CloudNine™ Explore Web

Installation Guide
CloudNine™ Explore Web Version 7.11.75

- **System Requirements**
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CloudNine™ Explore Web Installation Guide

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CloudNine™ LAW
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CloudNine™ Explore Web

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CloudNine Explore Web

Installation

System Requirements

CloudNine™ Explore Web requires a Web server for hosting the CloudNine™ Explore Web application's Web site.

Computer/Processor	8 core 2.5+ GHz
Memory (RAM)	32+ GB It is recommended that systems have 4GB of RAM per 1 processing core.
Hard Drive	Solid State Drive w/ 100 GB+ free space
Display	1080p monitor resolution
Network	10/100 Mbps. Gigabit recommended. MS Domain network required
Operating System	Microsoft Windows 10 or 11 Microsoft Windows Server 2016 (version 1809) Microsoft Windows Server 2019 (version 1903)

	Only 64-bit versions of Microsoft Windows are supported.
IIS	IIS 10+ IIS 10+ is included in Windows Server 2016 and Windows 10.
Supported Client Browsers	Chrome 78 or later Mozilla Firefox 68 or later Microsoft Edge 40 or later It is important to keep Internet browsers up-to-date. Browser vendors release often and, in most cases, auto update. Installing these updates are important for the security of your environment and allows Explore Web to use features of the modern web.

Web Server Relationship to other CloudNine Explore Components

It is best practice to host CloudNine Explore Web on a dedicated machine to be assigned as your Web Server; ideally, no other CloudNine Explore components should be installed on this machine.

CloudNine Explore Web connects to a Management Store database, and to case databases and folders located on other server(s).

Ensure that your CloudNine Explore Web installation matches the version number of your CloudNine Explore install. If you upgrade your CloudNine Explore environment, you'll need to upgrade your CloudNine Explore Web server as well.

Web Site Security

To ensure that the CloudNine Explore Web application's Web Site is secure, it's important to configure the Web server with appropriate accounts and settings. This includes proper Windows Server security and account setup, proper IIS security and account setup, use of HTTPS for the Web site, and proper SQL Server security and accounts.

In addition, user accounts set up in the CloudNine™ Explore Web application need appropriate access to required directories and cases.

For the configuration of the server components, it is highly recommended that you consult with your IT resource. If the Web site is expected to be public facing vs internal or an intranet, then security setup should be of greater concern.

Using HTTPS is essential for the Web site's security. To ensure cookies are HTTP-only and secure when settings up HTTPS, do the following:

1. Add the following information to the web.config file in the <system.web>: <httpCookies httpOnlyCookies="true" requireSSL="true" />

2. Set the IIS Forms Authentication to require SSL:

   a. In the Internet Information Services (IIS) Manager, select IIS Authentication.

   b. Right-click Forms Authentication, and then select Edit.

   c. Select the Requires SSL check box.

> d.   Click OK to save your changes.

CloudNine Explore Web Accounts

CloudNine Explore Web User accounts and their role(s) determine what the User can do (create reviews, access specific cases, etc).

There are currently two roles available for User accounts in CloudNine™ Explore Web:

- **Administrator** - The administrator is an account for managing all User accounts and can create, update, and delete Users, reset passwords, and assign Users to cases. They may also create and manage other administrator accounts.

> Administrator accounts have access to all cases. The administrator account should be used only for the staff that require this high level of access to manage other Users.

- **User** - The standard User account has access only to the cases that they have been assigned to and can be granted full access or read-only access. A standard User account with full access can apply filters, create and run searches, perform filter and search analysis, and create and apply tags in the assigned cases. Users with read-only access can only view case data in CloudNine™ Explore Web.

To manage Users and case assignments, CloudNine™ Explore Web uses Clients for grouping. When a case is created in CloudNine™ Explore, a Client can be assigned as a case property via the New Case Settings or the Edit Case Settings dialog box.

To assign a User to a case in CloudNine™ Explore Web, the User must first be assigned to a Client. Once the User is assigned to a Client, that User can be assigned to any cases associated with the Client.

Users can only be given access to cases that are also associated with the same Client as their User account. Access to each case is explicit and must be configured for each User.

In CloudNine™ Explore Web, Users are assigned to Clients on the Create User > Edit [administrator name] page, or Add Users: [client name] page.

Installing CloudNine Explore Web

Prerequisites for Installation

- CloudNine™ Explore Web is intended for 64-bit systems only and should fail on 32-bit systems.

- You must have at least IIS 6.0 installed in order to install Explore Web.

- Explore Web requires an installation of CloudNine™ Explore desktop. If you have never run Explore desktop previously, you should run it at least once before installing Explore Web to allow the appropriate database to be created.

IIS Installation

Windows 10

1. Open the **Windows Features** dialog.

2. Expand the **Internet Information Services** feature.

3. Turn on both the **Web Management Tools** and **World Wide Web Services** features.

4. Expand **World Wide Web Services**, and ensure that both **.NET Extensibility 4.8** and **ASP.NET 4.8** are also turned on.

