold	Represents emphasized text in code.		
Select File > Save As	Represents a command to perform, such as opening the File menu and selecting Save As.		
Italic	Represents any information to be entered in a field.Represents documentation titles.		
< >	Represents placeholder values to be substituted with user specific values.		
<u>Hyperlink</u>	Represents a hyperlink. Clicking on this field takes you to the identified place in this guide.		

Chapter 1: Introducing Exigen Workflow

This section introduces the Exigen Workflow system.

The following topics are described in this section:

- What is Exigen Workflow?
- Exigen Workflow System Overview

What is Exigen Workflow?

Exigen Workflow is a Windows® based work management system that provides software for document imaging, indexing, routing, and archiving. Exigen Workflow is a customizable system enabling system administrators to create workflow applications to solve document management problems.

Exigen Workflow System Overview

The following diagram shows a graphical overview of Exigen Workflow:



Figure 1: Exigen Workflow system overview

Chapter 2: Installing Exigen Workflow

The following topics are described in this section:

- Exigen Workflow System Requirements
- Third Party Software
- Exigen Installer Overview
- General Installation Steps
- <u>Creating or Upgrading the Exigen Workflow Database Structure</u>
- Running Exigen Workflow
- Modifying Exigen Workflow Components
- Upgrading Exigen Workflow from a Previous Version
- Installing Exigen Workflow in Silent Mode

Exigen Workflow System Requirements

For information on Exigen Workflow hardware and software requirements, see the Exigen Workflow readme file.

Third Party Software

The following third party software is required by several Exigen Workflow components and may be delivered as part of the main Exigen Workflow installation:

Third party software used by Exigen Workflow components			
Third party software	Owner	Dependant Exigen Workflow components	
ABBYY FineReader Engine	ABBYY Software House	 FTS Preprocessor Form OCR Server generic OCR recognition Enhanced Form OCR 	
Adobe Libraries	Adobe Systems Incorporated	 Import Server when importing PDF files as images Conversion Engine E-Capture Interactive Document Capture 	
Centura Runtime	Centura Software Corporation	Exigen Workflow Windows based objects	
PCLTool SDK Runtime	Page Technology Marketing Inc.	E-Capture working with PCL files	
Axtel AX-4 Barcode Recognition Runtime	Axtel Applied Technology	Barcode ServerForm OCR ServerImage Viewer	

Third party software used by Exigen Workflow components			
Third party software	Owner	Dependant Exigen Workflow components	
Pegasus Smartscan Xpress BARCODE Runtime	Pegasus Imaging Corp.	Barcode ServerForm OCR ServerImage Viewer	
ScanFix Runtime	TMSSequoia	Image Enhancement ServerImage Viewer	
NED Image Printer Driver	Northeast Data Corp.	Exigen Workflow	
SPRINTA 2000 Driver for SQL Server	i-net Software	Exigen Workflow Web using SQL Server	
WDD Port Driver	We Do Drivers Inc.	Print Server	

If the preceding components are not included in the Exigen Workflow installation package, they can be ordered separately from Exigen.

Exigen Installer Overview

Exigen Workflow installation is performed by a tool named Exigen Installer. **Exigen Installer** is similar to a standard installation wizard but can be customized for each Exigen client according to its individual needs. Exigen Installer also verifies the compatibility of new Exigen Workflow components with those components that are already installed on the client's workstation and informs the user if incompatibilities or problem situations are detected.

Exigen Installer is automatically installed on the client's workstation when the user runs the Exigen Workflow installation for the first time. When a user runs the Exigen Workflow installation repeatedly or upgrades the solution to a new version, Exigen Installer is not reinstalled. The version that is already installed on the client's workstation is used.

Exigen Installer is also used for installing other Exigen solutions.

General Installation Steps

To install Exigen Workflow, proceed as follows:

- 1. Insert the Exigen Workflow installation CD into your CD drive.
- 2. If the installation does not start automatically, from the Exigen Workflow installation CD, launch the Setup.exe file located in the Windows directory.

The Exigen Installer Setup window appears.



Figure 2: Exigen Installer startup window

3. Wait while Exigen Installer verifies the list of installed Exigen Workflow components.

The **Exigen Installer Setup** window is updated and displays the solution name and version.



Figure 3: Exigen Installer window displaying the solution name and version

4. Click Next.

If personalization information is required, the User Information window appears.

🙀 Exigen Installer Setup		
User Information Enter the following information to personal	ize your installation.	
Full N <u>a</u> me:		
Organization:		
The settings for this application will be in Exigen Workflow 5.6.12 Installation Wizard	nstalled for all users that share	e this computer.
	< <u>B</u> ack <u>N</u> ex	kt > Cancel

Figure 4: User Information window

- 5. If the **User Information** window appears, enter the full user name and organization name.
- 6. Click Next.

The Select Installation Type window appears.



Figure 5: Selecting the installation type

7. Select one of the following installation types as required:

Installation	types
Туре	Description
Typical	Installs Exigen Workflow components that are required for most users.
	If this installation type is selected and the list of installed components displayed in the Selected Options window does not match requirements, to return to the Select Installation Type window, the user can click Back and select Custom. In this case, the list of components is preconfigured as in a typical configuration, but the user can modify the selection as appropriate.
Custom	Users can specify which Exigen Workflow components must be installed.
	If this option is initially selected, there are no components selected to install. However, if this option is selected after the Typical option is used, the list of components to be installed is preconfigured according to the typical installation type.

- 8. If the typical installation type is selected, click **Next** and follow instructions as described in <u>Finishing</u> <u>the Installation</u>.
- 9. If the custom installation type is selected, click **Next** and follow instructions as described in <u>Customizing the Exigen Workflow Installation</u>.

Customizing the Exigen Workflow Installation

If the custom installation type is selected, proceed as follows:

1. To change the location of Exigen Workflow setup files, in the **Setup Folder** window, click **Browse** and select the location.

🎼 Exigen Installer Setup	
Setup Folder Select a root folder of setup files.	
The Exigen Installation found the Setup.EV folder.	WF file and repository.rep file in following setup
To perform the installation from a different f another folder.	older, click the Browse button, and select
To perform the installation from another CD	, insert the CD and click OK.
You can choose not to install Exigen comp Installation Wizard.	onents by clicking Cancel to exit the Wise
⊢ Setup Folder	
D:\Exigen Workflow\Windows\	Browse
Exigen Workflow 5.6.12 Installation Wizard	
	< <u>Back N</u> ext> Cancel

Figure 6: Setup Folder window

The default location is the directory from which the Setup.exe file is launched.

2. Click Next.

The Exigen Workflow window appears, displaying all Exigen Workflow component groups.

🖥 Exigen Installer Setup				
Exigen Workflow				/
Component group	Remove Typical/Custom	Install/Upgrade Typical/Custom		
Common Modules		5.6.12	Details	?
Workspace Components		5.6.12	Details	2
Web Components		5.6.12	Details	2
Administrative Components		5.6.12	Details	2
Automated Services		5.6.12	Details	2
E-Capture	Г	5.6.12	Details	?
Enterprise Report Management (COLD)		5.6.12	Details	2
Form OCR	Г	5.6.12	Details	2
Scan Capture		5.6.12	Details	2
Document Publisher		5.6.12	Details	2
Options		5.6.12 🗖	Details	?
	All typical 🔄 Full 📃	All typical 🔄 Full 🔄		2
To see the description of the corresponding Exigen Work	flow component, click ?.			
Select the Remove check box to remove the item from y selected, the previous version of the item is removed and the item remains on the workstation.	our workstation or Install/Upgrade to insta 1 the new version is installed. If both chec	II or upgrade the item. If both check ck boxes are cleared, the currently in	boxes are stalled versi	on of
Install documentation for subcomponents				
		< <u>B</u> ack <u>N</u> ext >	Cance	

Figure 7: Exigen Workflow window

The list of component groups in the **Exigen Workflow** window you see may differ because Exigen Installer is customized for each customer.

Each component group contains one or more Exigen Workflow components or other component groups.

The **Exigen Workflow** window contains the following columns:

Exigen Workflow window columns		
Column	Description	
Component group	Lists Exigen Workflow component groups that can be installed, upgraded, or uninstalled on the client's workstation.	

Exigen Workflow window columns		
Column	Description	
Remove	Contains check boxes	s for uninstalling each component group.
	The appearance of cl actions to be taken w	neck boxes identifies the status of the component group and ith components as follows:
	Check box status	Description
		Some components of the component group are already installed on the workstation.
	▼ Typical	Typical selection of components in the component group is selected for removal from the workstation.
		Note: This option does not mean that all components in the component group are selected for removal.
	Custom	Custom selection of components in the component group is selected for removal from the workstation.
		No components of the component group are installed on the workstation.
Install/Upgrade	Contains check boxe	s for installing or upgrading each component group.
	The appearance of cl follows:	neck boxes identifies the status of the component group as
	Check box status	Description
		No components of the component group will be installed or upgraded.
	V Typical	Typical selection of components in the component group is selected for installing or upgrading on the workstation.
		Note: This option does not mean that all components in the component group are selected.
	Custom	Custom selection of components in the component group is selected for installing or upgrading on the workstation.

The **Remove** and **Install/Upgrade** columns may contain some additional component group information displayed to the left of the check box. This information usually shows the version or build number.

- 3. To see a description of a component or component group, click ?.
- 4. Select the component groups that must be installed, upgraded, or removed as required.
- 5. To remove all installed Exigen Workflow components, in the Remove column, click Full.
- 6. To remove all installed typical components in all component groups, in the **Remove** column, click **All typical.**

This option has the same effect as selecting each individual check box in the **Remove** column.

- 7. To install or upgrade all Exigen Workflow components, in the Install/Upgrade column, select Full.
- 8. To install or upgrade all typical components in all component groups, in the **Install/Upgrade** column, click **Select all.**

This option has the same effect as selecting each individual check box in the **Install/Upgrade** column.

- 9. To install the main Exigen Workflow documentation, in the **Options** component group, in the **Exigen Workflow Documentation** row, in the **Install/Upgrade** column, select the check box.
- 10. To install documentation for the selected Exigen Workflow subcomponents, select the **Install documentation for subcomponents** check box.

Additional documentation is provided for the following subcomponents:

- Exigen Workflow Web
- Task Oriented Workflow
- Exigen Publisher Cabinet
- Usage Logging Server
- 11. To configure components in an individual component group, click **Details.**

The list of components and subgroups in the selected component group appears.

🖶 Exigen Installer Setup				
Administrative Components			,	4
Components	Remove Typical/Custom	Install/Upgra Typical/Custo	de m	
Workflow Administrator 5.6.	12000.151	5.6.12000.158		?
Audit Subsystem	Г		Details	2
Workflow Management Tools			Details	2
Monitoring and Reporting Tools			Details	2
Exigen Workflow Client Setup 5.6.	12000.123 🗖	5.6.12000.123		?
Script Deploy	Г	5.6.12000.158		?
Space Calculator	Г	5.6.12000.158 🗖		?
				- 1
To see the description of the corresponding Exigen Workflow component, o	olick ?.	Ali typical Full		
Select the Remove check box to remove the item from your workstation or selected, the previous version of the item is removed and the new version the item remains on the workstation.	Install/Upgrade to insta is installed. If both chec	II or upgrade the item. If both che k boxes are cleared, the current	eck boxes are y installed version	on of
		<u>K</u>		

Figure 8: Example of components and subgroups in the Administrative Components group

- 12. Configure components in the group as follows:
 - To install or upgrade a component, in the **Install/Upgrade** column, select the check box.

- To leave the currently installed component on the workstation, in the **Install/Upgrade** column, clear the check box.
- To uninstall a component, in the **Remove** column, select the check box.

You can also select both check boxes for a component. This means that the currently installed component will be uninstalled and the new version will be installed.

Subgroups can be configured in the same way as the main Exigen Workflow component groups.

13. To apply changes and return to the main list of Exigen Workflow component groups, click OK.

14. To finish the installation, click **Next** and follow instructions as described in <u>Finishing the Installation</u>.

Finishing the Installation

If any of the following components is selected to be installed, additional installation windows appear:

- Application Services
- Automatic Queue Server

For information on installing Application Services, see Chapter 8: Installing Application Services.

For information on installing Automatic Queue Server, see <u>Chapter 9: Installing Automatic Queue</u> <u>Server</u>.

After all required components are selected, to finish the installation, proceed as follows:

- 1. Wait until Exigen Installer finishes checking discrepancies in the selected components.
- 2. If information about any discrepancies is displayed, click **Back** and correct the selection as required.

The **Destination Folder** window appears.

🚰 Exigen Installer Setup	
Destination Folder Select a folder(s) where the modules will be installed.	
Select the required destination folders.	
You can choose not to install Exigen Workflow by clicking Canc Installation Wizard.	el to exit the Exigen
Exigen Workflow Folder	
C:\VISIFLOW\	Browse
Exigen Workflow Web Root Folder	
C:WISICOMV	Browse
Exigen Workflow Web Dll Folder	
C:\VISICOM\WEB-INF\DII\	Browse
Exigen Products Folder	
C:\Program Files\Exigen\	Browse
Exigen Workflow 5.6.12 Installation Wizard	
< <u>B</u> ack [Next > Cancel

Figure 9: Destination Folder window

The **Destination Folder** window is used to specify the destination directories for selected Exigen Workflow components. Some of the fields can be disabled if the related components are not selected.

3. Select the following destination directories as required:

Exigen Workflow destination directories		
Directory	Description	
Exigen Workflow Folder	Main Exigen Workflow destination directory.	
Exigen Workflow Web Root Folder	Exigen Workflow Web destination directory.	
Exigen Workflow Web Dll Folder	Destination directory for Exigen Workflow Web DLL files.	
Exigen Products Folder	Exigen products directory.	

4. Click Next.

The **Selected Options** window appears, listing all options the user selected.

Selected Options	
The following setup options are selected: To proceed, click Next. To change the selected options, click Back.	
Workflow Administrator 5.6.12000.151 will be installed Audit Server 5.6.12000.151 will be installed Barcode Server 5.6.12000.151 will be installed Exigen Workflow Client Setup 5.6.12000.123 will be installed Configuration Browser 5.6.12000.151 will be installed Image Enhancement Server 5.6.12000.151 will be installed Escalation Server 5.6.12000.151 will be installed Distribution Server 5.6.12000.151 will be installed Exigen Workflow Core Extension 5.6.12000.151 will be installed High Volume Index 5.6.12000.151 will be installed High Volume Index 5.6.12000.151 will be installed High Volume Scan 5.6.12000.151 will be installed Image Viewer 5.6.12000.151 will be installed High Volume Scan 5.6.12000.151 will be installed High Volume Scan 5.6.12000.151 will be installed Image Viewer 5.6.12000.151 will be installed	
<u> </u>	

Figure 10: List of selected actions

- 5. Carefully review the list of actions.
- 6. If you find any actions in the list that are incorrect or may damage your business environment, click **Back** and make changes to the component configuration.
- 7. To accept the selected actions, click Next.

The Ready to Install the Application window appears.



Figure 11: Ready to Install the Application window

- 8. To revise the selected options, click **Back** and make any necessary changes to the configuration.
- 9. To execute the selected actions, click Next.

Exigen Installer removes, installs, or upgrades the selected Exigen Workflow components.

When the installation is finished, a message box appears.



Figure 12: Successful completion message

- 10. Click OK.
- 11. Set up a connection to the database server as described in <u>Chapter 3: Setting Up the Database</u> <u>Connection</u>.

Creating or Upgrading the Exigen Workflow Database Structure

When Exigen Workflow is installed or upgraded and the connection to the database is correctly configured, the required Exigen Workflow tables must be created and populated with the default values in the database. If the database structure was previously created with an older Exigen Workflow version, database tables and records may need to be upgraded. To find out if the database structure must be upgraded in your business environment, consult Exigen Support Services.

Before upgrading the database structure, it is recommended that you make a backup of the previously created Exigen Workflow database structure.

To create or upgrade the Exigen Workflow database structure, proceed as follows:

1. Select Start > Programs > Exigen Solution > Exigen Workflow > Workflow DB Startup.

The Workflow Database Installation/Upgrade Wizard window appears.

Workflow Database Installa	ation/Upgrade Wizard 🔀
Workflow Database Installe	ation/Upgrade Wizard Enter Database, User, and Password. Click Run to upgrade. Database: wf_db User: admin Password: xxxxxx Connect ✓ Use extended security
<u></u>	<u>Run</u> <u>Scripts</u>

Figure 13: Workflow Database Installation/Upgrade Wizard window

The Workflow Database Installation/Upgrade Wizard creates or upgrades Exigen Workflow system tables by running data structure creation scripts.

2. Enter values in the following fields:

Connect dialog fields	
Field	Description
Database	Exigen Workflow database name if you access the database through client software, or the Exigen Workflow database data source name (DSN) if you use the ODBC connection.
User	Database server user login name.
Password	Database server user password.

- 3. To connect to the database, click Connect.
- 4. To enable extended user authentication and authorization in this database, select the **Use extended security** check box.

The extended authentication can be performed on a database user or Windows domain level.

- Note: Enabling the Use extended security check box requires administrator rights.
- 5. Click Run.

If you are using an Oracle, DB2 z/OS, or AIX database, the Server window appears.

Server	×
Choose table SYSCATSP TEMPSPAC	<i>lespace:</i> ACE)F1
USERSPAC	
ОК	Cancel

Figure 14: Server window

6. In the Server window, select a tablespace and click OK.

The application creates or upgrades the Exigen Workflow system tables.

- 7. Wait until the Exigen Workflow system tables are created or upgraded.
- 8. To view the log file, click Log File.
- 9. To exit the Workflow Database Installation/Upgrade Wizard, click Finish.
- 10. If an Oracle database is used and Workflow DB Startup is not run on the workstation, the projects cannot be imported. To enable the projects to be imported, add the following line to VISI.INI file after the DBS_MASTER entry:

DBS_ORA_SCHEMA=<schema in which the Exigen Workflow tables are located>

Note: The DBS_ORA_SCHEMA parameter is case sensitive and the value must be the same as the database user schema name.

Running Exigen Workflow

- 1. To run Exigen Workflow, select Start > Programs > Exigen Solution > Exigen Workflow > Workflow Explorer.
- 2. Enter the login and password.

