




Deltek

Deltek Costpoint®

Upgrade Installation Guide for Microsoft
SQL Server®

October 22, 2019



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Downloading Deltek Products using Deltek Software Manager

You can use Deltek Software Manager (DSM) to download complete Deltek products, hot fixes, cumulative updates, and sub-releases. You can access DSM through the Deltek Support Center or use Deltek Software Manager Lite to download Deltek products.

Accessing DSM from within the Deltek Support Center

To access DSM from within the Deltek Support Center:

1. In your Web browser, go to <https://deltek.custhelp.com>.
2. Enter your Deltek Support Center **Username** and **Password**, and click **Login**.
3. When the Deltek Support Center page displays, click **Product Downloads**.
4. On the Deltek Software Manager screen, click **Launch Deltek Software Manager**.
5. Click **Settings** at the top right of the dialog box to use the Settings dialog box to specify the folder where you want to download Deltek products, and click **OK**.

Note: When you log on for the first time, DSM asks you to select a default folder where Deltek products are to be downloaded.

You can change this folder anytime in the Settings dialog box.

6. In the left pane, expand the Deltek product that you want to download, if it is not already expanded.
7. Select the product type that you want to download.

Options include:

- **Complete**
- **Cumulative Updates**
- **HotFixes**
- **Sub-Release**

8. In the table, select the check box that corresponds to the Deltek product that you want to download.

The right pane displays a message stating that the product has been added to the download queue.

Note: To view the items in the download queue, click **View Download Queue** at the bottom of the left pane.

9. Click **Download** at the bottom of the left pane to download the product to the folder that you selected.

Accessing DSM Lite

To access Deltek Software Manager Lite:

In your Web browser, go to <https://dsm.deltek.com/DeltekSoftwareManagerLite>.

1. Enter your Deltek Support Center **Username** and **Password**, and click **Logon**.
2. When the Deltek Software Manager Lite page displays, select a product from the drop-down list.
3. Click the product type that you want to download.

Note: The download behavior and download folder may differ depending on the browser and browser settings that you are using.

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](#).

Note: When you click a link, you will be asked to log into DSM if you aren't already logged in.

Upgrade Installation Checklist

The following is a checklist of the overall steps needed to install Costpoint 7.1.1. 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>
Pre-Installation		
	1. Run Link-Views	
	2. Check Pre-Upgrade Transaction Database Status	
	3. Check Pre-Upgrade Admin Database Status	
	4. Execute Outstanding Costpoint Processes	
	5. Back up Costpoint 7.0.1 Database(s)	
	6. Collation Conversion – Mixed-Case Data Analysis (if applicable)	
	7. Collation Conversion – Update Mixed-Case (if applicable)	
	8. Collation Conversion – Re-Run Mixed-Case Data Analysis (if applicable)	
Database Tier Installation		
	1. Upgrade Costpoint Database using Costpoint Database Tier Installer	
	2. Enable JDBC Distributed Transactions (if applicable)	
Application Tier Installation		
	1. Install Application Tier Software	
	2. Add Users to the CostpointToolsGroup	

Done?	Step	Notes
	3. Start Costpoint 7.1.1	
	4. Install Costpoint 7.1.1 Windows Service	
	5. Configure Costpoint 7.1.1 Windows Service	
	6. Configure Integration Console and Web Services	
Web Tier Installation (Microsoft IIS)		
	1. Configure Microsoft IIS for Costpoint 7.1.1	
	2. Install Web Tier Software	
	3. Add Users to the CostpointToolsGroup	
	4. Configure Costpoint 7.1.1 IIS Access	
	5. Restart Costpoint 7.1.1 WebLogic Server	
Using Costpoint 7.1.1		
	1. Set Web Browser Internet Options	
	2. Log in to Costpoint 7.1.1	
Collation Conversion		
	1. Run Collation Conversion (For clients who are currently in US-English collation)	
Post-Installation		
	1. Configure Additional Systems.	
	2. Install Latest Costpoint 7.1.1 Hot Fixes.	

Related Documentation

The following table lists the additional documentation that downloads along 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 will need Adobe Reader 8.0 or higher to view the documents listed in this section.

Release Notes

Document Name	Description
Deltek Costpoint 7.1.1 Database Changes	This document describes the database changes between the release of Costpoint 7.0.1 and Costpoint 7.1.1.
Deltek Costpoint 7.1.1 Release Notes Enhancements	<p>Major New Features and Enhancements — Click this bookmark to view the major new features and enhancements included in Costpoint 7.1.1.</p> <p>De-Supported Applications — Click this bookmark to view the applications that are no longer supported in Costpoint 7.1.1.</p>
Deltek Costpoint 7.1.1 Release Notes Software Issues Resolved	This document describes the issues that were resolved between the release of Costpoint 7.0.1 and Costpoint 7.1.1.
Deltek Costpoint 7.1.1 Release Notes Software Issues Resolved Cumulative Update	This document describes the issues that were resolved in the Costpoint 7.1.1 cumulative update.

Entity Relationship Diagrams (ERDs)

Document Name	Description
DeltekCostpoint711TransactionSchemaERD.zip	ZIP file containing the ERD for the Deltek Costpoint 7.1.1 Transaction schema. Use index.htm to view the ERD.
DeltekCostpoint711SystemSchemaERD.zip	ZIP file containing the ERD for the Deltek Costpoint 7.1.1 System schema. Use index.htm to view the ERD.
DeltekCostpoint711AdminSchemaERD.zip	ZIP file containing the ERD for the Deltek Costpoint 7.1.1 Admin schema. Use index.htm to view the ERD.

Technical Guides

Document Name	Description
Deltek Costpoint 7.1.1 Configuration Utility	This document describes how to use the Costpoint Configuration Utility, which helps Costpoint administrators perform the most common configuration tasks.
Deltek Costpoint 7.1.1 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 7.1.1 DB Wizard Utility	This document describes how administrators can use the DB Wizard utility to apply hot fixes and database structure changes to Costpoint installations.
Deltek Costpoint 7.1.1 Deploying Hotfixes	This document describes how to apply hot fixes to Costpoint 7.1.1.
Deltek Costpoint 7.1.1 Deployment Options Technical Overview	This document provides a high level overview of various Costpoint configuration options, including server, database, and security options.
Deltek Costpoint 7.1.1 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 7.1.1 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.
Deltek Costpoint 7.1.1 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.

Document Name	Description
Deltek Costpoint 7.1.1 Monitoring Utility	This document describes how to use the Monitoring Utility to diagnose Costpoint configuration problems.
Deltek Costpoint 7.1.1 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 7.1.1 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 7.1.1 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 7.1.1 Security	This document describes user authentication and other security safeguards in Costpoint.
Deltek Costpoint 7.1.1 User Migration Utility	This document describes how to migrate users from earlier Costpoint versions to Costpoint 7.1.1.

Other Documents

Document Name	Description
Deltek Costpoint 7.1.1 Getting Started Guide	This document describes instructions for accessing Costpoint's applications as well as descriptions of menus, toolbars, and other global features. You will also find information on logging on to Costpoint, accessing the database, printing reports, reviewing online help, and contacting Deltek Customer Care and other client services.
Deltek Costpoint 7.1.1 User Interface QRC	This document is a quick reference card which can be kept handy and used for reference as you navigate Costpoint 7.1.1. It describes how to navigate through the application.

Document Name	Description
Deltek Costpoint 7.1.1 Shortcut Keys Toolbar Icons And Buttons QRC	This document is a quick reference card which can be kept handy and used for reference as you work in Costpoint 7.1.1. It lists the shortcut keys available in Costpoint, as well as the toolbar icons and buttons.
Deltek Costpoint 7.1.1 Views QRC	This document is a quick reference card which can be kept handy and used for reference as you work with the Costpoint 7.1.1. It explains the differences between Table View and Form View.
Deltek Costpoint 7.1.1 Query and Lookup QRC	This document is a quick reference card which can be kept handy and used for reference as you work with the Costpoint 7.1.1. It explains how to use the query and lookup functions in Costpoint,
Deltek Costpoint 7.1.1 Extensibility Designer Coding Guide	This document contains java coding information for Costpoint Extensibility developers.
Deltek Costpoint 7.1.1 Extensibility Designer Quick Start Guide	This document outlines the basic steps for creating and deploying extensibility.
Deltek Costpoint 7.1.1 Extensibility Designer Report Guide	This document describes how to extend a report.
Deltek Costpoint 7.1.1 Extensibility Designer User Guide	This document contains detailed instructions for using the Costpoint Extensibility Designer.
Deltek Costpoint 7.1.1 Screen Customization and Business Logic Extensibility	This document is an overview of Costpoint's screen customization and business logic extensibility features.

Upgrade Installation Overview

This document provides instructions for installing the Deltek Costpoint 7.1.1 software. During the installation process, you will perform the following:

- Ensure that your system meets the installation prerequisites.

Note: Please refer to the [Installation Prerequisites](#) and [System Requirements](#) sections for additional information. Also please review the full list of [Related documentation](#) prior to installing or upgrading to Costpoint 7.1.1.

- Execute the Costpoint 7.1.1 Database Tier installer to upgrade your Costpoint 7.0.1 database.
- Install the Costpoint 7.1.1 Application Tier software, which includes both the Oracle WebLogic® Server software and the Costpoint 7.1.1 software.
- Install the Costpoint 7.1.1 Web Tier software to your Internet Information Server, if applicable.
- Install the latest Costpoint 7.1.1 Hot Fixes.

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

Installation Package Contents

The Costpoint 7.1.1 installation package contains the following:

- Costpoint 7.1.1 Database Tier installer
- Costpoint 7.1.1 Collation installer
- Costpoint 7.1.1 Application Tier installer
- Costpoint 7.1.1 Web Tier installer
- Costpoint 7.1.1 System Configuration installer
- Deltek Costpoint 7.1.1 Upgrade Installation Guide for Microsoft SQL Server

Installation Prerequisites

The following prerequisites must be met before upgrading to Costpoint 7.1.1:

- Your Costpoint databases must be at version 7.0.1 (GA).
- You must have Administrative access to your Costpoint 7.0.1 Transaction, System, and Admin databases.

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	<p>All product compatibility information is maintained in the Deltek Product Support Compatibility Matrix available on the Customer Care Support Site here.</p> <p>Please note the database compatibility levels: SQL Server 2016 (130), SQL Server 2014 (120), SQL Server 2012 (110).</p>
Passwords	<p>To run the installation, password is required for Microsoft SQL Server SA user or any user with "sysadmin" privileges.</p>
Firewall Settings	<p>On your Database Server, the Microsoft SQL Server Instance Port (1433) must be open for Inbound and Outbound traffic through your firewall.</p> <p>For a Named Microsoft SQL Server Instance, the following must be met:</p> <ul style="list-style-type: none"> ▪ A dedicated port should be configured for the instance and such a port should be open for Inbound and Outbound traffic. ▪ SQL Browser Service must be enabled and running. ▪ SQL Browser UDP Port (1434) should be open for Inbound and Outbound traffic. <p>On your Database Server, make sure that Network discovery and file sharing options are switched on.</p>

Close all software applications running on the desktop.

To avoid memory contention, check the memory allocated for SQL Server and make sure the server can allocate at least a minimum of 3 GB.

Application Tier Installation Prerequisites

Before you start the Application Tier installation process, the application server that will run your WebLogic Server and Costpoint 7.1.1 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>

Costpoint 7.1.1 Server Startup Prerequisites

Before you start Costpoint 7.1.1, the following must be met:

Prerequisite Component	Details
Server	<p>On your Database Server, the SQL Server Listener Port 1433 must be open for Inbound and Outbound traffic through your firewall.</p> <p>On your Database Server, make sure that the Network Discovery and File Sharing options are switched on.</p> <p>On your Application Server, the WebLogic Listener Port 7009 must be open for Inbound and Outbound traffic through your firewall.</p> <p>On your Application Server, make sure that the Network Discovery and File Sharing options are switched on.</p>

Costpoint 7.1.1 Initial Log In Configuration Prerequisites

Before you can login to Costpoint 7.1.1, 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 8.0 or higher. This is required only for users who want to print Costpoint 7.1.1 reports in PDF format. Make sure that you select the Display PDF in browser option under the In 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> <p>Microsoft Internet Information Server 7.0.</p>

Upgrade Process for Costpoint 7.1.1

The Costpoint 7.1.1 installation process incorporates the following changes:

Component	Change Details
Database Tier Installation	<p>The Database Tier installer automatically upgrades the following schemas/users:</p> <ul style="list-style-type: none"> Transaction Schema (DELTEK) Admin Schema (CPADMIN) System Schema (CPSYSTEM) Link User (CPLINK_USER) <p>The Database Tier installer automatically performs all the following actions:</p> <ul style="list-style-type: none"> Applying TRANSACTION Rollback Scripts Applying ADMIN Rollback Scripts Upgrading Costpoint SYSTEM Database Upgrading Costpoint ADMIN Database Upgrading Costpoint TRANSACTION Database
Application Tier Installation	<p>The Install function in the Application Tier now automatically installs all necessary software and handles all configurations.</p> <p>The Application Tier installer automatically performs all the following actions:</p> <ul style="list-style-type: none"> Extracting JDK Uninstalling WebLogic Installing WebLogic Creating Backup of Costpoint 7.0.1 Deleting Old Costpoint Application Files Extracting BIRT lib files Extracting App Tier Class Files Updating Config files Encrypting Passwords Running LinkViews Syncing Sys Settings Table Running License Menu Builder Running Application Module Migration Creating Demo License Extracting Help Files

Component	Change Details
	<ul style="list-style-type: none"> 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 7.1.1 Deltek directory (C:\Deltek) Full Security Permissions on your WebLogic directory (C:\Oracle\Middleware12.1.3)
Web Tier Installation	<p>The Install function in the Web Tier now automatically installs all necessary software and handles all configurations.</p> <p>The Web Tier installer automatically perform all of following actions:</p> <ul style="list-style-type: none"> Resetting Internet Information Server Creating Backup of Costpoint 7.0.1 Web Tier Extracting Help Files Resetting Internet Information Server Configure 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 7.1.1 DEWebApp directory (C:\Deltek\Costpoint or C:\Deltek\Costpoint\70\applications)

Web Servers Supported In Costpoint 7.1.1

The Costpoint 7.1.1 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:	The drive where the Costpoint 7.1.1 software is installed.

Directory Names

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

Directory Name	Description
ORACLE/MIDDLEWARE12.1.3	The name of the directory where the Oracle WebLogic software is installed.
DELTEK	The name of the directory where the Costpoint 7.1.1 software is installed.

Costpoint Database Names

The table below lists the typical Costpoint database names used in the upgrade process:

Database Name	Description
DELTEKCP	The name of your Costpoint Transaction database.
CPSYSTEM	The name of the Costpoint System database.
CPADMIN	The name of the Costpoint Admin database.

Internet Information

Software installations, installation instructions, technical guides, and release notes are available for download from the Deltek Software Manager (DSM). All future releases of Costpoint 7.1.1 are also downloaded 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.

Deltek Software Manager Requirements

You can run DSM from any desktop. It does not need run from Deltek application servers.

In order 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.

Note: 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](#).

Note: The above troubleshooting link will only work if you are logged into Deltek Customer Care Connect.

Knowledge Base Documentation

To view Knowledge Base articles, complete the following steps:

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

Field Name	Description
Username	Your Support user name
Password	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, and complete the following fields:

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 select 7.1.1 .
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. Click **Search**.
5. 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

The Costpoint 7.1.1 system uses the following components:

- **Database Tier** – SQL Server
- **Application Tier** – with integrated WebLogic Server
- **Browser Client** – Internet Explorer, 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](#).

Note: 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.