5. Click OK to close the **Windows Features** dialog and accept these changes.
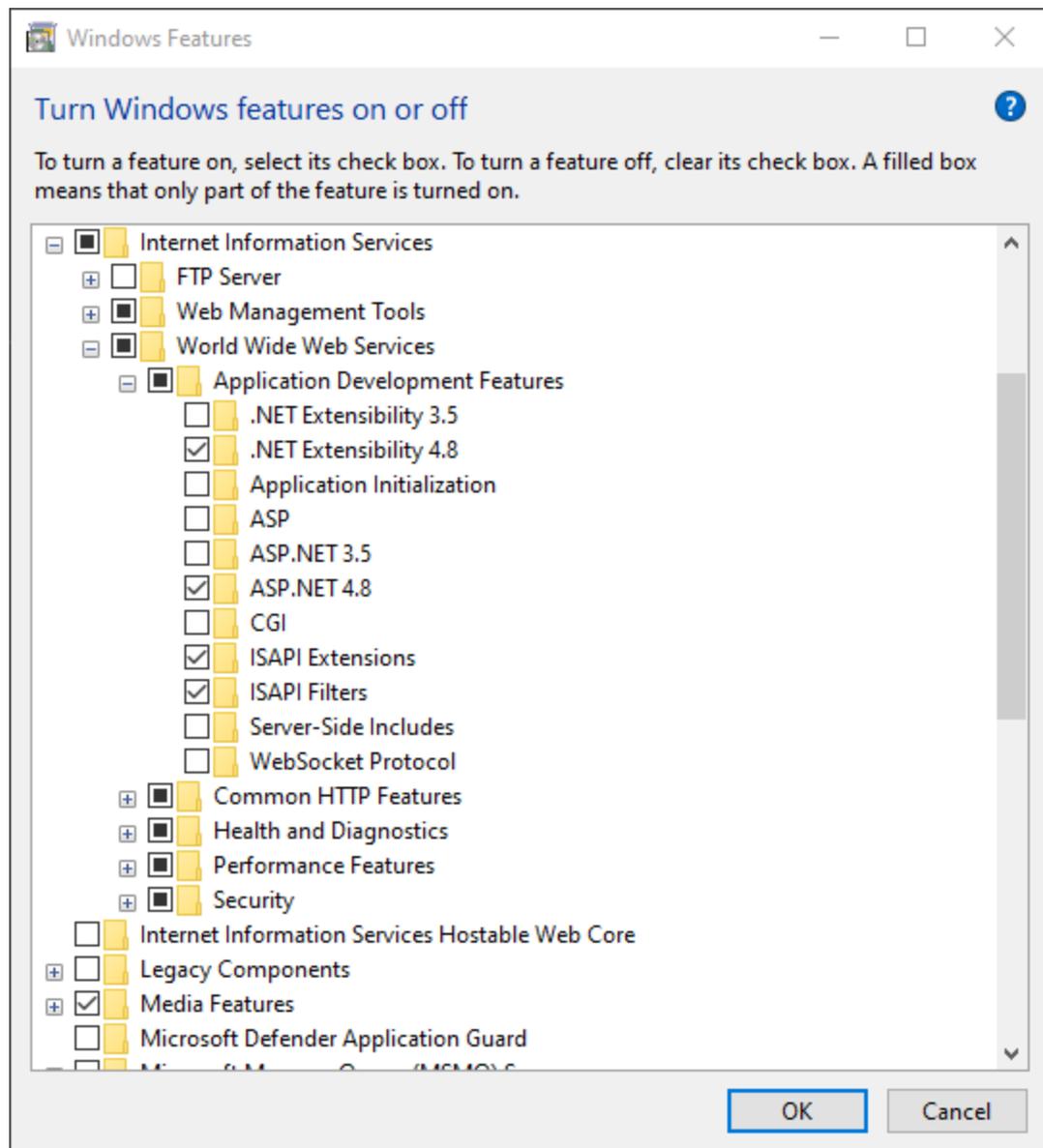
Windows Server

