

OrCAD Component Information Portal Installation Guide

**Product Version 17.4-2019
October 2019**

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1 Introduction

CIP complements Cadence® OrCAD® Capture CIS. CIP is comprised of the following three components and optional Starter Library:

- **CIP Web Application** – provides access to the CIP/CIS database as defined by user permissions
- **CIP Database** – a centralized MS SQL database that is directly accessible from both CIP and Capture CIS and provides quick and easy access to engineering data
- **CIP Client** – enables users to preview and place parts directly from CIP onto a Capture schematic design. To use CIP standalone, users simply open CIP using a standard browser.

Note: When using OrCAD CIP Web application version 17.4.5 or higher, the CIP Client plugin must also be 17.4.5 or higher.

- **Optional Starter Library** – contains over 5,000 manufacturer parts with datasheets, PCB footprints, and schematic symbols.

NOTE: The Installer for CIP product version 17.4-2019 is different from the 17.2-2016. If you are upgrading to this installation, make sure to read the installation instructions.

This Installation Guide provides step-by-step instructions for installing the Component Information Portal (CIP). Installation of the CIP Client is a separate procedure that is explained in the CIP Client Installation Guide. Instructions for using CIP are provided separately in the CIP User Guide. After your CIP installation is completed, the CIP User Guide can be accessed directly from the CIP web interface, from the help link located in the upper right hand corner of the page.

CIP license management is based on FlexLM. FlexLM version 11.14 is required and is included with Cadence License Manager Version 12.08 or higher.

The organization and order of sections in the CIP Installation Guide, follow the order of installation steps. After you review the instructions provided in this CIP Installation Guide you will be able to:

- Gather prerequisite information needed to install the CIP Web Application and database. ([Preparing for Install](#))
- Install and configure the CIP Web Application and database ([Installing CIP](#))
- Migrate your CIP Web Application and database to an alternate location ([Migrating CIP to Another Server](#))
- Troubleshoot installation and upgrade issues ([Appendix: Troubleshooting Installation or Upgrade Problems](#))

Once CIP is installed, you have an interface for creating, modifying, and removing parts, without needing direct access to the master CIS database. CIP facilitates the conversion of temporary parts into formal parts. Users assigned to an administrative role can assign logins and passwords to those who will be using CIP.

Please refer to the CIP User Guide to learn how to use CIP. After your installation is complete, the User Guide is available in HTML and PDF format directly from the CIP Help menu.

2 Technical Support

If you have any difficulties or questions regarding the licensing or installation, please contact your Cadence OrCAD channel partner.

3 What's Included

The files included with your CIP installation support both new or upgrade installations. The list that follows identifies tools and utilities included with the installation of CIP on the server and the CIP Client.

Server Files

- CIP Server Application installer – OrCAD17.4-2019CIPServerSetup.exe. Installs the following items:
 - CIP-E Web Application and web site
 - CIP Scheduler Service
 - Blank/updated CIP SQL database (named CIP_E)
 - 2 SQL users with sufficient permission to perform functions required.
 - Technical Datasheets for parts in starter library
 - Schematic symbols for parts in starter library
 - Allegro footprints for parts in starter library
 - Cadence OrCAD Capture CIS Database Configuration Files (.DBC)
 - CIP User Guides - Includes the CIP User Guide and CIP Client Installation Guide
 - End User License Agreement (EULA)
 - CIP Client Installer
 - Other CIP Utilities
 - GrantAccessAndRolesForDBMail.sql
 - EnableCLRandSmartValue.exe
 - Admin_Reset.exe
 - CIP_E_DB_Logins_and_Users_Restore.exe
 - Delete_Starter_Library_Parts.exe

- Installation Guide (this guide)

Client Files

CIP Client installer is also included. This installer may also be distributed to users by enabling download from the CIP Web Application. To enable download, refer to the CIP User Guide, in section Administration > Configuration > Download of CIP Client.

- CIP Client installer - OrCAD17.4-2019CIPClientSetup.exe. Installs the following items:
 - Client application
 - Starter library parts in a .CSV formatted file
 - ODBC data source for Capture CIS to connect to database
 - Set up initial settings

4 Preparing for Install

Before you Begin

Use the list that follows to collect and record information needed during the installation process.

- ☐ Server setup (this information is typically available to IT staff)
 - MS SQL server name, including the instance name (if applicable), e.g. CIPSERVER\SQLINSTANCENAME
 - Windows server name to host CIP Web server (may be the same server as your database server if both are installed on the same server)
 - Database user credentials of a user with SQL sysadmin role to the SQL server. **Note:** the Administrator permission to the Windows Server hosting the SQL server differs from the SQL sysadmin role; be sure to obtain the SQL sysadmin database user credentials)
 - Centralized location for archiving Cadence OrCAD Capture Symbols, Allegro PCB Footprints, Technical Datasheets and other essential files.
- ☐ Determine the hardware configuration of the database and web server; ensure the minimum requirements listed in the System Requirements section are installed.
- ☐ Microsoft IIS must be enabled on the Web Server prior to installing other Microsoft components. If not, you may need to repair the components or re-install all components in the proper order. Setup of IIS that is required for CIP is addressed in the appendix section, [Installing Internet Information Services](#).
- ☐ MS SQL Server must be installed. Mixed mode (SQL and Windows) authentication, SQL Server Browser, and TCP/IP need to be enabled.
- ☐ For more information, refer to [Configuring MS SQL Server](#) in the [Appendix](#).

Determine if you have .NET Framework 4.6.1

If you are using the current version of Windows 10 or Windows Server 2016, .NET Framework is automatically installed for you. However, if you are using any of the earlier supported versions of Windows, (System Requirements) you need to follow the procedure that follows to verify the installation of .NET Framework.

To verify your version of .NET Framework

1. Go to the **Start Menu > Control Panel > Programs and Features**.
2. Scroll through the list to find **.NET Framework**.

If neither .NET Framework 4.6.x nor 4.7.x is present on the web server, you need to install one of these versions in order for CIP to work. A reboot of your web server may be required. Depending on the order in which you enable IIS and install .NET Framework, you may need to register .NET framework with IIS. To register .NET 4.6.1, open the command prompt using "Run as administrator." Navigate to the following folder and type the following:

```
C:\windows\Microsoft.NET\Framework64\v4.0.30319> aspnet_regiis.exe -ir
```

If you receive an error message when you run the command above, you need to install/uninstall ASP.NET 4.5 with IIS8 using the "Turn Windows Features On/Off" dialog, the Server Manager management tool, or the dism.exe command line tool.

4.1 Overview of System Requirements

CIP includes the following three components and optional Starter Library:

- **CIP Web Application** – Web portal to the centralized engineering SQL database
- **CIP Database** – MS SQL database for CIP/CIS users and other users who need access to engineering data
- **CIP Client** – Client component is a plug in to Cadence OrCAD Capture CIS
- **Starter Library** – Contains over 5,000 manufacturer parts with datasheets, PCB footprints, and schematic symbols.

CIP complements the Cadence OrCAD CIS product. A client tool is provided that enables you to open CIP within Capture. If desired, you can use CIP without Capture, by using a standard web browser. The CIP server components may be installed on a single server, or multiple servers.

The files required by CIP do not have any special requirements. Adequate disk space will be required to house the files that the engineers will be storing. This can be sizable based on the number and size of the datasheets acquired from manufacturers. The optional Starter Library includes approximately 5,000 parts, datasheets, PCB footprints, and schematic symbols and use approximately 500 MB of disk space.

As with the base OrCAD Capture CIS product, it is strongly recommended that libraries be placed on the same network as the CIS users, to minimize speed issues.

4.2 System Requirements

System Requirements of Web Application

Compatible Microsoft Operating Systems	• Windows Pro/Ent/Ult: 8.1, 10 • Windows Server: 2012, 2012R2, 2016, 2019 • (versions supported by Microsoft)
Other Microsoft Components (All Required)	• Internet Information Services (IIS) 7.5 or greater • .NET Framework 4.6.1 or greater
Hardware	• Processor – Recommended Dual-Core 2GHz or higher • Memory – Recommended 8GB or greater

Note: Disk space varies with usage of web server datasheet files

System Requirements of Database Server

SQL Server with Database Tools (Management Studio)	• Microsoft SQL Server: 2012, 2014, 2016, 2017, 2019 • Email Notifications are not available with SQL Server Express editions
Compatible Microsoft Operating Systems	• Windows Pro/Ent/Ult: 8.1, 10 • Windows Server: 2012, 2012R2, 2016, 2019 • (versions supported by Microsoft)
Hardware	• Processor – Recommended Dual-Core 2GHz or higher • Memory – Recommended 8GB or greater

Note: Disk space varies with the number of parts (10 GB is typically sufficient). Minimum hardware requirements increase when the web application and database server are installed on a common server.

Client Requirements

Cadence OrCAD Capture CIS	• 17.4
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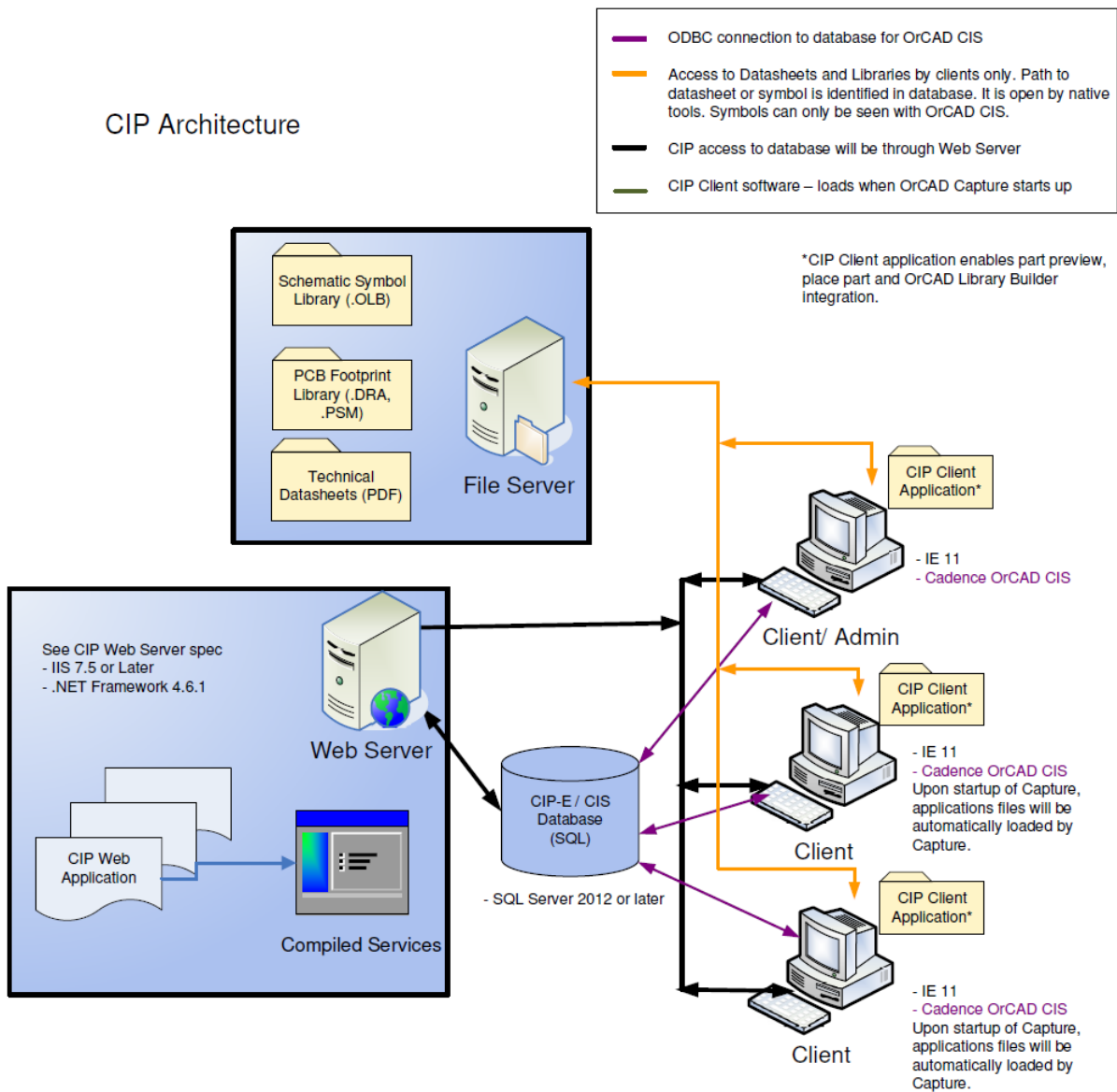
4.3 Licensing

CIP uses the FlexLM license manager. FlexLM version 11.14 is required and is included with Cadence License Manager Version 12.08 or higher.

If you already have the License Manager installed either locally or on your network, it is unnecessary to install a new licensing server. Simply specify its location during installation.

4.4 CIP Architecture

CIP Architecture



5 Installing CIP

If using CIP for the first time, you may want to install CIP in a testing environment before installing and using it for production. Before starting installation, make sure that you have reviewed and completed the section checklist presented in the section, [Preparing for Install](#).

5.1 Installing CIP Server

The CIP Server provides options to install the CIP Web Application, CIP Database and Files associated with the starter library. Each of the options may be installed on a single or multiple servers. Co-location of the CIP web server and SQL server will provide the best performance for CIP.

If you are **upgrading** from **OrCAD CIP 17.2**, you will need to uninstall your CIP Web Application before continuing to install any versions of CIP 17.4-2019.

If you are migrating from EMA CIP or OrCAD CIP 16.6,

- Complete the steps in the section, [Migrating from EMA CIP to OrCAD CIP](#) before proceeding to install the CIP database (instructions below).

Note: We highly recommend that you backup your database and your web.config file before you begin the upgrade process. For new installations, verify you have completed each item listed in the section [Preparing for Install](#) to ensure successful installation.

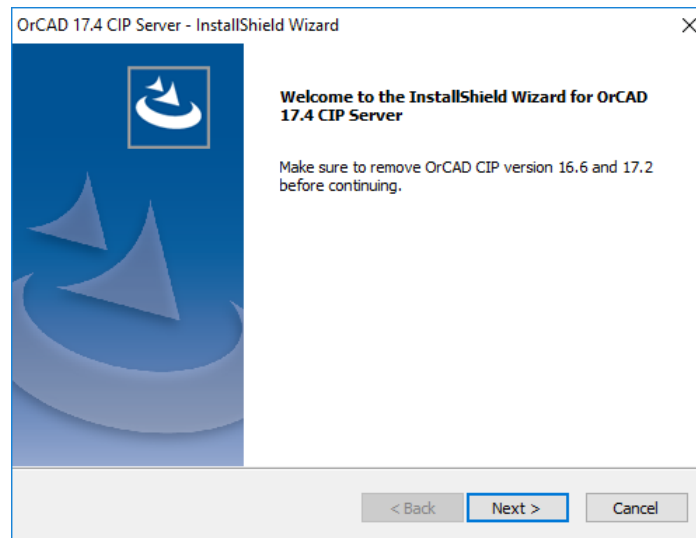
Note: When using OrCAD CIP Web application version 17.4.5 or higher, the CIP Client plugin must also be 17.4.5 or higher.

The following steps show installation of all features onto a single server. When installer features on multiple servers, only dialogs pertaining to the selected feature will be presented.

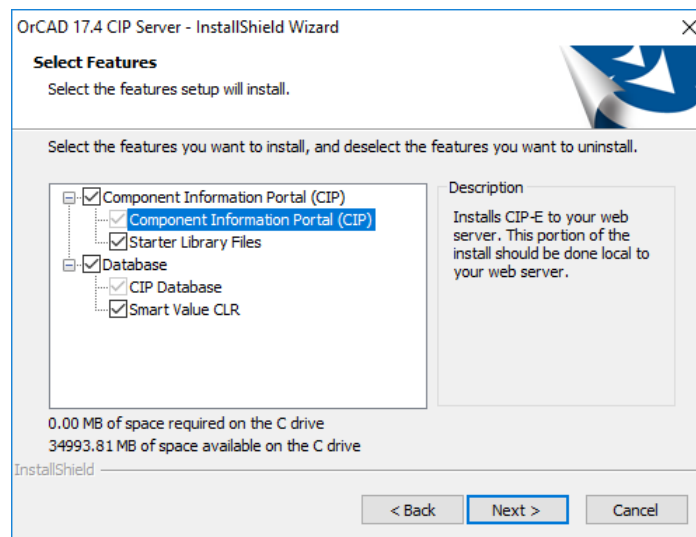
1. Double-click the installer executable file **OrCAD17.4-2019CIPServerSetup.exe** to launch the CIP Server installation wizard. You will need to uninstall older versions of CIP before continuing.

