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Deltek

Deltek Costpoint® 8.1

New Installation Guide for Oracle®

November 22, 2021



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New Installation Checklist

The following is a checklist of the overall steps needed to install Costpoint 8.1. Details for each step are provided on subsequent pages.

Print this checklist and use it as you complete this installation, if desired.

| Done? | Step | Notes |
|---|---|-------------------------------|
|  | <i>Step summary...</i> | <i>Any pertinent notes...</i> |
| Database Tier Installation | | |
| | 1. Create Costpoint 8.1 Oracle Instance(s) and Tablespaces | |
| | 2. Install Costpoint Database using Database Tier Installer | |
| | 3. Apply Partitioning Script for Performance Enhancement (optional) | |
| Application Tier Installation | | |
| | 1. Install Application Tier Software | |
| | 2. Add Users to the CostpointToolsGroup | |
| | 3. Start Costpoint 8.1 | |
| | 4. Install Costpoint 8.1 Windows Service | |
| | 5. Configure Costpoint 8.1 Windows Service | |
| Web Tier Installation (Microsoft IIS) | | |
| | 1. Configure Microsoft IIS for Costpoint 8.1 | |
| | 2. Install Web Tier Software | |
| | 3. Add Users to the CostpointToolsGroup | |
| | 4. Configure Costpoint 8.1 IIS Access | |
| | 5. Restart Costpoint 8.1 WebLogic Server | |

| Done? | Step | Notes |
|----------------------------------|--|-------|
| Using Costpoint 8.1 | | |
| | 1. Log in to Costpoint 8.1 | |
| Maintenance Release Installation | | |
| | 1. Install Latest Costpoint 8.1 Maintenance Release (MR) | |

Related Documentation

The following table lists the additional documentation that downloads with this release. Except where noted, all the user guides and quick reference guides listed in this table are also available for download from the Deltek Customer Care Connect site.

You need Adobe Reader 8.1 or higher to view the documents listed in this section.

Release Notes

| Document Name | Description |
|---------------------------------------|--|
| Deltek Costpoint 8.1 Database Changes | This document describes the database changes between the release of Costpoint 8.0 and Costpoint 8.1. |
| Deltek Costpoint 8.1 Release Notes | <p>Major New Features and Enhancements: View the major new features and enhancements included in Costpoint 8.1.</p> <p>De-Supported Applications: View the applications that are no longer supported in Costpoint 8.1.</p> |

Entity Relationship Diagrams (ERDs)

| Document Name | Description |
|--|---|
| DeltekCostpoint810TransactionSchemaERD.zip | This ZIP file contains the ERD for the Deltek Costpoint 8.1 Transaction schema. Use index.htm to view the ERD. |
| DeltekCostpoint810SystemSchemaERD.zip | This ZIP file contains the ERD for the Deltek Costpoint 8.1 System schema. Use index.htm to view the ERD. |

| Document Name | Description |
|---|--|
| DeltekCostpoint810AdminSchemaERD.zip | This ZIP file contains the ERD for the Deltek Costpoint 8.1 Admin schema. Use index.htm to view the ERD. |
| DeltekCostpoint810PLTransactionSchemaERD.zip | This ZIP file contains the ERD for the Deltek Costpoint 8.1 Planning Transaction schema. Use index.htm to view the ERD. |
| DeltekCostpoint810TETTransactionSchemaERD.zip | This ZIP file contains the ERD for the Deltek Costpoint 8.1 Time & Expense Transaction schema. Use index.htm to view the ERD. |

Technical Guides

| Document Name | Description |
|--|---|
| Deltek Costpoint 8.1 Configuration Utility | This document describes how to use the Costpoint Configuration Utility, which helps Costpoint administrators perform the most common configuration tasks. |
| Deltek Costpoint 8.1 Content Management Integration | This document describes how to configure and tune the Costpoint Content Management Integration (CMI) application to provide access to Microsoft SharePoint™, as well as other Content Management Systems (CMS) that are compliant with the Content Management Interoperability Standard (CMIS). |
| Deltek Costpoint 8.1 DB Wizard Utility | This document describes how administrators can use the DB Wizard utility to apply licenses, run link views, rebuild user menus, as well as deploy and verify extensibility. |
| Deltek Costpoint 8.1 Deployment Options Technical Overview | This document provides a high-level overview of Costpoint configuration options, including server, database, and security options. |
| Deltek Costpoint 8.1 Integration Overview | This document provides a high-level overview of how Costpoint reports, processes, and data can be integrated with third-party applications via Web services. |
| Deltek Costpoint 8.1 Integration Console | This document is a detailed guide to the Costpoint Integration Console, which automates the process of integrating Costpoint reports, processes, and data with third-party applications via Web services. |

| Document Name | Description |
|---|---|
| Deltek Costpoint 8.1 Maintenance Release Installation Guide | This document describes how to apply Costpoint 8.1 MRs. |
| Deltek Costpoint 8.1 Message Boards | This document describes how integration between Costpoint and MS Exchange can enable collaboration among Costpoint users as well as between Costpoint and non-Costpoint users. This capability also allows you to link emails with attachments directly to Costpoint documents and view them directly from Costpoint. |
| Deltek Costpoint 8.1 Monitoring Utility | This document describes how to use the Monitoring Utility to diagnose Costpoint configuration problems. |
| Deltek Costpoint 8.1 Performance Optimization | This document contains Costpoint performance tips and tricks, information on the configuration of the Deltek performance lab, as well as a list of optimized applications for the Oracle parallel SQL execution option. |
| Deltek Costpoint 8.1 Post Installation Hardening Guide | This document presents common principles and recommendations that administrators should consider for post-installation hardening of the Costpoint server environment. |
| Deltek Costpoint 8.1 Process Execution Modes | This document describes the many options for executing reports and processes in Costpoint, including using interactive and batch modes and job servers. |
| Deltek Costpoint 8.1 Security | This document describes user authentication and other security safeguards in Costpoint. |
| Deltek Costpoint 8.1 User Migration Utility | This document describes how to migrate users from earlier Costpoint versions to Costpoint 8.1. |

Other Documents

| Document Name | Description |
|--|--|
| Deltek Costpoint 8.1 Getting Started Guide | This document describes instructions for accessing Costpoint applications as well as descriptions of menus, toolbars, and other global features. You will also find information about logging on to Costpoint, accessing the database, printing reports, reviewing online help, and contacting Deltek Customer Care and other client services. |

| Document Name | Description |
|--|--|
| Deltek Costpoint 8.1 User Interface QRC | This document is a quick reference card that you can keep handy and use for reference as you work in Costpoint 8.1. It describes how to navigate through the application. |
| Deltek Costpoint 8.1 Shortcut Keys Toolbar Icons And Buttons QRC | This document is a quick reference card that you can keep handy and use for reference as you work in Costpoint 8.1. It lists the shortcut keys available in Costpoint, as well as the toolbar icons and buttons. |
| Deltek Costpoint 8.1 Views QRC | This document is a quick reference card that you can keep handy and use for reference as you work in Costpoint 8.1. It explains the differences between Table View and Form View. |
| Deltek Costpoint 8.1 Query and Lookup QRC | This document is a quick reference card that you can keep handy and use for reference as you work in Costpoint 8.1. It explains how to use the query and lookup functions in Costpoint, |
| Deltek Costpoint 8.1 Extensibility Designer Coding Guide | This document contains java coding information for Costpoint Extensibility developers. |
| Deltek Costpoint 8.1 Extensibility Designer Quick Start Guide | This document outlines the basic steps for creating and deploying extensibility. |
| Deltek Costpoint 8.1 Extensibility Designer Report Guide | This document describes how to extend a report. |
| Deltek Costpoint 8.1 Extensibility Designer User Guide | This document contains detailed instructions for using the Costpoint Extensibility Designer. |
| Deltek Costpoint 8.1 Screen Customization and Business Logic Extensibility | This document provides an overview of Costpoint screen customization and business logic extensibility features. |

New Installation Overview

This document provides instructions for installing the Deltek Costpoint 8.1 software. During the installation process, you will perform the following:

- Ensure that your system meets the installation prerequisites.

Note: See the [Installation Prerequisites](#) and [System Requirements](#) sections for additional information, and review the full list of [Related Documentation](#) prior to installing Costpoint 8.1.

- Install the Costpoint 8.1 Database Tier software to create your Costpoint 8.1 Transaction, System, and Admin databases, as well as your Costpoint 8.1 Planning (PL) Transaction and Time & Expense (TE) Transaction databases **(if applicable)**.
- Install the Costpoint 8.1 Application Tier software, which includes both the Oracle WebLogic® Server software and the Costpoint 8.1 software.
- Install the Costpoint 8.1 Web Tier software to your Internet Information Server, if applicable.
- Install the latest Costpoint 8.1 Maintenance Release (MR).

Note: If you need help with this installation, please contact Deltek Costpoint Technical Support at 877.HLP.PROJ (877-457-7765).

Installation Package Contents

The Costpoint 8.1 installation package contains the following:

- Costpoint 8.1 Database Tier installer
- Costpoint 8.1 Application Tier installer
- Costpoint 8.1 Web Tier installer
- Costpoint 8.1 Maintenance Release Installer
- Deltek Costpoint 8.1 New Installation Guide for Oracle
- Deltek Costpoint 8.1 Maintenance Release Installation Guide

Installation Prerequisites

Database Tier Installation Prerequisites

Before you start the Database Tier installation process, your database server must meet the following software prerequisite:

| Prerequisite Component | Details |
|------------------------|---|
| Software | All product compatibility information is maintained in the Deltek Product Support Compatibility Matrix, which is available on the Customer Care Support Site here . |

| Prerequisite Component | Details |
|---------------------------------|---|
| Passwords | To run the installation, passwords are required for Oracle SYSTEM and SYS users. |
| Oracle Instance and Tablespaces | Create an Oracle instance and Oracle tablespaces as documented in Create Costpoint 8.1 Instance(s) and Tablespaces . |
| Firewall Settings | On your Database Server, the Oracle Listener Port (1521) must be open for Inbound and Outbound traffic through your firewall. On your Database Server, make sure that the Network discovery and file sharing options are switched on. |

Application Tier Installation Prerequisites

Before you start the Application Tier installation process, the application server that will run your WebLogic Server and Costpoint 8.1 software must meet the following prerequisites:

| Prerequisite Component | Details |
|------------------------|---|
| Software | All product compatibility information is maintained in the Deltek Product Support Compatibility Matrix available, which is available on the Customer Care Support Site here . |

Costpoint 8.1 Server Startup Prerequisites

Before you start Costpoint 8.1, the following requirements must be met:

| Prerequisite Component | Details |
|------------------------|--|
| Server | On your Database Server, the Oracle Listener Port 1521 must be open for Inbound and Outbound traffic through your firewall. On your Database Server, make sure that the Network Discovery and File Sharing options are switched on. On your Application Server, the WebLogic Listener Port 7009 must be open for Inbound and Outbound traffic through your firewall. On your Application Server, make sure that the Network Discovery and File Sharing options are switched on. |

Costpoint 8.1 Initial Log In Configuration Prerequisites

Before you can log in to Costpoint 8.1, your Windows client computer must meet the following requirements:

| Prerequisite Component | Details |
|------------------------|--|
| Software | <p>All product compatibility information is maintained in the Deltek Product Support Compatibility Matrix available on the Customer Care Support Site here.</p> <p>Adobe Reader 2020.xxx or higher: This is required only for users who want to print Costpoint 8.1 reports in PDF format. Make sure that you select the Display PDF in browser option under the Preference settings for Adobe Acrobat Reader to avoid pulling up a blank browser screen when printing in PDF format.</p> |

Web Tier Installation/Microsoft Internet Information Server (IIS) Configuration Prerequisites

The web server that will host your Internet Information Server software must meet the following prerequisites:

| Prerequisite Component | Details |
|------------------------|---|
| Software | <p>All product compatibility information is maintained in the Deltek Product Support Compatibility Matrix available on the Customer Care Support Site here.</p> |

Installation Process for Costpoint 8.1

The Costpoint 8.1 installation process incorporates the following steps:

| Component | Change Details |
|-------------------------------|---|
| Database Tier Installation | <p>The Database Tier installer automatically creates the following user-defined schemas and users:</p> <ul style="list-style-type: none"> Transaction Schema (DELTEK) Admin Schema (CPADMIN) System Schema (CPSYSTEM) PL Transaction Schema (PLTRAN), if applicable TE Transaction Schema (TETRAN), if applicable Link User (CPLINK_USER) |
| Application Tier Installation | <p>The Install function in the Application Tier automatically installs all necessary software and handles all configurations.</p> |

| Component | Change Details |
|-----------------------|---|
| | <p>The Application Tier installer automatically performs all the following actions:</p> <ul style="list-style-type: none"> ▪ Extracting JDK ▪ Installing WebLogic ▪ Extracting BIRT Lib Files ▪ Extracting App Tier Class Files ▪ Updating Config Files ▪ Encrypting Passwords ▪ Running LinkViews ▪ Syncing Sys Settings Table ▪ Applying License ▪ Running LinkViews ▪ Migrating Org Security Application Modules ▪ Creating Demo License ▪ Creating Shortcuts <p>The Application Tier installer creates a CostpointToolsGroup with the following Sharing and Security permissions:</p> <ul style="list-style-type: none"> ▪ Full Sharing and Security Permissions on your Costpoint 8.1 Deltek directory (C:\Deltek) ▪ Full Security Permissions on your WebLogic directory (C:\Oracle\Middleware12.2.1.4) |
| Web Tier Installation | <p>The Install function in the Web Tier automatically installs all necessary software and handles all configurations.</p> <p>The Web Tier installer automatically performs all of the following actions:</p> <ul style="list-style-type: none"> ▪ Extracting DEProxy Files ▪ Extracting DEWebApp Files ▪ Configuring Internet Information Server (IIS) ▪ Resetting Internet Information Server (IIS) <p>The Web Tier installer creates a CostpointToolsGroup with the following Sharing and Security permissions:</p> <ul style="list-style-type: none"> ▪ Full Sharing and Security Permissions on the folder containing your Costpoint 8.1 DEWebApp directory (C:\Deltek\Costpoint or C:\Deltek\Costpoint\81\applications) |

Web Servers Supported in Costpoint 8.1

The Costpoint 8.1 system supports the following web servers only:

- Microsoft Internet Information Server
- Oracle's WebLogic Web server

Naming Conventions

The naming conventions specified in this section are used in all installation instructions detailed in this upgrade installation guide.

Drive Letters

The table below lists the drive letters used in the installation instructions:

| Drive | Description |
|-------|--|
| C: | This is the drive where the Costpoint 8.1 software is installed. |

Directory Names

The table below lists the directory names used in the installation instructions:

| Directory Name | Description |
|---------------------------|--|
| ORACLE/MIDDLEWARE12.2.1.4 | This is the name of the directory where the Oracle WebLogic software is installed. |
| DELTEK | This is the name of the directory where the Costpoint 8.1 software is installed. |

Costpoint Schema Names

The table below lists the typical Oracle schema names used in the Costpoint Database Tier installation:

| Database Name | Description |
|---------------|--|
| CPTRAN | This is the name of your Costpoint Transaction schema. |
| CPSYSTEM | This is the name of the Costpoint System schema. The CPSYSTEM user is a separate database schema that stores the metadata that the Costpoint 8.1 software needs to function properly. |
| CPADMIN | This is the name of the Costpoint Admin schema. The CPADMIN user is a separate database schema that stores system and security information that the Costpoint 8.1 software needs to function properly. |
| PLTRAN | This is the name of your Planning Transaction schema. |
| TETRAN | This is the name of your Time & Expense Transaction schema. |

Deltek Software Manager (DSM)

Software installations, installation instructions, technical guides, and release notes are available for download from the Deltek Software Manager (DSM). You will also download future releases of Costpoint 8.1 from DSM.

DSM is the sole download source for hotfix files. Deltek Knowledge Base articles provide an explanation of the fixes and contain links to DSM for retrieval of the actual files.

DSM Requirements

You can run DSM from any desktop. You do not need to run DSM from Deltek application servers.

To run DSM, you must meet the following requirements:

- Windows XP or later
- Microsoft .NET Framework 3.5 SP1 (3.5.1)

The following Deltek Knowledge Base article contains a download link to the framework. It also has examples of what you may see if you do not have the framework installed:

https://deltek.custhelp.com/app/answers/detail/a_id/52469

Tip: Refer to the [DeltekSoftwareManager.pdf](#) to learn more about DSM and how it works.

DSM Documentation and Troubleshooting

- To view the online help for Deltek Software Manager, click [here](#).
- To view a tutorial on how to use Deltek Software Manager, click [here](#).
- To view more information on troubleshooting Deltek Software Manager, click [here](#).

This link works only when you are logged in to Deltek Customer Care Connect.

Knowledge Base Documentation

To view Knowledge Base articles:

1. Go to <http://www.deltek.com> and click **Support Login**.
2. Enter your logon credentials in the following fields, and then click **Log In**:

| Field Name | Description |
|-----------------|-----------------------------------|
| Username | Enter your Support user name. |
| Password | Enter your Support user password. |

If you have forgotten your username or password, click **Account Assistance**.

If you have forgotten your username, enter your email address and click **Email My Username**.

If you have forgotten your password, enter your username and click **Reset My Password**.

3. On the Deltek Support Home Screen, click the Knowledge Center tab, complete the following fields, and then click **Search**:

| Field Name | Description |
|-----------------------------------|--|
| Refine by Product | Select Costpoint from the drop-down list. |
| Refine by Category/Version | Expand Service Pack/Hot Fix from the drop-down list, and then select 8.1 (GA) . |
| Search Type | Use the default value, Phrases, or select your preferred search type from the drop-down list. |
| Search by Keyword | Enter the specific text you are looking for or leave blank to return all records for this version. |

4. On the search results screen, perform the following actions:
 - In the **Summary** column, click the link for the desired correction.
 - When the desired correction loads, click the links in the **Answers** section to download the files.

System Requirements

Components

Costpoint 8.1 uses the following components:

- **Database Tier:** Oracle
- **Application Tier:** With integrated WebLogic Server
- **Browser Client:** Edge, Chrome, Firefox, Safari
- **Web Tier:** Microsoft Internet Information Server (optional)
- All product compatibility information is maintained in the Deltek Product Support Compatibility Matrix available on the Customer Care Support site [here](#).

System Clocks

For the Costpoint system to function properly, the system clocks on your WebLogic application server and the database server that hosts your Costpoint databases must be synchronized with each other. Failure to synchronize your system clocks may result in login and other system problems.

Hardware Recommendations

You should have received a hardware recommendations document. For future releases of Costpoint, hardware recommendations will be supplied via a Customer Care **Knowledge Base** article.

Uninstalling and Reinstalling on the Same Server/VM

Errors can occur when you uninstall and reinstall Costpoint on the same Server/VM. If you encounter problems during a first installation attempt and need to start over, Deltek recommends that you start over on a freshly built Server/VM.

If you are using a VM, taking a snapshot of the VM before you begin the installation offers an easy method of returning to a fresh state.

