cloudnine™
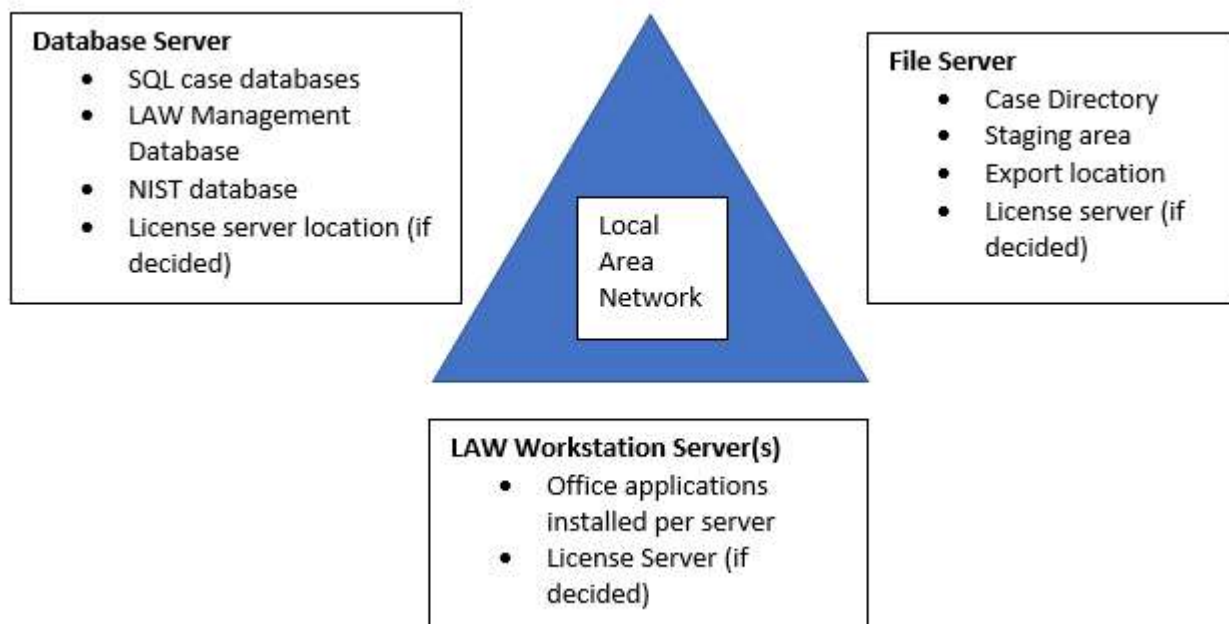
LAW Install Checklist 2024

General Summary

LAW is an eDiscovery platform that has two ingesting engines. One is multithreaded, the other is single threaded. You are also able to open multiple instances of the application but will be limited to how many operational licenses that you have purchased. Users may install as many LAW Desktop instances as they like, which allow a user to directly control what level of OCR, Scanning, Searching, Tagging, Fields, Filtering, Reporting, etc.

Database Server
- SQL case databases
- LAW Management Database
- NIST database
- License server location (if decided)

File Server
- Case Directory
- Staging area
- Export location
- License server (if decided)

Local Area Network

LAW Workstation Server(s)
- Office applications installed per server
- License Server (if decided)

A Standard LAW environment would be taking the sides of a triangle, and the triangle being the LAN

1: Database Server – This is where the primary SQL server will be located. This server will host all LAW databases which are cases created from LAW.

2: WorkStation server(s) – These servers are what the LAW application software are installed on. Each of these servers may also have installed Office applications for additional productions capabilities for LAW.

3: File server – This server is the location of data to which the LAW application will reference for processing. This server usually serves the following:

4: License Server – This server will be the location in which the LAW Application servers will communicate with for usage of its LAW modules. It is common for clients to put this on the SQL machine.

References:
http://answercenter.ediscovery.co/litigation/ac/lawdc/welcome-to-law.html
and
http://answercenter.ediscovery.co/litigation/ac/law/welcome.htm

Fields's descriptions: http://answercenter.ediscovery.co/litigation/ac/lawdc/system-export-fields.html

User Guide: http://answercenter.ediscovery.co/litigation/ac/law_documentation/LAWUserGuide.pdf

Administration Guide:
http://answercenter.ediscovery.co/litigation/ac/law_documentation/LAWAdminGuide.pdf

High-Level Checklist -

Storage Network should be set up first	Has this been completed
10/100/1000 Mbps. Gigabit recommended.	
Network File Storage should be 3-4 times the size of the intended source data	
Create a System Account that will need full read, write, and modify access to Network Storage, SQL, Source Data, and Workstations	
MS Domain network required	

SQL Server should be next	Has this been completed
Install the OS of your choice Microsoft Windows 10 or 11 Microsoft Windows Server 2016 (version 1809) Microsoft Windows Server 2019 (version 1903) Microsoft Windows Server 2022	
Install SQL of your choice Microsoft SQL Server 2016 Microsoft SQL Server 2017 Microsoft SQL Server 2019 Microsoft SQL Server 2023	
Ports Needed for LAW activity Outgoing: ms-sql-s -> 1433 (TCP/UDP) www, http -> 80 (TCP) https -> 443 (TCP/UDP) microsoft-ds -> 445 (TCP/UDP) smtp -> 25 (TCP) * Configurable via Tools->Options->Notifications Sentinel Protection Server (3rd party) -> 7002 (TCP) Sentinel RMS Server (3rd party) -> 5093 (UDP)	
Ports needed for LAWtsi Outgoing: ms-sql-s -> 1433 (TCP/UDP) www, http -> 80 (TCP) microsoft-ds -> 445 (TCP/UDP) Sentinel Protection Server (3rd party) -> 7002 (TCP) Sentinel RMS Server (3rd party) -> 5093 (UDP) Note: This interfaces with 3rd party TWAIN drivers which may use various network communication methods to access devices. Ports would have to be determined by the vendor.	

LAW Management Console Outgoing: ms-sql-s -> 1433 (TCP/UDP) microsoft-ds -> 445 (TCP/UDP) UDP -> 8401 (UDP) * Configurable via Tools->Options Incoming: UDP -> 8401 (UDP) * Configurable via Tools->Options	
Microsoft SQL Server Management Studio	
Configuring your SQL Server max memory allocation. 1. Open the SQL Instance through the SQL Server Management Studio. 2. Then right click on the Instance name and select Properties. 3. Then select the Memory tab. 4. The Maximum server memory (in MB): should be approximately 80% of your servers' available memory unless you have multiple instances on the same server	
Add System Account into SQL with Full Access	
Sentinel RMS Licenses Manager	
Licenses Manager Desktop App. For this install LAW - Run the install but stop at the LAW Configuration Utility	
Figuring out how many SQL cores you need	

LAW ED Loader/Turbo*	Has this been completed
Computer/Processing - 8core	
Memory (RAM) = 16gb (Turbo workstations will need 32gb of RAM)	
Hard Drive - 100gb of SSD	
Display - 1080p	
Install the OS of your choice Microsoft Windows 10 or 11 Microsoft Windows Server 2016 (version 1809) Microsoft Windows Server 2019 (version 1903) Microsoft Windows Server 2022	
Microsoft Office Microsoft Office 2010 Microsoft Office 2013 Microsoft Office 2016 Microsoft Office 365 (Local Install) Microsoft Office 2019 *NOTE if you are going to be using ED Loader then your Office install must be 32bit. If you are just using Turbo than you are free to use 64-bit office.	
Create a Outlook dummy Account: Use Outlook without an email account - Outlook (microsoft.com)	
Install All Microsoft Language Packs or the ones that you want to work with	
Antivirus Best Practices and Recommendations	

Chrome or other browser programs. Set up printer settings	
Solidworks eDrawings 2013	
IrfanView and all plugins	
Adobe Reader (32bit) and other PDF software. Set up Printer settings on both	
Turn off Microsoft 'File Block Settings' in office products	
Turn off the caching of thumbnails in hidden thumbs.db files	
If using Remote Desktop: Turn off the Local Printers	
ABBYY Fine Reader Engine	
Lotus Notes 8.5 or 9 (once installed open it and selected to turn off popups)	
Show hidden files and file extensions	
Lower User Account Control Settings to 'Never Notify'	
LAW Installer or Silent Install	
LAW Configuration with NIST and File Type Management	
Select Which machines are going to allow for Turbo work	
Encryption and TLS Protocols	
LAW FIPS Compliance and Configuration	
Set up your Queries and Grid Views	
Set up your LAW case preferences	
Set up your LAW ED Loader ingestion preferences	
Open LAW Management Console	
Add any scripts	
ICD Shortcut	
Set Default Printer	
License Matrix	

*Note if there is anything different for the type of engine, that will be mentioned
in the detailed steps

Detailed Checklist -

STORAGE NETWORK

Network Speed - 10/100/1000 Mbps. Gigabit recommended.

Network File Storage - When importing electronic discovery documents, the size of data can vary greatly based on source data. Data can inflate to 3-4 times of its original size.

Create a System/Network Account – It is highly suggested that a System/Network Account be created to build a CloudNine™ LAW environment on. This account and its users should be created to have full read/write/modify access to network shares, source data, the processing workstations and SQL. During set up, anytime LAW is asking for Username and password, this account should be used. This is to allow the program to function without hindrance.

