

Pegasus CIS 5 – Installation Guide



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www.pegasus.co.uk

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Introduction

About this Guide

This Installation Guide provides information concerning the installation and initial configuration of CIS 5.

The guide includes instructions for making sure the prerequisites are installed, installing the server software, configuring the server software, installing the client software and migrating data from earlier versions of CIS 5.

The guide assumes you are conversant with networking environments, and have prerequisite knowledge of the supported Microsoft Windows server and desktop editions as well as other software environment applications identified in this guide.

The guide does not cover the configuration of a network environment nor SQL Server.

Getting the Software

The software is available for Pegasus partners to download using Infor Extreme and for customers using the Infor Download Center.

Pegasus Help Centre

The Pegasus Help Centre (docs.pegasus.co.uk) is your main resource for latest news and help topics, PDF user guides and product information.

Help

CIS 5 Help provides details of key functions available in the application.

Guide iterations

A summary of changes per document iteration.

Iteration	Date	Changes
R2.0	April 2022	Baselined initial release of CIS 5
R2.1	26/5/2022 (released August 22)	Added a new Troubleshooting entry for Runtime Error 339 & Connection error, Note added about supported browsers. Note added for specifying CIS Admin User on Migration. Default configuration DB note added, update front page.

Installation Fundamentals

The CIS 5 installation consists of two parts: server admin software and client software. To install the client software, the server must have already been installed. This is because the client installation program relies on the server files & folders that are created during the server installation. The installation of the client installs all the necessary files needed to run CIS 5 from the client computer.

The Server Installation unpacks the SQL Databases, Dictionaries, Reports, System, Demo Data and other files needed for Pegasus CIS 5 to the Server.

The Server installation routine also copies the Client Installation files to a Folder 'C:\CIS\Setup\Desktop Client'. It is from here that you would install each client by running Setup.exe. If the client is already installed on a PC, each time Pegasus CIS 5 is launched it checks for any upgrades.

The Client Installation only installs application program files including Crystal Reports, i.e., all data files are installed using the Server Installation.

Shortcuts to the main executable are created to both the Desktop and the Start Menu. Additional support files are installed to the Windows System and Common Files directories.

For Servers setup with strict client Installation access rights (i.e., non-admin rights), an Administrator can use Group Policies to authorise the Windows Installer package for the Client and therefore elevate the installation rights on the Client.

* **Marked sections,** Dashboard Designer and Advanced Document Management elements (such as the Email Monitoring functionality, Settings – Document Management menu and integrated Application Document Management e.g., integrate with Word, Excel, Outlook etc.) will be coming soon to CIS 5.

Note: Supported browsers Google Chrome, Microsoft Edge (based on Chromium), Safari and Mozilla Firefox – Latest versions. **Internet Explorer is not supported.**

Stage 1 - Installation Pre-requisites & Considerations

In this stage, you need to check that the necessary prerequisites are installed & applied.

- Software Environment
- Microsoft .Net Framework
- SQL Server Settings
- SQL Server Users

Software Environment

The following are recommended versions;

Software	Description
Windows Server 2016+	The Windows Server environment.
 Microsoft .NET Framework v6 Windows Server Hosting for CIS 5 Server 	The software development framework used in the development of CIS 5.
 v4.8 for CIS 5 Client(s) 	
Microsoft SQL Server 2014+	The data store technology used for CIS 5. The Software Requirements guide lists the supported versions of Microsoft SQL Server.

Microsoft .Net Framework Considerations

The relevant versions of the .Net Framework are installed with CIS 5 (Server & Client). These are as follows;

- Version 6 Windows Server Hosting for the CIS 5 Server (which is part of the Server installation and can be found in the default location of C:\CIS\Setup\Hosting Bundle)
- Version 4.8 for the CIS 5 Client(s) (part of the client installation)

SQL Server Settings

There are a number of settings that need to be applied in order for CIS 5 to install and work.

- Mixed Authentication Mode
- TCP/IP Protocols

Mixed Authentication Mode

CIS 5 will use SQL Server Users in order to access and run the application and its communication with the SQL data. When installing CIS 5, the SQL User(s) must be used to complete the wizard. Mixed Authentication mode must be enabled for this process to complete successfully.

To ensure you have the correct setting, follow these steps;

- 1. On the server, click **Start** and type 'SQL Server'. Then click **SQL Server Management Studio** and connect to **Microsoft SQL Server**.
- 2. In the left pane, select the **Server**.



- 3. Open the **Properties** dialog for the SQL Server and open the **Server Security** page.
- 1. Under Server authentication, ensure SQL Server and Windows Authentication mode has been selected.

Select a page	Script - Help		
🚰 General			
Memory			
Security	Server authentication		
Connections	O mindows Addrenacation mode		
Patabase Settings	SQL Server and Windows Authentication mode		
Permissions	Login auditing		
	O None		
	Esilod loging only		

2. Close SQL Server Management Studio.

TCP/IP Protocols

In SQL Server 2014 +, the TCP/IP protocol must be enabled. In SQL Server Configuration Manager, make sure that the TCP/IP protocol is enabled for MSSQLSERVER (or the appropriate instance).

Follow these instructions;

- 1. On the server, click Start and type 'SQL Server'. Then click **SQL Server Configuration Manager**.
- 2. In the left pane, select Client Protocols under SQL Server Network Configuration.
- 3. Make sure that 'TCP/IP' is set to 'Enabled'.
- 4. Do the same for all 'TCP/IP' protocols in **SQL Server Configuration Manager** (i.e. Native Client Configuration).
- 5. Close SQL Server Configuration Manager.

ile Action View Help ■ 🔿 🖄 🔜 👔		
SQL Server Configuration Manager (Local) SQL Server Services SQL Server Network Configuration (32bit) SQL Native Client 11.0 Configuration Protocols for SQLEXPRESS SQL Native Client 11.0 Configuration	Protocol Name Shared Memory Named Pipes TCP/IP	Status Enabled Enabled Enabled

SQL User creation

CIS 5 will use SQL Server Users in order to access and run the application and its communication with the SQL data. When installing CIS 5, the SQL User(s) must be used to complete the wizard. Mixed Authentication mode must be enabled (see previous section) and the SQL Users created.

There is a requirement to create a SQL User for Admin purposes and a non-admin user for processing. The same SQL User may be used for each element, assuming the minimum permission requirements are applied.

Recommended set-up would include creating two users and applying the Roles respectively;

- CISAdmin
- CISUser



NB: When creating the Users ensure the option **User must change password at next login** is switched off

SQL Server Administrative User

For the Administrative role the CISAdmin user needs to be able to:

- Create/delete databases
- Change the recovery model on databases
- Assign user permissions on Company databases (specifically db_owner)
- Grant users the "View Server State" permission
- Set single user mode on a database

To create a new SQL User, use the following steps as a guide;

- 1. On the server, click **Start** and type 'SQL Server'. Then click **SQL Server Management Studio** and connect to **Microsoft SQL Server**.
- 2. In the left pane, select **Security** and then **Logins**.
- 3. Right-click on Logins and select New Login.
- 4. Type in the new login name i.e. 'CISAdmin', select **SQL Server authentication**, enter a secure password and complete the rest of the form (recommended to untick the password options).
- 5. Open the **Server Roles** page. Under **Server Roles**, make sure 'dbcreator' & 'securityadmin' are selected (as a minimum) and close the dialog.
- 6. Close SQL Server Management Studio.

Login Properties - CISAdmin	n		-	ЦX	
Select a page	🖵 Script 🔻 😯 Help				
Server Roles					
User Mapping	Login name:	CISAdmin		Search	
Securables Status	 Windows authentication 				
	SQL Server authentication				
	Password:	•••••	•		
	Confirm password:	•••••	•	7	
	Specify old password				
	Old password:				
	Enforce password policy	/			
	Enforce password expira	ation			
	User must change pass	word at next login			
	 Mapped to certificate 			r	
	 Mapped to asymmetric key 			·	
Connection	Map to Credential			Add	
Server:	Mapped Credentials	Credential	Provider		
UKKENAANGELL102\SQLEXPRI					
Connection: INFOR\aangell1					
View connection properties					
Progress				Remove	
Ready	Default database:	master	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	*	
Peast Peast	Default language:	English - us_english	🚦 Login Propert	ies - CISAdmi	n
			Select a page		
			General		🖵 Script 🔻 😮 Help
			Server Boles		
			User Mapping		Server role is used to grant server-wide security privileges to a user.
			Securables		
			🖋 Status		
					Server roles:
					bulkadmin
					securityadmin
					serveradmin
					setupadmin
			1		sysadmin sysadmin
					Systamm

SQL Server Non-Administrative User

For the Non-Administrative role the CISUser requires:

• No specific access rights required.

Minimum recommended Role is the default Public Role.

To create a new SQL User, use the following steps as a guide;

- 1. On the server, click **Start** and type 'SQL Server'. Then click **SQL Server Management Studio** and connect to **Microsoft SQL Server**.
- 2. In the left pane, select **Security** and then **Logins**.
- 3. Right-click on Logins and select New Login.
- 4. Type in the new login name i.e. 'CISUser', select **SQL Server authentication**, enter a secure password and complete the rest of the form (recommended to untick the password options).
- 5. Open the **Server Roles** page. Under **Server Roles**, make sure 'public' is selected (as a minimum) and close the dialog.
- 6. Close SQL Server Management Studio.

Login Properties - CISUser			-		
Select a page	🖵 Script 🔻 😮 Help				
Server Roles User Mapping Securables Securables	Login name:	CISUser		Search	
Status	 SQL Server authentication 				
	Password:	•••••	•		
	Confirm password:	•••••	•		
	Enforce password policy	,			
	Enforce password expire	ation			
	User must change pass	word at next login			
	 Mapped to certificate 				
	 Mapped to asymmetric key 				
Connection	Map to Credential		\sim	Add	
Server: UKKENAANGELL102\SQLEXPRE	Mapped Credentials	Credential	Provider		
Connection: INFOR\aangell1					
View connection properties					
			Login Properti	es - CISUser	
rogress			Select a page		
heady	Default database:	master	General		🖵 Script 🔻 😯 Help
	Default language:	English - us_english	Server Roles		Server role is used to grant server-wide security privileges to a user.
			Securables		
			🖋 Status		
					Server roles:
					diskadmin
					serveradmin

Note: It is recommended to restart the SQL Service following any changes or record creation, prior to installing CIS 5.

Migration considerations

If you have an existing installation of CIS, prior to installing CIS 5, you will need to consider the migration of both the Microsoft Access Configuration database and any Microsoft Access Company databases to Microsoft SQL Server. To simplify and automate this process, there is a new <u>Access To SQL Server Migration Utility</u>. This can be run before or after installing CIS 5 (with different considerations).

A key decision here is whether to migrate the existing Configuration database or start again with a clean setup. There is one Configuration database for each Pegasus CIS installation, and this holds all the users, companies, groups, permissions, reports, etc. All the settings in previous versions of the Configuration database (aka the "Core" database / PegasusCISCore.mdb) can be migrated to CIS 5 except for the module and menu permissions defined in Groups – these will all need to be recreated. The Groups themselves and the Members of those groups can all be migrated – just not the permissions themselves. This is because the entire permissions system has been completely redesigned, making the existing settings incompatible.

NB: It is recommended to keep the configuration database name to the default of PegasusCIS_Configuration.

If the existing Configuration database is to be retained and for just the permissions to be recreated, the recommended approach is to migrate the Configuration database prior to installing CIS 5 as this is simpler. However, it is still possible to migrate the Configuration database after CIS 5 has been installed.

Migration of Company Databases to a "Clean" Installation

If the decision is made to take this opportunity to redesign groups, get rid of obsolete users, etc. and start from scratch, there is no need to migrate the Configuration database. Company databases can be migrated before or after installing CIS 5 – it is only the migration of the Configuration database that needs more consideration with this decision.

