

# **OrCAD Component Information Portal Client Installation Guide**

**Product Version 23.1  
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# 1 What is the CIP Client?

The Component Information Portal (CIP) Client is an application that is loaded by Cadence OrCAD Capture CIS. The installation of the CIP client is only necessary for users who have OrCAD Capture.

A few examples of the functionality added by the CIP Client include the following:

- **Part Preview** – Symbols for a component can be previewed by selecting the Preview button next to the schematic part name in CIP as shown in the following figure. The symbol libraries used for part preview come from your CAPTURE.INI file.
- **Place Part** – Symbols for a component can be placed from CIP directly onto an open OrCAD Capture schematic page. The symbol libraries used to place parts come from your CAPTURE.INI file.
- **Footprint Preview** – Footprints for a component can be previewed by selecting the Preview button next to the PCB footprint name in CIP. Footprint libraries used for footprint preview come from your CAPTURE.INI file.
- **Compare Symbol and Footprint** – Schematic Symbol(s) and PCB Footprint(s) of a component can be compared to show whether pin numbers and pin counts match.
- **Creation of Reuse Module** - Symbol for a reuse modules can be created from a design file.
- **BOM Import from design file** - Parts from an opened design file can be imported directly into CIP.
- **Build symbols and footprints using OrCAD Library Builder** – Library Builder will open automatically to the manufacturer datasheet.

The screenshot shows the CIP interface with a 'Preview' window open for the part ADS7280IP. The preview window displays a schematic symbol with the following pin connections:

Pin	Label	Value
1	+VA	
2	+IN1	
3	+IN0	
4	COM	EOC_INT_CDI
5	AGND	
6	REF-	
7	REF+	
8	NC	
9	CONVST	
10	EOC_INT_CDI	
11	SCI	
12	SCLK	
13	SDO	
14	BDGND	
15	+VBD	
16		

The main window shows a table of part properties:

Property	Value
Part Type	EMA\SMD\Co
Value	ADS7280IP
Schematic Part	ADS7280IP
Temperature Maximum	85C
Package Size	16-TSSOP
Package Type	SMD
Rated Power	13.7mW
Supply Current	

Callouts in the image identify the 'Place Part Buttons' (the 'Place' button in the preview window and the 'Place' button in the main window) and the 'Part Preview Button' (the 'Preview' button in the main window).

CIP Place Part and Part Preview

The CIP Client installer installs files that are loaded by Cadence OrCAD Capture CIS and run from the Capture environment.

## 2 Client Installation and Setup

This Client Installation Guide provides the following instructions:

1. [Installation of CIP client files](#)
2. Set up [CIP URL](#) within CIP client installer or manually from CIP Setup
3. Set up [Library Builder](#) path within CIP client installer or manually from CIP Setup
4. Set up footprint viewer path
5. Set up and validation of [ODBC data source](#) (required when using CIS Explorer)
6. [Update CAPTURE.INI](#) for OrCAD Capture CIS
7. Set up and validation of [CDS\\_SITE environment variable](#) for System Capture

### 2.1 Required Information

To proceed with your client installation, you need the CIP Client installer as well as the following information:

- Server name of the SQL Database Server

The SQL server name is used to connect Capture CIS to the CIP database. View access to the CIP database is available through the CIS Explorer or CIP after installation is successfully completed.

- Server name where the configuration files are stored

The full path to the configuration file including the filename is added to your CAPTURE.INI file during the installation process

- Location of the Schematic Symbols and Allegro Libraries

The full path to the Schematic Symbols and Allegro Libraries are added to your CAPTURE.INI file during the installation process. This enables Capture CIS to use the symbols and footprints from the central library location.

### ***Prerequisites***

To fully obtain the benefits of product integration, configuration of CIP, Cadence OrCAD Capture CIS, Cadence System Capture and OrCAD Library Builder and the corresponding versions of the following application are required:

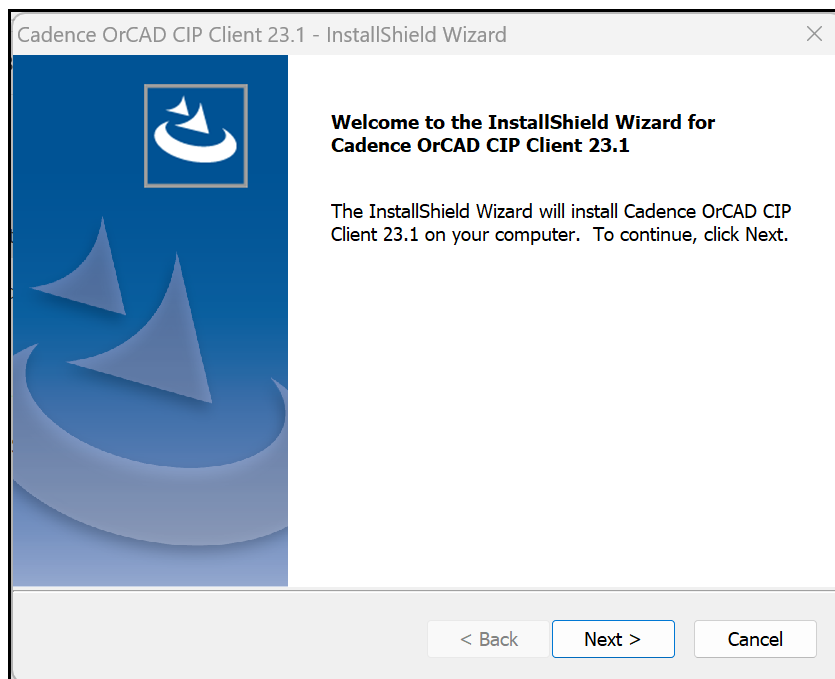
- OrCAD Capture CIS and System Capture
- OrCAD Library Builder
- Windows 10 Pro or Above, Windows 11 Pro or Above (versions supported by Microsoft)
- Allegro Free Viewer
- Allegro PCB Editor (Required only if using Compare Symbols to Footprint functionality)

## 2.2 Installing CIP Client

**Note:** Use of CIP Client version matching your CIP Web Application version is recommended.

### To start the client installation

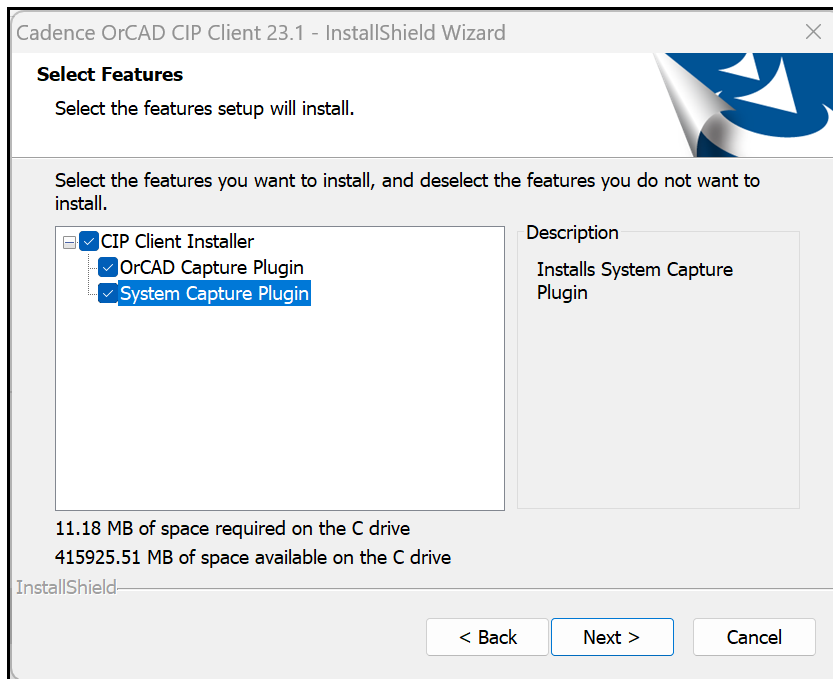
1. Run the **CadenceOrCADCIPClient23.1Setup.exe** installer.