MS Domain network required

SQL SERVER

Installation the Operating System – CloudNine™ LAW is made to work with certain operating systems. The current version is made to work with only 64-bit version of Microsoft Windows.

The following operating systems are supported:
- Microsoft Windows 10 or 11

- Microsoft Windows Server 2016 (version 1809)

- Microsoft Windows Server 2019 (version 1903)

- Microsoft Windows Server 2022

Both of CloudNine™ LAW engines Turbo and ED Loader uses the list of time zones from the user's operating system.

Install Microsoft SQL of your choice - CloudNine™ LAW is made to work with certain versions of Microsoft SQL. LAW stores the metadata and the extracted text tables and fields in SQL. To install LAW you will need the IP address, DNS, or Instance Name for the SQL server that will be used to manage the LAW environment.

The following versions of SQL are supported:
- Microsoft SQL 2016

- Microsoft SQL 2017
- Microsoft SQL 2019
- Microsoft SQL 2023

Ports Needed for LAW activity -
- Outgoing:
  - ms-sql-s -> 1433 (TCP/UDP)
  - www, http -> 80 (TCP)
  - https -> 443 (TCP/UDP)
  - microsoft-ds -> 445 (TCP/UDP)
  - smtp -> 25 (TCP) * Configurable via Tools->Options->Notifications
  - Sentinel Protection Server (3rd party) -> 7002 (TCP)
  - Sentinel RMS Server (3rd party) -> 5093 (UDP)Incoming (web only, end user configurable):

Ports Needed for LAWtsi activity -

- Outgoing:
  - ms-sql-s -> 1433 (TCP/UDP)
  - www, http -> 80 (TCP)
  - microsoft-ds -> 445 (TCP/UDP)
  - Sentinel Protection Server (3rd party) -> 7002 (TCP)
  - Note: This interfaces with 3rd party TWAIN drivers which may use various network
  - communication methods to access devices. Ports would have to be determined by the vendor.

Prots Needed for LAW Management Console
- Outgoing:
  - ms-sql-s -> 1433 (TCP/UDP)
  - microsoft-ds -> 445 (TCP/UDP)
  - UDP -> 8401 (UDP) * Configurable via Tools->Options
  - Incoming:
  - UDP -> 8401 (UDP) * Configurable via Tools->Options

Microsoft SQL Server Management Studio - Is a software application that is used for configuring, managing, and administering all components within Microsoft SQL Server. The tool includes both script editors and graphical tools which work with objects and features of the server. (https://en.wikipedia.org/wiki/SQL_Server_Management_Studio)

Configuring your SQL Server max memory allocation. –
1. Open the SQL Instance through the SQL Server Management Studio.
2. Then right click on the Instance name and select Properties.
3. Then select the Memory tab.
4. The Maximum server memory (in MB): should be approximately 80% of your servers available memory unless you have multiple instances on the same server

Add System Account into SQL with Full Access – Add the System/Network Account into SQL and with Full Read, Write and Modify access.
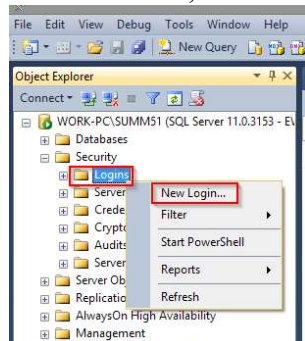
Once in you've entered into SQL Management Studio, open up Security > Right Click on Logins > "New Login"
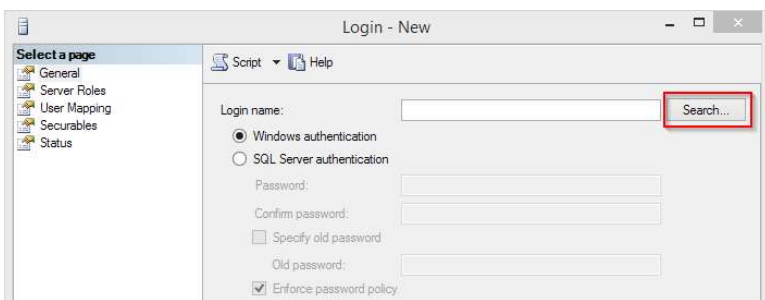
On the new login screen choose 'Search'
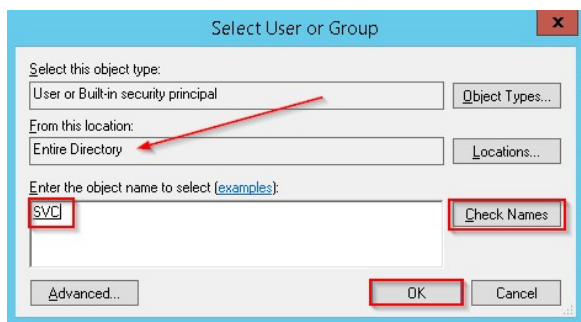
On the search screen ensure you are searching the Entire Directory, type in the username, check Names, then choose ok.
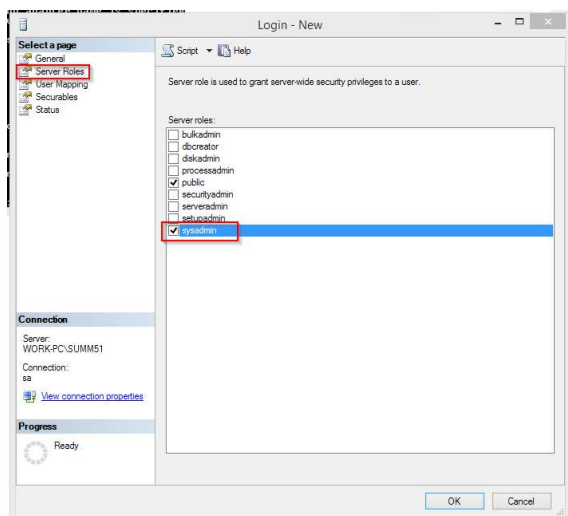
After you click OK, Click Server Roles and check 'sysadmin' then ok

Use this method when using SQL Server for other applications in addition to CloudNine™ LAW. This option helps to prevent users of SQL Server from accessing and modifying any other existing databases yet provides additional security for your databases. To create a custom SQL user account: · Setup a SQL Server user with create/modify permissions. · The username and password will be referenced whenever accessing SQL (Database management, NIST storage, File Type Database Management, and for case list storage). User: (Custom SQL login following SQL Guidelines) Pwd: (Custom password following SQL Guidelines) When using this option, the security mode for SQL Server must be set to SQL Server and Windows for mixed-mode authentication.

Sentinel RMS Licenses Manager - Sentinel Protection Server and Sentinel RMS License Manager are installed using a separate installer. When configuring LAW, you will need to make sure you have access to your License Manager and that you have a valid LAW License. To obtain a copy of the Sentinel Licensing Installers, jut visit our download page at: Software Download - CloudNine

- If you are installing LAW or Explore 7.10 or above, make sure you grab the Thales Sentinel RMS License Manager Installer

- If you are installing LAW or Explore 7.9 or below, make sure you grab the SafeNet Sentinel RMS License Manager Installer

For help on installing either application, see this site: https://answercenter.ediscovery.co/litigation/ac/lawdc/sentinel-installer.html

Licenses Manager Desktop App. Now that you have installed the Sentinel RMS Licenses Manager Program, you will also need the CloudNine™ Desktop app which right now is only located in the LAW install. For this LAW install - Run the installer but STOP when you get to the Configuration Utility

- Once you've downloaded the **LAW Installer**, you are ready to begin installing **LAW**. The instructions below will guide you through the installation process:

- **NOTICE**: These instructions cover the installation of **LAW** on the local machine. You can install them both at once, or separately as desired.

  1.Start by running the **LAW Installer** <u>as an administrator</u> (right-click > Run as administrator). Click **Yes** when prompted to allow the app to make changes to your device.
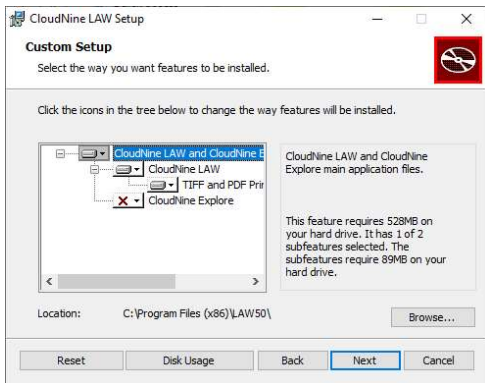

2.You will first be greeted by the **End User License Agreement**. If you agree to these terms, then check the box stating **I agree to the license terms and conditions** and click **Install** to proceed.

3.The **LAW Installer** now displays the **Setup Progress** screen, which will remain in place for the duration of the installation. It will start automatically installing the necessary prerequisites.

4.Once the necessary prerequisites have been installed, the **Setup Wizard** will open in a separate window, and you will be brought to the **Welcome** screen. Click **Next** to proceed.

5.At the **Custom Setup** screen, decide which features/programs you want to install by clicking the icons on their left and selecting **Will be installed on local hard drive** from the drop-down menu. Any feature/program with an X will <u>not</u> be installed.

6.You can change the install location for all programs/features selected within the **Custom Setup** screen by clicking the **Browse...** button to the far right of the **Location** shown near the bottom. This will open the **Change destination folder** window, allowing you to determine a new root folder (on this computer) to use as the install location. If you choose a new folder, be sure to click **OK** to apply those changes.