Compatibility Matrix

For the most current hardware and software requirements, please refer to the Knowledge Base article containing the Compatibility Matrix:

- https://deltek.custhelp.com/app/answers/detail/a_id/38499
- <https://deltek.custhelp.com/ci/fattach/get/1072689/0/filename/DeltekProductSupportCompatibilityMatrix.pdf>

Costpoint 8.1 Log File Information

The table below provides information on the log files used by the Costpoint 8.1 system. All of these log files are located on the Application Server under the C:\Deltek\Costpoint\81\logs folder.

| File Name | Description |
|--------------------------|--|
| DEServer.log | <p>This log file is maintained by the WebLogic server instance. In a clustered environment, each server writes to a separate file and the file name matches the server name.</p> <p>The log records server-specific events such as the startup and shutdown of servers, the deployment of new applications, or the failure of one or more subsystems. The messages include the time and date of the event as well as the ID of the user who initiated the event.</p> |
| CP_DBConn_DEServer.log | <p>This file lists the activate connections used by the product at a given time. To enable this logging, set <SYSTEMNAME>.logDBConnectionProfile = true in enterprise properties.</p> <p>In a clustered environment, each server writes to a separate log file and the server name determines the name of the log file.</p> <p>CP_DBConn_<Server>.log</p> |
| CP_DEServer.log | <p>This file contains application-specific information such as performance, security, and errors encountered while running a Costpoint application.</p> <p>Each server writes to a separate log file and the server name determines the name of the log file.</p> <p>CP_<Server>.log</p> |
| CP_Security_DEServer.log | <p>This file captures messages generated by Costpoint Web security module. Messages such as invalid login attempts caused by problematic user IDs, passwords, or insufficient parameters, as well as deactivated user accounts, are captured here.</p> <p>In a clustered environment, each server writes to a separate log file and the server name determines the name of the log file.</p> <p>CP_Security_<Server>.log</p> |

| File Name | Description |
|-------------|---|
| delteke.log | <p>This log file contains information that pertains to the entire domain. It consolidates log records from all application logs and a subset of events recorded in all server logs. All the information gathered is written into a single file.</p> <p>Not all log messages are written into domain. Only those messages that match the defined severity are consolidated.</p> |
| service.log | <p>This log file contains messages generated by Costpoint Web windows service. It helps in troubleshooting issues related to service startup, which usually occur during the initial configuration stages.</p> <p>In addition to service-related messages, this file contains most of the information that is captured in the DEServer.log.</p> <p>Therefore, after the initial startup issues are sorted out, Deltek recommends that you disable this log by editing the InstallCPWebasService.cmd (C:\Deltek\Costpoint\81\bin folder) and removing the occurrence of "- log:%CP_ROOT%\logs\service.log".</p> <p>If you remove this after installing the service, you will need to uninstall and reinstall the service for the changes to take effect.</p> |

Database Tier Installation

This section provides instructions and recommendations for creating your Costpoint 8.1 database schemas.

During this installation process, you will install the Costpoint 8.1 Database Tier software and automatically perform the following:

- Create and populate a Costpoint 8.1 Transaction database schema (CPTRAN) to store transaction data.
- Create and populate a Costpoint 8.1 System database schema (CPSYSTEM) to store metadata.
- Create and populate a Costpoint 8.1 Admin database schema (CPADMIN) to store system and security information.
- Create and populate a Costpoint 8.1 Planning Transaction database schema (PLTRAN) to store PL transaction data, if applicable.
- Create and populate a Costpoint 8.1 Time & Expense Transaction database schema (TETRAN) to store TE transaction data, if applicable.

Note: If you use Oracle Real Application Clusters (RAC) and you have two or more Oracle instances, make sure that your CPTRAN, CPADMIN, CPSYSTEM, PLTRAN, and TETRAN schemas are all part of one RAC database instead of physically separate databases. If you have a critical need to use separate databases, please contact Deltek Support.

Note: The Costpoint platform does not currently support Unicode Translation Format (UTF) character sets, such as AL32UTF8. When configuring your Oracle database using Oracle tools, please make sure you choose non-unicode character set, **WE8MSWIN1252**, when creating your initial Costpoint database.

Before You Start

Make sure that you meet all [Database Tier Installation Prerequisites](#).

Create Costpoint 8.1 Oracle Instance(s) and Tablespaces

The recommended steps to configure your Oracle instance(s) and set up your Costpoint 8.1 database tablespaces are detailed in this section.

This step must be performed on the Oracle database server(s) that will host your CPTRAN, CPSYSTEM, CPADMIN, PLTRAN, and TETRAN database schemas.

The CPTRAN, CPSYSTEM, CPADMIN, PLTRAN, and TETRAN database schemas can reside in the same Oracle database or separate Oracle databases on the same or separate Oracle database servers.

To create the instance(s) and tablespaces that will host your CPTRAN, CPSYSTEM, CPADMIN, PLTRAN, and TETRAN database schemas:

1. Use your Oracle database software to create an Oracle instance(s) for hosting the Costpoint database.

The following tables provide a reference for creating your Oracle instance(s).

These initial settings are only minimal recommendations. Your production environment may need to be analyzed and adjusted to meet your specific requirements. You must customize these parameters over time based on database size, concurrent users, workload, and so on to achieve optimal performance.

| Oracle Instance Parameter | Value |
|-------------------------------|--|
| cursor_sharing | EXACT |
| db_block_size | 8192 |
| dml_locks | 1500 |
| java_pool_size | 64 MB |
| job_queue_processes | 2 |
| log_checkpoint_interval | 10000 |
| log_checkpoint_timeout | 1810 |
| open_cursors | 3000 |
| optimizer_index_caching | 0 |
| optimizer_index_cost_adj | 100 |
| optimizer_mode | ALL_ROWS |
| processes | 500 |
| session_cached_cursors | 1500 |
| timed_statistics | TRUE |
| sga_target | 0 |
| pga_aggregate_target | 0 |
| statistics_level | Typical |
| db_file_multiblock_read_count | 16 |
| memory_target | Based on database size (4 GB to 50 GB) |
| memory_max_target | Based on database size (4 GB to 50 GB) |
| pga_aggregate_limit | 0 |

| Tablespace Configuration Type | Tablespace Name | Minimum Size (MB) | Small Production System (MB) |
|-------------------------------|-----------------|-------------------|------------------------------|
| System | SYSTEM | 100 | 100 |
| Default | COSTPOINT_DATA | 200 | 500 |
| Index | COSTPOINT_INDEX | 100 | 300 |
| Default | TE_DATA | 100 | 300 |
| Index | TE_INDEX | 100 | 300 |
| Default | PL_DATA | 100 | 300 |
| Index | PL_INDEX | 100 | 300 |
| Dynamic | COSTPOINT_DYN | 100 | 300 |
| Temporary | TEMPORARY_DATA | 100 | 400 |

- For databases over 50GB, Deltek recommends the following additional tablespaces for optimal performance.

These initial settings are only minimal recommendations. Your production environment may need to be analyzed and adjusted to meet your specific requirements.

| Recommended Customization Tablespace Configuration Type | Tablespace Name | Minimum Size (MB) | Small Production System (MB) |
|--|--------------------|-------------------|------------------------------|
| Temporary Data | COSTPOINT_XZDATA | 512 | 2048 |
| Temporary Index | COSTPOINT_XZINDEX | 256 | 1024 |
| Report Data | COSTPOINT_RPTDATA | 1024 | 5120 |
| Report Index | COSTPOINT_RPTINDEX | 512 | 2048 |

| Recommended Tablespace Configuration Type for CPSYSTEM and CPADMIN | Tablespace Name | Minimum Size (MB) | Small Production System (MB) |
|--|-----------------|-------------------|------------------------------|
| System | SYSTEM | 450 | 450 |
| Default | CPMETA_DATA | 400 | 400 |

| Recommended Tablespace Configuration Type for CPSYSTEM and CPADMIN | Tablespace Name | Minimum Size (MB) | Small Production System (MB) |
|--|-----------------|-------------------------|---------------------------------|
| Index | CPMETA_INDEX | 100 | 100 |
| Temporary | TEMPORARY_DATA | 100 | 100 |

Configuring Multiple Costpoint Transaction Schemas with Shared CPADMIN/CPSYSTEM Schema(s)

Note: You can skip this step if you do not want to share your CPADMIN or CPSYSTEM schemas across multiple Costpoint systems.

If you want to share your Costpoint CPSYSTEM and /or CPADMIN schemas across multiple Costpoint Transaction schemas and the schemas reside on different databases or on separate database servers, it is necessary to configure all the Oracle databases in shared server configuration mode (also called Oracle multi-threaded server [MTS]).

An Oracle database creates server processes to handle incoming requests from user processes from client machines. A server process is called a dedicated server process when it services and is dedicated to only one user process at a time. This is the default configuration for all Oracle databases. A shared server process can service multiple user process requests in shared server architecture, thus reducing the total number of server processes needed to service a given workload. This allows for a significant reduction in system resources and enables the support of an increased number of concurrent users.

The following recommendation is just the starting point on how to configure your database with shared server architecture. It is important to understand your system configuration, number of concurrent users, server load, network load, and so on and adjust these settings for optimal performance. There are other parameters available that can be adjusted depending on your Oracle RDBMS version.

The DISPATCHERS initialization parameter configures dispatcher processes in shared server architecture. Execute the following statement in SQL Plus:

```
ALTER SYSTEM SET DISPATCHERS = '(PROTOCOL=TCP) (DISPATCHERS=2)';
```

The SHARED_SERVERS initialization parameter specifies the minimum number of shared servers created at instance startup. Execute the following statement in SQL Plus:

```
ALTER SYSTEM SET SHARED_SERVERS = 5;
```

Setting this parameter to 0 disables shared server architecture.

Note: For more information on Oracle shared server architecture, see the Oracle documentation for your RDBMS version.

Configuring Costpoint on Oracle

Costpoint 8.1 supports both Oracle database architectures: non-CDBs as well as Oracle Multitenant (PDBs).

Costpoint 8.1 fully supports use of pluggable databases (PDBs) that form a part of a container database (CDB). When hosting a Costpoint database as a PDB, it is important to allocate adequate shared resources and/or limit the number of PDBs in the CDB in order to achieve and maintain optimal application performance. The database setup and configuration with Oracle multitenant will vary depending on the database workload characteristics, database size, concurrent users, and so on.

Tip: Costpoint 8.1 does not support use of the domain name as a suffix for the Oracle service name. For example, Costpoint 8.1 does not support **orc1.domain.com** as your service name.

Install Database Tier Software

The steps to install the Costpoint 8.1 Database Tier software as well as create the Transaction, System, and Admin databases are detailed in this section.

You must perform this step on your database server or from a client workstation with Oracle client connectivity tools installed to connect to the database.

You must have Internet access on the machine where the Costpoint 8.1 installer is invoked in order to download the latest DeltekCostpoint81DatabaseNewInstallationFiles.exe and DeltekCostpoint81RequirementsINI.exe files automatically.

The DeltekCostpoint81DatabaseNewInstallationFiles.exe contains the latest special characters supported for user, password, and other fields in the installer. The DeltekCostpoint81RequirementsINI.exe contains the latest OS platforms and database versions supported. These files are automatically downloaded when you launch the Database Tier installation, assuming that your database server has Internet access.

Note: The Deltek product installers contain functionality which enables them to dynamically download configuration files and patch rollback scripts when the product installers are executed from the Deltek Software Manager server. To improve security, these connections have been modified to require communication over HTTPS.

If your database server does not have Internet access, you must perform the steps in the [Latest Installer Files Download Instructions](#) section of this document before you run the DeltekCostpoint81DatabaseTier.exe file.

To install the Database Tier software:

1. Run the **DeltekCostpoint81DatabaseTier_Buildxx.exe** file to launch the Costpoint 8.1 Database Tier installation program.

Note: Due to enhanced security in Microsoft Windows Server, it is advised that you use the **Run as Administrator** option when launching installation files, even if you are logged in as a user with local administrative rights. To **Run as Administrator**, right-click the DeltekCostpoint81DatabaseTier.exe file in Windows Explorer and select **Run as Administrator**.

2. On the Welcome to the InstallShield Wizard for Deltek Costpoint Database screen, click **Next >**.
3. On the Select the Database Type screen, select **Oracle**, and click **Next >**.
4. On the Choose Destination Location screen, click **Browse** to navigate to an installation location for the Costpoint 8.1 Database Tier software, and click **Next >**.

The default installation location is **C:\Deltek\Costpoint\81\Database\Scripts** (recommended).

5. On the Features screen, select from the following:

| Field Name | Action |
|---|---|
| Costpoint Oracle Databases | Select this feature to install and configure Costpoint Transaction, System, and Admin database schemas and users. |
| Time & Expense Oracle Database | Select this feature to install and configure Time & Expense Transaction database schema and user. |
| Planning Oracle Database | Select this feature to install and configure Planning Transaction database schema and user. |

6. On the Oracle Home Information screen, from the drop-down list, select the **Oracle Home** location for your Costpoint database, and click **Next >**.

The installer will read your registry to display all available Oracle Home locations.

7. On the Costpoint Oracle TRANSACTION Database Information screen, complete the following fields.

| Field Name | Action |
|-------------------------------|---|
| IP Address or Hostname | <p>Enter the IP address (for example, 10.2.2.154) or hostname (for example, dbsvr01) of your Costpoint 8.1 Transaction (CPTRAN) database server. The default value is your computer name. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>- _</p> <p>The values for the IP Address or Hostname cannot be 127.0.1.0.1 or localhost.</p> <p>For RAC installations, you must specify the IP Address or Hostname of one of the instances. If you have SCAN listener setup, please use the Scan hostname or Scan IP Address. Do not use the Virtual IP Address.</p> |
| Service Name | <p>Select SID or Service Name, and then enter the system identification name (SID) or Service Name (ORC1) for the Oracle instance where your Costpoint Transaction database schema will be created. The default is PDBORCL.</p> <p>In addition to standard alphanumeric characters, the _ (underscore) and * (period) are the only special character also supported.</p> <p>Deltek Costpoint requires the Oracle Database SERVICE_NAME to be the DB_NAME value only, meaning the DB_DOMAIN value must be empty. Therefore, the SERVICE_NAME must use the "dbname" format, and not "dbname.dbdomain".</p> <p>Oracle Database software identifies a database by its global database name. A global database name consists of the database name and database domain. The DB_NAME parameter and the DB_DOMAIN parameter combine to create the global database name value assigned to the SERVICE_NAMES parameter in the initialization parameter file.</p> |

| Field Name | Action |
|---|---|
| | <p>For databases on Oracle 12c, Service Name <u>must</u> be selected.</p> <p>For databases on other Oracle versions, you are free to choose either the SID or the Service Name to connect to the Costpoint database. The Oracle SID pertains to the unique name that identifies an Oracle instance. If SID is used, then the SID must be registered with the listener on the database server hosting the Costpoint database.</p> <p>Similarly, if a Service Name is entered, the Service Name must be a valid service registered with the listener on the database server hosting the Costpoint database.</p> <p>For RAC installations, you may specify the Oracle Instance (SID) of one of the instances, or use the Service Name depending on your Oracle RDBMS version.</p> |
| Port | Enter the Oracle listener port of your Costpoint database server. The default port for Oracle is 1521 . |
| Transaction Database User (Schema) | <p>Enter the name for your Transaction schema user account. The default is CPTRAN. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ _</p> |
| Transaction Database User Password | <p>Enter the password for your Transaction schema user account. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |
| Transaction Database Confirm User Password | <p>Re-enter the password for your Transaction schema user account. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |
| Oracle SYSTEM User | <p>Enter the name of your Oracle SYSTEM user. The default is SYSTEM. If a user with "sysadmin" privileges is available, that user can alternatively be used. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ _ #</p> <p>The Oracle superuser (non-Costpoint user) entered on the installer screen to establish link views between Costpoint users—if you use a custom user (not the Oracle SYSTEM user), then the user name entered is case-sensitive. If the case mismatches, the installer will fail in the link view step even though the connection validation on the initial screens will be successful.</p> |
| Oracle SYSTEM User Password | <p>Enter the password for your Oracle SYSTEM user account. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |

8. Click **Test Connection**.

If you have entered the proper database connection information, a message similar to the following displays:

“CPTRAN will be created. Click Next.”

If the message above does not display, correct the connection information, and click **Test Connection** again.

9. After receiving the message, click **Next >**.

10. On the Costpoint Oracle ADMIN Database Information screen, complete the following fields.

| Field Name | Action |
|-------------------------------|--|
| IP Address or Hostname | <p>Enter the IP address (for example, 10.2.2.154) or hostname (for example, dbsvr01) of your Costpoint 8.1 Admin (CPADMIN) database server. The default value is your computer name. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>- _</p> <p>The values for the IP Address or Hostname cannot be 127.0.1.0.1 or localhost.</p> <p>For RAC installations, you must specify the IP Address or Hostname of one of the instances. If you have SCAN listener setup, please use the Scan hostname or Scan IP Address. Do not use the Virtual IP Address.</p> |
| Service Name | <p>Select SID or Service Name, and then enter the system identification name (SID) or Service Name (ORC1) for the Oracle instance where your Costpoint Admin database schema will be created. The default is PDBORCL.</p> <p>In addition to standard alphanumeric characters, the _ (underscore) and * (period) are the only special character also supported.</p> <p>Deltek Costpoint requires the Oracle Database SERVICE_NAME to be the DB_NAME value only, meaning the DB_DOMAIN value must be empty. Therefore, the SERVICE_NAME must use the “dbname” format, and not “dbname.dbdomain”.</p> <p>Oracle Database software identifies a database by its global database name. A global database name consists of the database name and database domain. The DB_NAME parameter and the DB_DOMAIN parameter combine to create the global database name value assigned to the SERVICE_NAMES parameter in the initialization parameter file.</p> <p>For databases on Oracle 12c, Service Name <u>must</u> be selected.</p> <p>For databases on other Oracle versions, you are free to choose either the SID or the Service Name to connect to the Costpoint database. The Oracle SID pertains to the unique name that identifies an Oracle instance. If SID is used, then the SID must be registered with the listener on the database server hosting the Costpoint database.</p> |

| Field Name | Action |
|---|--|
| | <p>Similarly, if a Service Name is entered, the Service Name must be a valid service registered with the listener on the database server hosting the Costpoint database.</p> <p>For RAC installations, you may specify the Oracle Instance (SID) of one of the instances, or use the Service Name depending on your Oracle RDBMS version.</p> |
| Port | Enter the Oracle listener port of your Costpoint database server. The default port for Oracle is 1521 . |
| Admin Database User (Schema) | <p>Enter the name for your Admin schema user account. The default is CPADMIN. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ _</p> |
| Admin Database User Password | <p>Enter the password for your Admin schema user account. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |
| Admin Database Confirm User Password | <p>Re-enter the password for your Admin schema user account. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |
| Oracle SYSTEM User | <p>Enter the name of your Oracle SYSTEM user. The default is SYSTEM. If a user with "sysadmin" privileges is available, that user can alternatively be used. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ _ #</p> <p>The Oracle superuser (non-Costpoint user) entered on the installer screen to establish link views between Costpoint users—if you use a custom user (not the Oracle SYSTEM user), then the user name entered is case-sensitive. If the case mismatches, the installer will fail in the link view step even though the connection validation on the initial screens will be successful.</p> |
| Oracle SYSTEM User Password | <p>Enter the password for your Oracle SYSTEM user account. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |

11. Click **Test Connection**.

If you have entered the proper database connection information, a message similar to the following displays:

"CPADMIN will be created. Click Next."

If the message above does not display, correct the connection information, and click **Test Connection** again.