The default login user is DTM, and the password is dtm.

Modifying Exigen Workflow Components

To modify or remove installed Exigen Workflow components, proceed as follows:

- 1. Insert the Exigen Workflow installation CD into your CD drive.
- 2. If the installation does not start automatically, from the Exigen Workflow installation CD, launch the Setup.exe file located in the Windows directory.

The Application Maintenance window appears.

🞼 Exigen Installer	Setup	_ 🗆 🗙
Application Mainte Select the mainte	nance enance operation to perform.	
C Modify	Change the installed components. Displays the Component Group dialog that allows configuring individual components and modules.	
• Remove	To uninstall Workflow from this computer select option Remove Sol To remove only Exigen Installer select option Remove Installer.	 ution(s)
	Remove Exigen Solution(s)	
	C Remove Exigen Installer	
Exigen Workflow 5.6.1	2 Installation Wizard	
	< <u>B</u> ack, <u>N</u> ext > C	ancel

Figure 15: Application Maintenance window

- 3. Select one of the following options as required:
 - To modify installed Exigen Workflow components, select **Modify**.
 - To remove Exigen Workflow components, select Remove and select one of the following options as required:
 - Remove Exigen Solution(s) uninstalls all Exigen Workflow components. Warning: If Exigen Installer is not launched from the original Exigen Workflow installation location but from another location, this option may cause all installed Exigen solutions to be uninstalled.
 - Remove Exigen Installer uninstalls only Exigen Installer.
- 4. Click Next.

If Modify is selected, the Select Installation Type window appears.

🙀 Exigen Installer Setup				
Select Installation Select the desir	Type ed installation type.			2
C Lypical	The most common application is recommended for most users	features will be i	nstalled. This option	
	Installed components will be upgraded or repaired. Reinstall all components Upgrade to newer versions only			
	Use this option to choose whic installed and where they will be advanced users.	h application fea installed. Reco	atures you want mmended for	
Exigen Workflow 5.6.	12 Installation Wizard			
	Ľ	< <u>B</u> ack	<u>N</u> ext > C	ancel

Figure 16: Selecting the installation type

5. Select one of the following installation types as required:

Installation typ	Installation types		
Туре	Description		
Typical	Installs typical Exigen Workflow components that are required for most users.		
	If this installation type is selected and the list of installed and upgraded components displayed in the Selected Options window is incorrect, to return to the Select Installation Type window, the user can click Back and select Custom. In this case, the list of components is preconfigured as in a typical configuration but the user can modify the selection as appropriate.		

Installation types			
Туре	Description		
Upgrade	Performs one of the following actions as selected by the user:		
	Action	Description	
	Reinstall all components	Reinstalls all installed Exigen Workflow components.	
	Upgrade to newer versions only	Upgrades those installed Exigen Workflow components that have an older version than the one available in the installation.	
	If this installation type is selected and Exigen Installer displays any component discrepancies, to return to the Select Installation Type window, the user can click Back and select Custom. In this case, the list of components is preconfigured as in the previous installation type, but the user can modify the selection as appropriate.		
Custom	Users can specify which Exigen Workflow components must be installed, upgraded, or removed.		
	If this option is selected initially, there are no components selected to install or upgrade. However, if this option is selected after the Typical or Upgrade option is used, the list of components to be installed and upgraded is preconfigured according to the previously selected installation type.		

6. Click Next.

7. If **Custom** is selected, follow instructions as described in <u>Customizing the Exigen Workflow</u> <u>Installation</u>.

Upgrading Exigen Workflow from a Previous Version

Newer Exigen Workflow versions include new components. To use these components, new dependencies are added for components available in previous Exigen Workflow versions. Therefore, if a component that requires new components is selected to be upgraded, Exigen Installer reports discrepancies between the components.

To successfully upgrade Exigen Workflow from a previous version, proceed as follows:

- 1. From the Exigen Workflow installation CD, launch the Setup.exe file located in the Windows directory.
- 2. Follow the instructions in the installation wizard until the **Select Installation Type** window appears.
- 3. Depending on the existing configuration, perform one of the following steps:
 - If the typical installation was used in the previous Exigen Workflow version, select **Typical**.
 - If a customized installation was used in the previous Exigen Workflow version, select **Upgrade** and **Reinstall all components.**
- 4. Click **Next** and follow the instructions in the installation wizard until one of the following occurs:
 - List of component discrepancies is displayed.
 - The **Selected Options** window is displayed.
- 5. If a list of component discrepancies is displayed, proceed as follows:
 - Record the discrepancies, and click **Back** until the **Select Installation Type** window is displayed.

• Select **Custom** and click **Next**.

A list of Exigen Workflow components is displayed.

- To resolve the component discrepancies, configure Exigen Workflow components as described in <u>Customizing the Exigen Workflow Installation</u>.
- If any Exigen Workflow Client/Server components are installed, ensure that at least the typical selection of the **Common Modules** component group is selected to be installed.
- To finish the upgrade process, click **Next** and follow the instructions in the installation wizard.
- 6. In the **Selected Options** window, carefully review the list of components to be installed and upgraded.
- 7. If the list of changes in the **Selected Options** window does not match requirements, follow instructions as described in step 5.

Installing Exigen Workflow in Silent Mode

Typical Exigen Workflow components can be installed in silent mode without using the graphical user interface. This functionality is useful when the same Exigen Workflow components must be installed on many user workstations.

The following topics are described in this section:

- Silent Installation Parameters
- Configuring the Custom Configuration File
- <u>Reconfiguring the Set of Typical Components</u>
- Identifying Component Dependency

Silent Installation Parameters

To install typical Exigen Workflow components in silent mode, on the user's workstation, at the command prompt, execute the following command:

msiexec /i "<full path>\Setup.msi" /q <parameters>

where <full path> is a full path to the installation directory where the Setup.msi file is located and <parameters> is a list of parameters described in the following table:

Silent installation parameters		
Parameter	Description	
FR	Full path to the directory containing the Exigen.EWF file. Typically, this is the same directory in which the Setup.msi file is located.	
DOC_INST	Optional parameter that identifies if the subcomponent documentation must be installed.	
	The value can be Yes or No. If the parameter is not specified, the default value is Yes.	
INI_PATH	Optional parameter that identifies a full path to the $Setup.ewf$ file if it differs from the location specified in the FR parameter.	

Silent installation parameters		
Parameter	Description	
HISTORY_PATH	Full path and	file name of the installation log file.
	If the parame the name SE	eter is not specified, the log file is created in the Windows directory with TUP_HISTORY.txt.
REP_PATH	Optional parameter that identifies a full path to the repository.rep file if it differs from the location specified in the FR parameter.	
CUST_INI_PATH	Optional para configuration	ameter that identifies the location and file name of the custom In file that contains Exigen Workflow silent installation parameters.
	The configur	ation file can contain parameters described in this table.
	For informati Configuration	ion on the custom configuration file, see <u>Configuring the Custom</u> <u>n File</u> .
LOCATION	Optional para directories a	ameter that identifies the directory in which all component installation re located if it differs from the location specified in the FR parameter.
	By default, it	is the same directory in which the Setup.msi file is located.
Q	Optional para one of the fo	ameter that specifies silent installation mode. This parameter can have llowing values:
	Value	Description
	q	Users do not see anything on the screen during installation.
	qb!	Users see the progress of the installation for each component. The Cancel button is not available.
		This is the default value.
	dp	Users see the progress of the installation for each component. The Cancel button is available.
INSTALLDIR	Exigen Work	flow destination directory.
	The following	g is the default value:
	C:\VISIFL	W
INSTALLDIR2	Exigen Work	flow Web destination directory.
	The following	g is the default value:
	C:\VISICO	М
INSTALLDIR3	Exigen Work	flow Web Dll destination directory.
	The following	g is the default value:
	C:\VISICO	M\WEB-INF\Dll
INSTALLDIR4	Exigen progr	rams directory.
	The following	g is the default value:
	C:\Program	m Files\Exigen
LOGINNAME	User name r	equired for Application Services and Automatic Queue Server.
	The following	g is the default value:
	.\visiflo	W
PWD	Password re	quired for Application Services and Automatic Queue Server.
	The following	g is the default value:
	exigensrv	

Silent installation parameters		
Parameter	Description	
CONN_STR	Default connection string to Exigen Workflow database required for Application Services and Automatic Queue Server.	

If any parameters are not specified, their default value is used.

The following are examples of the command entered to install typical Exigen Workflow components in silent mode:

Example 1

msiexec /i "E:\Windows\Setup.msi" /q Q=q FR="E:\Windows"

The preceding command installs all typical Exigen Workflow components in their default directories from the specified installation source directory.

Example 2

```
msiexec /i "E:\Windows\Setup.msi" /q Q=q FR="E:\Windows" DOC_INST=No
INI_PATH="C:\Custom Installation\Setup.ewf" REP_PATH="C:\Custom
Installation\repository.rep" CUST_INI_PATH="C:\Custom Installation\Setup_PARAM.ini"
```

The preceding command installs all typical Exigen Workflow components with the following exceptions:

- Components are installed in directories specified in the custom configuration Setup_PARAM.ini file.
- Documentation for subcomponents is not installed.
- The Setup.ewf file is taken from a specific directory, C:\Custom Installation.
- The repository.rep file is taken from a specific directory, C:\Custom Installation.

Configuring the Custom Configuration File

A custom configuration file can be defined to contain Exigen Workflow silent installation parameters. The custom configuration file is useful in cases when the same Exigen Workflow components must be installed on many workstations. In this case, one common custom configuration file can be defined to ensure that the same installation configuration is used.

The custom configuration file is a text file in the following format:

```
[INSTALL_PARAMETERS]
<parameter 1>
<parameter 2>
```

•••

Each line in the [INSTALL_PARAMETERS] section is a silent installation parameter. For information on silent installation parameters, see <u>Silent Installation Parameters</u>.

This file can be specified during the silent installation using the CUST_INI_PATH parameter.

Reconfiguring the Set of Typical Components

The silent installation mode installs only typical Exigen Workflow components. The set of typical components is defined in the <code>Setup.ewf</code> configuration file, which is delivered together with the installation.

To reconfigure the set of typical components, proceed as follows:

- 1. Open the Setup.ewf file.
- 2. For the required component, locate the corresponding [s#] section, where # is a number.

The component to which the section is related is identified in the Caption parameter.

- 3. Configure the section as follows:
 - To add the component to the set of typical components, add the Install=Yes line to the section.
 - To remove the component from the set of typical components, remove the Install=Yes line from the section.
 - To always uninstall any previously installed version of this component before installing the current version, add the Remove=Yes line to the section.

The silent installation does not automatically install those components that are required by the typical components. This means that if component A requires component B to be installed, and component A is set as a typical component, component B must also be set as a typical component. The silent installation cannot be performed if the set of typical components does not also include all dependent components.

4. Ensure that all dependent components are also set as typical.

For information on how to find a component's dependent components, see <u>Identifying Component</u> <u>Dependency</u>.

5. Save and close the Setup.ewf file.

Identifying Component Dependency

This section describes how to identify a component's dependent components, which are required by the component. This is important when Exigen Workflow is installed in silent mode. Exigen Workflow cannot be installed in silent mode if the set of typical components does not also include all dependent components. For information on defining typical Exigen Workflow components, see <u>Reconfiguring the Set of Typical Components</u>.

Procedures described in this section do not provide information about the dependency and compatibility of those components that are already installed on the workstation. For example, it is not possible to install an older version of a component if a newer version is already installed. In this case, the previously installed component must be uninstalled. One way to resolve this problem is to add the Remove=Yes parameter in the Setup.ewf file for the component as described in <u>Reconfiguring the Set</u> of Typical Components.

The following topics are described in this section:

- Identifying Component Dependency Using the repository.rep File
- Identifying Component Dependency Using the Main Exigen Workflow Installation

Identifying Component Dependency Using the repository.rep File

Component dependency is defined in the repository.rep file, which is usually located in the same directory where the setup.exe file is located.

Warning: The repository.rep file must not be modified. It can only be viewed to determine dependency of Exigen Workflow components.

To determine a component's dependent components, the administrator must identify the following information about the component:

- component identifier used in the installation configuration files
- component version number delivered in the installation package

The following procedure describes how to identify this information and determine a component's dependent components:

1. To locate the component identifier, in any plain text editor, open the setup.ewf file and locate the section [sx] that contains the following line:

Caption=<component name>

where X is the component identifier.

For example, the following section means that the identifier for Clear Cache Utility is 12.

[S12]

Caption=Clear Cache Utility

- 2. Close the Setup.ewf file.
- 3. To identify the component version number, go to the directory where the component's installation .msi file is located.
- 4. In the component's installation directory, using any plain text editor, open the component's .ver file.

In the .ver file, the component version number is specified by the Version parameter as follows:

Version=<version number>.<build number>

The version number is three numbers separated by a period. The build number is not important to identify a component's dependencies.

In the following example, the component version number is 5.6.12000:

Version=5.6.12000.137

5. Close the component's .ver file.

- 6. Using any plain text editor, open the repository.rep file.
- 7. In the repository.rep file, locate the following section:

[s<component's identifier>V<component's version>]

For example, if the component identifier is 12 and its version is 5.6.12000, the required section in the repository.rep file is the following:

[s12V5.6.12000]

This section defines other components that are required by this component to work.

If there is no such section in the repository.rep file, the component does not have any dependencies and there are no restrictions on installing this component in silent mode.

8. To identify the dependent components, examine the section.

The following two parameters in this section identify this component's dependant components:

Parameters for identifying a component's dependency		
Parameter	Description	
RequiredX	Identifies a required component as follows:	
	RequiredX= <identifier component="" file="" in="" of="" required="" setup.ewf="" the="" used=""></identifier>	
	RX_V1= <minimal required="" version=""></minimal>	
	RX_V2= <maximal required="" version=""></maximal>	
	where X is a sequence number that is used to list multiple required components. All listed dependent components are mandatory for this component to work.	
	The RX_V1 parameter is the minimal required version of the dependent component. It means that the dependent component must not be older than the specified version.	
	The RX_V2 parameter is the maximal allowed version of the dependent component. It means that the dependent component must not be later than the specified version.	
	The RX_V2 parameter can be blank. In this case, there is no limitation on the maximal dependent component version.	
	In the following example, component S20 requires components S19 and S50 to be installed:	
	[\$20V5.6.10000]	
	Required1=S19	
	R1_V1=5.5.11000	
	R1_V2=5.6.12000	
	Required2=S50	
	R2_V1=5.5.11000	
	R2_V2=	

Parameters for identifying a component's dependency		
Parameter	Description	
DeputyX_Y	Parameter similar to the Requiredx parameter that specifies a set of alternative components rather than one required component. At least one of the listed alternative components must be installed, but not necessarily all.	
	The DeputyX_Y parameter is as follows:	
	DeputyX_1= <identifier alternative="" component="" first="" of="" the=""></identifier>	
	DX_1_V1= <minimal required="" version=""></minimal>	
	DX_1_V2= <maximal required="" version=""></maximal>	
	DeputyX_2= <identifier alternative="" component="" of="" second="" the=""></identifier>	
	DX_2_V1= <minimal required="" version=""></minimal>	
	DX_2_V2= <maximal required="" version=""></maximal>	
	${\bf x}$ is a sequence number that lists multiple sets of alternative dependent components. The component requires at least one dependent component from each alternative component set.	
	Y is a sequence number that lists multiple alternative components within a component set.	
	In the following example, the component S50 requires either component S106 or component S51:	
	[S50v5.6.12000]	
	Deputy1_1=S106	
	D1_1_V1=5.6.10000	
	D1_1_V2=	
	Deputy1_2=S51	
	D1_2_V1=5.6.10000	
	D1_2_V2=	

- 9. Close the repository.rep file.
- 10. To perform the silent installation successfully, ensure that all identified dependant components are also set as typical components as described in <u>Reconfiguring the Set of Typical Components</u>.
- 11. Repeat this procedure again for each identified dependant component to identify its dependent components.

Identifying Component Dependency Using the Main Exigen Workflow Installation

To verify the validity of a configured set of typical components using the main Exigen Workflow installation, proceed as follows:

1. On a workstation that does not have any Exigen Workflow components installed, run the main Exigen Workflow installation.

- 2. Select the typical installation type.
- 3. Click **Next** until a dependency problem window appears listing all other components that must also be installed for the selected components to work.
- 4. Reconfigure the set of typical components so that the listed dependent components are also set as typical as described in <u>Reconfiguring the Set of Typical Components</u>.
- 5. Repeat this procedure until no dependency problems are displayed.
Chapter 3: Setting Up the Database Connection

This section describes how to set up the connection to the database server for Exigen Workflow.

The following topics are described in this section:

- Database Connection Overview
- SQL.INI File Structure
- <u>Connecting to SQL Server Using ODBC</u>
- <u>Connecting to SQL Server Using OLE DB</u>
- <u>Connecting to DB2 UDB Using ODBC</u>
- <u>Connecting to DB2 UDB Using OLE DB</u>
- <u>Connecting to DB2 UDB Using IBM iSeries Access for Windows</u>
- <u>Connecting to Oracle</u>
- <u>Configuring the Database Connection Using Connect DB Wizard</u>

Database Connection Overview

To run Exigen Workflow, the target database server must be running and the appropriate database client must be installed and configured.

Before connecting to the database, make sure that the following prerequisites are met:

- All required client software is installed on the client workstation, including the database communication software.
- The database server and drivers are running.
- The name of the database used by Exigen Workflow does not exceed 8 characters.

Exigen Workflow uses a common initialization file named SQL.INI to store the database client connection settings. The SQL.INI file is located in the VISIFLOW\SYSTEM directory.

SQL.INI File Structure

The sol.INI file is a simple text file that contains database connection configuration parameters. Applications find database connection settings by looking through the file for the section identifiers that apply. Each section has a brief description after the section identifier.

Note: In the SQL.INI file, the semicolon is used to indicate a comment line.