To migrate Company databases, run the Migration Utility and make sure to untick the Configuration database from the list of databases to migrate. Once all the databases have been migrated and the default "clean" Configuration database created after CIS 5 has been installed, the Companies can be created using the Administrator program and pointed to the SQL Server databases as normal.

Please refer to the <u>Migration Utility</u> section for further information.

Migration Prior to CIS 5 Installation

If you wish to retain the configuration details, it is recommended to run the Migration Utility prior to installing CIS 5. The migration utility will migrate the Configuration and Company databases at the same time, in parallel. Ensure the **Update Configuration Database with new company connection settings after migration** option is selected, as this ensures the Company databases that have been converted to SQL Server are automatically setup in the Configuration database without any manual intervention required. If this flag is not set, the settings in the migrated Configuration database will remain as they were and will therefore require manual configuration in the Administrator program after the migration is complete.

Please refer to the Migration Utility section for further information.

Note: You can still run the migration utility just for the Company databases prior to installing CIS 5, however, these would then need to be added into the CIS system manually i.e. the **Update Configuration Database with new company connection settings after migration** setting would be unticked as the Configuration database would not be created or already exist.

Migrating Post CIS 5 Installation

If you have already installed the CIS 5 Server and then want to migrate the Configuration database to SQL Server, there are some additional steps that need to be taken.

First, either the Configuration database will have to be given a different name to the original one entered as part of the CIS 5 Server installation (the Migration Utility will not overwrite an existing database); or the existing "clean" Configuration database created during the CIS 5 Server installation needs to be deleted.

NB: When testing the connection in the Migration Utility, it will warn and stop you from continuing if an existing database with the same name is found.

The Configuration database, optionally along with any Company databases, can now be migrated using the Migration Utility. When company databases are to be migrated, ensure you turn the **Update Configuration Database with new company connection settings after migration** option on (otherwise this will need to be setup and updated manually). This ensures the databases are converted to SQL and the company dataset(s) are "registered" in the configuration database so that they are listed automatically without any manual intervention required.

Once the migration of the Configuration database is complete, the CIS 5 Server setup needs to be updated from 'Apps and Features' / 'Add/Remove Programs'. If you migrated the Configuration database to the same name as was entered when the CIS 5 Serve setup was run initially, you need to run a 'Repair'; if it is not the same name, you need to run a 'Change' then modify the Configuration database name to match.

Please refer to the <u>Migration Utility</u> section for further information.

NB: You will need to run the "Upgrade All" option in CIS Administrator – Companies following the installation of CIS 5

Split Migration

Company databases may be very large and could take a long time to migrate, so you may wish to split up the process, i.e., migrate just the Configuration database then complete the install of CIS 5 before migrating the Company databases.

Once the CIS 5 Server install is complete, the Migration Utility can be run again to migrate the Company databases, either one at a time or all at once. However, this time when selecting **Open** *server configuration file*, browse to the new **Pegasus.CIS.config** file instead. This will only display the company databases which can then be selected and ensure you select the option **Update Configuration Database with new company connection settings after migration** on (otherwise this will need to be setup and updated manually). This ensures the databases have been converted to SQL and the company dataset(s) are "registered" in the configuration database so that they are listed automatically without any manual intervention required.

Please refer to the <u>Migration Utility</u> section for further information for migration, and the installation steps for <u>installing CIS 5</u>.



Stage 2 - Installing CIS 5

In this stage, you must install the CIS 5 server software using a setup wizard. The Server must then be used to configure the server software after it is installed.

Downloading the software

Download the latest version of CIS 5 software from the Infor ProductDownload Center or Infor Xtreme. The downloaded software includes a single server installation (msi) file. Save the downloaded software where it can be accessed from the server.

Installing server software

On the CIS 5 server, run Pegasus.CIS.Server.msi from the Server download folder and then complete the steps in the wizard setup.

1. Click **Next** on the **Welcome** screen



 Select the required components and choose the installation location. It is recommended to use the default paths for all services and website components, however the Application Server path should be located on a suitable 'Data' drive (e.g. D:\CIS) if one exists). Then click Next.

NB: If an older version of CIS is already installed, it is recommended to adjust the existing installation by;

1. In the "CIS" folder on the server, create a new "v4" subfolder

2. Move all files and folders to the new v4 subfolder apart from the System directory and the PegasusCIS.e2k file.

3.Run the v4 Administrator program, go into "Set Application Paths and System Settings" and change the "Root Path" to the new corresponding "CIS\v4" path.

You could also try using a different & separate path when installing CIS 5 i.e. 'C:\CIS_5' but further manipulation may be required.

Please ensure no users are using the system when installing or upgrading, that sufficient space is available on the Server; and that the CIS services are restarted afterwards.

ustom Setup				
Select the way you	want features to be installed.			9
Click the icons in t	he tree below to change the way	features will b	e installed.	
Appli	Cation Server Demo Company	Install the file system	Pegasus CIS s	erver side
a dmi	Importer Service Messaging Service Email Monitoring Service Inistration Website	This featur hard drive selected. T	re requires 196 . It has 2 of 2 : The subfeature	5MB on your subfeatures s require
	Importer Service Messaging Service Email Monitoring Service inistration Website	This featur hard drive selected. T 182MB on	re requires 196 . It has 2 of 2 : The subfeature your hard driv	5MB on your subfeatures s require e.
Location:	Importer Service Messaging Service Imail Monitoring Service Instration Website C:\CIS\	This featur hard drive selected. T 182MB on	re requires 196 . It has 2 of 2 : The subfeature your hard driv	5MB on your subfeatures s require e. Browse

Note: If you do not require a Demo Company, then this component can be turned off, as the 'Executing SQL Strings' stage may take a lot longer to complete when the 'Demo Company' is included.

3. Enter the **File Share** name required (either use the default 'CIS' or specify your own). Then click **Next**.

Application Settings		-	• ×
pplication Settings			
gasus CIS will use the follow	ing information for the file	server.	
UNC Path to File Server			
	File Share	The name of the file	share
\UKKENAANGELL 102\	CIS	to be created on the server	IS
	De d	Marit	Consul
	Bad	k Next	Cancel

4. Enter the Server Name in the SQL Database Server details. Then click Next.

Note: Enter the full instance name if in use. It is also recommended to leave the database names with the default assignments. An incorrect Server name will not allow the installation to proceed.

	Application Database Settings	- 🗆 X
If a "migration" has been performed (utility or manual) prior to installing CIS 5 because you want the configuration	Application Database Settings Pegasus CIS will use the following Database Settings to a SQL Database Server Server Name UKCISSERV01/SQLEXPRESS	tore configuration information. The name of the SQL Server machine and instance name if applicable
details to be retained and used in the new version, please ensure you enter the correct name of the migrated configuration database if it is different to the default entry.	Database Names Configuration PegasusCIS_Configuration Demo Company PegasusCIS_DemoCompany Data Dictionary PegasusCIS_DataDictionary B	The database names for storing configuration information and the demo company dataset

5. Enter the **User Name** & **Password** for the SQL Server Administrative and Non-Administrative Users. Refer to a previous step regarding the creation of the respective SQL Server Users. Then click **Next**.

	account of a definitions				
plication Da	tabase Credentials				
jasus CIS will u: npany datasets	se the following SQL Server	credentials to access	the configuratio	n and	
QL Server Admi	nistrative User				
User Name	CISAdmin	An SQL user	with read/write	permission	
Pacquord		databases an	id permission to	create new	
10350010	<u>[</u>	databases			
QL Server Non-	Administrative User	databases			
QL Server Non-, User Name	Administrative User	An SQL user	with read/write	permission	
QL Server Non- User Name Password	Administrative User CISUser	An SQL user to the configu databases	with read/write uration and com	permission pany	
QL Server Non- User Name Password	Administrative User CISUser	databases An SQL user to the configu databases	with read/write	permission pany	

NB: The User credentials will be checked before continuing the installation.

6. Enter the **Administration Website Settings**, recommended to use the default entries. Then click **Next**.

dminis	tration Website S	ettings				
egasus C erver Na ttp://Sen	IS uses IIS to host the me as the Web Addres verName:31080 from v	system administra s, in which case th rithin the local netv	tion website. T e Administrati vork only.	"he simplest setup on Website can be	is to use the accessed at	
desired, ttp port 8	a fully qualified domain 0. In which case the Ard	n can be entered s dministration Webs . It is recommende	uch as ccadmi site can be acc ad that the Adr	n.domainname.co essed at ninistration Webs	m along with ite is not made	6
xternally	accessible.					-
ternally fter insta nable the	accessible. Illation, SSL certificates e use of https.	can be used to se	cure communi	cation with the we	eb server and	~
ternally fter insta nable the Administ	accessible. Illation, SSL certificates e use of https. ration Web Server Sett	can be used to se ings	cure communi	cation with the we	eb server and	-
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Administ Web Ac	accessible. Illation, SSL certificates e use of https. ration Web Server Sett ddress	can be used to se	cure communi	cation with the we	b server and	
Administ Web Ac	accessible. Illation, SSL certificates e use of https. ration Web Server Sett ddress	can be used to se ings : 31080	cure communi	cation with the we	ab server and	

NB: 31080 is the designated default port for the CIS administrator program but it can be changed in this step during the server setup. CIS can use any port as long as there are no conflicts with other applications. The CIS Server installation will add the incoming Firewall rule automatically without the user needing to do anything extra.

7. Enter specific User credentials for the **Importer Service Credentials** details to be used. Leaving this blank will use the **Local System Account** instead. Then click **Next**.

Note: This service needs read & write access to the 'C:\CIS\Imports' folder on the server so it can monitor for files appearing and move processed files to appropriate sub-folders. Please ensure that either the local system account has the appropriate permissions on that folder or enter in a suitable username & password that does have the required permissions.

nporter Service Credentia	als
gasus CIS will use the following	Windows credentials to run the Importer Service
mporter Service User	
User Name	A local Windows or Domain user with the necessary credentials to run the Importer Service, in the form Domain/User. If left blank the Local System Account will be used instead.

8. Enter specific User credentials for the **Messaging Service Credentials** details to be used. Leaving this blank (Recommended) will use the **Local System Account** instead. Then click **Next**.

	lls
asus CIS will use the following Wir	ndows credentials to run the Importer Service
lessaging Service User	
User Name	A local Windows or Domain user with
Password	Messaging Service, in the form
	System Account will be used instead.

9. Enter specific User credentials for the **Email Monitoring Service Credentials** details to be used. Leaving this blank (Recommended) will use the **Local System Account** instead. Then click **Next**.

nasus CIS will use the following	a Windows credentials to run th	e Email Monitoring	Service
abus ets mil use are following	g millions a cachada ta run a	e enter nonconing	Service
mail Monitoring Service User			
User Name	A local W	indows or Domain	user with
Password	the neces Email Mo	sary credentials to nitoring Service, in	run the the form
	Domain\L	Jser. If left blank th	ne Local
	System A	iccount will be use	u insteau.

 Enter specific User credentials for the Licencing Service Credentials details to be used. Leaving this blank (Recommended) will use the Local System Account instead. Then click Next.

Licencing Servi	ce Credentials		- 🗆	×
Licencing Servi	ce Credentials			
egasus CIS will us	e the following Windows creden	tials to run the Licencing S	ervice	
Licencing Service User Name Password	User	A local Windows or Dom the necessary credentia Licencing Service, in the Domain\User. If left blar System Account will be u	ain user with Is to run the form Ik the Local used instead,	
		Back Next	Canc	el

11. Click **Install** to complete to process.



NB: The 'Executing SQL Strings' stage may take a long time to complete when the 'Demo Company' is also being installed. This option could have been turned off when selecting which components to install (Step 2- Component selection).