12. After receiving the message, click **Next >**.
13. On the Costpoint Oracle SYSTEM Database Information screen, complete the following fields.

| Field Name | Action |
|-------------------------------|--|
| IP Address or Hostname | <p>Enter the IP address (for example, 10.2.2.154) or hostname (for example, dbsvr01) of your Costpoint 8.1 System (CPSYSTEM) database server. The default value is your computer name. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>- _</p> <p>The values for the IP Address or Hostname cannot be 127.0.1.0.1 or localhost.</p> <p>For RAC installations, you must specify the IP Address or Hostname of one of the instances. If you have SCAN listener setup, please use the Scan hostname or Scan IP Address. Do not use the Virtual IP Address.</p> |
| Service Name | <p>Select SID or Service Name, and then enter the system identification name (SID) or Service Name (ORC1) for the Oracle instance where your Costpoint System database schema will be created. The default is PDBORCL.</p> <p>In addition to standard alphanumeric characters, the _ (underscore) and * (period) are the only special character also supported.</p> <p>Deltek Costpoint requires the Oracle Database SERVICE_NAME to be the DB_NAME value only, meaning the DB_DOMAIN value must be empty. Therefore, the SERVICE_NAME must use the “dbname” format, and not “dbname.dbdomain”.</p> <p>Oracle Database software identifies a database by its global database name. A global database name consists of the database name and database domain. The DB_NAME parameter and the DB_DOMAIN parameter combine to create the global database name value assigned to the SERVICE_NAMES parameter in the initialization parameter file.</p> <p>For databases on Oracle 12c, Service Name <u>must</u> be selected.</p> <p>For databases on other Oracle versions, you are free to choose either the SID or the Service Name to connect to the Costpoint database. The Oracle SID pertains to the unique name that identifies an Oracle instance. If SID is used, then the SID must be registered with the listener on the database server hosting the Costpoint database.</p> <p>Similarly, if a Service Name is entered, the Service Name must be a valid service registered with the listener on the database server hosting the Costpoint database.</p> <p>For RAC installations, you may specify the Oracle Instance (SID) of one of the instances, or use the Service Name depending on your Oracle RDBMS version.</p> |

| Field Name | Action |
|--|--|
| Port | Enter the Oracle listener port of your Costpoint database server. The default port for Oracle is 1521 . |
| System Database User (Schema) | Enter the name for your System schema user account. The default is CPSYSTEM . In addition to standard alphanumeric characters, the following special characters are also supported: \$ _ |
| System Database User Password | Enter the password for your System schema user account. In addition to standard alphanumeric characters, the following special characters are also supported: ' ~ # \$ ^ & () - _ + = , . |
| System Database Confirm User Password | Re-enter the password for your System schema user account. In addition to standard alphanumeric characters, the following special characters are also supported: ' ~ # \$ ^ & () - _ + = , . |
| Oracle SYSTEM User | Enter the name of your Oracle SYSTEM user. The default is SYSTEM . If a user with "sysadmin" privileges is available, that user can alternatively be used. In addition to standard alphanumeric characters, the following special characters are also supported: \$ _ # The Oracle superuser (non-Costpoint user) entered on the installer screen to establish link views between Costpoint users—if you use a custom user (not the Oracle SYSTEM user), then the user name entered is case-sensitive. If the case mismatches, the installer will fail in the link view step even though the connection validation on the initial screens will be successful. |
| Oracle SYSTEM User Password | Enter the password for your Oracle SYSTEM user account. In addition to standard alphanumeric characters, the following special characters are also supported: ' ~ # \$ ^ & () - _ + = , . |

14. Click **Test Connection**.

If you have entered the proper database connection information, a message similar to the following displays:

"CPSYSTEM will be created. Click Next."

If the message above does not display, correct the connection information, and click **Test Connection** again.

15. After receiving the message, click **Next >**.

16. On the Time & Expense Oracle TRANSACTION Database Information screen, complete the following fields.

| Field Name | Action |
|---|--|
| IP Address or Hostname | <p>Enter the IP address (for example, 10.2.2.154) or hostname (for example, dbsvr01) of your Time & Expense 8.1 Transaction (TETRAN) database server. The default value is your computer name. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>- _</p> <p>The values for the IP Address or Hostname cannot be 127.0.1.0.1 or localhost.</p> <p>For RAC installations, you must specify the IP Address or Hostname of one of the instances. If you have SCAN listener setup, please use the Scan hostname or Scan IP Address. Do not use the Virtual IP Address.</p> |
| Service Name | <p>Select SID or Service Name, and then enter the system identification name (SID) or Service Name (ORC1) for the Oracle instance where your Time & Expense Transaction database schema will be created. The default is PDBORCL.</p> <p>In addition to standard alphanumeric characters, the _ (underscore) and * (period) are the only special character also supported.</p> <p>Deltek Costpoint requires the Oracle Database SERVICE_NAME to be the DB_NAME value only, meaning the DB_DOMAIN value must be empty. Therefore, the SERVICE_NAME must use the “dbname” format, and not “dbname.dbdomain”.</p> <p>Oracle Database software identifies a database by its global database name. A global database name consists of the database name and database domain. The DB_NAME parameter and the DB_DOMAIN parameter combine to create the global database name value assigned to the SERVICE_NAMES parameter in the initialization parameter file.</p> <p>For databases on Oracle 12c, Service Name <u>must</u> be selected.</p> <p>For databases on other Oracle versions, you are free to choose either the SID or the Service Name to connect to the Costpoint database. The Oracle SID pertains to the unique name that identifies an Oracle instance. If SID is used, then the SID must be registered with the listener on the database server hosting the Costpoint database.</p> <p>Similarly, if a Service Name is entered, the Service Name must be a valid service registered with the listener on the database server hosting the Costpoint database.</p> <p>For RAC installations, you may specify the Oracle Instance (SID) of one of the instances, or use the Service Name depending on your Oracle RDBMS version.</p> |
| Port | <p>Enter the Oracle listener port of your Costpoint database server. The default port for Oracle is 1521.</p> |
| Transaction Database User (Schema) | <p>Enter the name for your Time & Expense Transaction schema user account. The default is TETRAN. In addition to standard alphanumeric characters, the following special characters are also supported:</p> |

| Field Name | Action |
|---|--|
| | \$ _ |
| Transaction Database User Password | Enter the password for your Time & Expense Transaction schema user account. In addition to standard alphanumeric characters, the following special characters are also supported: ‘ ~ # \$ ^ & () - _ + = , . |
| Transaction Database Confirm User Password | Re-enter the password for your Time & Expense Transaction schema user account. In addition to standard alphanumeric characters, the following special characters are also supported: ‘ ~ # \$ ^ & () - _ + = , . |
| Oracle SYSTEM User | Enter the name of your Oracle SYSTEM user. The default is SYSTEM . If a user with “sysadmin” privileges is available, that user can alternatively be used. In addition to standard alphanumeric characters, the following special characters are also supported: \$ _ # The Oracle superuser (non-Costpoint user) entered on the installer screen to establish link views between Costpoint users—if you use a custom user (not the Oracle SYSTEM user), then the user name entered is case-sensitive. If the case mismatches, the installer will fail in the link view step even though the connection validation on the initial screens will be successful. |
| Oracle SYSTEM User Password | Enter the password for your Oracle SYSTEM user account. In addition to standard alphanumeric characters, the following special characters are also supported: ‘ ~ # \$ ^ & () - _ + = , . |

17. Click **Test Connection**.

If you have entered the proper database connection information, a message similar to the following displays:

“TETRAN will be created. Click Next.”

If the message above does not display, correct the connection information, and click **Test Connection** again.

18. After receiving the message, click **Next >**.

19. On the Planning Oracle TRANSACTION Database Information screen, complete the following fields.

| Field Name | Action |
|-------------------------------|---|
| IP Address or Hostname | Enter the IP address (for example, 10.2.2.154) or hostname (for example, dbsvr01) of your Planning 8.1 Transaction (PLTRAN) database server. The default value is your computer name. In addition to standard alphanumeric characters, the following special characters are also supported: |

| Field Name | Action |
|---|--|
| | <p>- _</p> <p>The values for the IP Address or Hostname cannot be 127.0.1.0.1 or localhost.</p> <p>For RAC installations, you must specify the IP Address or Hostname of one of the instances. If you have SCAN listener setup, please use the Scan hostname or Scan IP Address. Do not use the Virtual IP Address.</p> |
| Service Name | <p>Select SID or Service Name, and then enter the system identification name (SID) or Service Name (ORC1) for the Oracle instance where your Planning Transaction database schema will be created. The default is PDBORCL.</p> <p>In addition to standard alphanumeric characters, the _ (underscore) and * (period) are the only special character also supported.</p> <p>Deltek Costpoint requires the Oracle Database SERVICE_NAME to be the DB_NAME value only, meaning the DB_DOMAIN value must be empty. Therefore, the SERVICE_NAME must use the “dbname” format, and not “dbname.dbdomain”.</p> <p>Oracle Database software identifies a database by its global database name. A global database name consists of the database name and database domain. The DB_NAME parameter and the DB_DOMAIN parameter combine to create the global database name value assigned to the SERVICE_NAMES parameter in the initialization parameter file.</p> <p>For databases on Oracle 12c, Service Name <u>must</u> be selected.</p> <p>For databases on other Oracle versions, you are free to choose either the SID or the Service Name to connect to the Costpoint database. The Oracle SID pertains to the unique name that identifies an Oracle instance. If SID is used, then the SID must be registered with the listener on the database server hosting the Costpoint database.</p> <p>Similarly, if a Service Name is entered, the Service Name must be a valid service registered with the listener on the database server hosting the Costpoint database.</p> <p>For RAC installations, you may specify the Oracle Instance (SID) of one of the instances, or use the Service Name depending on your Oracle RDBMS version.</p> |
| Port | <p>Enter the Oracle listener port of your Costpoint database server. The default port for Oracle is 1521.</p> |
| Transaction Database User (Schema) | <p>Enter the name for your Planning Transaction schema user account. The default is PLTRAN. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ _</p> |
| Transaction Database User Password | <p>Enter the password for your Planning Transaction schema user account. In addition to standard alphanumeric characters, the following special characters are also supported:</p> |

| Field Name | Action |
|---|--|
| | ' ~ # \$ ^ & () - _ + = , . |
| Transaction Database Confirm User Password | Re-enter the password for your Planning Transaction schema user account. In addition to standard alphanumeric characters, the following special characters are also supported: ' ~ # \$ ^ & () - _ + = , . |
| Oracle SYSTEM User | Enter the name of your Oracle SYSTEM user. The default is SYSTEM . If a user with "sysadmin" privileges is available, that user can alternatively be used. In addition to standard alphanumeric characters, the following special characters are also supported: \$ _ # The Oracle superuser (non-Costpoint user) entered on the installer screen to establish link views between Costpoint users—if you use a custom user (not the Oracle SYSTEM user), then the user name entered is case-sensitive. If the case mismatches, the installer will fail in the link view step even though the connection validation on the initial screens will be successful. |
| Oracle SYSTEM User Password | Enter the password for your Oracle SYSTEM user account. In addition to standard alphanumeric characters, the following special characters are also supported: ' ~ # \$ ^ & () - _ + = , . |

20. Click **Test Connection**.

If you have entered the proper database connection information, a message similar to the following displays:

"PLTRAN will be created. Click Next."

If the message above does not display, correct the connection information, and click **Test Connection** again.

21. After receiving the message, click **Next >**.

22. On the Costpoint Oracle Tablespace Information screen, complete the following fields, and click **Next >**.

| Schema Tablespace Information | Field Name | Action |
|---|------------------|---|
| Costpoint TRANSACTION Schema Tablespace Information | Default | Select your default tablespace for the Costpoint Transaction Schema. Deltek recommends that you use COSTPOINT_DATA as the tablespace value. |
| | Temporary | Select your temporary tablespace for the Costpoint Transaction Schema. |

| Schema Tablespace Information | Field Name | Action |
|---|------------------------|---|
| | | Deltek recommends that you use TEMPORARY_DATA as the tablespace value. |
| | Index | Select your default tablespace for the Costpoint Indexes. Deltek recommends that you use the default value, COSTPOINT_INDEX , as the tablespace value. |
| | Temporary Data | Select your default tablespace for the Costpoint Temporary Data (X_Z_ and Z_ tables). Deltek recommends the default value, COSTPOINT_DATA , unless your database is over 50G. In which case, Deltek recommends that you use COSTPOINT_XZDATA as the tablespace value. |
| | Temporary Index | Select your default tablespace for the Costpoint Temporary Indexes (X_Z_ and Z_ tables). Deltek recommends the default value, COSTPOINT_INDEX , unless your database is over 50G. In which case, Deltek recommends that you use COSTPOINT_XZINDEX as the tablespace value. |
| | Reporting Data | Select your default tablespace for the Costpoint Reporting Data. Deltek recommends the default value, COSTPOINT_DATA , unless your database is over 50G. In which case, Deltek recommends that you use COSTPOINT_RPTDATA as the tablespace value. |
| | Reporting Index | Select your default tablespace for the Costpoint Reporting Indexes. Deltek recommends the default value, COSTPOINT_INDEX , unless your database is over 50G. In which case, Deltek recommends that you use COSTPOINT_RPTINDEX as the tablespace value. |
| Costpoint ADMIN Schema Tablespace Information | Default | Select your default tablespace for the Costpoint Admin Schema. Deltek recommends that you use CPMETA_DATA as the tablespace value. |

| Schema Tablespace Information | Field Name | Action |
|---|------------------|--|
| | Temporary | Select your temporary tablespace for the Costpoint Admin Schema. Deltek recommends that you use TEMPORARY_DATA as the tablespace value. |
| | Index | Select your default tablespace for the Costpoint Admin Schema indexes. Deltek recommends that you use CPMETA_INDEX as the tablespace value. |
| Costpoint SYSTEM Schema Tablespace Information | Default | Select your default tablespace for the Costpoint System Schema. Deltek recommends that you use CPMETA_DATA as the tablespace value. |
| | Temporary | Select your temporary tablespace for the Costpoint System Schema. Deltek recommends that you use TEMPORARY_DATA as the tablespace value. |
| | Index | Select your default tablespace for the Costpoint System Schema indexes. Deltek recommends that you use CPMETA_INDEX as the tablespace value. |

23. On the Time & Expense Oracle Tablespace Information screen, complete the following fields, and click **Next >**.

| Schema Tablespace Information | Field Name | Action |
|--|------------------|--|
| Time & Expense TRANSACTION Schema Tablespace Information | Default | Select your default tablespace for the Time & Expense Transaction Schema. Deltek recommends that you use TE_DATA as the tablespace value. |
| | Temporary | Select your temporary tablespace for the Time & Expense Transaction Schema. Deltek recommends that you use TEMPORARY_DATA as the tablespace value. |
| | Index | Select your default tablespace for the Time & Expense Indexes. |

| Schema Tablespace Information | Field Name | Action |
|-------------------------------------|------------|--|
| | | Deltek recommends that you use the default value, TE_INDEX as the tablespace value. |

24. On the Planning Oracle Tablespace Information screen, complete the following fields, and click **Next >**.

| Schema Tablespace Information | Field Name | Action |
|--|------------------|--|
| Planning TRANSACTION Schema Tablespace Information | Default | Select your default tablespace for the Planning Transaction Schema. Deltek recommends that you use PL_DATA as the tablespace value. |
| | Temporary | Select your temporary tablespace for the Planning Transaction Schema. Deltek recommends that you use TEMPORARY_DATA as the tablespace value. |
| | Index | Select your default tablespace for the Planning Indexes. Deltek recommends that you use the default value, PL_INDEX as the tablespace value. |

25. On the Link User Information screen, complete the following fields.

| Field Name | Action |
|-----------------------------------|---|
| Link User Name | Enter the name of your LINK user account. The default value is CPLINK_USER . The user (schema) should not exist in the database. In addition to standard alphanumeric characters, the following special characters are also supported: \$ _ |
| Link User Password | Enter the password for your LINK user account. In addition to standard alphanumeric characters, the following special characters are also supported: ' ~ # \$ ^ & () - _ + = , . |
| Link User Confirm Password | Re-enter the password for your LINK user account. In addition to standard alphanumeric characters, the following special characters are also supported: ' ~ # \$ ^ & () - _ + = , . |

26. Click **Test Connection**.

If you have entered the proper database connection information, a message similar to the following displays:

“Link User CPLINK_USER will be created. Click Next.”

If the above message does not display, correct the connection information and click **Test Connection** again.

27. After receiving the message, click **Next >**.

28. On the Start Copying Files screen, review the installation parameters you have selected:

- If you want to change any settings, click **< Back** to go back and make the necessary changes.
- If you are satisfied with these settings, click **Install >** to begin the installation.

Once initiated, the installation process will commence and create objects needed for Costpoint 8.1. Please do not interrupt the process. A Windows Command Prompt will appear on your screen that displays the scripts that are being executed.

The installation will perform the scenarios detailed in the [Installation Process for Costpoint 8.1](#) section of this document. The installation process will stop if any errors are encountered. If any errors occur during the installation, please contact Deltek Technical Support.

29. Upon completion, the Deltek Costpoint Database - Installation Summary Results screen will show the results of the installation process.

For each Feature you selected to install, you should see a SUCCESS message.

Any FAILED messages or Errors indicated should be further researched in the applicable detailed log file(s) and reported to Deltek Costpoint Technical Support.

30. Click **Next >**.

31. On the InstallShield Wizard Complete screen, complete the following fields.

| Field Name | Action |
|--|---|
| Launch the installer summary file | Select this check box to review the summary log file. This will show the same data from previous screen. C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer\DBTier_Install_SummaryResults.log. |
| Launch the installer log file | Select this check box to review the Deltek Costpoint Database installer log file. C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer\DBTier_Install.log. |

32. Click **Finish** to exit the installation.

Please review all log files for any Errors or reported issues, although to help identify any issues, all Errors will be in the DBTier_Install_ErrorSummaryResults.log, from the C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer folder.

Make sure that the default Oracle Port (**1521**) is open for Inbound and Outbound traffic through your firewall. Also, make sure that Network Discovery and File Sharing options are switched on.

Apply Partitioning Script for Performance Enhancement

The steps to applying partitioning scripts to your Costpoint 8.1 TRANSACTION database schema are detailed in this section.

Warning: This is an optional step for clients who run Oracle Enterprise edition licensed with partitioning support. All other clients must skip this step.

Partitioning for the following Costpoint tables and corresponding indexes is supported with Costpoint 8.1.

| Table Name | Index Name |
|-------------------|---------------------------------|
| POOL_SIE_SUPPORT | SI_1305 |
| PSR_FINAL_DATA | SI_1822 |
| PSR_HDR | SI_1821 |
| PROJ_SUM | PI_0737 |
| PROJ_BURD_SUM | PI_0736 |
| RPT_REVENUE_WKS | SI_1485 |
| RPT_PROJ_LAB_SUM | SI_1037, SI_1038 |
| RPT_REV_SUM | SI_1218 |
| RPT_PROJ_TMA | SI_0015 |
| PROJ_MOD_ITD_SUM | PK_PROJ_MOD_ITD_SUM_IDX |
| RPT_UNBILLED_RSN | UI_RT_UBD_RSN_PRFPYDSDUCORS_IDX |
| RPT_PROJ_UNBILLED | SI_RPT_PROJ_UNB_PRFPYDSDUCO_IDX |
| HS_PROJ | PK_HS_PROJ_IDX |

The **CostpointPartitionTables.sql** file contains scripts for creating partitioned tables and indexes using the default partitioning scheme recommended by Deltek. You can choose to change the partitioning scheme to suit your requirements.

If the entire script is executed, for each table, the script will create a temporary partitioned table, move the data from the existing non-partitioned table to the partitioned version, create local partitioned indexes, and drop the original non-partitioned table.

The partitioned tables and indexes are created in the default Oracle tablespace of the Transaction schema (DELTEK). To modify this behavior or to retain the tablespace settings of the corresponding original non-partitioned tables, you will need to modify the appropriate script by adding the tablespace information, where necessary.

To partition a subset of the tables in the list above, you are expected to modify the script suitably before execution. Please make provision for adequate disk space and appropriate tablespace settings before executing the script.

While out-of-the-box partitioning may work well for small to medium customers, Deltek strongly recommends that larger customers (or customers with multiple years of data) who need to get the most performance out of Costpoint applications modify the default partitioning scheme to include the Fiscal Year and Company ID columns as additional partition parameters on top of the columns

used by Deltek. If only one company is configured/used in Costpoint then Company ID column should not be included.