To configure the client parameters in the SQL.INI file, proceed as follows:

6. In the [win32client.dll] section, specify the communication DLLs that the Windows applications intend to use. To access more than one database, specify or uncomment the comdll entries for all the databases as described in the following table:

Servers and parameters		
Server name	Parameter	
Oracle	comdll=sqlora32	
SQL Server	comdll=sqlodb32	
DB2 UDB	comdll=sqlodb32	

7. For SQL Server or DB2 UDB server, select the following section:

```
[odbcrtr]
```

remotedbname=<Exigen Workflow database alias>,dsn=<ODBC data source name>

```
buffrow=0
```

odbctrace=off

odbctracefile=sql.log

8. If creating a connection to a new Exigen Workflow system, select a name for the Exigen Workflow database.

If you are connecting to the Exigen Workflow system and it is already running, you must ask your system administrator for the appropriate Exigen Workflow database name.

- 9. If you are going to connect to multiple databases through ODBC, in the [odbcrtr] section create a separate remotedbname=<Exigen Workflow DB alias>,dsn=<ODBC data source name> statement for each database.
- 10. For Oracle server, edit the following section:

```
[oragtwy]
remotedbname=<Exigen Workflow DB alias>,@<Oracle database service name>
longbuffer=32767
substitute=",
substitute=SYSSQL.,
fetchrow=20
```

- 11. For Oracle server, delete any quotation marks appearing in the substitute line.
- 12. After modifying the SQL.INI file, delete the GUPTA.INI file if it is present in the same directory.

The GUPTA.INI file is created automatically by Centura if the ODBC router is loaded, and contains information about previously configured database connections. If the GUPTA.INI file is present, Centura runtime may use the parameters specified in this file instead of SQL.INI.

Normally Centura Routers scan the remotedbname records of the SQL.INI file to connect to the database with the requested Centura database name. When the requested remotedbname value is located, the information specified after the comma is used to connect to the database.

In cases where Centura ODBC Router is loaded, Centura scans for the DSN value matching the requested Centura database name first and uses this parameter for the connection. Only if a matching DSN value is not found does Centura scan for the requested remotedbname value.

If Centura ODBC Router is commented in the winclient.dll section of the SQL.INI file, it is not loaded.

Connecting to SQL Server Using ODBC

To connect to the SQL Server database using ODBC, proceed as follows:

- 1. To set up the ODBC Connection in Windows 2000, select **Start > Settings > Control Panel >** Administrative Tools > Data Sources (ODBC).
- 2. In the ODBC Data Source Administrator window, select the System DSN tab.
- 3. Click Add.
- 4. In the Create New Data Source window, select SQL Server and click Finish.
- 5. In the **Create a New Data Source to SQL Server** window, set the **Name** to your database name and **Server** to your database server name, and click **Next.**
- 6. In the **Create a New Data Source to SQL Server** window, select the authentication method and enter a user name and password.
- 7. Click Next.
- 8. Check Change Default Database to and select your database name.
- 9. Click Next.
- 10. Click Finish.
- 11. To confirm that your connection is correct, click **Test Data Source.**
- 12. Modify the SQL.INI file as follows:

```
[win32client]
clientname=Win32Client
[win32client.comments]
[win32client.dll]
comdll=sqlodb32
[odbcrtr]
remotedbname=<Exigen Workflow DB name>,dsn=<ODBC data source name>
buffrow=0
odbctrace=off
odbctracefile=sql.log
```

The [odbcrtr] section specifies parameters for the ODBC Router.

13. Enter your database alias used by the Exigen Workflow system and the ODBC reference name.

Only letters and digits are permitted in the remotedbname name.

Connecting to SQL Server Using OLE DB

This section describes how to set up an OLE DB connection to the SQL Server. This functionality is supported by the following components:

- Retention Server
- Configuration Browser
- Audit Viewer

To set up a connection to the SQL Server database using the OLE DB connection, proceed as follows:

- 1. Open the SQL.INI file.
- 2. If the SQL.INI file does not contain a section named [OLEDB], create the [OLEDB] section.

The [OLEDB] section must be located before the [odbcrtr] section.

3. In the [OLEDB] section, add the following parameters:

remotedbname=<Exigen Workflow database name>, Provider=SQLOLEDB;Initial Catalog=<default database name>;Data Source=<SQL Server address or name>

4. Save and close the SQL.INI file.

Connecting to DB2 UDB Using ODBC

This section describes how to set up an ODBC connection to the DB2 UDB database server.

Warning: Exigen Workflow requires the Read Committed transaction isolation level when using the DB2 UDB database.

To connect to DB2 UDB, proceed as follows:

- 1. Select Start > Settings > Control Panel > Administrative Tools > Data Sources (ODBC).
- 2. Select the appropriate driver and follow the instructions in the window.
- 3. In the SQL.INI file, find the corresponding [odbcrtr] section and make the necessary corrections.
- 4. To configure your data source, proceed as follows:
 - 1. In the ODBC Data Source Administrator window, select the System DSN tab.
 - 2. Select the data source, and click **Configure.**

The DB2 Message dialog appears.

3. Click No.

The CLI/ODBC Settings dialog appears.

4. Click Advanced.

The Advanced CLI/ODBC Settings dialog appears.

- 5. Select the **Service** tab.
- 6. In the Parameter pane, select Known workarounds PATCH1.
- 7. In the Value pane, select MS Visual Basic fix for empty searched update/delete.
- 8. In the Parameter pane, select Warnings.
- 9. In the Value pane, select the Ignore warnings check box.
- 10. To accept these settings, click **OK**.
- 5. To save the configuration, click **OK.**
- 6. Open the VISI.INI file.
- 7. In the **VISI.INI** file, add the following section:

```
[DB2_OS]
<data source>=<operating system>
```

- <data source> is the name of the DB2 database. It must be identical to the value specified in the DBS_MASTER parameter in the same VISI.INI file.
- <operating system> is one of the following values representing the operating system on the database server:

Operating system values	
Value	Operating system
4	AS400
А	AIX
0	OS390
Х	Other

If the operating system is not specified, the system assumes that the value is X.

8. Save and close the **VISI.INI** file.

Connecting to DB2 UDB Using OLE DB

This section describes how to set up an OLE DB connection to the DB2 UDB. This functionality is supported by the following components:

- Retention Server
- Configuration Browser

To set up a connection to the DB2 UDB database using the OLE DB connection, proceed as follows:

- 1. Open the SQL.INI file.
- 2. If the SQL.INI file does not contain a section named [OLEDB], create the [OLEDB] section.

The [OLEDB] section must be located before the [odbcrtr] section.

3. In the [OLEDB] section, add the following parameters:

remotedbname=<Exigen Workflow database name>, Provider=IBMDA400;Data Source=<DB2
server address>

- 4. Save and close the SQL.INI file.
- 5. Open the VISI.INI file.
- 6. In the VISI.INI file, add the following section:

```
[DB2_OS]
<data source>=<operating system>
```

- <data source> is the name of the DB2 database. It must be identical to the value specified in the DBS_MASTER parameter in the same VISI.INI file.
- <operating system> is one of the following values representing the operating system on the database server:

Operating system values		
Value	Operating system	
4	AS400	
A	AIX	
0	OS390	
Х	Other	

If the operating system is not specified, the system assumes that the value is X.

7. Save and close the **VISI.INI** file.

Connecting to DB2 UDB Using IBM iSeries Access for Windows

The connection to the database is performed through the ODBC Data Source Administrator.

Warning: Exigen Workflow requires the Read Committed transaction isolation level when using the DB2 UDB database.

To connect to DB2 UDB using IBM iSeries Access for Windows, proceed as follows:

- 1. Select the appropriate driver and follow the instructions in the window.
- 2. In the SQL.INI file, find the corresponding [odbcrtr] section and make the necessary corrections.
- 3. In the ODBC Data Source Administrator window, select the System DSN tab.
- 4. Select the data source and click Configure.

The iSeries Access for Windows ODBC Setup window appears.

- 5. Select the **Translation** tab.
- 6. Click Advanced.

The Advanced translation options window appears.

- 7. In the SQL statement CCSID list box, select Unicode (UCS-2) CCSID.
- 8. To accept the settings, click OK.
- 9. To save the configuration, click OK.
- 10. Open the VISI.INI file.
- 11. In the VISI.INI file, add the following section:

```
[DB2_OS] <data source>=<operating system>
```

- <data source> is the name of the DB2 database. It must be identical to the value specified in the DBS_MASTER parameter in the same VISI.INI file.
- <operating system> is one of the following values representing the operating system on the database server:

Operating system values	
Value	Operating system
4	AS400
А	AIX
0	OS390
Х	Other

If the operating system is not specified, the system assumes that the value is X.

12. Save and close the **VISI.INI** file.

Connecting to Oracle

This section describes how to set up a connection to the Oracle database server.

The following topics are described in this section:

- Installing Oracle Client
- Setting Up a Connection for the Main Exigen Workflow Components
- <u>Setting Up a Connection Using the ODBC or OLE DB Driver</u>

Installing Oracle Client

Oracle Client must be installed on the user's workstation before connecting to the Oracle database.

To install Oracle Client, proceed as follows:

1. From the Oracle installation source, launch the Oracle Client setup application.

- 2. Select to install either the ODBC driver or the OLE DB driver as required.
- 3. After a successful Oracle Client installation, modify the registry information by adding the following string variables in hkey_local_machine\software\oracle:

String variables in registry	
Name Value	
Name	oraoci
Data	oraclientX.dll
	where X is the Oracle Client version.

Setting Up a Connection for the Main Exigen Workflow Components

Most Exigen Workflow components use the native Oracle driver to connect to the Oracle server. For information on components that do not support this type of connection, see <u>Setting Up a Connection</u> <u>Using the ODBC or OLE DB Driver</u>.

To set up a connection using the native Oracle driver, proceed as follows:

- 1. Open the SQL.INI file.
- 2. In the [win32client.dll] section uncomment the following line:

comdll=sqlora32

3. In the [oragtwy] section, add or edit the following line as required:

remotedbname=<Exigen Workflow database name>,@<Oracle database service name>

4. Save and close the SQL.INI file.

Setting Up a Connection Using the ODBC or OLE DB Driver

The following Exigen Workflow components do not support the database connection using the native Oracle driver:

- Retention Server
- Configuration Browser
- Audit Viewer
- Component Configuration Manager
- ADSync

To use the preceding components, one of the following additional connection types must be configured in addition to the standard connection configuration:

- <u>Setting Up an ODBC Connection</u>
- <u>Setting Up an OLE DB Connection</u>

Setting Up an ODBC Connection

To set up an ODBC connection, proceed as follows:

- 1. Open the SQL.INI file.
- 2. In the [win32client.dll] section, uncomment the following line:

comdll = sqlodb32

This line must be located after the following line:

comdll = sqlora32

- 3. Save and close the SQL.INI file.
- 4. To finish the configuration, perform one of the following procedures depending on the connection type:
 - Setting Up the Oracle ODBC Driver with the DSN Alias
 - Setting Up the Oracle ODBC Driver without the DSN Alias
 - Setting Up the Microsoft ODBC Driver with the DSN Alias
 - Setting Up the Microsoft ODBC Driver without the DSN Alias

Setting Up the Oracle ODBC Driver with the DSN Alias

To set up the Oracle ODBC driver with the DSN alias, proceed as follows:

- 1. Select Start > Settings > Control Panel > Administrative Tools > Data Sources (ODBC).
- 2. Select the **System DSN** tab.
- 3. Click Add.
- 4. In the driver list, select the Oracle ODBC driver.
- 5. Click Finish.

The setup window appears.

- 6. Specify the following parameters as required:
 - DSN, which must be different from the Exigen Workflow database name
 - Oracle database service name
 - user ID
 - description if required
- 7. Click OK.
- 8. Open the SQL.INI file.
- 9. If the SQL.INI file does not contain a section named [odbcrtr], create the [odbcrtr] section.
- 10. In the [odbcrtr] section, add the following parameters:

remotedbname=<Exigen Workflow database name>,dsn=<ODBC data source name>

11. Save and close the SQL.INI file.

Setting Up the Oracle ODBC Driver without the DSN Alias

To set up the Oracle ODBC driver without the DSN alias, proceed as follows:

- 1. Open the SQL.INI file.
- 2. If the SQL.INI file does not contain a section named [odbcrtr], create the [odbcrtr] section.
- 3. In the [odbcrtr] section, add the following parameters:

```
remotedbname=<Exigen Workflow database name>,driver={<Oracle ODBC driver
name>};dbq=<Oracle database service name>
```

4. Save and close the SQL.INI file.

Setting Up the Microsoft ODBC Driver with the DSN Alias

To set up the Microsoft ODBC driver with the DSN alias, proceed as follows:

- 1. Select Start > Settings > Control Panel > Administrative Tools > Data Sources (ODBC).
- 2. Select the **System DSN** tab.
- 3. Click Add.
- 4. In the list, select Microsoft ODBC for Oracle.
- 5. Click Finish.

The setup window appears.

- 6. Specify the following parameters as required:
 - DSN, which must be different from the Exigen Workflow database name
 - description if required
 - user name
 - Oracle database service name
- 7. Click **OK.**
- 8. Open the SQL.INI file.
- 9. If the SQL.INI file does not contain a section named [odbcrtr], create the [odbcrtr] section.
- 10. In the [odbcrtr] section, add the following parameters:

remotedbname=<Exigen Workflow database name>,dsn=<data source name>

11. Save and close the SQL.INI file.

Setting Up the Microsoft ODBC Driver without the DSN Alias

To set up the Microsoft ODBC driver without the DSN alias, proceed as follows:

- 1. Open the SQL.INI file.
- 2. If the SQL.INI file does not contain a section named [odbcrtr], create the [odbcrtr] section.
- 3. In the [odbcrtr] section, add the following parameters:

remotedbname=<Exigen Workflow database name>,driver={Microsoft ODBC for Oracle};server=<Oracle database service name> 4. Save and close the SQL.INI file.

Setting Up an OLE DB Connection

To set up an OLE DB connection, proceed as follows:

- 1. Open the SQL.INI file.
- 2. If the SQL.INI file does not contain a section named [oledb], create the [oledb] section.

The [oledb] section must be located before the [odbcrtr] section.

3. In the [oledb] section, add the following parameters:

remotedbname=<Exigen Workflow database name>, Provider=OraOLEDB.Oracle; Data Source=<Oracle database service name>

4. Save and close the SQL.INI file.

Configuring the Database Connection Using Connect DB Wizard

Exigen Workflow includes a tool named Connect DB Wizard for configuring the SQL.INI file by using a graphical user interface. However, Connect DB Wizard does not allow administrators to configure some specific configuration settings.

To configure the database connection using Connect DB Wizard, proceed as follows:

1. Select Start > Programs > Exigen Solution > Exigen Workflow > Connect DB Wizard.

The Centura Connectivity Administrator window appears.

有 Centura Connectivity Administrator	×		
Connectivity			
The names of configurable items installed on your PC are listed in this tree. Click on any + to display the sub-items (datasources, protocols, etc.).			
Select an item, then either right-click (for a pop up menu) or press one of the buttons below to perform an operation on that item. On the 'Connectivity' tab, a right-click on white space will produce a pop up menu to set SQL.INI location.			
C:\VISIFLOW\SYSTEM\sql.ini			
Ingres Ingres ODBC Oracle ⊕ Sybase ⊕ ∰ SQLBase			
Add Remove Enable Properties			
OK Cancel Help			

Figure 17: Connect DB Wizard

All data source items configured on the workstation are listed in a tree structure divided into related groups.

- 2. To examine the configured data source items, expand the tree structure as required.
- 3. To add a new database connection item, select the related data source group and click Add.

The Data Source Configuration window appears.

🦧 Data Source Configuration	DN	×
Required Fields		
In the first field, enter the nam	e of the data source to which the router will connect.	
Data Source Name:	ewtsrv	
Connection String:	dsn=ewfsrv	
	OK Cancel Help	

Figure 18: Adding a new data source

The window may differ depending on the selected data source type.

- 4. In the Data Source Name field, enter the database alias.
- 5. In the **Connection String** field, enter the data source name.

For information on the data source definition syntax in each specific case, click Help.

- 6. To add the new data source item, click **OK**.
- 7. To remove a configured data source item, select the item and click **Remove.**
- 8. To modify a configured data source item, select the item and click **Properties.**
- 9. To disable a configured data source item, select the item and click **Disable**.
- 10. To enable a disabled data source item, select the item and click **Enable**.
- 11. To apply changes made to the data source items, click **OK**.

Chapter 4: Installing Exigen Workflow Web

This section describes how to install Exigen Workflow Web. The following topics are described in this section:

- <u>What is Exigen Workflow Web?</u>
- Exigen Workflow Web System Requirements
- Installing the Exigen Workflow Web Server
- General Steps for Configuring the Application Server
- <u>Configuring Application Servers</u>
- Using the Exigen Workflow Web Configuration Page
- Using the Proxy Server
- Running Exigen Workflow Web

What is Exigen Workflow Web?

Exigen Workflow Web is an application that provides web access to the basic workflow objects and administration tools. Once the Exigen Workflow Web server is installed and configured properly, clients can perform most of their daily duties through the Internet.

Exigen Workflow Web has a different interface and it does not support all functions available in the main Exigen Workflow system.

Exigen Workflow Web System Requirements

For information on Exigen Workflow Web hardware and software requirements, see the Exigen Workflow readme file.

Installing the Exigen Workflow Web Server

To install the Exigen Workflow Web server, proceed as follows:

- 1. Insert the Exigen Workflow installation CD into the CD drive.
- 2. If the installation does not start automatically, from the CD, launch the Setup.exe file.
- 3. Follow the installation instructions until you reach the **Exigen Workflow** window as described in <u>General Installation Steps</u>.
- 4. In the **Exigen Workflow** window, in the **Install/Upgrade** column, select the **Web Components** check box.