12. When the installation has completed, a confirmation window will appear.

🚽 Pegasus CIS Server Setup	- 🗆 X
Ð	Completed the Pegasus CIS Server Setup Wizard
	Click the Finish button to exit the Setup Wizard.

Note: Before clicking *Finish*, it is recommended to launch the Client Installer as part of finalising the Sever installation by ticking the respective option.

13. Click **Finish** to complete the Server installation.

NB: Clicking **Finish** will first trigger the 'Microsoft .NET 6 Windows Server Hosting' bundle installation (see details below for further information) and once complete, will install the CIS 5 Client assuming the box was ticked.

IIS

As part of the Server installation, IIS is enabled automatically (if not already enabled). The components applied as part of the installation are as follows;

- FeatureName:IIS-WebServerManagementTools
- FeatureName:IIS-WebServerRole
- FeatureName:IIS-ManagementConsole

Microsoft .Net v6 Windows Server Hosting

Following the Server installation, Microsoft .NET v6 will be installed if not already on the Server. If the installation is cancelled but is still required, you can manually install it from the default location of C:\CIS\Setup\Hosting Bundle'

NET	Microsoft .NET 6.0.0 Windows Server Hosting	
etup	Progress	
rocessing:	Microsoft .NET Runtime - 6.0.0 (x64)	

Firewall Considerations

Firewall considerations are for SQL Server and File/Print Sharing

NB: CIS Server needs internet access

Ensure the firewall permissions for the designated SQL Server are appropriate. For a default instance of SQL Server (e.g. 'SERVERNAME'), TCP port 1433 should be open. For a SQL Server named instance (e.g. 'SERVERNAME\SQLEXPRESS') it is recommended that sqlserver.exe (installed to "Program Files\Microsoft SQL Server\MSSQL[Major Version].[Instance Name]\MSSQL\Binn" by default) is allowed in addition to opening UDP port 1434 for SQL Server Browser.

Client Installation

The Client installation can be launched from the Server installation completion step. If you did not tick the option to launch the Client installation, you can manually launch the set-up from the default location of C:\CIS\Setup\Desktop Client (On the CIS 5 client, run Pegasus.CIS.Client.exe from the folder and then complete the steps in the wizard setup);

1. Click Install on the Client welcome screen



Upgrading CIS 5

This section explains the necessary steps to upgrade the CIS 5 software on the server and each client PC.

Follow these instructions;

- 1. Download the latest version of CIS 5 software from the Infor Product Download Center or Infor Xtreme. The downloaded software includes the server installation.
- 2. Save the downloaded software where it can be accessed from the server.
- 3. Make sure that no one is using CIS 5 and prevent users from logging on before installing the server and client software.

Note: Make sure no one is using the system by using the Administrator program to look at the existing logins on the 'Licence – Sessions' screen. If there are any licences in use, click the **Close All Sessions** button to give the users a notification that the application will automatically log them out in the next few minutes. If a user has left their client in the middle of processing that prevents the automatic logout, you can force close the session by expanding out the session tree view and pressing the delete icon. This should only be done as a last resort as it will make the client session invalid and prevent it from working. You can also prevent anyone else from logging into the system by going to the 'Licence - Sessions' screen and selecting 'Prevent Logins'.

NB: If the Administrator web app has been used just before the server upgrade is applied, IIS will still have a lock on relevant CIS files, it is therefore recommended to "Recycle" the "PegasusCISAdministratorAppPool" Application Pool in IIS to prevent the server installation requiring a reboot.

- 4. Install the server software by running the MSI file from the Server download folder.
- 5. Complete the steps in the wizard setup.
- 6. Install the client software on the server by ticking the Launch Client Installer option at the end of the Server upgrade (to manually update the client, browse to C:\CIS\Setup\Desktop Client and run the Pegasus.CIS.Client.exe file).
- 7. Complete the steps in the wizard setup.
- 8. After the server installation has completed, run the **CIS 5 Administrator** program to ensure the licencing service has already automatically fetched a new licence (if it has not, you will be automatically redirected to the licence screen where you can fetch one manually) and upgrade the companies if necessary.

Note: Assuming the 'Prevent Logins' has been applied before upgrading, remember to 'Allow Logins' following completion of the upgrade. To do this, click the button in the banner that appears along the top of the Administrator program on every screen

9. Complete on each client PC.

NB: Clients that are already installed will prompt to upgrade the next time they are run. Furthermore, the CIS 5 Administrator program has the ability to automatically launch the client setup as an elevated administrator so that those users who are not local PC administrators can install the upgrade without the need for an actual administrator to login. This is setup in the CIS 5 Administrator using the 'Settings' screen and clicking the **Enter Client Upgrade Credentials** where they can enter the 'DOMAIN\UserName' and 'password' of the **Active Directory** account to use when launching the installer.

Upgrading from CIS v4 or lower

CIS 5 can be installed alongside CIS v4 or lower. Install CIS 5 (Server & Client) as per the instructions in the earlier section.

A summary of what can be migrated is detailed below, however, please refer to the <u>Migration Utility</u> section for further information.

NB: Manually data can be migrated from any older version of CIS, but only from the CIS SQL variant (the migration from an Access CIS variant must be done via a separate utility).

Migration

NB: Data can be migrated from any older version of CIS, including both the Access and SQL variants, however, it is recommended that the Migration Utility is used in all scenarios.

Install CIS 5 (Server & Client) as per the instructions in this guide.

Common Migration Paths

There are various scenarios and paths for migrating CIS 4 to CIS 5. The method used will depend on what version the current system is on & what is required to be migrated. This includes considerations for;

- Existing System on CIS 4 Access
- Existing System on CIS 4 SQL
- Migrate Data only
- Migrate Data & Configuration (Users, companies, groups, custom Reports everything bar permissions)
- Manual or using the utility

Company datasets

Company dataset upgrades are all done from within the Administrator program via the "Companies" option. They can either all be upgraded at the same time (via the toolbar option on that screen) or done individually by clicking on the company and selecting the upgrade option on the toolbar.

These upgrade routines work on all older versions of CIS application data but they need to be in SQL Server. The routine cannot convert from Access to SQL Server in the Administrator program. Customers can use the CIS v4 routines to convert to SQL Server and then point the CIS 5 Administrator program to those converted to SQL to then upgrade the schema from CIS v4 to CIS 5.

Configuration databases

Existing Configuration databases (i.e. "Core" / PegasusCISCore.mdb databases) can also be upgraded from CIS v4 to CIS 5 (again, only from CIS SQL variant) and this will allow CIS v4 companies to keep all the users, companies, groups, custom reports and custom captions.

However, permissions will be wiped and will need to be all manually recreated (due to the permissions system being totally redesigned where existing data is incompatible). Alternatively, you can start with a blank configuration database.

Reports

Custom Reports that are no longer compatible will need to be manually updated (this cannot be automated).

Migration Utility

There is an Access To SQL Server Migration utility installed along with CIS 5. This utility allows for migration of any v4.x installation from Microsoft Access to Microsoft SQL Server. It can migrate company databases as well as the configuration database, by pointing the utility at the "PegasusCIS.E2K" file in the "CIS" folder. It will automatically detect all applicable databases as well as allowing them to be given unique names when migrated to a specified SQL Server in parallel. Any company dataset migrated to SQL Server also has it's configuration updated in the SQL Server migrated version of the configuration database.

This is implemented in .NET 6.0 with a "Self Contained" install (i.e. it does not need .NET 6.0 installed to run) and is installed to "C:\CIS\Utilities\Access To SQL Server Migration" (by default) as part of the server install but can be copied off an installation and used elsewhere before CIS v5 is installed, if required. Run the AccessToSqlServerMigration.exe to launch the utility.

Access to SQL Server Migration Utility

Please use the following steps as a guide to run the Access to SQL Server Migration Utility;

1. Launch File Explorer and browse to C:\CIS\Utilities\Access To SQL Server Migration (default location). Locate and double click the AccessToSqlServerMigration.exe to launch the utility.

Access to SQL Server Migration	—	×	
Open server configuration file			Ľ
		 _	

2. Click on the *Open server configuration file* button to start the process.

3. You will be prompted to locate the *PegasusClS.e2k* configuration file. Select the file and click *Open*.

→ ~ ↑ 📑	> This PC > OSDisk (C:) > CIS		~	C 🔎 Se	arch CIS
nize 🔻 New fold	ler				= • 🔟 😗
Pictures	Name	Date modified	Туре	Size	
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Desites	📒 Imports	21/03/2022 13:03	File folder		
	Reports	21/03/2022 13:03	File folder		
Documents	🚞 Setup	21/03/2022 13:04	File folder		
Downloads	🚞 System	21/03/2022 11:45	File folder		
Music	📒 Templates	21/03/2022 13:03	File folder		
Pictures	📒 Utilities	21/03/2022 13:03	File folder		
Videos	Pegasus.CIS.config	21/03/2022 13:08	CONFIG File	1 KB	
OSDisk (C:)	PegasusCIS.e2k	26/06/2005 21:56	E2K File	1 KB	
File <u>r</u>	ame: PegasusCIS.e2k			 Server (Configuration Files (*.E2l \vee
	L				on Cancel

 On the Access to SQL Server Migration wizard form, enter the appropriate details and select the relevant options;

Enter the SQL		Server Username to be used to perform
where you wish	Access to SQL Server Migration	the Migration. Please ensure
to migrate the	Convert Microsoft Access databases to Microsft SQL Server	relevant roles,
databases to.	Server Name: User Name: sa Test	permissions and
	Database Prefix: PegasusCIS_ Connection	security settings are
	Update Configuration Database with new company connection settings after migration 🗹	upplied.
Enter the SQL	Select Companies to Migrate	NB: Please specify
database Prefix	✓ Configuration Database New SQL Server database name:	here.
that will be used	PegasusCISCore.mdb PegasusCIS_Configuration	
for any	✓ 1 - Pegasus CIS Demo Data New SQL Server database name:	
databases	Demo\PegasusCIS.mdb PegasusCIS_Demo	
migrated		You will need to test the connection once
		all the relevant
databases found		details have
by the utility		been entered
(Company &		
configuration		
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Kaustatus	lt is recom "Upda	nmended to have the ate Configuration
information on	Database	with new company
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	will have t	o be manually setup.

For example;

	Convert Microsoft Ac	cess database	es to Microsft SQL Server	r
erver Name:	AANGELL102\SQLEXPRESS	User Name:	CISAdmin	Test
atabase Prefix:	PegasusCIS_	Password:	•••••	Connection
Ipdate Configura	ation Database with new com	pany connectio	on settings after migration o Migrate	V
lpdate Configura	ation Database with new com Select on Database	pany connectio t Companies to Nev	on settings after migration o Migrate v SQL Server database nar	ne:
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Testing the connection will verify the details entered (SQL Server Name, User credentials etc) and also check the database name i.e. if they already exist

	Convert Microsoft A	ccess database	s to Microsft SQL Serv	ver	
erver Name:	AANGELL102\SQLEXPRESS	User Name:	CISAdmin		Test
Database Prefix:	PegasusCIS_	Password:	•••••		Connection
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PegasusCISCore.mdb PegasusCIS_Configuration R	
1 - Pegasus CIS Demo Data New SQL Server database name:	nue
Demo\PegasusCIS.mdb PegasusCIS_Demo	



NB: If you run the utility prior to installing CIS 5, it is recommended to leave the default configuration Database Name as PegasusCIS_Configuration as this will then be picked up by the installation wizard automatically assuming the default names are used. Alternatively note down the name assigned which can then be manually entered during the installation wizard.

If CIS 5 is already installed, then you can either choose to;

- 1 Untick the configuration database so it does not get migrated. You would do this if you had already migrated the configuration database prior to installing CIS 5 and you wish to keep that migration; or you plan to configure the system from new.
- 2 Rename or delete the existing **PegasusCIS_Configuration** database what was automatically created in SQL Server as part of the CIS 5 Server installation (which would become redundant).
- 3 Use a different name i.e. **PegasusCIS_ConfigurationConv** and re-run the CIS 5 installation using the "change" option and then entering the new configuration database name.
- 1. Once all the relevant details are confirmed, click the *Migrate* button to start the process.