This installer installs the CIP-E web site as http://. However, if desired you may change the site to a secured site after installation is complete.

The installation of the CIP Web Application option must be completed on the web server machine.



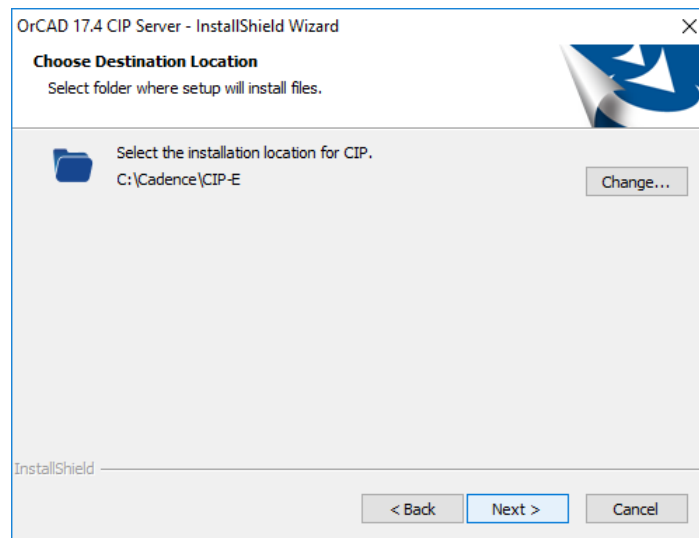
2. Click **Next** to open the License Agreement dialog. Read the End User License Agreement (EULA) before proceeding. If you agree with the terms of the EULA, click the "I accept..." button and click **Next** to continue.
3. Check the CIP features that you want to install. Highlight a feature to view its description.



Features that are available for installation include:

- **Component Information Portal (CIP)** - Web application
- **Starter Library Files** – Folders and files for the Starter Library are placed in the installation directory. If installing the Starter Library, the Starter Library directory must be shared to enable access by ECAD users. The Starter Library includes:
 - Technical Datasheets – Datasheet files associated to the parts.
 - PCB Footprint Library – PCB footprint files associated with the parts.

- Schematic Symbol Library – Library files for symbols associated with the parts.
 - **CIP Database**
 - **Smart Value CLR** – The Smart Value CLR feature enables a smart search on values containing SI units (e.g. Mohm, pf). If you choose not to add this feature, you may add it later by running the **EnableCLRAndSmartValue.exe** utility that is part of this CIP Server installation. Default location is in C:\Cadence\CIP-E\Utilities.
4. On the *Choose Destination Location* dialog box, you may change the location to the CIP installation. The default installation directory (recommended) is C:\Cadence\CIP-E. If you wish to change the installation location, click **Change...** and navigate to the folder in which you wish to install CIP. Select the directory and click **Next** to continue.
 5. Record the selected destination folder. After this installation, you will need to setup the appropriate permissions on the BOMs and Import folders so that users can access and utilize the Advanced Export and Import feature in CIP. Please see the [Setting Folder Permissions on the CIP BOMs folder](#) section.



6. At the *Please specify license information* dialog box, specify the License port and License host for the FLEXlm license server and click **Next**.

If you do not know this information, you may click **Skip Licensing setup** to skip the licensing set up portion of the installation. You will need to configure licensing manually. See section on [verify license information](#) to change this information later.

Note: See the FlexLM documentation if you are configuring redundant license servers. Verify licensing information.

OrCAD 17.4 CIP Server - InstallShield Wizard

Please specify license information

☒ Cadence License Server

License Port: License Host:

☐ Skip Licensing Setup

InstallShield

< Back Next > Cancel

7. Select the **Database Server** from the drop-down list provided in the Database Server dialog. If your database server is not in the list click the **Browse** button or type in the server and instance name or the IP address of the database server to host the CIP database. Also, select the method of authentication to Connect to the database. If SQL Server authentication is selected, enter the Login ID and Password of the SQL login.

NOTE: For either method of authentication, you will need to ensure the authenticated user has the appropriate rights (e.g. SQL sysadmin Role) to the database server instance to create the CIP database and its associated users. The installer adds two SQL users (CIP_E_Internal_User and CIP_E_CIS_User) as part of the installation. We highly recommend that you change the password for these users after installation. For SQL Express installations, Windows Authentication is generally used for this step, but it is your choice based on the configuration.

OrCAD 17.4 CIP Server - InstallShield Wizard

Database Server
Select database server and authentication method.

Database server that you are installing to:
 Browse...

Connect using:
☒ Windows authentication
☐ SQL Server authentication using the Login ID and password below

Login ID:
 Password:

InstallShield

< Back Next > Cancel

8. Click **Next** to continue the installation. If you see errors at this step, review the [Troubleshooting](#) section in the Appendix to identify the possible configuration issue.
9. In the Ready to Install the Program dialog box, select **Install** to start the installation.
10. When the Product installation is complete, click **Finish**.
11. After database and web application are installed, proceed to setting permissions. Bring up CIP-E in a browser to [verify CIP installation](#). You will need to continue to set permissions on the CIP BOMs Folder before the installation is complete.

Note: If passwords for SQL users, installed with the database, have been changed, you will also need to [change the installed web.config](#) file.

5.2 Setting Permissions on the CIP BOMs and Import Folders

Perform the steps below to ensure users will be able to successfully use:

- The CIP Advanced Export feature to upload and export BOMs
- The bulk import feature to import or update component part numbers and data in bulk

To set permission for BOMs folder:

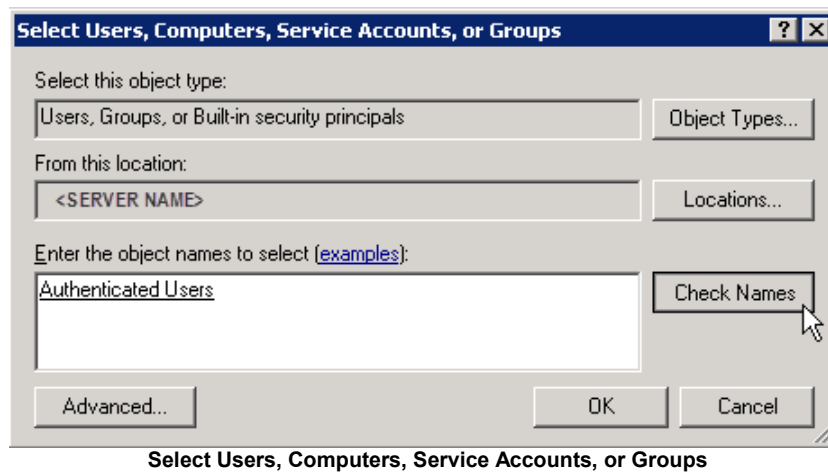
1. Navigate to the CIP web engine install directory (default directory C:\Cadence\CIP-E\Web) and locate the BOMs folder.
2. Right-click the BOMs folder and select **Properties**.

The **BOMs Properties** window opens.

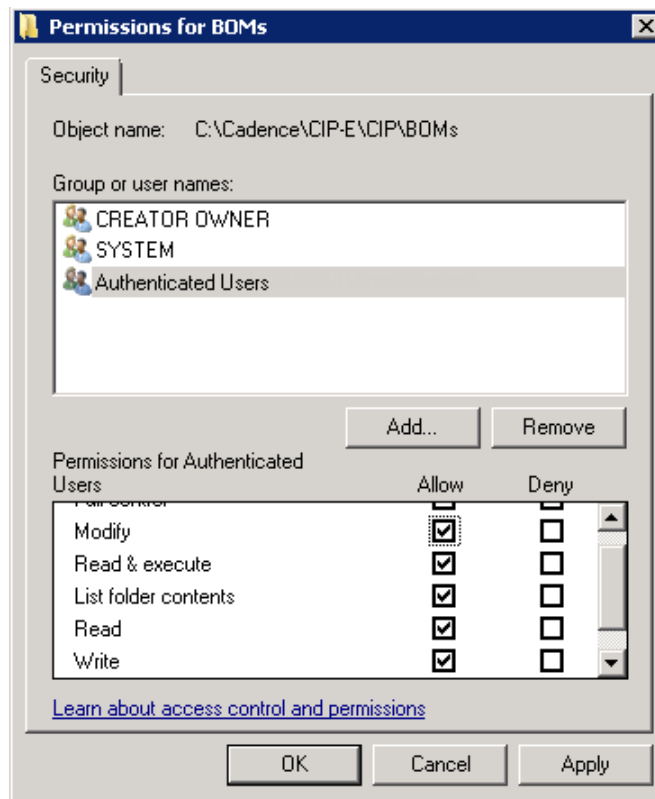
3. Click the **Security** tab.
4. Verify that the **Authenticated Users** group is present in the Group or user names section.

If that group is missing from the list, click the **Edit** button and then the **Add** button.

The **Select Users, Computers, Service Accounts, or Groups** window opens.



5. Click on the **Locations** button and select the local server name. Click **OK**.
6. Under **Enter the object names to select (examples)**: type in Authenticated Users.
7. Click on the **Check Names** button. Click **OK**.
8. Verify the Authenticated Users group has the following permissions:
 - Modify
 - Read & Execute
 - List Folder Contents
 - Read
 - Write



Assigning permissions to Authenticated Users Group

9. Click **Apply**. Click **OK**.

Repeat the above steps to set permissions for Import folder.

5.3 Migrating From EMA CIP to OrCAD CIP

You must be at CIP-E version 4.2, 4.3 or 5.0 to successfully migrate from an EMA CIP product to OrCAD CIP. You must first upgrade your CIP-E to one of these versions before proceeding. Contact your Cadence OrCAD channel partner to obtain prior CIP versions for the upgrade.

Warning: If you have made any modifications to the CIP Database, you should not run this migration procedure. If you continue with this upgrade it may result in irreparable damages. Please contact your Cadence OrCAD channel partner for further assistance, if you have made any changes.

Be sure to backup your database before you begin the migration process. Before starting the migration process, you must first uninstall the EMA CIP. Do not run both EMA and Cadence versions of CIP together.

To remove CIP

1. Select **Start > Control Panel > Programs and Features**.
2. Find EMA CIP-E and uninstall.

Note: The CIP uninstall process occurs without removing your database.

3. Update IIS configuration to the configuration described in [Enabling IIS](#).

Note: IIS configuration has changed since CIP-E versions 4.2, 4.3 or 5.0

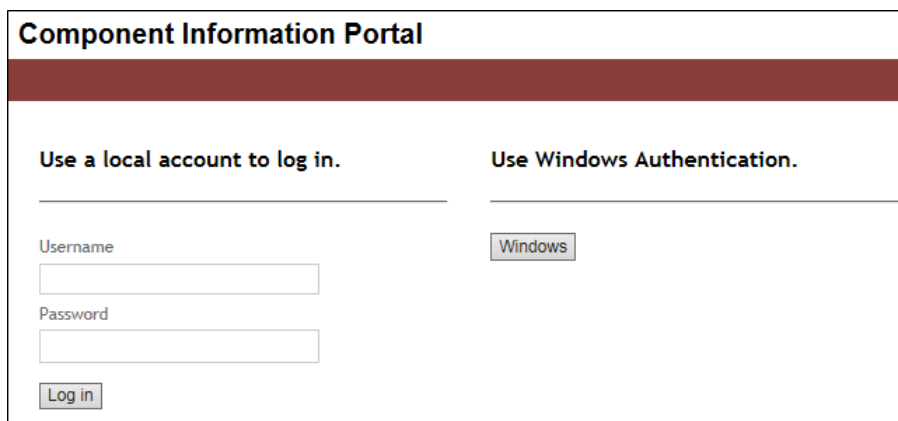
4. Ensure [.NET Framework 4.6.1](#) has been registered with IIS.
5. Follow all instructions in section [Installing CIP](#) after EMA CIP is removed. Be sure to use the same path to your EMA CIP database during the re-installation. Perform each of the following steps:
 - Run CIP Server installation
 - Set Permissions on CIP BOMs and Import Folders

6 Verifying CIP Installation

To verify your CIP Installation is functioning correctly

1. Open your browser and navigate to the CIP-E site.
`http://<YourWebServer>/CIP-E`
2. At the log in screen, log in using the following credentials:

Username: Admin
Password: Admin



Component Information Portal

Use a local account to log in.

Username

Password

Use Windows Authentication.

If you are unable to view the login screen or if you get an IIS error after logging in, review the [Troubleshooting](#) section in the Appendix to identify the possible configuration issue.

6.1 Upgrading CIP

Review the upgrade matrix below to determine the actions that are required for you to upgrade or migrate from EMA CIP to OrCAD CIP.

You can verify your installation version by opening the CIP web site. The version number is available from the upper right corner of the site.

Upgrade Matrix

From Version	To Version	Action
Pre EMA version 4.2	17.4.X	1) You will need to run each installer prior to 4.2 to incrementally bring your database up to 4.2. 2) After installation of version 4.2, follow instructions in Migrating from EMA CIP OrCAD CIP . 3) Uninstall CIP web application. 4) Proceed to section on Installing CIP Server . Make sure that you create a backup of your database before starting.
16.6.X and prior, EMA version 4.2, 4.3, 5.0.x	17.4.X	1) Follow instructions in Migrating from EMA CIP OrCAD CIP . 2) Uninstall CIP web application. 3) Proceed to section on Installing CIP Server . Make sure that you create a backup of your database before starting. If you were on version 5.0.8 of CIP, verify that CIP-E has been removed from IIS before continuing.
17.2.X	17.4.X	1) Uninstall CIP web application. 2) Proceed to section on Installing CIP Server .

7 Setting up Database Mail

The CIP Email Notification feature allows users to receive emails when parts are added, modified, or deleted from the CIS database. This feature also allows users who create Temp Parts (either through CIS or CIP) to receive emails when their Temp Parts are assigned Formal Part Numbers.

Note: Before users can begin using Email Notifications, the SQL Server Administrator must enable and configure the Database Mail Profile on the database server. The Database Mail Configuration Wizard is available with Standard and Enterprise Editions of SQL Database Server.

This wizard is not available in the MS SQL Express Edition. The Mail Profile name created must be called CIP-E and the profile should be set to Public.

Once the SQL Server Administrator has created and enabled the CIP Database Mail Profile, the **GrantAccessAndRolesForDBMail.sql** must be executed. This script is placed in the Utilities folder of the CIP installation directory (default C:\Cadence\CIP-E\Utilities).

8 Client Installation – Connecting CIS to CIP

The CIP Client Installer and installation guide may be downloaded from the CIP-E site, if configured.

To configure, the Admin user will need to bring up **CIP-E > Admin > Configuration**.

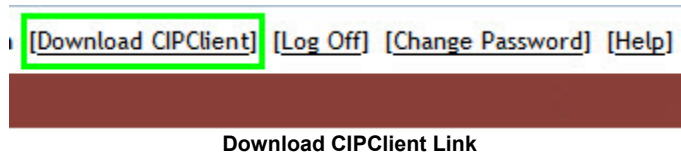


CIP Admin > Configuration

At the option to **Show CIPClient Download Link**, select **Edit**  and select the checkbox. Click **Save**  to enable this functionality.

	Import/Export Separator	,
	CIP Base URL (ex: http://127.0.0.1/CIP-E)	
	Schematic Part Delimiter	,
 	Show CIPClient Download Link	☐
	Reuse Module Directory (ex: M:\ReuseModules\)	

Once enabled, users will be able to download the CIP Client from the CIP Page.