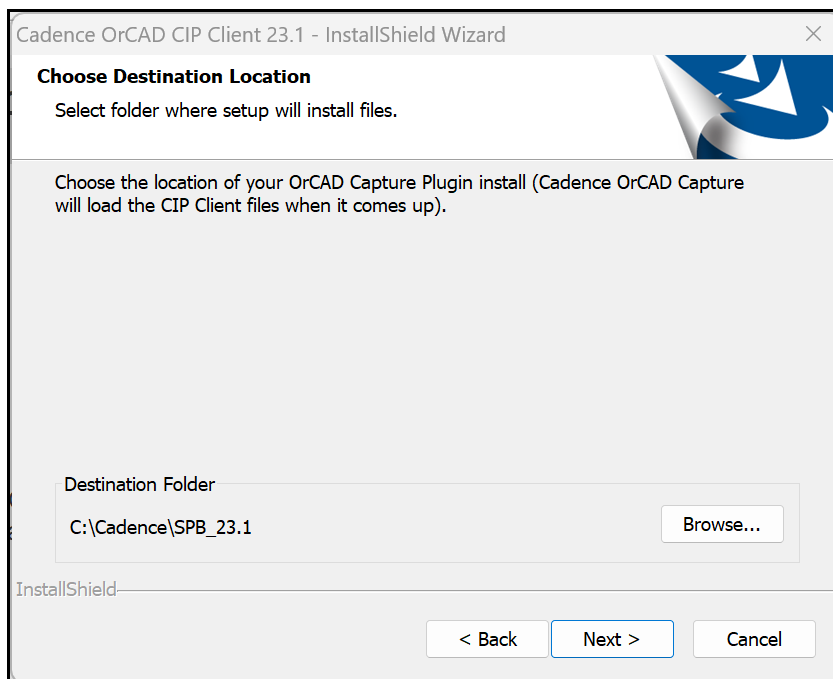
CIP Client Install Welcome

2. Click **Next** to continue.

3. Read the license agreement and click **I accept** before continuing with the rest of the installation.
4. Select the CIP Client Plugin you want to install. You may install both if you use both OrCAD Capture and System Capture.

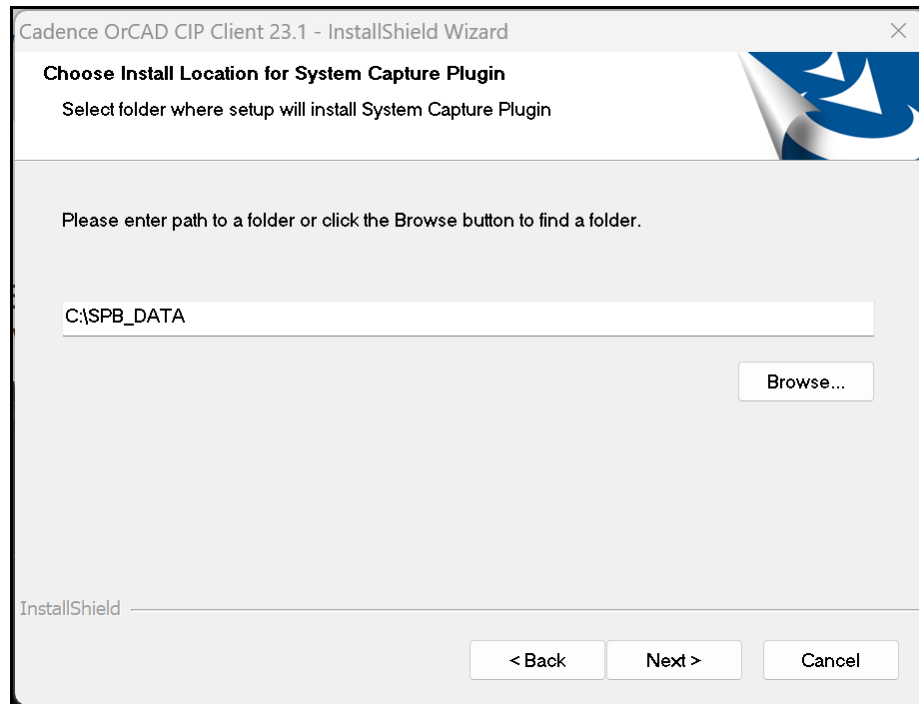


5. If OrCAD Capture Plugin is selected, select the location of your Cadence 23.1 installation to install the OrCAD Capture Plugin.



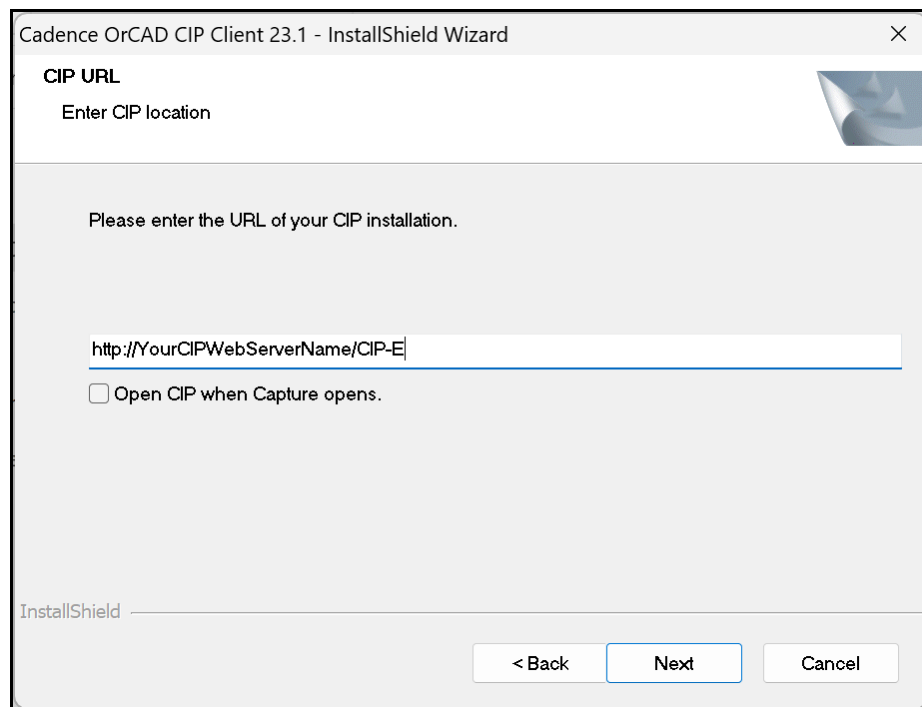
CIP Client Install Location

6. If System Capture Plugin is selected, select the location of your "HOME" environment variable to install the System Capture Plugin.



**Note:** The folder in which OrCAD Capture and System Capture loads TCL files are different. If an issue occurs or you do not see the CIP menu item in either OrCAD or System Capture, review the [Troubleshooting Installation](#) section for possible causes and solutions.

7. Click **Next** to continue to set up your company CIP web address. Enter the web address of your company's CIP server into the text input field.