🖶 Exigen Installer Setup				
Exigen Workflow				4
Component group	Remove Typical/Custom	Install/Up Typical/0	grade iustom	
Common Modules		5.6.1	Details	2
Workspace Components		5.6.1 🗖	Details	2
Web Components		5.6.1 🔽 T	ypical Details	2
Administrative Components		5.6.1 🗖	Details	2
Automated Services		5.6.1 🗖	Details	2
E-Capture	Г	5.6.1 🗖	Details	?
Enterprise Report Management (COLD)	Г	5.6.1 🗖	Details	2
Form OCR		5.6.1 🔲	Details	2
Scan Capture		5.6.1 🗖	Details	?
Document Publisher	Γ	5.6.1 🗖	Details	2
Options		5.6.1 🗖	Details	?
	All typical 🔄 Full 🛄	All typical 🔜 Full 🔜		2
Common Modules contains commonly used Exigen Workflow	v components.			
Select the Remove check box to remove the item from your selected, the previous version of the item is removed and the the item remains on the workstation.	workstation or Install/Upgrade to install e new version is installed. If both check	or upgrade the item. If both boxes are cleared, the cu	check boxes are rently installed versi	on of
Install documentation for subcomponents				
		< <u>B</u> ack <u>N</u> ext	> Cance	:

Figure 19: Installing Exigen Workflow Web

- 5. To select which Exigen Workflow Web components to install or upgrade, click **Details** and configure the components as required.
- 6. To install Exigen Workflow Web documentation, select the **Install documentation for subcomponents** check box.
- 7. Click Next.

The **Destination Folder** window appears.

记 Exigen Installer Setup	
Destination Folder Select a folder(s) where the modules will be installed.	
Select the required destination folders.	
You can choose not to install Exigen Workflow by clicking Cancel to Installation Wizard.	exit the Exigen
– Exigen Workflow Folder	
	Browse
Exigen Workflow Web Root Folder	
C:\VISICOM\	Browse
Exigen Workflow Web Dll Folder	
C:\VISICOM\WEB-INF\DII\	Browse
Exigen Products Folder	
	Biowse
Exigen Workflow 5.6.12 Installation Wizard	utty Connect
<u> </u>	Lancel

Figure 20: Specifying Exigen Workflow Web installation directories

- 8. To set the directory in which to install the main Exigen Workflow Web files, in the **Exigen Workflow Web Root Folder** box, click **Browse** and select the required directory.
- 9. To set the directory in which to install Exigen Workflow Web DLL libraries, in the **Exigen Workflow Web DII Folder** box, click **Browse** and select the required directory.
- 10. Click Next.
- 11. To complete the installation process, follow the instructions as described in <u>General Installation</u> <u>Steps</u>.

Warning: To avoid the user credentials being sent through the network as a plain text, it is recommended to use Secure Socket Layer (SSL) in Exigen Workflow Web.

General Steps for Configuring the Application Server

Exigen Workflow Web is run as a web application on an application server. The application server and Exigen Workflow Web server environment must be configured for users to be able to access Exigen Workflow Web.

The following procedure describes general steps for configuring the application server and Exigen Workflow Web server environment:

- 1. Before installing the application server, install JDK.
- 2. Ensure that the web.xml file located in the VISICOM\WEB-INF directory is in the correct format for the application server.
- 3. If it is not in the correct format, rewrite all settings of this file in the correct format for your application server as described in your application server's documentation.
- 4. Ensure the application server can find the document root location by specifying the document root for Exigen Workflow Web as described in the application server's documentation.
- 5. Ensure the application server can find Exigen Workflow Web Java classes and libraries.

For most application servers, this can be achieved by specifying Java libraries and class files location as the WEB-INF directory inside the document root directory.

- 6. If it still does not work with your application server, specify the CLASSPATH variable for it as described in the application server's documentation.
- 7. Ensure the application server can find the native libraries location by modifying the PATH environment variable of your application server to point to the Exigen Workflow Web native libraries directory as described in the application server's documentation.

The PATH environment variable must be modified before starting the application server.

8. Ensure that the application server can find your database driver by adding the location of your database driver to the application server's CLASSPATH variable.

For more information on configuring database drivers and application servers, see your application server and database driver documentation.

9. To improve the performance of Exigen Workflow Web, configure the initial and maximal memory heap size used for the Java virtual machine according to the system load and available memory.

For information on configuring specific application servers, see <u>Configuring Application Servers</u>.

The Exigen Security Services package that supports NT LAN Manager (NTLM) authentication for Exigen Workflow Web is not included in the Exigen Workflow installation package. For information on the Exigen Security Services package that supports NTLM, contact Exigen Support Services.

Configuring Application Servers

This section describes how to install Exigen Workflow Web as a default application for a given application server with minimal changes to the default server's settings.

The following topics are described in this section:

- Tomcat 4.1.27 Standard Edition Application Server
- Tomcat 5.5.6 Standard Edition Application Server
- <u>WebLogic 8.1 Application Server</u>
- <u>WebSphere 5.1 Application Server</u>
- WebSphere 6.0 Application Server

Tomcat 4.1.27 Standard Edition Application Server

This section describes how to install Exigen Workflow Web as a default application for the Tomcat 4.1.27 Standard Edition Application Server.

The following topics are described in this section:

- Configuring Tomcat 4.1.27 as a Standalone Java Process
- <u>Configuring Tomcat 4.1.27 as a Service</u>

Configuring Tomcat 4.1.27 as a Standalone Java Process

To configure Tomcat 4.1.27 as a standalone Java process, proceed as follows:

- 1. From the Exigen Workflow installation CD, launch the Setup.exe file.
- 2. Install the Exigen Workflow Web server as described in Installing the Exigen Workflow Web Server.
- 3. Ensure the following location is selected as the Exigen Workflow Web root directory:

<Tomcat installation directory>\webapps\visicom

The location for native libraries is updated as follows:

<Tomcat installation directory>\webapps\visicom\WEB-INF\Dll

- 4. Perform one of the following steps:
 - Copy your database driver to the VISICOM\WEB-INF\lib directory.
 - Specify the location of your database driver in the application server's CLASSPATH variable.
- 5. To specify the native libraries path for Tomcat, go to Tomcat's bin directory and open the startup.bat file.
- 6. Modify the doneSetArgs label as follows:

```
:doneSetArgs
```

SETLOCAL

set path=%CATALINA_HOME%\webapps\visicom\WEB-INF\Dll;%path%

call "%EXECUTABLE%" start %CMD_LINE_ARGS%

ENDLOCAL

:end

7. To improve the performance of Exigen Workflow Web, add the following line before the application server startup command:

set JAVA_OPTS=-Xms<initial heap size> -Xmx<maximal heap size>

This command sets the initial and the maximal memory heap size used for the Java virtual machine.

For example, if 512 MB of memory is available, it is recommended to add the following line to the startup.bat file:

set JAVA_OPTS=-Xms128m -Xmx328m

However, these parameters must be configured according to the system load and available memory.

- 8. Save and close the file.
- 9. Start Tomcat.
- 10. Open the Web browser and in the address bar, enter the following:

http://localhost:8080/visicom

The Exigen Workflow Web login page appears.

Configuring Tomcat 4.1.27 as a Service

The following procedure describes how to configure Tomcat 4.1.27 as a service.

Prerequisite: The **NT Service** component must be selected in the Tomcat setup during the Tomcat 4.1.27 installation.

- 1. From the Exigen Workflow installation CD, launch the Setup.exe file.
- 2. Install the Exigen Workflow Web server as described in Installing the Exigen Workflow Web Server.
- 3. Ensure the following location is selected as the Exigen Workflow Web root directory:

<Tomcat installation directory>\webapps\visicom

The location for native libraries is updated as follows:

<Tomcat installation directory>\webapps\visicom\WEB-INF\Dll

- 4. Perform one of the following steps:
 - Copy your database driver to the VISICOM\WEB-INF\lib directory.
 - Specify the location of your database driver in the application server's CLASSPATH variable.
- 5. Add the location of Exigen Workflow Web native libraries to the system PATH variable.

Exigen Workflow Web native libraries are located in the **VISICOM\WEB-INF\Dll** directory.

6. In the service console, start Tomcat as a service named **Apache Tomcat 4.1.**

7. Open the Web browser and in the address bar, enter the following:

http://localhost:8080/visicom

The Exigen Workflow Web login page appears.

Tomcat 5.5.6 Standard Edition Application Server

This section describes how to install Exigen Workflow Web as a default application for the Tomcat 5.5.6 Standard Edition Application Server.

Prerequisite: To run Tomcat 5.5.6 using JDK 1.4.2, the Tomcat compatibility package must be installed. It can be retrieved from the following website:

http://jakarta.apache.org/tomcat/

The following topics are described in this section:

- Configuring Tomcat 5.5.6 as a Standalone Java Process
- <u>Configuring Tomcat 5.5.6 as a Service</u>

Configuring Tomcat 5.5.6 as a Standalone Java Process

To configure Tomcat 5.5.6 as a standalone Java process, proceed as follows:

- 1. From the Exigen Workflow installation CD, launch the Setup.exe file.
- 2. Install the Exigen Workflow Web server as described in Installing the Exigen Workflow Web Server.
- 3. Ensure the following location is selected as the Exigen Workflow Web root directory:

<Tomcat installation directory>\webapps\visicom

The location for native libraries is updated as follows:

<Tomcat installation directory>\webapps\visicom\WEB-INF\Dll

- 4. Perform one of the following steps:
 - Copy your database driver to the visicom\WEB-INF\lib directory.
 - Specify the location of your database driver in the application server's CLASSPATH variable.
- 5. Add the location of Exigen Workflow Web native libraries to the system PATH variable.

Exigen Workflow Web native libraries are located in the visicom/WEB-INF/Dll directory.

- 6. To configure Tomcat, go to Tomcat's bin directory and launch the tomcatw executable.
- 7. To improve the performance of Exigen Workflow Web, in the Java tab, modify the following memory parameters as required:
 - Initial memory pool
 - Maximum memory pool

These parameters set the initial and the maximum memory heap size used for the Java virtual machine.

For example, if 512 MB of memory is available, it is recommended to set the memory parameters as follows:

Java virtual machine memory parameter values		
Parameter	Value	
Initial memory pool	128 MB	
Maximum memory pool	328 MB	

8. Click OK.

- 9. Start the Tomcat application server.
- 10. Open the Web browser and, in the address bar, enter the following address:

http://localhost:8080/visicom

The Exigen Workflow Web login page appears.

Configuring Tomcat 5.5.6 as a Service

The following procedure describes how to configure Tomcat 5.5.6 as a service.

Prerequisite: The NT Service component must be selected in the Tomcat setup during the Tomcat 5.5.6 installation.

- 1. From the Exigen Workflow installation CD, launch the Setup.exe file.
- 2. Install the Exigen Workflow Web server as described in Installing the Exigen Workflow Web Server.
- 3. Ensure the following location is selected as the Exigen Workflow Web root directory:

<Tomcat installation directory>\webapps\visicom

The location for native libraries is updated as follows:

<Tomcat installation directory>\webapps\visicom\WEB-INF\Dll

- 4. Perform one of the following steps:
 - Copy your database driver to the visicom\WEB-INF\lib directory.
 - Specify the location of your database driver in the application server's CLASSPATH variable.
- 5. Add the location of Exigen Workflow Web native libraries to the system PATH variable.

Exigen Workflow Web native libraries are located in the visicom/WEB-INF/Dll directory.

- 6. To start the Tomcat service, perform one of the following steps:
 - In the Windows Services console, start the Apache Tomcat service.
 - In the Tomcat configuration manager, in the **General** tab, start the Apache Tomcat service.
- 7. Open the Web browser and, in the address bar, enter the following address:

http://localhost:8080/visicom

The Exigen Workflow Web login page appears.

WebLogic 8.1 Application Server

This section describes how to configure WebLogic 8.1 application server to run Exigen Workflow Web.

The following topics are described in this section:

- Prerequisites
- <u>Configuring WebLogic 8.1 Application Server</u>

Prerequisites

The following requirements must be met before configuring the WebLogic 8.1 application server:

- WebLogic 8.1 must be installed.
- Exigen Workflow Web must be installed.
- The path to the Exigen Workflow Web DLL directory must be defined in the system PATH variable.

Configuring WebLogic 8.1 Application Server

To configure the WebLogic 8.1 application server, proceed as follows:

1. Run BEA WebLogic Configuration Wizard.

The Create or Extend a Configuration window appears.

BEA WebLogic Configuration Wizard	
Create or Extend a Configuration	
Choose between creating and extending a configuration. Based on your selection,	i hoo
the Configuration Wizard guides you through the steps to generate a new or extend an existing configuration.	2 UGa
Oreate a new WebLogic configuration	
Start here to create a WebLogic configuration in your projects directory.	
 Extend an existing WebLogic configuration 	
Start here to extend an existing webLogic configuration.	
Use this option to add applications and services, including Database access (JDBC) and Messagin	g (JMS).
This option also enables you to extend functionality by enabling WebLogic Workshop.	
	Previous <u>N</u> ext

Figure 21: WebLogic Configuration Wizard

2. Select Create a new WebLogic configuration and click Next.

The Select a Configuration Template window appears.

BEA WebLogic Configuration Wizard		_ 🗆 🛛
Select a Configuration Template Select the configuration template that best meets your requirement. Min define the infrastructure of a domain. They may also define other applic	imally, configuration templates ations, data and services.	<i>i bea</i>
WebLogic Configuration Templates BEA KebLogic Server Examples Domain Avitek Medical Records Sample Domain Basic WebLogic Server Domain	Description Create a basic WebLogic Server domain without installing sample	applications.
Template Locations	Author BEA Systems, Inc.	
	Pre	evious <u>N</u> ext

Figure 22: Selecting a configuration template

- 3. In the tree, expand the **BEA** folder and select **Basic WebLogic Server Domain**.
- 4. Click Next.

The Choose Express or Custom Configuration window appears.

BEA WebLogic Configuration Wizard	
Choose Express or Custom Configuration	00000
Choose between default and customized settings for your configuration.	i bea
 Express 	
Create a configuration quickly using the default template settings.	
This option does not permit modification of template settings, for example, server port numbers, a creates a configuration exactly as defined by the template.	nd
○ Custom	
Create a custom configuration by modifying any template settings, as desired.	
This option permits modification of template settings including clustering, database(JDBC), messaging(JMS), and advanced security options.	
Exit Help	revious <u>N</u> ext

Figure 23: Selecting a configuration type

5. Select Express and click Next.

The Configure Administrative Username and Password window appears.

🔊 BEA WebLogic Configu	uration Wizard	
Configure Administration Create a user automatically assign This user is the default administra	tive Username and Password gned to the Administrative Role. rator used to start development mode servers.	bea
💍 Discard Changes		
User Name *	weblogic	
User Password *	****	
Confirm User Password *	*****	
Description	This user is the default administrator.	
Exit Help	Previous	Next

Figure 24: Configuring the administrative account

6. Enter values in the following fields as required:

Administrative account fields		
Field Description		
User Name	Administrator user name.	
User Password	Administrator password.	
Confirm User Password	Confirmation of administrator password.	
Description	Administrative account description.	

7. Click Next.

The Configure Server Start Mode and Java SDK window appears.

BEA WebLogic Configuration Wizard	
Configure Server Start Mode and Java SDK Choose the WebLogic configuration startup mode and the Java Software Development Kit (SDK) to be used for the domain.	<i>i bea</i>
WebLogic Configuration Startup Mode	Java SDK Selection
 Development Mode Utilize boot.properties for username and password and poll for applications to deploy. Sun SDK recommended for better startup performance during iterative development. Production Mode Require the entry of a username and password and do not poll for applications to deploy. WebLogic JRockit SDK recommended for better runtime performance and management. 	BEA Supplied SDKs Sun SDK 1.4.1_03-ea @ d:\bea\jdk141_03 JRockit SDK 1.4.1_03-8100 @ d:\bea\jrockit81sp1_1 ① Other Java SDK Browse
If you plan to use WebLogic JRockit in production, BEA recommends deve project cycle. Refer to the WebLogic JRockit Migration Guide for useful in	eloping and testing your applications with WebLogic JRockit early in the nformation on migrating applications to WebLogic JRockit from other JVMs.
Exit Help	Previous Next

Figure 25: Configuring the server start mode and Java SDK

8. Select the required configuration startup mode and click **Next.**

BEA WebLogic Configuration Wizard		
Create WebLogic Configuration Specify the directory in which you want to create a WebLo summary and make any corrections by returning to the ass	igic configuration. Please review the ociated section in the Configuration Wizar	d.
Configuration Summary	Configuration Details	
Template	Name Name * Listen Address Listen Port	Value myserver 7001
Summary View: Deployment Configuration Location and Domain Name	 ▼	
Browse d:\bea\user_projects\domains\mydomain		Configuration Name: mydomain
		Previous

Figure 26: Creating the WebLogic configuration

- 9. In the tree, select your server and configure the server name, listen address, and port as required.
- 10. Click Create.

The configuration creation process starts.

- 11. When the configuration is created, click **Done.**
- 12. Open the config.xml file located in the created domain directory.
- 13. In the <Domain> section, add the following record:

```
<Application
Name="VISICOM"
Path="D:\"
StagingMode="nostage"
TwoPhase="true">
<WebAppComponent
```

Name="VISICOM"

PreferWebInfClasses="true"

Targets="myserver" URI="VISICOM"/>

</Application>

- 14. Configure the Path, Name, and URI parameters as appropriate for your production environment.
- 15. Save and close the config.xml file.
- 16. To start the server, in the domain directory, perform one of the following tasks as required:
 - To start the server as a service, run the installService.cmd file.
 - To start the server manually, run the startWebLogic.cmd file.
- 17. Enter the administrator user name and password.
- 18. To test the configuration, in your Web browser address bar, enter the following address:

http://localhost:7001/VISICOM

If the server is configured correctly, the Exigen Workflow Web login window appears.

WebSphere 5.1 Application Server

This section describes how to configure the WebSphere 5.1 application server to run Exigen Workflow Web.

The following topics are described in this section:

- Prerequisites
- Setting Up the Application Server

Prerequisites

The following steps must be performed before configuring the application server:

- The WebSphere 5.1 application server must be installed.
- The Exigen Workflow Web for WebSphere component must be installed.

The Exigen Workflow Web for WebSphere component is delivered as the WorkflowWEBWebsphere.msi installation package. It contains the visicom.ear file, which is used in the application server configuration.

Setting Up the Application Server

To configure the WebSphere application server to run Exigen Workflow Web, proceed as follows:

- 1. Start the WebSphere application server.
- 2. Open the WebSphere Administrative Console.
- 3. Enter the login name and click OK.