Convert Microsoft Access databases to Microsoft SQL Server rver Name: AVNGELL102XSQLEXPRESS User Name: ISdamin Test Configuration Database Personation Importance Oconfiguration Database New SQL Server database name: PegasusCISCone.mdb PegasusCISCone.mdb PegasusCIS_ConfigurationConvl Importance I - PegasusCISS.mdb PegasusCIS_Demo Importance Demo/PegasusCIS.mdb PegasusCIS_Demo Importance To migrate: 2 Migrating: 0 Migrated: 0 Errors: 0 Migrate										
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Manually Migrating

The following section details the method of manually migrating CIS 4 to CIS 5

Migrating CIS 4 Access to CIS 5

Currently the main method to migrate data from CIS 4 Access to CIS 5 is to convert CIS 4 Access to CIS 4 SQL in the first instance. Then migrate CIS 4 SQL to CIS 5. This includes Data and if required, the Configuration database. Please refer to the "<u>Converting CIS 4 Access to CIS 4 SQL</u>" section to upgrade from Access to SQL.

NB: The Access to SQL functionality can be found in CIS Administrator and may be used for any Access database to SQL conversion i.e. this can be used on the CIS Company or CIS Configuration databases.

Converting CIS 4 Access to CIS 4 SQL Database format

The following steps are a guide to converting a CIS Access database to a SQL Database.

Note: Some basic information was detailed in the original 12 - Pegasus CIS SQL.pdf training guide

1. Open CIS Administrator and select Maintain Application Datasets/Companies



2. Select the Company to be converted and click Edit

Company [Pegasus Company No./Name: 1	CIS Demo Data] X
Connection Baths Lo	gging <u>A</u> ddress C <u>o</u> ntact Company <u>D</u> etails <u>B</u> ank
Database Type:	<u>ب</u>
Database Name:	Demo\PegasusCIS.mdb
Access Workgroup: Database User Name:	Database Password:
	Create New Dataset Convert Existing Dataset
OK Car	ncel Apply Test Connection

3. Select the **Convert Existing Dataset** button

ect Database to Co	onvert		
Database Type:	Microsoft Access		\sim
Server Name:			
Database Name:	C: \CIS4\Data \Demo \	PegasusCIS.mdb	
Workgroup File:			
User Name:	Admin	Password:	
Close		<< Prev Next >>	Convert

4. Check the details of the database to be converted are correct and click **Next**.

elect Destination Da	tabase
Database Type:	Microsoft SQL Server 🗸
Server Name:	UKKENAANGELL 102\SQLEXPRESS
Database Name:	CIS4SQL
Workgroup File:	
User Name:	Password:
Close	<< Prev Next >> Convert

5. Enter the Server Name, Database name (and any other relevant details if required) and click Convert.

NB: This utility can be used to convert from Access to SQL or SQL to Access

Database Conversion Progress	×
Conversion Information Conversion Information Conversion Information Time Message Q1+5532: Created AssetCategoryRates (8 (6))	Creating Table 54 / 115: CISOpeningBalancesBatch01 Creating Table 54 / 115: CISOpeningBalancesBatch01 Creating Index CISOpeningBalancesBatch01 Converting Data for JobCostTransactions Converting Data for JobCostTransactions
(1) + 59:33 Created Asset (13), 13 (1) + 59:33 Created AssetSitus, (3), 31 (1) + 59:33 Created AssetSitus, (3), 31 (1) + 59:33 Created BackTing Pace (4), 41 (1) + 59:33 Created BackTing Pace (4), 41 (1) + 59:34 Created BackTing Pace (4), 41 (1) + 59:34 Created BackTing Pace (4), 41 (1) + 59:34 Created BackSing Pace (4), 41 (2) + 59:34 Created BackSing Pace (4), 42 (2) + 59:34 Created BackSing Pace (4), 43 (2) - 69:59:34 Created BackSing Pace (4), 43 (3) - 69:59:34 Created BackSing Pace (4), 43 (3) - 69:59:34 Created BackSing Pace (4), 43 (4) - 69:59:34 Created BackSing Pace (4), 44	Time Message Q1 14-59-17 Created (ISCertificates) (62 / 6 Q1 14-59-17 Created CISCertificates (16 / 6 Q1 14-59-17 Created CISCertificates (17 / 6 Q1 14-59-17 Created CISCertificates (17 / 6 Q1 14-59-18 Created CISCertificates (17 / 7 Q1 14-59-18

7. When the conversion process has completed, the results can be saved before the window is closed.

Database Co	onversion Progress		>
Progress	-0		
Conversion Co	ompleted		
Conversion Inf	ormation		
Time	Message		^
15:05:53	Created WarehouseGroups (2 / 2)		
15:05:53	Created Warehouses (3 / 3)		
15:05:53	Created WeekSetup (2 / 2)		
15:05:53	Created WIPSettings (1 / 1)		
15:05:53	Created YNDLookup (3 / 3)		
15:05:54	Created YNDXLookup (5 / 5)		
15:05:54	Created YNMLookup (3 / 3)		
15:05:54	Created YNPLookup (3 / 3)		
	a		
15:05:54	Conversion Completed		<u> </u>
15:05:54	Conversion Completed		Ŷ
15:05:54	Conversion Completed		Ŷ

NB: The conversion is now complete. Please note, the database is now converted to CIS v4 SQL, however the data is not attached to a new company record i.e. It is currently a "free standing" database. This must be done manually where the database can now be linked with a new Company record in CIS 4 SQL or CIS 5.

Adding converted CIS SQL database to CIS 4 SQL

Once a database has been converted, it needs to be added into the application and linked with a new Company record. Use the following steps as a guide to complete this process;

Note: If adding a SQL CIS Database, please ensure CIS is activated as a SQL solution

1. Open CIS Administrator and select Maintain Application Datasets/Companies

🏠 Compar	iies			-		×
No	Company Name		2			
001	Pegasus CIS Dem	o Data				
0		5 12	D.L.		r .	
Llose	Add	Edit	Delete	Du	iplicate	

2. Select the Add button. Enter the Company Name, DB Type (SQL), Server Name, Database Name (as in the SQL db name used earlier) and then select Apply.

🏠 Company [(new)]*	×					
Company No./Name: 2 CIS4SQL						
Connection Paths Lo	gging <u>A</u> ddress C <u>o</u> ntact Company <u>D</u> etails <u>B</u> ank					
Database Tune:	Microsoft SDL Server					
Server Name:	Server Name: UKKENAANGELL102\SQLEXPRESS					
Database Name: CIS4SQL						
Access Workgroup:						
Database User Name: Database Password:						
	Create New Dataset Convert Existing Dataset					
OK Ca	ncel Apply Test Connection					

3. You will be prompted to apply all security groups access to this Company, select Yes to continue.

4. Now complete the rest of the forms to complete the Company set-up.

NB: If you are upgrading from CIS 4 to CIS 5, once you have converted the database from Access to SQL, you do not have to add the database into CIS 4 SQL, you can go straight to CIS 5. However, it will need to be done at some point. Instead of having to reconfigure all the companies in CIS 5, an option would be to update the configuration database in v4 then when the configuration database is migrated to CIS 5 it is already correct.

Migrating Configuration (Core) database

Most CIS 4 installations (Access or SQL) will have the core configuration database as an Access .MDB rather than SQL (bar 1 or 2 customers which may have a core in SQL). The configuration database is found in the Root CIS – System folder, generally called **PegasusCISCore.mdb**– this contains all the field db types, configurations, Users and so on.

Note: There is also an associated config file named **PegasusCIS.e2k** for v4 and **Pegasus.CIS.config** for v5 associated with the Core database, you can open this file in Notepad and look at the 'Database Type' setting to see whether the Core database is in Access (Database Type = 0) or SQL (Database Type = 1)..

To convert this into a SQL database, use the following steps as a guide;

No	Company Name	5			
001	Pegasus CIS Demo Data				
			🏠 Company [Pegasus	CIS Demo Data]	×
			Company No./Name:	Pegasus CIS Demo Data	
			Connection Baths Lo	ogging <u>A</u> ddress C <u>o</u> ntact Company <u>D</u> etails <u>B</u> ank	
			Database Type:		~
			Server Name:		
			Database Name:	Demo\PegasusCIS.mdb	
			Access Workgroup:		
		_	Database User Name:	Database Password:	
Close	Add Edit	D			
				Create New Dataset Convert Existing Da	taset
		Î	OK Ca	ncel Apply Test Connection	

1. Open CIS Administrator and select Maintain Application Datasets/Companies, Click Edit

2. Select the **Convert Existing Dataset** button. The Database Conversion Progress wizard will default to the details of the Company selected. This can be changed to select the Core database to be converted.

🚮 Database Convers	ion Progress	Ν	×			
Select Database to C	onvert	63				
Database Type:	Microsoft Access		~			
Server Name:						
Database Name:	C:\CIS4\Data\Demo\Pegasus	usCIS.mdb				
Workgroup File:		🚍 Database Conversion Progress				
User Name:	Admin					
		Select Database to Co	ponvert			
Close		Database Type:	Microsoft Access 🗸			
		Server Name:				
		Database Name:	C:\CIS4\System\PegasusCISCore.mdb			
		Workgroup File:				
		User Name:	Admin Password:			
		Close	<< Prev Next >> Convert			

3. Once the PegasusCISCore.mdb file has been selected, click Next

lect Destination Da	tabase 15
Database Type:	Microsoft SQL Server 🗸
Server Name:	UKKENAANGELL102\SQLEXPRESS
Database Name:	PegasusCISCore
Workgroup File:	
User Name:	Password:
Close	<< Prev Next >> Convert

4. Enter the Server & Database Names e.g. SERVERNAME\SQLEXPRESS & PegasusCISCore respectively. Click **Convert**.

NB: If the plan is to move to CIS 5 in the future, the application is not yet installed and you wish to retain & migrate most of the configuration details (Users, Groups etc.), it is strongly recommended to name the SQL database **PegasusCIS** Configuration in readiness for the upgrade and migration.

gress eating Table 15 / 23: Permissions		Database Conversion Progress	×
ating Index Permissions01		Conversion Completed	
nversion Information			
Ine Message 12:25:32 Created Dictionaries (1 / 1)	^	Conversion Information	
12:25:32 Created Favorites (0 / 0)		Time Message	
12:25:33 Created Folders (1 / 1)		12:25:35 Created Preferences (5 / 5)	
12:25:33 Created Globals (1 / 1)		12:25:35 Created ReportParameters (0 / 0)	
12:25:34 Created Icons (0 / 0)		12:25:35 Created Reports (0 / 0)	
12:25:34 Created MailMerge (0 / 0)		12:25:36 Created SystemIDs (4 / 4)	
12:25:34 Created Members (1 / 1)		12:25:36 Created UserPasswordHistory (0 / 0)	
12:25:35 Created Permissions (0 / 0)	~	12:25:37 Created Users (1 / 1)	
		12:25:37 Created Views (0 / 0)	
	Next >> Convert	12:25:37 Conversion Completed	~
Cancel << Prev			
Cancel << Prev			

5. When the database has been converted from Access to SQL, you need to edit the configuration file to ensure the system points to and uses the SQL database instead. To do this, open the PegasusCIS.e2k file found in the CIS root directory with an editor such as Notepad

<u>File Edit Format View H</u> elp		
Core Connection File v1.0		~
)atabase Type = 0		
Server Name =		
Database Name = System\Pe	gasusCISCore.m	ndb
Jser Name =	,	
Password -		
Access workgroup =		
		\sim

- 6. Edit the file by changing;
 - a. Database Type = 1
 - b. Server Name = <SQLSERVERNAME>
 - c. Database Name = <SQL DATABASE NAME> (created in the earlier step)
 - d. And either
 - i. specify the SQL Server User Name and (clear text) Password or
 - ii. leave both the User Name and Password fields empty (in which case Windows Integrated Security will be used and each Active Directory user account needs to have access to the appropriate SQL Server databases (or be in a group that has this access).