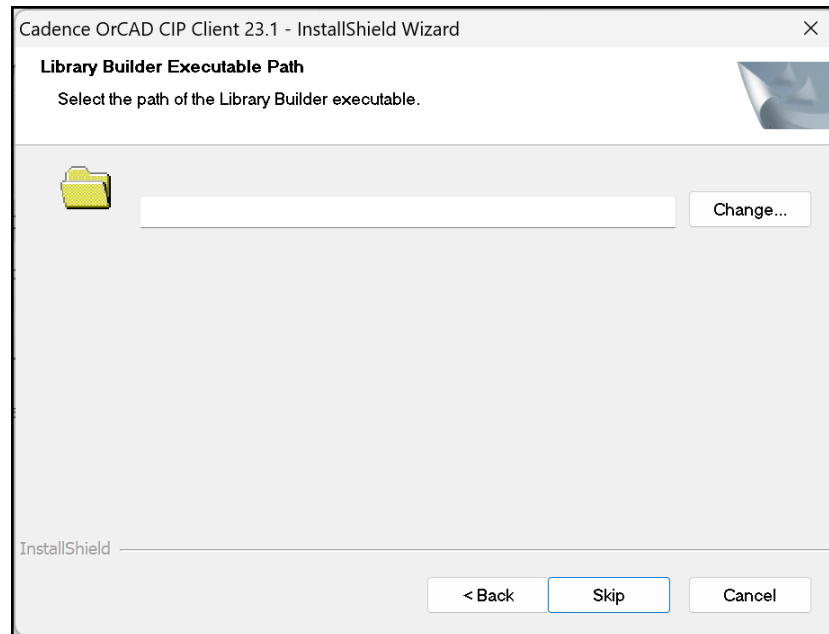
Configure CIP URL with Installer

**Note:** If the URL of your company's CIP server is unavailable at the time of install, you can leave the input field blank and [configure the CIP URL](#) after installation is complete.

8. Click to place a check mark in the check box, **Open CIP when Capture opens**, if you want CIP to automatically start when you open Capture.
9. Click **Next** to continue.

At the Library Builder Executable Path screen, add the path to your Library Builder executable. If you don't have Library Builder installed, skip this step. If you install Library Builder after this installation, you can [add the Library Builder executable location](#) at that point.

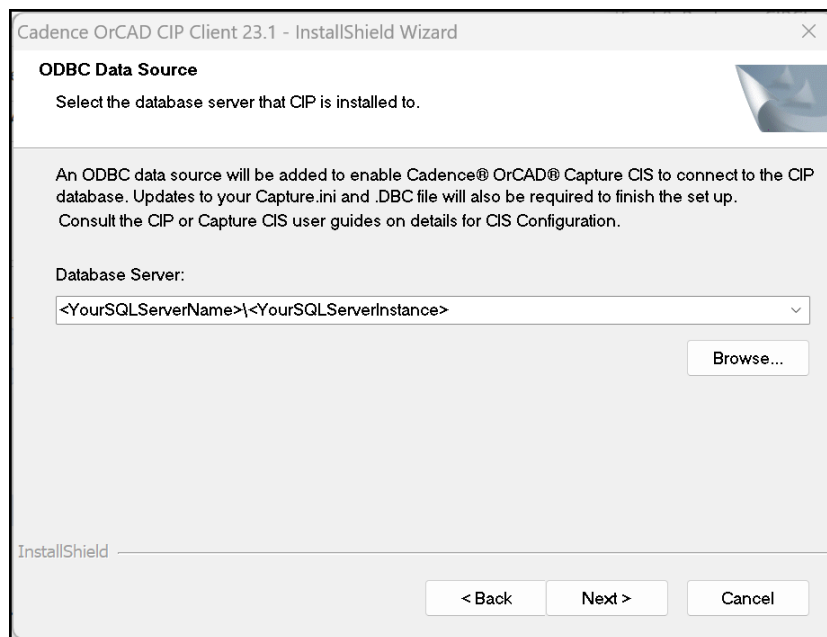




Set up Library Builder Executable Path with Installer

10. Click **Next** to continue.

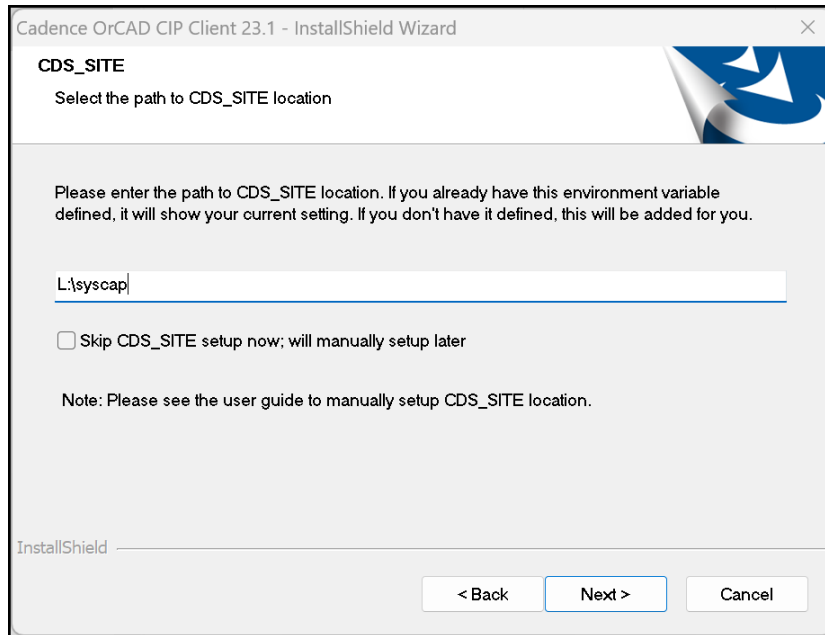
If the OrCAD Capture Plugin is selected, an ODBC setup dialog appears. The ODBC Data Source screen sets up your data source for the CIP database. If you already have the CIP-E\_CIS\_DB data source set up, leave the input field blank. If this is your first time connecting your Capture CIS to CIP, enter the SQL Server Name into the input field. If the SQL Server Name is either unavailable or you need to change this later, see the section regarding [manual set up of client ODBC data source](#) to change or set this up.



ODBC Data Source Setup with Installer

### 11. Click **Next** to continue.

If the System Capture Plugin is selected, a CDS\_SITE setup dialog appears. Enter the location of your CDS\_SITE. If you already have this environment variable defined, it will show your current setting. If you don't have it defined, this will be added for you. The section [Manual Setup or Edit to CDS\\_SITE Environment Variable](#) provides instructions on how to add or change this variable manually when needed.



### 12. Click **Next** and then click **Install** to finish the installation.

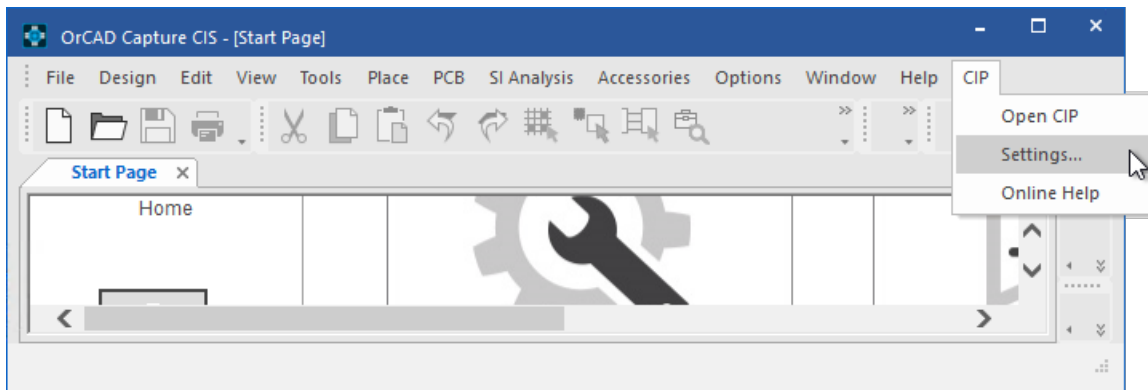
You can validate the creation of the ODBC data source by following the instructions for [manual setup of Client ODBC Data Source](#).