1. Run the **Add Roles and Features Wizard**.

2. Under **Server Roles** section, add the **Web Server (IIS)** feature.

3. Expand **Web Server (IIS)**, then **Web Server**, and finally **Application Development**.

4. Ensure that both the **.NET Extensibility 4.7** and **ASP.NET 4.7** features are also added.

5. Finish the **Add Roles and Features Wizard** to save these changes.
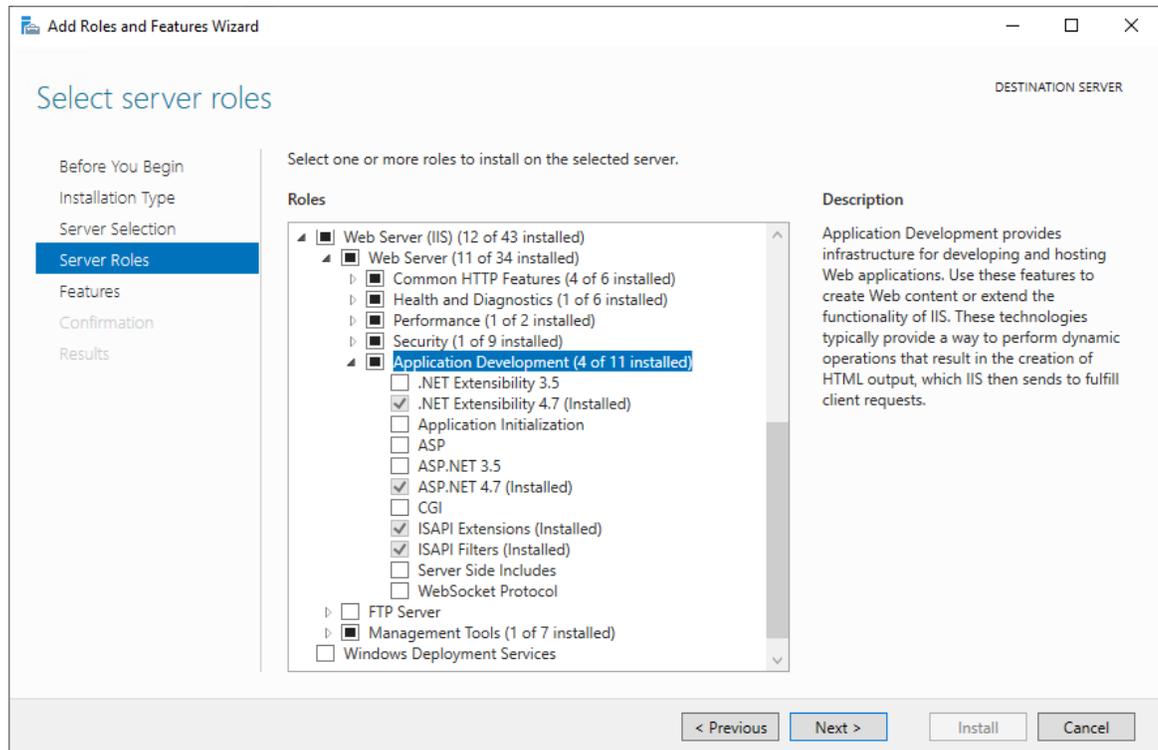
CloudNine™ Explore Web Installation

1. Run the CloudNine Explore Web installation executable. The **Welcome** screen displays.
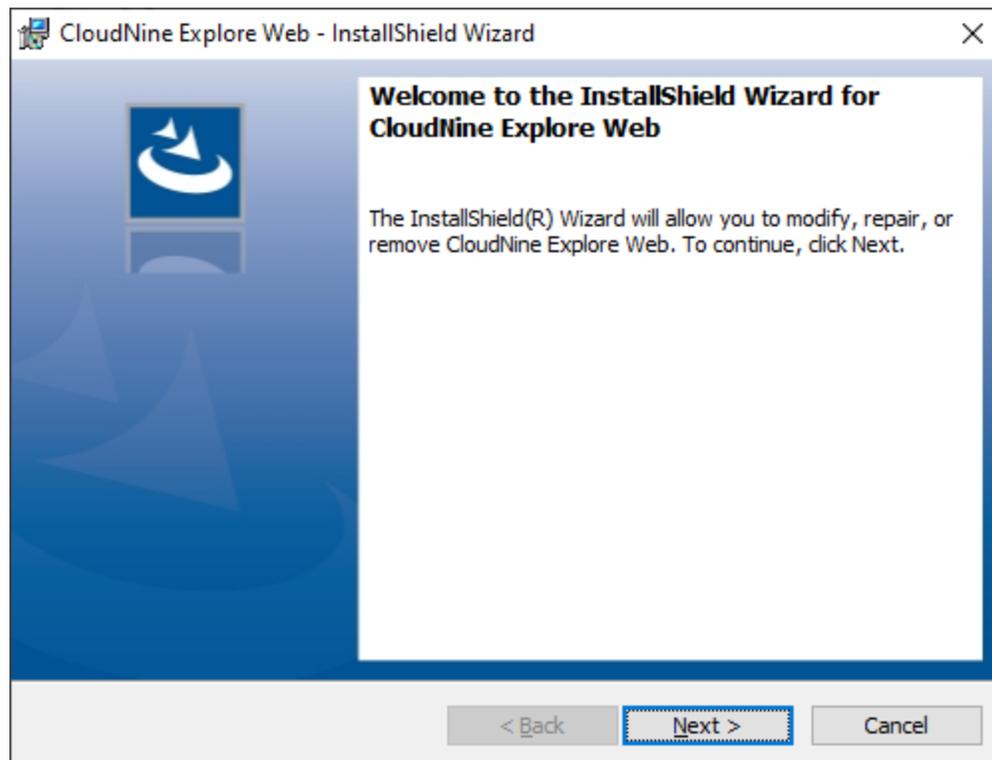
2. Click **Next**. The **Destination Folder** screen displays.