If you use this approach, Fiscal Year should be the first column in the range criteria. Period should be the second column. Company ID (if multiple companies are used) should be the third, with Subperiod being last. Sub-partitioning option can be used for subperiod. Partitioning model may change over time, e.g. if you start using multiple companies.

You must perform this step on your Costpoint 8.1 Transaction database server.

To apply the partitioning script:

1. Click **Start » All Programs » SQLPlus**.
2. Connect to your Costpoint 8.1 TRANSACTION database using your Transaction schema (**DELTEK**) user account, and execute the following SQL script:
`CostpointPartitionTables.sql`
 The script is located in this folder:
 C:\Deltek\Costpoint\81\Database\Scripts\ORACLE\CP_TRANSACTION\Scripts
3. Exit **SQLPlus**.

Application Tier Installation

The Costpoint 8.1 system uses Oracle's WebLogic Server for its application server tier. During the Application Tier installation process, you will install the WebLogic Server 12.2.1.4 application server software and the Costpoint 8.1 software.

The Costpoint 8.1 WebLogic application server must not contain any previous versions of WebLogic.

Before You Start

Make sure that you meet all [Application Tier Installation Prerequisites](#).

Install Application Tier Software

This step provides instructions for installing Oracle's WebLogic Server 12.2.1.4 application server software and Delttek Costpoint 8.1 software.

You must perform this step on the machine that will serve as your Costpoint 8.1 **application** server.

You must have Internet access on the machine where the Costpoint 8.1 installer is invoked in order to download the latest DelttekCostpoint81RequirementsINI.exe file automatically. The file contains the latest OS platforms and database versions supported. The file is automatically downloaded when you launch the Application Tier installation, assuming that your application server has Internet access.

Note: The Delttek product installers contain functionality which enables them to dynamically download configuration files and patch rollback scripts when the product installers are executed from the Delttek Software Manager server. To improve security, these connections have been modified to require communication over HTTPS.

If your application server does not have internet access, you will need to perform the steps in the [Latest Installer Files Download Instructions](#) section of this document before you run the DelttekCostpoint81ApplicationTier_Buildxx.exe file.

To install the Application Tier software:

1. Run the **DelttekCostpoint81ApplicationTier_Buildxx.exe** file to launch the Costpoint 8.1 Application Tier installation program.

Note: Due to enhanced security in Microsoft Windows Server, it is advised that you use the **Run as Administrator** option when launching installation files, even if you are logged in as a user with local administrative rights.

2. On the Welcome to the InstallShield Wizard for Delttek Costpoint Application screen, click **Next >**.
3. On the Setup Type screen, complete the following fields, and click **Next >**.

| Field Name | Action |
|--|---|
| Primary Application Server Tier | Select this setup type to install both the Oracle WebLogic and Delttek Costpoint Application Tier software. |

| Field Name | Action |
|--|---|
| | This option must be selected if installing Costpoint in a non-clustered environment or if this will be your Primary Application Server Tier in a clustered environment. Additional changes are required to configure a clustered environment. |
| Secondary Application Server Tier | Select this setup type to install only the Oracle WebLogic software. The Deltek Costpoint Application Tier software will not be installed. This option must only be selected when configuring a clustered environment after your Primary Application Server Tier has already been installed. |

- On the Feature Selection screen, complete the following fields, and click **Next >**.

| Field Name | Action |
|---------------------------|--|
| Costpoint | This feature is automatically selected for you. All variations still require Costpoint schema information to be entered. |
| Time & Expense | Select this feature if you have purchased Time & Expense. |
| Planning | Select this feature if you have purchased Planning. |

- On the Oracle WebLogic Installation Directory screen, click **Browse...** to navigate to an installation location for the Oracle WebLogic software, and click **Next >**.

The default is **C:\Oracle\Middleware12.2.1.4** (recommended).

Do not install the WebLogic Server software in a directory path or folder that contains a space. The Costpoint 8.1 software will not function properly if the WebLogic Server software is installed to a directory path or folder that contains a space.

- If you select **Secondary Application Server Tier** for the **Setup Type**, the Pre-Installation Summary screen displays. Proceed to step 29 of this procedure.
- On the Choose Deltek Costpoint Application Installation Directory screen, navigate to the location where you want the Costpoint 8.1 software installed, and click **Next >**.

The default directory is **C:\Deltek** (recommended).

The directory in which you install the Costpoint 8.1 software cannot be the Oracle WebLogic install directory (C:\Oracle\Middleware12.2.1.4).

Note: If you choose to install to a different drive, Deltek strongly recommends that you use the same **Deltek** default directory (**E:\Deltek**).

- On the Deltek Costpoint Application License screen, click the **Browse...** button, navigate to the folder containing your Costpoint, Time & Expense, and Planning license(s), select all applicable ones, click **Open**, and click **Next >**.

Example license files:

Deltek_CP_8_License CP.zip, Deltek_CP_8_License TE.zip, Deltek_CP_8_License PL.zip

- On the Select the Database Type screen is displayed, select **Oracle**, and click **Next >**.

10. On the Costpoint Oracle TRANSACTION Database Information screen, complete the following fields.

| Field Name | Action |
|---|---|
| IP Address or Hostname | <p>Enter the IP address (for example, 10.2.2.154) or hostname (for example, dbsvr01) of your Costpoint 8.1 Transaction (CPTRAN) database server. The default value is your computer name. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>- _</p> <p>The IP Address or Hostname cannot be 127.0.1.0.1 or localhost.</p> <p>For RAC installations, you must specify the IP Address or Hostname of one of the instances. Do not use the Virtual IP Address.</p> |
| Service Name | <p>Enter the service name (ORC1) for the Oracle instance where your Costpoint 8.1 Transaction (CPTRAN) database schema resides. The default value is PDBORCL.</p> <p>In addition to standard alphanumeric characters, the _ (underscore) and * (period) are the only special character also supported.</p> <p>The Service Name must be a valid service registered with the listener on the database server hosting the Costpoint database. The Oracle Net Connect Descriptor on the client machine uses "Service_Name" in the instance portion to specify the database to connect to in the file tnsnames.ora.</p> <p>Oracle creates one default service with the same name as the SID when a database is created. This service registers with the local listener to provide access to the database. Customers can choose to create other service names as needed.</p> <p>For RAC installations, you <u>must</u> specify the Service Name of one of the instances.</p> |
| Port | <p>Enter the port that your Costpoint 8.1 Transaction database server software uses to listen for requests. The default port for Oracle is 1521.</p> |
| Transaction Database User (Schema) | <p>Enter the name of your CPTRAN user. The default is CPTRAN. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ _</p> |
| Transaction Database User Password | <p>Enter the password for your CPTRAN user. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |

| Field Name | Action |
|--------------------------------------|--|
| Oracle SYSTEM User | <p>Enter the name of your SYSTEM user. The default is SYSTEM. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ _ #</p> <p>The Oracle superuser (non-Costpoint user) entered on the installer screen to establish link views between Costpoint users—if you use a custom user (not the Oracle SYSTEM user), then the user name entered is case-sensitive. If the case mismatches, the installer will fail in the link view step even though the connection validation on the initial screens will be successful.</p> |
| Oracle SYSTEM Schema Password | <p>Enter the password for your Oracle SYSTEM user account. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |

11. Click **Test Connection**.

If you have entered the proper database connection information, the following message displays:

“Connection Successful. Click Next.”

If it this message does not display, correct the information entered, and click **Test Connection** again.

12. After receiving the message, click **Next >**.

13. On the Costpoint Oracle ADMIN Database Information screen, complete the following fields:

| Field Name | Action |
|-------------------------------|--|
| IP Address or Hostname | <p>Enter the IP address (for example, 10.2.2.154) or hostname (for example, dbsvr01) of your Costpoint 8.1 Admin (CPADMIN) database server. The default value is your computer name. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>- _</p> <p>The IP Address or Hostname cannot be 127.0.1.0.1 or localhost.</p> <p>For RAC installations, you must specify the IP Address or Hostname of one of the instances. Do not use the Virtual IP Address.</p> |
| Service Name | <p>Enter the service name (ORC1) for the Oracle instance where your Costpoint 8.1 Admin (CPADMIN) database schema resides. The default value is PDBORCL.</p> <p>In addition to standard alphanumeric characters, the _ (underscore) and * (period) are the only special character also supported.</p> <p>The Service Name must be a valid service registered with the listener on the database server hosting the Costpoint database. The Oracle Net Connect Descriptor on the client machine uses "Service_Name" in the</p> |

| Field Name | Action |
|--------------------------------------|---|
| | <p>instance portion to specify the database to connect to in the file tnsnames.ora.</p> <p>Oracle creates one default service with the same name as the SID when a database is created. This service registers with the local listener to provide access to the database. Customers can choose to create other service names as needed.</p> <p>For RAC installations, you <u>must</u> specify the Service Name of one of the instances.</p> |
| Port | Enter the port that your Costpoint 8.1 Admin database server software uses to listen for requests. The default port for Oracle is 1521 . |
| Admin Database User (Schema) | <p>Enter the name your CPADMIN user account. The default user is CPADMIN. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ _</p> |
| Admin Database User Password | <p>Enter the password for your CPADMIN user account. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |
| Oracle SYSTEM User | <p>Enter the name of your SYSTEM user. The default is SYSTEM. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ _ #</p> <p>The Oracle superuser (non-Costpoint user) entered on the installer screen to establish link views between Costpoint users—if you use a custom user (not the Oracle SYSTEM user), then the user name entered is case-sensitive. If the case mismatches, the installer will fail in the link view step even though the connection validation on the initial screens will be successful.</p> |
| Oracle SYSTEM Schema Password | <p>Enter the password for your Oracle SYSTEM user account. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |

14. Click **Test Connection**.

If you have entered the proper database connection information, the following message displays:

“Connection Successful. Click Next.”

If it this message does not display, correct the information entered, and click **Test Connection** again.

15. After receiving the message, click **Next >**.

16. On the Costpoint Oracle SYSTEM Database Information screen, complete the following fields:

| Field Name | Action |
|--------------------------------------|--|
| IP Address or Hostname | <p>Enter the IP address (for example, 10.2.2.154) or hostname (for example, dbsvr01) of your Costpoint 8.1 System (CPSYSTEM) database server. The default value is your computer name. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>- _</p> <p>The IP Address or Hostname cannot be 127.0.1.0.1 or localhost.</p> <p>For RAC installations, you must specify the IP Address or Hostname of one of the instances. Do not use the Virtual IP Address.</p> |
| Service Name | <p>Enter the service name (ORC1) for the Oracle instance where your Costpoint 8.1 System (CPSYSTEM) database schema resides. The default value is PDBORCL.</p> <p>In addition to standard alphanumeric characters, the _ (underscore) and * (period) are the only special character also supported.</p> <p>The Service Name must be a valid service registered with the listener on the database server hosting the Costpoint database. The Oracle Net Connect Descriptor on the client machine uses "Service_Name" in the instance portion to specify the database to connect to in the file tnsnames.ora.</p> <p>Oracle creates one default service with the same name as the SID when a database is created. This service registers with the local listener to provide access to the database. Customers can choose to create other service names as needed.</p> <p>For RAC installations, you <u>must</u> specify the Service Name of one of the instances.</p> |
| Port | <p>Enter the port that your Costpoint 8.1 System database server software uses to listen for requests. The default port for Oracle is 1521.</p> |
| System Database User (Schema) | <p>Enter the name your CPSYSTEM user account. The default user is CPSYSTEM. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ _</p> <p>The Oracle superuser (non-Costpoint user) entered on the installer screen to establish link views between Costpoint users—if you use a custom user (not the Oracle SYSTEM user), then the user name entered is case-sensitive. If the case mismatches, the installer will fail in the link view step even though the connection validation on the initial screens will be successful.</p> |
| System Database User Password | <p>Enter the password for your CPSYSTEM user account. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |

| Field Name | Action |
|--------------------------------------|--|
| Oracle SYSTEM User | <p>Enter the name of your SYSTEM user. The default is SYSTEM. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ _ #</p> <p>The Oracle superuser (non-Costpoint user) entered on the installer screen to establish link views between Costpoint users—if you use a custom user (not the Oracle SYSTEM user), then the user name entered is case-sensitive. If the case mismatches, the installer will fail in the link view step even though the connection validation on the initial screens will be successful.</p> |
| Oracle SYSTEM Schema Password | <p>Enter the password for your Oracle SYSTEM user account. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |

17. Click **Test Connection**.

If you have entered the proper database connection information, the following message displays:

“Connection Successful. Click Next.”

If it this message does not display, correct the information entered, and click **Test Connection** again.

18. After receiving the message, click **Next >**.

19. On the Time & Expense Oracle TRANSACTION Database Information screen, complete the following fields.

| Field Name | Action |
|-------------------------------|--|
| IP Address or Hostname | <p>Enter the IP address (for example, 10.2.2.154) or hostname (for example, dbsvr01) of your Time & Expense 8.1 Transaction (TETRAN) database server. The default value is your computer name. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>- _</p> <p>The IP Address or Hostname cannot be 127.0.1.0.1 or localhost.</p> <p>For RAC installations, you must specify the IP Address or Hostname of one of the instances. Do not use the Virtual IP Address.</p> |
| Service Name | <p>Enter the service name (ORC1) for the Oracle instance where your Time & Expense 8.1 Transaction (TETRAN) database schema resides. The default value is PDBORCL.</p> <p>In addition to standard alphanumeric characters, the _ (underscore) and * (period) are the only special character also supported.</p> <p>The Service Name must be a valid service registered with the listener on the database server hosting the Time & Expense database. The Oracle</p> |

| Field Name | Action |
|---|---|
| | <p>Net Connect Descriptor on the client machine uses "Service_Name" in the instance portion to specify the database to connect to in the file tnsnames.ora.</p> <p>Oracle creates one default service with the same name as the SID when a database is created. This service registers with the local listener to provide access to the database. Customers can choose to create other service names as needed.</p> <p>For RAC installations, you <u>must</u> specify the Service Name of one of the instances.</p> |
| Port | Enter the port that your Time & Expense 8.1 Transaction database server software uses to listen for requests. The default port for Oracle is 1521 . |
| Transaction Database User (Schema) | <p>Enter the name of your TETRAN user. The default is TETRAN. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ _</p> |
| Transaction Database User Password | <p>Enter the password for your TETRAN user. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |
| Oracle SYSTEM User | <p>Enter the name of your SYSTEM user. The default is SYSTEM. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ _ #</p> <p>The Oracle superuser (non-Costpoint user) entered on the installer screen to establish link views between Costpoint users—if you use a custom user (not the Oracle SYSTEM user), then the user name entered is case-sensitive. If the case mismatches, the installer will fail in the link view step even though the connection validation on the initial screens will be successful.</p> |
| Oracle SYSTEM Schema Password | <p>Enter the password for your Oracle SYSTEM user account. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |

20. Click **Test Connection**.

If you have entered the proper database connection information, the following message displays:

"Connection Successful. Click Next."

If it this message does not display, correct the information and click **Test Connection** again.

21. After receiving the message, click **Next >**.

22. On the Planning Oracle TRANSACTION Database Information screen, complete the following fields.

| Field Name | Action |
|---|---|
| IP Address or Hostname | <p>Enter the IP address (for example, 10.2.2.154) or hostname (for example, dbsvr01) of your Planning 8.1 Transaction (PLTRAN) database server. The default value is your computer name. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>- _</p> <p>The IP Address or Hostname cannot be 127.0.1.0.1 or localhost.</p> <p>For RAC installations, you must specify the IP Address or Hostname of one of the instances. Do not use the Virtual IP Address.</p> |
| Service Name | <p>Enter the service name (ORC1) for the Oracle instance where your Planning 8.1 Transaction (PLTRAN) database schema resides. The default value is PDBORCL.</p> <p>In addition to standard alphanumeric characters, the _ (underscore) and * (period) are the only special character also supported.</p> <p>The Service Name must be a valid service registered with the listener on the database server hosting the Planning database. The Oracle Net Connect Descriptor on the client machine uses "Service_Name" in the instance portion to specify the database to connect to in the file tnsnames.ora.</p> <p>Oracle creates one default service with the same name as the SID when a database is created. This service registers with the local listener to provide access to the database. Customers can choose to create other service names as needed.</p> <p>For RAC installations, you <u>must</u> specify the Service Name of one of the instances.</p> |
| Port | <p>Enter the port that your Planning 8.1 Transaction database server software uses to listen for requests. The default port for Oracle is 1521.</p> |
| Transaction Database User (Schema) | <p>Enter the name of your PLTRAN user. The default is PLTRAN. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ _</p> |
| Transaction Database User Password | <p>Enter the password for your PLTRAN user. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |

| Field Name | Action |
|--------------------------------------|--|
| Oracle SYSTEM User | <p>Enter the name of your SYSTEM user. The default is SYSTEM. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ _ #</p> <p>The Oracle superuser (non-Costpoint user) entered on the installer screen to establish link views between Costpoint users—if you use a custom user (not the Oracle SYSTEM user), then the user name entered is case-sensitive. If the case mismatches, the installer will fail in the link view step even though the connection validation on the initial screens will be successful.</p> |
| Oracle SYSTEM Schema Password | <p>Enter the password for your Oracle SYSTEM user account. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |

23. Click **Test Connection**.

If you have entered the proper database connection information, the following message displays:

“Connection Successful. Click Next.”

If it this message does not display, correct the information and click **Test Connection** again.

24. After receiving the message, click **Next >**.

25. On the Link User Information screen, complete the following fields:

| Field Name | Action |
|---------------------------|--|
| Link User Name | <p>Enter the name your LINK user account. The default user is CPLINK_USER. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ _</p> |
| Link User Password | <p>Enter the password for your LINK user account. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p> |

26. Click **Test Connection**.

If you have entered the proper database connection information, the following message displays:

“Connection Successful. Click Next.”

If it this message does not display, correct the information entered, and click **Test Connection** again.

27. After receiving the message, click **Next >**.

28. On the Deltek Costpoint Application System Information screen displays, complete the following fields, and click **Next >**.

| Field Name | Action |
|--------------------|--|
| System Name | <p>Enter the system name that will be used to log on to the Costpoint 8.1 system.</p> <p>Deltek recommends that you use your Costpoint 8.1 database name, DELTEKCP.</p> <p>The characters used for the system name must be uppercase and alphanumeric. It must not contain any special characters and must be 16 characters or less in length.</p> |
| Listen Port | <p>Enter the port that your Application Server will use to listen for connections. The default value is 7009.</p> |

29. On the Pre-Installation Summary screen, review the installation parameters you have selected:

- If you want to change any settings, click **< Back** to go back and make the necessary changes.
- If you are satisfied with these settings, click **Install >** to begin the installation.

Once initiated, the installation process can take a long time to complete. Please do not interrupt the process. A Windows Command Prompt will also appear on your screen that displays the scripts that are being executed.

The installation will perform the scenarios detailed in the [Installation Process for Costpoint 8.1](#), Application Tier Installation section of this document. The installation process will stop if any errors are encountered. If any errors occur during the installation, please contact Deltek Technical Support.

30. Upon completion, the Deltek Costpoint Application Install Summary Results screen will show the results of the installation process.

For each Feature you selected to install, you should see either a SUCCESS message.

Any FAILED messages or Errors indicated should be further researched in the applicable detailed log file(s) and reported to Deltek Costpoint Technical Support.

31. Click **Next >**.

32. On the InstallShield Wizard Complete screen, complete the following fields.

| Field Name | Action |
|--|--|
| Launch the installer summary file | Select this check box to review the summary log file. This will show the same data from previous screen. |
| Launch the installer log file | Select this check box to review the Deltek Costpoint Application installer log file. |

33. Click **Finish** to exit the installation.

Please review all log files for any Errors or reported issues, although to help identify any issues, all Errors will be in the AppTier_Install_ErrorSummaryResults.log, from the C:\Program Files\Deltek\Costpoint\8.1\Logs\AppTier_Installer folder.