- 4. In the navigation tree, select Applications > Install New Application.
- 5. Select Local file system and, in the Specify path field, enter the path to the visicom.ear file.

Browse the local machine or a rem	iote server:	 Choose the local path if the ear resides on the same machine as the browser.
C: Wisicom.ear	Choose the server ear resides on any nodes in your cell	Choose the server path if the ear resides on any of the nodes in your cell context.
sed only for standalone Web modu	lles (*.war)	I You must specify a context root if the module being installed is a WAR module.
	Browse the local machine or a rem C:wisicom.ear Server path: sed only for standalone Web modu	Browse the local machine or a remote server:

Figure 27: Selecting the visicom.ear file

- 6. Click Next twice.
- 7. In the **Application Name** field, enter *visicom*.

AppDeployment Options	Enable
Pre-compile JSP	
Directory to Install Application	
Distribute Application	
Jse Binary Configuration	
Deploy EJBs	
Application Name	(visicom)
Create MBeans for Resources	
nable class reloading	
Reload Interval	3

Figure 28: Changing the application name

- 8. Click Next three times.
- 9. Click Finish.

WebSphere installs the application.

- 10. When the application is installed successfully, click Save to Master Configuration.
- 11. In the Save to Master Configuration window, click Save.

C th m w	lick the Save button to update the master repository with your changes. Click ne Discard button to discard your changes and begin work again using the naster repository configuration. Click the Cancel button to continue working with your changes.
T	otal changed documents: 11

Figure 29: Saving changes to the master configuration

Do not click any buttons until the application is fully saved. The application is completely saved when the window contents are updated.

- 12. In the navigation tree, select **Applications > Enterprise Applications.**
- 13. In the Enterprise Applications window, click visicom.

Tota ⊞ F ⊞ P	: 9 ilter references	
Sta	art Stop Install Uninstall Update	Export Export DDL
	Name 🗢	Status ♀ <u></u>
	DefaultApplication_	•
	MDBSamples_	•
	PlantsByWebSphere_	•
	SamplesGallery_	•
	TechnologySamples	•
	adminconsole	•
	ivtApp_	-
	petstore_	⇒
	Visicom	*
<u></u>	I	

Figure 30: Viewing enterprise applications

14. In the Additional Properties list, click Session management.

Target Mappings		The mapping of this deployed object (Application or Module) into a target environment (server, cluster, cluster member)	
Libraries		A list of library references which specify the usage of global libraries.	
session Manager	iem -	Session Manager properties specific to this Application	
View Deployment Descriptor		View the Deployment Descriptor	
Map virtual hosts for web modules		Map virtual hosts for web modules	
Map modules to application servers		Map modules to application servers	
Related Items			
Web Modules	Web Modules d	Web Modules defined for this Application	
EJB Modules	EJB Modules de	EJB Modules defined for this Application	
- · · · · · ·	Connector Modules defined for this Application		

Figure 31: Configuring the application

- 15. Make the following changes to the configuration:
 - Select the **Override** check box.

....

- Clear the Enable Cookies check box.
- Select the Enable URL Rewriting check box.

General Properties		
Overwrite Session Management	Overwrite	Specifies whether this SessionManager settings are to be used for the current module. Default is to use Session Manager settings defined or parent object.
Session tracking mechanism:	Enable SSL ID tracking Enable Cookies Enable URL Rewriting Enable protocol switch rewriting	Specify a mechanism for HTTP session management.
Overflow:	Allow overflow	i Whether to allow the number (

Figure 32: Configuring session settings

16. Click **OK.**

17. When the page is reloaded, click **Save.**

18. In the Save to Master Configuration window, click Save.

Do not click any buttons until the application is fully saved. The application is completely saved when the window contents are updated.

- 19. In the Enterprise Applications window, click visicom.
- 20. Select the Local Topology tab and click visicom.war.

Configuration Local Topology		
Local Topology		
Enterprise Applications		
🖻 🛄 visicom		
E 🗁 Web Module		
Usicom.war		
E EJB Modules		
Connector Modules		

Figure 33: Selecting the visicom.war web module

21. In the Classloader mode list box, select PARENT_LAST.

Configuration		
General Properti	es	
Uri	* visicom.war	A URI that, when resolved relative to the application URL, specifies the location of a module's archive contents on a file system. The URI must match the URI of a ModuleRef URI in the deployment descriptor of an application if the module was packaged as part of a deployed application (EAR).
Alternate DD		The altDD URI for a given module.
Starting Weight	* 10000	When the enterprise application contains multiple modules, the starting weight specified here can be used to give this module startup priority over other modules during server startup. Modules with lower startup order will be started first.
Classioader Mode		Specifies whether classes are loaded via the parent classloader before this one.



- 22. Click OK.
- 23. Click Save twice.
- 24. Stop the WebSphere application server.
- 25. To register the document.dll file, at the command prompt, enter and execute the following command:

```
regsvr32 "WebSphere\AppServer\installedApps\<your server
name>\visicom.ear\visicom.war\WEB-INF\Dll\document.dll"
```

If it is required that the document.dll file must be upgraded, it must first be unregistered using the regsvr32 command. After the upgrade, the file must be registered again.

26. To register the dtmstg.dll file, at the command prompt, execute the following command:

```
regsvr32 "WebSphere\AppServer\installedApps\<your server
name>\visicom.ear\visicom.war\WEB-INF\Dll\dtmstg.dll"
```

If it is required that the dtmstg.dll file must be upgraded, it must first be unregistered using the regsvr32 command. After the upgrade, the file must be registered again.

- 27. Ensure that all DLL files required by Exigen Workflow Web are specified in the PATH environment variable.
- 28. Ensure that the visicom.properties file is located in the following directory:

WebSphere\AppServer\installedApps\<your server name>\visicom.ear\visicom.war\WEB-INF\Config

29. Delete the commons-logging.jar file from the following directory:

WebSphere\AppServer\installedApps\<your server name>\visicom.ear\visicom.war\WEB-INF\lib

- 30. Start the WebSphere application server.
- 31. To test Exigen Workflow Web, in the web browser's address bar, enter the following address:

http://localhost:9080/visicom

If everything is configured correctly, the Exigen Workflow Web login page appears.

WebSphere 6.0 Application Server

This section describes how to configure the WebSphere 6.0 application server to run Exigen Workflow Web.

The following topics are described in this section:

- Prerequisites
- Setting Up the Application Server

Prerequisites

The following steps must be performed before configuring the application server:

- The WebSphere 6.0 application server must be installed.
- The Exigen Workflow Web for WebSphere component must be installed.

The Exigen Workflow Web for WebSphere component is delivered as the WorkflowWEBWebsphere.msi installation package. It contains the visicom.ear file, which is used in the application server configuration.

Setting Up the Application Server

To configure the WebSphere application server to run Exigen Workflow Web, proceed as follows:

- 1. Start the WebSphere application server.
- 2. Open the WebSphere Administrative Console.
- 3. Enter the login name and click OK.
- 4. In the navigation tree, select **Applications > Install New Application.**
- 5. Select Local file system and, in the Specify path field, enter the path to the visicom.ear file.

Welcome	Preparing for the application installation
1 Servers	
Applications	Preparing for the application installation
Enterprise ApplicationsInstall New Application	Specify the EAR, WAR or JAR module to upload and install.
🗄 Resources	C Local file system
🗄 Security	Specify path
🗄 Environment	C:\VISICOM\visicom.ear Browse
E System administration	C Remote file system
Monitoring and Tuning	Specify path
Troubleshooting	
E Service integration	Context root
I UDDI	Used only for standalone Web modules (.war files)
	Next Cancel

Figure 35: Selecting the visicom.ear file

- 6. Click Next twice.
- 7. In the Application name field, enter visicom.

Select installation options	
Specify the various options that are available to prepare and install your application.	
Pre-compile JSP	
Directory to install application	
✓ Distribute application	
Use Binary Configuration	
Deploy enterprise beans	
Application name visicom	
Create MBeans for resources	
Enable class reloading	
Reload interval in seconds	
Deploy Web services	
Validate Input off/warn/fail warn 🔽	
Process embedded configuration	

Figure 36: Changing the application name

- 8. Click Next three times.
- 9. Click Finish.

WebSphere installs the application.

- 10. When the application is installed successfully, click Save to Master Configuration.
- 11. In the Save window, click Save.
| ave | - |
|--|---|
| Save | |
| Save your workspace changes to the master configuration | |
| Click Save to update the master repository with your changes. Click Discard to discard your changes and begin work again
using the master repository configuration. Click Cancel to continue working with your changes. | |
| Total changed documents: 12 | |
| Save Discard Cancel | |

Figure 37: Saving changes to the master configuration

Do not click any buttons until the application is fully saved. The application is completely saved when the window contents are updated.

12. In the navigation tree, select **Applications > Enterprise Applications.**

13. In the Enterprise Applications window, click visicom.

Enterpri	nterprise Applications ? -						
Enter Lists ⊕ Pr	prise Applications installed applications. A single application can be deplo eferences	oyed onto multip	ole servers.				
Sta	rt Stop Install Uninstall Update Roll	lout Update	Remove File	Export	Export DDL		
D							
Sele	t Name 🛟	Status 🕻	2				
	DefaultApplication	€					
	ivtApp_	٠					
	<u>query</u>	٠					
	🔽 visicom.						
Tota	al 4						

Figure 38: Viewing enterprise applications

14. In the Additional Properties list, click Session management.

onfiguration Local Topology	
General Properties	– Additional Properties
 * Name visicom Binary Management Application binaries \$(APP_INSTALL_ROOT)/mare Use metadata from binaries I use metadata from binaries	 Session management Application profiles Libraries Target mappings Last participant support extension View Deployment Descriptor Provide JMS and EJB endpoint URL information Publish WSDL files Provide HTTP endpoint URL information Map virtual hosts for Web modules Map modules to servers Related Items EJB Modules Connector Modules
Startup Options * Starting weight 1 Enable background application Create MBeans for resources	
Apply OK Reset Cancel	

Figure 39: Configuring the application

- 15. Make the following changes to the configuration:
 - Select the **Override session management** check box.
 - Clear the **Enable cookies** check box.
 - Select the Enable URL rewriting check box.

neral Properties Override session management	The additional properties will not be available until the general properties for this item are saved. Additional Properties
Constant tracking machanisms	Distributed environment settings
Enable SSL ID tracking	
Enable cookies	
Enable protocol switch rewriting	
Allow overflow	
Asymum in-memory session county	
1000 sessions	
Session timeout:	
O No timeout	
Set timeout	
30 minutes	
Security integration	
Serialize session access:	
Allow serial access	
Maximum wait time	
u seconds	
M Allow access on timeout	

Figure 40: Configuring session settings

- 16. Click OK.
- 17. When the page is reloaded, click Save.
- 18. In the Enterprise Applications window, click Save.

Do not click any buttons until the application is fully saved. The application is completely saved when the window contents are updated.

- 19. In the Enterprise Applications window, click visicom.
- 20. Select the Local Topology tab and click visicom.war.

terprise Applications	? _
Enterprise Applications > visicom	
Enterprise Applications	
Configuration Local Topology	
Enterprise Applications	
🖃 🛅 visicom	
🖃 🗁 Web module	
🔓 <u>visicom.war</u>	
EJB Modules	
Connector Modules	



21. In the Class loader mode list box, select PARENT_LAST.

Configuration	
General Properties	Additional Properties
* URI visicom.war	Target mappings
	View Deployment Descriptor
Alternate deployment descriptor	Web services client bindings
* Starting weight	Web services implementation scope
10000	Web services: Client security bindings
	Web services: Server security bindings
* Class loader mode Parent Last 🗸	Session Management
	View Web services client deployment descriptor extension
Apply OK Reset Cancel	View Web services server deployment descriptor
	View Web services server deployment descriptor extension

Figure 42: Selecting the class loader mode

- 22. Click OK.
- 23. Click Save twice.
- 24. Stop the WebSphere application server.
- 25. To register the document.dll file, at the command prompt, enter and execute the following command:

```
regsvr32 "WebSphere\AppServer\installedApps\<your server
name>\visicom.ear\visicom.war\WEB-INF\Dll\document.dll"
```

If it is required that the document.dll file must be upgraded, it must first be unregistered using the regsvr32 command. After the upgrade, the file must be registered again.

26. To register the dtmstg.dll file, at the command prompt, execute the following command:

```
regsvr32 "WebSphere\AppServer\installedApps\<your server
name>\visicom.ear\visicom.war\WEB-INF\Dll\dtmstg.dll"
```

If it is required that the dtmstg.dll file must be upgraded, it must first be unregistered using the regsvr32 command. After the upgrade, the file must be registered again.

- 27. Ensure that all DLL files required by Exigen Workflow Web are specified in the PATH environment variable.
- 28. Ensure that the visicom.properties file is located in the following directory:

```
WebSphere\AppServer\profiles\default\installedApps\<your server name>\visicom.ear\visicom.war\WEB-INF\Config
```

29. Delete the commons-logging.jar file from the following directory:

```
WebSphere\AppServer\profiles\default\installedApps\<your server name>\visicom.ear\visicom.war\WEB-INF\lib
```

- 30. Start the WebSphere application server.
- 31. To test Exigen Workflow Web, in the web browser's address bar, enter the following address:

http://localhost:9080/visicom

If everything is configured correctly, the Exigen Workflow Web login page appears.

Using the Exigen Workflow Web Configuration Page

The main Exigen Workflow Web server configuration parameters are stored in the visicom.properties file located in the VISICOM\WEB-INF\Config directory. Parameters in this file are configured using the Exigen Workflow Web configuration page.

This section describes only the basic steps for configuring Exigen Workflow Web using the Exigen Workflow Web configuration page. For full information on using the Exigen Workflow Web configuration page, see *Exigen Workflow Web Administrator's Guide*, Chapter 9: Configuring an Exigen Workflow Web Session.

To configure Exigen Workflow Web, proceed as follows:

- 1. Start the application server.
- 2. Open your web browser and enter the following address in the address bar:

http://<host name>:<port number>/VISICOM/Config/VisiConfig.jsp

The Exigen Workflow Web configuration page appears.

3. In the list, select the database or define a new one.

4. Specify the JDBC connection URL.

The URL depends on the JDBC driver selected. You must follow the URL specification rules described in your JDBC driver documentation.

5. Specify the JDBC driver.

The JDBC driver depends on the selected database brand. For information on the selected DB Brand, see the database and application server documentation.

- 6. Specify the user name and password for the master database.
- 7. If necessary, specify the required Exigen Workflow Web settings as described in *Exigen Workflow Web Administrator's Guide*, Chapter 9: Configuring an Exigen Workflow Web Session.
- 8. Click Apply Settings.
- 9. Restart the application server.
- 10. Test the master database connection.

It is recommended to restrict access to the Exigen Workflow Web configuration page either by IP address or by using another method. For information on restricting access to Exigen Workflow Web configuration page, see your application server documentation.

Note: Not all Exigen Workflow Web settings are available in the configuration page. Several parameters can be modified only by editing the visicom.properties file manually. For information about the visicom.properties file, see *Exigen Workflow Web Administrator's Guide*, Chapter 9: Configuring an Exigen Workflow Web Session.

Using the Proxy Server

If the business environment uses a proxy server to access Exigen Workflow Web, add the following parameters in the <code>visicom.properties</code> file located in the <code>VISICOM\WEB-INF\Config</code> directory:

Proxy server parameters in the visicom.properties file				
Parameter	Description			
VISICOM_EXTERNAL_HOST	Proxy server name.			
VISICOM_EXTERNAL_PATH	Path of the proxy server.			
VISICOM_EXTERNAL_PORT	Proxy server port.			
VISICOM_EXTERNAL_PROTOCOL	Protocol used to access the proxy server.			

The following example shows how to implement these parameters in the visicom.properties file:

#Workflow working with proxy

VISICOM_EXTERNAL_HOST=proxy

VISICOM_EXTERNAL_PATH=path1

VISICOM_EXTERNAL_PORT=443

Running Exigen Workflow Web

To run Exigen Workflow Web, proceed as follows:

- 1. Start the application server.
- 2. Open the web browser and enter the corresponding URL in the address bar:

http://<host name>:<port number>/VISICOM/VisiLogin.jsp

The Exigen Workflow Web login page appears.



Figure 43: Exigen Workflow Web login page

Chapter 5: Integrating Exigen Workflow with Other Exigen Products

This section describes the following topics:

- Integrating Exigen Workflow with Exigen E-Forms
- Integrating Exigen Workflow with Exigen E-Mail

Integrating Exigen Workflow with Exigen E-Forms

Exigen Workflow enables integration with Exigen E-Forms. The integration allows viewing, creating, and editing electronic forms from within Exigen Workflow.

Note: You must have administrator rights to perform this operation.

To integrate Exigen Workflow with Exigen E-Forms, proceed as follows:

1. Make sure that the JDBC settings of your database are correct.

This applies only to Exigen Workflow Web. JDBC settings can be modified in the Exigen Workflow Web configuration page. For information on configuring Exigen Workflow Web, see <u>Using the</u> <u>Exigen Workflow Web Configuration Page</u>.

- 2. In Exigen Workflow, in **Database Tools**, start **Project Builder**.
- 3. In the menu of the project in which you want to use Exigen E-Forms, select **Project > Create E-Forms Tables.**
- 4. To perform actions with Exigen E-Forms from within Exigen Workflow, in the Workflow Builder, create a queue node for a workflow in which you want to use Exigen E-Forms.
- 5. In the **E-Forms** tab, specify the actions to be performed with the forms.

	<u>-</u> 0111		Hules	<u>S</u> end	<u>E</u> scalation
<u>M</u> onitor		E-F <u>o</u> rms		Taskflow	Additional Settings
Action	Form Name	New Form Name	Interface	Descrip	tion
New		Standard Invoice	New	Standard invoice for U.S.	. customers.
View/Edit Docume	nt Form 1		Form 1	View/Edit Form 1.	
		ļ			
			ļ		
			ļ		
			ļ		
			ļ		
Add new Action	. Modify /	Action	Delete Action		

Figure 44: Modify Node window: E-Form tab

6. To add a new action, click **Add new Action.**

The Action window appears.