3. By default CloudNine Explore Web installs in <SysDrive>:
\inetpub\wwwroot\EdaWeb. You can click **Change** to alter the installation
location. When you have your installation location specified, click **Next** to
continue. The **IIS Application Configuration** screen displays.

4. The **Port Number** field defaults to **80**. The default value, 80, may conflict with the default IIS site configuration. The **Application Pool Identity** is the identity that the IIS application will run as. Select one of the following options:

- **Default Application Pool Identity** - The **Default Application Pool Identity** option uses the default user set up when IIS was initially configured. This default user usually has rights on the local system but not on a network. The **Default Application Pool Identity** option should only be used if the CloudNine™ Explore data will be hosted locally on the same server where CloudNine™ Explore Web is installed.

- **Specific User** - The **Specific User** option allows CloudNine™ Explore Web to be run under a specific user account. This option should be used when CloudNine™ Explore Web will require access to data stored on a network resource. The user specified should also have access to the data location for CloudNine™ Explore.

  o If you selected the **Specific User** option, in the **User name** and **Password** fields, type the user name and password for the user with access to the domain and network containing the CloudNine™ Explore data. Click the **Validate User** button.

> The **Validate User** button confirms the user credentials for the domain, not the user's network access to CloudNine Explore resources.

5. Click **Next**. The **Ready to Install** screen displays.

6. Click Install. The installation completes and the Wizard Completed screen displays.
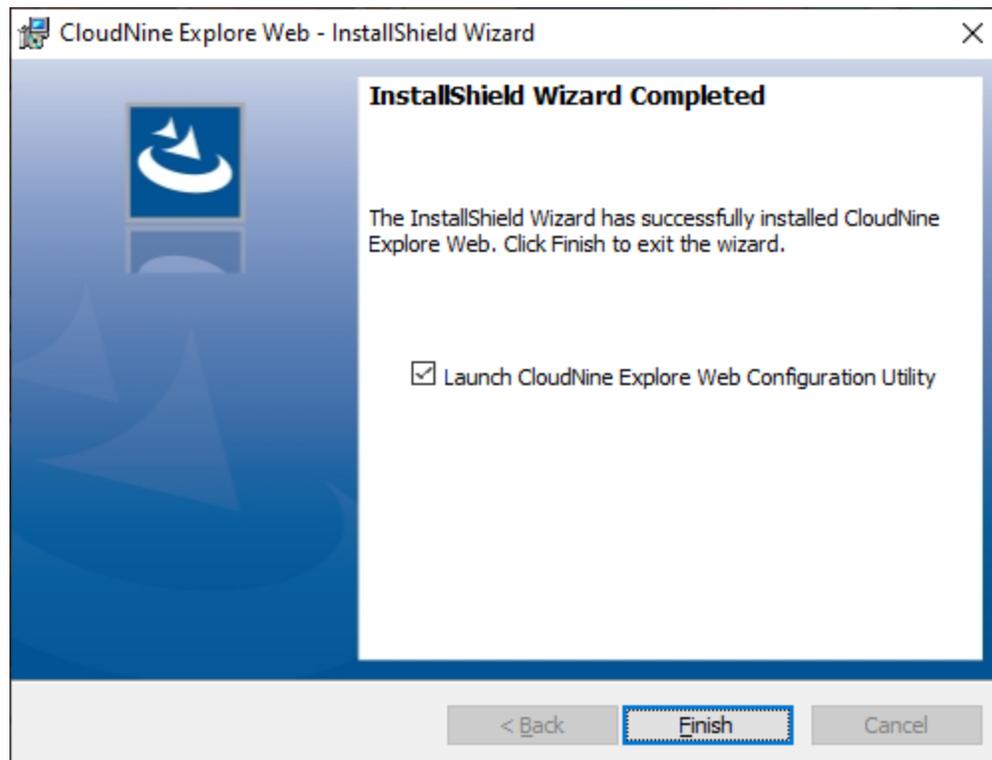
7. You will need to configure the database settings and create the initial administrator account for CloudNine Explore Web using the CloudNine Explore Web Configuration Utility. To proceed with configuration, leave the **Launch CloudNine Explore Web Configuration Utility** box checked and click **Finish**. If you want to complete configuration later, deselect the check-box and you can run the configuration utility from Windows Start at a later time.

CloudNine Explore Web Configuration Utility

The CloudNine™ Explore Web Configuration Utility is used to setup the management store and the initial administrator for CloudNine™ Explore Web after installation. The CloudNine™ Explore Web installation adds the utility to the CloudNine™ LAW programs location and it can be accessed from the Start Menu. The utility can be run at any time to configure the Management Database, but will only create the initial administrator if there are no other administrators in the Management Database.

1. Run the Explore Web Configuration Utility. This will run automatically after installation of Explore Web if you select Launch CloudNine Explore Web Configuration Utility. Alternately you can run the utility by selecting CloudNine Explore Web Configuration Utility from the CloudNine LAW folder in Windows Start.