Make sure that your default Application Server Listener Port (**7009**) is open for Inbound and Outbound traffic through your firewall. Also, make sure that Network discovery and File Sharing options are switched on.

Note: If you are running a WebLogic cluster, you must repeat this step for all of your WebLogic servers.

Run the step once on your Cluster master and choose **Primary Application Server Tier** for the **Costpoint Tier Type**. Then, on each of your cluster nodes, choose **Secondary Application Server Tier** for the **Costpoint Tier Type**.

Please refer to the [DeltekCostpoint81ConfigurationUtility.pdf](#) technical guide for more information on WebLogic clustering.

Add Users to the CostpointToolsGroup

The steps to add the necessary users to the newly created User Group, **CostpointToolsGroup**, are detailed in this section. The Application Tier installation you just completed has added this group to your application server, granting it both **Full Sharing** and **Full Security Permissions** to the **C:\Deltek** folder and **Full Security Permissions** to the **C:\Oracle\Middleware12.2.1.4** folder.

You must perform this step on your Costpoint 8.1 application server.

To add users to the newly created CostpointToolsGroup:

1. Open **Computer Management**.
2. From **Computer Management » Local Users and Groups » Groups**, add the following users to the **CostpointToolsGroup** group:
 - **Web Tier (IIS) install user:** The user that will run the Web Tier install will need to be in this group prior to running that install in the next section.
 - **Application Tier (Costpoint) Windows Service account:** The user that you will use to start and run the Costpoint Windows Service.
 - **Application Tier (Costpoint) Tools user:** The user that you will use to log in to the application server to run any of the Costpoint tools, such as the Config Utility, Migrate User Utility, or DBWizard.
3. Reboot your Costpoint 8.1 application server.

Before You Start

Make sure that you meet all [Costpoint 8.1 Server Startup Prerequisites](#).

Manually Start Costpoint 8.1

The steps to starting Costpoint 8.1 are detailed in this section. You must start the Costpoint 8.1 WebLogic Server on your application server to gain access to the Costpoint 8.1 system.

You must perform this step on your Costpoint 8.1 application server.

To start Costpoint 8.1:

1. Right-click **Start**, select **Search**, enter **Costpoint 8.1**, open file location for **Start Costpoint 8.1**, right-click **Start Costpoint 8.1**, and click **Run as administrator**.

Note: Due to enhanced security in Windows Server, it is advised that you use the **Run as Administrator** option when launching this command even if the logged in user has local administrative rights.

This opens a Windows Command Prompt and launches a command script that starts the Costpoint 8.1 WebLogic Server. When the Windows Command Prompt window opens, you will see a series of messages scrolling down the screen.

Starting the Costpoint 8.1 WebLogic Server can take a long time to complete. Please do not interrupt the process.

2. After the Costpoint 8.1 WebLogic Server has successfully started, the following message displays at the bottom of the command line shell window:

<The server started in RUNNING mode.>

If the Costpoint 8.1 WebLogic Server encounters errors during the startup process, the message will not be displayed and the command line shell (DOS window) may terminate.

If the message does not display or if the command line shell (DOS window) terminates, you must perform the following:

- Make a copy of the C:\Deltek\Costpoint\81\logs\DEServer.log file.
- Contact Deltek Costpoint Technical Support.

Install the Costpoint 8.1 Windows Service

The steps to installing the Costpoint 8.1 Windows service are detailed in this section.

This step must be performed on your Costpoint 8.1 WebLogic application server.

To install Costpoint 8.1 to run as a Windows service:

1. Stop the Costpoint 8.1 WebLogic Server.

Note: See the [Stop Costpoint 8.1 WebLogic Server from the Web Browser](#) section for information on starting and stopping the Costpoint 8.1 WebLogic Server.

2. Use Windows Explorer to navigate to the directory where the Costpoint 8.1 software was installed (C:\Deltek\Costpoint\81\bin), right-click **InstallCPWebasService.cmd**, and select **Run as administrator**.

Configure the Costpoint 8.1 Windows Service

The steps to configuring the Costpoint 8.1 Windows service are detailed in this section.

This step must be performed on your Costpoint 8.1 WebLogic application server.

To configure the Costpoint 8.1 Windows service:

1. Click **Start » Administrative Tools » Services**.
2. On the Services window, scroll down the **Services** drop-down list, right-click the **Costpoint 8.1** service, and then click **Properties** on the shortcut menu.

If you do cannot find the **Costpoint 8.1** service, then the service must not have installed properly in the previous step. Please repeat Step 1 of [Install the Costpoint 8.1 Windows Service](#).

3. On the Costpoint 8.1 Properties screen, click the Recovery tab, and complete the following.

| Field Name | Action |
|-------------------------------|---|
| First failure | Change the drop-down selection from Take No Action to Restart the Service . |
| Second failure | Accept the default value, Take No Action . |
| Subsequent failures | Accept the default value, Take No Action . |
| Reset fail count after | Change the value from 0 to 1 days. |
| Restart service after | Accept the default value, 1 minute. |

4. Click **Apply**.
5. On the Costpoint 8.1 Properties screen, click the Log On tab, and complete the following.

| Field Name | Action |
|-------------------------|---|
| Account | Enter the domain Account. For example, domain\useraccountname. If using a domain service login account instead of the "Local System Account", select This Account . |
| Password | Enter the password for the domain Account. |
| Confirm Password | Re-enter your password for the domain Account. |

6. Click **Apply**.

Make sure that the login account for the Costpoint Service is in the local Administrators group on the Application Tier server and is part of the local security group created by the Application Tier installer, CostpointToolsGroup.

Also, keep in mind that this login account must be given full access permissions for any Alternate File locations set up (network shared directories). Alternate File locations are used for Costpoint users for uploading and downloading files from within Costpoint.

7. On the Costpoint 8.1 Properties screen, click the General tab, and click **Start** to start the Costpoint 8.1 service.

The service will indicate that it started immediately. However, please note that it takes several minutes for the Costpoint 8.1 service to fully initialize.

After starting the service, wait several minutes before attempting to connect to the software.

If you encounter problems with the Costpoint 8.1 service, check the C:\Deltek\Costpoint\81\logs\DEServer.log file and report any errors to Deltek Costpoint Technical Support.

8. Click **OK** to close the Costpoint 8.1 Properties screen, and close the Services window.

Web Tier Installation

The steps to integrate your Costpoint 8.1 software with the Microsoft Internet Information Server (IIS) are detailed in this section.

The Microsoft Internet Information Server component is **optional**. The WebLogic Server software includes an integrated web server component that you can use with the Costpoint 8.1 software.

Though the use of the IIS component is optional, Deltek strongly recommends that you install it in your production environment. In addition to acting as the proxy, the IIS server is also used to load balance the cluster nodes.

Before You Start

Make sure that you meet all [Web Tier Installation/Microsoft Internet Information Server \(IIS\) Configuration Prerequisites](#).

Install Microsoft IIS Web Server for Costpoint 8.1 using PowerShell (Admin)

This section provides the steps that you need complete to configure Microsoft IIS prior to the installation of Costpoint 8.1 using PowerShell (Admin).

Note: To manually configure using Server Manager, skip this step and proceed to the next step.

You must perform this procedure on a web server that uses Microsoft Internet Information Server.

To install IIS features:

1. Open Windows PowerShell (Admin).
2. Run this command to install features:

```
Install-WindowsFeature -Name Web-Server,Web-ISAPI-Ext,Web-Mgmt-Compat,Web-Metabase,Web-Scripting-Tools -IncludeManagementTools
```

3. Run this command to verify installed features:

```
get-WindowsFeature -name Web-*
```

Install Microsoft IIS Web Server for Costpoint 8.1 using Server Manager

This section provides the steps that you need complete to manually configure Microsoft IIS prior to the installation of Costpoint 8.1 using Server Manager.

Note: If you installed the required features in the previous step using PowerShell (Admin), you can skip this step.

You must perform this step on a web server that uses Microsoft Internet Information Server.

To configure Microsoft IIS Web server:

1. Click **Start » Programs and Features**.
2. Click the **Turn Windows features on or off** link.
3. On the Server Manager screen, select **Add roles and features**.
4. On the Before you begin screen, click **Next >**.
5. On the Select installation type screen, accept the default of **Role-based or feature-based installation**, and click **Next >**.
6. On the Select destination server, accept the default of **Select a server from the server pool**, which should have automatically selected the IIS server you are on, and click **Next >**.
7. On the Select server roles screen, scroll down and select **Web Server (IIS)**.
8. On the Add features that are required for Web Server (IIS) screen, click **Add Features**.
9. On the Select server roles screen, click **Next >**.
10. On the Select features screen, click **Next >**.
11. On the Web Server Role (IIS) screen, click **Next >**.
12. On the Select role services screen, perform the following:
 - a. Scroll down, expand **Application Development**, and select **ISAPI Extensions**.
 - b. Scroll down, under **Management Tools**, expand **IIS 6 Management Compatibility**, and select **IIS 6 Metabase Compatibility**.
 - c. Scroll down and select **IIS Management Scripts and Tools**.
 - d. Click **Next >**.
13. On the Confirm installation selections screen, click **Install**.
14. After the installation is complete, click **Close**.
15. From the upper right of Server Manager, click **Tools**, and select **Internet Information Services (IIS) Manager**.
16. On the Internet Information Services (IIS) Manager screen, right-click your IIS computer name icon, and click **Stop**.
17. Right-click your IIS computer name icon again, and click **Start**.
18. Close the Internet Information Services (IIS) Manager window.
19. Close the Services Manager window.
20. Close the Control Panel window.

Install Web Tier Software

The steps to integrate the Costpoint 8.1 system with Microsoft IIS are detailed in this section.

You must perform this step on a web server that is using Microsoft Internet Information Server.

You must have Internet access on the machine where the Costpoint 8.1 installer is invoked in order to download the latest DeltekCostpoint81RequirementsINI.exe file automatically. The file contains the latest OS platforms and database versions supported. The file is automatically downloaded when you launch the Web Tier installation, assuming that your web server has Internet access.

Note: The Deltek product installers contain functionality which enables them to dynamically download configuration files and patch rollback scripts when the product installers are executed from the Deltek Software Manager server. To improve security, these connections have been modified to require communication over HTTPS.

If your application server does not have Internet access, you will need to perform the steps in the [Latest Installer Files Download Instructions](#) section of this document before you run the DeltekCostpoint81WebTier.exe file.

To install Costpoint 8.1 on your Microsoft IIS Web server:

1. Run the **DeltekCostpoint81WebTier_Buildxx.exe** file to launch the Costpoint 8.1 Web Tier installation program.

Note: Due to enhanced security in Windows Server, it is advised that you use the **Run as Administrator** option when launching the executable files even if the logged in user has local administrative rights.

2. On the Welcome to the InstallShield Wizard for Deltek Costpoint Web screen, click **Next >**.
3. On the Choose Destination Location screen, click **Browse** to navigate to an installation location for the Deltek Costpoint 8.1 IIS software.

The default is **C:\Deltek\Costpoint\81\applications** (recommended).

The installation process populates the folder selected above with a \DEWebApp folder that contains all the program files you need to integrate the Costpoint 8.1 software that resides on your application server with your Microsoft IIS Web server.

4. Click **Next >**.
5. On the Costpoint WebLogic System Information screen, complete the following fields:

| Field Name | Action |
|-------------------------------|--|
| IP Address or Hostname | Enter the IP address (10.2.2.154) or hostname (appsrvr01) of your Costpoint 8.1 WebLogic application server. The IP Address or Hostname must not be 127.0.1.0.1 or localhost . |
| Listen Port | Enter the Listener Port for your Costpoint 8.1 WebLogic application server. You specified this port during the Costpoint 8.1 application server software installation. The default port is 7009 (recommended). Your Microsoft IIS Web server will use the IP address or hostname and Listener Port information to forward requests to your Costpoint 8.1 WebLogic application server. This port must match the one entered during the Costpoint 8.1 Application Server installation. |

6. Click **Next >**.
7. On the Deltek Costpoint Web Tier IIS Website screen, locate the **Website Name** field and select the website where you want to create the Deltek Costpoint 8.1 Virtual Directory (**CPWeb**).

Typically, this is the **Default Web Site**.

8. Click **Next >**.

9. On the Pre-Installation Summary screen, review the installation parameters you have selected:
 - If you want to change any settings, click **< Back** to go back and make the necessary changes.
 - If you are satisfied with these settings, click **Install >** to begin the installation.

Once initiated, the installation process can take a long time to complete. Please do not interrupt the process.

The installation will perform the scenarios detailed in the [Installation Process for Costpoint 8.1](#), Web Tier Installation section of this document.

The installation process creates the **CPWeb** Virtual Directory under the Default Website, using the Default App Pool. The process also creates a share of your Costpoint 8.1 Costpoint directory, C:\Deltek\Costpoint\81\applications. In order for the Application Server (WebLogic) to deploy hot fixes and updates, this directory must be shared with Co-Owner (Full Control) rights.

During the installation process, a new User Group, **CostpointToolsGroup**, is created and given Full Sharing and Security rights on C:\Deltek\Costpoint\81\applications.

10. Upon completion, the Deltek Costpoint Web – Installation Summary Results screen will show the results of the installation process.

For each step executed, you should see either a SUCCESS message.

Any FAILED messages or Errors indicated should be further researched in the applicable detailed log file(s) and reported to Deltek Costpoint Technical Support.

11. Click **Next >**.

12. On the InstallShield Wizard Complete screen, complete the following fields.

| Field Name | Action |
|--|--|
| Launch the installer summary file | Select this check box to review the summary log file. This will show the same data from the previous screen. |
| Launch the installer log file | Select this check box to review the Deltek Costpoint Application installer log file. |

13. Click **Finish** to exit the installation.

Please review all log files for any Errors or reported issues, although to help identify any issues, all Errors will be in the AppTier_Install_ErrorSummaryResults.log, from the C:\Program Files\Deltek\Costpoint\8.1\Logs\WebTier_Installer folder.

The following errors can be ignored when installing WebTier on the same box as your AppTier.

ADSCreateLocalGroup Error: System.Runtime.InteropServices.COMException (0x81070563): The specified local group already exists.

ADSCreateLocalGroup Error: The account already exists. Returning True

Please refer to the Post Installation [Web Tier Installer Log Files](#) section for more information on the logs folder structure and contents.

Make sure that Network Discovery and File Sharing options are switched on.

Note: If you are running an IIS web cluster, you must repeat this step for all of your IIS web servers.

Add Users to the CostpointToolsGroup

The steps to add the necessary users to the newly created **CostpointToolsGroup** are detailed in this section. The Web Tier installation added this group to your web server and has granted the group **Full Sharing** and **Full Security Permissions** to the folder containing your DEWebApp folder, **C:\Deltek\Costpoint\81\applications**.

You must perform this step on your Costpoint 8.1 Web server.

To add users to the newly created CostpointToolsGroup:

1. Open **Computer Management**.
2. From **Computer Management**, **Local Users and Groups**, **Groups**, add the following users to the **CostpointToolsGroup** group:
 - **Application Tier (Costpoint) Tools user:** The user that you will use to log in to the application server to run any of the Costpoint tools, such as the Config Utility, Migrate User Utility, or DBWizard.
3. Reboot your Costpoint 8.1 Web server.

Configure Costpoint 8.1 IIS Access

The steps to configure Costpoint 8.1 to work through IIS are detailed in this section.

You must perform this step on your Costpoint 8.1 WebLogic application server.

To configure Costpoint 8.1 and IIS:

1. With your Costpoint 8.1 service running, right-click **Start**, select **Search**, enter **Costpoint 8.1**, right-click **Start Costpoint 8.1 Config Utility**, and click **Run as administrator**.

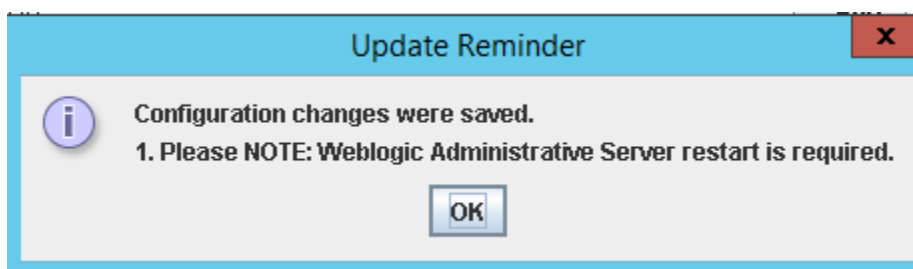
Note: Due to the enhanced security in Windows Server, it is advised to that you use the **Run as Administrator** option when launching this command even if the logged in user has local administrative rights.

2. On the Select Your Configuration Options screen, make sure the **IIS Connection Configuration** check box is selected and click **Next**.
3. On the Costpoint Configuration Utility screen, click the IIS tab and perform the following for each of your IIS Web Servers:

| Field Name | Action |
|--|---|
| Use IIS #1 | Select this check box. This option is cleared by default. |
| Configuration File Location (iisproxy.ini) | <p>Click the ellipsis button, and navigate to the \\CPiisServer\Costpoint folder share on your IIS server.</p> <p>Select the DEProxy\lib folder to access the iisproxy.ini file, and click Open.</p> <p>Click OK after the following message displays: "Configuration file iisproxy.ini was successfully loaded."</p> |

| Field Name | Action |
|--------------------------|---|
| DEWebApp Folder Location | Click the ellipsis button, and navigate to the shared \\CPiisServer\Costpoint folder on your IIS server. Navigate to the folder containing your DEWebApp folder (that is, \\CPiisServer\Costpoint\81\applications), and click Open . |
| WebLogic Host IP | Enter your WebLogic application server name. |
| Port | Enter the WebLogic Listener Port, 7009 . |

- Click **Save**. The following message displays:



- Click **OK**, and click **Close**.

Restart Costpoint 8.1 WebLogic Server

The steps to stop and restart your Costpoint 8.1 WebLogic Server are detailed in this section.

You must perform this step on your Costpoint 8.1 WebLogic application server.

To stop and restart your Costpoint 8.1 WebLogic Server:

- Click **Start » Administrative Tools » Services**.
- On the Services window opens, scroll down the **Services** list and **Stop** the **Costpoint 8.1 service**.
- After the service stops, **Start** the **Costpoint 8.1 service**.

Note: The service immediately indicates that it has started. However, please note that it takes several minutes for the Costpoint 8.1 service to fully initialize.

After starting the service, wait several minutes before attempting to connect to the software.

If you encounter problems with the Costpoint 8.1 service, check the **C:\Deltek\Costpoint\8.1\logs\DEServer.log** file and report any errors to Deltek Costpoint Technical Support.

- Close the Services window.

Costpoint 8.1 Initial Log In Configuration

The steps to configure your browser and verify your Costpoint 8.1 Application Tier and Web Tier installations are detailed in this section. To confirm that these servers are functioning properly, you will log in to Costpoint 8.1 and preview a report.

Before You Start

Make sure that you meet all [Costpoint 8.1 Initial Log In Configuration Prerequisites](#).

Configure Costpoint 8.1 Printer

This step is optional. It provides configuration instructions for your Application Tier WebLogic Server to allow you to print Costpoint 8.1 reports. This is useful for asynchronous printing from the server, especially for tasks such as printing reports through the Job Server in the middle of the night.

Note: Users can print to local printers from the workstations without configuring anything in this step.

You must perform this step on your Costpoint 8.1 application server.

To create Windows printer objects on your application server:

1. Right-click **Start**, click **Control Panel**, and under Hardware, select **View devices and printers**.
2. On the Printers and Faxes screen, double-click **Add Printer**.
3. Use the Add Printer Wizard to create a Windows printer object that will connect and print to a printer on your network.