7. Save the file and close the application

NB: This file has been enhanced into a partially encrypted file named Pegasus.CIS.config for CIS 5

Migrating a 'CIS 4 SQL database' to CIS 5

There are two types of database that can be migrated for CIS 5 (as detailed in the summary);

- Company Data
- Configuration Data

Migrating a Company Database from CIS 4 SQL to CIS 5

Regardless if the SQL Company database has been added into CIS 4 Administrator, the database can be added into the CIS 5 solution. Please use the following steps as a guide;

- 1. Log into CIS 5 Administrator
- 2. Go to Companies and click Add New



3. In the new company screen, enter the Database Name.

1	Demo	Data	
Connection	Paths	Details	Data Sources
Data Version			
11.35			
Change Data	base Server/	Credentials	

Note: If the Company database is located on a different SQL Server to the one the Configuration database is on, then click on the **Change Database Server/Credentials** button, and enter the Server Name, User Name and Password.

Enter the SQL Server Name (where the data resides), the Database Name (the name assigned when the Access to SQL conversion was run e.g. CIS4SQL), the SQL User created as part of the prerequisites (further details found in the Training Installation guide, e.g. CISUser) and the password assigned to the SQL CIS User (further details found in the Training Installation guide). Then click Save

	Name
1	Demo Data
Connection	Paths Details Data Sources
Server Name	
Only specif a different s is stored or	y a server name if you want to point this company to SQL Server than the one the configuration database or you want to use specific user credentials.
Only specif a different s is stored or Database Name PegasusCIS_D	y a server name if you want to point this company to SQL Server than the one the configuration database or you want to use specific user credentials. emoCompany
Only specif a different S is stored or Database Name PegasusCIS_D Username	y a server name if you want to point this company to SQL Server than the one the configuration database or you want to use specific user credentials. emoCompany Password
Only specif a different s is stored or Database Name PegasusCIS_D Username Data Version	y a server name if you want to point this company to SQL Server than the one the configuration database or you want to use specific user credentials. emoCompany Password

4. Once saved, the company record should be created and linked to the specified database.

on	npanies						
+ Add	d New 🕇 Upgrade All						
ID	Company Name	Database	Data Ver	Custom Reports Path	Documents Path	Import Path	
1	Demo Data	PegasusCIS_DemoCompany	11.35		Demo Company	Demo Company	© î

- 5. Upgrade the Company's Database be either;
 - a. Clicking on Upgrade All or
 - b. Clicking on the Company, and clicking on Upgrade Database

Upgrading to v11.16	🚯 Create Database	🔞 Upgrade Database 🗙
Dat	Upgrading to	o v11.16
Datt	Data	

6. Once completed, the database should be on the latest Data Version. There may be a few routines required to be run due to the updated version and the system will prompt which routines are needed to be run.

Upgrade Database	
New features in this version require the following routines to be run in company 'CIS4SQLDataSet': - Settings -> Ledger Links -> Ledger Synchronisation -> Import. Ledgers	All
0	ĸ

The data version can be checked on the Companies List view.

+ Add N	New 🕇 Upgrade All		
	Company Name	Database	Data Var
	sompany Name	Database	Data vei

Migrating the Configuration Database from CIS 4 SQL to CIS 5 with CIS 5 yet to be installed

The steps to perform the migration of the Core database to CIS 5 will depend on what name was assigned to the Configuration database when converting the data.

- If the name used was **PegasusCIS_Configuration**, then no additional steps are required. The installation routine will pick up the existing configuration database as part of the installation and use the information in the file.
- If the configuration database was called anything else, then to migrate the configuration (Core) CIS 4 SQL Database to CIS 5, one simple step is required during the CIS 5 installation routine. On step 4 as seen in the training installation guide when it requests confirmation of the SQL database names, enter the relevant database name in the **Configuration** database field.

igasus CIS will use	the following Database Settings to store	configuration information.	
SQL Database Serv	er		
Server Name	UKCISSERV01\SQLEXPRESS	The name of the SQL Server machine and instance name if applicable	
Database Names		_	
Configuration	PegasusCIS_Configuration	The database names for storing configuration	
Demo Company	PegasusCIS_DemoCompany	information and the demo	
	PegasusCIS_DataDictionary		
Data Dictionary			
Data Dictionary			

Then continue the installation as normal. The configuration file should be updated automatically as required (using the CISAdmin credentials as entered during the wizard)

Note: Please refer to the installation guide for further details.

Migrating the Configuration Database from CIS 4 SQL to CIS 5 with both applications installed

The steps to perform the migration of the Core database to CIS 5 with both applications installed, will depend on what name was assigned to the Configuration database when converting the data, though the likelihood is that the name used was not **PegasusCIS_Configuration** as this may have failed due to an existing database with that name already.

To migrate the configuration (Core) CIS 4 SQL Database to CIS 5, re-run the **installation** routine for CIS 5 (not the **Repair** option). Click next on the wizard and then select the Change option. Then click Next

l Pega	asus CIS Server Setup		► –	
Chan	nge, repair, or remove	installation	43	
Sele	ect the operation you wish to	o perform.		B
	Change			
	Lets you change the v	way features are install	ed.	
	Repair			
	Repairs errors in the r files, shortcuts, and r	most recent installation egistry entries.	by fixing missing and	l corrupt
	<u>R</u> emove			
	Removes Pegasus CIS	S Server from your com	puter.	
		Back	Next	Cancel

On the step where it requests confirmation of the SQL database names, enter the relevant database name in the **Configuration** database field. Then continue as normal. Click **Change** on the last step of the wizard to process the re-installation. The configuration file should be updated automatically as required (using the CISAdmin credentials as entered during the wizard)

egasus CIS will use	the following Database Settings to store	configuration information.	Pegasus CIS Server Setup - X
SQL Database Serv	/er		Ready to change Pegasus CIS Server
Server Name	UKCISSERV01\SQLEXPRESS	The name of the SQL Server machine and instance name if applicable	Olick Change to begin the installation. Click Back to review or change any of your
Database Names			installation settings. Click Cancel to exit the wizard.
Configuration	PegasusCIS_Configuration	The database names for	
Demo Company	PegasusCIS_DemoCompany	storing configuration information and the demo	
Data Dictionary	PegasusCIS_DataDictionary		
	Dack	Next	
	Back	Caller	

Note: *Please refer to the installation guide for further details.*

Removing CIS 5

The following are the steps and considerations when uninstalling CIS 5.

NB: It is always advisable to back-up data, system and report etc. files and folders before removing the application.

Removing via Apps and Features (Add/Remove Programs)

The recommend method to un-install CIS 5 is to use the uninstall option via Apps & Features (Add/Remove Programs). Uninstall the Client(s) before the Server.

Considerations

Once the Client and Server installations have been removed, it is recommended to check the following;

- SQL: Ensure all relevant SQL databases relating to CIS 5 have been removed (recommended to use SQL Management Studio to perform this check and process).
- Files & Folders: Ensure all relevant CIS 5 folders have been removed (recommended to use File Explorer to perform this check and process. The default path is C:\CIS).
- IIS: Ensure all relevant Website(s) relating to CIS 5 have been removed (recommended to use IIS to perform this check and process. Check the Application Pool list as well.
- Registry: Ensure the main references to the CIS 5 installation have been removed.

Installing Document Management for CIS 5

Application Document Management (DM) for CIS 5 is a separate installation to the CIS 5 Server install. The install files are created by the CIS 5 Server installation and must be run separately once the Server has been installed and set-up.

After CIS 5 Server has been installed, the DM installation files can be found in C:\CIS\Setup\Document Management.



NB: The install files can be used on any machine, independent from CIS 5 e.g. a user who does not have CIS 5 installed, may still require DM functionality so can install DM on their machine and utilise the features.

To install DM for CIS 5 please use the following steps;

- 1. Run the setup.exe
- 2. Click **Next** at the welcome screen



3. Select the installation **Destination Folder** and select **Next**.

Destination Folder			5	
Click Next to install to the default folder	or click Change to choos	e another.	G	7
Install Pegasus CIS Document Managemer	nt to:			
C:\Program Files (x86)\Pegasus\Pegasus	.CIS.DocumentManager	nent\		
Change				
			Canad	

4. Click the Install button to install DM.



5. Click Finish to close the completed installation confirmation screen.

🔄 Pegasus CIS Document Mar	nagement Setup	-		×
Ð	Completed the Pegasus Management Setup Wiza	CIS Do ard	cument	
	Click the Finish button to exit the Se	tup Wizar	d.	
				_
	Back Fin	ish	Cance	e

Appendix A – CIS 5 Server Files, Folders & Other Components

Main Folder & Files on the server

The default location for the share CIS 5 folder & files on the server is 'C:\CIS' (though this can be changed during installation). These are installed by the Server installation.

\rightarrow \checkmark \uparrow \square \checkmark	This PC > OSDisk (C:) > C	IS		
🔶 Quick access	Name	Date modified	Туре	Size
	Exports	22/03/2022 19:22	File folder	
o Creative Cloud Files	📒 Imports	22/03/2022 19:22	File folder	
🤝 OneDrive - Infor	Reports	22/03/2022 19:22	File folder	
💶 This PC	🦰 Setup	22/03/2022 19:22	File folder	
Desktop	Templates	22/03/2022 19:22	File folder	
- Documents	📒 Utilities	22/03/2022 19:22	File folder	
- Downloads	Pegasus.CIS.config	15/03/2022 01:30	CONFIG File	1 KB

Only the shared server files that all clients need to access to e.g. for reports, templates, imports, exports, etc. are installed to the 'C:\CIS' folder.

Folder	Purpose
Exports	This folder contains any exports from CIS 5 and are stored in the respective Company's sub-folder.
Imports	This folder contains any imports for CIS 5 and are stored in the respective Company's sub-folder. In each Company's folder, there are sub folders for various records in relation to the import i.e. Analysis Codes, Contracts, Job Journals and so on.
Reports	This is where all the standard and custom report designs are maintained. Reports are in Crystal Report formats.
Setup	This folder contains the set-up files for the CIS 5 Client and the v6 Hosting bundle (.Net v6) respectively.
Templates	This folder contains any relevant templates such as a Remote Timesheet Template.
Utilities	There is an Access To SQL Server Migration utility installed along with CIS 5. This utility allows for migration of any v4.x installation from Microsoft Access to Microsoft SQL Server. It can migrate company databases as well as the configuration database, by pointing the utility at the "PegasusCIS.E2K" file in the "CIS" folder it will automatically detect all applicable databases as well as allowing them to be given unique names when migrated to a specified SQL Server in parallel. Any company dataset migrated to SQL Server also has it's configuration updated in the SQL Server migrated version of the configuration database.
Pegasus.CIS.config file	This is the config file (PegasusCIS.e2k for v4) for v5 associated with the Core database. This contains the database type, server name, configuration db name, username & encrypted password. This is created during the installation process.

ProgramData Folder & Files on the server

The Windows data folders used by CIS 5 are located in 5 locations within the ProgramData location. These are primarily where configuration files are located.