Action				×
Action:	New	•		
Form <u>N</u> ame:				
New Form Name:				
Interface:				
<u>D</u> escription				
				-
<				▶
01	-		Cancel	1
<u>U</u> K			<u>c</u> aricei	

Figure 45: Action window

- 7. In the **Action** list box, select an action.
- 8. Enter the form name and interface name.
- 9. Enter a description if appropriate.

The description is optional.

- 10. Click **OK.**
- 11. To modify existing actions, click Modify Action.
- 12. To delete an action, click Delete Action.
- 13. To specify the path to Exigen E-Forms server in Exigen Workflow, start Project Builder.
- 14. For the project in which to use Exigen E-Forms, select **Project > Project Configuration**.

The **Project Configuration** page appears.

15. Select the **E-Forms** tab.

E-Forms target:			
htttp://janispp:8080/			
☑ Embed EForms in Current Fra ☐ Default view interface	me		
Form Name		Interface	,
	d	efault	
	Add	Modify	Delete

Figure 46: Project Configuration page: E-Forms tab

- 16. In the **E-Forms target** field, enter the path to your Exigen E-Forms server.
- 17. Click Apply.

New Exigen E-Forms buttons are now available, when you select a queue from a workflow of the configured project depending on the selected Exigen E-Forms actions.

The following figure shows an Exigen Workflow Web node with a **New Form** button.





Integrating Exigen Workflow with Exigen E-Mail

This section describes how to integrate Exigen Workflow with Exigen E-Mail.

The Exigen Workflow integration with Exigen E-Mail enables users to send Exigen E-Mail documents to Exigen Workflow and import them as documents in parcels. After a successful integration, Exigen E-Mail documents can be accessed and viewed in Exigen Workflow in the following workflow nodes:

- Queue
- Retrieve
- Inspect
- Work Item Submitter
- Low Volume Scan
- High Volume Scan
- High Volume Index

To integrate Exigen E-Mail with Exigen Workflow, proceed as follows:

1. In the Exigen Workflow project that uses Exigen E-Mail documents, in the DOCUMENT table, create a custom integer field called A_EMAIL_ID.

For information on creating custom table fields, see Exigen Workflow Administrator's Guide, Part I.

- 2. In Workflow Explorer, open the Administrator utility.
- 3. Select Administrator > Exigen E-Mail Settings.

The Exigen E-Mail Settings window appears.

Exigen E-Mail Settings		×
🔽 Use E-Mail		
URL to E-Mail server: http://	/emailhost:8081/emailroute	r.
<u>0</u> K		

Figure 48: Enabling Exigen E-Mail in Exigen Workflow Client/Server

- 4. Select the **Use E-Mail** check box.
- 5. In the **URL to E-Mail server** field, enter the address to your Exigen E-Mail server, which contains the following parameters:
 - protocol
 - host name
 - port
 - path to the Exigen E-Mail server

The following is an example of the Exigen E-Mail server URL:

http://email_host:8081/emailrouter

6. Click OK.

Chapter 6: Installing Remote Storage Server

This section describes how to install and configure Remote Storage Server.

The following topics are described in this section:

- <u>Remote Storage Server Overview</u>
- Installing Remote Storage Server on the Server
- Installing Remote Storage Server on the Client

Remote Storage Server Overview

Remote Storage Server is an application that provides access to Exigen Workflow documents on a remote location. It also complements the security model within the Exigen Workflow environment.

Remote Storage Server provides restricted access to document files. When Remote Storage Server is configured, the clients can access document files only through the Exigen Workflow system and not through file sharing.

Remote Storage Server can be started either in console mode or in service mode. Console mode is used for troubleshooting or in special configuration environments. Generally, in a production environment, Remote Storage Server must be configured to run as a Windows service.

For optimal performance, it is recommended to install Remote Storage Server on the same workstation where the file server is stored.

Remote Storage Server uses the standard Remote Procedure Call (RPC) mechanism for network communications. For information on RPC, see the following web pages:

- <u>http://www.microsoft.com/technet/prodtechnol/windowsserver2003/library/TechRef/4dbc4c95-935b-4617-b4f8-20fc947c7288.mspx</u>
- http://support.microsoft.com/default.aspx?scid=kb;en-us;154596

The main service that Remote Storage Server uses is the RPC Endpoint Mapper. This service uses the following ports:

- TCP 135
- UDP 135

Installing Remote Storage Server on the Server

This section describes how to install and configure Remote Storage Server on the file server.

Prerequisite: The Remote Storage Server component must be installed from the Exigen Workflow installation CD.

After installing Remote Storage Server, the following files are located in the **VISIFLOW\RSS\Server** directory:

- rss.exe
- rssmsg.dll

To install Remote Storage Server, proceed as follows:

- 1. To configure Remote Storage Server registry entries, launch the Registry editor.
- 2. Open the following registry section:

HKEY_LOCAL_MACHINE/SOFTWARE/Exigen/RSS/CurrentVersion/RSS Server



Figure 49: Remote Storage Server registry settings

The Bindings section contains communication protocols. The TCP/IP protocol is added to the Bindings section during installation.

3. To use a different protocol, in the Bindings section, add a corresponding protocol key.

The following table lists supported protocols:

Supported protocols				
Protocol	Protocol key			
TCP/IP based protocol	ncacn_ip_tcp			
HTTP based protocol	ncacn_http			
Named Pipes based protocol	ncacn_np			
SPX based protocol	ncacn_spx			
Local RPC based protocol	ncalrpc			

4. To configure Remote Storage Server, modify the following registry entries as required:

Remote Storage Server registry entries		
Registry entry	Description	
Min calls	Minimum calls according to the number of users. The default value is 0000000.	
Max calls	Maximum number of open threads.	
Audit Log Directory	Directory in which the log is created.	
	An example of an audit log directory is $c:\\sc{s}$.	
	This entry is optional.	
Logging Level	Logging level.	
	Possible values for this parameter are from 0 to 4 as follows:	
	Value 0 produces no logging.	
	Value 4 enables complete logging.	
	Value 1 is recommended for production because it logs only critical errors.	

- 5. If Remote Storage Server is run as a service, to configure the Remote Storage Server logon account, proceed as follows:
 - Select Start > Settings > Control Panel > Administrative Tools > Services.
 - Right-click Exigen Remote Storage Server and select Properties.
 - Select the Log On tab.
 - Select This account.
 - Specify the account that has access to the remote file system.

Exigen Remote Storage Servi	er Properties (Local Computer)	? ×
General Log On Recov	very Dependencies	
Log on as:		
C Local System account Allow service to in	it teract with desktop	
• This account	technology\paul	<u>B</u> rowse
Password:	*****	
<u>C</u> onfirm password:	*****	
You can enable or disable	e this service for the hardware p	rofiles listed below:
Hardware Profile		Service
Profile 1		Enabled
	<u>E</u> nable	<u>D</u> isable
	OK Cance	el <u>A</u> pply

Figure 50: Configuring the Remote Storage Server logon account

- 6. Launch Remote Storage Server using one of the following methods:
 - To start Remote Storage Server as a service, perform one of the following actions:
 - Select Start > Settings > Control Panel > Administrative Tools > Services and start Exigen Remote Storage Server.

🍇 Services						x
<u>A</u> ction ⊻iew		🔮 🛛 ► 🔳				
Tree	Name 🛆	Description	Status	Startup Type	Log On As	
Services (Local)	Exigen Import Server			Manual	LocalSystem	
	🖏 Exigen Push Server			Manual	LocalSystem	
	Exigen Remote Storage Server			Manual	LocalSystem	
	🏶 Fax Service	Start		Manual	LocalSystem	
	🏶 IIS Admin Service	Stop	arted	Automatic	LocalSystem	
	🆓 Indexing Service	Pause		Manual	LocalSystem	
	🖏 Internet Connection Sharing	Resume		Manual	LocalSystem	
	🖏 IPSEC Policy Agent	Restart	arted	Automatic	LocalSystem	
	🏶 Logical Disk Manager	All Tasks	, arted	Automatic	LocalSystem	
	🏶 Logical Disk Manager Administra			Manual	LocalSystem	
	🏶 Messenger	Refresh	arted	Automatic	LocalSystem	
	🏶 Net Logon	Properties	arted	Automatic	LocalSystem	
	Remote Desktop Sh	Topercies		Manual	LocalSystem	
	🏶 Network Associates Alert Manage	Help	arted	Automatic	LocalSystem	
	Network Associates McShield		Started	Automatic	LocalSystem	
	Network Associates Task Manager		Started	Automatic	LocalSystem	
	Network Connections	Manages o	Started	Manual	LocalSystem	
	Network DDE	Provides n		Manual	LocalSystem	
	Network DDE DSDM	Manages s		Manual	LocalSystem	-

Figure 51: Launching Remote Storage Server as a service

- At the command prompt, execute the following command: net start rsserver
- To start Remote Storage Server in a console mode, launch the rss.exe file located in the VISIFLOW\RSS\Server directory.

Installing Remote Storage Server on the Client

This section describes how to install Remote Storage Server on the client. A workstation can be a server and a client simultaneously.

Prerequisite: The Remote Storage Server component must be installed from the Exigen Workflow installation CD.

To install Remote Storage Server on the client, proceed as follows:

- 1. To configure the Remote Storage Server client for Exigen Workflow Client/Server, locate the VISIFLOW\INI directory and copy the rsc.ini and remote.ini files to the VISIFLOW\SYSTEM directory.
- 2. To configure the Remote Storage Server client for Exigen Workflow Web, perform the following actions depending on the document access mode:

- If remote access mode is used, on the Exigen Workflow Web server, locate the VISIFLOW\INI directory and copy the rsc.ini and remote.ini files to the VISICOM\WEB-INF\Dll directory.
- If the local access mode is used, on the Exigen Workflow Web client workstation, locate the VISIFLOW\INI directory and copy the rsc.ini and remote.ini files to the directory where Web DMS Viewer is installed.
- 3. Open the rsc.ini file for editing.
- 4. In the rsc.ini file, add or modify a configuration section that defines the Remote Storage Server location and communication protocol.

This configuration section is referenced by the remote.ini file to automatically substitute the actual location on the server for the document location defined in the database.

rsc.ini file parameters		
Parameter	Description	
Network Address	Server name where Remote Storage Server is running. This name must be entered according to the specifications of the communication protocol that is used.	
Protocol	Communication protocol used by Remote Storage Server.	
Sequence	For information on protocol syntax, see <u>Installing Remote Storage Server on the</u> <u>Server</u> .	
Domain	Domain in which Remote Storage Server is running. This parameter is required only if the server and the client are in different domains.	
Authentication Level	Authentication level used for the remote procedure call. This parameter is optional and can have values from 0 to 5. The default value is 0.	
	For more information on authentication levels, see http://msdn.microsoft.com/library/default.asp?url=/library/en- us/rpc/rpc/authentication_level_constants.asp.	
	If the client is working on Windows NT 4 with a Windows 2000 domain server, the authentication level must be set to 1.	

The following table describes parameters in the rsc.ini file:

There can be several configuration sections in the rsc.ini file, but each section must have a unique name.

The following is an example of a configuration section:

[SERVER1_TCPIP]

Network Address=fileserver.domain.com

Protocol Sequence=ncacn_ip_tcp

Domain=DOMAIN2

Authentication Level=1

- 5. Save and close the rsc.ini file.
- 6. Open the remote.ini file for editing.

Exigen Workflow uses information in the remote.ini configuration file to communicate with Remote Storage Server. Within the system, the actual location on the server is automatically substituted for a document location defined in the database.

The following types of document location substitution are supported by Remote Storage Server:

Document location substitution types supported by Remote Storage Server		
Туре	Description	
Drive substitution	Substitutes the actual document location on the server for a logical drive in the database.	
	For example, if in the project configuration, the document location is defined to be on drive E and the remote.ini file associates drive E with a remote file server, instead of accessing documents on drive E, the system accesses documents on the specified remote file server. From the system's point of view, documents are still stored on drive E.	
	This substitution type is defined in the [Drives] section as follows:	
	<drive be="" replaced="" to="">:=<section in="" rsc.ini<br="" the="">file>,<timeout in="" milliseconds=""></timeout></section></drive>	
	The associated configuration section in the $rsc.ini$ file defines the configuration for the actual location on the server.	
Network location substitution	Similar to the drive substitution type, but instead of substituting a logical drive, it substitutes a network location specified according to UNC.	
	This substitution type is defined in the [UNCs] section as follows:	
	<location be="" replaced="" to="">=<section in="" rsc.ini<br="" the="">file>,<timeout in="" milliseconds=""></timeout></section></location>	
	The associated configuration section in the $rsc.ini$ file defines the configuration for the actual location on the server.	
	The $[UNCs]$ section must contain only the computer name and share name. Share subdirectories cannot be used.	
Path substitution	Replaces one document location path with another.	
	This is particularly useful when the document location is changed but the information in the database remains the same.	
	This substitution type is defined in the [Substitute] section as follows:	
	<previous location="">=<new location=""></new></previous>	

There can be more than one entry in each section, and all lines starting with ? are ignored.

The following is an example of remote.ini file contents:

[Drives]

E:=SERVER1_TCPIP,9000

[UNCs]

\\FILESERVER1\SHARE1\=SERVER1_TCPIP,9000

[Substitute]

\\FILESERVER5\DOCS\=\\FILESERVER3\NEW\

7. Save and close the remote.ini file.

Chapter 7: Setting Up Exigen Workflow with Terminal Server and Citrix MetaFrame

This section describes how to configure Terminal Server and the Citrix MetaFrame server to provide an Exigen Workflow application environment.

Although some Exigen Workflow customers use Citrix MetaFrame, formal quality assurance of such configurations is not in the scope of quality assurance plans for Exigen Workflow. Experience shows that problems can arise when a solution or individual solution components depend on the use of local directories or locally stored configuration files. Such problems are usually solved in the scope of individual customer solutions by creating redirect scripts in Citrix MetaFrame, and they must not affect the core product. However, since it is not possible to predict all possible variations of customer-specific solutions, Citrix MetaFrame support requirements must be examined on a case-by-case basis within the scope of specific solution requirements.

Warning: Exigen Workflow server components cannot be used in the Terminal Server and Citrix MetaFrame environment.

To configure Terminal Server and Citrix MetaFrame, proceed as follows:

- 1. Install Citrix on Terminal Server.
- 2. Create users as described in the Microsoft support documentation for Terminal Server.
- 3. Ensure that the user profile directory and home directory are not the same.

For information on user profiles and home directories, see Microsoft support documentation.

- 4. Go to the Active Directory Users and Computers window.
- 5. Select a user.
- 6. To open the **Citrix Track Properties** window, right-click the user.
- 7. Ensure that all Terminal Server user workstations have a common network drive, for example, Q.
- 8. Send each user a request to send you their visiclt.ini file from their local Windows directory.
- 9. Request that each user logs into Terminal Server via Citrix MetaFrame or straight into Terminal Server using the remote login.
- 10. Do not run Exigen Workflow, but perform a remote login and logout.
- 11. Verify that the user Windows directory is created for the user.
- **Note:** Do not create this directory using scripts unless you know how to change user permissions with scripts, because valid user permissions for each directory must be created.
- 12. From each user's local Windows directory, copy the visiclt.ini file into the appropriate home Windows directory.
- **Note:** The appearance of the window in Exigen Workflow, such as window size and location, can differ.

For example, for a user named john2, user profiles are stored in the following directory:

\\server\citrix\profile\john2

The following is the home directory:

\\server\citrix\home\john2

This directory can also be added to user search paths and used for all other programs that require individual user settings.

Chapter 8: Installing Application Services

This section describes how to install and configure Application Services.

The following topics are described in this section:

- <u>Application Services Overview</u>
- Installing Application Services from the Main Exigen Workflow Installation
- Installing Application Services from a Standalone Installation
- Installing Application Services in Silent Mode
- <u>Reinstalling Application Services in Silent Mode</u>
- Uninstalling Application Services in Silent Mode
- <u>Changing the Application Services User Account</u>
- <u>Configuring Application Services</u>

Application Services Overview

Application Services is a middleware application with a COM interface that provides access to the Exigen Workflow data store and aggregates functionality related to the Exigen Workflow resources.

Application Services is required by Automatic Queue Server.

Before using Application Services, you must configure the database client to support Transaction Server as described in <u>Chapter 10: Configuring the Database Client to Support Transaction Server</u>.

Installing Application Services from the Main Exigen Workflow Installation

To install Application Services from the main Exigen Workflow installation, proceed as follows:

- 1. Insert the Exigen Workflow installation CD into the CD drive.
- 2. If the installation does not start automatically, from the CD, launch the Setup.exe file.
- 3. Follow the installation instructions until you reach the **Exigen Workflow** window as described in <u>General Installation Steps</u>.
- 4. In the Install/Upgrade column, in the Automated Services row, click Details.
- 5. In the Automated Services window, in the Install/Upgrade column, select the Workflow Application Services check box.

记 Exigen Installer Setup

Automated Services



	Hemove Typical/Custom	Install/Upgrade Typical/Custom		
Barcode Server	Γ		Details	2
Image Enhancement Server	Г		Details	2
Escalation Server	Γ	5.6.12000.123		?
Distribution Server		5.6.12000.123 🕅		?
Import Server	Γ		Details	2
Commit Server	Г	5.6.12000.123		?
Print Server		Γ	Details	?
Retention Server	Г	5.6.12000.123 🗖		?
Workflow Application Services	Г	🔽 Typical	Details	2
Automatic Queue Server		5.6.12000.123		?
Push Server	Г	5.6.12000.123		?
Full Text Search	Г	Γ	Details	2
Windows System Event Log Dump Utility	Г	5.6.12000.123 🗖		?
	All typical 🔜 Full 🔜	All typical 🔜 Full 📃		?

Select the Remove check box to remove the item from your workstation or Install/Upgrade to install or upgrade the item. If both check boxes are selected, the previous version of the item is removed and the new version is installed. If both check boxes are cleared, the currently installed version of the item remains on the workstation.

<u>0</u>K

Figure 52: Installing Application Services

- 6. Click OK.
- 7. Click Next.

The Account information window appears.