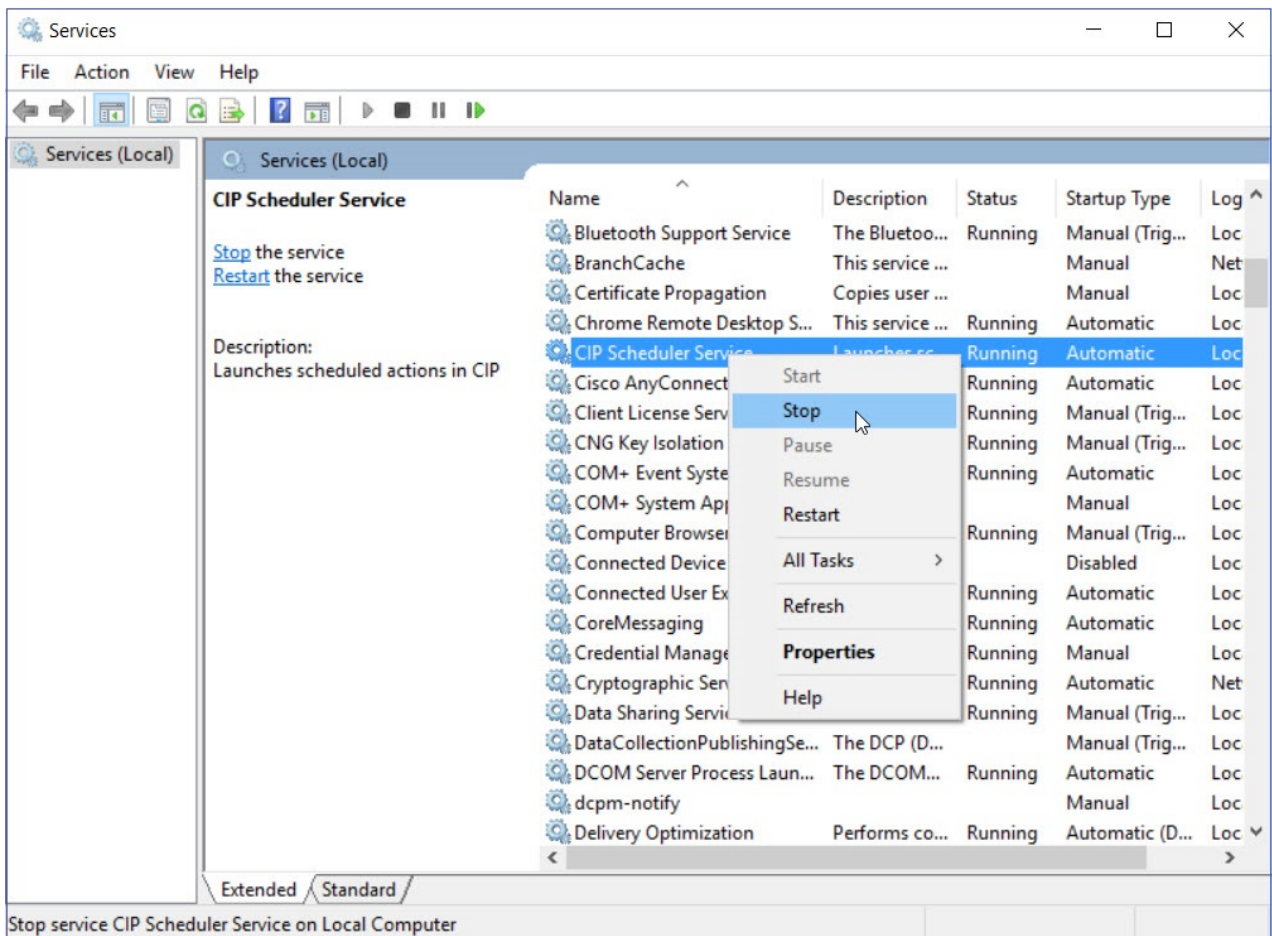


Refer to the CIP User Guide for detailed information regarding this configuration.

9 Uninstalling CIP

Before you begin uninstalling CIP, stop the CIP Scheduler Service and IIS server. This needs to be completed before you begin if you want to avoid the need to reboot your web server after the uninstall. Stopping CIP Scheduler service is required only if you are uninstalling CIP versions greater than 17.2.3.

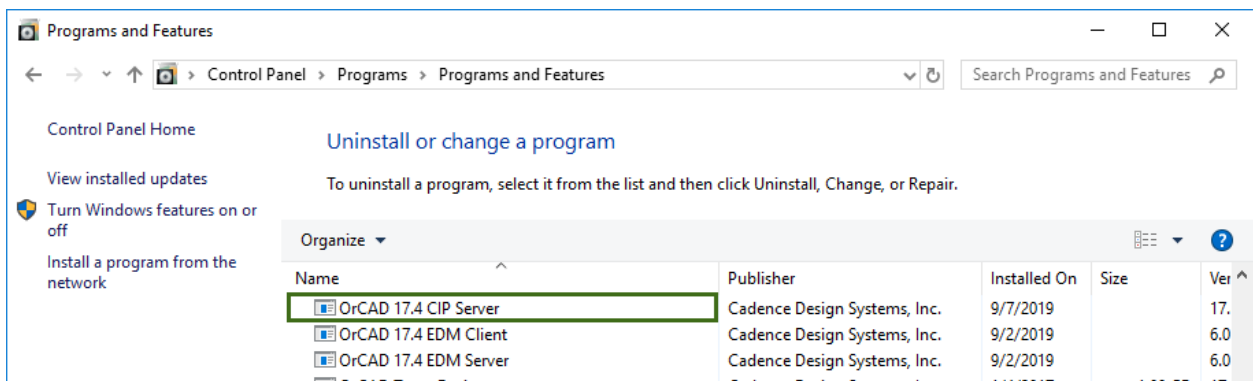
1. To stop the CIP Scheduler service:
 - a) Open the Control Panel.
 - b) Select **Administrative Tools > Services**.
 - c) In the Services window, locate **CIP Scheduler Service**. Right-click this item, then click **Stop**.



- To stop the web service process, run your Command Prompt using **Run as Administrator** then enter:

```
net stop WAS
```

- To uninstall the CIP web application, locate **OrCAD 17.4 CIP Server** in Programs and Features and select uninstall.



4. Once the uninstall is complete you may restart the web service process. To restart this process run Command Prompt using **Run as Administrator**, then type:

```
net start W3SVC
```

The CIP uninstall is completed.

10 Migrating CIP to Another Server

CIP consists of two installed components (application and database) and an optional CIP Starter Library. This section describes how to backup and restore the application database from one server to another. You will also need to copy all libraries and datasheets as part of your migration.

10.1 Database Migration

The following steps describe how to migrate your database from one database server to another. You will first need to make sure that users are not working with CIP during the migration.

Step 1: Back up the CIP_E database

Microsoft SQL Server Management Studio is required to create and restore SQL database backups. If you do not have SQL Management Studio installed, you can download the application from <http://www.microsoft.com/download/en/default.aspx>. Type in the search string "SQL management studio 2014 express" and download and install the version that is compatible with your PC configuration.

1. Open Microsoft SQL Server Management Studio and login. The user who is logging in must be assigned to the sysadmin role.

Note: DO NOT USE the CIP-E Users (CIP_E_Internal_User or CIP_E_CIS_User) since they lack the required permissions. Assignment of the CIP-E role should ONLY be used for ODBC Data Sources.

2. Expand Databases and click **CIP_E**.
3. Right-click and select **Tasks > Back up**.
4. Ensure that Backup type is set to **Full**.
5. Record the Destination path and filename shown, as you will need to copy the database backup in #1 of Step 2.

6. Click the **Options** page.
8. Under Overwrite media, select **Overwrite all existing backup sets**.
9. Under Reliability, select **Verify backup** when finished.
10. Click **OK**. Wait for the backup process to finish successfully. Click **OK**.
11. Copy the CIP_E.bak file (created in #9 of Step 1) from the Current/Old Server to a physical drive location on the New Server.

Step 2: Restore database

1. Copy the CIP_E.bak Database Backup to the new server.
2. Open Microsoft SQL Server Management Studio and login. The user who logs in needs to be assigned to the sysadmin role.
3. Right-click the database and select **Tasks > Restore > Database**.
4. Select **From device**, click the ellipsis button , click **Add**, and browse to the database backup that you copied in #1 of Step 2. Click **OK** then **OK** again.
5. Ensure that To database is set to **CIP_E**.
6. Click the **Restore** check box.
7. Click the **Options** page.
8. Under Restore options, select **Overwrite the existing database (WITH REPLACE)**.

Under Restore the database files as > Restore As column, you have the option to change the paths (default location will vary). The database and log files are stored in the locations you choose.

9. Click **OK**. Wait for the restore process to finish successfully. Click **OK**.

Step 3: Reattach the CIP-E internal and CIS users

1. Run CIP_E_DB_Logins_and_Users_Restore.exe (located in Utilities directory of Installation directory; default location is C:\Cadence\CIP-E\Utilities).
2. Enter a valid server name and authentication, and (if using SQL Authentication) the user name and password.
3. Select **Upgrade an existing database** and then CIP_E from the database list. If CIP_E is not available in the database list, the server or the authentication information may be invalid, or the specified user lacks required permissions on the SQL server.
4. Click **Run**. Click **Yes** when prompted to upgrade the database.
5. Wait for the upgrade process to finish successfully. Click **OK**.

Step 4: Restore mail notification, and CLR functionality

1. If CIP_E was installed with smart value CLR feature, run EnableCLRAndSmartValue.exe to re-enable CLR functionality on the new Server. (Default is C:\Cadence\CIP-E\Utilities))
2. If email notification was used on the old server, configure database mail and run the GrantAccessAndRolesForDBMail.sql email script on the new server. Refer to the section on [Setting up Database Mail](#).

Step 5: Reconfigure CIP web server to use the new database

Follow instructions on [Change to SQL Servers or Users](#) to change the web.config file to point to the new SQL server.

Step 6: Reconfigure ODBC data source on CIS user's client systems to use the new database

Users using [ODBC data source](#) to connect to the database will need to modify the data source. Users may also need to remove the connection string in the Capture.ini file.

Step 7: Verify server migration

Verify that you can log into CIP-E (using your existing credentials) `http://<ServerName>/CIP-E`.

Step 8: Optional - Remove from old server

1. If everything passes on the client machines, delete CIP_E database from old server.
2. Remove CIP-E mail profile and mail account from database mail on old server.

10.2 CIP Web Application Migration

The following steps describe how to migrate the CIP Web Application from one server to another.

Step 1: Back up Technical Datasheets, Symbols and Footprint Libraries

If Technical_Datasheets, Allegro_Library, Schematic_Symbols are stored on the same current (old) web server, you will need to move these folders to the new server as well. If not, skip this step.

If using the Starter Library, the default paths for these three folders are in C:\Cadence\CIP-E.

Step 2: Installation on new web server

1. Follow steps described in Installing CIP Server. Before starting the installation, ensure you check the following:
 - Verify System Requirements of new server

- [Preparing for installation](#) on new server, including [IIS](#) and [.NET Framework](#) settings
- When [installing the CIP Server](#) on the new server, select only the Component Information Portal (CIP)
- [Update BOM and Import folders' permissions](#) on new server

Step 3: Restore Technical Datasheets, Symbols and Footprint Libraries

If you backed up library items in Step 1, copy the Technical_Datasheets, Allegro_Library, and Schematic_Symbols, and folders to the desired location(s) on the new server.

Step 4: Re-path Datasheet

If the location of the Technical_Datasheets folder is changing, follow instructions in the CIP user guide in Bulk operations section to update paths.

Step 5: Reconfigure users' client systems to use the new CIP location

1. Users need to use the new URL to access CIP.
2. Users need to change the URL in Capture. While in Capture, select **CIP > Settings** and then change the URL.

Step 6: Verify Server Migration

Verify that you can successfully log into CIP-E (using your existing credentials) from the new server (<http://<NewServerName>/CIP-E>).

Step 7: Optional - Remove from old server

If everything passes on the Client Machines, uninstall CIP-E from the old server (via Windows Programs and Features).

10.3 Client Machines Changes After Migration

1. If the database is migrated, remove and recreate the CIP-E_CIS_DB [ODBC Data Source](#) to CIS (i.e. update info to point to the New Server). Refer to the section on [Setting up the Client ODBC Data Source](#), in this guide.
2. Verify that you can log into CIP-E (using your existing credentials) from your PC to the New Server (<http://<NewServerName>/CIP-E>).

If library files are migrated, modify your capture.ini file so that it points to the new library location.

3. Verify connection to CIS by Placing a Database Part on a schematic. Refer to the section on Placing a database part on a schematic page, in the OrCAD CIS User Guide.

- Open Capture CIS
- Open/Create Schematic Design
- Right-click and **Place Database Part**. Select a part and make sure you can place it on the schematic.

11 Appendix

11.1 Configure for Multiple Windows Domain

By default, the CIP server will only search the Active Directory domain it belongs to when checking the validity of Windows logins. If there are multiple domains in your company's environment, users on other domains may not show when adding users into CIP.

You may customize how CIP looks up Windows logins by modifying two sections in the Web.config file.

1) Replace the <configSections /> element near the top of the Web.config file with the following:

```
<configSections>
  <section name="principalContextConfigurations"
    type="EMA.CIP.PrincipalContextConfigurationsSection"/>
</configSections>
```

2) Add the following section before the closing </configuration> line:

```
<principalContextConfigurations>
  <principalContexts>
    <add contextType="Domain" name="ad.contoso.com" />
    <add contextType="Domain" name="fabrikam.com"
      username="FABRIKAM\user" password="pass" />
    <add contextType="Domain" name="adatum.com"
      container="OU=Users,DC=adatum,DC=com" />
  </principalContexts>
</principalContextConfigurations>
```

Add an element for each domain to search. Set the name attribute to the domain's name. The above example shows 3 example entries for domains.

By default, the search will be performed by the application pool user; if a username and password are provided the search will be performed with those credentials instead. The search may optionally be restricted by container, as shown in the third example.

11.2 Changes to SQL Server or Users

After installation changes to the SQL server name/instance or SQL users may also require changes to the CIP web application's web.config file and/or client machines ODBC database.

SQL user changes

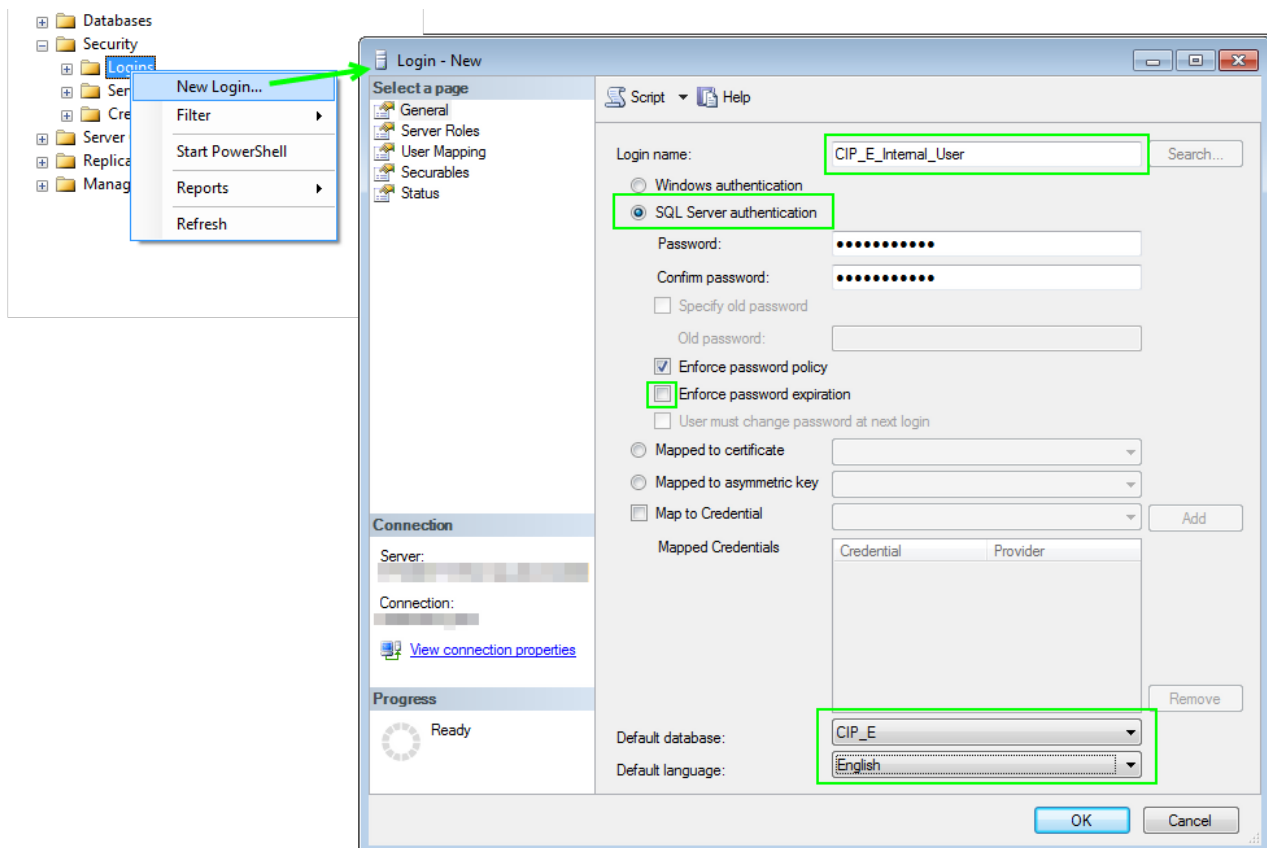
The following two SQL users are created during the database installation.