Note: A hardware recommendations document should have previously been distributed to you. For future releases of Costpoint, hardware recommendations will be supplied via a Customer Care **Knowledge Base** article.

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 7.1.1 Log File Information

The table below provides information on the log files used by the Costpoint 7.1.1 system. All of these log files are located on the Application Server under the C:\Deltek\Costpoint\71\logs folder.

File Name	Description
DEServer.log	This log file is maintained by the WebLogic server instance. In a clustered environment each server will write to separate file and file name matches the server name. 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 information about the time and date of the event as well as the ID of the user who initiated the event.

File Name	Description
CP_DBConn_DEServer.log	This file lists the activate connections uses by the product at given time. To enable this logging set <SYSTEMNAME>.logDBConnectionProfile = true in enterprise properties. In a clustered environment each server will write to a separate log file and name the server will determine the name of the log file. CP_DBConn_<Server>.log
CP_DEServer.log	This log file contains application specific information such as performance, security, and errors encountered while running a Costpoint application. Each server will write to a separate log file and name the server will determine the name of the log file. CP_<Server>.log.
CP_Security_DEServer.log	This file captures messages generated by Costpoint Web security module. Messages such as invalid login attempt either due to user id, password or insufficient parameters, de-activated user account are captured here. In a clustered environment each server will write to a separate log file and name the server will determine the name of the log file. CP_Security_<Server>.log.
delteke.log	This log file contains information pertained 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. Note: Not all log messages are written into domain. Only those messages that match the defined severity are consolidated.
service.log	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. In addition to service related messages, it also contains most of the information that is captured in the DEServer.log. So, after the initial startup issues are sorted out, Deltek suggests disabling this log by editing the InstallCPWebasService.cmd (C:\Deltek\Costpoint\71\bin folder) and removing the occurrence of "-log:%CP_ROOT%\logs\service.log". If you remove this after installing the service, you will need to uninstall and reinstall the service for the changes to take effect.

Pre-Installation Instructions

This section provides instructions to prepare your Costpoint 7.0.1 system for upgrade to Costpoint 7.1.1.

Attention: Please ensure that you perform the steps in this section before performing any test upgrade and again before you upgrade your production environment. Changes made to your production environment after you have upgraded your test copy could provide different results for the pre-validation section.

During the pre-installation steps, you will perform the following actions:

- Run link-views on your Costpoint 7.0.1 system
- Perform the pre-upgrade check on your Costpoint 7.0.1 Transaction database
- Execute any outstanding Costpoint Process Manager processes
- Create a backup of your Costpoint 7.0.1 database(s)
- Collation Analysis
 - If you upgraded to Costpoint 7.0.1 and not yet performed the collation conversion, it is required that you perform the collation conversion mixed-case analysis section before upgrading to Costpoint 7.1.1.

Attention: If you have previously performed this step during a Costpoint 7.0.1 upgrade and converted your database(s)/schema(s) to binary collation, you are not required to repeat this step during this Costpoint 7.1.1 upgrade. However, if you plan to support the European language character set specifically with Euro symbol as part of any description or text, and your current collation is not Latin1_General_BIN, you are required to run the conversion tool again to support those special characters/symbols.

If you are co-locating your Costpoint 7.1.1 instance with Time & Expense 10.0.0 or Budgeting & Planning 7.0.0, you are required to run the conversion tool in order to convert all co-located product schemas to Latin1_General_BIN.

- Review the Collation Conversion section and assess the impact of the case sensitivity change on customer specific programs, stored procedures, reports, data imports, and so on.

Attention: The Collation Conversion Tool will set the collation of your Microsoft SQL Server Costpoint database(s) to Latin1_General_BIN. This setting is binary case sensitive, and may have an impact on customer specific programs, reports, data imports, and other applications which interact with Costpoint and/or the underlying Costpoint database. These applications and programs may need to be modified and need to be re-tested as part of your Costpoint 7.1.1 upgrade.

For example:

- If custom scripts or stored procedures exist where the table and field names are in lower or mixed case, the scripts and stored procedures will need to be modified so that they match the object case sensitivity which is always upper case for Costpoint tables.
 - If end user queries refer to account names in lower case, and the account names are actually in mixed case or uppercase, the queries will need to be adjusted so that they use the same case as the account names.
 - If reports or data import programs interact with Costpoint, they may need to be adjusted and re-tested as well.
- MS SQL Server Clients upgrading from Costpoint 7.0.1 with US-English Collation should run the collation analysis option as part of the pre-validation steps. Please read the section under “**Collation Conversion – Mixed Case Data Analysis**” in the Collation Conversion chapter for instructions on running the utility.

Notify All Costpoint Users

It is important that you coordinate the timing for the upgrade with all Costpoint users. Users must not access the Costpoint database during the upgrade.

Run Link-Views

The steps to run the Link-Views are detailed in this section.

Link-Views grant your Costpoint database schemas (DELTEK/CPSYSTEM/CPADMIN) the ability to view specific database objects owned by the each of the other Costpoint database schemas.

You must perform these steps on your Costpoint WebLogic application server. You will may to verify the toolconnections.properties file on your Costpoint application server in order to connect to the databases that you are upgrading to Costpoint 7.1.1.

To run link views, complete the following steps:

1. Click **Start » All Programs » Costpoint 7.0.1 » Start Costpoint 7.0.1 DBWizard**. For Windows Server 2012, right-click on **Start**, select **Search**, under **Costpoint 7.0.1** right-click **Start Costpoint 7.0.1 DBWizard**, and click **Run as administrator**.

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

2. On the Costpoint DBWizard screen, locate the **Available options** field and select **Link-View**, then click **Next**.

3. On the System screen, select your Costpoint system name, i.e., **DELTEKCP**, from the drop-down list.
4. Click **Next**.
5. On the Enter Passwords screen, complete the following fields.

Field Name	Action
DBA User	Accept the default value, SA .
Password	Enter your Microsoft SQL Server SA user password.

6. Click **Next**.
7. On the Create Link-View screen, perform one of the following options
 - Locate the **Log file** field accept the default value, **C:\Costpoint\Deltek\70\logs\linkView.log**, or
 - Click the ellipsis button, and complete the following fields.

Field Name	Action
File Name	Enter a log file name.
Files of Type	Accept the default of Select LOG file or folder (*.log).

8. Click **Select**, and then click **Run**.
9. Click **Yes** if the following message displays:
 “Link User “CPLINK_USER” does not exist on <Server_Name>. Do you want the Database Wizard to create “CPLINK_USER” now?”
10. If the Creation Link User screen displays, complete the following fields.

Field Name	Action
User Name	Accept the default value, CPLINK_USER .
TEMPDB	Accept the default value of your Admin schema, CPADMIN .
Enforce SQL Server Password Complexity	Clear this check box.

11. Click **OK**.
 After the process completes, the following message displays: “Process completed without errors.”
12. Click **OK**, and then click **Cancel**.
13. On the Costpoint DBWizard screen, click **Exit**.

Check Pre-Upgrade Transaction Database Status

The steps to perform a pre-upgrade check on your Costpoint 7.0.1 Transaction database (DELTEKCP) are detailed in this section.

You must perform this step on your Costpoint 7.0.1 database server. You must also have Internet access in order to download the latest DeltekCostpoint711DatabaseUpgradeFiles.exe file automatically. The file contains the latest database patch rollback scripts as well as the latest list of Costpoint 7.0.1 database patches that have been worked into the upgrade. The file is 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 will need to perform the steps found in the [Latest Upgrade Files Download](#) section.

To run the pre-upgrade check on your database, complete the following steps:

1. Run the **DeltekCostpoint711DatabaseTier.exe /prevalidation** command to launch the Costpoint 7.1.1 Database Tier pre-validation program.
2. On the Select Deltek Costpoint Install Type screen, select **Upgrade from CP 7.0.1**, and click **Next >**.
3. On the Select Database Platform screen, select **Microsoft SQL Server**, and click **Next >**.
4. On the Microsoft SQL Server for Deltek Costpoint 7.1.1 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 7.1.1 Transaction (DELTEKCP) database server. The default value is your computer name.</p> <p>The IP Address or Hostname value cannot be 127.0.1.0.1 or localhost.</p> <p>For SQL Cluster installations, you must specify the SQL Cluster IP Address or SQL Cluster Hostname.</p>
Port	<p>Enter the SQL Server TCP port the Costpoint database server. The default port for SQL Server is 1433.</p>
Database Name	<p>Enter the name of your Costpoint database. The default value is DELTEKCP.</p>
Instance Name	<p>Enter the name of your Costpoint database instance. The default value is LOCAL.</p>

Field Name	Action
User Name	Enter the name of your Transaction user account. The default is DELTEK .
Password	Enter the password for your Transaction user account.
SA User Name	Enter the name of your Microsoft SQL Server SA user. The default is sa . If a user with "sysadmin" privileges is available, that user can alternatively be used.
SA User Password	Enter the password for your Microsoft SQL Server SA user.

- Click **Test Connection**.

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

"Connection Successful. Click Next."

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

- Click **Next >**.

This will open the **preValidation.log** file. This log file is also written to the **C:\Program Files\Deltek\Costpoint\7.1.1** folder.

- Review the codes that display directly beneath the PRE-UPGRADE SUMMARY section.

If you do not find a PRE-UPGRADE SUMMARY section, then there are no CHECK codes for you to address.

- If the screen displays CHECK codes, match the codes to the CHECK codes listed in the following table in order to determine your appropriate course of action.

Attention: You will not be able to proceed with this installation until all CHECK items are addressed.

Check Number	Description	Action
CHECK 03	Process must be complete before upgrading.	<p>Contact Deltek Costpoint Technical Support.</p> <p>The SQL script below is provided to assist you in gathering information that the Deltek support representative may request:</p> <pre>SELECT * FROM POST_SEMAPHORE ORDER BY S_APPL_FUNC_ID, STEP_SEQ_NO;</pre>

Check Number	Description	Action
CHECK 04	Posting must be complete before upgrading.	<p>Contact Deltek Costpoint Technical Support.</p> <p>The SQL scripts below are provided to assist you in gathering information that the Deltek support representative may request:</p> <pre>SELECT FY_CD, PD_NO, S_JNL_CD, POST_SEQ_NO, COMPLETED_FL FROM POSTING WHERE COMPLETED_FL = 'N' ORDER BY FY_CD, PD_NO, S_JNL_CD, POST_SEQ_NO;</pre> <pre>SELECT S.* FROM S_POST_SEMAPHORE S, POSTING P WHERE P.COMPLETED_FL = 'N' AND S.FY_CD = P.FY_CD AND S.PD_NO = P.PD_NO AND S.S_JNL_CD = P.S_JNL_CD AND S.POST_SEQ_NO = P.POST_SEQ_NO ORDER BY S.FY_CD, S.PD_NO, S.S_JNL_CD, S.POST_SEQ_NO, S.STEP_SEQ_NO;</pre>
CHECK 06	Custom database changes have been applied.	<p>You have a customized version of Costpoint.</p> <p>Do not proceed with the upgrade until you are sure that you have received all the necessary custom software, database change scripts, and upgrade instructions.</p> <p>If you proceed with the upgrade without upgrading your custom work, you will either lose your custom work or encounter incompatibility problems between your programs and your database.</p>
CHECK 08	Invalid BUYER_VEND.BUYER_ID.	Contact Deltek Costpoint Technical Support.
CHECK 10	Post Edit Manual Bills.	You must clear all Billing Edit Tables prior to the upgrade. Post all transactions or remove the non-posted records from the appropriate Billing Edit screen(s).
CHECK 11	Post Customer Product Bills.	You must clear all Billing Edit Tables prior to the upgrade. Post all transactions or remove the non-posted records from the appropriate Billing Edit screen(s).

Check Number	Description	Action
CHECK 12	Post Project Product Bills.	You must clear all Billing Edit Tables prior to the upgrade. Post all transactions or by remove the non-posted records from the appropriate Billing Edit screen(s).
CHECK 13	Post Progress Payment Bills.	You must clear all Billing Edit Tables prior to the upgrade. Post all transactions or by remove the non-posted records from the appropriate Billing Edit screen(s).
CHECK 14	Post Edit Standard Bills.	You must clear all Billing Edit Tables prior to the upgrade. Post all transactions or remove the non-posted records from the appropriate Billing Edit screen(s).

- Check for Un-Identified Patches in the preValidation.log file.

If there are Un-Identified Patches, this indicates that the patches listed have not yet been worked into the upgrade, which will prevent you from upgrading to Costpoint 7.1.1. Please contact Deltek Costpoint Technical Support to get an update as to when the patches will be worked into the upgrade.

Attention: You will not be able to proceed with this installation until all of these patches are added to the upgrade.

The following is an example of a Constraint Mismatch:

```
Un-Identified Patches
```

```
-----
```

```
Un-identified Patch 2104
```

Database patches that cause Constraint Mismatch messages are listed below:

- None currently

Execute Outstanding Job Management Processes

The steps to execute any remaining processes that have been submitted to Job Server queues within your Costpoint 7.0.1 system are detailed in this section.

Any processes that remain in a queue during the upgrade are automatically deleted.

Attention: You can skip this step if you do not want to execute any processes that reside in your Job Server queues. The database upgrade automatically deletes any processes that remain in your Job Server queues.

You can perform this step from any Windows client workstation that has TCP/IP access to your Costpoint 7.0.1 WebLogic application server.

To execute any outstanding jobs, complete the following steps:

1. Open your Web browser, and connect to Costpoint 7.0.1:
http://<AppServerIPAddress or ComputerName>:<Port>
http://<WebServerIPAddress or ComputerName>/cpweb
 Where <AppServerIPAddress or ComputerName> identifies your Costpoint 7.0.1 WebLogic application server and <Port> identifies the unique port number that your Costpoint 7.0.1 WebLogic application server uses to listen for connections. You specified this port value during the Costpoint 7.0.1 software installation. The default is **7009** (for example, **http://10.2.2.154:7009**).
 Or where <WebServerIPAddress or ComputerName> identifies your Costpoint 7.0.1 IIS web server (for example, **http://10.2.2.156/cpweb**).
2. When the Delttek Costpoint 7 Welcome screen displays, enter your login information, and click **Log In**.
 From the main menu screen, click **Administration » Job Management » Job Management Process » Start/Stop Job Server**.
3. Stop all Job Servers.
4. Wait 10-15 minutes for all Job Servers to stop.
5. From the main menu screen, click **Administration » Job Management » Job Management Process » Update Job Status**.
6. Make sure there are no Executing or Queued jobs in any Job Queue.
 If any exist, wait for them to execute or remove them.
7. Exit out of Costpoint.

Back Up Costpoint 7.0.1 Databases

Delttek strongly recommends you make a backup of your existing Costpoint databases before you upgrade to version Costpoint 7.1.1. You need to make a backup of the Transaction, Admin, and System databases.

Customers may use their own preferred way to create a backup of the Costpoint databases.

Note: Delttek strongly recommends that you regularly test and verify your database backups.

Note: For additional information on backing up your Microsoft SQL Server database, consult the Microsoft SQL Server documentation.

Collation Conversion – Mixed Case Data Analysis

The steps to perform mixed-case data analysis on your Costpoint 7.0.1 Transaction database are detailed in this section. If you completed your upgrade to Costpoint 7.0.1 and have not yet performed the analysis

of your transaction database for data inconsistencies then we highly recommend that you perform this data validation step as part of supporting a case-sensitive database. Deltek recommends that you perform this step as a precursor to running the upgrade or collation tool.

Attention: Clients who have performed Collation conversion in earlier versions of Costpoint should skip this step.

Note: Please note that you are not actually running the Collation Conversion here. You are only analyzing and fixing any data that is in mixed case. A later section in this document will guide you through the process of collation conversion.