## 2.3 Updating CIP URL and Settings

### To change the CIP URL

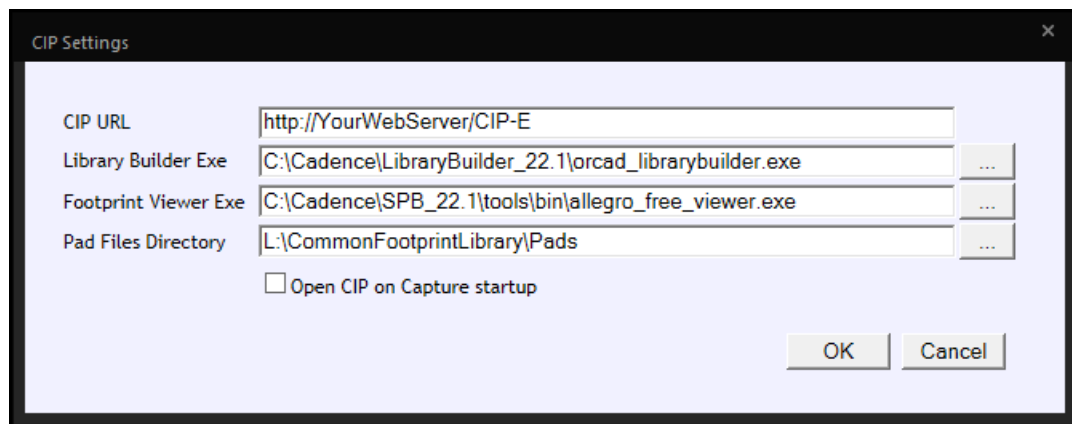
1. Open OrCAD Capture.
2. Select **CIP** from the top menu bar and then click **Settings....**

If **CIP** is unavailable from the top menu bar, see the [Troubleshooting Installation](#) section.



The CIP Settings pop-up opens as shown in the following figure.

3. Enter the web address of your company's CIP. If you want CIP to automatically open when you open Capture, select the check box, **Open CIP on Capture startup**.



CIP Set Up screen

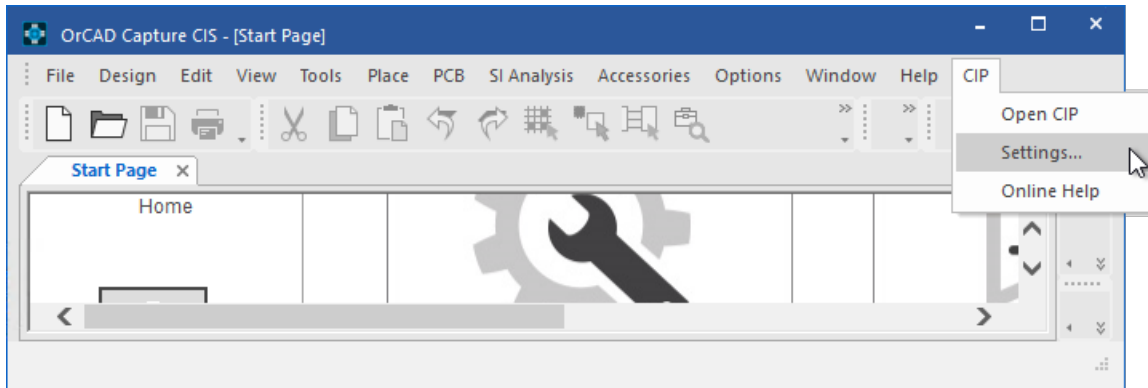
4. Click **OK** to save the settings.
5. To open CIP, select **CIP** from the top menu bar and then click **Open CIP**.
6. Log in to CIP using your assigned log in. If you see a blank screen when you open CIP or when using Windows log in, you may need addition settings to [resolve your blank screen](#).

## 2.4 Updating Library Builder Executable Location

### To change the Library Builder executable

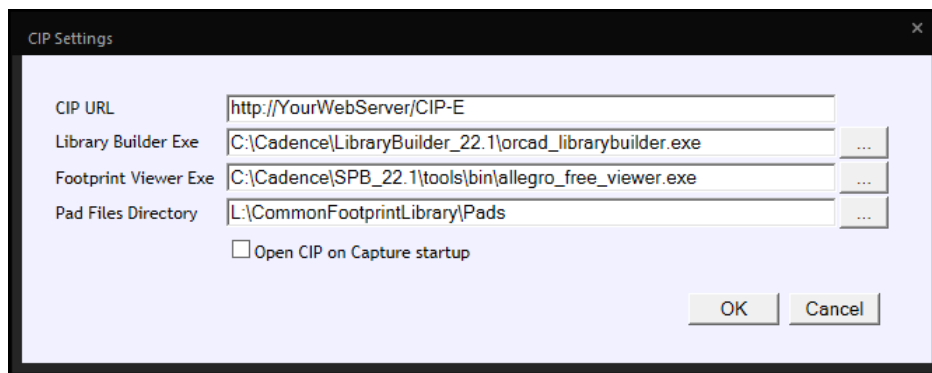
1. Open OrCAD Capture.
2. Select **CIP** from the top menu bar and then click **Settings....**

If **CIP** is unavailable from the top menu bar, see the [Troubleshooting Installation](#) section.



The CIP Settings pop-up opens, as shown in the next figure that follows.

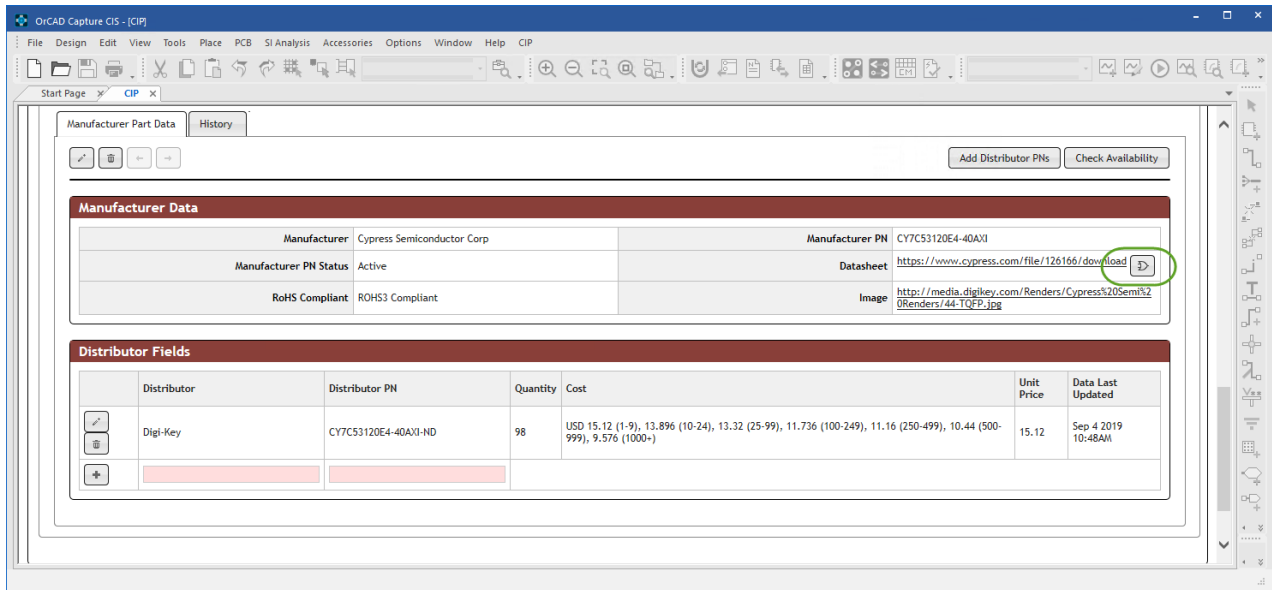
3. Enter the path of your Library Builder executable or select the ellipsis button to navigate to your Library Builder executable.
4. Enter the path to the executable file for your Footprint Viewer if you want to setup footprint previewing.
5. If you are creating footprints using Library Builder, enter the Pad Files Directory.
6. Click **OK** to save the settings.



**CIP Set Up screen**

7. To open CIP, select **CIP** from the top menu bar and then click **Open CIP**.

The Library Builder executable will be open when you select the Library Builder button, as shown in the following figure.