- CIP_E_Internal_User (used by Web Application)
Installed Password: bra#ru5=phaT
- CIP_E_CIS_User (for use with Capture CIS by users connecting to the database)
Installed Password: Test1234

During installation, each user created is granted only the permissions they need to perform their application tasks.

If you create these users manually, you will need to create the users for SQL server authentication and deselect "Enforce password expiration." After the database is installed, modify the properties for this user and change the default database to CIP_E.

If you created users manually because the default passwords failed to pass your company password policy, then you need to uncheck "Enforce password policy" when you manually create the users. If you want to keep the password policy enforced, however, then create the users manually and use a stronger password that is compliant with the password policy.



If you changed the password for CIP_E_CIS_User, you will need to communicate the new password to all Capture CIS users. The CIP_E_CIS_User user is only granted limited access to tables needed by CIS. If you create different users for CIS purpose, you need to ensure that the created users do not have delete or update permissions.

Web.config changes

If you changed the SQL server location or password for CIP_E_Internal_User during or after installation you also need to change the password used by the web. You need to update web.config before CIP web pages function correctly. We recommend that you create a backup of your edited Web.config to retain your changes.. Upgrade of the CIP Server may replace your edited web.config with an updated version.

To change the password

1. Navigate to the installed location of the CIP web application (default location on web server is C:\Cadence\CIP-E) and then to the CIP folder.

2. Open web.config file and change the default password from bra#ru5=phaT to the password you entered when creating/modifying the user.
3. If the CIP_E database is moved to another server or the server/instance name is incorrect, update the following line in the web.config file.

```
<connectionStrings>
    <add name="DefaultConnection"
connectionString="Server=(local)
\sqlexpress;Database=CIP_E;Uid=CIP_E_Internal_User;Pwd=bra#ru5=phaT;"
providerName="System.Data.SqlClient"></add>
</connectionStrings>
```

Data Source Changes on Client Machines

OrCAD Capture CIS connects to the CIP database using an ODBC data source. During installation of CIP client, an ODBC data source named CIP-E_CIS_DB is created for this purpose. If you change the SQL server location of CIP database, CIS users will need to [update their ODBC data sources](#). To change the database reference within the ODBC data source launch the 64 bit ODBC Data Source Administrator tool.

If you change the password for CIP_E_CIS_User, CIS users will need the new password to log in from Capture CIS to connect to the database.

11.3 Set up or Change ODBC Data Source

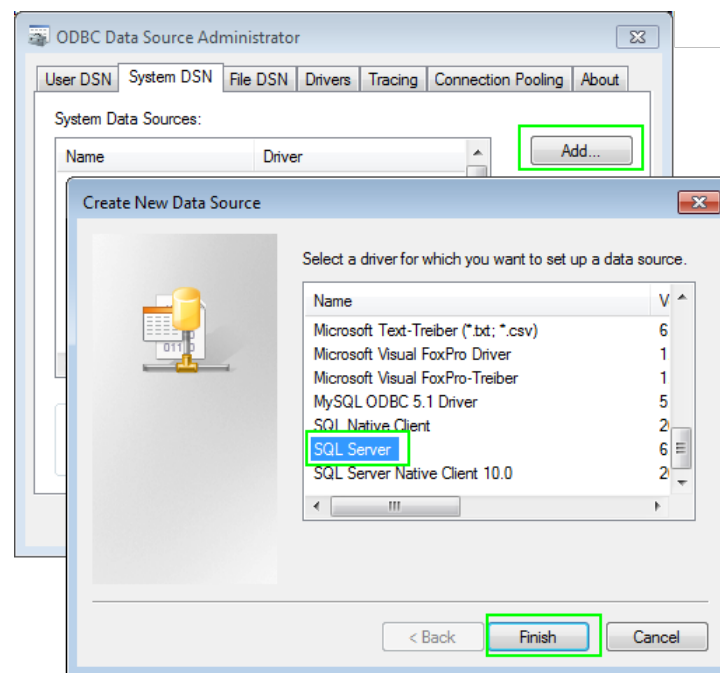
The CIP Client installer automatically adds/alters the ODBC data source name, CIP-E_CIS_DB when you run it. This data source is used by OrCAD Capture CIS to connect to the CIP database.

To verify or change the ODBC data source

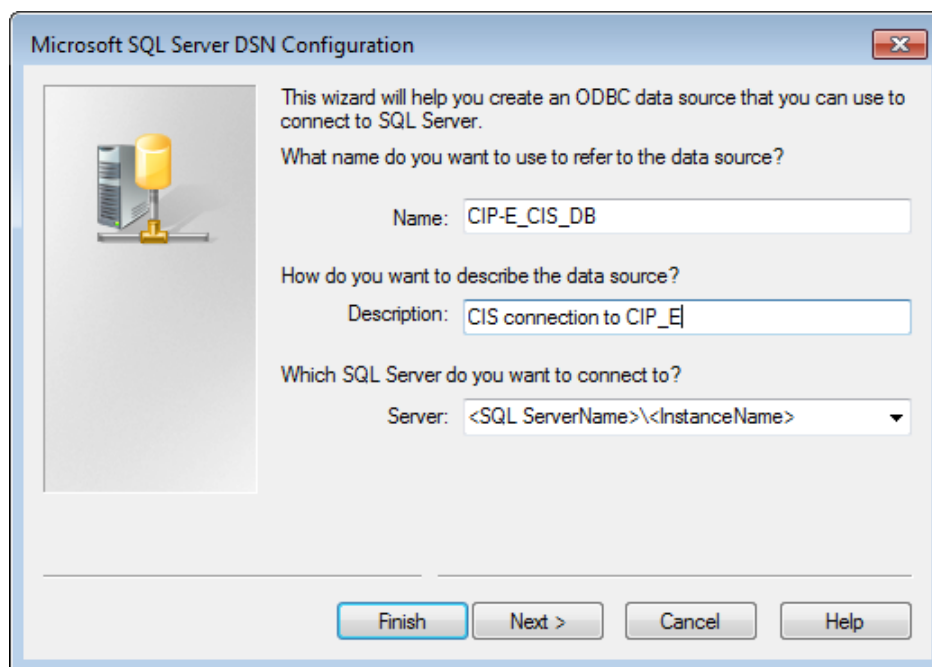
1. Launch the 64 bit ODBC Data source administrator tool.
2. If you did not enter database information during installation, you may create it manually. To verify the data source, skip to step 3.

To manually create your data source:

- a) Select **System DSN**.
- b) Click the **Add** button.
- c) Select **SQL Server** and click the **Finish** button.



3. Locate CIP-E_CIS_DB and select **Configure**. Verify the Name is set to CIP-E_CIS_DB and that your SQL server and instance names are correct. Click the **Next** button. If you are creating a new data source, type in information as shown in the following figure.

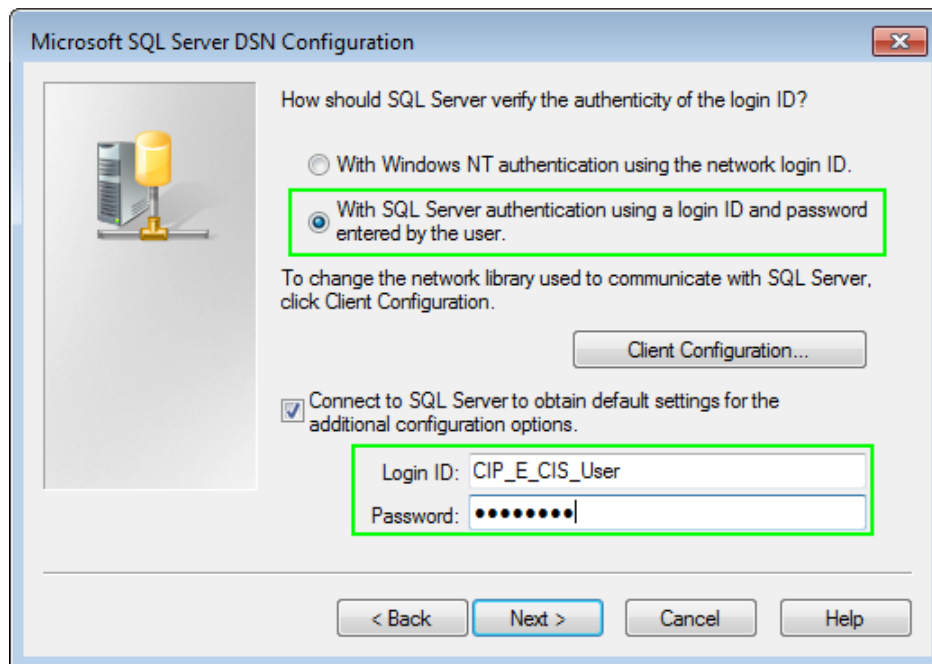


4. Verify the SQL Server authentication is selected and that the **Login ID** and **Password** are correct. The default password that comes with CIP-E installation is as follows:

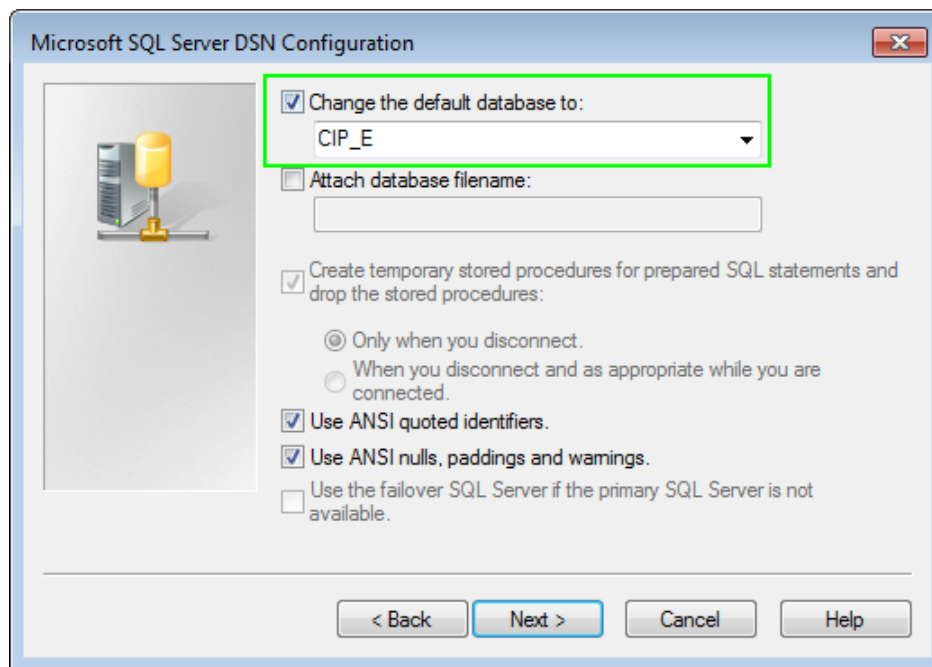
Login ID: CIP_E_CIS_User

Password: Test1234

If you are creating a new data source, type in the **Login ID** and **Password** as shown in the figure that follows and click **Next**.



5. Verify **CIP_E** is selected as the default database. If you are creating a new data source, check the "**Change the default database to**" checkbox and select **CIP_E** database from the drop-down list. Click **Next**.



6. If desired, you may select Test Data Source before selecting **OK**.

7. Select **Finish**.

11.4 Enabling Internet Information Services (IIS)

IIS comes pre-installed with Windows. The following steps show you how to enable and configure IIS to use CIP.

1. You must use "Turn Windows features on or off" to enable IIS. Depending on your Windows system, you may see different wizards before navigating to the following screen. You must enable the features shown in following figures.

This screen capture is taken from Windows Server 2012R2. If you are using a different Windows version, the screen may appear slightly different.

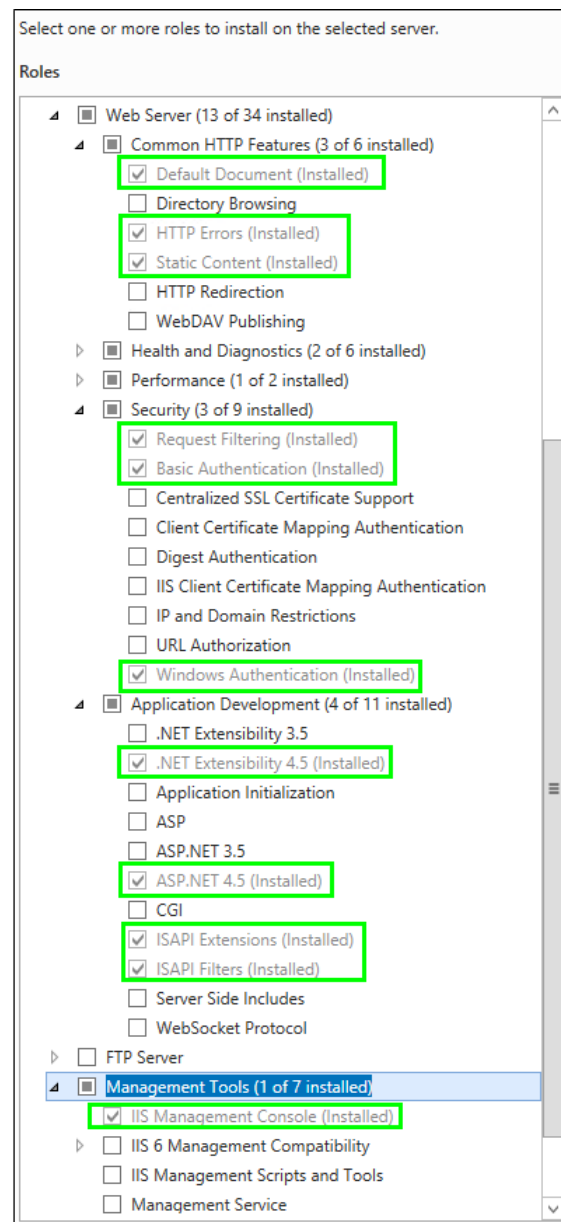


Figure: IIS Requirements (Sample from Windows Server 2012R2)

The screen capture below shows is taken from Windows 10. If you are using a different Windows version for your client, the screen may appear slightly different.