🕑 New 🗸		⊕ î↓ Sort ~	\equiv View \cdot		
\rightarrow .	∽ ↑ <mark>[—] C:\ProgramData\Pegasus</mark> ~	S C Search I	Degasus		
× [Name	Date modified	Туре	Size	
>	Pegasus.CIS.Administrator	22/03/2022 19:22	File folder		
>	📒 Pegasus.CIS.EmailMonitoringService	22/03/2022 19:22	File folder		
> I	Pegasus.CIS.ImporterService	22/03/2022 19:23	File folder		
	Pegasus.CIS.LicencingService	22/03/2022 19:23	File folder		
\$	Pegasus.CIS.MessagingService	22/03/2022 19:23	File folder		

Folder	Description
Pegasus.CIS.Administrator (Pegasus.CIS.Administrator.Admin.config & Pegasus.CIS.Administrator.Client.config)	This location contains the config files (.config, but XML format) for the CIS Administration Admin & Client elements. Admin file containing data associated with the Core database. This contains the database type, server name, configuration db name, CISAdmin username & encrypted password. This is created during the installation process. Client file containing data associated with the Core database. This contains the database type, server name, configuration db name, CISUser username & encrypted password. This is created during the installation process.
Pegasus.CIS.EmailMonitoringService (Configuration.xml)*	This location contains a config file (xml) for the Email Monitoring Service i.e. settings for Polling (10). Developed in .NET 6.0 with a "Self Contained" install (i.e. it does not need .NET 6.0 installed to run) and uses SQL Server Query Notifications to automatically send emails as soon as they are received without the need for polling. Note : All service event logs are written out to "Applications and Service Logs" (as opposed to "Windows Logs") in a "Pegasus" subfolder.
Pegasus.CIS.ImporterService (Configuration.xml)	This location contains a config file (xml) for the Importer Service. This contains time interval settings for the various Importing functions with CIS i.e. checking for new import files every 30 minutes. Developed in .NET 6.0 with a "Self Contained" install (i.e. it does not need .NET 6.0 installed to run) and uses SQL Server Query Notifications to automatically detect changes in company configuration (companies added/modified/removed in the administrator program) without the need to restart the service. It also monitors for changes in the defined import folders for each company without needing to restart the service.

	Error reports are added to the company pending emails list and sent via the messaging service (which will handle retrying and so on, when the email server is unavailable/unresponsive etc.). The communications are formatted as HTML for enhanced aesthetics and formatting. Company Log files are no longer used (and the field has been removed from the Company screen in the administrator program) and all log messages are now published to the Event Viewer. Note: All service event logs are written out to "Applications and Service Logs" (as opposed to "Windows Logs") in a "Pegasus" subfolder.
Pegasus.CIS.LicencingService (Configuration.xml)	This location contains a config file (xml) for the Licencing Service. This contains time interval settings for the various Licencing checks for CIS i.e. checking for new licence details every 24 hours (though this can be forced via the Fetch Licence function in CIS Administrator if required).
Pegasus.CIS.MessagingService (Configuration.xml)	This location contains a config file (xml) for the Messaging Service. This contains time interval settings for the various Messaging functions with CIS i.e. checking for new messages every 5 minutes. Developed in .NET 6.0 with a "Self Contained" install (i.e. it does not need .NET 6.0 installed to run) and uses SQL Server Query Notifications to automatically send emails as soon as they are received without the need for polling. It also uses SQL Server Query Notifications to automatically detect changes in company configuration (companies added/modified/removed in the administrator program) without the need to restart the service as well as automatically detecting changes in the config file and re-loading as appropriate. Failed email messages will be retried on a separate schedule and further failures will not result in error reports being emailed unless the email is edited or the "Resend" operation is run from within the application. Note: All service event logs are written out to "Applications and Service Logs" (as opposed to "Windows Logs") in a "Pegasus" subfolder.

Note: The credentials used by the administrator program are written out to the

"C:\ProgramData\Pegasus\Pegasus.CIS.Administrator" folder on the server into two files: "Pegasus.CIS.Administrator.Admin.config" & "Pegasus.CIS.Administrator.Client.config", for the admin and non-admin (or Client) credentials respectively. The Administrator program uses the Admin config for everything it processes with the exception of the company dataset operations (like "Test Connection" and "Upgrade Database") where it uses the Client config details in combination with the Database Name for each company (in the scenario where the company has not had it's Server Name, User Name and Password details overridden). This also allows the system to use the Admin credentials (with higher permissions than the Client in SQL Server) to make sure that the Client credentials are setup with the correct permissions for each company database.

Program Files (x86) Folder & Files on the server

The **Windows Services** required for the CIS 5 server to work are located in 4 subfolders of the 'C:\Program Files (x86)\Pegasus' Windows file system folder.

C:\Program Files (x86)\Pegasus	N		– 🗆 ×
⊕ New ~ 🔏 🔲 🔂 🗐	k} ⊡ ↑↓ Sort	\sim \equiv View \sim \cdots	
÷ → · ↑ [*] C:\Program Files (x86)\Pegast	ت		
Name	Date modified	Type Size	
Pegasus.CIS.EmailMonitoringService	22/03/2022 19:23	File folder	
Pegasus.CIS.ImporterService	22/03/2022 19:23	File folder	
Pegasus.CIS.LicencingService	22/03/2022 19:23	File folder	
Pegasus.CIS.MessagingService	22/03/2022 19:23	File folder	
5 items			

Folder	Purpose
Pegasus.CIS.EmailMonitoringService*	This folder contains the various CIS 5 'DLL' programs for the Email Monitoring function
Pegasus.CIS.ImporterService	This folder contains the various CIS 5 'DLL' programs for
	the Importer function.
Pegasus.CIS.LicencingService	This folder contains the various CIS 5 'DLL' programs for
	the Licencing function.
Pegasus.CIS.MessagingService	This folder contains the various CIS 5 'DLL' programs for the Messaging function
	the Messaging function.

Other Components

There are various other components of note that are present in the CIS 5 infrastructure. Please see the following sections on Registry, IIS, Services, SQL and Misc for further information.

Registry

The main entry in the registry associated with the server installation are the configuration settings (i.e. to allow a repair to work properly). This is found @

Computer\HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Pegasus\Pegasus.CIS. This is installed by the Server installation.

egistry Editor			- 0 ×
Edit View Favorites Help outer\HKEY_LOCAL_MACHINE\SOFTWARE\WOW	5432Node\Pegasus\Pegasus.CIS		
🗸 🚞 Pegasus	Name	Type	Data
> Capital Gold Payroll	ab (Default)	REG_SZ	(value not set)
> CapitalGold	ab AdministratorDomainName	REG SZ	UKKENAANGELL102
> CapitalGold DevKit	ab AdministratorPortNumber	REG SZ	31080
> DIT3	ab AdministratorSQLPasswordHash	REG SZ	XwS7X8nP/Zvg0Vr9fYksOw==
> IMCP	ab AdministratorSQLPasswordSalt	REG SZ	1FF50A27E43E94D4848088459F52ED7F
> instant Messenger	ab AdministratorSQLUsername	REG.SZ	CISAdmin
Client Kol	ab ApplicationSQLPasswordHash	REG SZ	IRGaCMr5D7aecEm+6XNkUA==
O3 Client VER	ab ApplicationSQLPasswordSalt	REG SZ	4EBD39E314B1AED996E994843D06C7F9
03.55	ApplicationSQLUsername	REG SZ	CISUser
O3 Server SQL	46 ConfigurationDatabaseName	REG SZ	PegasusCIS_Configuration
3 O3 Server VEP	ab DataDictionaryDatabaseName	REG SZ	PegasusCIS DataDictionary
> OFM	ab DataServerName	REG_SZ	UKKENAANGELL102\SQLEXPRESS
> Operations	ab DemoCompanyDatabaseName	REG_SZ	PegasusCIS DemoCompany
> Coperations Client	ab DemoCompanyDatabaseName2	REG_SZ	PegasusCIS_DemoCompany
> Pegasus Capital Gold	ab EliteServiceEmailMonitoringPasswordHash	REG_SZ	O1jZEMrlaUpN9inhhc3Dgg==
> Pegasus Document Management Cliv	ab EliteServiceEmailMonitoringPasswordSalt	REG_SZ	FC11CFA9AAEA47E2BCD6B38AAFF92AFF
> 📁 Pegasus Document Management Ser	ab EliteServiceEmailMonitoringUsername	REG_SZ	
> Pegasus Operations	M EliteServiceImporterPasswordHash	REG_SZ	LWLgffny5KVu+J7tZPhKgQ==
> Pegasus Operations Client	ab EliteServiceImporterPasswordSalt	REG_SZ	23E8D0438D11591D9B4D2F8D51845771
> Pegasus.CIS	a EliteServiceImporterUsemame	REG_SZ	
Scheduler	ab EliteServiceLicencingPasswordHash	REG_SZ	VvIWfKwObGrSkhFoVZnyRA==
Scheduler Server	ab EliteServiceLicencingPasswordSalt	REG_SZ	4BEC6F5955ABAA213D1793602459578D
Stocktake	ab EliteServiceLicencingUsername	REG_SZ	
Rolicier	ab EliteServiceMessagingPasswordHash	REG_SZ	IrSeD7uPnUa7/9Mh/YFqjQ==
PDP 1	ab EliteServiceMessagingPasswordSalt	REG_SZ	C406147FADE523E1D90B3CA86038EF52
Realtek	ab EliteServiceMessagingUsername	REG_SZ	
Realtek Semiconductor Corp.	ab FileShareName	REG_SZ	CIS
Senistered Annlications			

IIS

The Administrator program is installed to 'C:\inetpub\Pegasus\Pegasus.CIS.Administrator' with config files created in 'C:\ProgramData\Pegasus\Pegasus.CIS.Administrator'.

0 New 06	U U E E U IV sort · E View · ···
	<pre></pre>
🔶 Quick access	Name Date modified Type Size
	Pegasus.CIS.Administrator 22/03/2022 19:23 File folder
😞 Creative Cloud Files	
	gasus.CIS.Administrator
C:\ProgramData\Pegasus\Peg	gasus.CIS.Administrator
C:\ProgramData\Pegasus\Peg Đ New ~ 🛛 🔏 🗌	gasus.CIS.Administrator (Ĩ) ⊡ 🖻 🖄 🕅 ঝ Sort ~ ☰ View ~ 😽
C:\ProgramData\Pegasus\Peg Đ New ~ │	gasus.CIS.Administrator (T) (E) (B) (T) (T↓ Sort ~ ■ View ~ ···· rrogram.Data\Pegasus\Pegasus.CIS.Administrator
C:\ProgramData\Pegasus\Peg D New ~ → ~ ↑ ► CIF	gasus.CIS.Administrator T
C:\ProgramData\Pegasus\Peg D New ~ & □ → ~ ↑ È ★ Quick access	gasus.CIS.Administrator T T T T T T T T T T T T T
C:\ProgramData\Pegasus\Peg Đ New ~ & □ → ~ ↑ <mark>□ আ</mark> ★ Quick access	gasus.CIS.Administrator

A PegasusCISAdministratorAppPool is automatically created & configured as required and assigned to the Pegasus CIS Administrator Website.

File View Help						
Connections	Application Pools	e list of ap	plication pools	on the server. Appli	cation pools are assoc	ated with worker pro
Application Pools appli	cations, and provide isolation am	ong differe	nt applications.			
> 😔 Default Web Site Filte	r: 👻 🐨 Go	- 🕁 Sho	w All Group by	y: No Grouping	-	
> 😔 Pegasus CIS Administrator Nam	ne	Status	.NET CLR V	Managed Pipel	Identity	Applications
	NET v2.0	Started	v2.0	Integrated	ApplicationPoolId	0
ii	NET v2.0 Classic	Started	v2.0	Classic	ApplicationPoolld	0
L. 🗐	NET v4.5	Started	v4.0	Integrated	ApplicationPoolId	0
2 .	NET v4.5 Classic	Started	v4.0	Classic	ApplicationPoolId	0
	lassic_NET_AnnPool	Started	v2.0	Classic	ApplicationPoolId	0
() ()	efaultAppPool	Started	v4.0	Integrated	ApplicationPoolId	1
2 P	egasusCISAdministratorAppPool	Started	v4.0	Integrated	ApplicationPoolId	1
				PegasusCISA .NET CLR ver .NET CLR Ver Managed pij Integrated	IdministratorAppPool sion: rsion v4.0.30319 seline mode:	~ ely
Fea	stures View 📑 Content View				ОК	Cancel

These elements are installed by the Server installation.