7.You can also determine how much hard drive space is **Required**/**Available** for these programs/features from the **Custom Setup** screen by clicking the **Disk Usage** button at the bottom-left. This will open the **Disk Space Requirements** window, indicating these details for all available **Volumes**. When you're done reviewing the information, click **OK** to close this window.

8.When you're satisfied with the features/programs and install location shown in the **Custom Setup** screen, click **Next** to proceed.

9.Skip this step if you're <u>not</u> installing **Explore** at this time. At the **Configure CloudNine Explore Service** screen, enter a Microsoft Windows account (**User name** and **Password**) with permissions to the SQL Server instance that **Explore** will use. This is required both for distributed network <u>and</u> local-only environments. When you're finished, click **Next** to proceed.

i. If you use the **Local System Account** option from the **Run As** drop-down, then the <u>current</u> Windows user must have access permissions to the SQL Server, or you will be unable to connect.

10.At the **Ready to install CloudNine LAW** screen, you have one last chance to go **Back** to any of the previous screens and change the installation settings. Otherwise, click **Install** to begin the installation process.

11.You will be brought to the **Installing CloudNine LAW** screen, where the installation progress is displayed. This process may take several minutes.

12. Once the installation finishes, you will arrive at the **Completed** screen. If a **License Server** has been assigned, and your **License** has already been activated, then you are ready to continue to the **LAW Configuration Utility**.

UNCHECK 'Additional configuration information is required to complete the CloudNine LAW installation.'

When installing this on the SQL server we are doing this for the CloudNine License Manger
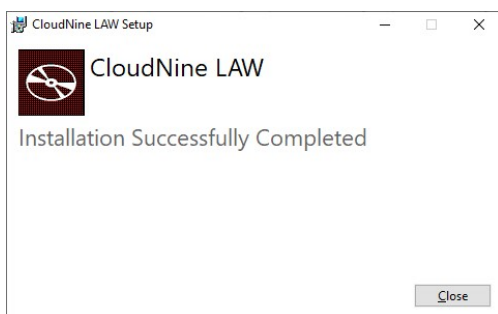
14. You have now finished installing **LAW**! There are some additional steps we recommend you take at this time to ensure a fully functioning **LAW** experience:
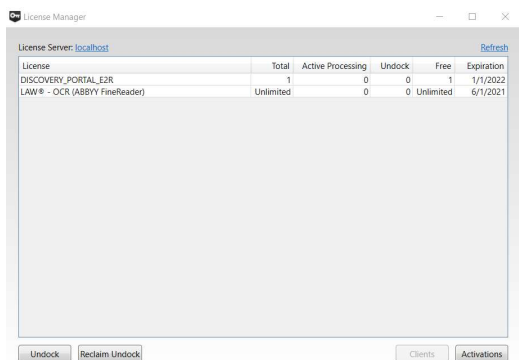
1) Activate your **LAW Licenses** through the **License Manager** utility if you haven't already done so. Instructions for doing so can be found in the **License Server** topic.

2) Configure your **Environment** and/or **Local Machine** through the **LAW Configuration Utility**. Instructions can be found in the **LAW Configuration Utility** topic.

3) Have your system administrator grant all users who will be running **LAW** full read/write/modify permissions to the root directory (install location) for **LAW**. This ensures that their program settings/options are saved properly.

4) Have your system administrator adjust the **Properties** of **Law50.exe** within the root directory (install location) of **LAW** to enable the **Run this program as an administrator** option under the **Compatibility** tab. This will prevent several known Windows related usability issues from occurring.

Undocking Licenses –

The purpose of an undock license key is to temporarily hold licenses checked out from the license server, so that licenses can be used on a second computer. A typical use of undock keys is to furnish a laptop with the licenses necessary to conduct on-site discovery operations.

Undocked software licenses can be created in two ways.

- Undocked keys can be purchased from CloudNine.

- Undock software licenses are generated from the License Manager, where you specify which licenses to checkout and the length of time to check them out. When the licenses are ready to be returned to the original license server, the licenses are reclaimed from the License Manager using the Reclaim Undock menu selection.

Soft key

To undock a soft key to a computer/server/workstation that will house the undock license that computer/server/workstation must first be on the same network that that currently exist on. This new or 2nd server must be able to see the 1st server that is holding the license manager that you want to borrow from.
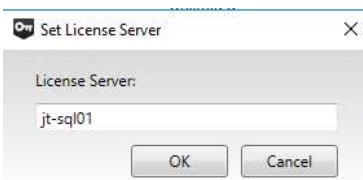
Open the License Manager on the 2nd server and enter in the name of the 1st server.


The License Manager on your 2nd server will then open and display the licenses that are currently on that 1st licenses server that you want to borrow from.
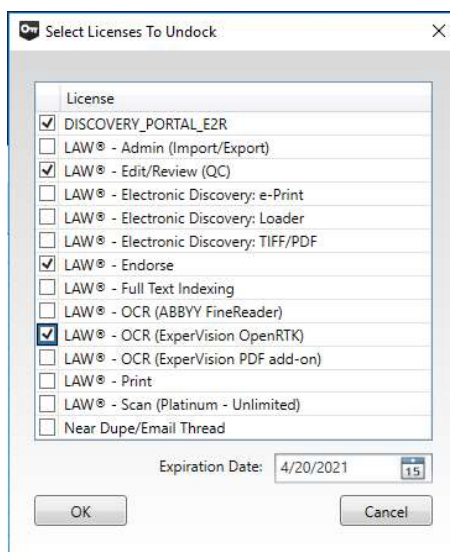
Click Undock to then see which license you have that can be undocked. (Near Dupe/Analytics using software licensing. CloudNine™ Explore, CloudNine™ Explore Web, Turbo Import, temporary licenses, and ELA licensing is currently not available for undock software licenses.)

You must enter in an expiration date past the next day. Anything will your current date or the next day date, will not be accepted.

Select the licenses you want to undock and click ok.
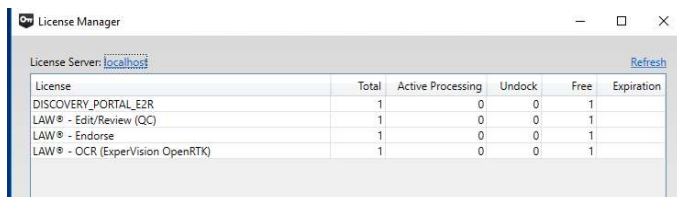
You set the license Manager to 'localhost' and you will see the licenses that are now assigned to this machine. You are free to go offsite or process without a network.

If an undocked license expires, it will still need to be reclaimed before continued use on the workstation resumes.

Undocking Licenses –

Set the New License Manger back at the older or the one that you borrow license from. Click 'Reclaim Undock' and it will pull your licenses back to the original License Manager.

For more information about the License Manager, see License Manager.

Figuring out how many SQL cores you need - Microsoft is not going to suggest that you have more than 1 core 1gb of RAM on the SQL machine. This is due to the fact that they just do not know what you are going to be using it for. LAW has a lot of communication with the SQL tables and needs a large bandwidth to prevent bottlenecking. What I've found to work best is at a minimum, total instances that can be communicating or interacting with SQL be divided by 3. That should be your core count. That same number times 4, that should be your RAM count. Going higher will only benefit you.

LAW WORKSTATIONS

Install the OS of your choice - Each program build of CloudNine™ LAW is made to work with certain types of operating systems. This version is made to work with only 64-bit version of Microsoft Windows.

- Microsoft Windows 10

- Microsoft Windows Server 2016 (version 1809)

- Microsoft Windows Server 2019 (version 1903)

- Microsoft Windows Server 2022

CloudNine™ LAW uses the list of time zones from the user's operating system.

.NET 4.8 – Is a required product for LAW to run, but the LAW installer will checks to see if .net 4.8 specifically is installed, and if not, it installs it.

Microsoft Office
- LAW's ED Loader relies on Office to process, and natively image data. At this time all Office installations for ED Loader must be 32bit.

- LAW Turbo does not need Office to process data but if using the native imager, then you must install office into the workstation. LAW Turbo can be 64bit.

Below are the Office versions that will work best for viewing natives.
- Microsoft Office 2010

- Microsoft Office 2013

- Microsoft Office 2016

- Microsoft Office 365 (Local Install)

- Microsoft Office 2019

Create a Outlook "nameless" Account: - This step only needs to happen if you want the ability to open emails in their native format, on the workstation.
This site will help walk your through how to use Outlook without an email account: Use Outlook without an email account - Outlook (microsoft.com)

- To set up Outlook 2016 or Outlook for Microsoft 365 as a personal information manager without an email account, use the following steps.
- Note: These steps will only work for Outlook 2016 or Outlook with a Microsoft 365 subscription.

  1. Close Outlook.

2. Click the Windows key and then type Run.
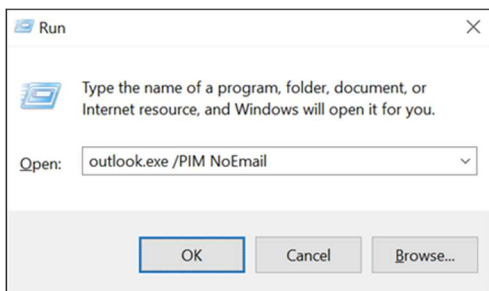
3. In the Run window, type Outlook.exe /PIM <your profile name> and then click OK. This will create a new profile in Outlook without an email account. You can then use Outlook to store your contacts, tasks, and calendar information.