Library Builder Button Shown Inside CIP

## 2.5 Manual Setup of Client ODBC Data Source

The instructions that follow guide you through the creation of the Client ODBC data source. These instructions can also validate the data source as well.

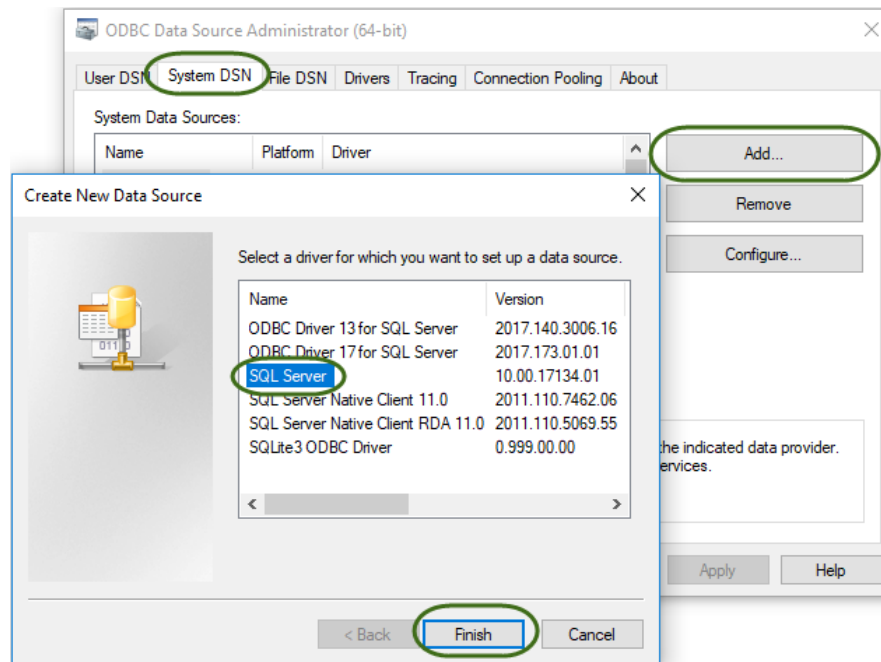
If users are unable to complete this procedure, verify the user has local administrative permissions on the client machine.

### To open the ODBC Data Source Administrator

1. Select the menu items, **Start > Control Panel > Administrative Tools > Data Source (ODBC)**.

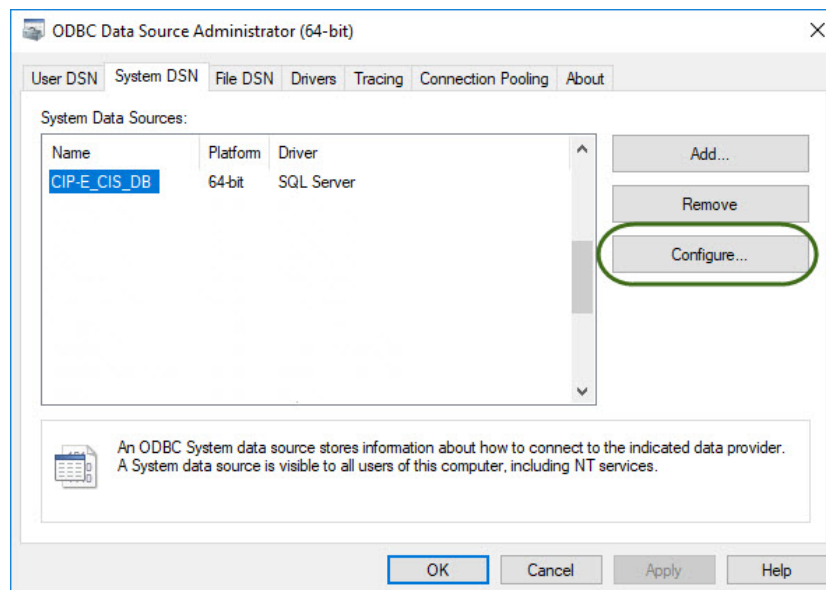
**Note:** Use the 64 bit ODBC data source.

2. If not configured with the CIP Client installer, click on the **System DSN** tab.
3. Click **Add**.
4. Select **SQL Server** and click **Finish**, as shown in the following figure.



Creating an ODBC Data Source

5. If you already have CIP-E\_CIS\_DB created, select **CIP-E\_CIS\_DB** and then click the **Configure...** button.
6. Follow the rest of the instructions in this section to verify that the ODBC data source is correct.



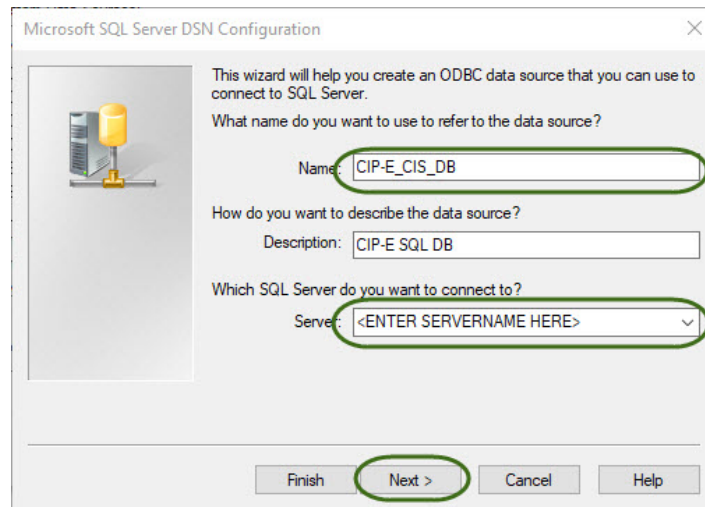
Configure ODBC Data Source

7. Enter the following information:

Data Source Name: CIP-E\_CIS\_DB

**Note:** All CIS Users must use the same data source name.

- Description (Optional)
- The name of the SQL Server hosting the CIP-E SQL Database.



**ODBC Name and SQL Server Database Selection**

8. Click **Next** to continue.

You will next need to authenticate to the CIP-E SQL database.

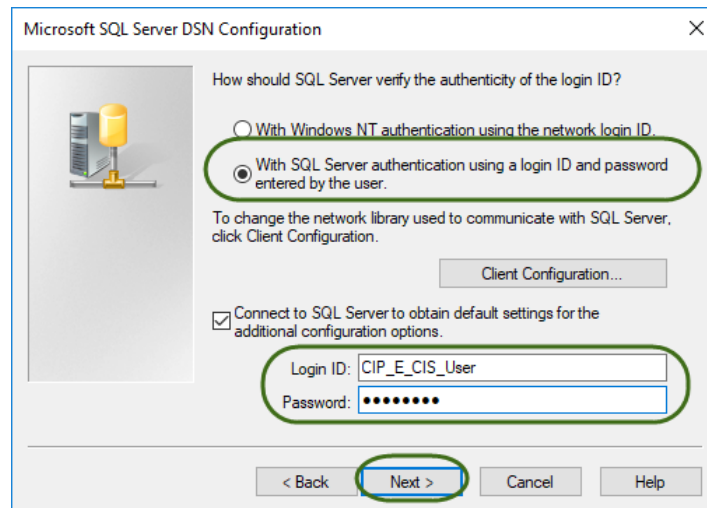
9. Select **With SQL Server Authentication...** and enter the username and password shown below. This username and password will be needed to access the CIP\_E database from CIS.