Services

Four main services are installed as part of the server. Use 'services' at the Windows start menu to open the Services list.

+ 🖂 🖬 🖉	2 🕞 🛛 📰 🕨 🗉 🗈 🕨					
Services (Local)	O Services (Local)					
	Pegasus CIS Document	Name	Description	Status	Startup Type	Log On As
	Management Email Monitoring Service	Pegasus CIS Document Management Email Monitoring Service	Server side service for monitoring Microsoft 365 mailboxes for incoming emails and importing them into Pegasus CIS	Running	Automatic	Local System
		Pegasus CIS Importer Service	Server side service for monitoring file system folders and automatically triggering corresponding import routines in Pegasus CIS when files are detected	Running	Automatic	Local System
	Stop the service	Pegasus CIS Licencing Service	Server side service for automatically updating the Pegasus CIS licence	Running	Automatic	Local System
	Restart the service	Pegasus CIS Messaging Service	Server side service for sending email messages generated by Pegasus CIS	Running	Automatic	Local System
		C Renarus Merrane Senice	Sands the mercanes generated by the User Senice and Surtem Senice. It also handles logins from the Instant Messanger	-	Manual	Local Surtem

Service	Description
Pegasus CIS Document Management Email Monitoring Service*	Server side service for monitoring Microsoft 365 mailboxes for incoming emails and importing them into Pegasus CIS
Pegasus CIS Importer Service	Server side service for monitoring file system folders and automatically triggering corresponding import routines in Pegasus CIS when files are detected
Pegasus CIS Licencing Service	Server side service for automatically updating the Pegasus CIS licence. The "Pegasus CIS Licencing Service" is responsible for automatically fetching new licences (once a day) from the licencing server. This is primarily for handling customers on monthly subscriptions so they can renew automatically where valid, but it will also keep refreshing perpetual licences, so within 1 day of something changing (e.g. increasing the number of licenced users) the licence will be up to date. Administrators can still manually go into the Administrator application and fetch an updated licence whenever required, i.e. if applying a new licence is urgent. Note: A new licence is required for every release, due to being linked with a specific version number. This will occur automatically when the licencing service starts up (assuming it already has a valid licence).
Pegasus CIS Messaging Service	Server side service for sending email messages and text messages generated by Pegasus CIS

SQL

Three main databases are created during the Server installation routine.

ile <u>E</u> dit G - O ∓ \¥	Yiew Jools Window Help 3 -
Object Expl	orer ▼ ₽ ×
Connect 🕶	₩ ¥ = ▼ C →
🗆 🔒 UKI	ENAANGELL102\SQLEXPRESS (SQL Server 15.0.4083 - INFOR\aangell1)
=	Databases
+	System Databases
+	Database Snapshots
+	comp_z
+	ContractCosting_Configuration
÷	ContractCosting_DataDictionary
+	ContractCosting_DemoCompany
+	
*	
*	
	Opera3SECompany007
	Opera3SECore
±	OperadSESystem
÷	PegasusCIS_Configuration
÷	PegasusCIS_DataDictionary
÷	PegasusCIS_DemoCompany
	Contraction and the second s
	PWXStorage

Database	Purpose
PegasusCIS_Configuration	This important database holds key information and settings including configuration settings for companies, users, groups, permissions, custom reports etc.
PegasusCIS_DataDictionary	Contains the live data dictionary definitions currently in use by CIS 5. Hint: Contains the full details of the database structure, ideal for generating a Database Schema.
PegasusCIS_DemoCompany	The demonstration data available to use when experimenting with the features in CIS 5. This data will get overwritten each time CIS 5 is upgraded to a new version or when the 'Repair' routine is run on the server setup.

Misc

'Config' files created as part of the installation routine should be automatically removed when the corresponding application is uninstalled, however 'Log' files will always be left behind.

Appendix B – CIS 5 Client Files, Folders & Registry

All client files are installed to 'C:\Program Files (x86)\Pegasus\Pegasus.CIS'.

rionic	Share	View			
→ ~ ↑	C:\P	rogram Files (x86)\Pegasus\Pegasus.CIS		× ق ۶	Search Pegasus.Cl
		Name	Date modified	Туре	Size
Quick access		Dev Evenence Charter v21.1 Core dll	00/00/2021 19-56	Application outer	076 KB
on Desktop	*	Devexpress.cnarts.vz1.1.core.dii	09/00/2021 10:00	Application exten	970 ND
		DevExpress.Dashboard.v21.1.Core.dll	09/08/2021 18:55	Application exten	7,702 KB
Downloads	R	DevExpress.Dashboard.v21.1.Wpf.dll	09/08/2021 18:55	Application exten	508 KB
🎯 Documents	*	DevExpress.Data.Desktop.v21.1.dll	09/08/2021 18:55	Application exten	447 KB
- D: 1		Des Frances Deter 21.1 dill	00/00/2021 10-55	A set list in set of	5 3 47 KD

ProgramData Folder & Files on the client

The client looks to the "C:\ProgramData\Pegasus\Pegasus.CIS\Pegasus.CIS.ini" file to pick up the path to the CIS\Pegasus.CIS.config file on the server.



Program Folder (x86) Folder & Files on the client

The client program and dll files are located in the CIS Client Program Folder (x86) Folder. This folder also includes the help file (Pegasus.CIS.chm) and the Pegasus.CIS.exe.config file.

C:\Program Files (x86)\Pegasus\Pegasus.CIS					
⊕ New × 🔏 🔲 🛅 🖻 🖻	$↑$ Sort \cdot $≡$ View \cdot				
← → · ↑					_
늘 Pegasus.CIS	Name	Date modified	Туре	Size	
> 🛅 Pegasus.CIS.EmailMonitoringService	@ Pegasus.CIS.exe	14/04/2022 13:36	Application	454 KB	
> 🛅 Pegasus.CIS.ImporterService	DevExpress.Charts.Designer.v21.2.dll	27/02/2022 03:00	Application exten	1,686 KB	
> 🛅 Pegasus.CIS.LicencingService	DevExpress.Charts.v21.2.Core.dll	27/02/2022 03:00	Application exten	1,022 KB	
> 늘 Pegasus.CIS.MessagingService	DevExpress.CodeParser.v21.2.dll	27/02/2022 03:00	Application exten	1,696 KB	
	Destaura Destaura at a consult	17/01/1011 01:00	A	7 020 80	

Registry

The main entry in the registry associated with the client is the last logged on username. This is found @ Computer\HKEY_CURRENT_USER\Software\Pegasus\Pegasus.CIS. This is created by the desktop client the first time a user logs in.

Appendix C – Moving Servers

When you need to move the CIS 5 System to a new Server, please use the following information as a guide to carry out this process.

Moving CIS installation & SQL databases to new server

In this scenario you are moving the complete CIS solution (Install and SQL elements) to a new server, please use the following steps as a guide;

- 1. Back-up the configuration & company dbs in SQL (please refer to the 3TRNCISv5BackupTrainingGuide for further details)
- 2. Restore them in the new SQL Server
- 3. Copy all the server files & folders from the "CIS" share on the old server to the new server in the location the CIS server will be installed ("C:\CIS" is the default location)
- 4. Install CIS 5 on the new server (please refer to the *installation* section for further details)

Appendix D - How to Register a Microsoft Graph API Application for CIS Email Integration

How to Register a Microsoft Graph API Application for CIS Email Integration

- 1. Login to <u>Azure Portal</u>
- 2. Select <u>Azure Active Directory</u>
- 3. Select App registrations from the Manage menu on the left
- 4. Select New registration from the toolbar at the top
 - a. Enter in application name, e.g. "Pegasus CIS Email Monitoring"
 - b. Make sure the "Accounts in this organizational directory only ([Company Name] Single tenant)" option is selected
 - c. Leave the "Redirect URI" blank
 - d. Click "Register"

Name he user-facing display name for this application (this can be changed later). Elike Contract Costing Email Monitoring upported account types the can use this application or access this API? Accounts in this organizational directory only (Thom Micro Systems only - Single tenant) Accounts in any organizational directory (Any Azure AD directory - Multitenant)	
Name The user-facing display name for this application (this can be changed later). Elite Contract Costing Email Monitoring upported account types Who can use this application or access this API? Accounts in this organizational directory only (Thom Micro Systems only - Single tenant) Accounts in any organizational directory (Any Azure AD directory - Multitenant)	
the user-facing display name for this application (this can be changed later). Elite Contract Costing Email Monitoring Supported account types Who can use this application or access this API? Accounts in this organizational directory only (Thom Micro Systems only - Single tenant) Accounts in any organizational directory (Any Azure AD directory - Multitenant)	
Elite Contract Costing Email Monitoring Supported account types Nho can use this application or access this API? Accounts in this organizational directory only (Thom Micro Systems only - Single tenant) Accounts in any organizational directory (Any Azure AD directory - Multitenant)	
Supported account types Nho can use this application or access this API? Accounts in this organizational directory only (Thom Micro Systems only - Single tenant) Accounts in any organizational directory (Any Azure AD directory - Multitenant)	
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Who can use this application or access this API? Accounts in this organizational directory only (Thom Micro Systems only - Single tenant) Accounts in any organizational directory (Any Azure AD directory - Multitenant)	
Accounts in this organizational directory only (Thom Micro Systems only - Single tenant) Accounts in any organizational directory (Any Azure AD directory - Multitenant)	
Accounts in any organizational directory (Any Azure AD directory - Multitenant)	
Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. skype, XDOX)	
Personal Microsoft accounts only	
Help me choose	
Redirect URI (optional)	
Ne'll return the authentication response to this URI after successfully authentication the user. Providion this now is ontional and it can be	
hanged later, but a value is required for most authentication scenarios.	
Web V e.g. https://myapp.com/auth	

5. Take a note of the "Application (client) ID" – you will need to enter this into the "Mailbox Monitoring Settings" screen in CIS.