Getting into outlook can be difficult. If on Office 365 you may need to
First run the dummy account then
Once Outlook is open then go to File > Account Settings > Manage Profiles > Email Accounts > then under the Email tab, New

<u>Install All Microsoft Windows Language Packs</u> – For the correct language analysis and support with associated Unicode characters, it is suggested that all Windows Language Packs be loaded onto images. This site can help walk you through the process: Language packs for Windows (microsoft.com)
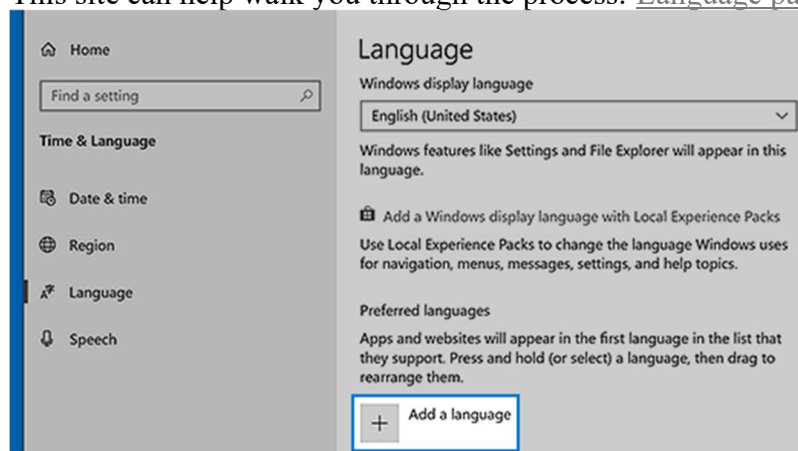
1. Select the Start button, and then select Settings > Language

2. Under Preferred languages, select Add a language.

3. Under Choose a language to install, select or type the name of the language that you want to download and install, and then select Next.

4. Under Install language features, select the features that you want to use in the language that you selected to download, and then select Install.
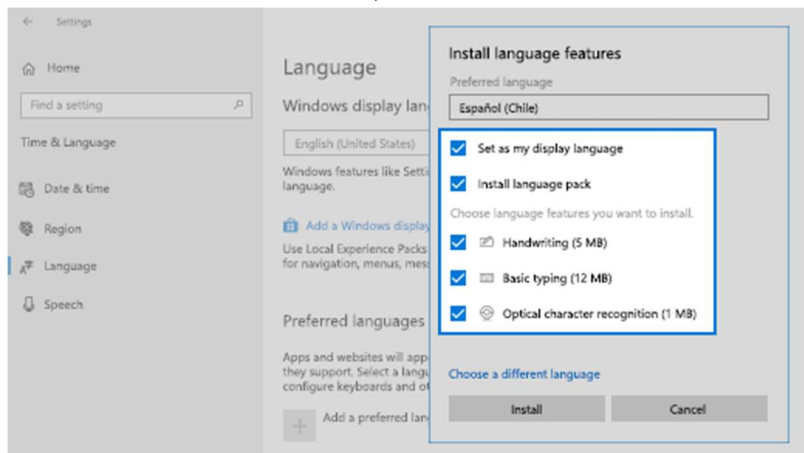
To use Microsoft Office in your preferred language, download an Office language pack.

You can download and install any of the following languages in Windows 10.

Explore/Edge/Chrome or other browser programs - If you are using LAW to image any HTML documents you will need a browsers. You will need Windows browser on top of any preferred browsers installed. Once installed open an HTML documents and setup your printer settings.

Turn off the caching of thumbnails in hidden thumbs.db files: How to Disable/Remove Thumbs.db File on Network Folders in Windows? | Windows OS Hub (woshub.com)

To prevent Windows File Explorer from creating a hidden thumbnail cache (Thumbs.db fil)e when browsing folders, you can use a GPO.

1. Run the local GPO editor (gpedit.msc) or create a domain GPO using the gpmc.msc console.
2. Go to the following Group Policy section User Configuration -> Administrative Templates -> Windows Components -> File Explorer.
3. This section has three options that allow you to manage the creating of the thumbs.db file by File Explorer:
   ▪ Turn off the display of thumbnails and only display icons on network folders (prevents thumbs.db file from being created on shared network folder)
   ▪ Turn off caching of thumbnails in hidden thumbs.db files

- Turn off the display of thumbnails and only display icons
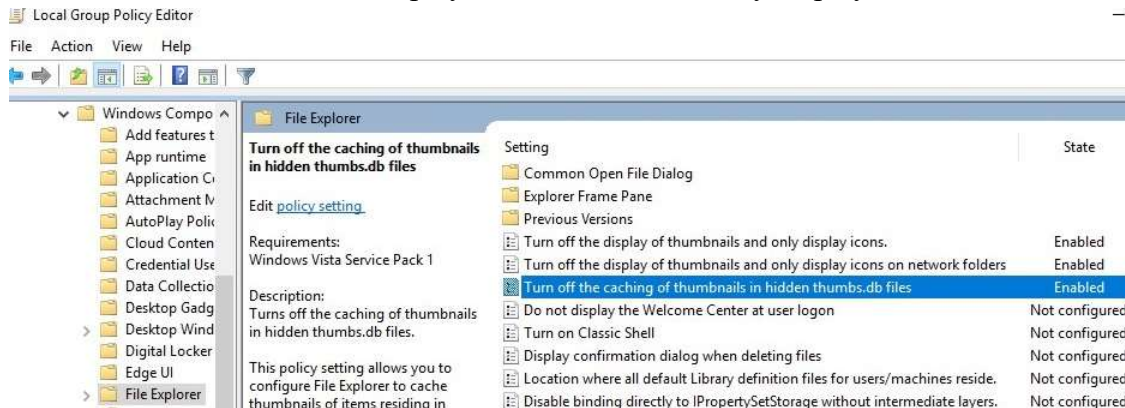
4. Enable all three policies by changing their values to 'Enabled';

It remains to link the Group Policy to users (if you use domain GPOs) and update it on domain computers. To apply the policy settings immediately, run the command: gpupdate /force

OCRing with which engine– When OCR work is done in Explore, it is done with one of two engines.

Determines which engine is used to perform OCR, from the following options:

- **ABBYY FineReader**
  - o Installed separately from CloudNine™ LAW and can be obtained by CloudNine when purchasing the ABBYY OCR license.
  - o Supports foreign languages such as: Chinese, Japanese, and Korean (CJK) languages.
  - o Can create PDF/A files.
  - o Able to run multiple instances on a single PC, one instance per CPU core.

- **ExperVision OpenRTK**
  - o Is included with the CloudNine™ LAW installer.
  - o Limited to one instance per machine.

Both engines support the creation of search-able PDF files and are able to produce image OCR files, which are used in the Storm and IPRO applications for highlighting search hits on images.

http://www.imagecap.com/installs/ABBYYEngine11.rev1.exe

Lotus Notes 9 – Lotus Notes 9 is the last supported version of Lotus Notes. Once installed open it and selected to turn off popups.

Show hidden files and file extensions – This will vary by Operating System. For Windows 10 you can access this by opening an Explore Window > Click View and you will see 'File name extensions' and 'Hidden items' turn those on.
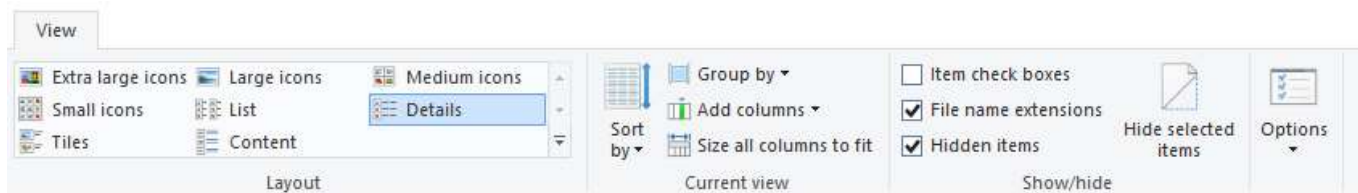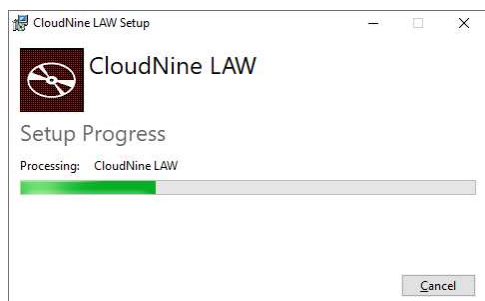

Install LAW

Once you've downloaded the **LAW Installer**, you are ready to begin installing **LAW**. The instructions below will guide you through the installation process:

    NOTICE: These instructions cover the installation of **LAW** and **Explore** on the local machine.

 1.Start by running the **LAW Installer** <u>as an administrator</u> (right-click > Run as administrator). Click **Yes** when prompted to allow the app to make changes to your device.

2.You will first be greeted by the **End User License Agreement**. If you agree to these terms, then check the box stating **I agree to the license terms and conditions**, and click **Install** to proceed.