You must perform this step on your Costpoint Transaction database server or from a client with tools installed to connect to the transaction database. Your server must have Internet access in order to download the latest rules files from DSM automatically. In the absence of Internet access, the packaged file will be used in the analysis.

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.

To run the collation analysis on your transaction database, complete the following steps:

1. From the command line, run the **DeltekCostpointCollation.exe /a** command to launch the collation analysis.

Make sure that you are not launching DeltekCostpointCollation.exe. In order to run the **/a** switch, you need to run from the command line.

2. On the Microsoft SQL Server 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 Costpoint 7.1.1 Transaction (DELTEKCP) database server. The default value is your computer name. The IP Address or Hostname value cannot be 127.0.1.0.1 or localhost .
Port	Enter the port that your Costpoint 7.1.1 Transaction database server software uses to listen for requests. The default port for SQL Server is 1433 .
Database Name	Enter the name of your Costpoint Transaction database.
Instance Name	Enter the name of your database instance. The default value is LOCAL .
User Name	Enter the user name for transaction schema.

Field Name	Action
Password	Enter the password for your DELTEK user.
Schema Name	Enter the schema name for transaction database. The default value used should be DELTEK .
SA User Name	Enter the name of your Microsoft SQL Server SA user. The default is sa .
SA User Password	Enter the password for your Microsoft SQL Server SA user.

- Click **Test Connection**.

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

“Connection Successful. Click Next.”

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

- Click **Next >**.

This will open the **Collation.log** file. This log file is also written to the **C:\Program Files\Deltek\Costpoint\7.1.1\Logs** folder with filename **CollationAnalysis** postfixed with date-time stamp.

- After reviewing the output, if data shown can be safely converted to uppercase, proceed to Step 6 to generate the necessary script.

However, if there are questions on the impact of data in changing to uppercase, contact Deltek Customer Support for further actions. If the output shows there is no data needing conversion, you can proceed to the “Database Tier Installation” section.

- From the command line, run the **DeltekCostpointCollation.exe /g** command to launch the collation analysis tool.

Make sure you are not launching DeltekCostpointCollation.exe. In order to run the **/g** switch, you need to run from the command line.

- On the Microsoft SQL Server 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 Costpoint 7.1.1 Transaction (DELTEKCP) database server. The default value is your computer name. The IP Address or Hostname value cannot be 127.0.1.0.1 or localhost .
Port	Enter the port that your Costpoint 7.1.1 Transaction database server software uses to listen for requests. The default port for SQL Server is 1433 .

Field Name	Action
Database Name	Enter the name of your Costpoint Transaction database.
Instance Name	Enter the name of your database instance. The default value is LOCAL .
User Name	Enter the user name for transaction schema.
Password	Enter the password for your DELTEK user.
Schema Name	Enter the schema name for transaction database. The default value used should be DELTEK .
SA User Name	Enter the name of your Microsoft SQL Server SA user. The default is sa .
SA User Password	Enter the password for your Microsoft SQL Server SA user.

8. Click **Test Connection**.

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

“Connection Successful. Click Next.”

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

9. Click **Next >**.

The tool will generate the necessary UPDATE statements to convert any mixed case data to uppercase.

Note: The tool will not actually perform the update against the database. It is only responsible for generating the statements so that you can review and modify as needed.

10. After completion, the tool will open the **Collation.log** file.

This log file is also written to the **C:\Program Files\Deltek\Costpoint\7.1.1\Logs** folder with filename **CollationGenScript** postfixed with date-time stamp.

Optional Steps:

11. If you want to know all the columns analyzed during the analysis step, from the command line, run the **DeltekCostpointCollation.exe /v** command to launch the collation analysis tool.

Make sure you are not launching the DeltekCostpointCollation.exe. In order to run the **/v** switch, you need to run from the command line.

12. On the Microsoft SQL Server 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 Costpoint 7.1.1 Transaction (DELTEKCP) database server. The default value is your computer name. The IP Address or Hostname value cannot be 127.0.1.0.1 or localhost .
Port	Enter the port that your Costpoint 7.1.1 Transaction database server software uses to listen for requests. The default port for SQL Server is 1433 .
Database Name	Enter the name of your Costpoint Transaction database.
Instance Name	Enter the name of your database instance. The default value is LOCAL .
User Name	Enter the user name for transaction schema.
Password	Enter the password for your DELTEK user.
Schema Name	Enter the schema name for transaction database. The default value used should be DELTEK .
SA User Name	Enter the name of your Microsoft SQL Server SA user. The default is sa .
SA User Password	Enter the password for your Microsoft SQL Server SA user.

13. Click **Test Connection**.

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

“Connection Successful. Click Next.”

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

14. Click **Next >**.

The tool generates a report with detailed information of all columns that analyzed within the Transaction database.

15. After completion, the tool will open the **Collation.log** file.

This log file is also written to the **C:\Program Files\Deltek\Costpoint\7.1.1\Logs** folder with filename **CollationVerbose** postfixed with date-time stamp.

Collation Conversion – Updating Mixed Case Data

Now that you have performed the analysis of your mixed case data, you need to execute the provided UPDATE statements to correct any mixed case data.

Attention: Clients who have performed Collation conversion in earlier versions of Costpoint should skip this step.

Note: You are not actually running the Collation Conversion here. You are only analyzing and fixing any data that is in mixed case. A later section in this document will guide you through the process of collation conversion.

You must perform this step on your Costpoint Transaction database server or from a client with tools installed to connect to the transaction database. Your server must have Internet access in order to automatically download the latest rules files from DSM. In the absence of Internet access, the packaged file will be used in the analysis.

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.

To update mixed case columns on your transaction database, complete the following steps:

1. After generating the script in the previous procedure, open the file in **SQL Management Studio**.
2. Connect to your Costpoint **Transaction** database as the **DELTEK** user.
3. To convert the columns reported in mixed case to upper case, execute the UPDATE statements contained in the **CollationGenScript** (postfixed with date-time stamp) from the **C:\Program Files\Deltek\Costpoint\7.1.1\Logs** folder.

Attention: Based on some unique data scenarios, there may be issues with some UPDATE statements based on the order of statements generated. If you happen to see such challenges, please contact Deltek Customer Support for further assistance.

Note: Depending on the size of the database, the script can run up to 30 minutes for large databases (for example, 100 GB).

Troubleshooting Mixed Case Data Update

This section provides an example of a mixed case data issue during update and the steps to resolve it.

Results from Mixed Case Data Analysis is shown below:

```
-- Total Number of Columns being analyzed: 8806
AR_DETL_HS.INVC_ID
-----
Inv-0001
inv-04398
-- Total Number of records with mixed case found for [AR_DETL_HS].[INVC_ID]: 2
AR_HDR_HS.INVC_ID
-----
```

```
Inv-0001
inv-04398
-- Total Number of records with mixed case found for [AR_HDR_HS].[INVC_ID]: 2
```

Update statements created using generate option (/g):

```
-- Total Number of records with mixed case found for [AR_DETL_HS].[INVC_ID]: 2
UPDATE CPDATA.[AR_DETL_HS] SET [INVC_ID] = UPPER([INVC_ID]) WHERE [INVC_ID] LIKE '%[abcdefghijklmnopqrstuvwxyz]%'
collate Latin1_General_BIN
GO
-- Total Number of records with mixed case found for [AR_HDR_HS].[INVC_ID]: 2
UPDATE CPDATA.[AR_HDR_HS] SET [INVC_ID] = UPPER([INVC_ID]) WHERE [INVC_ID] LIKE '%[abcdefghijklmnopqrstuvwxyz]%'
collate Latin1_General_BIN
GO
```

Errors encountered when applying the generated update statements due to foreign key constraints:

```
Msg 547, Level 16, State 0, Line 2
The UPDATE statement conflicted with the FOREIGN KEY constraint "F08173". The conflict occurred in database "CP_TRANS_DB", table "CPDATA.AR_HDR_HS".
The statement has been terminated.
Msg 547, Level 16, State 0, Line 3
The UPDATE statement conflicted with the REFERENCE constraint "F08173". The conflict occurred in database "CP_TRANS_DB", table "CPDATA.AR_DETL_HS".
The statement has been terminated.
```

How the issue is fixed by first disabling the check for foreign key constraint and then re-enabling the check:

```
ALTER TABLE CPDATA.AR_DETL_HS NOCHECK CONSTRAINT F08173
UPDATE CPDATA.[AR_DETL_HS] SET [INVC_ID] = UPPER([INVC_ID]) WHERE [INVC_ID] LIKE '%[abcdefghijklmnopqrstuvwxyz]%'
collate Latin1_General_BIN
GO
-- Total Number of records with mixed case found for [AR_HDR_HS].[INVC_ID]: 2
UPDATE CPDATA.[AR_HDR_HS] SET [INVC_ID] = UPPER([INVC_ID]) WHERE [INVC_ID] LIKE '%[abcdefghijklmnopqrstuvwxyz]%'
collate Latin1_General_BIN
GO
-- Enable single constraint
ALTER TABLE CPDATA.AR_DETL_HS CHECK CONSTRAINT F08173
```

Note: If any constraints or checks are disabled to fix the necessary data, reconfirm that all required checks and constraints are enabled back before proceeding.

If you run into errors during collation conversion and are unable to troubleshoot the issue, please contact Deltak Technical Support.

Collation Conversion – Re-Run Mixed Case Data Analysis

Before proceeding with the upgrade to Costpoint 7.1.1, you must ensure that your Costpoint 7.0.1 transaction database does not contain any mixed case data. The previous step provided UPDATE statements that should have been run to correct any mixed case data. You will now need to run the analysis step again to ensure that there no longer is any mixed case data.

Attention: Clients who have performed Collation conversion in earlier versions of Costpoint should skip this step.

Note: You are not actually running the Collation Conversion here – only analyzing and fixing any data that is in mixed case. A later section in this document will guide you through the process of collation conversion.

You must perform this step on your Costpoint Transaction database server or from a client with tools installed to connect to the transaction database. Your server must have Internet access in order to automatically download the latest rules files from DSM. In the absence of Internet access, the packaged file will be used in the analysis.

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.

To run the collation analysis on your transaction database, complete the following steps:

1. From the command line, run the **DeltekCostpointCollation.exe /a** command to launch the collation analysis.

Make sure you are not launching the DeltekCostpointCollation.exe. In order to run the **/a** switch, you need to run from the command line.

2. On the Microsoft SQL Server for Deltek Costpoint Database Information screen, complete the following steps:

Field Name	Action
IP Address or Hostname	Enter the IP address (for example, 10.2.2.154) or hostname (for example, dbsvr01) of your Costpoint 7.1.1 Transaction (DELTEKCP) database server. The default value is your computer name. The IP Address or Hostname value cannot be 127.0.1.0.1 or localhost .
Port	Enter the port that your Costpoint 7.1.1 Transaction database server software uses to listen for requests. The default port for SQL Server is 1433 .
Database Name	Enter the name of your Costpoint Transaction database.
Instance Name	Enter the name of your database instance. The default value is LOCAL .
User Name	Enter the user name for transaction schema.
Password	Enter the password for your DELTEK user.

Field Name	Action
Schema Name	Enter the schema name for transaction database. The default value used should be DELTEK .
SA User Name	Enter the name of your Microsoft SQL Server SA user. The default is sa .
SA User Password	Enter the password for your Microsoft SQL Server SA user.

- Click **Test Connection**.

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

“Connection Successful. Click Next.”

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

- Click **Next >**.

This will open the **Collation.log** file. This log file is also written to the **C:\Program Files\Deltek\Costpoint\7.1.1\Logs** folder with filename **CollationAnalysis** postfixed with date-time stamp.

- In order to proceed with the upgrade to Costpoint 7.1.1, the output should not show any columns containing mixed case data.

If you still have columns with mixed case data return to the previous step.

Database Tier Installation

This section provides instructions and recommendations for upgrading your Costpoint 7.0.1 Transaction, System, and Admin database schemas.

During this installation process, you will install the Costpoint 7.1.1 Database Tier software and automatically perform the following:

- Upgrade your Costpoint 7.0.1 Transaction database schema (DELTEK)
- Upgrade your Costpoint 7.0.1 System database schema (CPSYSTEM)
- Upgrade your Costpoint 7.0.1 Admin database schema (CPADMIN)

Before You Start

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

Install Database Tier Software

The steps to install the Costpoint 7.1.1 Database Tier software as well as upgrade the Transaction, System, and Admin databases are detailed in this section.

You must perform this step on your database server.

You must have Internet access on the machine where the Costpoint 7.1.1 installer is invoked in order to download the latest DeltekCostpoint711DatabaseUpgradeFiles.exe and DeltekCostpointRequirementsINI.exe files automatically. The DeltekCostpoint711DatabaseUpgradeFiles.exe contains the latest database patch rollback scripts as well as the latest list of Costpoint 7.0.1 database patches that have been worked into the upgrade. The DeltekCostpointRequirementsINI.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 will need to perform the steps in the [Latest Upgrade Files Download](#) section of this document before you run the DeltekCostpoint711DatabaseTier.exe file.

To install the Database Tier software, complete the following steps:

1. Run the **DeltekCostpoint711DatabaseTier.exe** file to launch the Costpoint 7.1.1 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 DeltekCostpoint711DatabaseTier.exe file in Windows Explorer and select **Run as Administrator**.

2. On the Welcome to the InstallShield Wizard for Costpoint screen, click **Next >**.
3. On the License Agreement screen, review the license agreement, select **I accept the terms of the license agreement**, and click **Next >**.
4. On the Choose Costpoint Database Scripts Directory screen, click **Browse** to navigate to an installation location for the Costpoint 7.1.1 Database Tier software, and click **Next >**
The default installation location is **C:\Program Files\Deltek\Costpoint\7.1.1** (recommended).
5. On the Select Deltek Costpoint Install Type screen, select **Upgrade from CP 7.0.1**, and click **Next >**.
6. On the Select Database Platform screen, select **Microsoft SQL Server**, and click **Next >**.
7. On the Deltek Costpoint 7.1.1 Transaction SQL Server 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 7.1.1 Transaction (DELTEKCP) database server. The default value is your computer name.</p> <p>The values for the IP Address or Hostname cannot be 127.0.1.0.1 or localhost.</p> <p>For SQL Cluster installations, you must specify the SQL Cluster IP Address or SQL Cluster Hostname.</p>
Port	<p>Enter the SQL Server TCP port the Costpoint database server. The default port for SQL Server is 1433.</p> <p>Currently, this installer will allow database installations to connect to a SQL Server DEFAULT instance over port 1433 only. Use of non-default ports will be addressed in a future release.</p>
Database Name	<p>Enter the name of your Costpoint database. The default value is DELTEKCP. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ - _</p>
Instance Name	<p>Enter the name of your Costpoint database instance. The default value is LOCAL. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ - _</p>
User Name	<p>Enter the name of your Transaction user account. The default is DELTEK. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ - _</p>

Field Name	Action
Password	Enter the password for your Transaction user account. In addition to standard alphanumeric characters, the following special characters are also supported: <code>' ~ # \$ ^ & () - _ + = , .</code>
SA User Name	Enter the name of your Microsoft SQL Server SA user. The default is sa . 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: <code>\$ - _</code>
SA User Password	Enter the password for your Microsoft SQL Server SA user. In addition to standard alphanumeric characters, the following special characters are also supported: <code>' ~ # \$ ^ & () - _ + = , .</code>

8. Click **Test Connection**.

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

"Connection Successful. Click Next."

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

9. After receiving the message, click **Next >** to proceed to one of the following screens:

- Pre-Upgrade Validation Information
- Deltek Costpoint 7.1.1 Admin SQL Server Database Information

If the Pre-Upgrade Validation Information screen displays, return to the [Pre-Installation Instructions](#) section of this document. You must successfully complete all pre-installation instructions before attempting to upgrade your database.