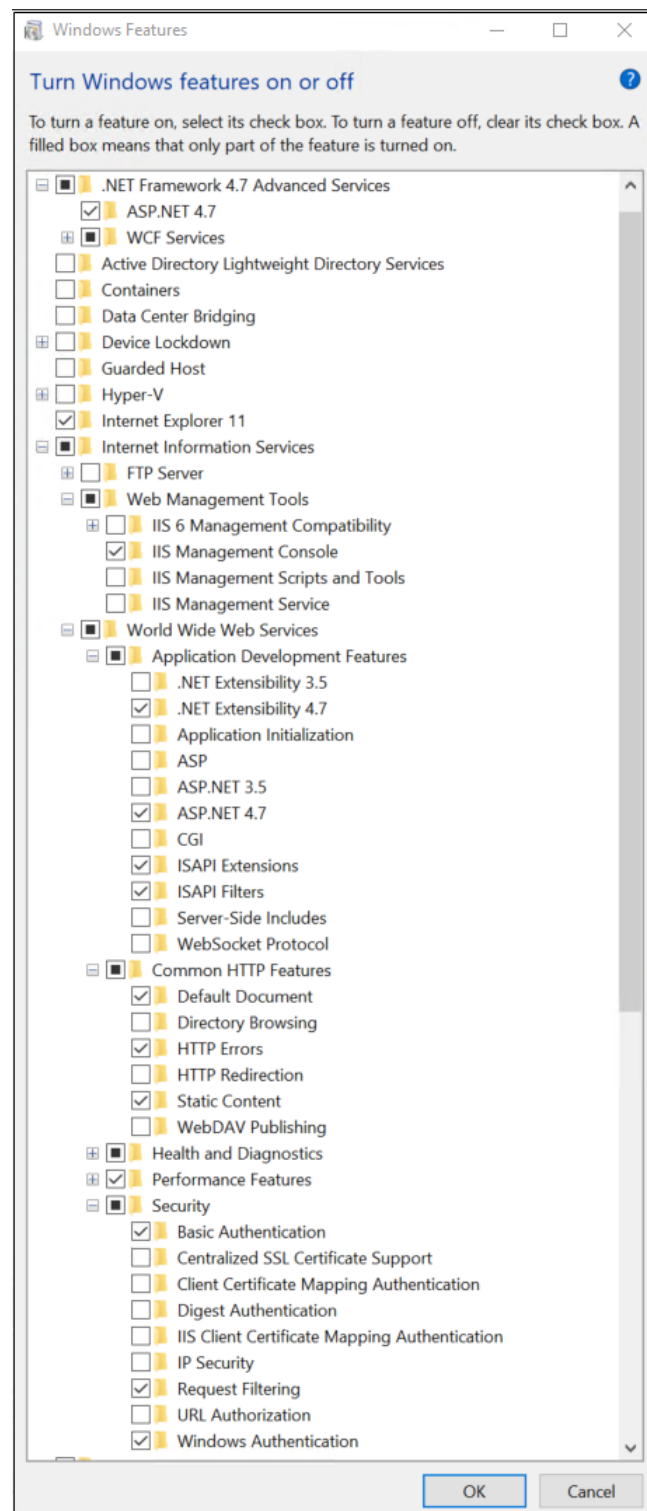
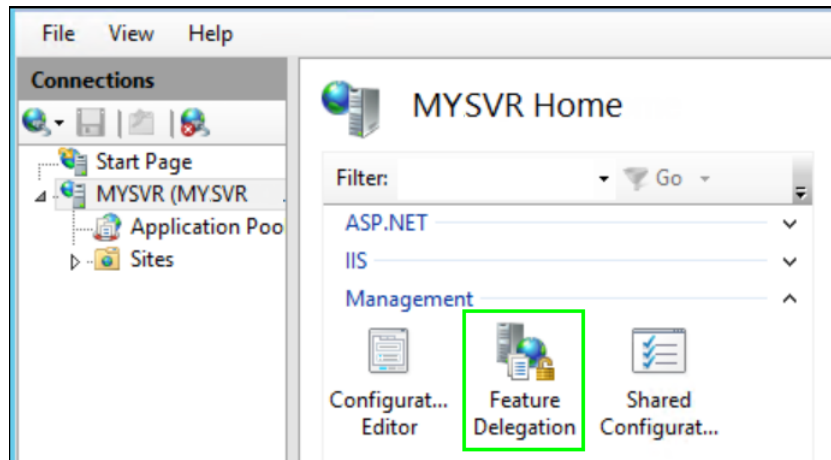
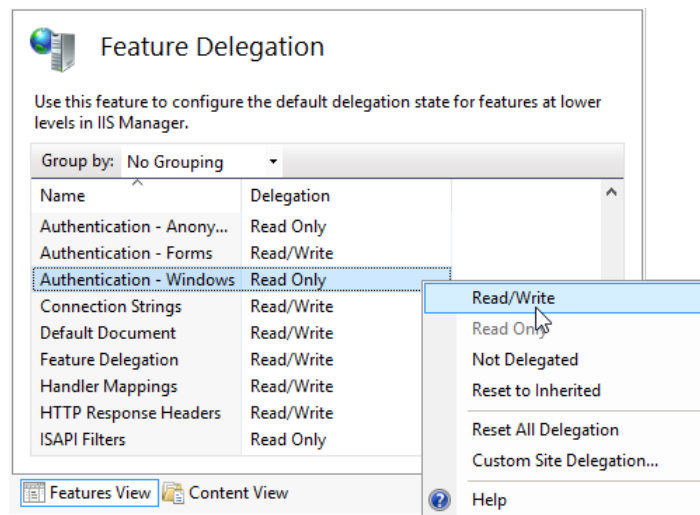


Figure: IIS Requirements (Sample from Windows 10)

2. After enabling IIS with settings from previous screen captures, open the **Internet Information Services (IIS) Manager** to finish configuring IIS. Select the server node to view setting options as shown in the following figure.



3. Then select **Feature Delegation**. Look for **Authentication - Windows**, right click it and select **Read/Write**.



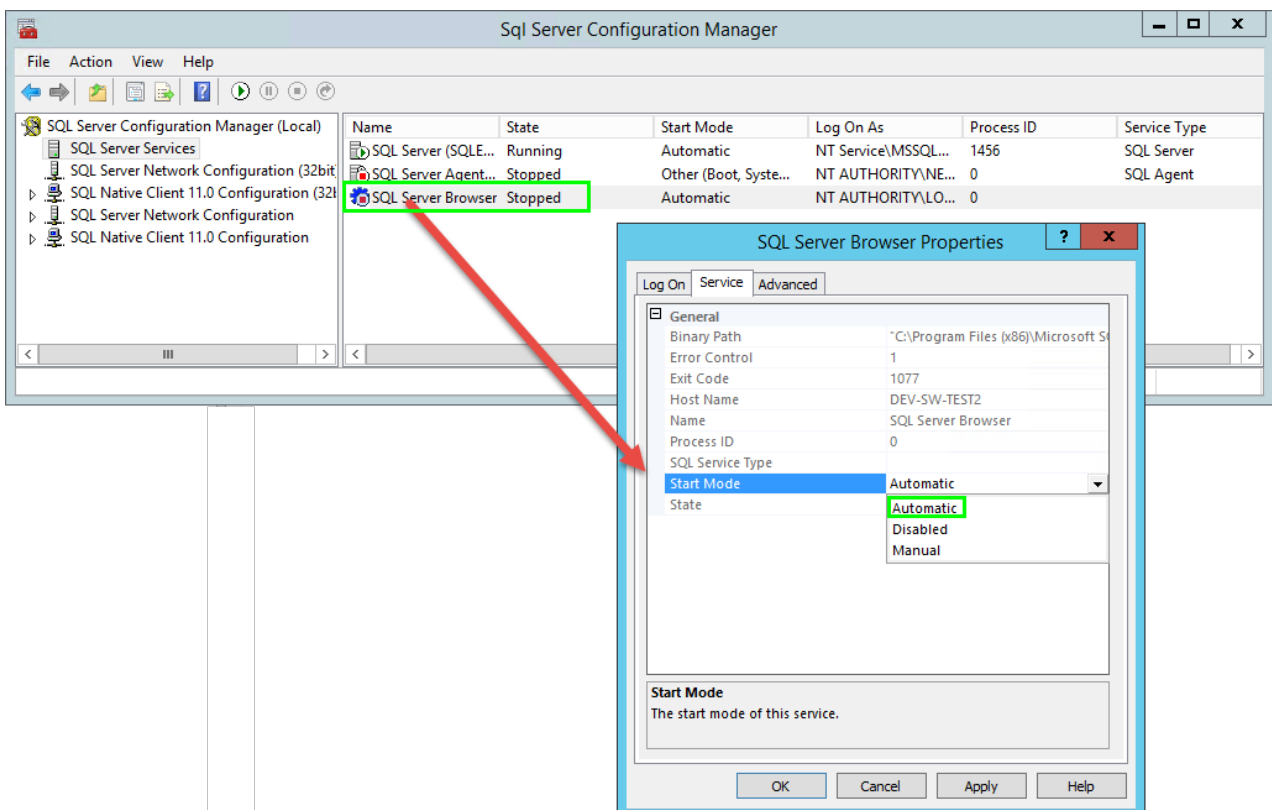
Note: If you do not see Authentication - Windows in the list, verify that IIS Security feature for Windows Authentication is enabled (See "Figure: IIS Requirements" presented in the beginning of this topic).

11.5 Configuring Microsoft SQL Server

After you install CIP and test a standalone configuration, you may find that users are unable to access the database from another PC. The default settings for SQL Express do not allow other users access to the database. SQL Server Browser, TCP/IP protocol and port must be enabled for access to the database by CIS users.

To enable SQL Server Browser

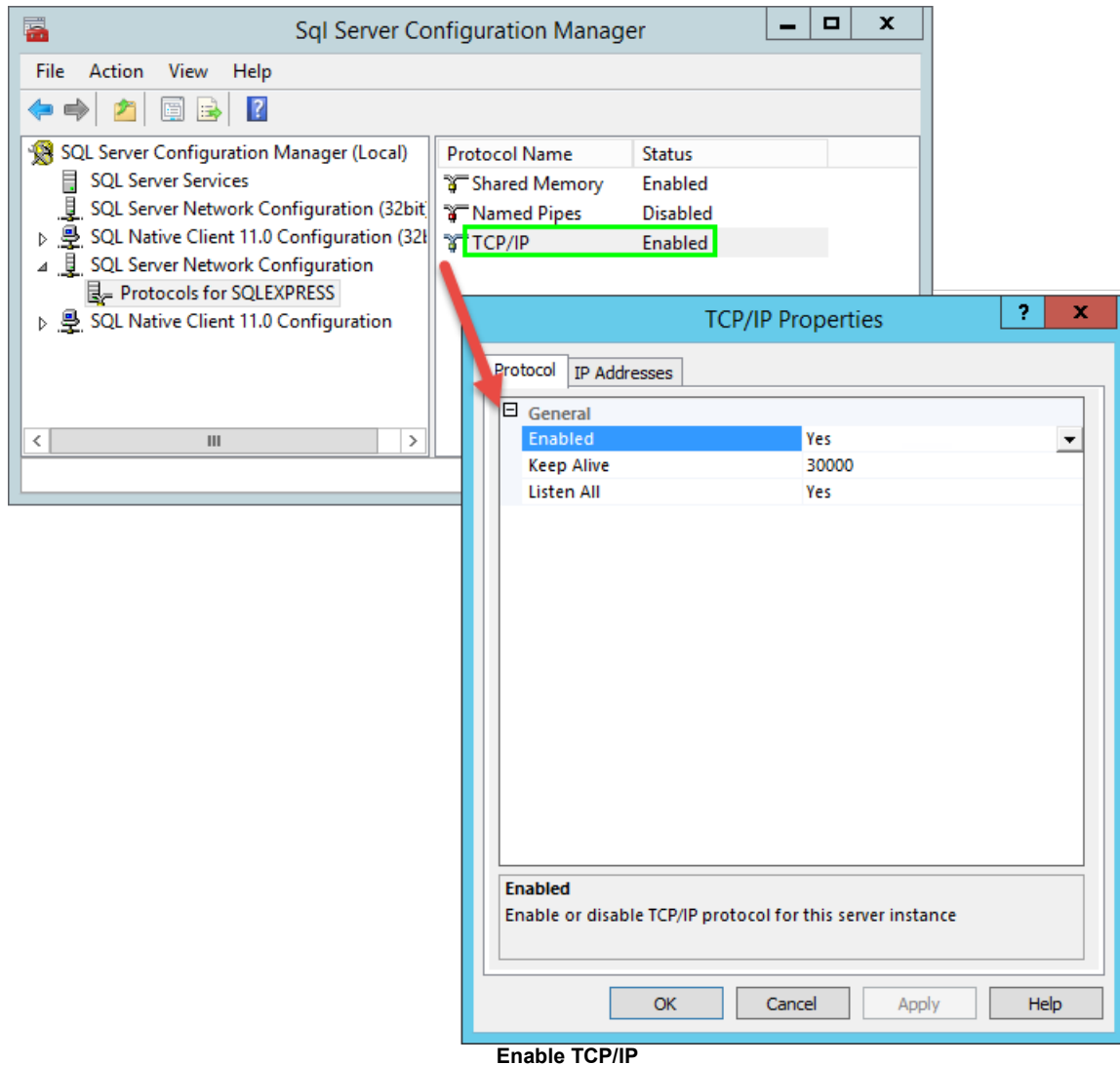
1. Go to the Start Menu > Microsoft SQL Server 20XX > Open **SQL Server 20XX Configuration Manager**.
2. In the upper left-hand corner, select **SQL Server Services**. Double-click **SQL Server Browser**.
3. Select the **Service** tab, set **Start Mode** to Automatic, then click **OK**.
4. Leave **SQL Server Configuration Manager** open.



Enable SQL Server Browser

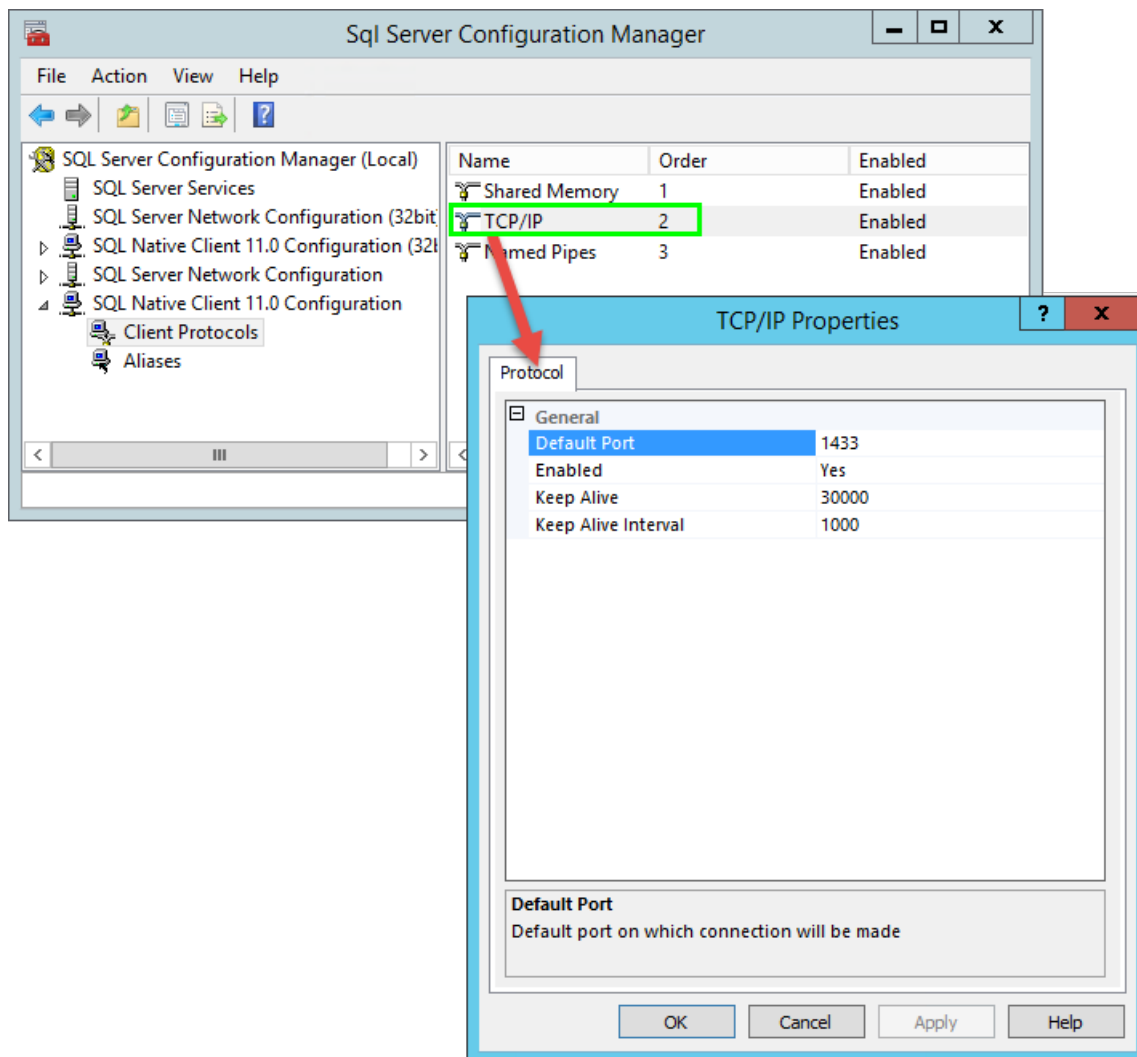
To enable TCP/IP and Client protocol

1. Go to the Start Menu > Microsoft SQL Server 20XX > Open **SQL Server 20XX Configuration Manager**.
2. In the upper left-hand corner, expand **SQL Server Network Configuration** > Protocols for <SQLInstanceName>. Double-click **TCP/IP**.
3. Set **Enabled** to **Yes**, then click **OK**.