🖟 Exigen Installer Setu	,			
Account information Enter the account nam string for Application Se	e, account passwor rvices	d, and database o	connection	
Account name:	.\ <username></username>			
Account password:	DSN= <odbc sou<="" td=""><td>ce name>;UID=<</td><td>user name>;PWD=</td><td><pre><pre>sword></pre></pre></td></odbc>	ce name>;UID=<	user name>;PWD=	<pre><pre>sword></pre></pre>
Connection string:				
Preconfigure the data	base client for MSE	DTC:		
C MSSQL C Oracle 8.1.7 C Oracle 9.2	 ○ Oracle 10 ○ DB/2 ○ None 			
The Account name	and Account pa	ssword fields a	re mandatory.	
Exigen Workflow 5.6.12 Insta	llation Wizard			
		< <u>B</u> ack	<u>N</u> ext >	Cancel

Figure 53: Account information window

The Account information window is used to define the following:

- user account required by the Application Services COM+ application
- default connection string for the Exigen Workflow project database
- predefined configuration of registry settings for the database client to support Distributed Transaction Coordinator (MSDTC)

In most cases, the user account is a local user account on the workstation where Application Services is run.

- 8. In the **Account information** window, enter the user name and password to be used by Application Services as follows:
 - For domain users, specify the user name as follows:

<domain>\<user>

• For local users, specify only the user name.

If the account fields are left blank, the system creates a default user with user name *visiflow* and password *exigensrv*.

If the specified local user does not exist, the installation creates the user. The following rights are granted automatically to local and domain users:

- log on as service
- log on as batch job
- default COM security access permission
- default COM security access permission for interactive user

The **Connection string** field specifies the default connection string for the Exigen Workflow project database, and can be left blank.

For information on the connection string syntax and examples, see <u>Application Services Connection</u> <u>String Examples</u>.

9. To set up the required registry entries for the database client to support MSDTC, select the brand of your database client.

The database brand can be selected only if Application Services is not currently installed on the workstation. If there is a previous version of Application Services installed on the workstation, the list of database brands is in read-only mode and cannot be modified.

To change the selected database brand, the previous version of Application Services must be removed.

If **None** is selected, no registry entries are modified and the user must configure them manually if required.

- 10. Click Next.
- 11. To complete the installation process, follow the instructions as described in <u>Finishing the</u> <u>Installation</u>.
- 12. If you did not define a default connection string, in the Application Services Console, add connection strings for the projects and workflows to be used by Application Services after installation.

For more information on the Application Services Console, see Configuring Application Services.

Installing Application Services from a Standalone Installation

If you have a standalone Application Services MSI installation, you can install it separately from Exigen Workflow.

To install Application Services using a standalone installation, proceed as follows:

1. Run the AppServer.msi file.

The Exigen Application Services Setup window appears.

2. Click Next.

The **User information** window appears.

- 3. Specify the personalization information as required.
- 4. Click Next.

The **Destination Folder** window appears.

🙀 Exigen Application Services Setup	_ 🗆 X
Destination Folder	100
Select a folder where the application will be installed.	
The Wise Installation Wizard will install the files for Exigen Application Services in t following folder.	he
To install into a different folder, click the Browse button, and select another folder. You can choose not to install Exigen Application Services by clicking Cancel to ex Wise Installation Wizard.	it the
Destination Folder	
C:\VISIFLOW\ Browse	
Wise Installation Wizard®	
< <u>B</u> ack <u>Next></u>	Cancel

Figure 54: Selecting the destination directory

- 5. In the **Destination Folder** window, click **Browse** and select the location where to install Application Services.
- 6. Click Next.

The Installation parameters window appears.

🎼 Exigen A	Application Services Setup	
Installation Enter serv connection	n parameters vice account user and password and database on string	I A A A A A A A A A A A A A A A A A A A
Ac	ccount name (leave empty for LocalSystem account) wisiflow	
Ac	ccount password	
C	onnection String (optional)	
Pr C C C	reconfigure the database client for MSDTC: MSSQL O Oracle 10 Oracle 8.1.7 O DB/2 Oracle 9.2 © None	
т	he Account name and Account password field	s are mandatory.
Wise Installa	tion Wizard®	
	< <u>B</u> ack	Next > Cancel

Figure 55: Specifying account information

7. In the **Installation parameters** window, enter the account name and password under which the service and COM+ application is running.

The default account user name is visiflow and password is exigensrv.

8. To set up the required registry entries for the database client to support MSDTC, select the brand of your database client.

The database brand can be selected only if Application Services is not currently installed on the workstation. If there is a previous version of Application Services installed on the workstation, the list of database brands is in read-only mode and cannot be modified.

To change the selected database brand, the previous version of Application Services must be removed.

If **None** is selected, no registry entries are modified and the user must configure them manually if required.

- 9. Click Next.
- 10. To complete the installation, follow the instructions that appear on the screen.

Installing Application Services in Silent Mode

To install Application Services in silent mode, at the command prompt, execute the following command:

```
msiexec /i "<installation file location>\AppServer.msi" LEGACPROJ="<connection
string>" SERVICE_ACCOUNT_NAME="<login name>" SERVICE_ACCOUNT_PASSWORD="<password>"
INSTALLDIR="<full path 1>" INSTALLDIR3="<full path 2>" /q
```

If the INSTALLDIR parameter is specified, all Application Services files are installed in the <full path 1>\AppServer directory:

If the INSTALLDIR3 parameter is specified, all Application Services files are installed in the <full path 2> directory.

Reinstalling Application Services in Silent Mode

To reinstall Application Services in silent mode, at the command prompt, execute the following command:

```
msiexec /fvomus "<installation file location>\AppServer.msi" LEGACPROJ="<connection
string>" SERVICE_ACCOUNT_NAME="<login name>" SERVICE_ACCOUNT_PASSWORD="<password>"
REINSTALL=ALL /q
```

Uninstalling Application Services in Silent Mode

To uninstall Application Services in silent mode, at the command prompt, execute one of the following commands:

- msiexec /x {E95C0646-040A-48CC-918B-D5C435CD8A7A} /q
- msiexec /x "<installation file location>\AppServer.msi" /q

Changing the Application Services User Account

To change the user name for Application Services after the installation, proceed as follows:

- To change the user account for the Application Services COM+ application, open the Component Services console by selecting Start > Settings > Control Panel > Administrative Tools > Component Services.
- In the tree on the left side of console, select Component Services > Computers > My Computer > COM+ Applications.
- 3. Right-click the EWF Engine COM+ application and select the Properties submenu.
- 4. In the EWF Engine Properties dialog, select the Identity tab.
- 5. Select the **This User** radio button and specify new user credentials.
- 6. To save the changes, click OK.

Configuring Application Services

This section describes how to configure Application Services. All configuration steps describes in this section are performed using Application Services Console.

To launch Application Services Console, select **Start > Programs > Exigen Solution > Exigen Workflow > Application Services Console.**



Figure 56: Application Services Console

The following topics are described in this section:

- Defining Connection Strings
- Setting Up the Event Trace Service
- Defining Trace Masks
- <u>Configuring Application Services Options</u>

Defining Connection Strings

If a default connection to the Exigen Workflow database is not defined for Application Services, a separate connection string must be defined for each project and workflow to be accessed from Application Services.

Note: If all projects and workflows can be accessed via one connection string, it is advisable to set this connection string as the default.

If the audit project is located in a database that is different from the one specified in the default project connection string, a separate connection string must be set up for the audit project.

The following topics are described in this section:

Defining Project Connection Strings

To define project connection strings, proceed as follows:

1. In Application Services Console, in the left pane, select **Console Root > Application Services Console > Connection Information > Project.**

All project connection strings defined for Application Services are displayed in the right pane.

🚡 Application Services Console - [Conso	ole Root\Application Services Co	nsole\Connection Information 💶 🗖 🗙
Action ⊻iew C → E 💽	₽ 2	
Tree	Project 🛆	Connection String
Console Root	🗱 (Default)	DSN=ewfdb;Uid=admin;Pwd=ewfadmin
🗄 🖳 Application Services Console	ST CLM	DSN=ewf;Uid=admin;Pwd=ewfadmin
Connection Information		
	•	Þ

Figure 57: List of project connection strings

2. To create a new project connection string, in the right pane, right click the blank space and select **New > Project Connection.**

The Create New Project Connection window appears.

Create New Project (Connection	×
Project ID:		
Connection String:		
	OK Cancel	

Figure 58: Defining a new project connection string

- 3. In the **Project ID** field, enter the project ID for which the connection string must be defined.
- 4. In the **Connection String** field, enter the connection string.

The following table provides examples of Application Services connection strings:

Application Services connection string examples		
Туре	Example	
OLE DB provider for Oracle	Provider=MSDAORA;Password=user_password; User ID=user_name;Data Source=ora_service;	
ODBC data source	DSN=dsn_name;UID=user_name;pwd=user_password;	
OLE DB provider for SQL Server	Provider=SQLOLEDB;Data Source=server_name;	
	Initial Catalog=database_name;	
	User ID= user_name;Password= user_password;	

It is possible to override the default services provided by the OLE DB provider for ODBC by specifying the following settings in the connection string:

Connection string default service override parameters				
Value in the connection string	Services enabled			
OLE DB Services = -1;	All services. This is the default value.			
OLE DB Services = -4;	All services except pooling and automatic transaction enlistment.			
OLE DB Services = -5;	All services except Client Cursor Engine.			
OLE DB Services = -8;	All services except pooling, automatic transaction enlistment, and Client Cursor Engine.			
OLE DB Services = -3;	Only pooling and automatic transaction enlistment services with a session level aggregation.			
OLE DB Services = 0;	None.			

The following is a sample connection string with the OLE DB Services parameter:

DSN=dsn_name;UID=user_name;pwd=user_password;OLE DB Services = -4;

5. Click OK.

The new connection string appears in Application Services Console.

6. To modify a connection string, in the right pane, right click a project connection string and select **Properties.**

The Project Connection Properties window appears.

- 7. Make the required changes and click **OK**.
- 8. To delete a connection string, in the right pane, right click a project connection string and select **Delete.**

Defining Workflow Connection Strings

To define workflow connection strings, proceed as follows:

1. In Application Services Console, in the left pane, select **Console Root > Application Services Console > Connection Information > Workflow.**

All workflow connection strings defined for Application Services are displayed in the right pane.

🚡 Application Services Console - [Console Root\Application Services Console\Connection Information 💻 🔲 🗙						
j Action View j ← → E 💽 🔂 😰						
Tree	Workflow	Connection String				
Console Root	≌ (Default) ≌ 1	DSN=ewf;Uid=admin;Pwd=ewfadmin DSN=ewfdb;Uid=admin;Pwd=ewfadmin				
	•					

Figure 59: List of project connection strings

2. To create a new workflow connection string, in the right pane, right click the blank space and select **New > Workflow Connection.**

The Create New Workflow Connection window appears.

Create New Workflow	v Connection	×
Workflow ID:		
Connection String:		1
	OK Cancel	

Figure 60: Defining a new workflow connection string

- 3. In the **Workflow ID** field, enter the workflow ID for which the connection string must be defined.
- 4. In the **Connection String** field, enter the connection string.
- 5. Click OK.

The new connection string appears in Application Services Console.

6. To modify a connection string, in the right pane, right click a workflow connection string and select **Properties.**

The Workflow Connection Properties window appears.

- 7. Make the required changes and click OK.
- 8. To delete a connection string, in the right pane, right click a workflow connection string and select **Delete.**

Setting Up the Event Trace Service

Application Services generates various event messages during run-time. Administrators can view these event messages to monitor and debug Application Services applications. To record and view Application Services event trace messages, the Event Trace Service must be set up.

The **Event Trace Service** is a Windows service that writes Application Services event messages in text files according to defined trace parameters.

Note: It is also possible to use an application named DebugView for viewing Application Services event messages. However, DebugView is not recommended when Application Services is running in a production environment.

To set up the Event Trace Service, proceed as follows:

1. In Application Services Console, in the left pane, right click **Application Services Console** and select **Configure Event Trace Service**.

If the Event Trace Service is not installed, a message window appears.



Figure 61: Event Trace Service message

2. To install the Event Trace Service, click Yes.

The Event Trace Service is installed and a confirmation message appears.



Figure 62: Confirmation message

3. To close the confirmation message window, click **OK.**

The Exigen Workflow Event Trace Service Settings window appears.

Exigen Workflow Event Trace Service Settings	×
Delete log files older than: 240 hours	
Split trace files if longer than: 100 megabytes	
Capture workflow messages only (if unchecked, all received trace messages are saved)	
Log File Storage	
Save captured messages to folder:	
c:\temp\EwfTrace\ .	
Automatically start Trace Service when operating system is loaded	
OK Canc	el

Figure 63: Configuring the Event Trace Service

The Event Trace Service writes event messages in log files that have the following name:

EWFTrace_<date>_<time>.trc

4. To automatically delete old log files, proceed as follows:
- Select the Delete log files older than check box.
- In the field, enter the number of hours after which log files must be deleted.
- 5. To automatically split log files that reach a specific size, proceed as follows:
 - Select the Split trace files if longer than check box.
 - In the field, enter the maximum size in megabytes.
- 6. To write only those event messages that are recorded in Exigen Workflow, select the **Capture workflow messages only** check box.
- 7. To define the location where log files must be saved, in the **Save captured messages to folder** field, specify the location.
- 8. To start the Event Trace Service automatically when the operating system is loaded, select the **Automatically start Trace Service when operating system is loaded** check box.
- 9. To apply changes, click OK.
- 10. To filter event messages that are produced by Application Services, define trace masks as described in <u>Defining Trace Masks</u>.

Defining Trace Masks

A **trace mask** is a filter that defines which event messages produced by Application Services must be captured and recorded in Event Trace Service log files.

To define trace masks, proceed as follows:

1. In Application Services Console, in the left pane, select **Console Root > Application Services Console > Trace Masks.**

All trace masks defined in Application Services are displayed in the right pane.

🚡 Application Services Console - [Console Root\Application Services Console\Trace Masks] 📃 🔲 🗙					
Action View 🗢 🔿 🗈 🖬 🖽 😰					
Tree	Mask	Trace Verbosity			
Console Root Application Services Console Connection Information Project Workflow Trace Masks Options	Wask QueueServer	30 30 30			

Figure 64: List of trace masks

2. To create a new trace mask, in the right pane, right click the blank space and select **New > Trace Mask.**

The New Trace Mask window appears.

New Trace Mask.	. <u>×</u>
Trace Mask String:	
Trace Verbosity: 30	Note: Trace mask value applies to trace source and may end with wildcard (**'). Trace verbosity level generally should fall into range 1100
	OK Cancel

Figure 65: Creating a new trace mask

3. To define the source from which event messages must be recorded, in the **Trace Mask String** field, enter the trace source string.

The following table describes available trace sources:

Available trace sources			
String	Trace source		
CacheOA	Cache access, commit, get, and put messages from the cacao.dll library.		
CacheAccessor	Accessor interface from the Accessor.dll library.		

Available trace sources			
String	Trace source		
CacheBinder	Supervisor service from the Binder.exe application.		
StoreLI	Index store from the StoreLI.dll library.		
StoreLW	Workflow store from the StoreLW.dll library.		
ObjectPad	Object pad from the vfobjpad.dll library.		
CognomenObj	Public Cognomen.dll interface.		
CognomenMoniker	Internal Cognomen calls.		
QueueServer	Automatic Queue Server messages.		
QS.Handler.*	Messages of the productized Automatic Queue Server handlers.		
QS.Filter.*	Messages of the productized Automatic Queue Server handler filters.		

The * symbol can be used as a substitute for any text string to define a trace mask that filters messages from a group of sources. For example, the *Cache** string filters messages from the CacheOA, CacheAccessor, and CacheBinder sources.

4. To define the minimal priority of messages that must be recorded, in the **Trace Verbosity** field, enter a value from 1 to 100.

A 1 is the highest priority. A 100 is the lowest priority. All messages whose trace verbosity value is equal to or less than the specified value are recorded in log files. A 30 is an optimal value that can be used in most cases.

5. Click OK.

The new trace mask appears in the right pane of Application Services Console.

- 6. To modify an existing trace mask, in the right pane, right click a trace mask, select **Properties**, and make the required changes to the configuration.
- 7. To delete a trace mask, in the right pane, right click a trace mask and select Delete.

Configuring Application Services Options

Application Services Console is also used for configuring miscellaneous Application Services options.

To configure Application Services options, proceed as follows:

1. In Application Services Console, in the left pane, select **Console Root > Application Services Console > Options.**

All options are displayed in the right pane.

🚡 Application Services Console - [Console Root\Application Services Console\Options]					
$ $ Action View $ \Leftrightarrow \Rightarrow $ 🔁 🖬 🗟 $ $					
Tree	Option Name	Value	Option Description		
Console Root Application Services Console Connection Information Project Workflow Trace Masks Contions	 Use Parameterized Queries Support Parallel Parcels Update Parcel Props Table On Send Use Document Recycling Tables Configuration Cache Timeout Automatically Unlink Documents On Deletion Smart Audit Event Filtering 	On Off Off 600 Off Off	Use parameterized database queries (performance improvements) Query for parallel parcels when sending a parcel Update PARCEL_PROPS table on parcel send operations Move DOCUMENT records to DOC_RECYCLE table instead of deleting them Cached workflow schema retention time, in seconds Automatically unlink documents from folder, parcel or subfolder being deleted. Query audit filter before the operation		

Figure 66: Configuring Application Services options

The following table describes the Application Services options:

Application Services options	
Option	Description
Use Parameterized Queries	If selected, improves performance for high volume operations.
Support Parallel Parcels	If selected, enables support of parallel parcels.
	To improve performance, this option must be cleared if parallel parcels are not used.
Update Parcel Props Table On Send	Must be selected if the project uses the PARCEL_PROPS table and a correct NODE_ID value is important.
	This option is required if parallel parcels are used.
Use Document Recycling Tables	If selected, moves DOCUMENT table records to the DOC_RECYCLE table instead of deleting them. This option is required to support the Centera document storage.
Configuration Cache	Time in seconds for which retrieved workflow data is cached locally.
Timeout	The value must be increased if the database connection has high latency. Higher cache retention time reduces the network communication overhead and improves application performance.
Automatically Unlink Documents on Deletion	If selected, automatically unlinks documents from folders, parcels, or subfolders that are deleted.
	This option must be selected to ensure database consistency and simplify the application code.
Smart Audit Event Filtering	If selected, queries the audit filter before performing audited operations.
	This option must be selected to avoid expensive database queries where auditing is not necessary, and increase performance on high volume systems.