3.The **LAW Installer** now displays the **Setup Progress** screen, which will remain in place for the duration of the installation. It will start automatically installing the necessary prerequisites.
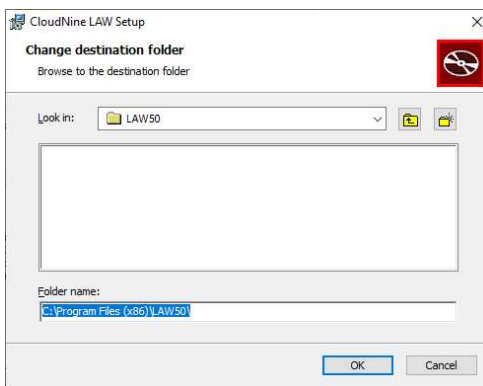
4.Once the necessary prerequisites have been installed, the **Setup Wizard** will open in a separate window, and you will be brought to the **Welcome** screen. Click **Next** to proceed.
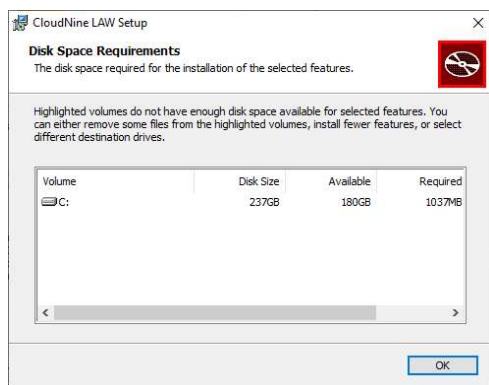

5.At the **Custom Setup** screen, decide which features/programs you want to install by clicking the icons on their left and selecting **Will be installed on local hard drive** from the drop-down menu. Any feature/program with an X will <u>not</u> be installed.
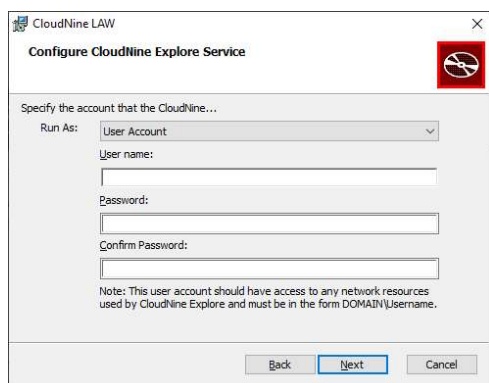
For Explore you will need to install CloudNine LAW and CloudNine Explore

6.You can change the install location for all programs/features selected within the **Custom Setup** screen by clicking the **Browse...** button to the far right of the **Location** shown near the bottom. This will open the **Change destination folder** window, allowing you to determine a new root folder (on this computer) to use as the install location. If you choose a new folder, be sure to click **OK** to apply those changes.
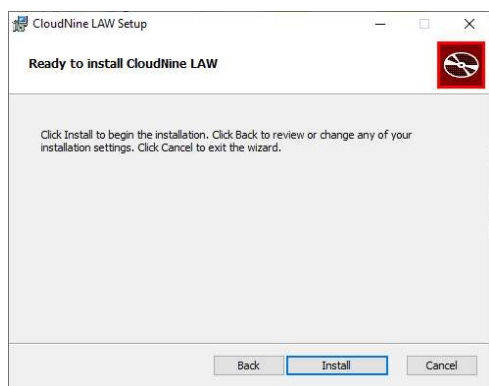
7.You can also determine how much hard drive space is **Required**/**Available** for these programs/features from the **Custom Setup** screen by clicking the **Disk Usage** button at the bottom-left. This will open the **Disk Space Requirements** window, indicating these details for all available **Volumes**. When you're done reviewing the information, click **OK** to close this window.
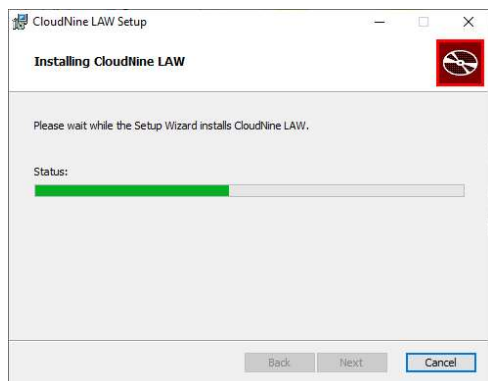
8.When you're satisfied with the features/programs and install location shown in the **Custom Setup** screen, click **Next** to proceed.

9.Skip this step if you're <u>not</u> installing **Explore** at this time. At the **Configure CloudNine Explore Service** screen, enter a Microsoft Windows account (**User name** and **Password**) with permissions to the SQL Server instance that **Explore** will use. This is required both for distributed network <u>and</u> local-only environments. When you're finished, click **Next** to proceed.

  i.If you use the **Local System Account** option from the **Run As** drop-down, then the <u>current</u> Windows user must have access permissions to the SQL Server, or you will be unable to connect.

10.At the **Ready to install CloudNine LAW** screen, you have one last chance to go **Back** to any of the previous screens and change the installation settings. Otherwise, click **Install** to begin the installation process.

11. You will be brought to the **Installing CloudNine LAW** screen, where the installation progress is displayed. This process may take several minutes.

12. Once the installation finishes, you will arrive at the **Completed** screen. If a **License Server** has been assigned, and your **License** has already been activated, then you are ready to continue to the **LAW Configuration Utility**, so go ahead and leave the option on your screen checked to do so automatically once the **Setup Wizard** closes. Otherwise, you will need to activate your **License** on a **License Server** before you can correctly configure **LAW**, so you should uncheck this option before continuing. Click **Finish** to exit the **Setup Wizard**.
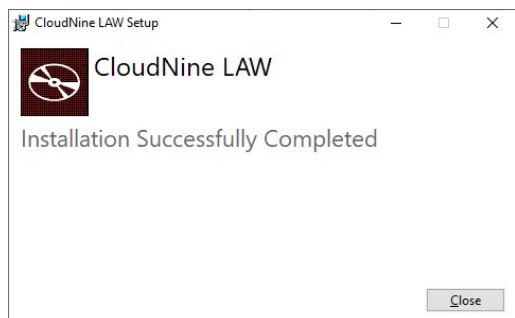
13. The **LAW Installer** will now indicate that the installation was **Successfully Completed**. Click **Close** to exit the **LAW Installer**.

14. You have now finished installing **LAW**! There are some additional steps we recommend you take at this time to ensure a fully functioning **LAW** experience:

LAW Configuration Utility with NIST and File Type Management

This section of the **LAW Configuration Utility** covers the necessary database and **Licensing** configuration that affects all workstations running **LAW** in a shared or local environment.

At any time during configuration, you can use the **Back** and/or **Next** buttons at the bottom-right of the utility to either return to a previous step, or proceed to the next one.

Each step is named after the section it references, and provides it's own set of instructions. You can return to this page for future reference if any changes need to be made to your **LAW Environment**.

⇨**Steps/Sections**:

1.**Management DB** Configuration:

A. Enter the **SQL Server Name** to be used by all **LAW** workstations, along with user credentials (**User Name** and **Password**) for this server. A database will be created for **LAW** on this SQL Server.

i. The **SQL Server Name** can be either the server's machine name or IP address.

ii. The **SQL Database Name** shown is the name of the database being created on that server, defaulting to "LAW5_Management".

iii. You can select **Use Windows Authentication** to automatically apply your current Windows login information as the user credentials instead (no input necessary).

B. Click **Test Connection** to ensure that the server details are correct. If the test fails, a prompt will appear indicating any issues.

C. When you see **Connection Test Succeeded**, you are ready to proceed. Click **Next** to continue.

CloudNine LAW Configuration Utility - Environment

Management DB

Case List Migration

Default Paths

Licensing

File Type DB

NIST

Review

Management Database

The LAW Management database is used to host shared settings for your LAW environment. Database configuration is required before using the application.

SQL Server Name*

Enter Server Name...