Enable TCP/IP

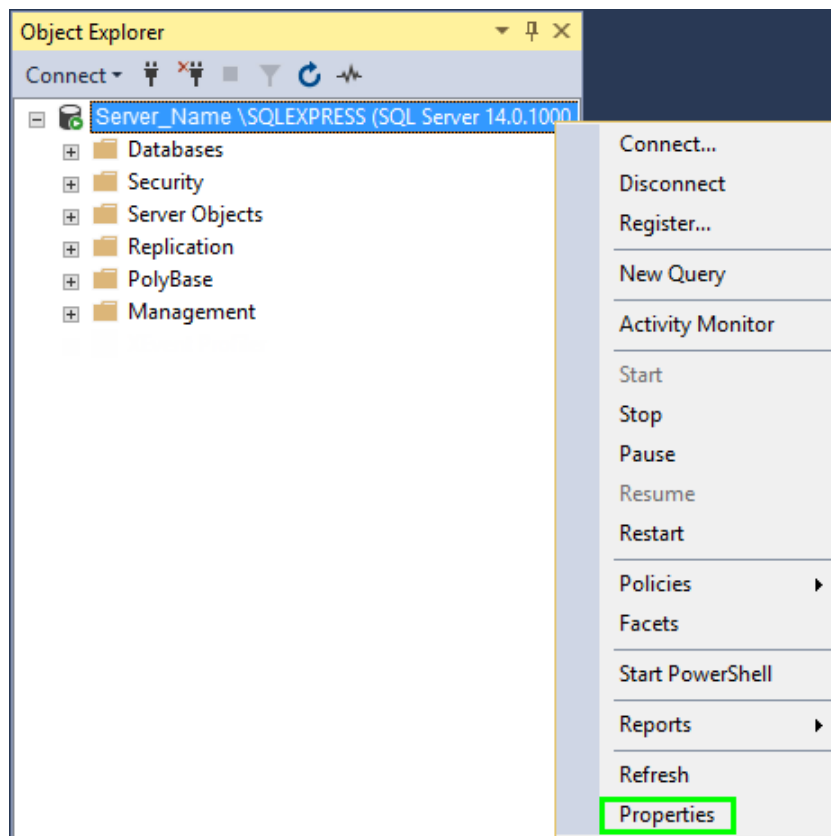
4. In the upper left-hand corner, expand **SQL Native Client 1X.0 Configuration** > **Client Protocols**. Double-click **TCP/IP**.
5. Set **Enabled** to **Yes**, then click **OK**.
6. Leave **SQL Server Configuration Manager** open.



Set TCP/IP Client Protocols

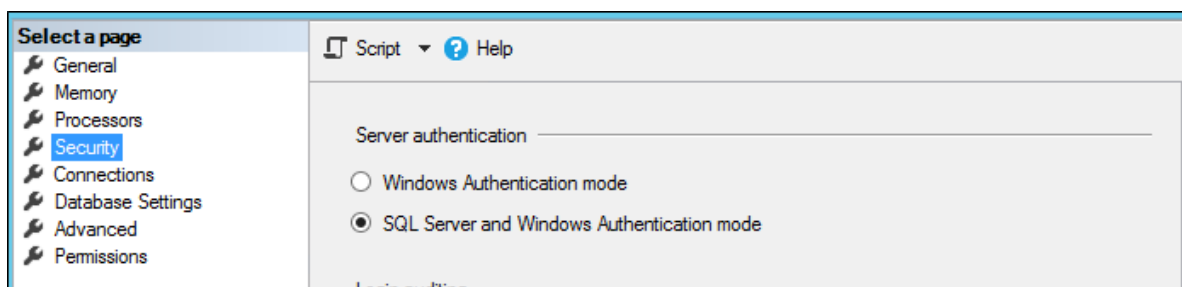
To enable/verify Mixed Mode Authentication

1. Go to the Start Menu > Microsoft SQL Server 20XX > open **SQL Server Management Studio**. **SQL Server Management Studio** can be downloaded directly from the [Microsoft Download Center](#) if you do not see this in your start menu.
2. Log in to connect to your SQL Server Instance,
3. Right-click the server instance name (e.g. <myserver>\SQLEXPRESS), then click **Properties**.



Open SQL Instance Properties

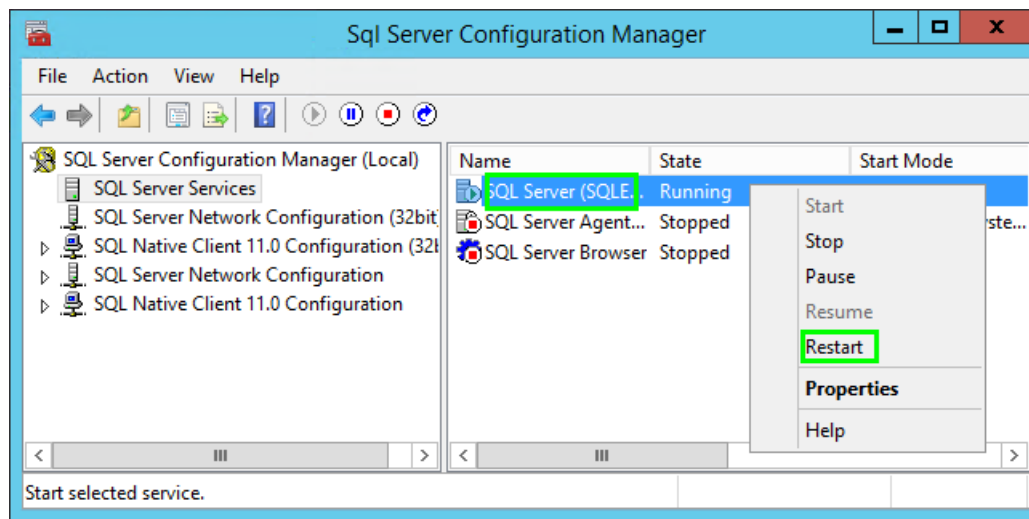
4. Select **Security** to highlight it and select the **SQL Server and Windows Authentication mode** radio option. Click **OK**.



Enable Mixed Mode (SQL and Windows) Authentication

After making your changes, you are now required to restart the SQL instance from within **SQL Server Configuration Manager**.

5. Right-click the server instance name (e.g. <myserver>\SQLEXPRESS) and select **Restart**. If you receive a SQL Agent warning, select **Yes** to continue.



11.5.1 Microsoft SQL with Tools/Management Studio

To download SQL management tool, use the following link: <https://docs.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms?view=sql-server-ver15>.

If the link is no longer valid, go to the [Microsoft Download Center](http://www.microsoft.com/downloads/en/default.aspx) (<http://www.microsoft.com/downloads/en/default.aspx>) and search for "Microsoft SQL server 2017 Express."

Read the descriptions of each executable, then download and install the appropriate file. Both SQL Server 20XX with Tools and SQL Server 20XX with Advanced Services include Management Studio in the installer.

You may wish to download recommended updates at another time.

Note: If MS SQL Server is already installed, and you are looking for **SQL Management Studio**, search for and download the version that corresponds to your SQL server instance.

11.6 Proxy Server

If proxy servers are used for internet access, you will need to modify the web.config file. To find this file, open IIS and navigate to Default Web Site – CIP-E. Open the file with Notepad and locate the Proxy Server section. The section of the code will look as follows. You will also need to replace `http://address:port` with your proxy address and port. The `<!--` and `-->` (flagged in red text) should be removed to uncomment the proxy settings.

```
<!-- Uncomment the following section and update the proxyaddress if a
proxy is used at your location -->
<!--<system.net>
    <defaultProxy>
        <proxy usesystemdefault="False"
```

```

        proxyaddress="http://address:port" bypassonlocal="True"
        autoDetect="False" />
    </defaultProxy>
</system.net>-->

```

CIP may also be configured for network environments where multiple proxies, or authenticated proxies are used. As these procedures are more technical in nature than configuring CIP for a normal proxy server, you may need to refer to your in-house IT support. For each of these procedures, begin by opening your web.config file, as above, then proceed as follows:

Multiple Proxies

To configure multiple proxies, first create a script that is similar to the following and save it to a directory within your CIP-E structure:

```

function FindProxyForURL(url, host)
{
    if (url.substring(0, 5) == "http:") {
        return "PROXY proxy:80";
    }
    else if (url.substring(0, 4) == "ftp:") {
        return "PROXY fproxy:80";
    }
    else if (url.substring(0, 6) == "https:") {
        return "PROXY secproxy:8443";
    }
    else {
        return "DIRECT";
    }
}

```

Next, modify the <defaultProxy> section of web.config as follows:

```

<system.net>
  <defaultProxy>
    <proxy scriptLocation="[http url to auto script]" />
  </defaultProxy>
</system.net>

```

Note: Replace [http url to auto script] with the location of the script you created.

Authenticated Proxies

To configure an authenticated proxy, begin by creating and compiling an assembly called SomeAssembly.dll with this class:

```

namespace SomeNameSpace
{
    public class MyProxy : IWebProxy
    {
        public ICredentials Credentials
        {
            get { return new NetworkCredential("user", "password"); }
            //or get { return new NetworkCredential("user", "password", "domain"); }
            set { }
        }
    }
}

```

```

    }
    public Uri GetProxy(Uri destination)
    {
        return new Uri("http://my.proxy:8080");
    }
    public bool IsBypassed(Uri host)
    {
        return false;
    }
}
}

```

Note: Replace all placeholders with relevant information for your proxy server.

Save this file in the bin directory of your CIP installation directory.

Next, modify the <defaultProxy> section of web.config as follows:

```

<defaultProxy enabled="true" useDefaultCredentials="false">
    <module type = "SomeNamespace.MyProxy, SomeAssembly" />
</defaultProxy>

```

11.7 Verify Application Pool

CIP-E adds a new application pool to Internet Information Services (IIS) during installation. There may be times that the App Pool is not configured or added correctly.

To verify all settings for the application pool and usage by CIP

1. On the web server, open IIS Manager. Click the Start Menu > Control Panel > Administrative Tools > Internet Information Services (IIS) Manager. (This is just one of several ways to access Administrative Tools.)
2. Expand Server node and select **Application Pool**.

Application Pools

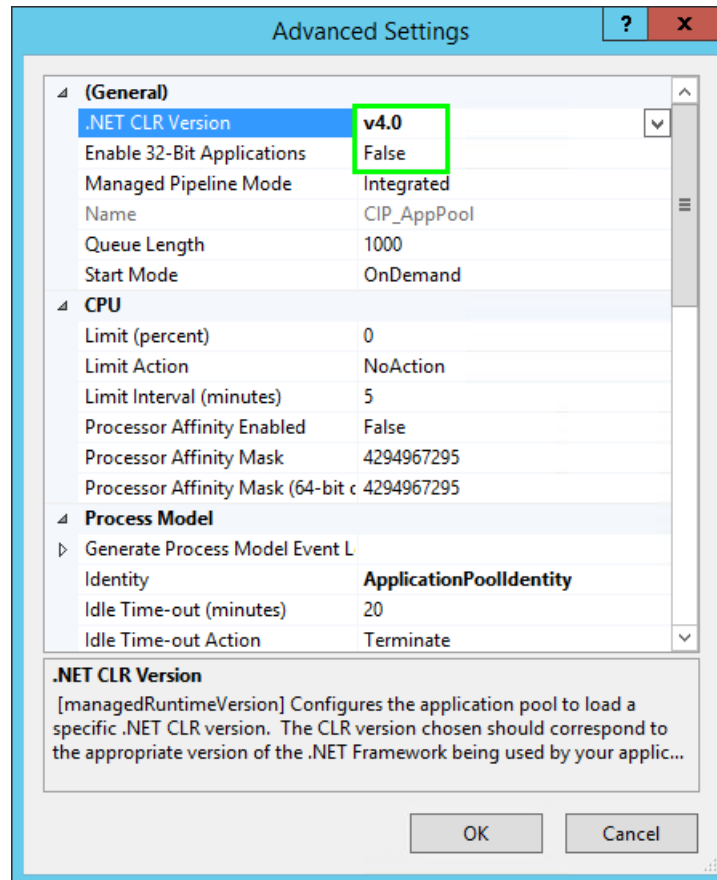
This page lets you view and manage the list of application pools on the server. Application pools are associated with provide isolation among different applications.

Filter: Go Group by: No Grouping

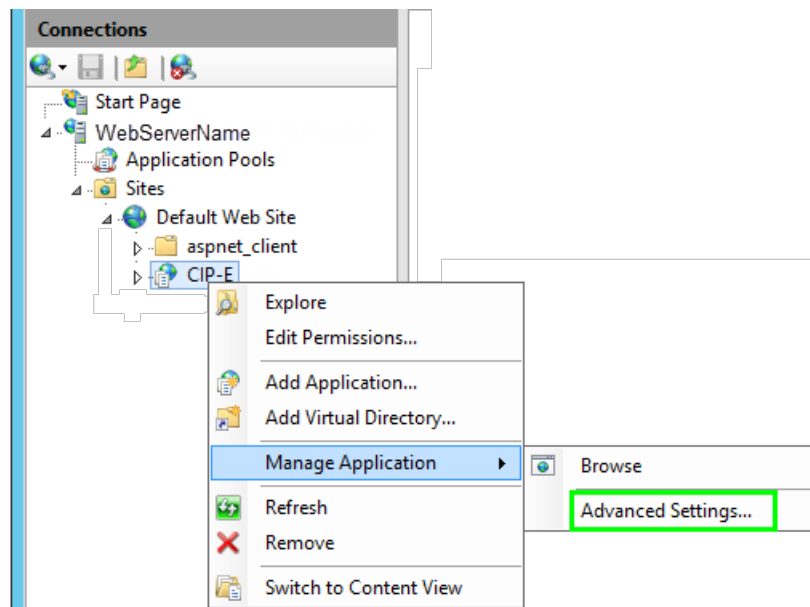
Name	Status	.NET CLR V...	Managed Pipel...	Identity	Applications
.NET v4.5	Started	v4.0	Integrated	ApplicationPoolId...	0
.NET v4.5 Classic	Started	v4.0	Classic	ApplicationPoolId...	0
CIP_AppPool	Started	v4.0	Integrated	ApplicationPoolId...	1
DefaultAppPool	Started	v4.0	Integrated	ApplicationPoolId...	1

App Pool in IIS

3. Right click on CIP_AppPool and select Advanced Setting.... Verify that Enable 32-Bit is false. If you need to change the identity of the AppPool to run using a service account, select the ellipses button next to the Identity.