If the password has been changed after installation, you will need to obtain the new password your database administrator. The password that comes pre-installed with the software is as follows:

Username: CIP\_E\_CIS\_User

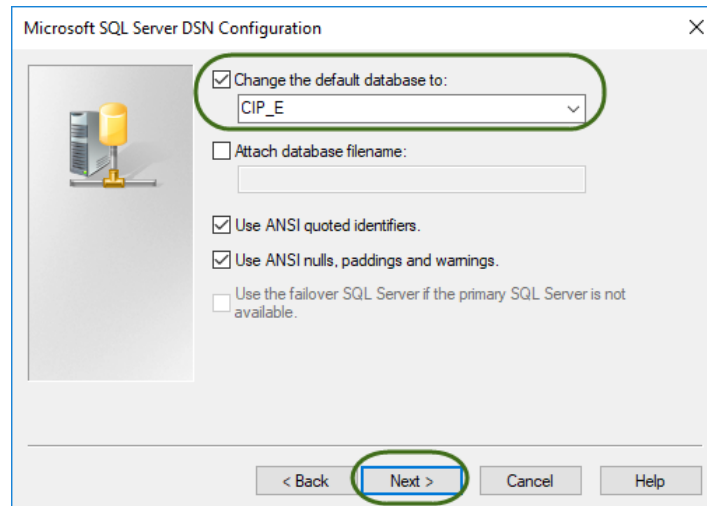
Password: Test1234

**Note:** The CIP\_E\_CIS\_User account does not have full access to the CIP\_E database. Access to the SQL server and any database is normally controlled by a company's IT or DBA. Users needing to import data should contact the IT or DBA for access.



**Set Authentication Mode, Login and Password**

10. Click **Next** and ensure that the default database is CIP\_E.



**Set Default Database**

11. Click **Next**, then click **Finish**. Click **OK**.

You will now see your new connection in the **System DSN** tab. Click **OK** to close the ODBC Data Source Administrator.

## 2.6 Updating the CAPTURE.INI File on a Local Client machine

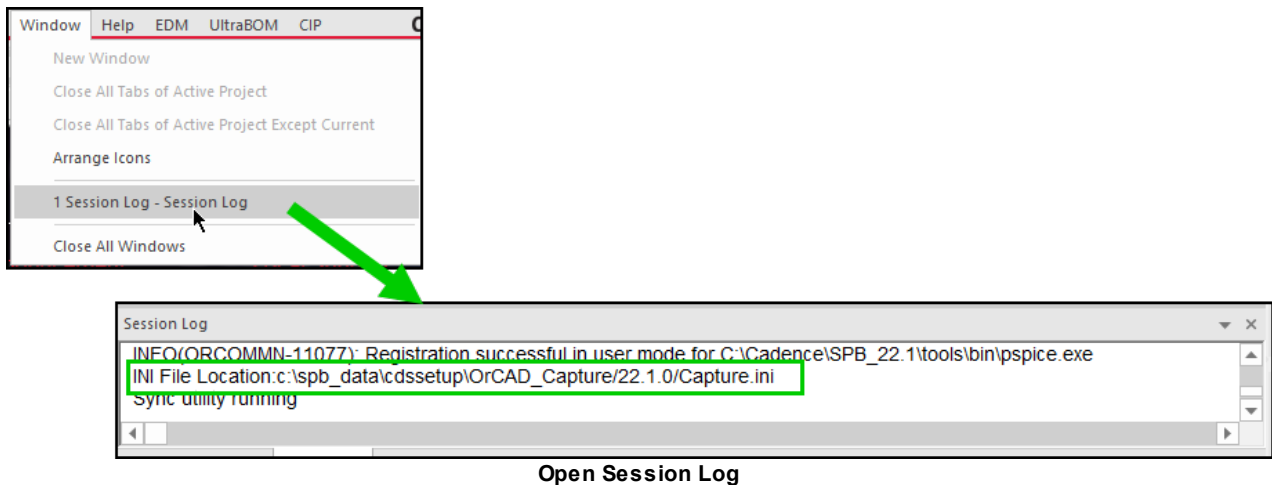
OrCAD Capture CIS uses the CAPTURE.INI each time it opens. The CAPTURE.INI file needs to correctly identify the path to your DBC file and library directories, or you need to edit the file. Each time you place a part from either CIS Explorer or CIP, Capture uses the DBC file and library directory identified in your CAPTURE.INI file.

Before you update the CAPTURE.INI file, be sure to create a backup copy of the CAPTURE.INI.



## To update the CAPTURE.INI file

1. Identify the exact CAPTURE.INI file used by OrCAD Capture by starting Capture and selecting **Windows > Session log** to open the session log. See example below.



2. Create a backup copy of your CAPTURE.INI file.
3. Close Capture.
4. Open the CAPTURE.INI file. A SampleCapture.ini may be downloaded using the CIP web help.
5. Find the corresponding sections in your CAPTURE.INI file that identify path directories.

**For example:** The highlighted paths in the following example need to be modified with your UNC path. If any of these do not exist in your CAPTURE.INI file, you may add them anywhere after the line that contains "Version=".

```
[Part Management]
Configuration File=\\<SERVER NAME>\CIP-E\Configuration_Files\<NAME OF DBC FILE>
TABLES OPTION=TABLE,VIEW
[Footprint Viewer Type]
Type=Allegro
[Allegro Footprints]
Dir0=\\<SERVER NAME>\CIP-E\Allegro_Library\symbols
[Part Library Directories]
Dir0=\\<SERVER NAME>\CIP-E\Schematic_Symbols
```

6. Enter the appropriate file name for the <NAME OF DBC FILE> of the Part Management entry. The following four sample .DBC files are included with the CIP Web application installation: Any changes made to the .DBC file should be changed to a new filename. Changes made and saved with original .DBC filenames in the installed locations will be overwritten the next time CIP installation is upgraded.
  - CIP-E V7.7 CIS DB.DBC

This DBC file is configured with out-of-the-box settings for CIP that includes distributor part information in the manufacturer display. Each distributor part information is shown on a separate line along with the corresponding manufacturer part information. If any of the user fields or other fields have an alias to another name, you will need to update the DBC file using CIS configuration option in Capture CIS.

- CIP-E V7.7 CIS DB\_NODISTRIB.DBC

This DBC file is configured with out-of-the-box settings for CIP that does not include distributor part information in the manufacturer display.

- CIP-E V7.7 CIS DB\_WITHCOMPLIANCE.DBC

This DBC file is configured with out-of-the-box settings for CIP with Compliance Module log in enabled. The DBC file configuration includes distributor part information in the manufacturer display.

- CIP-E V7.7 CIS DB\_NORELATIONAL.DBC

This DBC file is configured with out-of-the-box settings for CIP without any relational table settings.

- CIP-E V7.7 CIS DB\_WITHCOMPLIANCE\_NOSILICONEXPERTPNS.DBC

This DBC file is configured with out-of-the-box settings for CIP with Compliance Module log in enabled with all distributor part information but without Silicon Expert Part Number.

Note: If any of the user fields or other fields have an alias to another name, you will need to update the DBC file using the CIS configuration option in Capture CIS. Instructions that explain how to create and change .DBC files are located in the Capture CIS help for OrCAD CIS User Guide, in the Setting Database Table Property Options section.

As mentioned above, the .DBC files listed above are installed with the CIP Web Application. Contact your Web Server system administrator to obtain copies of these files.

## 7. Save the CAPTURE.INI file and open OrCAD Capture CIS.

Note: The first time a user opens the CIS Explorer Window, password entry for the CIP\_E\_CIS\_User is required. The default username and password for the CIS Explorer Window are as follows:

```
Username: CIP_E_CIS_User  
Password: Test1234
```

After typing in the password, the user will be able to retrieve parts that are in the common CIP database.