10. On the Deltek Costpoint 7.1.1 Admin SQL Server 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 Costpoint 7.1.1 Transaction (DELTEKCP) database server. The default value is your computer name. The values for the IP Address or Hostname cannot be 127.0.1.0.1 or localhost . For SQL Cluster installations, you must specify the SQL Cluster IP Address or SQL Cluster Hostname.
Port	Enter the SQL Server TCP port the Costpoint database server. The default port for SQL Server is 1433 .

Field Name	Action
	Currently, this installer will allow database installations to connect to a SQL Server DEFAULT instance over port 1433 only. Use of non-default ports will be addressed in a future release.
Database Name	Enter the name of your Costpoint database. The default value is CPADMIN . In addition to standard alphanumeric characters, the following special characters are also supported: \$ - _
Instance Name	Enter the name of your Costpoint database instance. The default value is LOCAL . In addition to standard alphanumeric characters, the following special characters are also supported: \$ - _
User Name	Enter the name of your Admin user account. The default is CPADMIN . In addition to standard alphanumeric characters, the following special characters are also supported: \$ - _
Password	Enter the password for your Admin user account. In addition to standard alphanumeric characters, the following special characters are also supported: ' ~ # \$ ^ & () - _ + = , .
SA User Name	Enter the name of your Microsoft SQL Server SA user. The default is sa . 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: \$ - _
SA User Password	Enter the password for your Microsoft SQL Server SA user. In addition to standard alphanumeric characters, the following special characters are also supported: ' ~ # \$ ^ & () - _ + = , .

11. Click **Test Connection**.

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

"Connection Successful. Click Next."

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

12. On the Deltek Costpoint 7.1.1 System SQL Server 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 7.1.1 Transaction (DELTEKCP) database server. The default value is your computer name.</p> <p>The values for the IP Address or Hostname cannot be 127.0.1.0.1 or localhost.</p> <p>For SQL Cluster installations, you must specify the SQL Cluster IP Address or SQL Cluster Hostname.</p>
Port	<p>Enter the SQL Server TCP port the Costpoint database server. The default port for SQL Server is 1433.</p> <p>Currently, this installer will allow database installations to connect to a SQL Server DEFAULT instance over port 1433 only. Use of non-default ports will be addressed in a future release.</p>
Database Name	<p>Enter the name of your Costpoint database. The default value is CPSYSTEM. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ - _</p>
Instance Name	<p>Enter the name of your Costpoint database instance. The default value is LOCAL. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ - _</p>
User Name	<p>Enter the name of your System user account. The default is CPSYSTEM. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ - _</p>
Password	<p>Enter the password for your System user account. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p>
SA User Name	<p>Enter the name of your Microsoft SQL Server SA user. The default is sa. 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>

Field Name	Action
SA User Password	Enter the password for your Microsoft SQL Server SA user. In addition to standard alphanumeric characters, the following special characters are also supported: ' ~ # \$ ^ & () - _ + = , .

13. Click **Test Connection**.

If you have entered the proper database connection information, the following message displays:
"Connection Successful. Click Next."

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

14. On the Deltek Costpoint 7.1.1 Link User Information screen, complete the following fields:

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

15. Click **Test Connection**.

If you have entered the proper database connection information, the following message displays:
"Connection Successful. Click Next."

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

16. 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 upgrade process to Costpoint 7.1.1 will commence. 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 [Upgrade Process for Costpoint 7.1.1](#) section of this document. The upgrade will stop if any errors are encountered. If any errors occur during the upgrade, please refer to the [Troubleshooting Instructions](#) section of this document.

17. On the InstallShield Wizard Complete screen, select the **Yes, I want to view the log file** check box to open the DeltekCostpoint711DatabaseTierInstallLog_<date>_<time>.txt file from the C:\Program Files\Deltek\Costpoint\7.1.1\Logs directory.

This check box is selected by default.

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

19. When the DeltekCostpoint711DatabaseTierInstallLog_<date>_<time>.txt file opens, search for the following keywords:

- **Error** – Report any search results to Deltek Costpoint Technical Support. You can ignore **DBCC execution completed. If DBCC printed error messages, contact your system administrator** search results.
- **Database Upgrade To Costpoint 7.1.1 META(SYSTEM) Completed Successfully** and then the line **\$DBSUCCESS=TRUE**.
- **Database Upgrade To Costpoint 7.1.1 ADMIN Completed Successfully** and then the line **\$DBSUCCESS=TRUE**.
- **Database Upgrade To Costpoint 7.1.1 TRANSACTION Completed Successfully** and then the line **\$DBSUCCESS=TRUE**.

Finding the three items listed above indicates that you have successfully installed the Costpoint 7.1.1 Database Tier software and that you have upgraded all of your Costpoint databases.

Make sure that the default SQL Server Port, **1433**, is open for Inbound and Outbound traffic through your firewall. Also, make sure that Network Discovery and File Sharing options are switched on.

Enable JDBC Distributed Transactions

Note: section is only applicable for clients upgrading on a new database server or those upgrading their SQL Server version.

If your upgrade is run on an existing functional Costpoint 7.0.1 database server and if distributed transactions has been previously enabled, clients may proceed to the *Application Tier Installation* section

Please follow the configuration and setup instructions based on your implementation:

1. If the installer is executed on the database server and all user(s)/schema(s) (TRANSACTION, SYSTEM (Meta) and ADMIN) were created on a single instance you are not required to perform any additional steps to enable distributed transactions. All required steps were performed during Costpoint Database Tier installation. This is the most common and simple implementation for most clients and can proceed to application tier installation.
2. If the installer is executed on the database server with database(s)/user(s)/schema(s) configured across different instances within the same server, the following set of actions as to be performed for each instances where Costpoint schema(s)/database(s) are configured. Please follow the steps documented under “How to enable JDBC distributed transactions and XA using Costpoint Installer for an instance.”
3. If the installer is executed from an alternative database server or from a client connectivity tools desktop with the actual databases residing remotely on a database server, please follow the steps documented under “How to enable JDBC distributed transactions and XA using Costpoint Installer for an instance.”
4. If Costpoint is setup across different database servers and instances with each databases remotely configured for TRANSACTION, SYSTEM (Meta) and ADMIN, please follow the steps documented under “How to enable JDBC distributed transaction and XA for remote database servers.”
5. If Costpoint is setup using SQL Cluster configuration, please follow the steps documented under “How to enable JDBC distributed transaction and XA for SQL Cluster Configuration.”

How to Enable JDBC Distributed Transactions and XA using Costpoint Installer for an Instance:

1. Create a backup of your Microsoft SQL Server master database.
2. Copy the DeltekCostpoint711DatabaseTier.exe installation file to this database server where Costpoint databases are created.
3. Run the **DeltekCostpoint711DatabaseTier.exe /enableXA** command to launch the Costpoint Database Tier enable XA program.
4. On the Microsoft SQL Server for Deltek Costpoint 7.1 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 7.1.1 DELTEKCP/CPSYSTEM/CPADMIN database server. The default value is your computer name.</p> <p>The value entered in the IP Address or Hostname field cannot be 127.0.1.0.1 or localhost.</p> <p>For SQL Cluster installations, you must specify the SQL Cluster Hostname.</p>
Port	<p>Enter the port that your Costpoint 7.1.1 database server software uses to listen for requests. The default port for Microsoft SQL Server is 1433.</p>
Instance Name	<p>Enter the name of your Costpoint 7.1.1 database instance used during new install setup. The default value is LOCAL. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ - _</p>
SA User	<p>Enter the name of your Microsoft SQL Server SA user. The default is sa. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>\$ - _</p> <p>Note: If a user with "sysadmin" privileges is available, that user can alternatively be used.</p>
SA Password	<p>Enter the password for your Microsoft SQL Server SA user. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p>' ~ # \$ ^ & () - _ + = , .</p>

5. Click **Test Connection**.

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

"Connection Successful. Click Next."

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

6. After receiving the confirmation message, click **Next >** to begin the installation process.

The Restarting the Distributed Transaction Coordinator (MSDTC) Service window will display as part of the installation process.

If any errors occur during this step, please call Deltek Technical Support.

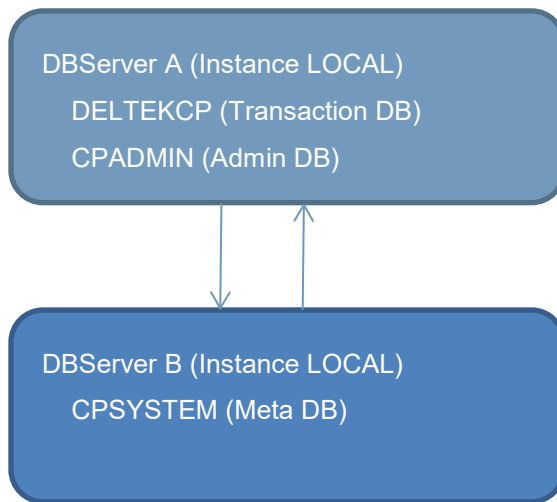
7. Click **OK** when the following message displays: "Successfully configured XA transactions."

Note: If your Costpoint 7.1.1 TRANSACTION, SYSTEM, and ADMIN databases reside on different servers, you must perform all of the actions in this step against each of the other servers.

How to Enable JDBC Distributed Transaction and XA for Remote Database Servers

If your Costpoint TRANSACTION, SYSTEM, and ADMIN databases reside on different database servers, you must perform this step in each of the servers.

An example for this configuration is shown below:



Based on the configuration above, all steps documented to enable distributed transaction should be done on both Server A and Server B.

1. Perform this step for the database instance using the instructions on “How to enable JDBC distributed transactions and XA using Costpoint Installer for an instance.”
2. The sequence of steps to open Component Services on your server might be different based on your Windows OS version.
3. On the left navigation tree, go to **Component Services » Computers » My Computer » Distributed Transaction Coordinator**.
4. Right-click **Local DTC**, and click **Properties** on the shortcut menu.
5. On the **Local DTC Properties** dialog box, click the Security tab.
6. Perform the following:
 - Select **Network DTC Access** under **Security Settings**.
 - Select **Allow Remote Clients** under **Client and Administration**.
 - Select **Allow Inbound** and **Allow Outbound** under **Transaction Manager Communication**.
 - Select the **No Authentication Required**.
 - Select **XA Transactions**.

7. Click **Apply**.

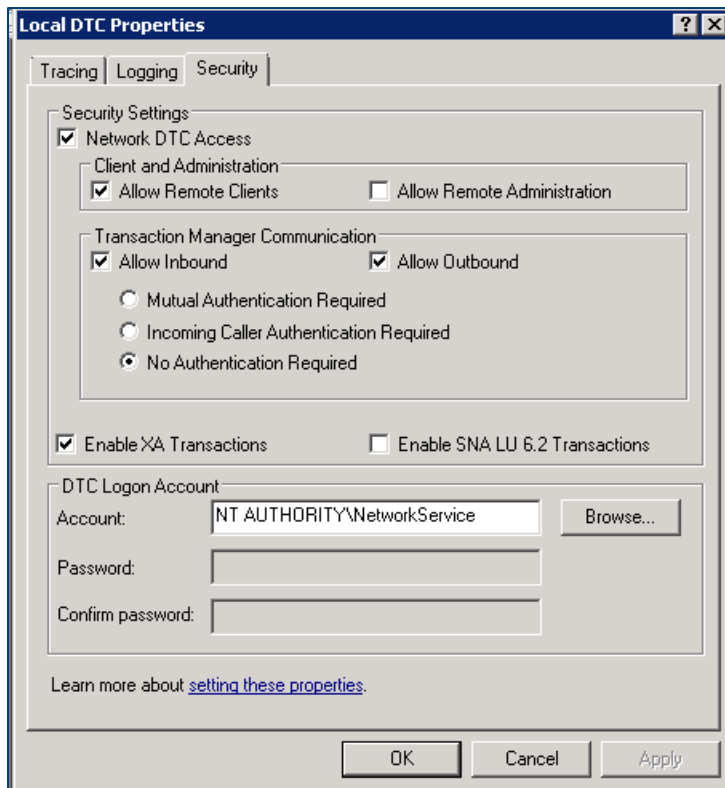
The following message displays: “The MSDTC Service will be stopped and restarted. All dependent services will be stopped. Applications using MSDTC may need to be restarted to use the new settings. Click Yes to proceed.”

8. Click **Yes**.

The following message displays: “The MSDTC service has been restarted.”

9. Click **OK**.

Your screen should look similar to the following.



Note: For DTC to function correctly, each of the hosts participating should be resolvable by NetBIOS name and each remote host should be reachable by name. This function will not work if the host server is configured only by IP address (as in many VM test deployments). In such cases, either have your host added to the IP/hostname mappings in your “c:\Windows\System32\drivers\etc\hosts” file or if in a domain, add DNS aliases.

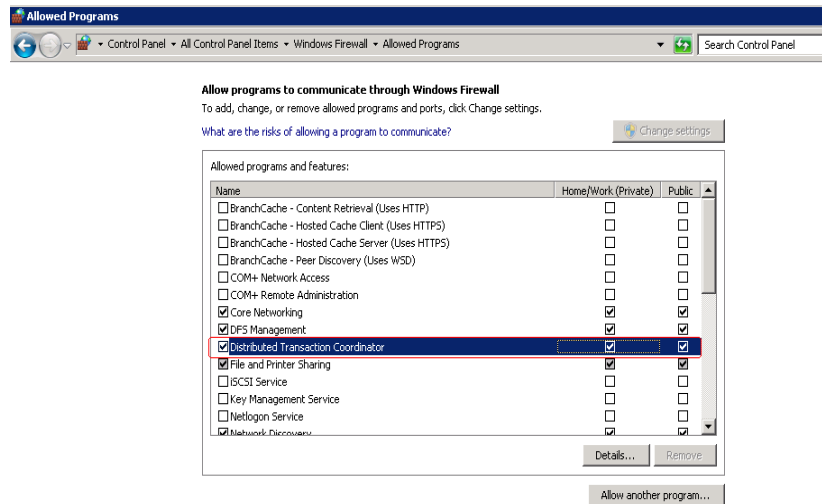
10. If your database server is configured for Windows Firewall, for DTC to function, follow the necessary firewall settings for MSDTC program.
 - a. Click **Start » Control Panel**.
 - b. In the search box, enter **firewall**, and click **Windows Firewall**.
 - c. In the left pane, click **Allow a program or feature through Windows Firewall**.
 - d. Click **Change settings**.

Enable JDBC Distributed Transactions

If you're prompted for an administrator password or confirmation, enter the password or provide confirmation.

- e. Select the check box next to **Distributed Transaction Coordinator** for both **Private** and **Public**, and click **OK**.

A sample selection of firewall setting for DTC program is shown below:



11. Reboot the server after completion of all the above steps.

12. Repeat steps 1 through 4 for each of the servers.

In the sample configuration, these steps would be repeated for “DBServer A” and “DBServer B.”

13. Proceed to the “Application Tier Installation” section.

How to Enable JDBC Distributed Transaction and XA for SQL Cluster Configuration

If your Costpoint TRANSACTION, SYSTEM, and ADMIN databases reside on a SQL Cluster configuration, follow these instructions:

1. Perform this step on the database cluster instance on each node using the instructions on “How to enable JDBC distributed transactions and XA using Costpoint Installer for an instance.”
2. The sequence of steps to open Component Services on your server might be different based on your Windows OS version.
3. On the left navigation tree, go to **Component Services » Computers » My Computer » Distributed Transaction Coordinator » Clustered DTCs**.