2. The **Management Configuration** screen displays.

3. For **Server**, enter the computer name for the CloudNine Explore SQL database server. You can use localhost as your **Server** if your database server is running on the same computer where the CloudNine Explore cases are created.

4. **Database** defaults to EDA_Management. This needs to be the database containing the cases that CloudNine Explore Web will be accessing.

5. Select your authentication method:

   a. Select **Use Windows Authentication** if you want to use your current Windows login as credentials for connecting to SQL Server.

   b. You can use SQL Authentication by deselecting **Use Windows Authentication** and then entering valid **Login** and **Password** details for a user account that has access to the database.

6. Click **Test Connection** to verify the connection to the database. A message displays indicating whether the connection succeeded. If the connection failed, review what was entered as your **Server** and contact your database administrator to verify you have the correct information. Also the supplied credentials (either Windows login or specified Login/Password) must have the SQL Server dbcreate permission enabled for it.

7. Click **Next**. The **Create Administrator** screen displays.

8. If this is the first time running CloudNine Explore Web Configuration Utility, you will be prompted to input information to create the initial administrator for CloudNine Explore Web. All fields on the **Create Administrator** screen are required, and the password fields must meet CloudNine Explore Web password requirements.

   a. Enter the administrator's **First name**.

   b. Enter the administrator's **Last name**.

c. Enter the administrator's **User name** for logging into CloudNine Explore Web.

d. Enter the administrator's **E-mail Address**.

e. For **Password** and **Confirm Password**, enter the administrator's CloudNine Explore Web password.

Password Requirements:

- Must be at least 8 characters, including spaces

- Cannot exceed 150 characters

- Must contain one number

- Must contain one special character from this list: ` ~ ! @ # $ % ^ & * ( ) - _ + = [ ] { } | \ / : ; " ' < > , . ?

- Must not be the same as your previous password

- Must not contain your user name or e-mail address

9. Click **Next**. The **Summary** screen displays.

10. Review the details displayed. If you need to edit any settings, click **Previous** to go back and make applicable changes. Click **Finish** to complete the configuration. The database settings will be added and if no administrators exist, the initial CloudNine Explore Web administrator is created.

Additional Steps for CloudNine Explore Web Setup

Once the CloudNine™ Explore Web installation and configuration is completed, there are several additional tasks that may need to be performed. Details for these tasks are in the following sections.

- Setup HTTPS for the CloudNine Explore Web Site

- Configure Permissions for Error Logging

- Resolve conflicts in IIS Installation

Setup HTTPS for the CloudNine Explore Web Site

It is highly recommended to have IIS only serve CloudNine™ Explore Web using HTTPS. This can be configured in Internet information Services Manager (Start > Run > inetmgr).

> 💡 This process is optional but highly recommended to be configured by your IT/security department.