>> pearch (Ctri+/)	📵 Delete 🌐 End	dpoints		
Overview	Got a second? V	Ve would love your feedback on Microsoft identity platform ((previously Azure AD for developer). →	
di Quickstart	∧ Essentials			
💉 Integration assistant Preview	Display name	: Elite Contract Costing Email Monitoring	Supported account types	: My organization only
Manage	Application (client) ID		Redirect URIs	: Add a Redirect URI
Branding	Directory (tenant) ID	and the second second second second second	Application ID URI	: Add an Application ID URI
Authentication	Object ID	Concerning the Content of the Section	Managed application in L.	: Elite Contract Costing Email Monitoring
Certificates & secrets	Station lune 20	the 2020 we will no longer add any new featurer to Ature Art	tive Directory Authentication Library (ADAL)	and Anura AD Graph We will continue to provide
Token configuration	technical suppor	t and security updates but we will no longer provide feature	updates. Applications will need to be upgr	aded to Microsoft Authentication Library (MSAL) and
API permissions				
Expose an API			Documentation	
Expose an API	Call APIs			
Expose an API Owners Roles and administrators Preview	Call APIs		Microsoft identity platform Authentication scenarios	
Expose an API Owners Roles and administrators Preview Manifest	Call APIs	10) 🖡 🔍	Microsoft identity platform Authentication scenarios Authentication libraries Code samples	
Expose an API Owners Roles and administrators Preview Manifest meand 1 Tomblackapter	Call APIs		Microsoft identity platform Authentication scenarios Authentication libraries Code samples Microsoft Graph	
Expose an API Owners Roles and administrators Preview Manifest Support + Troubleshooting	Call APIs	0 • • • •	Microsoft identity platform Authentication scenarios Authentication libraries Code samples Microsoft Graph Glossary Help and Support	
Expose an API Covners Roles and administrators Preview Manifest Support + Troubleshooting	Call APIs	0 • • •	Microsoft identity platform Authentication scenarios Authentication libraries Code samples Microsoft Graph Glossary Help and Support	

6. Configuration Application Authentication

a. Select "Quickstart" from the Manage menu on the left



b. Select "Web application"



c. Select "ASP.NET Core"



d. Click "Make this change for me"

Configuring your ap	plication registration \times
Certain attributes are required in order list of what is going to be modified in later.	er to run the code sample for this Quickstart - below is a your application - you can always revert these changes
Values to be added	
Redirect URIs	https://localhost:44321/
Redirect URIs	https://localhost:44321/signin-oidc
Logout URL	https://localhost:44321/signout-callback-oi
Values to be modified	
Implicit grant: ID tokens	True

e. Click "Make updates" – to view or adjust the automatic configuration select "Authentication" from the Manage menu on the left

epending on the platform or device this application is targeting, additional configuration may be required s direct URIs, specific authentication settings, or fields specific to the platform.	uch as
+ Add a platform	
∧ Web Quickstart D	00cs 🗗 🗎
Redirect URIs	
The URIs we will accept as destinations when returning authentication responses (tokens) after successfully authenticating users. Also referred to as reply URLs. Learn more about Redirect URIs and their restrictions ??	
https://localhost:44321/	Ū
https://localhost:44321/signin-oidc	Ē
Add URI	
Add URI ogout URL	
Add URI ogout URL his is where we send a request to have the application clear the user's session data. This is required for single sign ork correctly.	-out to
Add URI ogout URL his is where we send a request to have the application clear the user's session data. This is required for single sign ork correctly. https://localhost:44321/signout-callback-oidc	-out to
Add URI ogout URL his is where we send a request to have the application clear the user's session data. This is required for single sign ork correctly. https://localhost:44321/signout-callback-oidc mplicit grant	-out to
Add URI ogout URL his is where we send a request to have the application clear the user's session data. This is required for single sign ork correctly. https://localhost:44321/signout-callback-oidc mplicit grant llows an application to request a token directly from the authorization endpoint. Checking Access tokens and ID recommended only if the application has a single-page architecture (SPA), has no back-end components, does n the latest version of MSALjs with auth code flow, or it invokes a web API via JavaScript. ID Token is needed for A ore Web Apps. Learn more about the implicit grant flow	-out to
Add URI bogout URL is is where we send a request to have the application clear the user's session data. This is required for single sign ork correctly. https://localhost:44321/signout-callback-oidc nplicit grant lows an application to request a token directly from the authorization endpoint. Checking Access tokens and ID recommended only if the application has a single-page architecture (SPA), has no back-end components, does r e latest version of MSALjs with auth code flow, or it invokes a web API via JavaScript. ID Token is needed for A ore Web Apps. Learn more about the implicit grant flow e enable the implicit grant flow, select the tokens you would like to be issued by the authorization endpoint:	-out to
Add URI ogout URL his is where we send a request to have the application clear the user's session data. This is required for single sign ork correctly. https://localhost:44321/signout-callback-oidc mplicit grant llows an application to request a token directly from the authorization endpoint. Checking Access tokens and ID recommended only if the application has a single-page architecture (SPA), has no back-end components, does n e latest version of MSALjs with auth code flow, or it invokes a web API via JavaScript. ID Token is needed for A ore Web Apps. Learn more about the implicit grant flow o enable the implicit grant flow, select the tokens you would like to be issued by the authorization endpoint: Access tokens	-out to tokens tot use SP.NET

7. Setup Application Secret

a. Select "Certificates & secrets" from the Manage menu on the left

, βearch (Ctrl+/) «	Got feedback?			
Overview Quickstart Internation assistant Preview	Credentials enable confidential applications scheme). For a higher level of assurance, we	to identify themselves to the authentication service when recommend using a certificate (instead of a client secret) a	receiving tokens at a web addressable location (using is a credential.	an HTTPS
integration assistante pricenear	Certificates			
Manage Branding Authentication	Certificates can be used as secrets to prove t	the application's identity when requesting a token. Also ca	n be referred to as public keys.	
Certificates & secrets	Thumbprint	Start date	Expires	
Token configuration API permissions	No certificates have been added for this app	olication.		
Expose an API Owners Roles and administrators Preview Manifest	Client secrets A secret string that the application uses to p + New client secret	rrove its identity when requesting a token. Also can be refe	rred to as application password.	
upport + Troubleshooting	Description	Expires Val	ue	
Troubleshooting	No client secrets have been created for this a	application.		

b. Click "New client secret" from the "Client Secrets"

- c. Enter a suitable description for the client secret, e.g. "Contract Costing"
- d. Set the Expires to "Never"
- e. Click "Add" this will return you to the Certificates & secrets screen and show the newly generated Client Secret

ecret string that the application uses to prove its i	dentity when requesting a token. Also ci	in be referred to as application password.	
- New client secret			
Description	Expires	Value	
Contract Costing	12/31/2299	GYO	0

f. Take a note of the "Client Secret" – you will need to enter this into the "Mailbox Monitoring Settings" screen in CIS.

IMPORTANT: the Client Secret will become hidden by Microsoft so you only have a limited time to see this value – make sure you copy it before moving off this page: Client secrets

A secret string that the application uses to prove its identity when requesting a token. Also can be referred to as application password.

+ New client secret			
Description	Expires	Value	
Contract Costing	12/31/2299	GYO*****	Û

8. Setup API Permissions

a. Select API Permissions from the Manage menu on the left

cations are authorized to call A e permissions the application n	Pls when they are eeds. Learn more	granted permissions by users/admins as part about permissions and consent	of the consent process. The list of configure	d permissions should include
Add a permission 🗸 Grant	admin consent for	Theorem Street Speeces		
API / Permissions name	Туре	Description	Admin consent req State	us
✓ Microsoft Graph (1)				() •••
User Read	Delegated	Sign in and read user profile	-	

b. Click "Add a permission"

Request	API permissions
elect an API	
Microsoft API	APIs my organization uses My APIs
Commonly u	sed Microsoft APIs
	Microsoft Graph
	Take advantage of the tremendous amount of data in Office 365, Enterprise Mobility + Security, and Windows 10. Access Azure AD, Excel, Intune, Outlook/Exchange, OneDrive, OneNote, SharePoint, Planner, and more through a single endpoint.

c. Select "Microsoft Graph"

Request API permissions	
All APIs	
Microsoft Graph	
https://graph.microsoft.com/ Docs 🗗	
/hat type of permissions does your application require?	
Delegated permissions	Application permissions
Your application needs to access the API as the signed-in user.	Your application runs as a background service or daemon without a signed-in user.

d. Select "Application permissions" and enter in "Mail" into the "Select permissions" search box.

Requ	uest API permissions	×
	s	
N N	/icrosoft Graph	
👽 h'	ttps://graph.microsoft.com/ Docs 🗗	
Nhat ty	pe of permissions does your application require?	
Deleg Your a	ated permissions pplication needs to access the API as the signed-in user.	Application permissions Your application runs as a background service or daemon without a signed-in user.
Select p	permissions	expand all
🔎 mail		×
Per	rmission	Admin consent required
> ма	ilboxSettings	
∨ Ma	il (2)	
	Mail.Read ① Read mail in all mailboxes	Yes
	Mail.ReadBasic ① Read basic mail in all mailboxes	Yes
	Mail.ReadBasic.All ① Read basic mail in all mailboxes	Yes
<u>~</u>	Mail.ReadWrite ① Read and write mail in all mailboxes	Yes
	Mail.Send ①	Yes

- e. Expand the "Mail" section and tick "Mail.ReadWrite" and "Mail.Send"
- f. Click "Add permissions"

ations are authorized to call Al permissions the application ne	Pls when they are g eeds. Learn more a	granted permissions by users/admins as part of t bout permissions and consent	he consent process. The list of con	figured permissions should inc	lude
Add a permission 🗸 Grant	admin consent for	Thom Micro Systems			
API / Permissions name	Туре	Description	Admin consent req	Status	
✓ Microsoft Graph (2)					
Mail.ReadWrite	Application	Read and write mail in all mailboxes	Yes	A Not granted for	
User.Read	Delegated	Sign in and read user profile	-		

g. Admin consent is required for this (Status is set to "Not granted) – click "Grantadmin consent for [Company Name]" to grant the required permissions

you want	to grant consen	t for the requested permissions for all accounts in	? This
ll update a	ny existing admi	n consent records this application already has to match what	is listed below.
Yes	No		

h. Click "Yes" – the Status should now be changed to "Granted"

ponfigured permissions plications are authorized to call APIs when they are granted permissions by users/admins as part of the consent process. The list configured permissions should include all the permissions the application needs. Learn more about permissions and consent + Add a permission ✓ Grant admin consent for API / Permissions n Type Description Admin consent req Status ✓ Microsoft Graph (2) ****	Image: Second	API / Permissions n	Type	Description	Admin consent req	Status	
Infigured permissions plications are authorized to call APIs when they are granted permissions by users/admins as part of the consent process. The list configured permission should include all the permissions the application needs. Learn more about permissions and consent - Add a permission Grant admin consent for API / Permissions n Type Description Admin consent req Status Microsoft Graph (2)	Infigured permissions Infigured permissions Infigured permissions Infigured permissions should include all the permissions the application needs. Learn more about permissions and consent Add a permission Add a permission n Type Description Admin consent req Status Microsoft Graph (2)	API / Permissions n	Туре	Description	Admin consent req	Status	
ponfigured permissions uplications are authorized to call APIs when they are granted permissions by users/admins as part of the consent process. The list configured permissions should include all the permissions the application needs. Learn more about permissions and consent + Add a permission ✓ Grant admin consent for API / Permissions n Type Description Admin consent req	ponfigured permissions plications are authorized to call APIs when they are granted permissions by users/admins as part of the consent process. The list configured permissions should include all the permissions the application needs. Learn more about permissions and consent → Add a permission ✓ Grant admin consent for API / Permissions n Type Description Admin consent req	API / Permissions n	Туре	Description	Admin consent req	Status	
onfigured permissions uplications are authorized to call APIs when they are granted permissions by users/admins as part of the consent process. The list configured permissions should include all the permissions the application needs. Learn more about permissions and consent Add a permission Grant admin consent for	enfigured permissions plications are authorized to call APIs when they are granted permissions by users/admins as part of the consent process. The list configured permissions should include all the permissions the application needs. Learn more about permissions and consent - Add a permission </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>						
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onfigured permissions	Infigured permissions	onfigured permissions sh	ould include all	I the permissions the applica	tion needs. Learn more a	about permissions and consent	130
onfigured permissions	infigured permissions	lications are authorized t	to call APIs whe	n they are granted permissio	ns by users/admins as n	art of the consent process. The	list
		nfigured permissions	5				

You can now enter your "Microsoft 365 Domain Name ", "Application (client) ID" and "ClientSecret" into the "Settings -> Document Management Setup -> Mailbox Monitoring Settings" screen within CIS.

Appendix E – Troubleshooting

The following are some of the potential issues that could be encountered during installation and how to resolve them.

Issue: The Pegasus CIS Server Setup Wizard ended prematurely error when installing CIS 5 Server



Potential Resolution: A recent windows update may have been running in the background. Try a reboot of the machine, then the installation should complete successfully.

Issue: The installer has encountered an unexpected error installing this package. This may indicate a problem with the package. The error code is 2203.

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Installing Pegasus CIS Server		Ð
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Potential Resolution: Ensure all pre-requisites have been installed correctly. If this has been confirmed then a recent windows update may have been running in the background. Try a reboot of the machine, then the installation should complete successfully.