2. To configure an option, in the right pane, right click the option and select Properties.

The properties window appears.

3. Change the option value as appropriate.

Chapter 9: Installing Automatic Queue Server

This section describes how to install Automatic Queue Server.

Automatic Queue Server is an Exigen Workflow module for background processing of workflow items. Automatic Queue Server can be mapped to multiple custom scripts that implement customer-specific business logic. Access to workflow data store and actions with workflow items are performed via Application Services.

For information on using Automatic Queue Server, see Chapter 21: Automatic Queue Server in *Exigen Workflow Administrator's Guide, Part 2: Business Component Reference.*

The following topics are described in this section:

- <u>Automatic Queue Server Requirements</u>
- Installing Automatic Queue Server from the Main Exigen Workflow Installation
- Installing Automatic Queue Server from a Standalone Installation
- <u>Configuring the Number of Concurrent MSMQ Listener Threads</u>

Automatic Queue Server Requirements

The following topics are described in this section:

- Operating System Requirements
- <u>Required Components</u>

Operating System Requirements

Automatic Queue Server uses the Message Queuing (MSMQ) technology, which is available in Windows 2000 and later Windows versions. Automatic Queue Server does not function on older Windows versions.

Before using Automatic Queue Server, you must configure the database client to support Transaction Server as described in <u>Chapter 10: Configuring the Database Client to Support Transaction Server</u>.

Required Components

The following table lists all components required by Automatic Queue Server and describes how to install them:

Automatic Queue Server required components			
Component	Installation source		
Application Services	Before running Automatic Queue Server, Application Services must be installed and configured as described in <u>Configuring Application Services</u> .		

Automatic Queue Server required components			
Component	Installation source		
MSMQ	 In Windows 2000, MSMQ is an optional component and can be installed in the Add/Remove Windows Components window. In Windows XP, MSMQ is included in the operating system. Unless there are specific requirements for MSMQ installation, MSMQ must be installed in workgroup mode. Integration with Active Directory® is supported but it requires advanced administrative operating system skills. For information on MSMQ, see the Microsoft support web site. 		
.NET Framework	Download and install .NET Framework Redistributable and service packs from the Microsoft website:		
Redistributable	http://msdn.microsoft.com/netframework/downloads/updates/default.aspx		
MDAC	Download and install MDAC from the Microsoft website:		
	http://msdn.microsoft.com/data/		

Installing Automatic Queue Server from the Main Exigen Workflow Installation

To install Automatic Queue Server from the main Exigen Workflow installation, proceed as follows:

- 1. Insert the Exigen Workflow installation CD into the CD drive.
- 2. If the installation does not start automatically, from the CD, launch the Setup.exe file.
- 3. Follow the installation instructions until you reach the **Exigen Workflow** window as described in <u>General Installation Steps</u>.
- 4. In the Install/Upgrade column, in the Automated Services row, click Details.
- 5. In the Automated Services window, in the Install/Upgrade column, select the Automatic Queue Server check box.

<u>0</u>K

i 🖥 Ex

🖥 Exigen Installer Setup					×
Automated Services			Ľ,	<	
Components	Remove Typical/Custor	n Typical/Custom	•		
Barcode Server	Г	Γ	Details	2	
Image Enhancement Server	Г		Details	2	
Escalation Server	Г	5.6.12000.123		?	
Distribution Server		5.6.12000.123		?	
Import Server	Г		Details	2	
Commit Server	Г	5.6.12000.123		?	
Print Server			Details	2	
Retention Server	Γ	5.6.12000.123 🕅		?	
Workflow Application Services	Г		Details	2	
Automatic Queue Server		5.6.12000.123 🔽		?	
Push Server		5.6.12000.123 🗖		?	
Full Text Search	Г		Details	?	
Windows System Event Log Dump Utility		5.6.12000.123 🕅		?	
	All typical 🔜 Full 🔜	All typical 🔄 Full 🔄		?	
Automatic Queue Server is an automatic workflow object that Server can be mapped to multiple custom scripts that implem	at processes work items in background ent customer-specific business logic.	d mode without user interaction. Aut	omatic Queu	e	
Automatic Queue Server 5.6.12000.123 will be installed/upg	iraded.				

Figure 67: Installing Automatic Queue Server

Automatic Queue Server requires that Application Services is installed. For information on installing Application Services, see Chapter 8: Installing Application Services.

6. Click OK.

7. Click Next.

The Account information window appears.

🖟 Exigen Installer Setur	,			
Account information Enter the account name string for Automatic Que	e, account passwoi eue Server	rd, and database cr	onnection	
<u>A</u> ccount name:	.\ <username></username>			
Account password:	DSN= <odbc sou<="" td=""><td>rce name>:UID=<u< td=""><td>iser name>;PWD</td><td>= =<password></password></td></u<></td></odbc>	rce name>:UID= <u< td=""><td>iser name>;PWD</td><td>= =<password></password></td></u<>	iser name>;PWD	= = <password></password>
Connection <u>s</u> tring:				
C MSSQL C Oracle 8.1.7 C Oracle 9.2	○ Oracle 10 ○ DB/2 ● None			
The Account name	and Account pa	ssword fields ar	e mandatory.	
Exigen worknow 5.6.12 mate				
		< <u>B</u> ack	<u>N</u> ext>	Cancel

Figure 68: Account information window

- 8. In the **Account information** window, enter the following:
 - account name and password under which the Automatic Queue Server COM+ application is run
 - default database connection string
 - predefined configuration of registry settings for the database client to support Distributed Transaction Coordinator (MSDTC)

The default account user name is visiflow and the password is exigensrv.

9. To set up the required registry entries for the database client to support MSDTC, select the brand of your database client.

The database brand can be selected only if Automatic Queue Server is not currently installed on the workstation. If there is a previous version of Automatic Queue Server installed on the workstation, the list of database brands is in read-only mode and cannot be modified.

To change the selected database brand, the previous version of Automatic Queue Server must be removed.

If **None** is selected, no registry entries are modified and the user must configure them manually if required.

- 10. Click Next.
- 11. To complete the installation, follow instructions as described in General Installation Steps.

Installing Automatic Queue Server from a Standalone Installation

If you have a standalone Automatic Queue Server MSI installation file, it can be installed separately from Exigen Workflow.

To install Automatic Queue Server using a standalone installation, proceed as follows:

1. Make sure Application Services is installed on the workstation.

For information on installing and configuring Application Services, see <u>Chapter 8: Installing</u> <u>Application Services</u>.

2. Run the QueueServer.msi file.

The Exigen Automated Queue Server Setup window appears.

3. Click Next.

The User information window appears.

- 4. Specify the personalization information as required.
- 5. Click Next.

The **Destination Folder** window appears.

记 Exigen Automatic Queue Server Setup		
Destination Folder Select a folder where the application will be in	stalled.	Ø
The Wise Installation Wizard will install the f the following folder. To install into a different folder, click the Bro You can choose not to install Exigen Autom the Wise Installation Wizard.	iles for Exigen Automatic Q wse button, and select and atic Queue Server by click	ueue Server in other folder. ing Cancel to exit
Destination Folder		Prouve
C. WISIFLOWY		DIOMSE
Wise Installation Wizard®		
	< <u>B</u> ack <u>Next</u>	> Cancel

Figure 69: Selecting the destination directory

- 6. In the **Destination Folder** window, click **Browse** and select the location to install Automatic Queue Server.
- 7. Click Next.

The Service account window appears.

🕞 Exigen Automatic Queue Server Setu	ıp		_ 🗆 🗙
Service account Enter account name and password for run COM+ application	nning service and		Ĩ
Account name			
Avisiflow			
Account password			
, The Account name and Account pa	ssword fields are m	andatory.	
Wise Installation Wizard®			
	< <u>B</u> ack	<u>N</u> ext >	Cancel

Figure 70: Specifying the account parameters

8. In the **Service account** window, enter the account name and password under which the Automatic Queue Server COM+ application is run.

The default account user name is *visiflow* and the password is *exigensrv*.

If Automatic Queue Server handlers include a code that requires access to some shared resources in the local network, such as the remote file server, the Automatic Queue Server user account must have permission to access those resources.

For example, if you must access files on a remote server from the Automatic Queue Server handler and the remote server is a member of some domain, the Automatic Queue Server COM+ application must be running under a user account that has access to the remote server. In this case, the usual approach is to use a service account with logon rights to that particular domain.

- 9. Click Next.
- 10. To complete the installation, follow the instructions.

Configuring the Number of Concurrent MSMQ Listener Threads

The maximum number of concurrent MSMQ listener threads defines the maximum number of Automatic Queue Server handler threads. By default, the value for this setting is calculated as follows:

16 * <number of CPUs on the server>

If the environment or Automatic Queue Server handler implies any restrictions, the setting must be changed. For example, in the Oracle database, the maximum number of concurrent distributed transactions may be required to be a smaller number.

To configure the maximum number of concurrent MSMQ listener threads, proceed as follows depending on the operating system:

- To configure the maximum number of concurrent MSMQ listener threads on Windows 2000, follow instructions as described in <u>Configuring MSMQ Listener Threads on Windows 2000</u>.
- To configure the maximum number of concurrent MSMQ listener threads on Windows XP or Windows Server 2003, follow instructions as described in <u>Configuring MSMQ Listener Threads on</u> <u>Windows XP and Windows Server 2003</u>.

Configuring MSMQ Listener Threads on Windows 2000

To set the maximum number of concurrent MSMQ listener threads on Windows 2000, proceed as follows:

- 1. Open Registry Editor.
- 2. Create a registry key HKLM\Software\Microsoft\COM3\Debug.
- 3. Add a new DWORD value named QCListenerMaxThread.
- 4. Set the *QCListenerMaxThread* value to the required maximum number of concurrent MSMQ listener threads.

The recommended value is 4.

Note: This procedure sets the number of concurrent MSMQ listener threads for all applications on the server.

Configuring MSMQ Listener Threads on Windows XP and Windows Server 2003

To set the maximum number of concurrent MSMQ listener threads on Windows XP or Windows Server 2003, proceed as follows:

- 1. Select Start > Settings > Control Panel > Administrative Tools > Component Services.
- 2. Locate and right click the EWF Automatic Queue Server application.
- 3. In the pop-up menu, select **Properties.**
- 4. Select the **Queuing** tab.

In the Queuing tab, set the required maximum number of concurrent MSMQ listener threads.
 Automatic Queue Server installation automatically sets this property to 4.

Chapter 10: Configuring the Database Client to Support Transaction Server

This section describes how to configure the database client environment and Transaction Server to support Application Services and Automatic Queue Server functionality for several target database types.

Application Services and Automatic Queue Server use Transaction Server as a transaction coordinator. In Windows 2000, Transaction Server is part of a standard Windows installation.

If Exigen Workflow is installed on Windows Server 2003 or Windows XP SP2, the XA Transaction Support must be enabled as described in article KB817066 at the following website:

http://support.microsoft.com/default.aspx?scid=kb;EN-US;817066

It is recommended to use the latest available version of Data Access Components (MDAC).

The following topics are described in this section:

- <u>Configuring the Database Client for Oracle Database</u>
- <u>Configuring the Database Client for SQL Server</u>
- Configuring the Database Client for the DB2 UDB for iSeries
- <u>Configuring the Database Client for DB2 UDB</u>
- Application Services Connection String Examples

Configuring the Database Client for Oracle Database

To access an Oracle database, it is necessary to use the Microsoft ODBC driver for Oracle. The Oracle ODBC driver does not fully support Transaction Server.

If Exigen Workflow is installed on Windows Server 2003 or Windows XP SP2, access must be granted to the Oracle folder for the NetworkServices account as described in article KB816633 at the following website:

http://support.microsoft.com/default.aspx?scid=kb;en-us;816633

For additional information on using Oracle with Transaction Server and COM+, see http://support.microsoft.com/support/complus/mtsandoracle.asp?SD=GN&LN=EN-US&gssnb=1.

To configure the Distributed Transaction Coordinator (MSDTC) service, proceed as follows:

- 1. Start Windows Registry Editor.
- 2. Open the following registry section:

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\MSDTC\MTxOCI

3. Configure the appropriate Oracle XA libraries by changing the appropriate registry string values for your Windows and Oracle versions as described in the following table:

Oracle XA library registry strings		
Oracle Client	Registry keys	
9.x	"OracleXaLib"="oraclient9.dll"	
	"OracleSqlLib"="orasql9.dll"	
	"OracleOciLib"="oci.dll"	
10.x	"OracleXaLib"="oraclient10.dll"	
	"OracleSqlLib"="orasql0.dll"	
	"OracleOciLib"="oci.dll"	

- 4. Restart the MSDTC service.
- Note: If there are any applications that depend on MSDTC, such as MSMQ, they may stop.
- 5. If any applications stopped, restart them after MSDTC is restarted.
- 6. If any problems occur with the Oracle server and distributed transactions, consider increasing the following Oracle server configuration parameter values:
 - sessions
 - distributed_lock_timeout
 - distributed_transactions
 - dml_locks
 - max_transaction_branches
 - open_cursors
 - processes
 - queuesize

Configuring the Database Client for SQL Server

Application Services and Automatic Queue Server function without any modifications with SQL Server with Service Pack 3, and no special configuration steps are required for the database client.

Configuring the Database Client for the DB2 UDB for iSeries

The following topics are described in this section:

- Requirements
- <u>Configuring the Database Client</u>

Requirements

For information on DB2 UDB for iSeries database client software requirements, see the Exigen Workflow readme file.

Configuring the Database Client

To configure the database client to use the iSeries Access ODBC driver for Transaction Server, proceed as follows:

- 1. To turn off the OLE DB session pooling for MSDASQL, proceed as follows:
 - Start Windows Registry Editor.
 - In the HKEY_CLASSES_ROOT\CLSID\{c8b522cb-5cf3-11ce-ade5-00aa0044773d}\ registry key, double-click the OLEDB_SERVICES value.
 - Change the OLEDB_SERVICES value to Oxfffffffc.
 - Close Windows Registry Editor.

Warning: This is a global setting for the whole system and it may affect other applications.

2. If you do not want to change a global setting, to achieve the same result, specify the OLE DB Services = -4; parameter in the connection string as described in <u>Application Services</u> <u>Connection String Examples</u>.

This option affects only connections opened with this connection string.

- 3. To turn on ODBC connection pooling, proceed as follows:
 - Open ODBC Administrator.
 - Select the **Connection Pooling** tab.
 - Double-click the 32-bit iSeries Access ODBC driver.

The Set Connection Pooling Attribute window appears.

- Select the Pool Connections to this driver option.
- Set the timeout setting as required.

A value larger than 60 seconds is recommended, but this setting depends on your specific system requirements.

- 4. To set the required transaction isolation level, proceed as follows:
 - Open the iSeries Access Express ODBC setup window.
 - Select the **Server** tab.
 - Click Advanced.
 - Set the commit mode to *CHG.

Configuring the Database Client for DB2 UDB

The following topics are described in this section:

- Requirements
- <u>Configuring the Database Client</u>

Requirements

For information on DB2 UDB database client software requirements, see the Exigen Workflow readme file.

Configuring the Database Client

To configure the database client to use Transaction Server, proceed as follows:

- 1. To turn off the OLE DB Session Pooling for MSDASQL, proceed as follows:
 - Start Windows Registry Editor.
 - In the HKEY_CLASSES_ROOT\CLSID\{c8b522cb-5cf3-11ce-ade5-00aa0044773d}\ registry key, double-click the OLEDB_SERVICES value.
 - Change the OLEDB_SERVICES value to Oxfffffffc.
 - Close Windows Registry Editor.

Warning: This is a global setting for the whole system and it may affect other applications.

2. If you do not want to change a global setting, to achieve the same result, specify the OLE DB Services = -4; parameter in the connection string as described in <u>Application Services</u> <u>Connection String Examples</u>.

This option affects only connections opened with this connection string.

- 3. To turn on ODBC Connection Pooling, proceed as follows:
 - Open ODBC Administrator.
 - Select the **Connection Pooling** tab.
 - Double-click the IBM DB2 ODBC driver.

The Set Connection Pooling Attribute window appears.

- Select the **Pool Connections to this driver** option.
- Set the timeout setting as required.

A value larger than 60 seconds is recommended but this setting depends on your specific system requirements.

- 4. To set the required transaction isolation level, proceed as follows:
 - Open the IBM DB2 ODBC setup window.
 - Click Advanced.
 - Select the Transaction tab.
 - Set the Isolation Level parameter to Serializable or Repeatable Read.

Application Services Connection String Examples

The following table provides examples of Application Services connection strings:

Application Services connection string examples		
Туре	Example	
OLE DB provider for Oracle	Provider=MSDAORA;Password=user_password;	
	User ID=user_name;Data Source=ora_service;	
ODBC data source	DSN=dsn_name;UID=user_name;pwd=user_password;	

Application Services connection string examples		
Туре	Example	
OLE DB provider for SQL Server	Provider=SQLOLEDB;Data Source=server_name;	
	Initial Catalog=database_name;	
	User ID= user_name;Password= user_password;	

It is possible to override the default services provided by OLE DB provider for ODBC by specifying the following settings in the connection string:

Connection string default service override parameters		
Value in the connection string	Services enabled	
OLE DB Services = -1;	All services. This is the default value.	
OLE DB Services = -4;	All services except pooling and automatic transaction enlistment.	
OLE DB Services = -5;	All services except Client Cursor Engine.	
OLE DB Services = -8;	All services except pooling, automatic transaction enlistment, and Client Cursor Engine.	
OLE DB Services = -3;	Only pooling and automatic transaction enlistment services with a session level aggregation.	
OLE DB Services = 0;	None.	

The following is a sample connection string with the OLE DB Services parameter:

DSN=dsn_name;UID=user_name;pwd=user_password;OLE DB Services = -4;

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