Note: If you do not see the Clustered DTCs section, you may need to move the DTC Service to this node to make this visible. Please reopen Component Services after moving the DTC service to this node.

While the product may be functional by setting these properties on the active node during initial installation, it is important that all these steps are done in all nodes so that when the SQL Cluster services failover to alternate available nodes, the DTC function performs distributed transactions for proper application behavior.

4. Right-click your configured Distributed Transaction Coordinator Service Name (for example, DELTEKCPDTC), and click **Properties** on the shortcut menu.
5. On the Security tab, select **XA Transactions**.
6. Click **Apply**.

The following message displays:

"The MSDTC Service will be stopped and restarted. All dependent services will be stopped. Applications using MSDTC may need to be restarted to use the new settings.. Click Yes to proceed."

7. Click **Yes**.

The following message displays: "The MSDTC service has been restarted."

8. Reboot the server.
9. Repeat for each node participating in the cluster, and proceed to the "Application Tier Installation" section.

Application Tier Installation

The Costpoint 7.1.1 system uses Oracle's WebLogic Server for its application server tier. During the Application Tier installation process, you will install the WebLogic Server 12.1.3 application server software and the Costpoint 7.1.1 software.

As previously mentioned in the [Pre-Installation Instructions](#) section, after installation, the Costpoint 7.1.1 WebLogic application server must not contain any previous versions of WebLogic. The installation will automatically remove the Costpoint 7.0.1 WebLogic 12.1.1 version.

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 12.1.3 application server software and Deltek Costpoint 7.1.1 software.

You must perform this step on the machine that will serve as your Costpoint 7.1.1 **application** server.

You must have Internet access on the machine where the Costpoint 7.1.1 installer is invoked in order to download the latest DeltekCostpointRequirementsINI.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 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 Upgrade Files Download](#) section of this document before you run the DeltekCostpoint711ApplicationTier.exe file.

To install the Application Tier software, complete the following steps:

1. Run the **DeltekCostpoint711ApplicationTier.exe** file to launch the Costpoint 7.1.1 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 the Costpoint screen, click **Next >**.
3. On the License Agreement screen, review the license agreement, select **I accept the terms of the license agreement**, and click **Next >**.
4. On the Select Deltek Costpoint Install Type screen, select **Upgrade from CP 7.0.1**, and click **Next >**.
5. On the Setup Type screen, complete the following fields, and click **Next >**.

Field Name	Action
Primary Application Server Tier	<p>Select this setup type to install both the Oracle WebLogic and Deltek Costpoint Application Tier software.</p> <p>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.</p> <p>Additional changes are required to configure a clustered environment.</p>
Secondary Application Server Tier	<p>Select this setup type to install only the Oracle WebLogic software. The Deltek Costpoint Application Tier software will not be installed.</p> <p>This option must only be selected when configuring a clustered environment after your Primary Application Server Tier has already been installed.</p>

- On the Choose 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\Middleware12.1.3** (recommended).

Do not install the WebLogic Server software in a directory path or folder that contains a space. The Costpoint 7.1.1 software will not function properly if the WebLogic Server software is installed to a directory path or folder that contains a space.

- If you selected **Secondary Application Server Tier** for the **Setup Type**, the Pre-Installation Summary screen displays. Proceed to step 15 of this procedure.
- On the Choose Deltek Costpoint Installation Directory screen, navigate to the location of your existing Costpoint software.

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

The directory in which you install the Costpoint 7.1.1 software cannot be the Oracle WebLogic install directory (C:\Oracle\Middleware12.1.3).

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

- Click **Next >**.
- On the Costpoint System Information screen, select your **System Name** from the drop-down list, and click **Next >**.
- One of the following screens displays:
 - Microsoft SQL Server SA User Information
 - Pre-Installation Summary
- If the Pre-Installation Summary screen displays, proceed to Step 15.
- If the Microsoft SQL Server SA User Information screen displays, complete the following fields.

Schema Tablespace Information	Field Name	Action
Costpoint Transaction Information	SQLServer SA User Name	Enter your Microsoft SQL Server SA user name. This can be any SQL Server user that has the same role as the default SA account. The default is sa . In addition to standard alphanumeric characters, the following special characters are also supported: \$ - _
	SQLServer SA User Password	Enter the password for your Microsoft SQL Server SA user. In addition to standard alphanumeric characters, the following special characters are also supported: ' ~ # \$ ^ & () - _ + = , .
Costpoint Admin Information	SQLServer SA User Name	Enter your Microsoft SQL Server SA user name. This can be any SQL Server user that has the same role as the default SA account. The default is sa . In addition to standard alphanumeric characters, the following special characters are also supported: \$ - _
	SQLServer SA User Password	Enter the password for your Microsoft SQL Server SA user. In addition to standard alphanumeric characters, the following special characters are also supported: ' ~ # \$ ^ & () - _ + = , .
Costpoint System Information	SQLServer SA User Name	Enter your Microsoft SQL Server SA user name. This can be any SQL Server user that has the same role as the default SA account. The default is sa . In addition to standard alphanumeric characters, the following special characters are also supported: \$ - _
	SQLServer SA User Password	Enter the password for your Microsoft SQL Server SA user. In addition to standard alphanumeric characters, the following special characters are also supported: ' ~ # \$ ^ & () - _ + = , .

14. Click **Next** >.

15. 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 Changes for Costpoint 7.1.1](#) section of this document. The installation process will stop if any errors are encountered. If any errors occur during the installation, please refer to the [Troubleshooting Instructions](#) section of this document.

16. On the InstallShield Wizard Complete screen, select the **Yes, I want to view the log file** check box to open the DeltekCostpoint711ApplicationTierInstallLog_<date>_<time>.txt file from the C:\Program Files\Deltek\Costpoint\7.1.1\logs directory.

This check box is selected by default.

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

18. When the DeltekCostpoint711ApplicationTierInstallLog_<date>_<time>.txt file opens, search for the following keyword:

- **Error** – Report any search results to Deltek Costpoint Technical Support. The following errors can be ignored:
 - OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\error401.htm
 - OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\error403.htm
 - OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\error404.htm
 - OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\error500.htm
 - OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\tools\error.png
 - OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\error.png
 - OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\prompt_error_bottomb
order-righthand.png
 - OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\prompt_error_bottomb
order.png
 - OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\prompt_error_pointer-
righthand.png
 - OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\prompt_error_pointer.
png

- OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\prompt_error_topborder-righthand.png
- OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\prompt_error_topborder.png
- OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\prompt_error_vbackground-righthand.png
- OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\prompt_error_vbackground.png

If you are running a WebLogic cluster, you must repeat this step for all of your WebLogic servers. Running once on your Cluster master, choose **Primary Application Server Tier** for the **Setup Type**, and on each of your cluster nodes, choose **Secondary Application Server Tier** for the **Setup Type**.

Note: Please refer to the [DeltekCostpoint711ConfigurationUtility.pdf](#) technical guide for more information on WebLogic clustering.

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.

Verify Users Exist in the CostpointToolsGroup

The steps to verify that your users still exist in the User Group, **CostpointToolsGroup**, are detailed in this section. Just as it did with Costpoint 7.0.1, 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\Middleware12.1.3** folder.

You must perform this step on your Costpoint 7.1.1 application server.

To verify your users exist in the CostpointToolsGroup, complete the following steps:

1. Click **Start » Administrative Tools » Computer Management**. For Windows Server 2012, right-click **Start**, and select **Computer Management**.
2. From **Computer Management » Local Users and Groups » Groups**, and verify the following users exist in 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. If any of the above did not exist, add them and reboot your Costpoint 7.1.1 application server. If they all did exist, proceed to the next step.

Before You Start

Make sure that you meet all [Costpoint 7.1.1 Server Startup Prerequisites](#).

Manually Start Costpoint 7.1.1

The steps to starting Costpoint 7.1.1 are detailed in this section. You must start the Costpoint 7.1.1 WebLogic Server on your application server to gain access to the Costpoint 7.1.1 system.

You must perform this step on your Costpoint 7.1.1 application server.

To start Costpoint 7.1.1, complete the following steps:

1. Optional. In order for the Start Costpoint 7.1.1 Windows Command Prompt to have scrolling capability, perform the following:
 - a. Right-click **Start**, select **Search**, enter **Costpoint 7.1.1**, right-click **Start Costpoint 7.1.1**, and click **Open file location**.
 - b. Right-click **Start Costpoint 7.1.1** and click **Properties** on the shortcut menu.
 - c. Click the Layout tab and increase the **Screen buffer size Height** from **300** to **2000**.
 - d. Click **OK** to save the changes.
2. Right-click **Start**, select **Search**, enter **Costpoint 7.1.1**, right-click **Start Costpoint 7.1.1**, 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 7.1.1 WebLogic Server. When the Windows Command Prompt window opens, you will see a series of messages scrolling down the screen.

Starting the Costpoint 7.1.1 WebLogic Server can take a long time to complete. Please do not interrupt the process.

3. After the Costpoint 7.1.1 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 7.1.1 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\71\logs\DEServer.log file.
- Contact Deltek Costpoint 7.1.1 Technical Support.

Install Costpoint 7.1.1 Windows Service

The steps to installing the Costpoint 7.1.1 Windows service are detailed in this section.

This step must be performed on your Costpoint 7.1.1 WebLogic application server.

To install Costpoint 7.1.1 to run as a Windows service, complete the following steps:

1. Stop the Costpoint 7.1.1 WebLogic Server.

Note: See the [Stop Costpoint 7.1.1 WebLogic Server from the Web Browser](#) section for information on starting and stopping the Costpoint 7.1.1 WebLogic Server.

2. Use Windows Explorer to navigate to the directory where the Costpoint 7.1.1 software was installed (C:\Deltek\Costpoint\71\bin), right-click **InstallCPWebasService.cmd**, and select **Run as administrator**.

Configure Costpoint 7.1.1 Windows Service

The steps to configuring the Costpoint 7.1.1 Windows service are detailed in this section.

This step must be performed on your Costpoint 7.1.1 WebLogic application server.

To configure Costpoint 7.1.1 Windows service, complete the following steps:

1. Click **Start » Administrative Tools » Services**.
2. On the Services window, scroll down the **Services** drop-down list, right-click the **Costpoint 7.1.1** service, and then click **Properties** on the shortcut menu.

If you do cannot find the **Costpoint 7.1.1** service, then the service must not have installed properly in the previous step. Please repeat Step 1 of [Installing Costpoint 7.1.1 as a Windows Service](#).

3. On the Costpoint 7.1.1 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 7.1.1 Properties screen, click the Log On tab, and complete the following fields.

Field Name	Action
Account	Enter the domain Account. For example, Example: domain\useraccountname.

Field Name	Action
	If using a domain service login account instead of using 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.

- 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.

- On the Costpoint 7.1.1 Properties screen, click the General tab, and click **Start** to start the Costpoint 7.1.1 service.

The service will indicate that it started immediately. However, please note that it takes several minutes for the Costpoint 7.1.1 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 7.1.1 service, check the C:\Deltak\Costpoint\71\logs\DEServer.log file and report any errors to Deltak Costpoint 7.1.1 Technical Support.

- Click **OK** to close the Costpoint 7.1.1 Properties screen, and close the Services window.

Configure Integration Console and Web Services

The steps to upgrade your existing Web services (Integration console) are detailed in this section. To support Weblogic 12.1.3, as well as new integration features in this release, all integration modules have to be rebuilt or redeployed. Applications invoking Web services do not need to be changed or recompiled.

Attention: You must perform this step if you were previously using the Web services functionality (Integration console) with Costpoint 7.0.1.

You must perform this step on your Costpoint 7.1.1 WebLogic application server. Select one of the methods below, depending how you are using the system.

If you have Integration console configured against a production environment, redeploy Web services by following these steps:

- Right-click **Start**, select **Search**, enter **Costpoint 7.1.1**, right-click **Start Costpoint 7.1.1 Integration Console**, 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, even if the logged in user has local administrative rights.

2. Select your **System**, and click **Login**.
3. Under **Available options**, select **Build/Deploy Integration Modules (Web Services/EJB)**, and click **Next**.
4. Click **Select All** to select all modules, or manually select your desired modules.
5. Click **Build/Deploy** to rebuild and redeploy all selected modules.
6. Exit out of Integration Console.

If you always build Web services in a test environment and then apply them to a production environment through the Export/Hot fix deployer process, redeploy Web services by completing the following steps:

Note: For this method, your test environment must already be upgraded to Costpoint 7.1.1.

1. Click **Start » All Programs » Costpoint 7.1.1 » Start Costpoint 7.1.1 Integration Console**.
2. Select your **System**, and click **Login**.
3. Under **Available options**, select **Build/Deploy Integration Modules (Web Services/EJB)**, and click **Next**.
4. Click **Select All** to select all modules, or manually select your desired modules.
5. Click **Export**.
6. Customize the output hot fix file name as desired.
7. Click **Export** to rebuild and package modules into a Integration hot fix.
8. Exit out of Integration Console.
9. Click **Start » All Programs » Costpoint 7.1.1 » Start Costpoint 7.1.1 DBWizard**.
10. Apply the generated integration hot fix to all systems where Integration modules are used.

Web Tier Installation

The steps to integrate your Costpoint 7.1.1 software with the Microsoft Internet Information Server (IIS) is detailed in this section.

The Microsoft Internet Information Server component is **optional**. The WebLogic Server software included an integrated Web server component that you can use with the Costpoint 7.1.1 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 \(Microsoft IIS\) Prerequisites](#).

Configure Microsoft IIS Web Server for Costpoint 7.1.1

The steps to configure Microsoft IIS prior to the installation of Costpoint 7.1.1 are detailed in this section.

Attention: If you were running Costpoint 7.0.1 on Microsoft IIS, you should have already configured all of this, but you will still need to Restart IIS.

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

To configure Microsoft IIS Web server, complete the following steps:

1. Click **Start » Administrative Tools » Server Manager**.
2. Click **Manage**, and select **Add Roles and Features**.
3. On the Before you begin screen, click **Next**.
4. On the Select installation type screen, accept the default of **Role-based or feature-based installation**, and click **Next**.
5. 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**.
6. On the Select server roles screen, scroll down and select **Web Server (IIS)**.
7. On the Add features that are required for Web Server (IIS) screen, click **Add Features**.
8. On the Select server roles screen, click **Next**.
9. On the Select features screen, click **Next**.
10. On the Web Server Role (IIS) screen, click **Next**.
11. On the Select role services screen, perform the following:
 - Scroll down, expand **Application Development**, and select **ISAPI Extensions**.
 - Scroll down, under **Management Tools**, expand **IIS 6 Management Compatibility**, and select **IIS 6 Metabase Compatibility**.
 - Scroll down and select **IIS Management Scripts and Tools**.
 - Click **Next**.

12. On the Confirm installation selection screen, click **Install**.
13. After the installation is complete, click **Close**.
14. Click **Tools**, and select **Internet Information Services (IIS) Manager**.
15. On the Internet Information Services (IIS) Manager screen, right-click your IIS computer name icon, and click **Stop**.
16. Right-click your IIS computer name icon again, and click **Start**.
17. Close the Internet Information Services (IIS) Manager window.
18. Close the Services Manager window.

Install Web Tier Software

The steps to integrate the Costpoint 7.1.1 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 7.1.1 installer is invoked in order to download the latest DeltekCostpointRequirementsINI.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 Upgrade Files Download](#) section of this document before you run the DeltekCostpoint711WebTier.exe file.