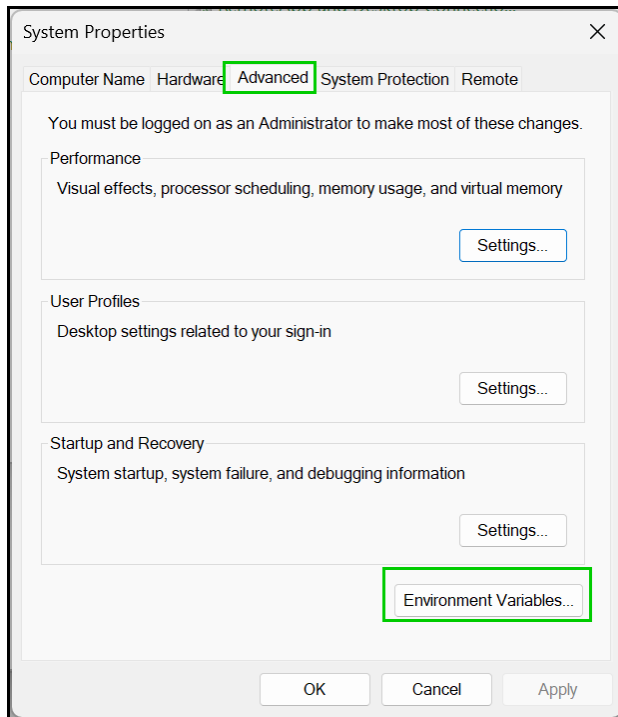
Contact your Admin if this password has changed.

## 2.7 Manual Setup or Edit to CDS\_SITE Environment Variable

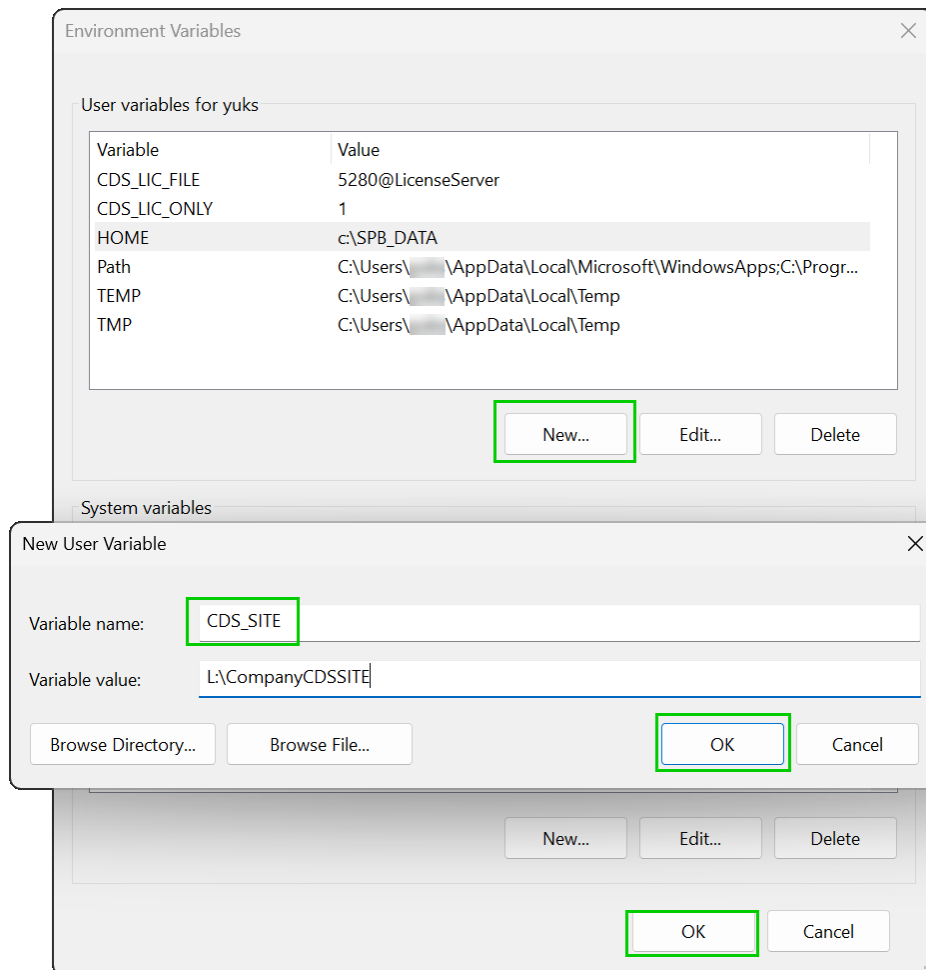
When using the System Capture Plugin, access to library symbols will require setup of CDS\_SITE environment variable and common library symbols. Close System Capture before you start the following setup.

### To add the CDS\_SITE environment variable

1. Select the menu items, **Start > Control Panel > System > Advanced system settings**.



2. Click on the **Advanced** tab.
3. Click the **Environment Variables** button.



4. Click **Add**.
5. Enter *CDS\_SITE* for the **Variable name** and the path to your company CDS\_SITE for the **Variable value**.
6. Click **OK**.
7. Click **OK**.

Your CDS\_SITE environment variable is now set up for System Capture.

### To verify that the environment variable is set up for System Capture

1. Launch System Capture
2. Click **Session Log** tab

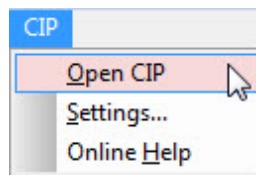


### 3 Troubleshooting Installation Problems

The troubleshooting instructions that follow help you debug typical installation problems that are associated with the CIP Client installer. Please contact your Cadence channel partner if you have any questions or continue to have an installation issue.

#### Menu Item is Not Available or Not Correct

After you open Capture, the menu option to **Open CIP** is missing from the menu bar:

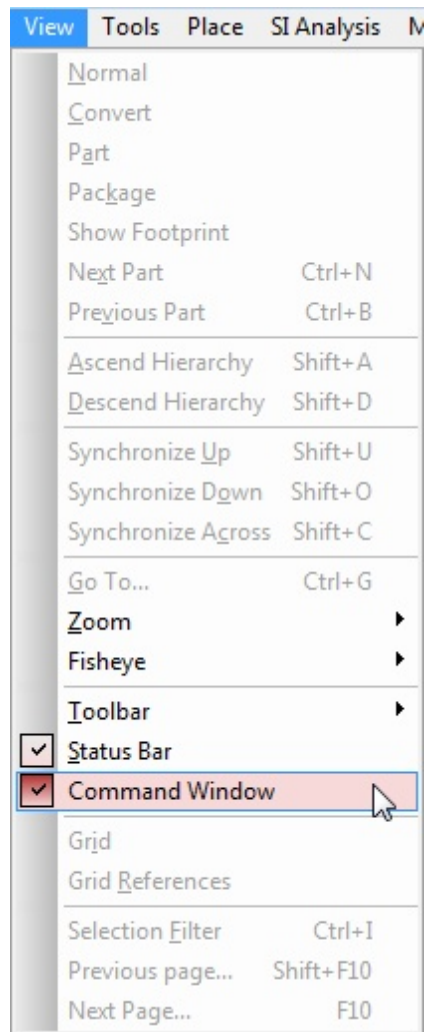


The version of CIP you are installing needs to match the version of Capture you are running. For example, if you are installing CIP client version 23.1 verify you are running OrCAD Capture 23.1.

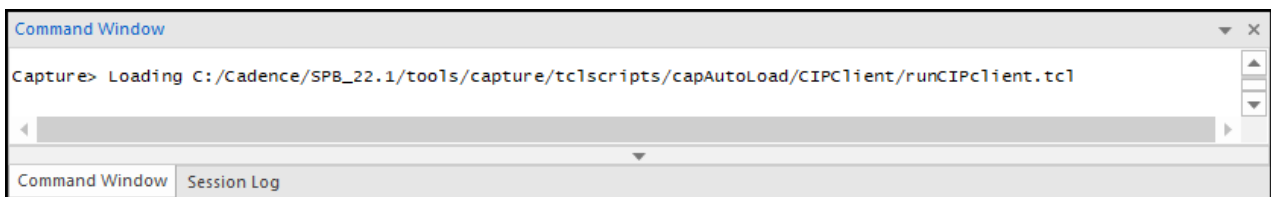
If you see CIP but the rest of the menus options are incorrect, make sure that you did not move any of the files after installation. If you did, remove all files and re-install. (Moving files can cause Capture to do partial loading of CIP Client files. Making copies of the files and putting them in various Cadence directories may also cause problems as you upgrade, since Capture will load TCL files from various locations.)