1. Configure the site bindings for https. If your organization has a certificate already setup with a certificate authority you can use that. Alternatively, if you are hosting internally and do not have a certificate with an authority, you can setup a machine certificate. It is recommended to check with your IT or security team to determine the appropriate certificate to use.
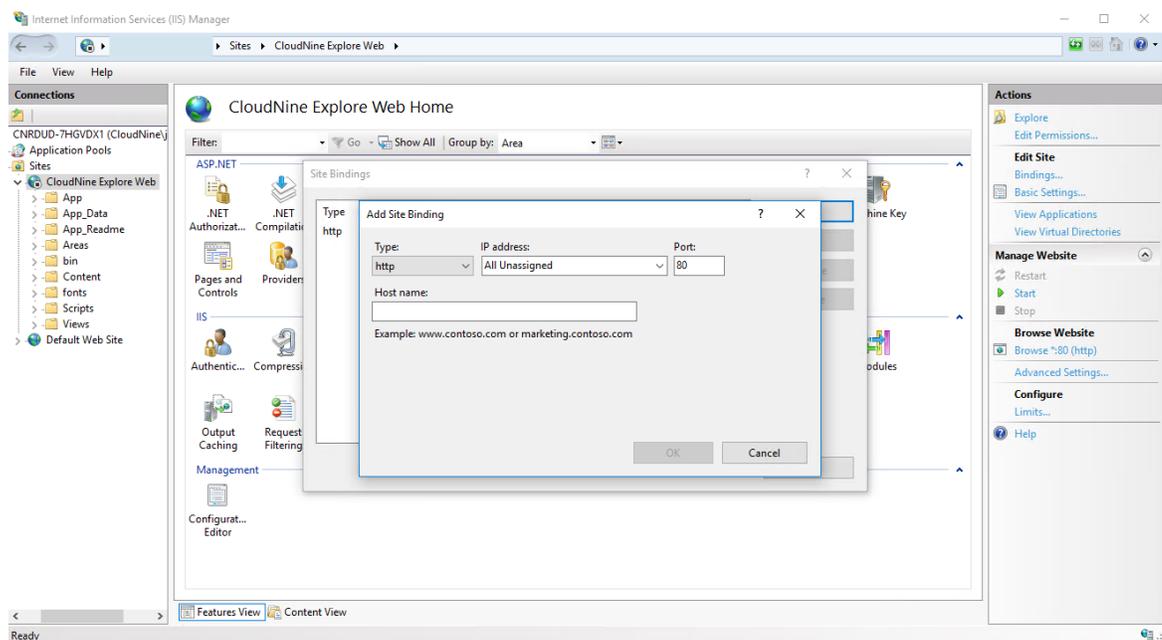
2. Configure IIS SSL settings to require SSL. From Internet information Services Manager (Start > Run > inetmgr), select SSL Settings for the CloudNine™ Explore Web site and select the **Require SSL** check box.
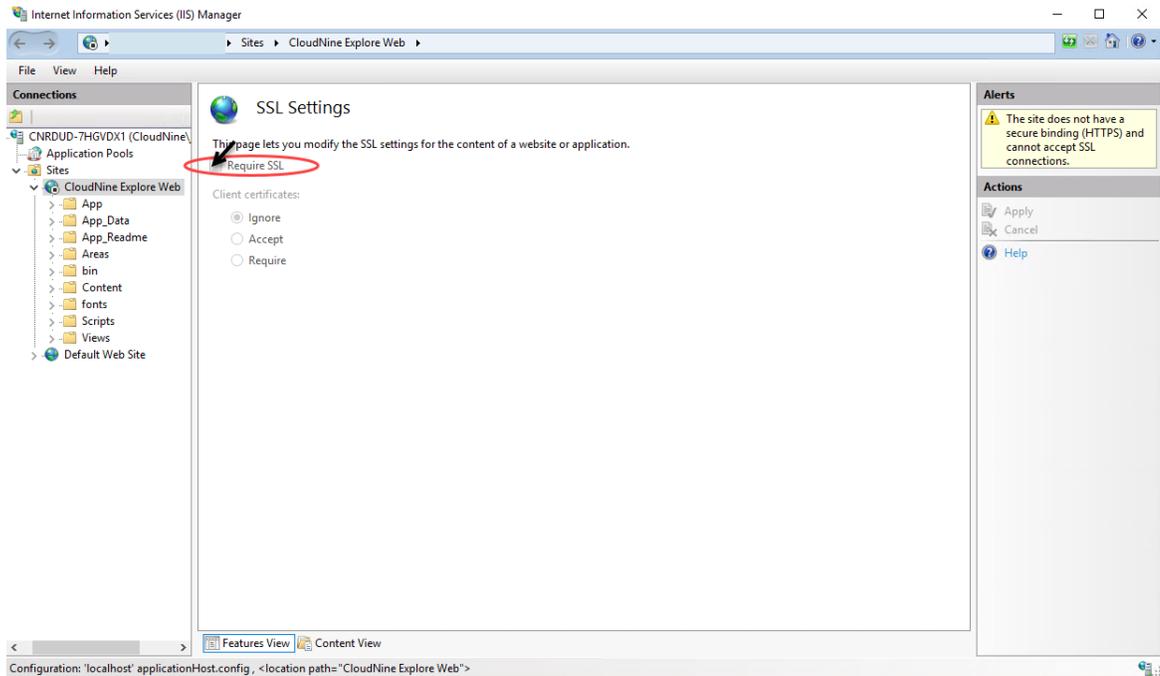
3. Additionally, the cookies should be setup to be httpOnly and Secure. To configure this, edit the web.config file and add the line below to the <system.web> section