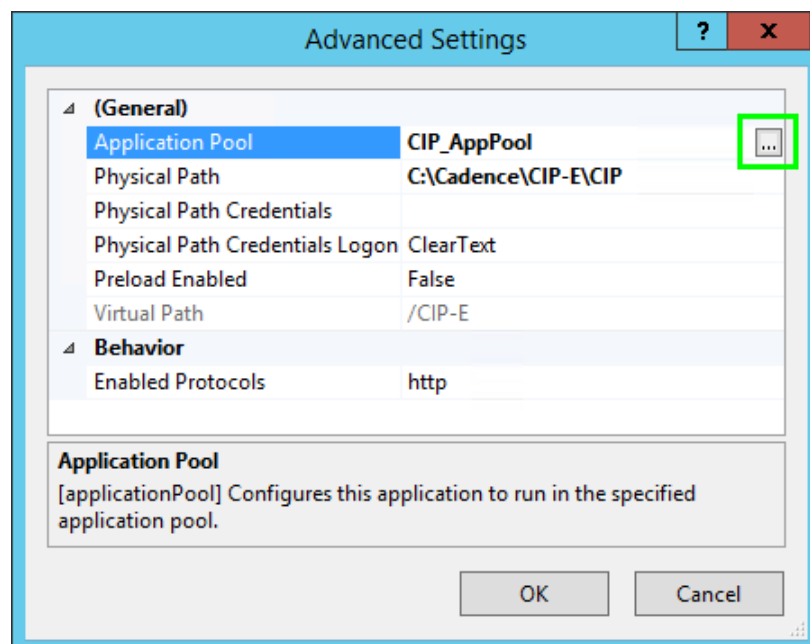


4. Expand **Sites > Default Web Site**, right click on **CIP-E** and select **Manage Application > Advanced Settings...**



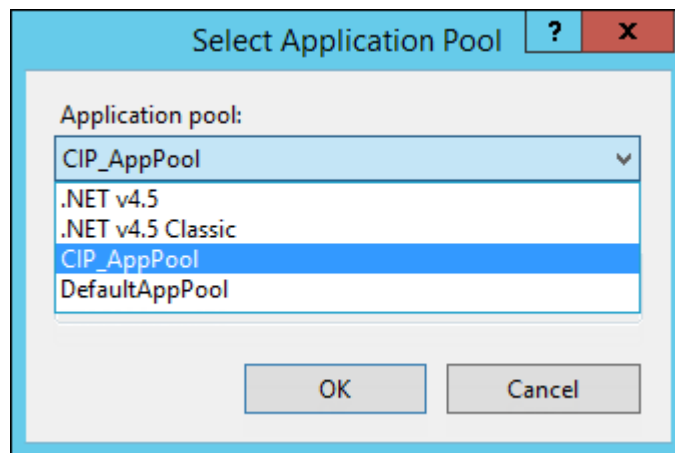
IIS Manager

5. At the **Advanced Settings** dialog, select the ellipsis button  for the application pool to open the application pool setup screen.



IIS Web Site Advanced Settings

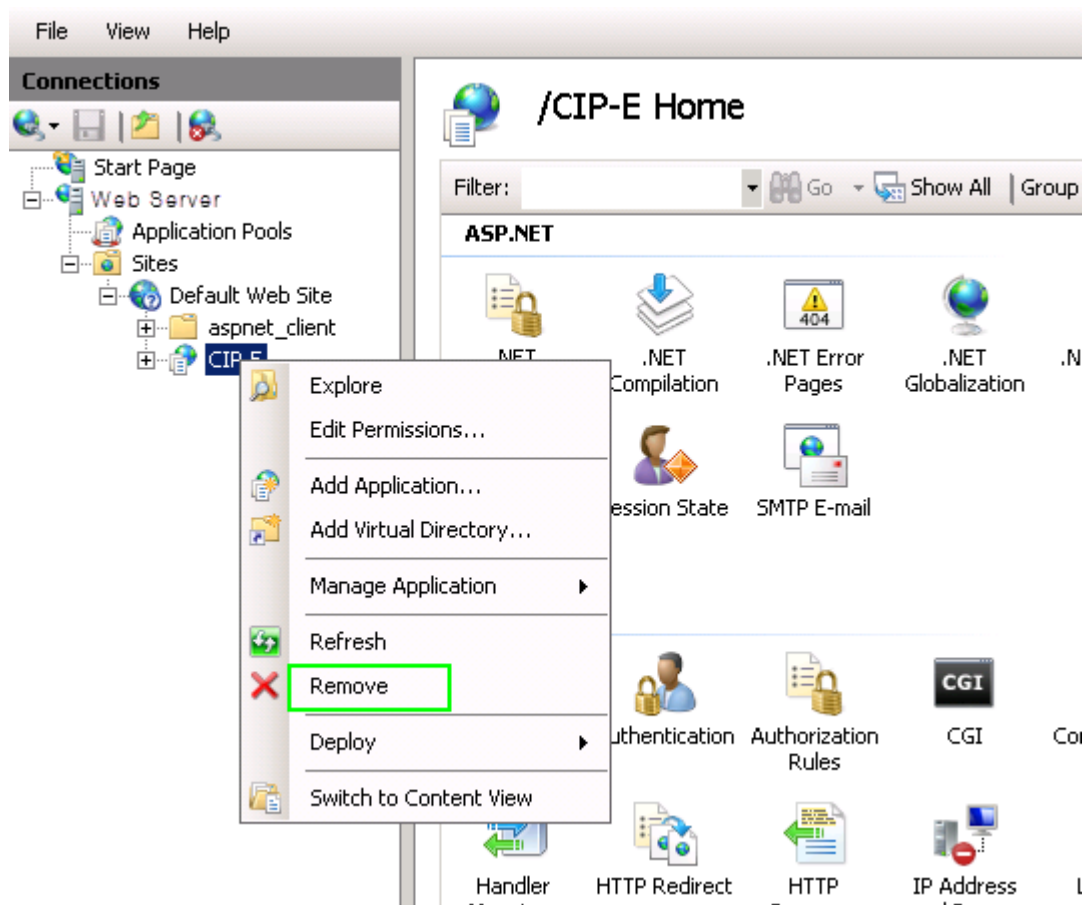
6. At the Application Pool set up screen, select the **CIP_AppPool** and click **OK**.



CIP-E Application Pool Selection

11.8 Verify removal of CIP-E site

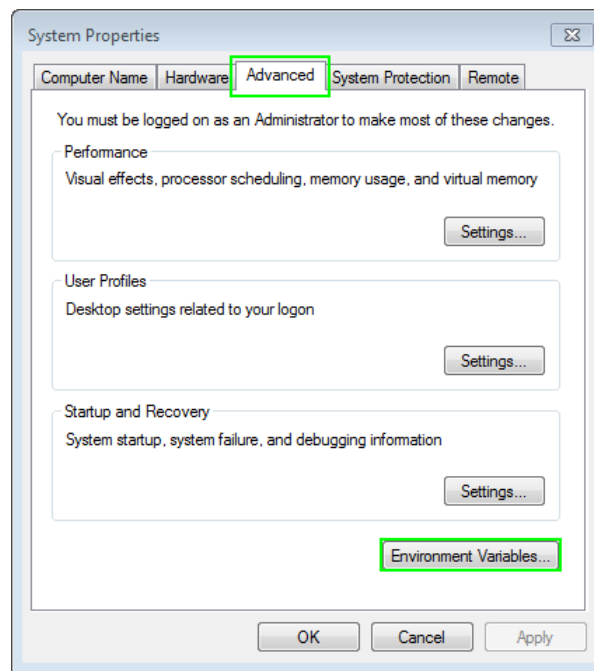
After uninstalling CIP-E and before installing CIP-E web application, verify that the CIP-E site has been removed. Bring up **Internet Information Services (IIS) Manager** and expand **Sites > Default Web Site**. If CIP-E is still in the list, remove the web site.



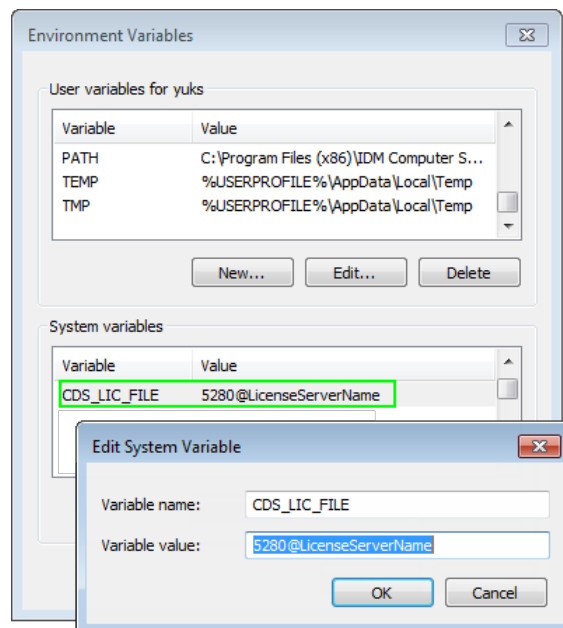
11.9 Verify License Server

Whether you are getting a license error, changing the license server, or updating the license environment variable, you will need to edit the environment variable and verify the CDS_LIC_FILE variable is set correctly.

To verify the environment variable, select Start > Control Panel > System > Advanced system settings. Select Advanced tab and then click the Environment Variables button as shown in the image that follows.

**Edit Environment Variable**

Verify that the environment variable is added as a **System variable** and that it has the correct port and server name.



If this information is correct and you continue to receive the License Error, you may need to check the license file itself to ensure the port and server name are correct.

If you are using multiple license servers, separate each `port@machinename` entry with a semi-colon. For example:

```
CDS_LIC_FILE=5280@machinename1;5280@machinename2
```

If your license servers are set up as a triad, separate each **port@machinename** entry with a comma.

Note: See the Flexadmin documentation if you are configuring redundant license servers.

11.10 Troubleshooting Installation or Upgrade Problems

Troubleshooting instructions provided in the sections that follow guide you as you debug a typical CIP installation or upgrade installation.

When you see an error, close your browser, clear your browser cache and try to bring up CIP web page again. If you see the error repeat, proceed to the following section for possible solutions.

If problems persist, please contact your Cadence Channel Partner if you are still having problems or have any questions.

11.10.1 HTTP Error 500.XX

The HTTP 500 Error is a generic error provided by IIS. This occurs when IIS attempts to start the CIP-E application and encounters a problem. The cause is most likely due to some settings on the IIS server. Regardless of the cause, you will need to investigate your IIS settings.

Possible areas to investigate for problem resolution are as follows:

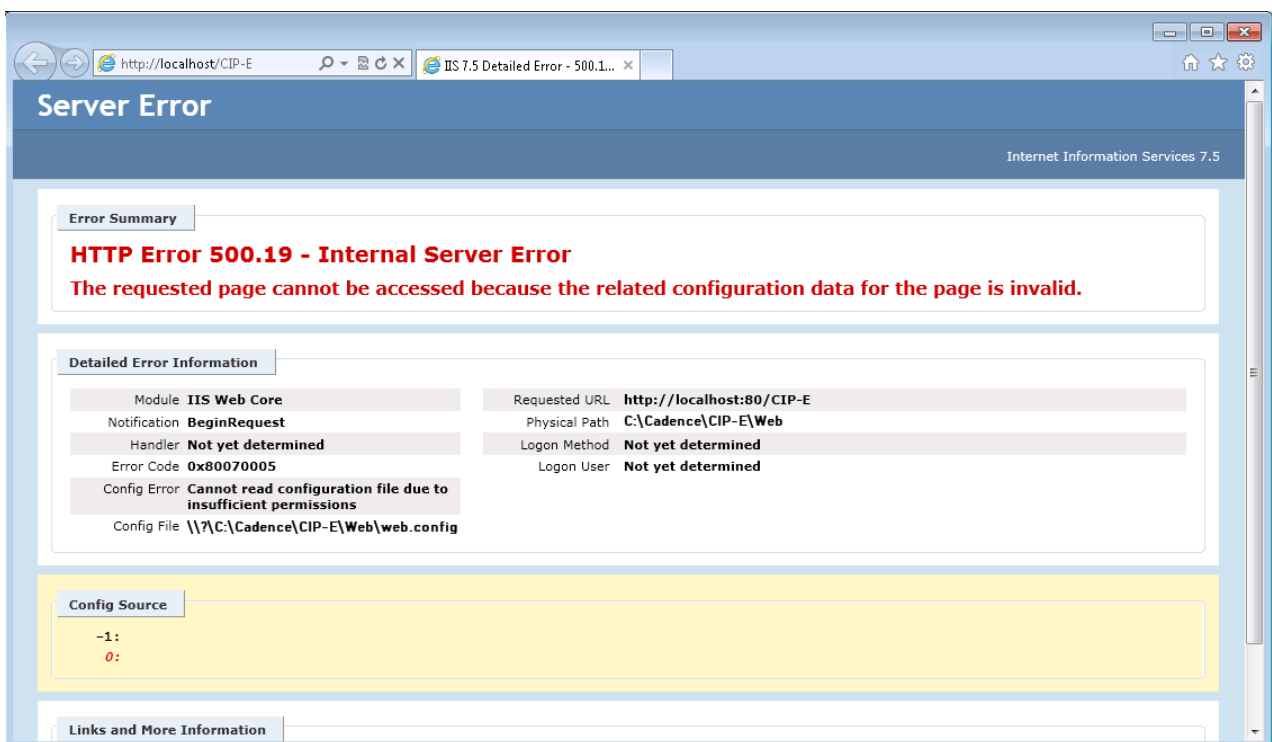
1. You will need to ensure that your IIS configuration has the minimum settings shown in the [Installing IIS](#) section and that the Feature Delegation is configured.
2. Verify that the user IIS is running as a user who has permission to access files in the installation directory. To check which user IIS is running as, look for the identity in the [Application Pool](#) setting. Sharing the CIP-E folder after installation may alter permissions on the files within this folder and its sub-folders thereby preventing access.
3. Verify that the Application Pool is running. If you configured your web application to run as a service account, ensure the user account credentials are still valid.

4. Verify the connection string in the web.config file has a valid SQL server and/or instance name.
5. Verify that the SQL Database is configured for TCP/IP. By default SQL Express is not configured with this enabled.
6. Verify that the SQL Server Browser is started.
7. Verify that the firewall on the SQL server is accepting connections via the SQL server port or SQL server and browser applications. If you specify a different port, you need to add that port to your firewall.

To test whether your web server can access the database, you may use the ODBC data source admin tool. If this ODBC data source admin tool is unable to connect to the database (see figure below), then the web application is also unable to connect. You need to obtain the correct SQL server and/or instance name to resolve this issue.

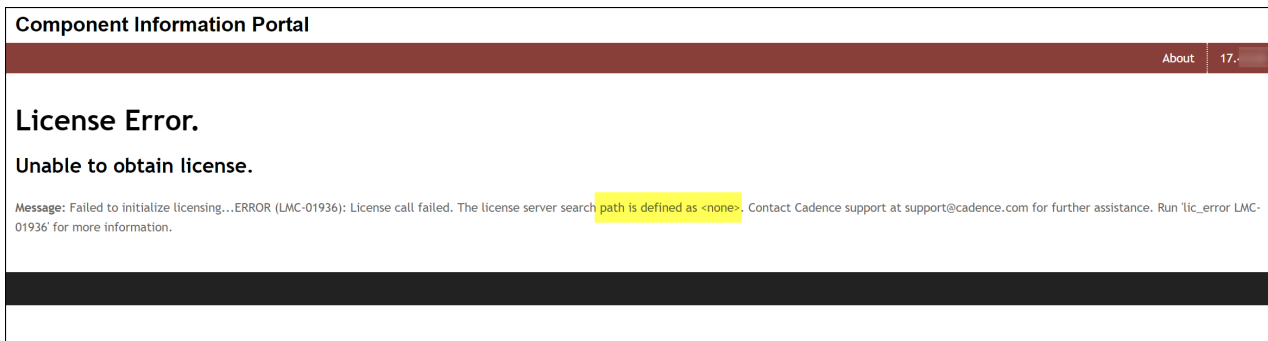
The following is an example of an error generated by IIS.

HTTP Error 500.19 - Internal Server Error

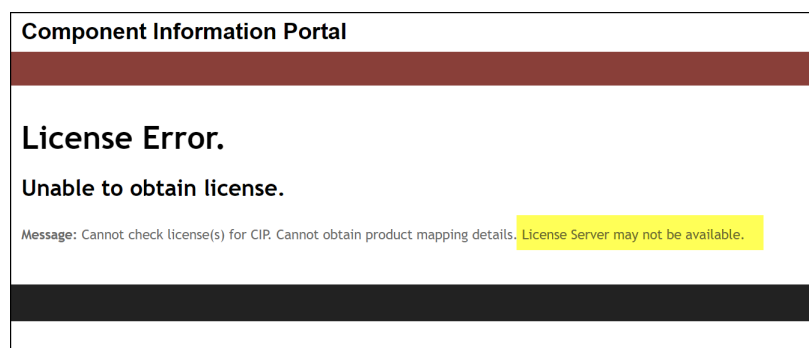


11.10.2 License Error After Initial Login

If you see a license error after your initial login that is similar to one of the two screen captures below, it may be one of two different types of license errors: "Failed to initialize licensing," or "Cannot check license(s)."