On your application server, you can create as many Windows printer objects as needed for your organization. After the printer objects are created, your Costpoint 8.1 WebLogic application server will make the printer objects available to your users.

Log In to Costpoint 8.1

The steps to log in to Costpoint 8.1 are detailed in this section.

You can perform this step from any Windows client workstation that has TCP/IP access to your Costpoint 8.1 WebLogic application server.

Note: Depending on your environment, you may need to add your Costpoint 8.1 URL under **Local Internet** instead of **Trusted sites**.

Disable any pop-up blockers or explicitly allow pop-ups for the Costpoint 8.1 URL, such as **http://<IPAddress or ComputerName>**, where **<IPAddress or ComputerName>** identifies your Costpoint 8.1 WebLogic application server or IIS Web server (for example, **http://10.2.2.154**).

To log in to Costpoint 8.1:

1. Open your web browser, and enter one of the following URLs:
http://<AppServerIPAddress or ComputerName>:<Port>
http://<WebServerIPAddress or ComputerName>/cpweb

Where <AppServerIPAddress or ComputerName> identifies your Costpoint 8.1 WebLogic application server and <Port> identifies the unique port number that your Costpoint 8.1 WebLogic application server uses to listen for connections. You specified this port value during the Costpoint 8.1 software installation. The default is 7009 (for example, **http://10.2.2.154:7009**).

Or where <WebServerIPAddress or ComputerName> identifies your Costpoint 8.1 IIS Web server (for example, **http://10.2.2.156/cpweb**).

2. When the Deltek Costpoint 8.1 Welcome screen displays, complete the following fields.

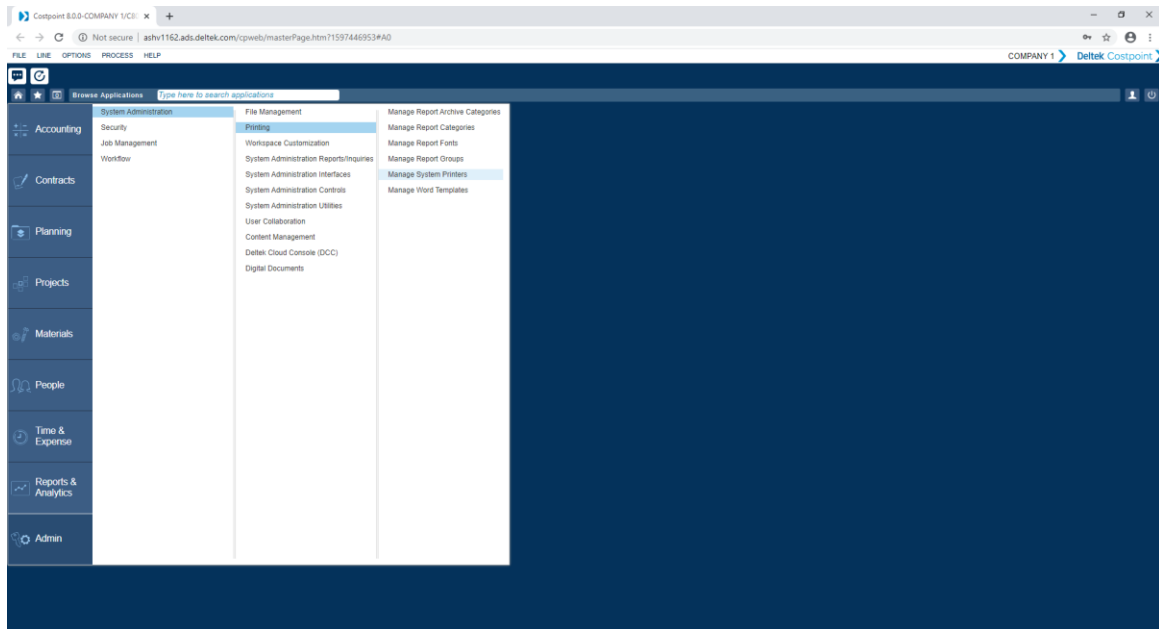
| Field Name | Action |
|----------------------------|---|
| Username | Enter CPSUPERUSER . |
| Password | Enter password . The password is case-sensitive and must be entered in lowercase. Passwords that you create for other user IDs may be uppercase, lowercase, or mixed. |
| System | Enter <Your_System_Name> , where <Your_System_Name> identifies the system name you assigned to your Costpoint 8.1 system during the Application Server Installation. Typically, customers use a system name that is identical to their Costpoint 8.1 Database name, DELTEKCP . |
| ADDITIONAL CRITERIA | <p>Click + to display these additional fields:</p> <ul style="list-style-type: none"> ▪ Application: Accept the blank default value, or enter a specific Costpoint 8.1 application. For example, COSTPOINT MENU. ▪ Company: Enter your company ID. For example, 1. ▪ Validation Frequency: Accept the default drop-down value, Field. After you have successfully logged in to Costpoint 8.1, review the online help for a detailed explanation of the value you can select for this field. ▪ Language: Accept the default drop-down value, English, or change to your language. |
| Remember me | Select this check box to have the system remember your login information. This check box is not selected by default. |

3. Click **Log In**.
4. When the Your password has expired screen displays, complete the following.

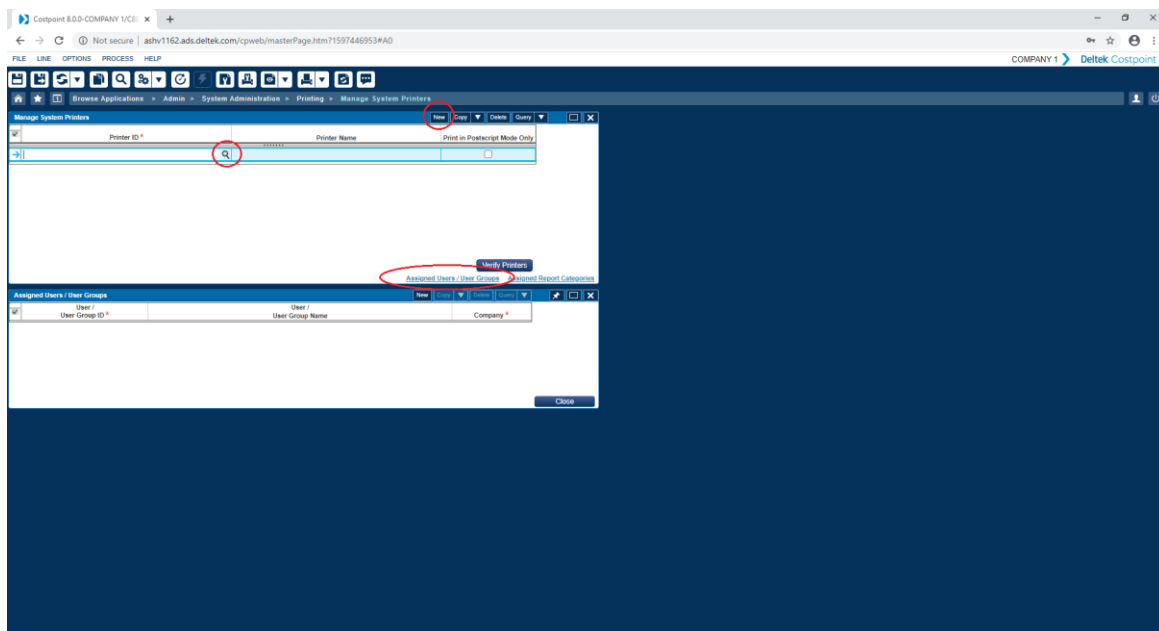
| Field Name | Action |
|-------------------------|---|
| Current Password | Enter password . The password is case-sensitive and must be entered in lowercase. |
| New Password | Enter a new password for the CPSUPERUSER account. Passwords are case-sensitive and may be uppercase, lowercase, or mixed. |

| Field Name | Action |
|-------------------------|---|
| Confirm Password | Re-enter your new password for CPSUPERUSER. |

- Click **Log In**.
- From the main menu screen, click **Admin » System Administration » Printing » Manage System Printers**.



- On the Manage System Printers screen displays, click **New Record (+)**.



- Complete the following fields.

| Field Name | Action |
|---------------------|--|
| Printer ID | Click the magnifying glass (circled above in red). This displays all printer objects that are available on your Application Server. Select the appropriate printer object by clicking the check box to the left of the printer object name and then clicking SELECT . |
| Printer Name | Enter a descriptive name for the printer object. |

- Select the **Assigned Users/User Groups** link located in the lower-right corner of the System Printers section.
- When the focus switches to the Assigned Users/User Groups section at the bottom half of your browser window, click **New Record (+)**, and complete the following fields.

| Field Name | Action |
|---|---|
| User/User Group ID or User/User Group Name | Click the magnifying glass for one of these fields. Select a User/User Group that should have access to the printer object you specified above. |
| Company | Click the magnifying glass. Select a Company for this User/User Group. |

- Click **SELECT**. You must repeat Step 9 for each User/User Group that you want to assign the printer object that you specified earlier.
- Click **Save**, and click **OK** when the following message is displayed: "Record modifications completed without error."
You must repeat items 6–11 for any printer objects on your Application server that you wish to make available to your Costpoint 8.1 system users.
- Click **File» Log-out** to exit Costpoint 8.1.
- Close your web browser.

Verify Costpoint 8.1 Printer Configuration

The steps to verify your Costpoint 8.1 printers are detailed in this section.

This step can be performed from any Windows client workstation that has TCP/IP access to your Costpoint 8.1 WebLogic application server.

To verify your Costpoint 8.1 printers:

- Open your Web browser, and enter one of the following URLs:

http://<AppServerIPAddress or ComputerName>:<Port>

http://<WebServerIPAddress or ComputerName>/cpweb

Where <AppServerIPAddress or ComputerName> identifies your Costpoint 8.1 WebLogic application server and <Port> identifies the unique port number that your Costpoint 8.1 WebLogic application server uses to listen for connections. You specified this port value during the Costpoint 8.1 software installation. The default is 7009 (for example, **http://10.2.2.154:7009**).

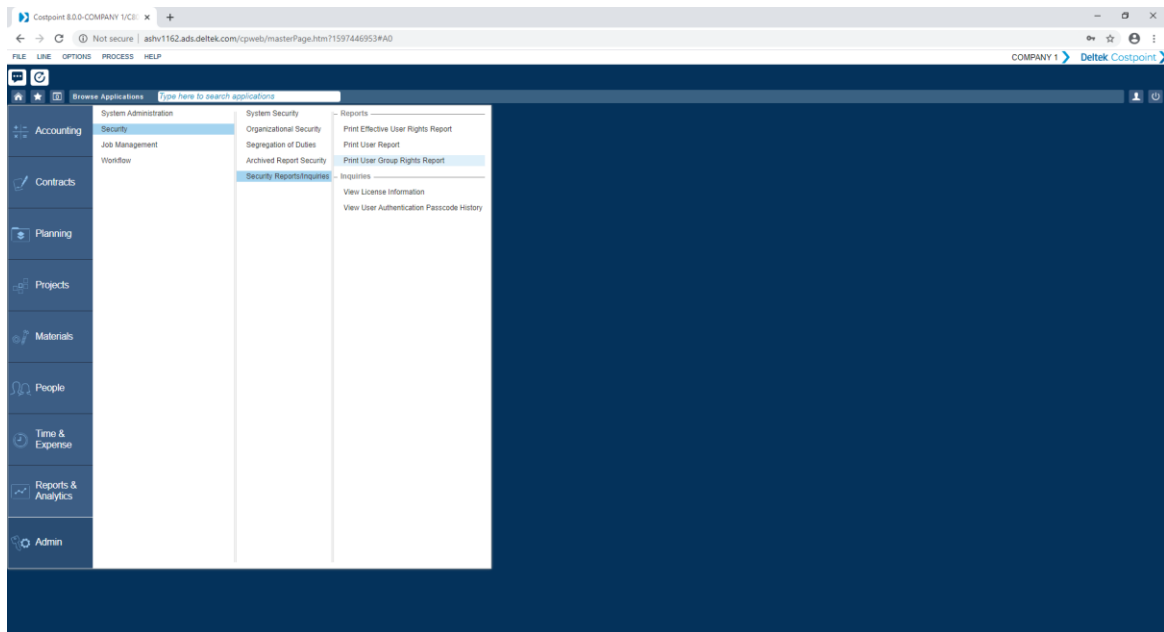
Or where <WebServerIPAddress or ComputerName> identifies your Costpoint 8.1 IIS Web server (for example, **http://10.2.2.156/cpweb**).

2. On the Deltek Costpoint screen, complete the following fields.

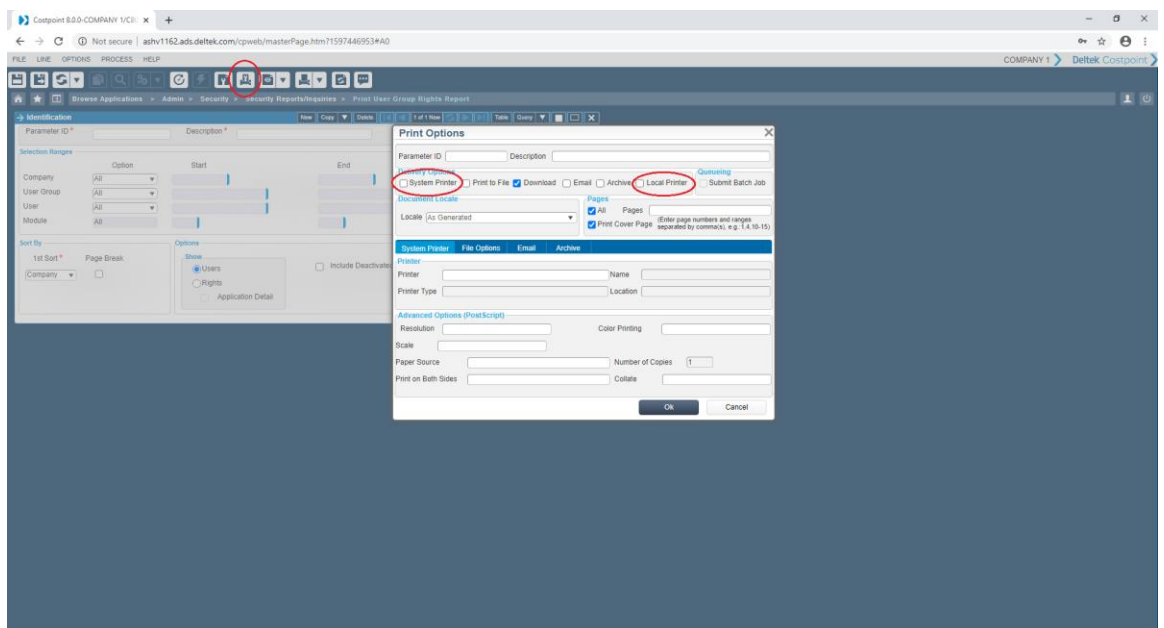
| Field Name | Action |
|------------------------------------|---|
| Username | Enter CPSUPERUSER . |
| Password | Enter the CPSUPERUSER user password. The default was password . |
| System | Enter <Your_System_Name> , where <Your_System_Name> identifies the system name you assigned to your Costpoint 8.1 system during the Application Server Installation process. Typically, customers use a system name that is identical to their Costpoint 8.1 Database name, DELTEKCP. |
| SHOW ADDITIONAL CRITERIA | <p>Click + to display these additional fields:</p> <ul style="list-style-type: none"> ▪ Application: Accept the blank default value, or enter a specific Costpoint 8.1 application. For example, COSTPOINT MENU. ▪ Company: Enter your company ID. For example, 1. ▪ Validation Frequency: Accept the default drop-down value, Field. After you have successfully logged in to Costpoint 8.1, review the online help for a detailed explanation of the value you can select for this field. |
| Remember log in information | Select this check box to have the system remember your login information. This option is not selected by default. |

3. Click **Log In**.
4. From the main menu screen, click **Adm » Security » Security Reports/Inquiries » Print User Group Rights Report**.

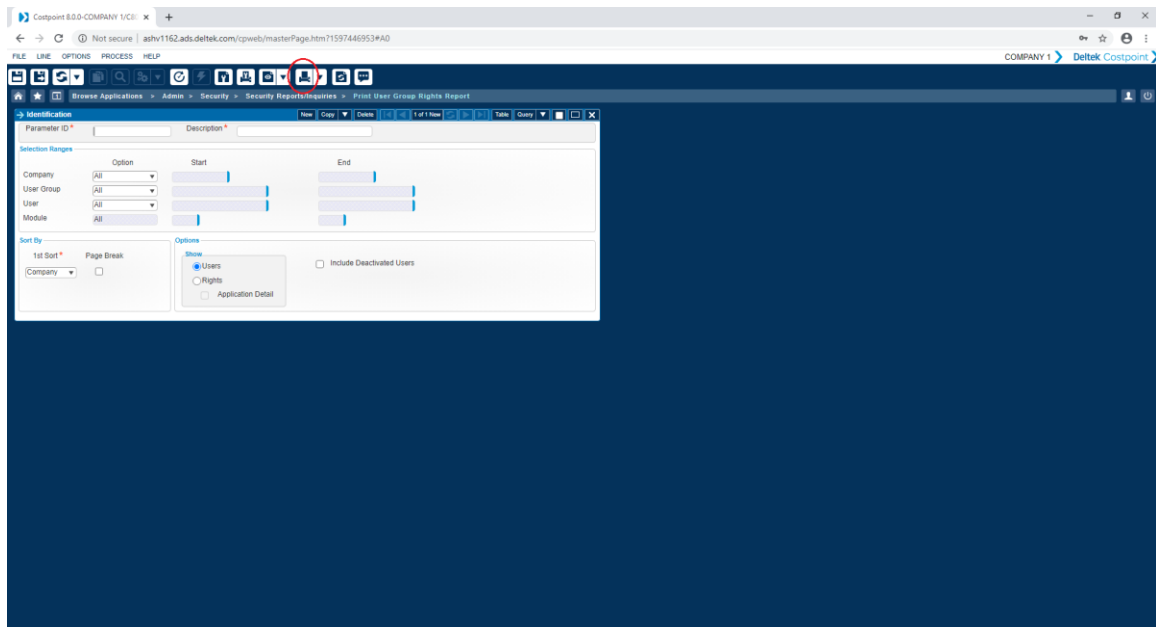
Costpoint 8.1 Initial Log In Configuration



5. On the Print User Group Rights Report screen, click **Print Options**.



6. On the Print Options screen, select the **System Printer** or the **Local Printer** Delivery Option, depending on how you set up your Application Server printer, and click **OK**.
7. On the Print User Group Rights Report screen, click **Print Default Report**.



If the User Group Rights Report prints correctly, your Costpoint 8.1 Application Server printer setup is working properly. If the report does not print correctly, please contact Deltak Costpoint Technical Support.

8. Click **File » Close Application** to close the Print User Group Rights Report screen.
 9. Click **OK** when the following message displays:
 “You have unsaved changes. Select Cancel to go back and save changes or select OK to discard changes and close the application”.
 10. You can now begin to configure and use the Costpoint 8.1 system.
- Please refer to the [Related Documentation](#) section for a list of all documentation included with the Costpoint 8.1 release.
- Deltak strongly recommends that you change the CPSUPERUSER user’s password. Please refer to the [Change CPSUPERUSER User’s Password](#) section for instructions.

Deploy Costpoint as a Progressive Web App

A Progressive Web App (PWA) is a web application which uses a set of latest technologies to incorporate the features which were historically associated with either browser or native applications. As a result, the PWA provides the end user with the best of both worlds.

The Costpoint PWA application provides the same rich set of capabilities regardless of the device. For example, if your company configured SAML or FIDO authentication for desktops, it will work on mobile devices, with no extra steps or additional deployment/configuration necessary. If you developed an Extension, it will work on a desktop, tablet, or phone. If your users access Costpoint from your company Azure portal using SSO, it will equally work on a laptop or phone.