To install Costpoint 7.1.1 on your Microsoft IIS Web server, complete the following steps:

1. Run the **DeltekCostpoint711WebTier.exe** file to launch the Costpoint 7.1.1 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 Costpoint screen, click **Next >**.
3. Review the license agreement, select **I accept the terms of the license agreement**, and click **Next >**.
4. On the Select Deltek Costpoint Install Type screen, select **Upgrade from CP 7.0.1**, and click **Next >**.
5. On the Choose Deltek Costpoint Installation Directory screen, click **Browse** to navigate to an installation location for the Deltek Costpoint 7.1.1 IIS software.

The default location for users upgrading from Costpoint 7.0.1 will be **C:\Deltek\Costpoint\70\applications**.

You may need to browse to the actual folder containing your **\DEWebApp** folder. If you integrated Costpoint with Microsoft IIS prior to Costpoint 7.0.1 this could be the **C:\Deltek\Costpoint** folder.

For new IIS users, the default is **C:\Deltek\Costpoint\71\applications** (recommended).

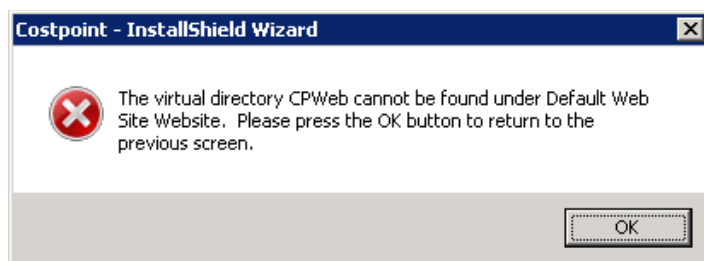
The installation process populates the folder selected above with a **\DEWebApp** folder that contains all the program files you need to integrate the Costpoint 7.1.1 software that resides on your application server with your Microsoft IIS Web server.

6. Click **Next >**, and one of the following screens displays:
 - Deltek Costpoint 7.1.1 WebLogic System Information
 - IIS Website Name
7. If the Deltek Costpoint 7.1.1 WebLogic System Information screen displays, complete the following fields.

Field Name	Action
IP Address or Hostname	Enter the IP address (10.2.2.154) or hostname (appsvr01) of your Costpoint 7.1.1 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 7.1.1 WebLogic application server. You specified this port during the Costpoint 7.1.1 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 7.1.1 WebLogic application server. This port must match the one entered during the Costpoint 7.1.1 Application Server installation.

8. Click **Next >**.
9. On the IIS Website Name screen, locate the **Website Name** field and select the Website where you want to create the Deltek Costpoint 7.1.1 Virtual Directory (**CPWeb**), and click **Next >**.

If you are upgrading from Costpoint 7.0.1, select your current Costpoint **Website Name**, (which is the Web site that contains your CPWEB virtual directory) from the drop-down list. Typically, this is the **Default Web Site**.
10. Click **OK** if you receive the following message.



- a. Go into **IIS**, right click your **CPWEB** virtual directory, and click **Convert to Application** on the shortcut menu.

- b. On the Add Application screen, click **OK**.

From the Web Tier install, you should still be in the IIS Website Name screen, with your **Website Name** selected.

- c. Click **Next >**.

11. On the Choose Deltek Costpoint 7.1.1 Path screen, click **Browse** to navigate to the shared UNC path (`\\appsrv01\Deltek_shared`) of the **Deltek** folder that resides on your **Costpoint 7.1.1 Application Server** (if your Web Server is also your Application Server, just enter the directory, `C:\Deltek`).

The Windows Administrator user account (or equivalent) on the machine that hosts your Costpoint 7.1.1 IIS Web server software that is running this installation must exist in the CostpointToolsGroup created on your Costpoint 7.1.1 application server. That group has the proper write permissions to the `C:\Deltek` share created on your Costpoint 7.1.1 Application Server.

12. 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 Changes for Costpoint 7.1.1](#) 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 7.1.1 Costpoint directory, `C:\Deltek\Costpoint\71\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\71\applications`.

13. On the InstallShield Wizard Complete screen, select **No, I will restart my computer later**, and click **Finish**.

14. Open the `DeltekCostpoint711WebTierInstallLog_<date>_<time>.txt` file (from the `C:\Program Files\Deltek\Costpoint\7.1.1\logs` directory), and search for the following:

- **Error** – Report any search results to Deltek Costpoint Technical Support. The following errors can be ignored:

OnInstallingFile - Installing File :

`C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\error401.htm`

OnInstallingFile - Installing File :

`C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\error403.htm`

OnInstallingFile - Installing File :

`C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\error404.htm`

OnInstallingFile - Installing File :

`C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\error500.htm`

OnInstallingFile - Installing File :

`C:\Deltek\Costpoint\71\applications\enterprise\tools\error.png`

```

OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\error.png

OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\prompt_error_bottomborder-righthand.png

OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\prompt_error_bottomborder.png

OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\prompt_error_pointer-righthand.png

OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\prompt_error_pointer.png

OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\prompt_error_topborder-righthand.png

OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\prompt_error_topborder.png

OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\prompt_error_vbackground-righthand.png

OnInstallingFile - Installing File :
C:\Deltek\Costpoint\71\applications\enterprise\DEWebApp\images\prompt_error_vbackground.png

```

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

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\71\applications**.

Note: If you upgraded from Costpoint Web 7.0.1 and were already using IIS, this group should already exist with the necessary users. Please verify that they do exist and make sure to reboot your Costpoint 7.1.1 Web server.

You must perform this step on your Costpoint 7.1.1 Web server.

To add users to the newly created CostpointToolsGroup, complete the following steps:

1. Right-click **Start**, and select **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 7.1.1 Web server.

Configure Costpoint 7.1.1 IIS Access

The steps to configure Costpoint 7.1.1 to work through IIS are detailed in this section.

You must perform this step on your Costpoint 7.1.1 WebLogic application server.

To configure Costpoint 7.1.1 and IIS, complete the following steps:

1. With your Costpoint 7.1.1 service running, right-click **Start**, select **Search**, enter **Costpoint 7.1.1**, right-click **Start Costpoint 7.1.1 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.

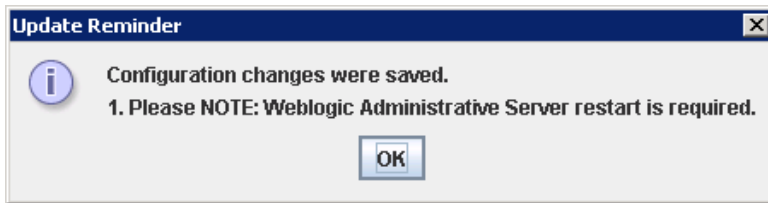
2. On the Select Your Configuration Options screen, make sure the **IIS Connection Configuration** check box is selected, and click **Next**.
3. On the Costpoint Configuration Utility screen, click the IIS tab and perform the following.

Note: If you upgraded from Costpoint Web 7.0.1 and were already using IIS, then these values are already set. However, you will still need to Save the settings.

Field Name	Action
Use IIS	Select this check box. This option is cleared by default.
Configuration File Location (iisproxy.ini)	Click the ellipsis button, and navigate to the \\CPiisServer\Costpoint folder share on your IIS server. Select the DEProxy\lib folder to access the iisproxy.ini file, and click Open . Click OK after the following message displays: "Configuration file iisproxy.ini was successfully loaded."
DEWebApp Folder Location	Click the ellipsis button, and navigate to the shared \\CPiisServer\Costpoint folder on your IIS server, and click Open .
WebLogic Host IP	Enter your WebLogic application server name.
Port	Enter the WebLogic Listener Port, 7009 .

4. Click **Save**.

The following messages displays.



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

Restart Costpoint 7.1.1 WebLogic Server

The steps to stop and restart your Costpoint 7.1.1 WebLogic Server are detailed in this section. You must perform this step on your Costpoint 7.1.1 WebLogic application server.

To stop and restart your Costpoint 7.1.1 WebLogic Server, complete the following steps:

1. Click **Start » Administrative Tools » Services**.
2. On the Services window opens, scroll down the **Services** list and **Stop** the **Costpoint 7.1.1 service**.
3. After the service stops, **Start** the **Costpoint 7.1.1 service**.

Note: The service immediately indicates that it has started. However, please note that it takes several minutes for the Costpoint 7.1.1 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 7.1 service, check the **C:\Deltek\Costpoint\7.1.1\logs\DEServer.log** file and report any errors to Deltek Costpoint 7.1.1 Technical Support..

4. Close the Services window.

Costpoint 7.1.1 Initial Log In Configuration

The steps to configure your browser and verify your Costpoint 7.1.1 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 7.1.1 and preview a report.

Before You Start

Make sure that you meet all [Costpoint 7.1.1 Initial Log In Configuration Prerequisites](#).

Costpoint 7.1.1 Printer Configuration

This step is optional. It provides configuration instructions for your Application Tier WebLogic Server to allow you to print Costpoint 7.1.1 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 7.1.1 application server.

To create Windows printer objects on your application server, complete the following steps:

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 7.1.1 WebLogic application server will make the printer objects available to your users.

Set Web Browser Internet Options

The steps to configure the Internet Explorer (IE) browser settings to access the Costpoint 7.1.1 system are detailed in this section.

This step must be performed on all Windows client workstations that will access your Costpoint 7.1.1 WebLogic application server.

To configure the browser settings for accessing the Costpoint 7.1.1 system, complete the following steps:

1. Open your Web browser.
2. From the menu bar, click **Tools » Internet Options**.
3. On the Internet Options screen, click the General tab, and click **Settings** under the **Browsing history** section.

4. On the Temporary Internet Files and History Settings screen, complete the following:

Field Name	Action
Check for newer versions of stored pages	Select Automatically .
Disk space to use	Enter at least 100 Megabytes (MB).

5. Click **OK** to close the Settings screen.
6. On the Internet Options screen, click the Security tab, and select **Trusted sites**, and click **Sites**.
Depending on your environment, you may need to add your Costpoint 7.1.1 URL under **Local Internet** instead of **Trusted sites**.
7. On the **Add this website to the zone**, enter **http://<IPAddress or ComputerName>**, where **<IPAddress or ComputerName>** identifies your Costpoint 7.1.1 WebLogic application server or IIS Web server, depending on which server you will be using to access Costpoint 7.1.1 (for example, **http://10.2.2.154**).
8. Clear the **Require server verification (https:) for all sites in this zone** check box.
9. Click **Add**, and then click **Close**.
10. On the Internet Options screen, click the Advanced tab, scroll down under the **Browsing** section, and clear the **Reuse windows for launching shortcuts** check box.
11. Click **OK** to close the Internet Options screen.
12. From the menu bar, click **Tools » Pop-up Blocker » Turn Off Pop-up Block**.
Disable any pop-up blockers or explicitly allow pop-ups for the Costpoint 7.1.1 URL, such as **http://<IPAddress or ComputerName>**, where **<IPAddress or ComputerName>** identifies your Costpoint 7.1.1 WebLogic application server or IIS Web server (for example, <http://10.2.2.154>).
13. Close your Web browser.

Log In To Costpoint 7.1.1

The steps to log in to Costpoint 7.1.1 are detailed in this section.

You can perform this step from any Windows client workstation that has TCP/IP access to your Costpoint 7.1.1 WebLogic application server.

To log in to Costpoint 7.1.1, complete the following steps:

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 7.1.1 WebLogic application server and **<Port>** identifies the unique port number that your Costpoint 7.1.1 WebLogic application server uses to listen for connections. You specified this port value during the Costpoint 7.1.1 software installation. The default is 7009 (for example, **http://10.2.2.154:7009**).

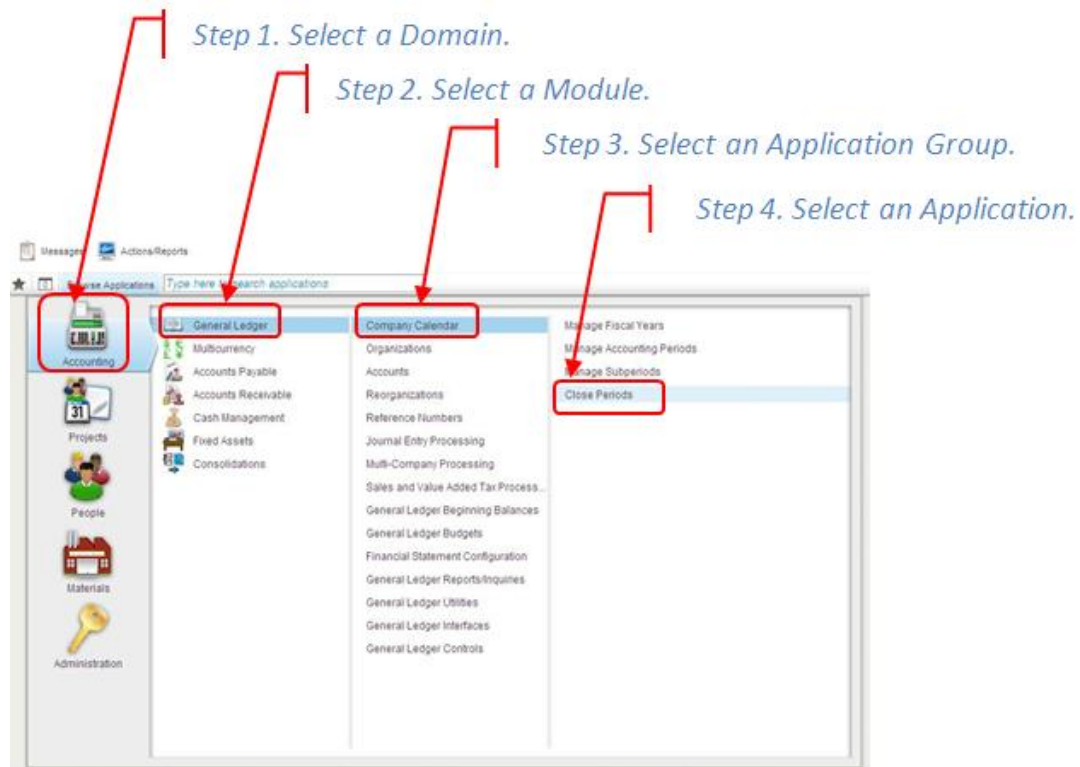
Or where <WebServerIPAddress or ComputerName> identifies your Costpoint 7.1.1 IIS Web server (for example, **http://10.2.2.156/cpweb**).