License Error Message - Failed to initialize



License Error Message - Cannot checkout license

If you see the error shown in the first figure, "Failed to initialize licensing," the cause of the error, may be one of the following:

- **Environment variable for CDS_LIC_FILE is improperly set.** – Verify the environment variable is configured as a system environment variable as described in the procedure [Verify License Server](#). Also verify the correct port and server name are entered.
- **Web application is unable to obtain the value of CDS_LIC_FILE environment variable** – If the environment variable appears to be correct, you may need to restart IIS to re-read system environment variables. There may be times that the web site loses the environment variables. To verify the environmental variables are set and being read, restart the web server from the command prompt by opening the Command Prompt using **Run as Administrator**. Enter: IISRESET to restart the server.

If you see the error shown in the second figure, "Cannot check license(s)," the error(s) may be due to one of the following causes:

- **License file on license server does not have the feature for orcad_component_portal**
 - To verify this feature, open the license file used by the license server and check for `orcad_component_portal`

11.10.3 Server Error in '/CIP-E' Application

The error message "Server Error in '/CIP-E' Application" is a generic error provided by IIS when it tries to open the CIP-E web application. Regardless of the cause, you will need to read the Description section for the error to help you determine the specific problem.

Possible areas to investigate for problem resolution are as follows:

1. ASP.NET settings in IIS has not been enabled. CIP relies on ASP.NET functionality of IIS. Without it, CIP will have problems. Check complete [IIS settings](#) to be sure.
2. [CIP web application cannot access the CIP_E database](#).
3. CIP web application [cannot log in to the CIP_E database](#) using the CIP_E_Internal_User.
4. [Permission error related to SQL server](#).
5. You see "Runtime error" - Review section on [General Runtime error or Error processing your request](#)
6. You see "Sorry, an error occurred while processing your request" - Review section on [General Runtime error or Error processing your request](#)

11.10.4 SQL Server does not exist or access denied

Server Error in '/CIP-E' Application.

*ERROR [08001] [Microsoft][ODBC SQL Server Driver][DBMSLPCN]SQL Server does not exist or access denied.
ERROR [01000] [Microsoft][ODBC SQL Server Driver][DBMSLPCN]ConnectionOpen (Connect()).*

Description: An unhandled exception occurred during the execution of the current web request. Please review the stack trace for more information about the error and where it originated in the code.

Exception Details: System.Data.Odbc.OdbcException: ERROR [08001] [Microsoft][ODBC SQL Server Driver][DBMSLPCN]SQL Server does not exist or access denied.
ERROR [01000] [Microsoft][ODBC SQL Server Driver][DBMSLPCN]ConnectionOpen (Connect()).

Source Error:

An unhandled exception was generated during the execution of the current web request. Information regarding the origin and location of the exception can be identified using the exception stack trace below.

Stack Trace:

[OdbcException (0x80131937): ERROR [08001] [Microsoft][ODBC SQL Server Driver][DBMSLPCN]SQL Server does not exist or access denied.
ERROR [01000] [Microsoft][ODBC SQL Server Driver][DBMSLPCN]ConnectionOpen (Connect()).]

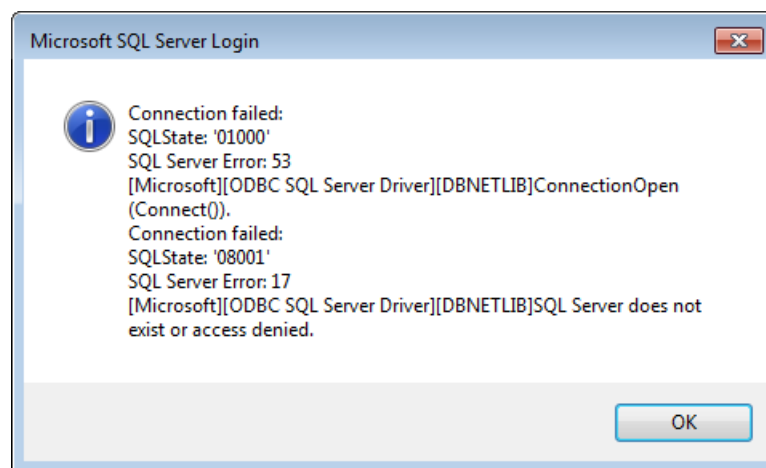
If you get an error that SQL Server does not exist or access denied, then most likely causes for this error are one of the following:

1. Server name and/or instance name was incorrectly entered during installation of the web application

2. SQL Database has not been configured for TCP/IP. By default, [SQL Express](#) is not configured with this enabled.
3. SQL Server Browser has not been started
4. Firewall on the SQL server is prevent outside access or access is only through a specified port. You may specify a specific port to use and add the port configuration to your firewall.

You should verify that the SQL server and/or instance name is correct in the web.config file. Additionally, if your SQL server has been configured to use a port other than the default port, then you will need to add the port number as well.

To test whether your web server can access the CIP_E database, you may use the ODBC data source admin tool. If this ODBC data source admin tool can't connect to the database (see figure below), then the CIP web application will also not be able to. You will need to obtain the correct SQL server and/or instance name to fix this problem.



11.10.5 Login failed for user CIP_E_Internal_User

Server Error in '/CIP-E' Application.

*ERROR [28000] [Microsoft][ODBC SQL Server Driver][SQL Server]Login failed for user 'CIP_E_Internal_User'.
 ERROR [28000] [Microsoft][ODBC SQL Server Driver][SQL Server]Login failed for user 'CIP_E_Internal_User'.*

Description: An unhandled exception occurred during the execution of the current web request. Please review the stack trace for more information about the error and where it originated in the code.

Exception Details: System.Data.Odbc.OdbcException: ERROR [28000] [Microsoft][ODBC SQL Server Driver][SQL Server]Login failed for user 'CIP_E_Internal_User'.
 ERROR [28000] [Microsoft][ODBC SQL Server Driver][SQL Server]Login failed for user 'CIP_E_Internal_User'.

Source Error:

An unhandled exception was generated during the execution of the current web request. Information regarding the origin and location of the exception can be identified using the exception stack trace below.

Stack Trace:

```
[OdbcException (0x80131937): ERROR [28000] [Microsoft][ODBC SQL Server Driver][SQL Server]Login failed for user 'CIP_E_Internal_User'.  

  ERROR [28000] [Microsoft][ODBC SQL Server Driver][SQL Server]Login failed for user 'CIP_E_Internal_User'.]
```

If you see an error that login failed for user 'CIP_E_Internal_User', then most likely causes are one of the following three problems:

1. The password for this user is incorrect
2. SQL server has not been configured for Mixed mode authentication
3. The 'CIP_E_Internal_User' has not been added to the Database Server. This could happen if you restore a database from a backup.

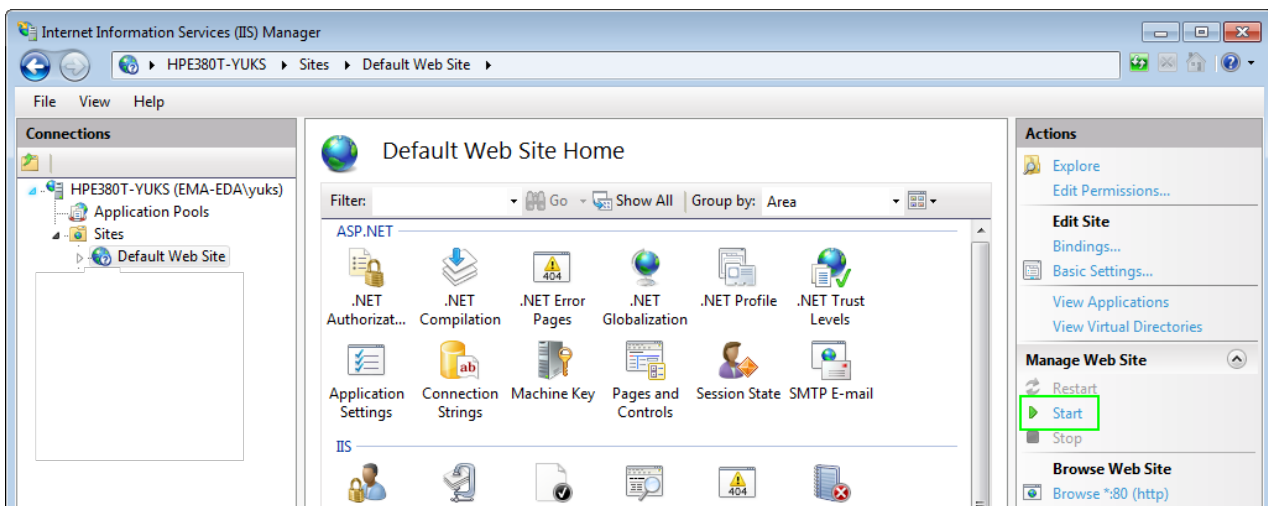
If you restored the database from a backup, you will need to run the restore user script. The script may be found on the installation directory C:\Cadence\CIP-E\Utilities.

If you did not restore the database, then you should verify that the password for CIP_E_Internal_User is correct in the web.config file.

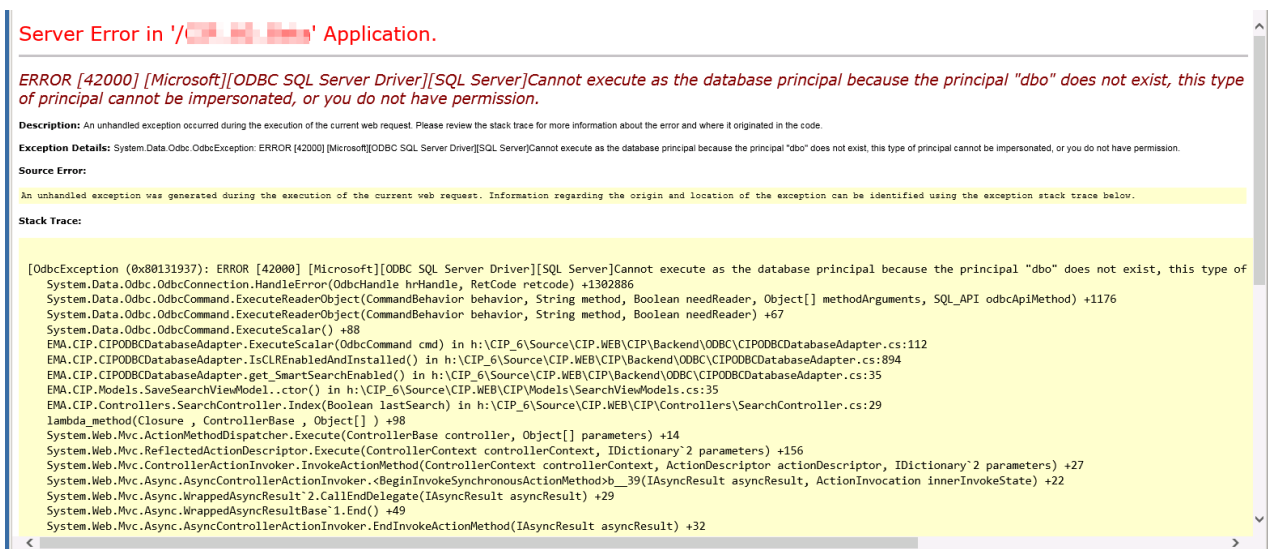
11.10.6 CIP-E Web Site Not Found



If you get the error of Not Found when you bring up the CIP-E web page, then this is most likely due to the web site not having been started. You will need to bring up IIS and Start the web site.



11.10.7 SQL Server Driver Error After Migration

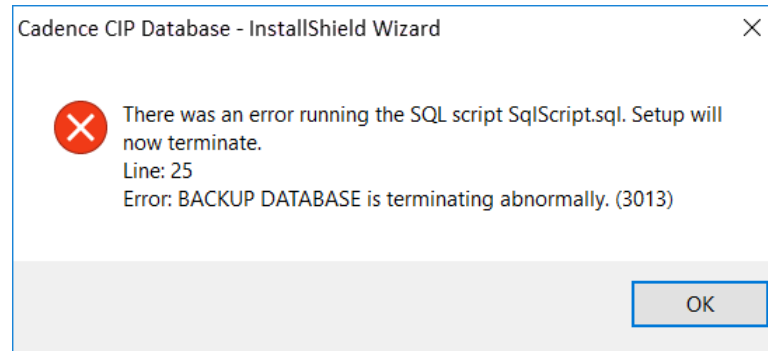


After migrating your SQL server database, if you see an error similar to the figure above, you may try running the following query on your CIP_E database.

```
use CIP_E
go
sp_ChangeDbOwner 'sa'
go
```

11.10.8 Installation Backup Database Error

If the following error occurs during installation, you will need to delete your existing CIP_E_INSTALL.bak file:



To delete this file, navigate to C:\ProgramData, locate the CIP_E_INSTALL.bak file and delete it.

Note: C:\ProgramData is a hidden directory. To navigate to it, either enter "**C:\ProgramData**" in the Windows file manager navigation address bar, or change your view settings to show hidden folders.

11.10.9 Runtime or Processing Your Request Error

If you are getting this Runtime Error, CIP Web Application may be configured to use an incorrect App Pool. To verify the correct App Pool is used, follow steps in the section, [Verify Application Pool](#).

Server Error in '/CIP-E' Application.

Runtime Error

Description: An application error occurred on the server. The current custom error settings for this application prevent the details of the application error from being viewed remotely (for security reasons). It could, however, be viewed by browsers running on the local server machine.

Details: To enable the details of this specific error message to be viewable on remote machines, please create a <customErrors> tag within a "web.config" configuration file located in the root directory of the current web application. This <customErrors> tag should then have its "mode" attribute set to "Off".

```
<!-- web.Config Configuration File -->
<configuration>
  <system.web>
    <customErrors mode="off"/>
  </system.web>
</configuration>
```

Notes: The current error page you are seeing can be replaced by a custom error page by modifying the "defaultRedirect" attribute of the application's <customErrors> configuration tag to point to a custom error page URL.

```
<!-- web.Config Configuration File -->
<configuration>
  <system.web>
    <customErrors mode="RemoteOnly" defaultRedirect="mycustompage.htm"/>
  </system.web>
</configuration>
```


Sorry, an error occurred while processing your request

If you received the error, "Sorry, an error occurred while processing your request", the CIP web application may be unable to connect with the database.

Causes for this may be due to one of the following reasons:

- CIP_E database is taken offline
- Password for CIP_E_Internal_User changed but was not updated in the web.config file.
- The CIP_E database was restored from a backup but the CIP_E_Internal_User and CIP_E_CIS_User were not restored after the database was restored.

11.10.10 Problems Accessing Distributors

If you have an issue obtaining search results from any of the distributors, you may need to whitelist the distributor API URLs.

URLs and expected responses are:

- URL for Digi-key search is <https://distributorsearch.ema-eda.com/api/>
(expected response is "Connection Successful")
- URL for Premier/Farnell/Newark are <https://www.newark.com/pffind/services/SearchService>,
<https://uk.farnell.com/pffind/services/SearchService>,
<https://au.farnell.com/pffind/services/SearchService>, and
<https://cn.farnell.com/pffind/services/SearchService>.
(expected response is XML error since you are trying to get there from the browser)
- URL for Future Electronics is
<http://www1.futureelectronics.com/PartLookup/PartLookup.aspx>
(expected response is a prompt to ask you to log in)
- URL for Mouser is <http://api.mouser.com/service/emasearchapi.aspx>
(expected response is the service search API info)
- URLs for Arrow are <http://api.arrow.com/itemservice/v2/en/search>, and
<http://api.arrow.com/itemservice/v2/en/detail>
(expected responses are Whitelabel page error and XML text)