As Costpoint is being constantly enhanced, you can be confident that your company and your users will always have access to the latest features and functionality while using Costpoint PWA, regardless of the device used to access Costpoint.

From an IT perspective, the use of Costpoint PWAs on mobile devices have these additional benefits:

- The instructions to install Costpoint PWA on your device (similar to installing a native app from a store) describe a manual process. However, because it is not required to publish PWA applications to the store, IT can push Costpoint PWA application to your employee devices using standard MDM solutions (for example, MobileIron).
- If your company has an internal company store which employees should use to download applications (for example, using MobileIron store), a PWA application can be published in your company store.
- IT has full control over the version of Costpoint used by users, including the PWA application deployed to user devices. When your company IT or Deltek Cloud deploys any new update to Costpoint, the PWA applications on user devices will refresh automatically and seamlessly, always staying in sync with the version of Costpoint used by your organization.
- There is no need to worry about backward or forward compatibility issues with the version of applications deployed on user devices, and no need to ask or expect users to download an updated version of the application from the company store.

Note: Deploying a PWA application using the steps outlined below does not only create an icon on your home screen but also generates a real native application container on your device. For example, you can tap the standard **App info** option for the Costpoint icon on an Android device and it will show that the CP icon you just created is a native application, downloaded from Google Play store.

Deploy Costpoint PWA on an Android Device

You can install the Costpoint PWA from the Costpoint Login page or the Chrome browser menu.

To deploy Costpoint PWA via the Costpoint Login page:

1. On your Android device, open the Costpoint Login page in the Chrome browser.
2. Tap **Add to Home screen**.
3. Name the Costpoint PWA, and then click **Add**.

You can now tap the icon on your Home screen to launch Costpoint as a stand-alone web app.

To deploy Costpoint PWA via the Chrome browser menu:

1. On your Android device, open the Costpoint Login page in the Chrome browser.
2. Tap the menu (three vertical dots) in the upper-right corner.
3. Tap **Add to Home screen**.
4. Tap **Add**.

You can now tap the icon on your Home screen to launch Costpoint as a stand-alone web app.

Deploy Costpoint PWA on an iPhone or iPad

To deploy Costpoint PWA:

1. On your iPhone or iPad, open the Costpoint Login page in the Safari browser.
2. Tap the **Share** button in Safari.
3. Tap the **Add to Home Screen** icon.
4. Name the Costpoint PWA.

5. Tap **Add** in the upper-right corner.

You can now tap the icon on your Home screen to launch Costpoint as a stand-alone web app.

Deploy Costpoint PWA on a Desktop

Deploying the Costpoint PWA on your desktop creates a desktop shortcut to the application. When you access Costpoint using the app, more data is visible on your screen. Browser elements, like the address bar, tabs, and other controls, are removed, offering a clearer view of your Costpoint data.

Note: Support for Microsoft Edge is coming soon.

To deploy Costpoint PWA in Google Chrome:

1. Open the Costpoint Login page.
2. Install Costpoint PWA using one of the following three options:
 - a. In the Address bar, click **+** (**Install Costpoint**) » **Install**.
 - b. In the browser menu (three vertical dots), click **Install Costpoint** » **Install**.
 - c. On the Costpoint Login page, click **Add to Home Screen** » **Install**.

Maintenance Release Installation

Apply Latest Costpoint 8.1 Maintenance Release (MR)

After you have a functioning Costpoint 8.1 environment, follow the **DeltekCostpoint81MaintenanceReleaseInstallation.pdf** installation document to install the latest Costpoint 8.1 MR.

Post-Installation Configuration

Database Tier Installer Log Files

Database Tier Installation logs are written to the following folder:

C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer

Each of these log files are detailed in the table below, but here is a look at the log folder/file structure:

```

C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer
    DBTier_Install.log
    DBTier_Install_ErrorSummaryResults.log
    DBTier_Install_SummaryResults.log
    DatabaseSteps.txt
C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer\CP_ADMIN
    createLinkUser.bat_CP_ADMIN.log
    OracleNewAdminDatabaseSetup81.bat.log
C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer\CP_SYSTEM
    createLinkUser.bat_CP_SYSTEM.log
    OracleNewSystemDatabaseSetup81.bat.log
C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer\CP_TRANS
    createLinkUser.bat_CP_TRANS.log
    OracleNewTransactionDatabaseSetup81.bat.log
C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer\PL_TRANS
    createLinkUser.bat.log
    CreatePLUserInCPTran.bat.log
    CreatePLUserInTETran.bat.log
    OracleNewPLDatabaseSetup81.log
C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer\TE_TRANS
    createLinkUser.bat_TE_TRANS.log
    CreateTEUserInCPTran.bat_TE_TRANS.log
    OracleNewTEDatabaseSetup81.bat.log
C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer\XA_TRANS
    MSDTC.log
C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer\InstallerLogArchive

```


| Log Name | Description | What to Look For |
|--|--|---|
| C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer | | |
| DBTier_Install.log | <p>Main DB Tier installation Log File. Shows detailed results of all processes executed in the installer.</p> <p>(Multiple log files for this, older ones from previous DB Tier installer runs stored under InstallerLogArchive folder.)</p> | Date and Build number at the top, Installation Success or failed at the bottom. Installation details, Error or Failed messages in between. |
| DBTier_Install_SummaryResults.log | <p>Installer Summary description Panel output written to a log file. Contains the results of the installation process.</p> <p>(Multiple log files for this, older ones from previous DB installer runs stored under InstallerLogArchive folder.)</p> | SUCCESS items, FAILED items with error messages, and/or Warning messages. |
| DBTier_Install_ErrorSummaryResults.log | <p>DB Tier installer error output written to a log file. Contains any ERROR results of the installation process.</p> <p>(Multiple log files for this, older ones from previous DB installer runs stored under InstallerLogArchive folder.)</p> | Any errors during the installation will be written to this file. This will then lead you to the other logs for more detailed description of the errors. |
| DatabaseSteps.txt | | |
| C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer\CP_ADMIN | | |
| createLinkUser.bat_CP_ADMIN.log | Results of creating CPLINK_USER in CPADMIN schema. | Will show any issues, that it completed successfully, or that the login already exists. |
| OracleNewAdminDatabaseSetup81.bat.log | Detailed results for setting up the CPADMIN user and schema. | Will show any issues or \$DBSUCCESS=TRUE at the end of the log file. |
| C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer\CP_SYSTEM | | |
| createLinkUser.bat_CP_SYSTEM.log | Results of creating CPLINK_USER in CPSYSTEM schema. | Will show any issues, that it completed successfully, or that the login already exists. |

| Log Name | Description | What to Look For |
|---|---|---|
| OracleNewSystemDatabaseSetup81.bat.log | Detailed results for setting up the CPSYSTEM user and schema. | Will show any issues or \$DBSUCCESS=TRUE at the end of the log file. |
| C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer\CP_TRANS | | |
| createLinkUser.bat_CP_TRANS.log | Results of creating CPLINK_USER in CPTRANS schema. | Will show any issues, that it completed successfully, or that the login already exists. |
| OracleNewTransactionDatabaseSetup81.bat.log | Detailed results for setting up the CPTRANS user and schema. | Will show any issues or \$DBSUCCESS=TRUE at the end of the log file. |
| C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer\PL_TRANS | | |
| createLinkUser.bat.log | Results of creating CPLINK_USER in TETRANS schema. | Will show any issues, that it completed successfully, or that the login already exists. |
| CreatePLUserInCPTran.bat.log | Results of creating PLTRANS user in CPTRANS schema. | Will show any issues, that it completed successfully, or that the login already exists. |
| CreatePLUserInTETran.bat.log | Results of creating PLTRANS user in TETRANS schema. | Will show any issues, that it completed successfully, or that the login already exists. |
| OracleNewPLDatabaseSetup81.log | Detailed results for setting up the PLTRANS user and schema. | Will show any issues or \$DBSUCCESS=TRUE at the end of the log file. |
| C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer\TE_TRANS | | |
| createLinkUser.bat_TE_TRANS.log | Results of creating CPLINK_USER in CPTRANS schema. | Will show any issues, that it completed successfully, or that the login already exists. |
| CreateTEUserInCPTran.bat_TE_TRANS.log | Results of creating TETRANS user in CPTRANS schema. | Will show any issues, that it completed successfully, or that the login already exists. |

| Log Name | Description | What to Look For |
|--|--|--|
| OracleNewTEDatabaseSetup81.bat.log | Detailed results for setting up the TETRANS user and schema. | Will show any issues or \$DBSUCCESS=TRUE at the end of the log file. |
| C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer\XA_TRANS | | |
| MSDTC.log | Results of restating the Distributed Transaction Coordinator. | Will show any issues or that it completed successfully. |
| C:\Program Files\Deltek\Costpoint\8.1\Logs\DBTier_Installer\InstallerLogArchive | | |
| | Copies of current log files will get moved to these folders if more than one run of the DB Tier installer is done. | |

Application Tier Installer Log Files

Application Tier Installation logs are written to the following folder:

C:\Program Files\Deltek\Costpoint\8.1\Logs\AppTier_Installer

Each of these log files are detailed in the table below, but here is a look at the log folder/file structure:

C:\Program Files\Deltek\Costpoint\8.1\Logs\AppTier_Installer

AppTier_Install.log

AppTier_Install_ErrorSummaryResults.log

AppTier_Install_SummaryResults.log

AppTierSteps.txt

C:\Program Files\Deltek\Costpoint\8.1\Logs\AppTier_Installer\APIs

applyLicense_<name of license zip file>.log

applyLicense_<name of license zip file>result.log

linkViews.log

linkViewsResultCode.log

OrgSecByApplMod.log

OrgSecByApplModResult.log

syncSysSettingsTable.log

syncSysSettingsTableResultCode.log

C:\Program Files\Deltek\Costpoint\8.1\Logs\AppTier_Installer\InstallerLogArchive

The following table provides the list of log files generated during the App Tier Installation, the folder they are under, along with a description of each, as well as what to look for when reviewing them:

| Log Name | Description | What to Look For |
|--|---|---|
| C:\Program Files\Deltek\Costpoint\8.1\Logs\AppTier_Installer | | |
| AppTier_Install.log | <p>Main App Tier installation Log File. Shows detailed results of all processes executed in the installer.</p> <p>(Multiple log files for this, older ones from previous App Tier installer runs stored under InstallerLogArchive folder.)</p> | Date and Build number at the top, Installation Success or failed at the bottom. Installation details, Error or Failed messages in between. |
| AppTier_Install_SummaryResults.log | <p>Installer Summary description Panel output written to a log file. Contains the results of the installation process.</p> <p>(Multiple log files for this, older ones from previous App installer runs stored under InstallerLogArchive folder.)</p> | SUCCESS items, FAILED items with error messages, and/or Warning messages. |
| AppTier_Install_ErrorSummaryResults.log | <p>App Tier installer error output written to a log file. Contains any ERROR results of the installation process.</p> <p>(Multiple log files for this, older ones from previous App installer runs stored under InstallerLogArchive folder.)</p> | Any errors during the installation will be written to this file. This will then lead you to the other logs for more detailed description of the errors. |
| C:\Program Files\Deltek\Costpoint\8.1\Logs\AppTier_Installer\APIs | | |
| applyLicense_<name of license zip file>.log | Results of applying your license file. | <p>Details of applying License file. If no issues will see this at the bottom:</p> <p>>License file applied successfully...</p> <p>-->Rebuilding Licensed Applications...</p> <p>-->Rebuilding User Menus...</p> <p>-->Done.</p> <p>-->Removing temporary folder...</p> <p>-->End of the process.</p> |
| applyLicense_<name of license zip file>result.log | Results of applying your license file. | Will show 1 if successful or 0 if there were issues. |

| Log Name | Description | What to Look For |
|---|---|--|
| linkViews.log | Log file containing details of Link Views process. | Will show error details if any at bottom. |
| linkViewsResultCode.log | Results of applying link views. | Will show 1 if successful or 0 if there were issues. |
| OrgSecByApplMod.log | Log file containing details of populating the Org Security Tables. | Will show error details if any at bottom. |
| OrgSecByApplModResult.log | Results of populating the Org Security Tables. | Will show 1 if successful or 0 if there were issues. |
| syncSysSettingsTable.log | Log file containing details of syncing the System Settings Tables. | Will show error details if any at bottom. |
| syncSysSettingsTableResultCode.log | Results of syncing System Settings Tables. | Will show 1 if successful or 0 if there were issues. |
| C:\Program Files\Deltek\Costpoint\8.1\Logs\AppTier_Installer\InstallerLogArchive | | |
| | Copies of current log files will get moved to these folders if more than one run of the App Tier installer is done. | |

Web Tier Installer Log Files

Web Tier Installation logs are written to the following folder:

C:\Program Files\Deltek\Costpoint\8.1\Logs\WebTier_Installer

Each of these log files are detailed in the table below, but here is a look at the log folder/file structure:

C:\Program Files\Deltek\Costpoint\8.1\Logs\WebTier_Installer

DeltekCostpointWebTierSetup.log

WebTier_Setup_ErrorSummaryResults.log

WebTier_Setup_SummaryResults.log

C:\Program Files\Deltek\Costpoint\8.1\Logs\WebTier_Installer\InstallerLogArchive

The following table provides the list of log files generated during the Web Tier Installation, the folder they are under, along with a description of each, as well as what to look for when reviewing them:

| Log Name | Description | What to Look For |
|---|-------------|------------------|
| C:\Program Files\Deltek\Costpoint\8.1\Logs\WebTier_Installer | | |

| Log Name | Description | What to Look For |
|---|--|---|
| DeltekCostpointWebTierSetup.log | Main Web Tier installation Log File. Shows detailed results of all processes executed in the installer. (Multiple log files for this, older ones from previous Web installer runs stored under InstallerLogArchive folder.) | Date and Build number at the top, Installation Success or failed at the bottom. Installation details, Error or Failed messages in between. |
| WebTier_Setup_SummaryResults.log | Installer Summary description Panel output written to a log file. Contains the results of the installation process. (Multiple log files for this, older ones from previous Web installer runs stored under InstallerLogArchive folder.) | SUCCESS items, FAILED items with error messages, and/or Warning messages. |
| WebTier_Setup_ErrorSummaryResults.log | Web Tier installer error output written to a log file. Contains any ERROR results of the installation process. (Multiple log files for this, older ones from previous Web installer runs stored under InstallerLogArchive folder.) | Any errors during the installation will be written to this file. This will then lead you to the other logs for more detailed description of the errors. |
| C:\Program Files\Deltek\Costpoint\8.1\Logs\WebTier_Installer\InstallerLogArchive | | |
| | Copies of current log files will get moved to these folders if more than one run of the Web Tier installer is done. | |

WebLogic Server Configuration

The following methods to start and stop your Costpoint 8.1 WebLogic Server are detailed in this section:

- Starting the Costpoint 8.1 WebLogic Server as a Windows service
- Starting the Costpoint 8.1 WebLogic Server from the Windows Start menu
- Starting the Costpoint 8.1 WebLogic Server from a Windows Command Prompt
- Stopping the Costpoint 8.1 WebLogic Server as a Windows service
- Stopping the Costpoint 8.1 WebLogic Server from a web browser

Start Costpoint 8.1 WebLogic Server as a Windows Service

The steps to start your Costpoint 8.1 WebLogic Server as a Windows service are detailed in this section.

This step must be performed on your Costpoint 8.1 WebLogic application server.

To start your Costpoint 8.1 WebLogic Server when it is installed as a Windows service:

1. Click **Start » Administrative Tools » Services**.
2. On the Services window, scroll down the **Services** list, right-click the **Costpoint 8.1** service, and click **Properties** on the shortcut menu.
3. On the Costpoint 8.1 Properties screen, click the General tab.
4. Click **Start** to start the Costpoint 8.1 service.

The service will indicate that it started immediately. However, please note that it will take several minutes for the Costpoint 8.1 service to fully initialize. After starting the service, wait several minutes before attempting to connect to the software.

If you encounter problems with the Costpoint 8.1 service, check the C:\Deltek\Costpoint\81\logs\DEServer.log file and report any errors to Deltek Costpoint Technical Support.

5. Click **OK** to close the Costpoint 8.1 Properties screen.
6. Close the Services window.

Start Costpoint 8.1 WebLogic Server from the Start Menu

The steps to start your Costpoint 8.1 WebLogic Server from the Windows Start menu are detailed in this section.

This step must be performed on your Costpoint 8.1 WebLogic application server.

To start your Costpoint 8.1 WebLogic Server from the Windows Start menu:

1. Right-click **Start**, select **Search**, enter **Costpoint 8.1**, right-click **Start Costpoint 8.1**, and click **Run as administrator**.

Note: Due to the enhanced security in Windows Server, it is advised that you use the **Run as Administrator** option when launching this command even if the logged in user has local administrative rights.

2. This will open a Windows Command Prompt and launch a command script that starts the Costpoint 8.1 WebLogic Server. When the Windows Command Prompt window opens, you will see a series of messages scrolling down the screen.

It will take several minutes for the Costpoint 8.1 WebLogic Server to start.

3. If your Costpoint 8.1 WebLogic Server starts successfully, the following message displays on the lower portion of the command line shell window:

<The server started in RUNNING mode. >

If your Costpoint 8.1 WebLogic Server encounters errors during the startup process, the message will not display, and the command line shell (DOS window) may terminate.

4. If you do not receive the message or the command line shell (DOS window) terminates, you should:
 - Make a copy of the C:\Deltek\Costpoint\81\logs\DEServer.log file.
 - Contact Deltek Costpoint Technical Support.

Start Costpoint 8.1 WebLogic Server from the Windows Command Prompt

The steps to start your Costpoint 8.1 WebLogic Server from a Windows Command Prompt are detailed in this section.

This step must be performed on your Costpoint 8.1 WebLogic application server.

To start your Costpoint 8.1 WebLogic Server from a command line shell:

1. Open a Windows Command Prompt in Administrator Mode, navigate to the **C:\Deltek\Costpoint\81\bin** folder, and launch the following command script:

StartCPWeb

You will see a series of messages scrolling down the screen. It takes several minutes for the Costpoint 8.1 WebLogic Server to start.

- If your Costpoint 8.1 WebLogic Server starts successfully, the following message displays on the lower portion of the command line shell window:

<The server started in RUNNING mode. >

- If your Costpoint 8.1 WebLogic Server encounters errors during the startup process, the message will not display, and the command line shell (DOS window) may terminate.
2. If you do not receive the message or the command line shell (DOS window) terminates, you should:
 - a. Make a copy of the C:\Deltek\Costpoint\81\logs\DEServer.log file.
 - b. Contact Deltek Costpoint Technical Support.

Stop Costpoint 8.1 WebLogic Server as a Windows Service

The steps to stop your Costpoint 8.1 WebLogic Server when it is running as a Windows service are detailed in this section.

This step must be performed on your Costpoint 8.1 WebLogic application server.

To stop your Costpoint 8.1 WebLogic Server when it is installed as a Windows service:

1. Click Windows **Start » Administrative Tools » Services**.
2. On the Services window opens, scroll down the Services list, right-click the **Costpoint 8.1** service, and click **Properties** on the shortcut menu.
3. On the Costpoint 8.1 Properties screen, click the General tab.
4. Click **Stop** to stop the Costpoint 8.1 service.
5. Click **OK** to close the Costpoint 8.1 Properties screen.
6. Close the Services window.

Stop Costpoint 8.1 WebLogic Server from the Web Browser

The steps to stop your Costpoint 8.1 WebLogic Server from the WebLogic console are detailed in this section.