2. When the Deltek Costpoint 7 Welcome screen displays, complete the following.

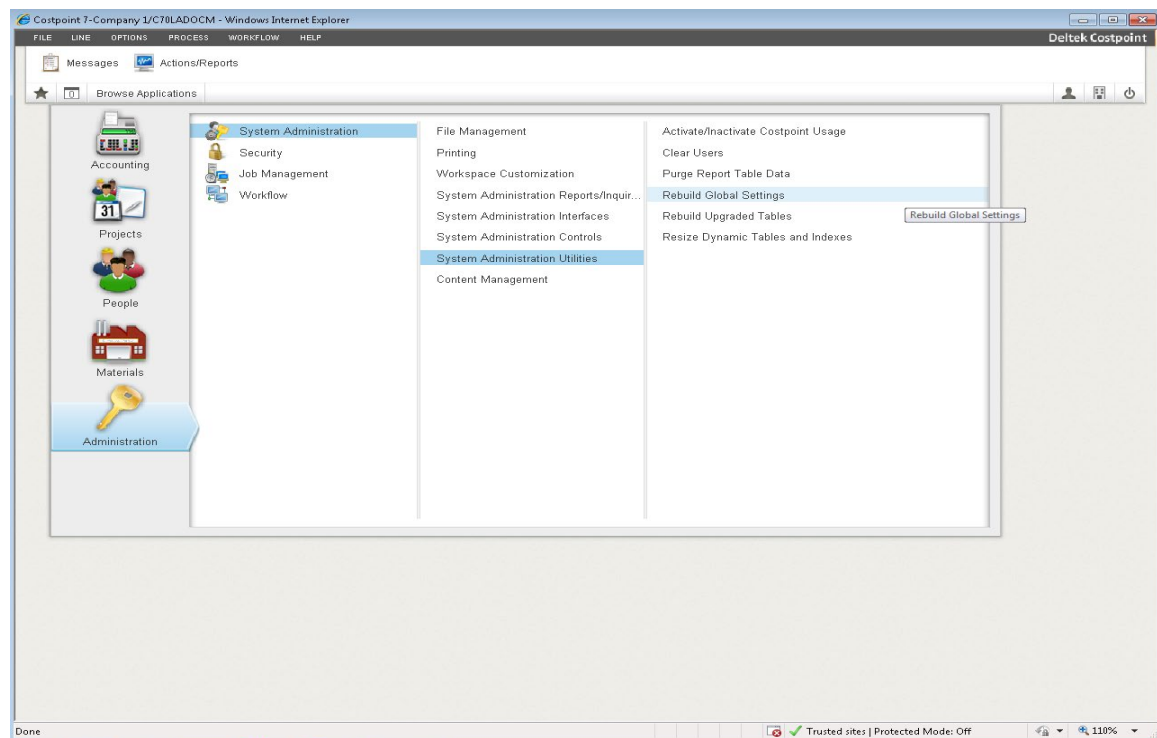
Field Name	Action
Username	Enter CPSUPERUSER .
Password	Enter password . The password is case-sensitive and must be entered in lowercase. Passwords that you create for other user IDs may be uppercase, lowercase, or mixed.
System	Enter <Your_System_Name> , where <Your_System_Name> identifies the system name you assigned to your Costpoint 7.1.1 system during the Application Server Installation. Typically, customers use a system name that is identical to their Costpoint 7.1.1 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 7.1.1 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 7.1.1, 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 check box is not selected by default.

3. Click **Log In**.
4. Contact Custom Solutions at Deltek if the following message displays:

“Warning: The custom programs and the database version are not compatible. The custom programs may not work properly. Please contact Custom Solutions at Deltek. Do you want to continue with the login?”
5. Click **OK**, and a screen similar to the following displays:

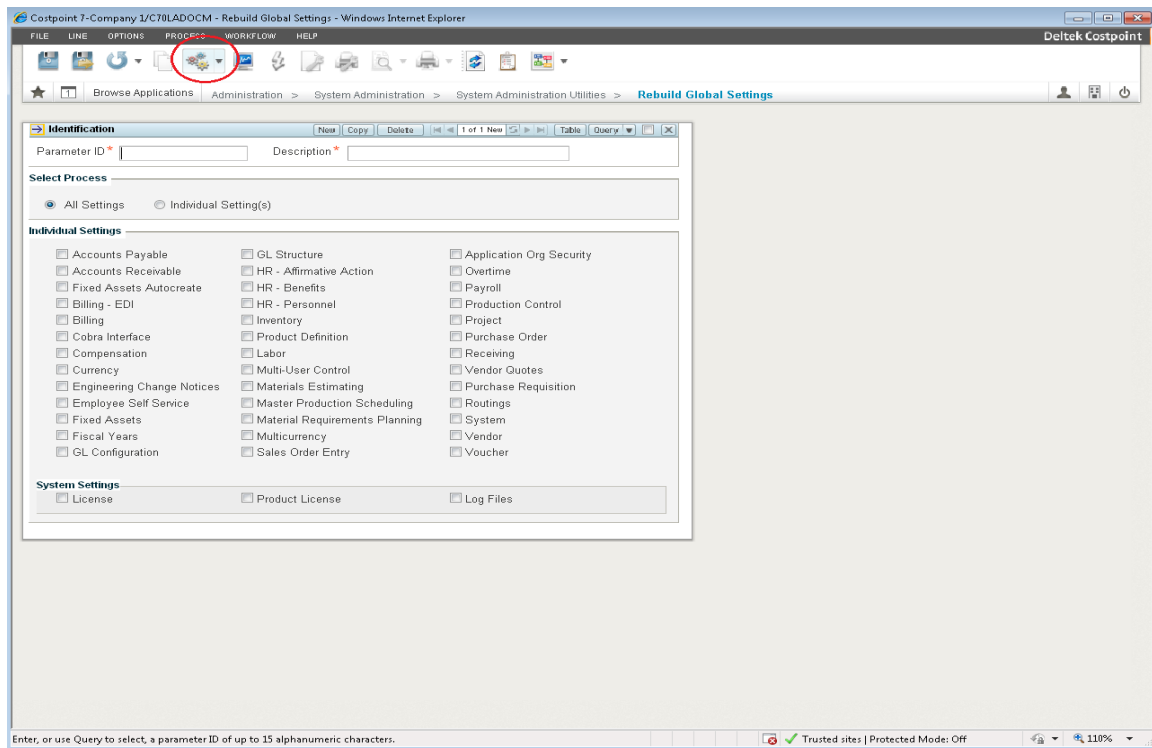


- From the main menu screen, click **Administration » System Administration » System Administration Utilities » Rebuild Global Settings**.



- On the Rebuild Global Settings screen, click **Default Action**.

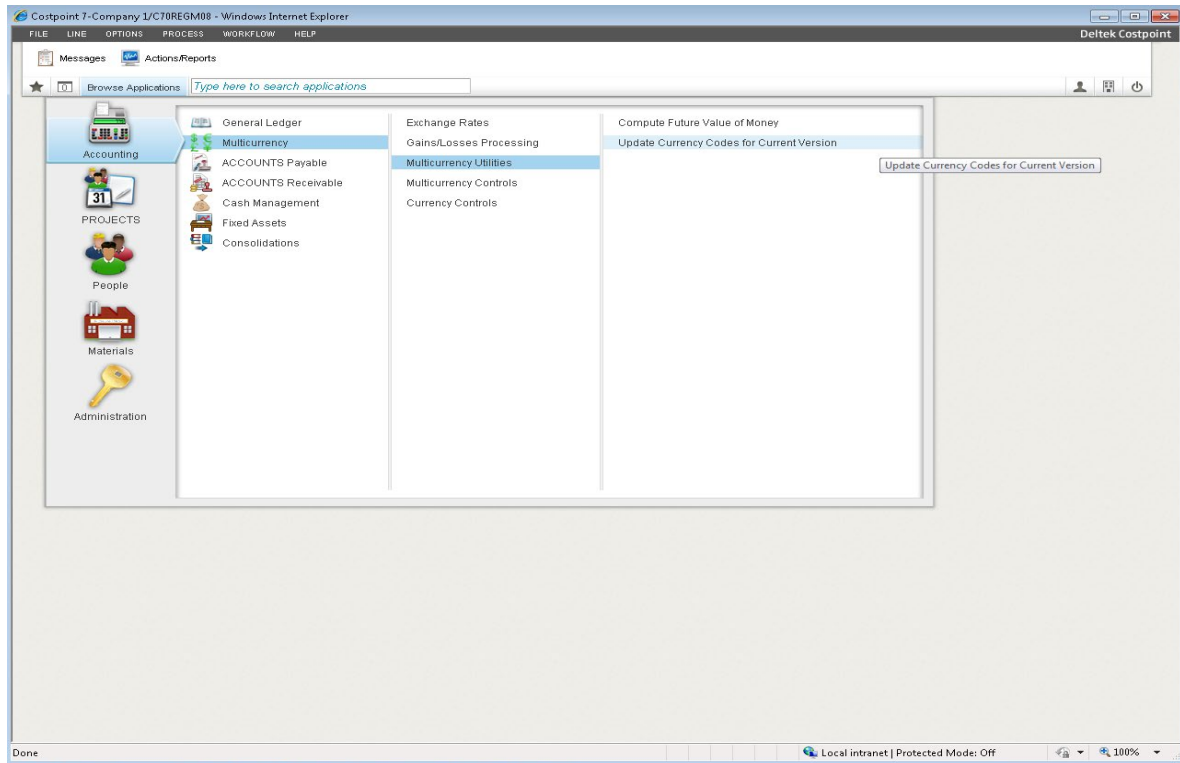
Costpoint 7.1.1 Initial Log In Configuration



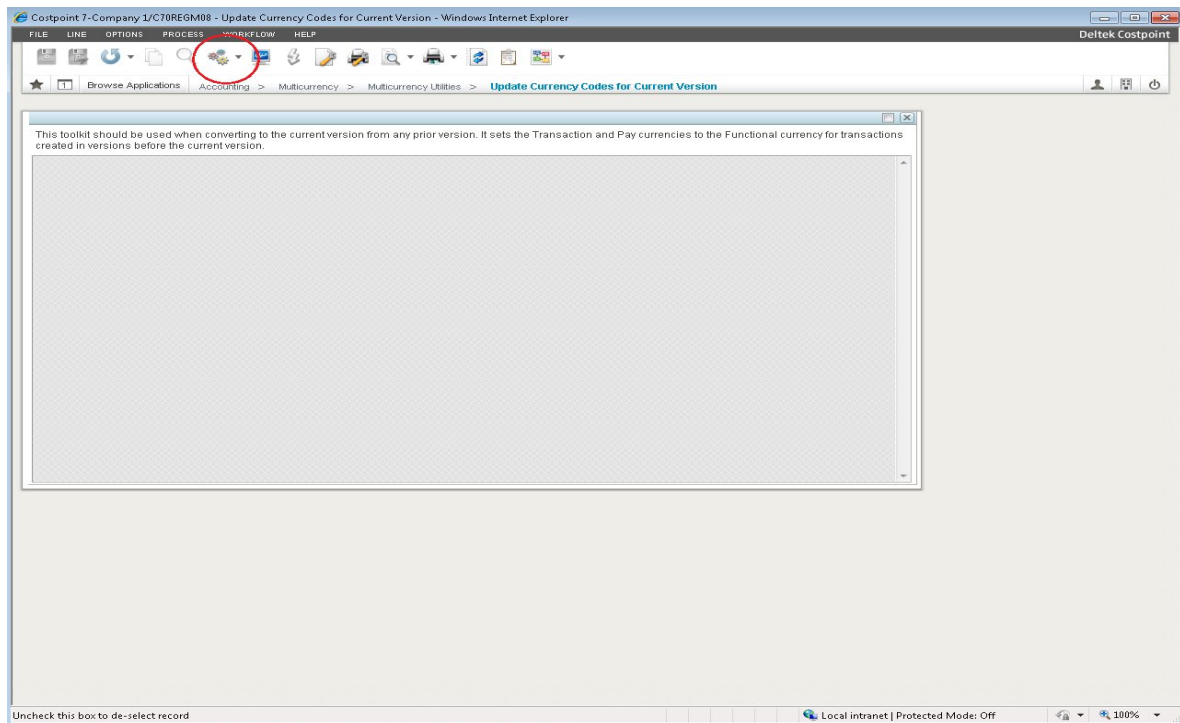
Note: If you click the right side (down arrow) of the **Default Action** button, you must also select **Reload Settings**.

8. On the Processing Complete screen, click **OK**.
9. Click **File » Close Application** to close the Rebuild Global Settings screen, and click **OK** on the unsaved changes message.
10. From the main menu screen, click **Accounting » Multicurrency » Multicurrency Utilities » Update Currency Codes for Current Version**.

Costpoint 7.1.1 Initial Log In Configuration

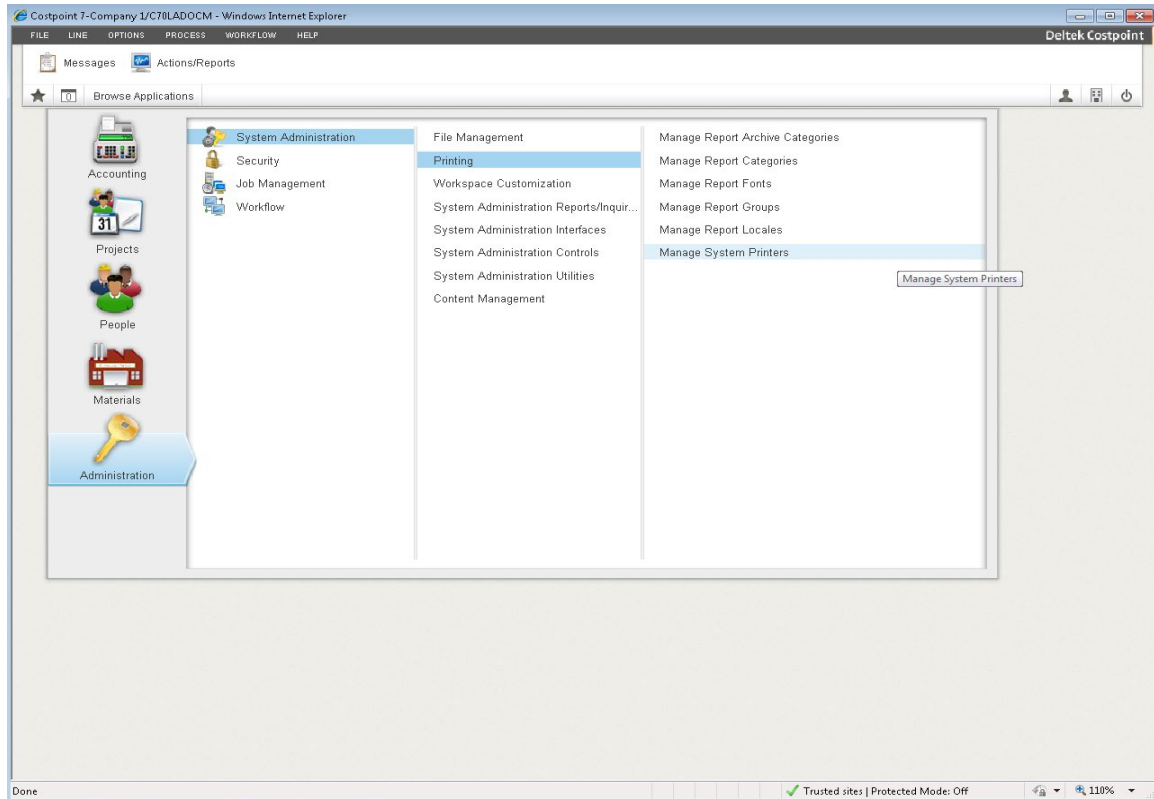


11. On the Update Currency Codes for Current Version screen, click **Default Action**.

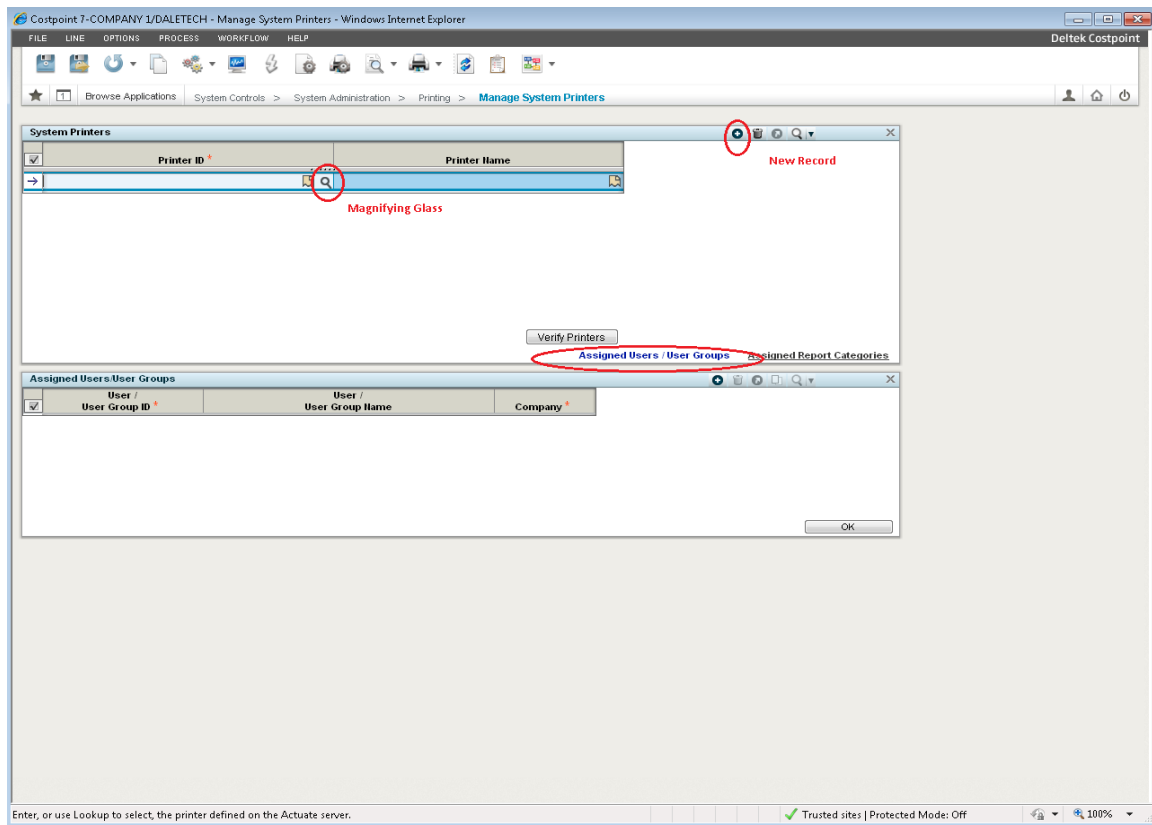


Note: If you click the right side (down arrow) of the **Default Action** button, you must also select **Initialize Currency Codes for Version**.