    ➢ <httpCookies httpOnlyCookies="true" requireSSL="true" />

4. After editing the web.config file, the Forms Authentication for the site has a setting for SSL cookies that overrides the web.config setting and needs to be changed. From Internet information Services Manager (Start > Run > inetmgr), select the IIS Authentication for the CloudNine™ Explore Web site. Edit the Forms Authentication and select the Requires SSL check box.
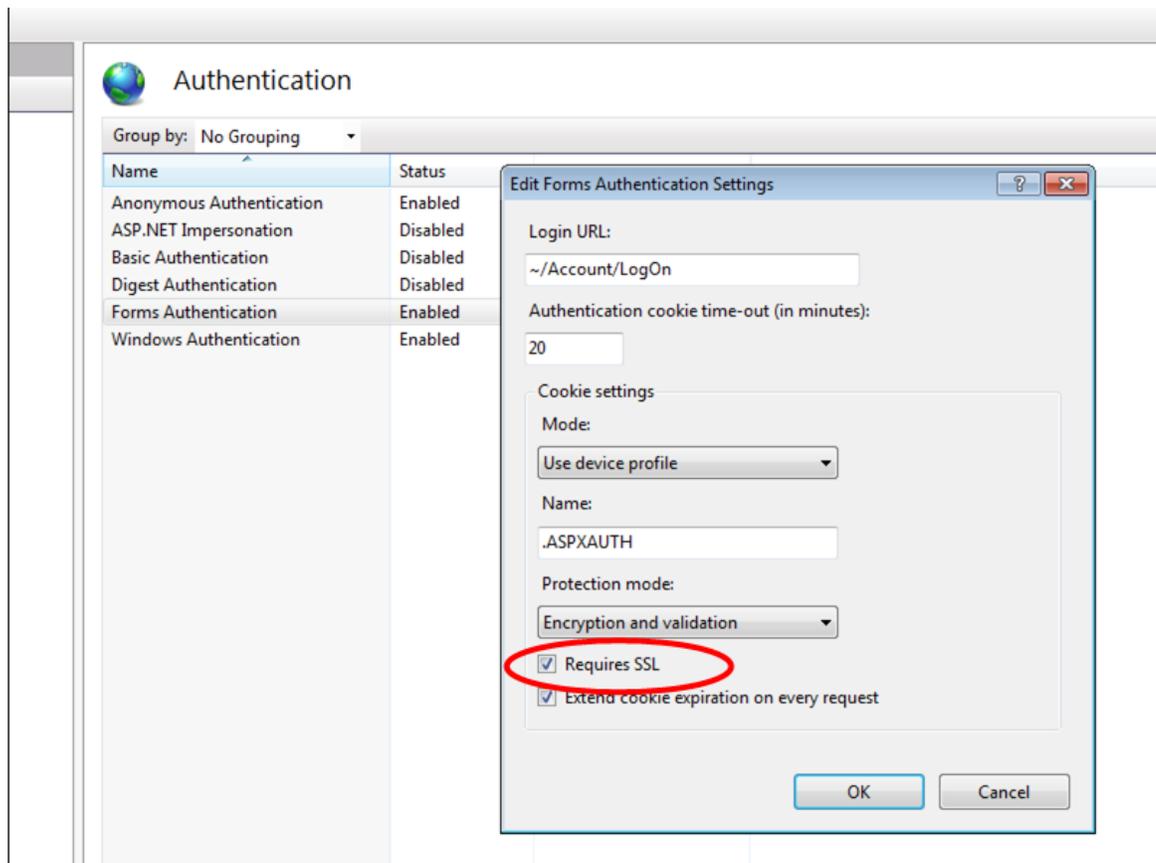
Configure Permissions for Error Logging

The App_Data\XML_Logs directory must have its permissions changed to allow read/write/modify access to it by the account that was configured for the application pool of CloudNine™ Explore Web. The App_Data\XML_Logs is located in the installation folder for example: C:\inetpub\wwwroot\EdaWeb\App_Data\Xml_Logs.

CloudNine™ Explore Web is configured to use IIS httpErrors for friendly error page redirection and to use ELMAH for error logging and display.

As indicated, the App_Data\XML_Logs directory must have permissions changed to allow read/write/modify access to it by the account that was configured for the application pool of CloudNine™ Explore Web.

As configured, the ELMAH logs can be viewed by a browser running local on the Web server by the following url: **https://localhost/elmah.axd**

The ELMAH url presents the error logs in a nicely formatted html display. You may also view the error files in their raw xml format by navigating to the App_Data\XML_Logs directory under the Web site with Microsoft Windows Explorer. Each error is recorded in its own .xml file.

⊟   Although it is possible to re-configure ELMAH to allow remote viewing of the error logs, it is highly recommended for security reason to keep viewing restricted to local access only.

Resolve conflicts in IIS Installation

Installing to a new IIS installation will likely have the default Web site using the same ports that CloudNine™ Explore Web is setup to use. This conflicts with other sites hosted in the same server and will need to be resolved.

For example, CloudNine™ Explore Web may need to be started and the default Web site in IIS may need to be stopped.

Troubleshooting CloudNine Explore Web

Below are several common error messages and their associated resolutions that can occur while setting up and accessing CloudNine™ Explore Web.

TimeZoneOffset field is required

Error Message

Login was unsuccessful. The TimeZoneOffset field is required.

Possible Causes

1. Internet Explorer running in compatibility mode.

2. JavaScript not enabled for browser.

3. Cookies not enabled for browser.

Resolutions

For cause 1:

1. Turn off compatibility mode in Internet Explorer (Tools menu > Compatibility View Settings).

2. Ensure that the site is NOT listed in the sites for compatibility view AND the make sure the following 2 check-boxes at the bottom are NOT selected.

    - Display intranet sites in Compatibility View

    - Display all websites in Compatibility View

For cause 2 and 3:

- Confirm security settings of browser, and ensure JavaScript and cookies are enabled.

Unable to authorize application on license server

Error Message

Login was unsuccessful. Unable to authorize application on license server.

Possible Causes

1. License server setting incorrect.

2. License server has been changed.

Resolutions

Restart IIS Service:

1. Start > run > services.msc

2. Stop the World Wide Web publishing service

3. Start the World Wide Web publishing service

If problem still persists, confirm the current license server setting is pointing to the expected server.

From SQL Server Management Studio, connect to the SQL Server and database that is being used for the CloudNine™ Explore Management Store (ie (local).EDA Management). If you are not sure of the current Management Store, either the web.config can be checked looking at the EDA_ManagementConnectionString or use the CloudNine™ Explore Web Configuration Utility to confirm.