CIP Client must be installed to CDSROOT or Cadence installation folder.

If you are unsure whether the CIP client files loaded without errors, open your command window. While in Capture, select **View -> Command Window** (see figure below).



Locate where `runCipClient.tcl` is loading. The command window should look similar to what is shown in the following figure. If you don't see the line for loading of the corresponding `runCIPClient.tcl` in your command window, then CIP client most likely did not install in a location where Capture loads TCL files from. If there are errors with this load file in the command window, you will need to follow the error message to see the source of the problem. You can try removing the installation and all files and install the files again, or contact your Cadence channel partner.



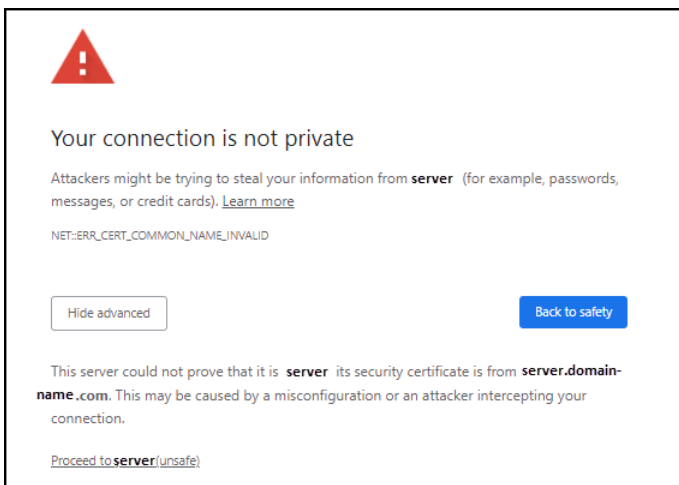
### 3.1 CIP Shows Blank Screen When Using Windows Login in Capture

Blank CIP screen inside Capture may be caused by one of two scenarios.

1. [Certificate Warning not shown in Capture](#) - When you open CIP while in Capture, a blank screen shows whereas when you open CIP in a standard browser, you see a certificate warning where you can accept risks to continue.
2. [Domain Login issue](#) - When you log in from inside Capture using Windows Domain login, you see a blank screen. However, when you log in using a standard browser with Windows Domain login, you are able to see the CIP search page after you enter your credentials.

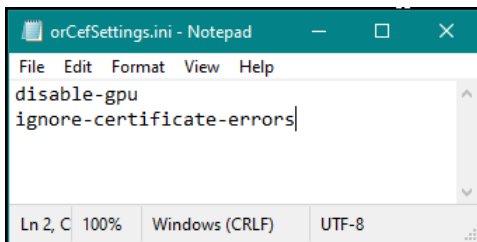
### Certificate Warning Issue

If your CIP website is set up with a certificate that is not recognized as a valid certificate by a browser, the browser shows a certificate warning. A sample figure of the warning is shown below.



Sample Certification Error

Each browser shows this warning until you accept the risk and proceed to the site. To accept the risk while using the browser inside Capture, insert "ignore-certificate-errors" into the orCefSettings.ini located in <Cadence\_SPB\_install\_directory>\SPB\_17.4\tools\bin\ as shown in the following figure. Update this file for all users.



### CIP Blank Screen with Windows Domain Log In

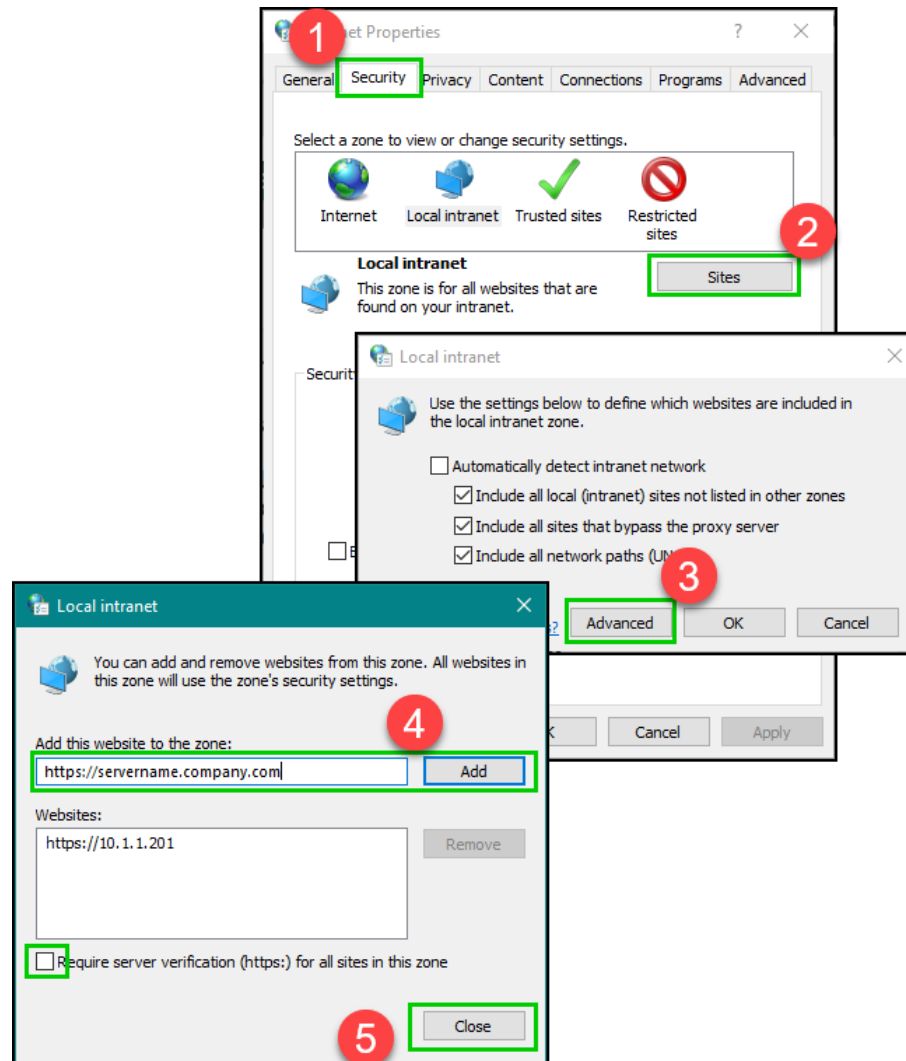
When you log in using Windows domain login from a standard browser and you are required to re-authenticate, the browser will automatically open a pop up for you to enter your login information. The need to re-authenticate is related to trust not having been established between the client browser and the domain where CIP is installed. Possible causes include:

- Your PC or VM hasn't been joined to the domain.

- You logged into your PC or VM using a local login.
- Your CIP website URL is entered using an IP address.
- Your CIP website URL is entered using a fully qualified domain name (FQDN).

Potential solutions include:

- Ensure that your PC or VM is joined to the domain and is trusted by the domain.
- Ensure that you are logged into your PC using your windows domain (not a local) login.
- If you must use an IP address or FQDN, add the domain to the list of trust sites. To add a domain to trust sites, select Start > Control Panel > Internet Options. Follow the steps shown in the following figure.



### 3.2 Error Loading runCIPClient.tcl

After installing the CIP client and starting OrCAD Capture, you see an error similar to the following in the Command Window.



```
Error loading
C:/Cadence/SPB_22.1/tools/capture/tclscripts/capAutoLoad/CIPClient/runCIPclient.tcl
: can't find package Tk.
```

Cause: The most likely cause of this problem is that you have either a **TCL\_Library** or **TK\_LIBRARY** environment variable defined.

Solution: You will need to remove these environment variables. Further explanation can be found from the following link: [https://wiki.tcl-lang.org/page/TCL\\_LIBRARY](https://wiki.tcl-lang.org/page/TCL_LIBRARY)

### 3.3 Technical Support

Please contact your Cadence channel partner with any questions you may have.