This step must be performed from a machine that has web browser client access via TCP/IP to the Costpoint 8.1 WebLogic application server.

To stop your Costpoint 8.1 WebLogic Server from a Web browser:

1. Open your Web browser and enter the following case-sensitive URL: **http://<IPAddress or ComputerName>:<Port>/console**, where **<IPAddress or ComputerName>** identifies your Costpoint 8.1 WebLogic application server and **<Port>** identifies the unique port number that your Costpoint 8.1 WebLogic application server uses to listen for connections. You specified this port value during the Costpoint 8.1 software installation. The default port is **7009** (for example, **http://10.2.2.154:7009/console**).
2. When the WebLogic Server Administration Console screen displays, complete the following fields:

| Field Name | Action |
|-----------------|--|
| Username | Enter system . |
| Password | Enter the password for the WebLogic Administrative user. The default password is weblogic . |

3. Click **Login**.
4. On the Welcome system screen, in the left pane, under **Domain Structure**, select the **delteke** node of the hierarchical tree.
5. On the Settings for delteke screen, click the Control tab.
6. Select the check the box to the left of the **DEServer(admin)** field.
7. Click **Shutdown**, and then click **Force Shutdown Now**.
8. When the Domain Life Cycle Assistant screen displays, click **Yes**.
9. Close the web browser screen.

Change CPSUPERUSER User's Password

The steps to change the CPSUPERUSER users password are detailed in this section.

This step may be performed from any Windows client workstation that has TCP/IP access to your Costpoint 8.1 WebLogic **application** server.

To change the CPSUPERUSER user's password:

1. Open your web browser, and enter one of the following URLs:

http://<AppServerIPAddress or ComputerName>:<Port>

http://<WebServerIPAddress or ComputerName>/cpweb

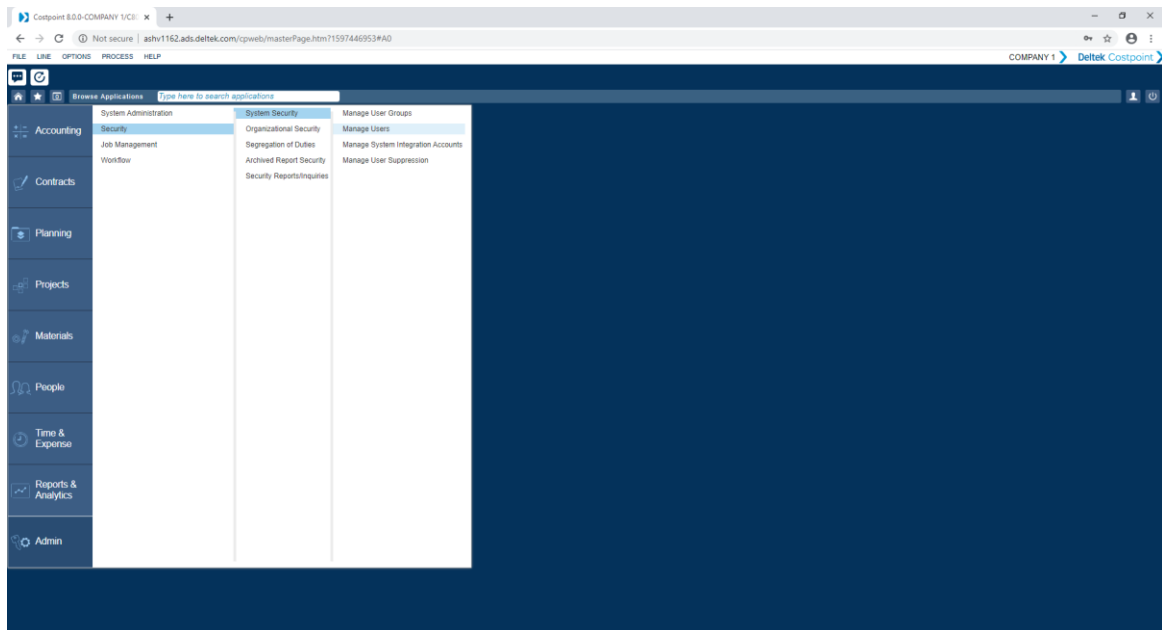
Where **<AppServerIPAddress or ComputerName>** identifies your Costpoint 8.1 WebLogic application server and **<Port>** identifies the unique port number that your Costpoint 8.1 WebLogic application server uses to listen for connections. You specified this port value during the Costpoint 8.1 software installation. The default is **7009** (for example, **http://10.2.2.154:7009**).

Or where **<WebServerIPAddress or ComputerName>** identifies your Costpoint 8.1 IIS Web server (for example, **http://10.2.2.156/cpweb**).

2. On the Deltek Costpoint screen, complete the following fields.

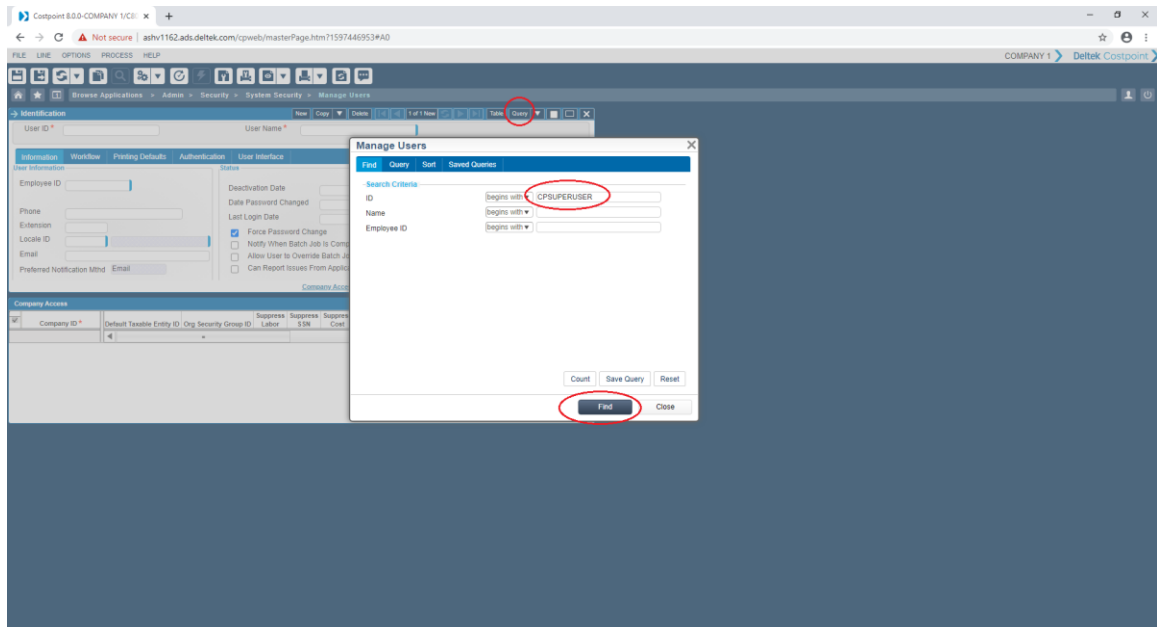
| Field Name | Action |
|------------------------------------|---|
| Username | Enter CPSUPERUSER . |
| Password | Enter the CPSUPERUSER user's password. The default is password . |
| System | Enter <Your_System_Name> , where <Your_System_Name> identifies the system name you assigned to your Costpoint 8.1 system during the Application Server Installation process. Typically, customers use a system name that is identical to their Costpoint 8.1 Database name, DELTEKCP. |
| SHOW ADDITIONAL CRITERIA | <p>Click + to display these additional fields:</p> <ul style="list-style-type: none"> ▪ Application: Accept the blank default value, or enter a specific Costpoint 8.1 application. For example, COSTPOINT MENU. ▪ Company: Enter your company ID. For example, 1. ▪ Validation Frequency: Accept the default drop-down value, Field. After you have successfully logged in to Costpoint 8.1, review the online help for a detailed explanation of the value you can select for this field. |
| Remember log in information | Select this check box to have the system remember your login information. This option is not selected by default. |

3. Click **Log In**.
4. From the main menu screen, click **Admin » Security » System Security » Manage Users**.

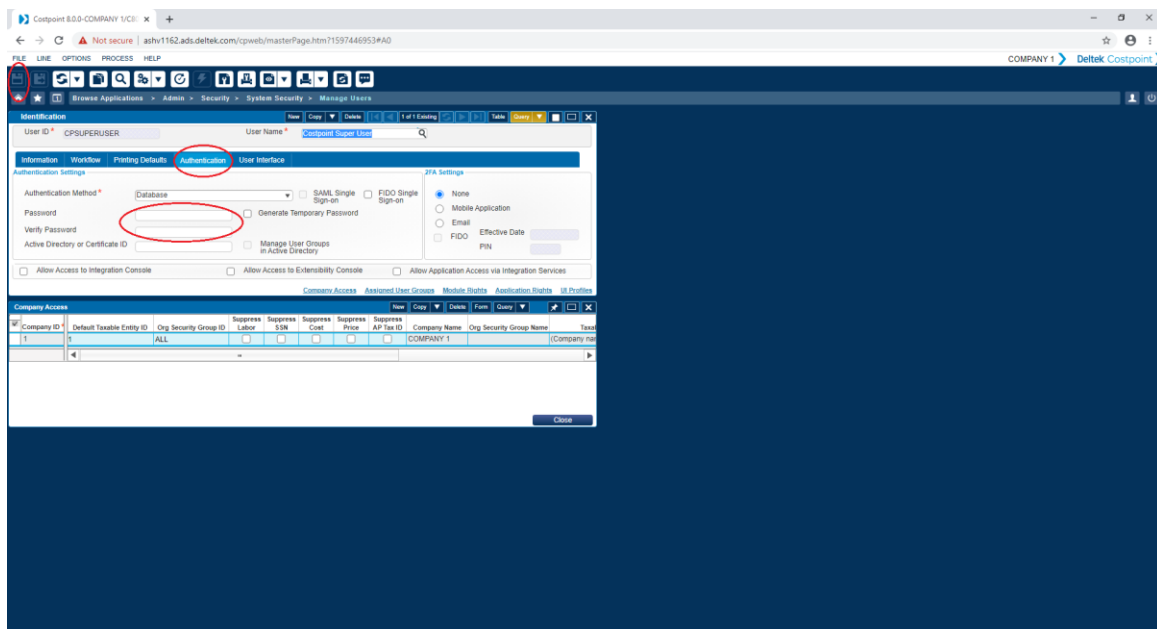


Post-Installation Configuration

- On the Manage Users screen, click **Query**.



- On the Users screen, enter CPSUPERUSER in the **ID** field, and click **Find**.



- After the CPSUPERUSER user information loads on the Manage Users screen, click the Authentication tab, and complete the following fields.

| Field Name | Action |
|------------------------------|--|
| Authentication Method | Accept the default value, Costpoint Database , from the drop-down list. |
| Costpoint Password | Enter a password for the CPSUPERUSER user. |

| Field Name | Action |
|------------------------|---|
| | The password is case-sensitive and must be between 8 and 20 characters in length. |
| Verify Password | Re-enter the password for the CPSUPERUSER user. |

8. Click **Save**.
9. After the confirmation message is displayed at the bottom of the screen, click **File » Close Application** to close the Enter/Manage Users screen.
10. Click **File » Log-out** to exit Costpoint 8.1.
11. Close your web browser.
12. Open your web browser, and enter one of the following URLs:

http://<AppServerIPAddress or ComputerName>:<Port>

http://<WebServerIPAddress or ComputerName>/cpweb

Where <AppServerIPAddress or ComputerName> identifies your Costpoint 8.1 WebLogic application server and <Port> identifies the unique port number that your Costpoint 8.1 WebLogic application server uses to listen for connections. You specified this port value during the Costpoint 8.1 software installation. The default is **7009** (for example, **http://10.2.2.154:7009**).

Or where <WebServerIPAddress or ComputerName> identifies your Costpoint 8.1 IIS Web serve (for example, **http://10.2.2.156/cpweb**).

13. On the Deltek Costpoint screen, complete the following fields.

| Field Name | Action |
|------------------------------------|--|
| Username | Enter CPSUPERUSER |
| Password | Enter the CPSUPERUSER user's password. The default is password . |
| System | Enter <Your_System_Name> , where <Your_System_Name> identifies the system name you assigned to your Costpoint 8.1 system during the Application Server Installation process. Typically, customers use a system name that is identical to their Costpoint 8.1 Database name, DELTEKCP. |
| SHOW ADDITIONAL CRITERIA | Click + to display these additional fields: <ul style="list-style-type: none"> ▪ Application: Accept the blank default value, or enter a specific Costpoint 8.1 application. For example, COSTPOINT MENU. ▪ Company: Enter your company ID. For example, 1. ▪ Validation Frequency: Accept the default drop-down value, Field. After you have successfully logged in to Costpoint 8.1, review the online help for a detailed explanation of the value you can select for this field. |
| Remember log in information | Select this check box to have the system remember your login information. It is selected by default. |

14. Click **Log In**.

You may begin accessing and using the Costpoint 8.1 system:

If you are unable to log in to Costpoint 8.1, contact Deltek Costpoint Technical Support.

Secure Sockets Layer (SSL) Encryption with Costpoint 8.1 Implementation

Information regarding the Costpoint Web support for SSL encryption is detailed in this section. This section also provides references to additional resources that you can use to learn more about implementing SSL with Costpoint 8.1.

Costpoint Web's Support for SSL

Costpoint 8.1 was tested against and supports SSL implemented on its WebLogic Server and Microsoft Internet Information Server (IIS) components.

Note: The IIS component is optional in the Costpoint Web environment. If you have chosen to deploy IIS with your Costpoint Web environment, you may implement SSL on both your IIS and WebLogic Server components.

SSL requirements will vary from customer to customer. Consequently, this section does not provide specific instructions for implementing SSL on either your WebLogic Server or IIS components. Instead, this section provides third-party informational resources that you can use to learn about and implement SSL with your Costpoint 8.1 environment.

Informational Resources for Implementing SSL

You can implement SSL on either or both of your Costpoint 8.1 system's IIS and WebLogic Server components. For help on implementing SSL, please refer to the following URLs:

- WebLogic Server
 - http://docs.oracle.com/cd/E24329_01/web.1211/e24422/ssl.htm#SECMG384: Oracle WebLogic Server documentation that provides an overview of WebLogic's domestic- and exportable-strength SSL licenses as well as step-by-step instructions for implementing SSL on your WebLogic Server.
- IIS
 - [http://technet.microsoft.com/en-us/library/cc732230\(WS.10\).aspx](http://technet.microsoft.com/en-us/library/cc732230(WS.10).aspx): Microsoft TechNet article that provides an overview of using encryption with IIS 8.1 and specific instructions for configuring SSL.
 - <http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/5e0119a8-deed-4056-9592-e721a4889a71.mspx?mfr=true>: Microsoft TechNet article that provides an overview of using encryption with IIS 6.0 and specific instructions for configuring SSL.

In addition to consulting these informational resources, you may contact Deltek's Systems Solutions team to arrange assistance for implementing SSL with your Costpoint 8.1 system.

Adding New Oracle Costpoint Systems to Existing Application Tier

Note: This section is only applicable if you use the Costpoint 8.1 New Database Tier installer to create new Costpoint 8.1 schemas.

This section does not apply if you are not licensed to use either Time and Expense or Planning or both.

To add a brand new Costpoint 8.1 system on Oracle RDBMS to an existing Application Tier:

1. Execute the Costpoint 8.1 Database Tier installer and create your Costpoint 8.1 schemas.
2. Add the new Costpoint 8.1 system through the **Costpoint 8.1 Config Utility**. Include Time & Expense and Planning schemas when creating the Costpoint system if you are licensed to use them.
3. Execute **Link-Views** using the **Costpoint 8.1 DBWizard**.
4. Apply your Costpoint/Time & Expense/Planning license(s) to the new system using the **Costpoint 8.1 DBWizard, Apply License** option.
5. Execute **Link-Views** using the **Costpoint 8.1 DBWizard**.
6. Execute and compile invalid objects in your Time and Expense schema. Deltek provides a script called `CompileSchemaObjectsAfterLinkViews.sql`. This script is packaged and available under your DB Tier Time & Expense installation folder.

C:\Deltek\Costpoint\81\Database\Scripts\ORACLE\TE_TRANSACTION\Scripts\CompileSchemaObjectsAfterLinkViews.sql

7. Execute and compile invalid objects in your Planning schema. Deltek provides a script called `CompileSchemaObjectsAfterLinkViews.sql`. This script is packaged and available under your DB Tier Planning installation folder.

C:\Deltek\Costpoint\81\Database\Scripts\ORACLE\PL_TRANSACTION\Scripts\CompileSchemaObjectsAfterLinkViews.sql

Latest Installer Files Download Instructions

The Costpoint Database Tier installer provides certain command-line options that can be invoked in special circumstances.

To display the currently supported switches:

1. Open Command Prompt in Administrator Mode
2. Navigate to the directory where the installer is located
3. Enter the following: **DeltekCostpoint81DatabaseTier_Buildxx.exe /?**

The instructions to download the latest Costpoint 8.1 Database upgrade and `DeltekCostpoint81RequirementsINI` files are detailed in this section. Each installer will automatically download the applicable files if your servers have Internet access. If your servers do not, you will need to run this step for each installer.

You must perform this step on any machine that has Internet access.

To download the required upgrade files:

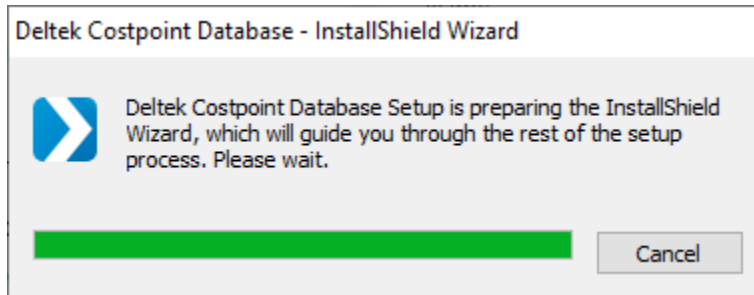
1. Run the applicable command to retrieve the files from DSM:

DeltekCostpoint81DatabaseTier_Build01.exe /filedynamicdownload

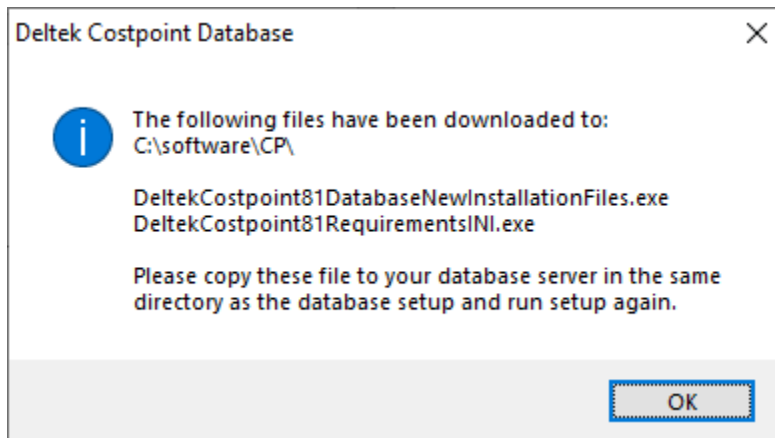
DeltekCostpoint81ApplicationTier_Build01.exe /filedynamicdownload

DeltekCostpoint81WebTier_Build01.exe /filedynamicdownload

You will see a screen similar to the following.



2. After the file downloads, a message similar to the following displays. Click **OK**.



3. Copy the downloaded **DeltekCostpoint81DatabaseNewInstallationFiles.exe/ DeltekCostpoint81RequirementsINI.exe** file(s) to your server, in the same folder as your '.exe' installer file.



About Deltek

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