View the settings in the CloudNine™ Explore Management db within the table dbo.EdaSharedProperties. The name of the setting is LicenseServer and the value column contains the server name.

> If making changes to the settings in the database, the IIS service must be restarted on the Web server to pick up the change. This requires an IIS Service restart and not just a restart of the Web site.
>
> If the license server setting is correct, then it may be that the license server is not operating properly (possible restart required of the license server) or that the recent value change and the Web application are still trying to use the old value.
>
> The CloudNine™ Explore Web application will check the license server setting automatically once each day (processing the first request after midnight). Restarting the IIS service will force the Web application to check the server setting on application start.

No licenses available

Error Message

Login was unsuccessful. No licenses available.

Possible Causes

1. Installed CloudNine™ LAW version is older than version 6.3.37.

2. Licenses are not refreshed.

3. All CloudNine™ Explore Web licenses are already in use.

Resolutions

- Confirm CloudNine™ LAW version 6.3.37 or later is being used. This is the minimum version required since this is the first version to support CloudNine™ Explore Web.

- Refresh licenses and confirm CloudNine™ Explore Web licenses are listed.

  o From Law Profile Manager select **File> Refresh License From Internet**.

  o After refresh complete, click the **Advanced** button and look at the licenses for the key(s). Confirm the **ED Analyzer: Web User** shows the expected number of licenses.

- If some users are able or have been able to connect then it is possible that the number of licenses purchased does not match current usage needs. Current licenses in use can be confirmed from the Law Profile Manager. Click the **Advanced** button and look at the licenses for the key(s). Then confirm the **ED Analyzer: Web User** license shows the expected number of free licenses and licenses that are in use.

The user account is locked

Error Message

Login was unsuccessful. The user account is locked, please contact the site administrator to unlock the account.

Possible Causes

After 5 incorrect login attempts within 10 minutes, the user account is automatically locked

Resolutions

- The account will unlock automatically 1 hour after last failed attempt.

- An administrator user can unlock the account.

General Website Error

Error Message

General Website Error. Sorry, an error occurred while processing your request.

Possible Causes

Various causes. This is a generic message sent back to the browser when an exception has occurred on the server. The details of the error are not sent to the browser for security reasons.

Resolutions

Navigate to the URL **http://localhost/elmah.axd** from a browser local on the Web server to identify the error details which can then be used as a starting point for troubleshooting. (Please see **Installing CloudNine™ Explore Web** more information on error handling and ELMAH).

No cases available

Error Message

No cases available.

Possible Causes

The current user account has not been assigned to any cases.

Resolutions

Have an administrator assign the user to a case or cases from the Administration module in CloudNine™ Explore Web.

Unable to open case

Error Message

Unable to open case - unspecified error

Possible Causes

Various causes.

Resolutions

Navigate to the URL **http://localhost/elmah.axd** from a browser local on the Web server to identify the error details which can then be used as a starting point for troubleshooting. (Please see **Installing CloudNine™ Explore Web** more information on error handling and ELMAH).

Invalid Case Directory

Error Message

Invalid Case Directory: Unable to open case. Please verify the location of the case directory. Case directory not found at: <CASEDIRECTORYPATH>

Possible Causes

1. Case directory does not exist.

2. Case directory is not accessible.

3. The account used for the CloudNine Explore Web IIS application pool does not have permissions to the location.

Resolutions

- Confirm that the directory specified in the error message is correct and does exist.

- Confirm that the directory is accessible from the Web server to that location.

- Confirm that the account used by the CloudNine Explore Web IIS application pool has permissions to the case directory specified.

The application pool identity that is configured can be confirmed or changed in Internet information Services Manager (Start > Run > inetmgr). Click **Application Pools** in the left pane under the server name. In the center pane, right-click **CloudNine™ Explore Web** and then click **Advanced Settings**. The identity setting under the Process Model section shows how the Web app will access the resources.

After confirming the identity being used by the application pool, confirm that account has access to the case directory. This can be done from Windows Explorer. Navigate to the directory and right-click the folder. Select security and confirm the account has access.

Below is an example of adding the ApplicationPoolIdentity account access to the case directory (note: this account can only be used if the Web server also has the

case directories and SQL Server all on the same box, if that is not how your components are deployed then either a Network Service account or specific user account in the domain should be used for the application pool identity)

Add IIS APPPOOL\CloudNine™ Explore Web as a user to give rights to case directory:

1. Open case directory from Windows Explorer.

2. Right-click Case folder.

3. Click Add.

4. Set 'location' to that machine.

5. Add IIS APPPOOL\CloudNine™ Explore Web and give full control.

SVG Support Required

Error Message

SVG Support Required. This feature requires a browser with SVG support.

Possible Causes

1. Browser does not have SVG support.

2. Browser does not have support for ECMAScript 5.

Resolutions

Use any one of the supported browsers. See Supported Client Browsers in the **System Requirements**.