SQL Database Name*

LAW5_Management

☐ **Use Windows Authentication**

User Name*

law_user

Password*

••••••••

⚠ Database Connection Has Not Been Tested   Test Connection

Cancel   Back   Next

2.**Case List Migration** Configuration:
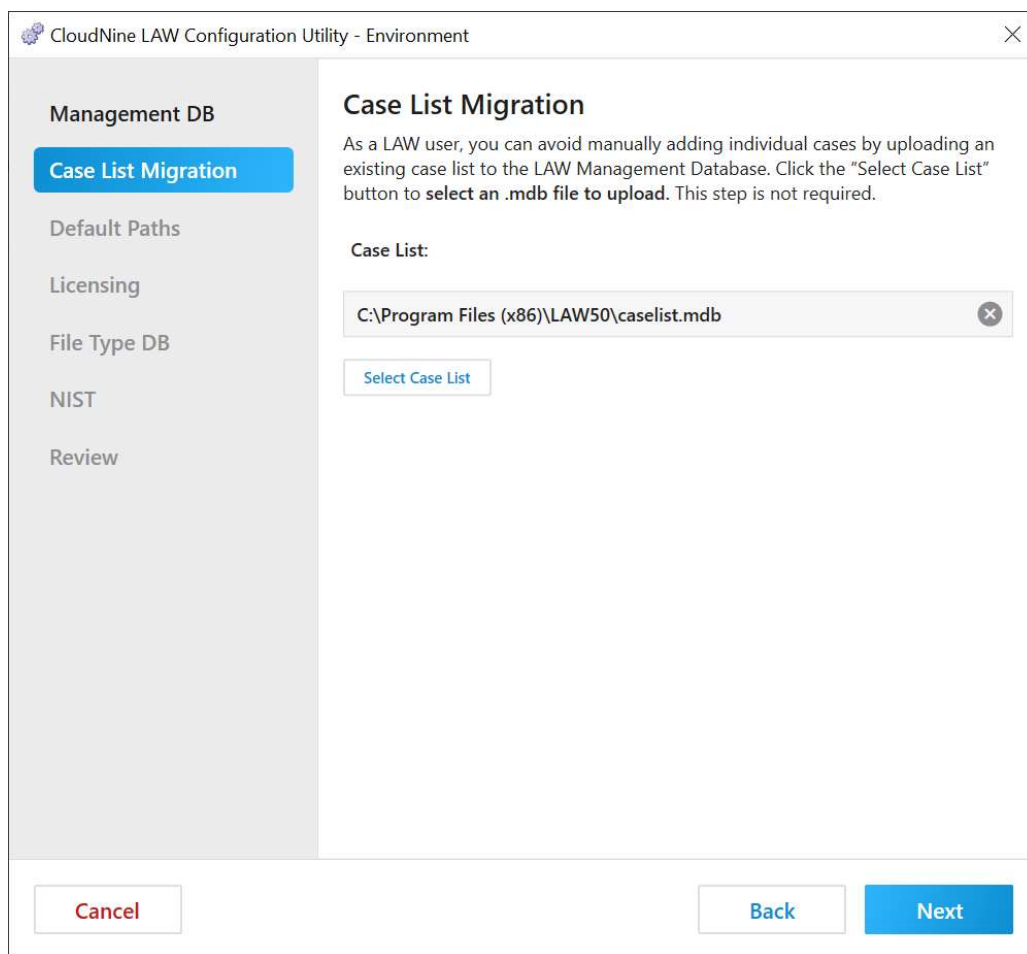
The **Case List** (MDB file) is used to record the name and file path for all **Case Files** that have been opened or created in **LAW**. This list can be migrated from previous **LAW** installations, and will be stored on your SQL Server Database.

A. Perform one of the following, depending on the needs of your current **LAW Environment**:

1)If you have a **Case List** from a previous installation of **LAW** that you would like to use in this **Environment**, then click on **Select Case List** to navigate to the desired MDB file and select it.

2)If you don't already have a **Case List**, or wish to use a new one for this **Environment**, then you can leave the default MDB file as selected.

B. With your **Case List** now selected, you are ready to proceed. Click <u>Next</u> to continue.

3.**Default Paths** Configuration:

NOTICE: It's recommended to use UNC paths for all shared network locations.

A. Enter a **Case Folder** network/local path for **LAW** to use as its **Case File** storage location. You can also click **Browse...** on the right to navigate to a location and select it via a File Explorer.

i. For shared network drives, ensure that the path selected is identically mapped for all workstations running **LAW**. These locations are not recommended for **Turbo Import** cases.

B. Enter an **Image Folder** network/local path for **LAW** to use as its image file storage location. You can also click **Browse...** on the right to navigate to a location and select it via a File Explorer.

C. **Validate Paths** to ensure that shared network locations can be accessed correctly. This step is not necessary for local paths.

D .When you are ready to proceed, click <u>Next</u> to continue.

4.**Licensing** Configuration:

A. Enter one of the following, depending on which computer is being used as your **License Server**:

1)The word "localhost" (without quotations) if <u>this computer</u> is your **License Server**.

2)The name or network IP address of whichever other computer is your **License Server**.

B. Click **Test Connection** to ensure proper connection with your **License Server**. If the connection fails, a prompt will appear indicating any issues.

C. When you see **Connection Test Succeeded**, you are ready to proceed. Click <u>**Next**</u> to continue.

CloudNine LAW Configuration Utility - Environment   ✕

Management DB

Case List Migration

Default Paths

Licensing

File Type DB

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Review

Licensing

This page allows you to point to the machine that will host your CloudNine LAW license key. If this is your first time installing LAW, please specify the IP or name of the machine you will use as your LAW license server.

You may update this information at any time, if you need to reference licenses on a different license server, or have migrated your existing license server.

License Server*

Enter License Server...

Test Connection

Cancel   Back   Next

5.**File Type DB** Configuration:

> You can import a **File Type Management** database from a previous **LAW** installation, or a new one will be created automatically.

A. Perform one of the following, depending on the needs of your current **LAW Environment**:

1)If you're <u>not</u> using a previous **FTM** database, then leave the **SQL Server Name** and user credentials (**User Name** and **Password**) exactly as they appear. This information should automatically match what was entered on the **Management DB** step. A new **FTM** database will be created automatically using **SQL Database Name** displayed. You can change this name if desired, or leave it at the default "LAW_FTM". Ignore the **FTM not loaded** warning message.

> > **NOTICE**: If you accidentally changed any of the SQL Server details, you may be required to click **Test Connection** again to ensure proper connection with the SQL Server before being able to proceed.

2)If you <u>are</u> using a previous **FTM** database, then enter the **SQL Server Name** and user credentials (**User Name** and **Password**) for the server on which the database is located, along with the **SQL Database Name** of that **FTM** database. Click **Test Connection** to ensure that the **FTM is loaded** properly (as will be indicated). You can also click **Import FTM** instead to navigate to the desired **FTM** database file and select it.

B. When you are ready to proceed, click <u>**Next**</u> to continue.

File Type Database

CloudNine LAW Configuration Utility - Environment ✕

Management DB

Case List Migration

Default Paths

Licensing

File Type DB

NIST

Review

File Type Database

The File Type Management database is used to include/exclude file types during import into LAW cases.

If you are configuring a new LAW environment, we recommend that you use the pre-populated database information in the fields below.

If you would like to utilize a File Type Management SQL database from a previous LAW installation, please specify the database information below.

SQL Server Name*

`<Your FTM Server Name Here>`

SQL Database Name*

`LAW_FTM`

☐ **Use Windows Authentication**

User Name*

`law_user`

Password*

`••••••••`

⚠ Database Connection Has Not Been Tested   **Test Connection**

An existing Access File Type Management Database could not be located on your system. If you would like   **Import FTM**

Cancel   Back   Next

6.**NIST** Configuration:

> This step is optional, and only needs to be completed if **NIST** filtering will be applied when importing documents. You can import a **NIST** database from a previous **LAW** installation, or create a new one here.

A. Enable the **Configure NIST Database** option by checking the box on the left.

B. Perform one of the following, depending on the needs of your current **LAW Environment**:

1)If you're not using a previous **NIST** database, then leave the **SQL Server Name** and user credentials (**User Name** and **Password**) exactly as they appear. This information should automatically match what was entered on the **Management DB** step. You will need to click **Load NIST Data** and follow the instructions in the **Load NIST Data** window to download and apply the appropriate **NIST** files. A new **NIST** database will be created with these files, using **SQL Database Name** displayed. You can change this name if desired, or leave it at the default "LAW_NIST".

2)If you are using a previous **NIST** database, then enter the **SQL Server Name** and user credentials (**User Name** and **Password**) for the server on which the database is located, along with the **SQL Database Name** of that **NIST** database.

C. Click **Test Connection** to ensure that the **NIST** database files are properly loaded. If the test fails, a prompt will appear indicating any issues.

D. When you see **NIST is loaded**, you are ready to proceed. Click **Next** to continue.

CloudNine LAW Configuration Utility - Environment ✕

Management DB

Case List Migration

Default Paths

Licensing

File Type DB

NIST

Review

NIST

The NIST database option allows users to upload the NSRL/NIST collection to the LAW Management database for document NIST filtering.

If you are configuring a new LAW environment, we recommend that you use the pre-populated database information in the fields below.

If you would like to utilize an existing NIST database, enable "Configure NIST Database" and specify the database information below.

☐ **Configure NIST Database**

SQL Server Name*

<Your NIST Server Name Here>

SQL Database Name*

LAW_NIST

☐ Use Windows Authentication

User Name*

law_user

Password*

••••••••

Test Connection

Load NIST Data

Cancel   Back   **Next**

7.**Review** Settings:

A. Take this chance to review all the configuration settings being applied to your **LAW Environment**. If something needs changed, you can go **Back** to any previous step and make the necessary corrections.

B. If everything looks good, then you are ready to proceed. Click **Finish** to apply these settings, and create the necessary databases on your SQL Server.

8.Configuration **Results**:

A. Click one of the following, depending on whether or not you plan to use <u>this computer</u> for **Turbo Import** document processing:

1)If **YES** to **Turbo Import** setup on <u>this computer</u>, continue to **Configure Local Machine: Service**.

2)If **NO**, then the **LAW Configuration Utility** closes, and you are now finished configuring **LAW**!
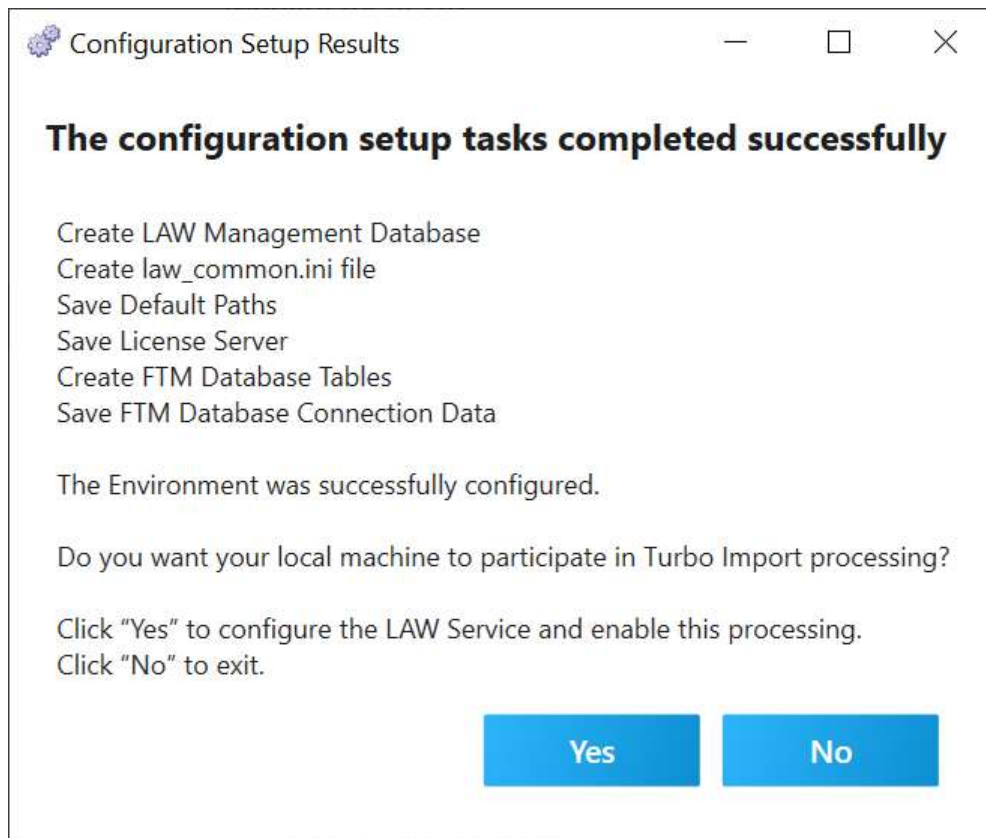
This section of the **LAW Configuration Utility** covers the necessary database and **Turbo Import** service accessibility for <u>each</u> workstation running **LAW** in a shared or local environment.

At any time during configuration, you can use the **Back** and/or **Next** buttons at the bottom-right of the utility to either return to a previous step, or proceed to the next one.

Each step is named after the section it references, and provides it's own set of instructions. You can return to this page for future reference if any changes need to be made to your **LAW Local Machine**.

⇨**Steps/Sections**:

1.**Roles** Configuration:

A. Determine which of the available **Roles** this computer should have when running **LAW**. It is recommended to leave both options selected.

B. When you are ready to proceed, click **Next** to continue.
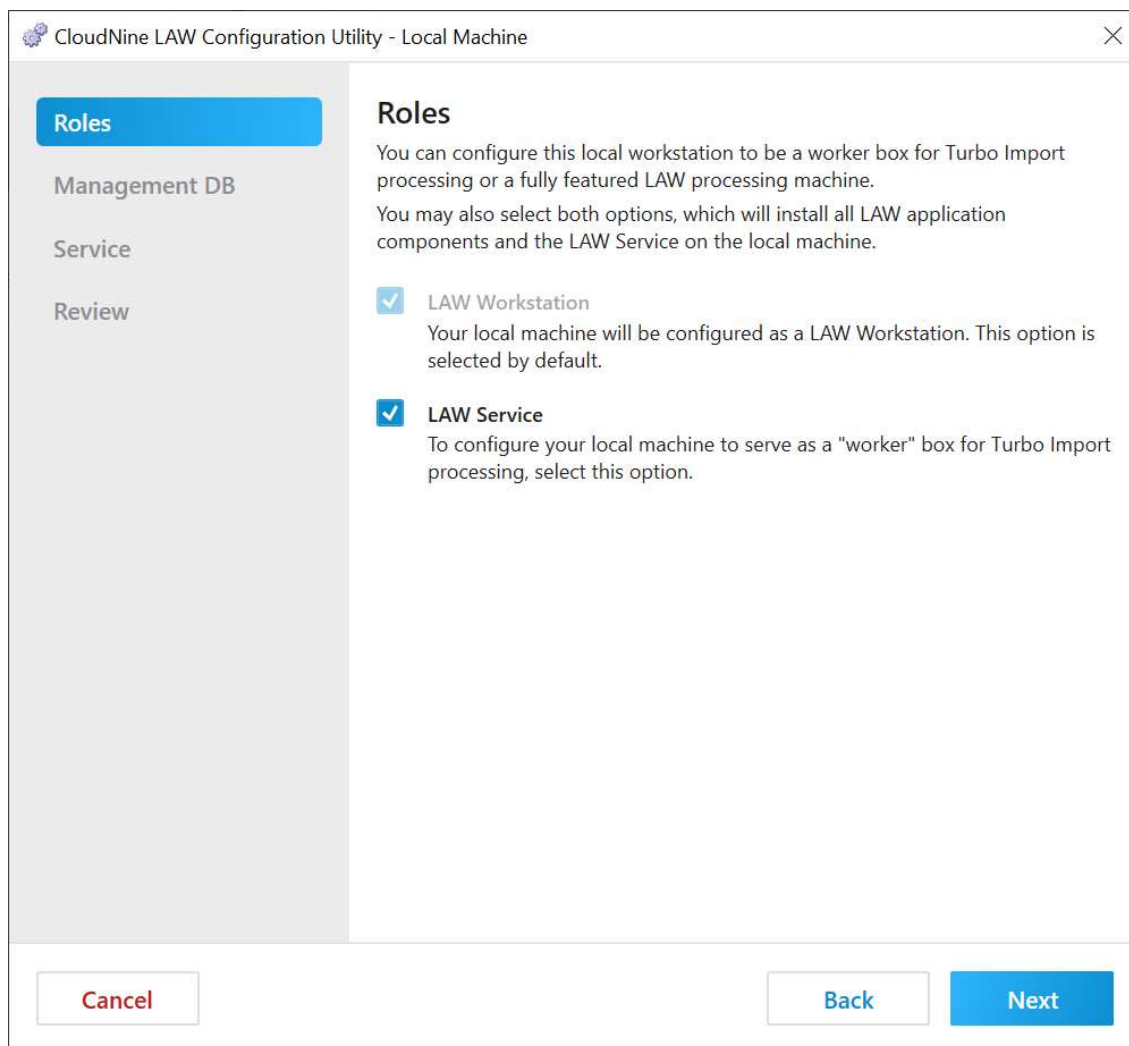
2.**Management DB** Configuration:

A. Enter the **SQL Server Name** and user credentials (**User Name** and **Password**) for the SQL Server that was selected while configuring your **LAW Environment**.

i. If you have <u>not yet</u> configured your **LAW Environment** (required), then do so now before continuing. Click **Back** <u>twice</u> to return to the main **LAW Configuration Utility**, and then select <u>Configure Environment</u> instead.

B. Click **Test Connection** to ensure that the server details are correct. If the test fails, a prompt will appear indicating any issues.

C. When you see **Connection Test Succeeded**, you are ready to proceed. Click <u>Next</u> to continue.

3.**Service** Configuration:

Skip this step if the **Local Machine** will <u>not</u> be used for **Turbo Import** document processing.

A. Perform one of the following, depending on where the **Default Paths** for your **LAW Environment** are located:

1)If the paths point to a <u>shared network</u> device, then enter the user credentials (**User Name** and **Password**) used to access that device. Click **Validate Input** to ensure a proper connection.

i. **User Names** should be in this format (without angled brackets or quotations): <"network domain"\"network user name">

2)If the paths point to a location on <u>this computer</u> (local), then instead select **Local System Account** from the **Run service as** drop-down menu at the top.

B. When you are ready to proceed, click **<u>Next</u>** to continue.

CloudNine LAW Configuration Utility - Local Machine   ✕

Roles

Management DB

Service

Review

Service

Machines that participate in Turbo Import processing will need to configure the LAW Service.

Run service as:

| User Account   ⌄ |

User Name*

| Enter User Name... |

Password*

| Enter Password... |

Confirm Password*

| Confirm Password... |

> **Local System Account** should only be selected for a single station installation where all file resources (i.e. Home Directory, source data, export folders, LAW ini files) are accessed locally.
> The **User Account** setting is required to operate the LAW Service in a distributed environment. The user you select must have permissions to access the network resources.

⚠ **All fields are required**   Validate Input

Cancel   Back   Next

4.**Review** Settings:

A. Take this chance to review all the configuration settings being applied to your **Local Machine**. If something needs changed, you can go **Back** to any previous step and make the necessary corrections.

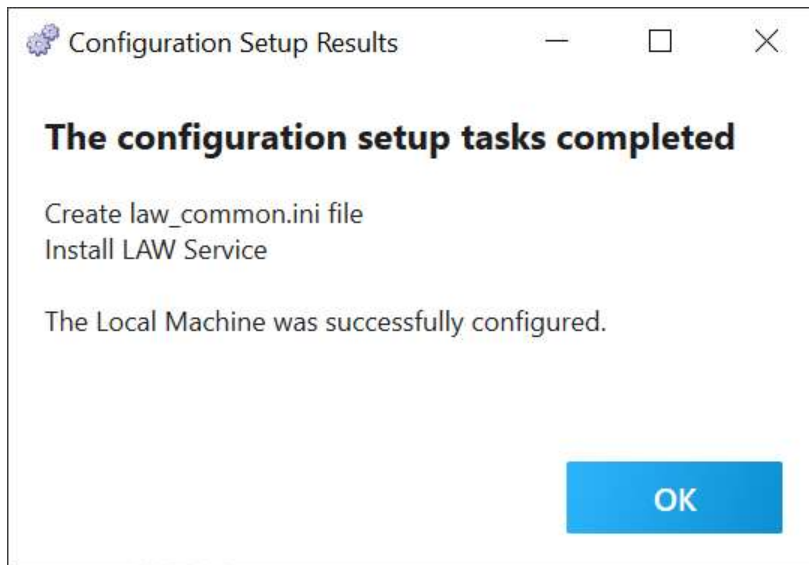B. If everything looks good, then you are ready to proceed. Click **Finish** to apply these settings.

5.Configuration **Results**:

A. Click **OK** to close the **LAW Configuration Utility**.

6.You are now finished configuring your **Local Machine** for **LAW**! If this computer was setup for **Turbo Import**, it is recommended to take the following action:

A. Check this computer's Windows **Services** to ensure that the **LAW Service** is running properly.
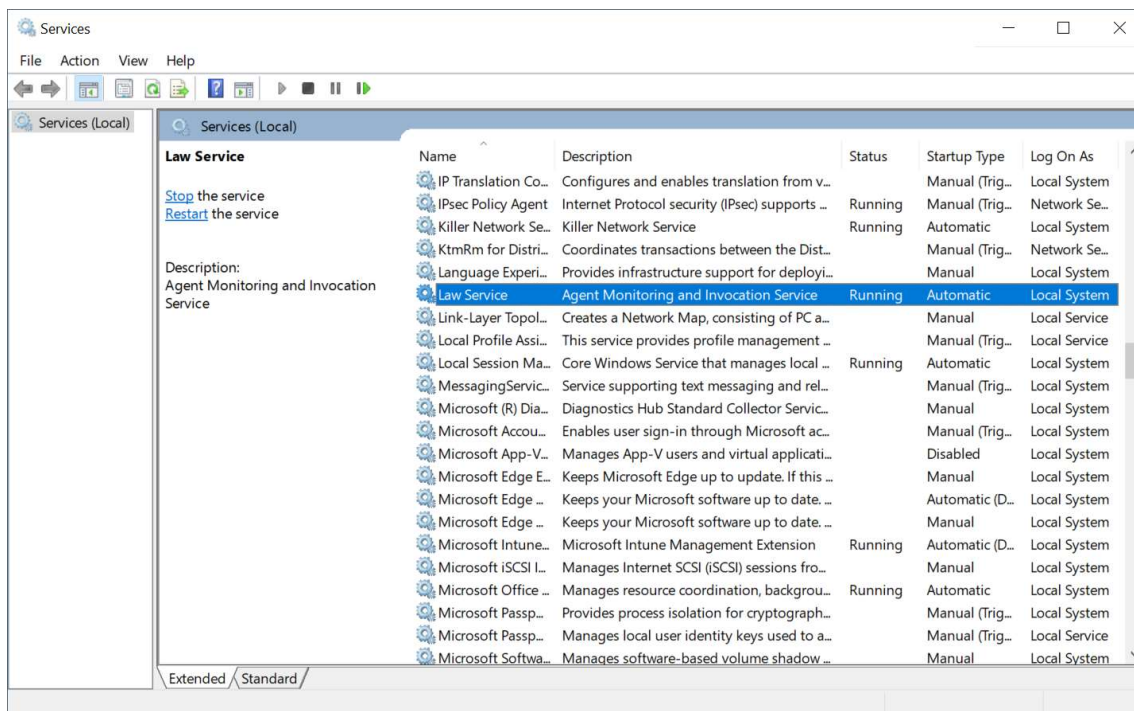
Select Which machines are going to allow for Turbo work

Encryption and TLS Protocols

Encryption and TLS Protocols As of version 7.3, LAW supports TLS 1.2 encryption protocols for Windows 10 systems. · For information on enabling TLS on your environment systems, we recommend you work with your Administrator. · LAW is compatible with systems running TLS 1.2 encryption; TLS 1.0 may be disabled on these systems. · For instructions on enabling/disabling TLS 1.2 and 1.0, please reference https://docs.microsoft.com/en-us/windows-server/security/tls/tls-registry-settings

LAW FIPS Compliance and Configuration

Effective starting with version 7.5.X, CloudNine LAW is certified for FIPS encrypted Windows 10 operating systems. Administrators can enable FIPS via either local system registry, or via Group Policy. When enabled, the operating system will ensure that only FIPS validated hashing and encryption modules are used by the operating system (including .NET libraries). For more information on the FIPS encryption and usage with Windows 10, the STIG guidelines are listed here for reference: https://www.stigviewer.com/stig/windows_10/. Users can also reference the STIG guidelines for enabling FiPS encryption: https://www.stigviewer.com/stig/windows_10/2019-01-04/finding/V-63811.

Antivirus Best Practices and Recommendations

Antivirus Best Practices and Recommendations With any eDiscovery processing tool, an anti-virus scanning utility can alter files and interrupt chain of custody and hashing values. Best Practices for insulating against unwanted AV impacts in processing include: · Separate the Processing Network other Review and Business Networks (e.g., separate LAN or vLAN). · Only run virus scanning after processing is completed (e.g., when moving processing volumes to new locations for Production or Review Loading). · If on-demand virus scanning is a compliance requirement, then scan only the file shares with extracted ESI. · These paths should be excluded so as to avoid impacts to processing speed and reliability: o Installation directory o Local User Log Directory o Local User Data store Directory o Local Computer Data store Directory o LAW Case Directory o LAW Worker Temp Directory o Source data location

Additionally, Users may reference the EDRM recommended practices regarding virus protection here: https://www.edrm.net/resources/frameworks-and-standards/edrmmodel/edrm-stages-standards/edrm-processing-standards-guide-version-2/.

Silent Install

PERFORMING A SILENT INSTALL

When you need to install the full version of **CloudNine™ LAW**, including **CloudNine™ Explore**, on numerous machines, you can save time by
running **Silent Installations** of **LAW** and **Explore**. **Silent Installations** install applications without prompting you for input during the installation.

1.Open a Command Prompt window by typing "cmd" in the Windows Search box and then selecting **Run as administrator**.

2.Determine which version of **LAW** you wish to install, and note the name of the associated installation executable. This name becomes the **< installation executable>** portion of the command line.

i.For example, the installer for **LAW 7.4** is named "law_full_7.4.58.exe" (without quotations).

3.Determine which features you want to install. Features are added as a comma-delimited list (no spaces, and feature names are case-sensitive), becoming the **<feature list>** portion of the command line.

i.For example, to install all available features, your **<feature list>** would be "LawApplication,LAWPrinterDrivers,ExploreApplication" (without quotations).

Features available for installation:

•**LawApplication** - Installs the **CloudNine™ LAW** application.

•**LAWPrinterDrivers** - Installs the TIFF and PDF **Print Drivers**.

•**ExploreApplication** - Installs the **CloudNine™ Explore** application and service.

4.Enter the following in the Command Prompt window, replacing the **<installation executable>** and **<feature list>** with the values you determined in **Steps 2-3**:

<installation executable> /s /qn ADDLOCAL=**<feature list>**

5.Press ENTER in the Command Prompt window to run the silent installation on the machine.

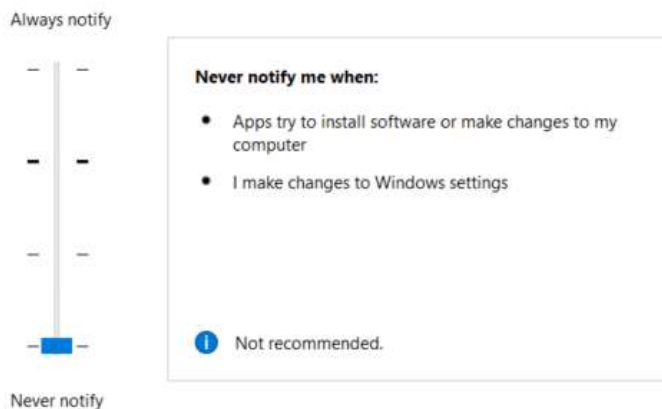**Lower User Account Control Settings to 'Never Notify'**

1. Go to Start screen. 2. Type Change User **Account** Control **settings** then select **Settings** on the right then Change user **account** control **settings** when it appears on the left. 3. Select the **setting** you want then select OK.

Further info Links and Guides

This information was gathered off the internet and guides. All links are here.

References:
http://answercenter.ediscovery.co/litigation/ac/lawdc/welcome-to-law.html
and
http://answercenter.ediscovery.co/litigation/ac/law/welcome.htm

Fields's descriptions: http://answercenter.ediscovery.co/litigation/ac/lawdc/system-export-fields.html

User Guide: http://answercenter.ediscovery.co/litigation/ac/law_documentation/LAWUserGuide.pdf

Administration Guide:
http://answercenter.ediscovery.co/litigation/ac/law_documentation/LAWAdminGuide.pdf