12. On the Processing Complete screen, click **OK**.
13. Click **File » Close Application** to close the Update Currency Codes for Current Version screen.
14. From the main menu screen, click **Administration » System Administration » Printing » Manage System Printers**.



15. On the Manage System Printers screen displays, verify you have a valid printer setup, or click **New Record (+)** to add one.



16. 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 in 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.

17. Select the **Assigned Users/User Groups** link located in the lower right corner of the System Printers section.

18. 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.

19. Click **SELECT**.

You must repeat Step 18 for each User/User Group that you want to assign the printer object that you specified in Step 16.

20. Click **Save**, and click **OK** when the following message displays: "Record modifications completed without error."

You must repeat items 14-20 for any printer objects on your Application server that you wish to make available to your Costpoint 7.1.1 system users.

21. Click **File» Log-out** to exit out of Costpoint 7.1.1.

22. Close your Web browser.

Verify Costpoint 7.1.1 Printer Configuration

The steps to verify your Costpoint 7.1.1 printers are detailed in this section.

This step can be performed from any Windows client workstation that has TCP/IP access to your Costpoint 7.1.1 WebLogic application server.

To verify your Costpoint 7.1.1 printers, complete the following steps:

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 7.1.1 WebLogic application server and <Port> identifies the unique port number that your Costpoint 7.1.1 WebLogic application server uses to listen for connections. You specified this port value during the Costpoint 7.1.1 software installation. The default is 7009 (for example, **http://10.2.2.154:7009**).

Or where <WebServerIPAddress or ComputerName> identifies your Costpoint 7.1.1 IIS Web server (for example, **http://10.2.2.156/cpweb**).

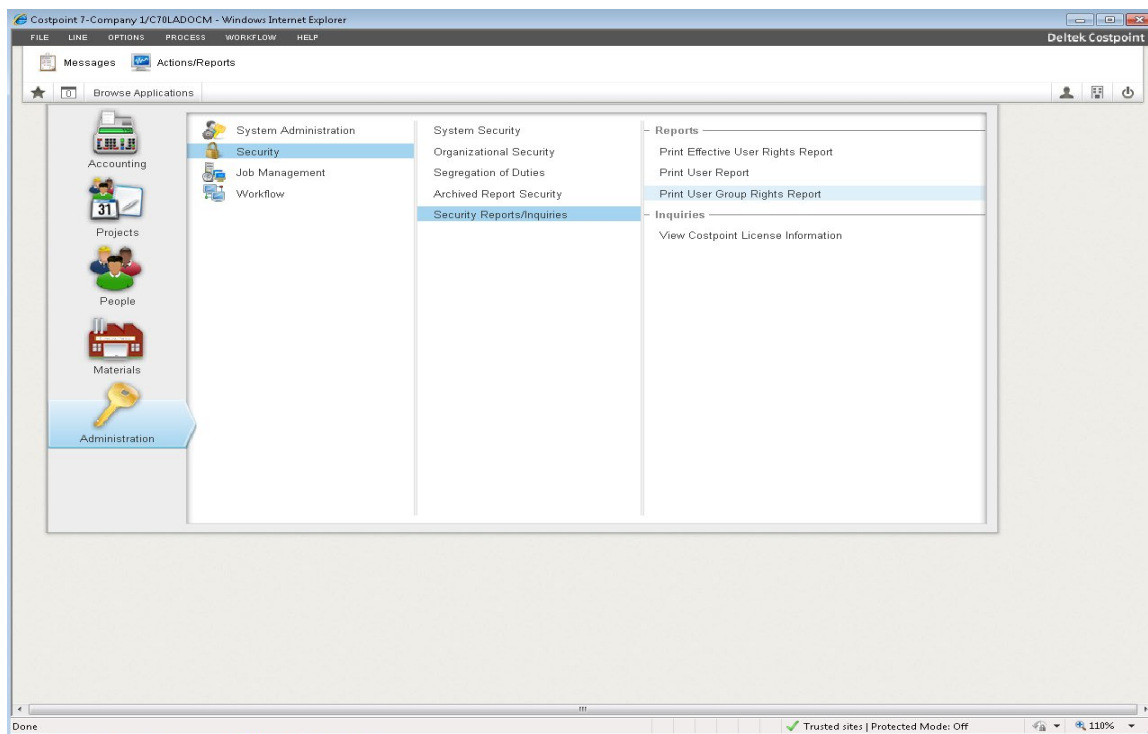
2. On the Deltak Costpoint 7 Welcome screen, complete the following fields.

Field Name	Action
Username	Enter CPSUPERUSER .
Password	Enter the CPSUPERUSER user password. The default is password .
System	Enter <Your_System_Name> , where <Your_System_Name> identifies the system name you assigned to your Costpoint 7.1.1 system during the Application Server Installation process. Typically, customers use a system name that is identical to their Costpoint 7.1.1 Database name, DELTEKCP.
SHOW ADDITIONAL CRITERIA	Click + to display these additional fields:

Field Name	Action
	<ul style="list-style-type: none"> Application — Accept the blank default value, or enter a specific Costpoint 7.1.1 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 7.1.1, 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.

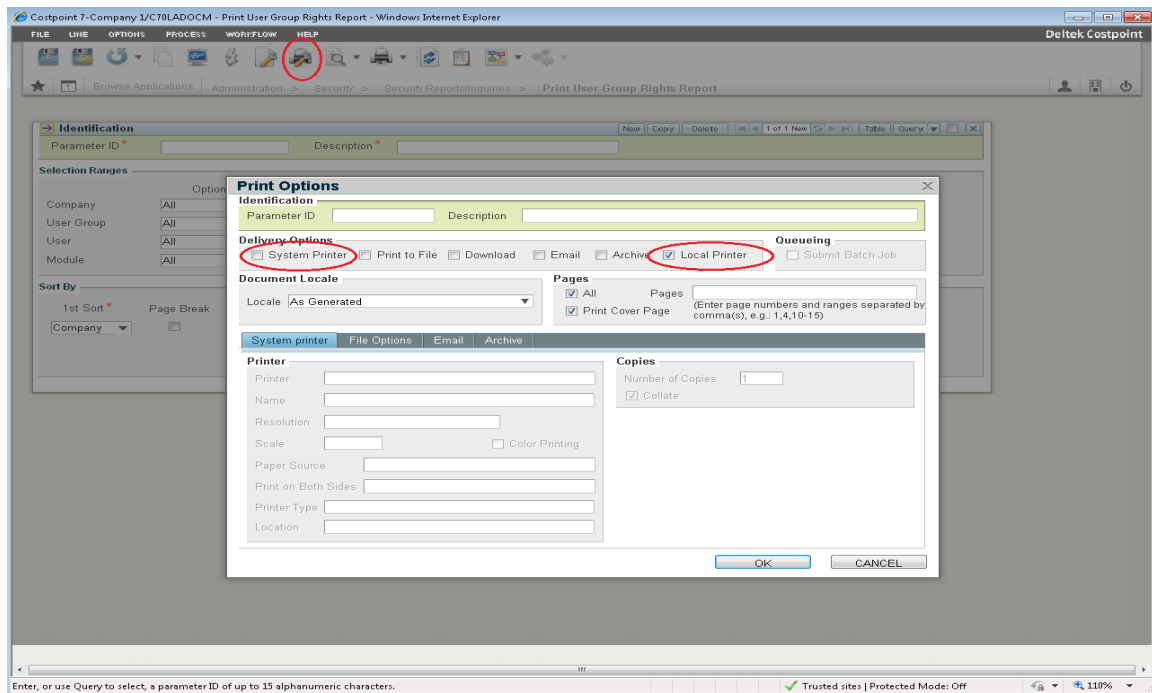
- Click **Log In**.
- Click **OK** if the following message displays:

“Warning: The custom programs and the database version are not compatible. The custom programs may not work properly. Please contact Custom Solutions at Deltek. Do you want to continue with the login?”
- From the main menu screen, click **Administration » Security » Security Reports/Inquiries » Print User Group Rights Report**.

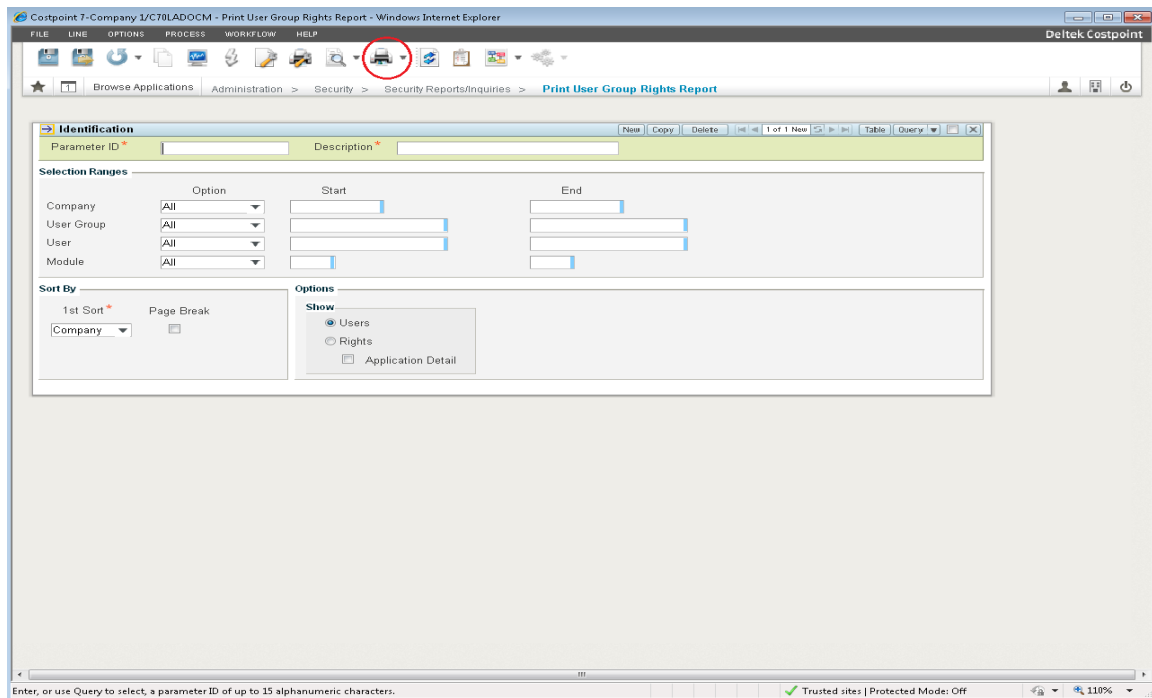


- On the Print User Group Rights Report screen, click **Print Options**.

Costpoint 7.1.1 Initial Log In Configuration



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



If the User Group Rights Report prints correctly, your Costpoint 7.1.1 Application Server printer setup is working properly. If the report does not print correctly, please contact Deltak Costpoint 7.1.1 Technical Support.

9. Click **File » Close Application** to close the Print User Group Rights Report screen.
10. 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.”
11. You can now begin to configure and use the Costpoint 7.1.1 system. Please refer to the “Related Documentation” section for a list of all documentation included with the Costpoint 7.1.1 release.
 Deltek 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** link (below the login information)
3. Name the Costpoint PWA, and then click **Add**.

You can now tap the icon on your Home screen to launch Costpoint as a standalone 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. Name the Costpoint PWA, and then tap **Add**.

You can now tap the icon on your Home screen to launch Costpoint as a standalone 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. Tap **Add** in the upper-right corner.
5. Name the Costpoint PWA.
6. Tap **Add** in the upper-right corner.

You can now tap the icon on your Home screen to launch Costpoint as a standalone 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**

Collation Conversion

Attention: If you have previously performed this step during a Costpoint 7.0.1 upgrade and converted your database(s)/schema(s) to binary collation, you are not required to repeat this step during this Costpoint 7.1.1 upgrade.

However, if you plan to support a European language character set specifically with the Euro symbol as part of any description or text and your current collation is not Latin1_General_BIN, you are required to run the conversion tool again to support those special characters/symbols.

If you are co-locating your Costpoint 7.1.1 instance with Time & Expense 10.0.0 or Budgeting & Planning 7.0.0, you are required to run the conversion tool in order to convert all co-located product schemas to Latin1_General_BIN.

This section provides instructions for converting your Costpoint 7.1.1 databases (TRANSACTION, ADMIN, and SYSTEM) from your current collation (for example, SQL_Latin1_General_CP1_CI_AS) to Latin1_General_BIN. Deltek now strongly recommends converting to the Latin1_General_BIN collation for proper application functionality.

Starting with Costpoint 7.0, if you use SQL Server RDBMS, you are recommended to change the default collation on your Costpoint database to Latin1_General_BIN. Deltek provides the collation utility, which is downloadable from DSM.

If you are converting your database collation, you must perform the steps in this section for all three of your Costpoint 7.1.1 databases or schemas on your Costpoint 7.1.1 database server(s) or from a Windows client machine with connectivity to the database server. Deltek highly recommends that you convert other schemas contained within the Costpoint databases for compatibility reasons.

Attention: Please note that the default SQL Server collation setting of **SQL_Latin1_General_CP1_CI_AS** should not be modified at the SQL Server **instance level**. Costpoint 7.1 requires a non-binary collation at the **instance level** for SQL Server installations.

Background

Starting with Costpoint 7.0 (CP7), Deltek strongly encourages clients using a Microsoft SQL Server database to validate the database collation currently used. If it does not match the recommended collation, run the provided collation conversion tool to switch to the recommended collation. (New customers installing Costpoint 7.0 (GA) or Costpoint 7.1.1 are not affected by this conversion as newly installed databases already have the proper collation.)

The text below is intended to provide background and rationale for this change as well as what impact the decision to convert or stay with the current collation will have on your enterprise.

Costpoint utilizes data filtering and sorting in performing many financial calculations and reporting. Depending on the situation, the filtering and sorting may be performed at any tier in the product - database, application server, or client browser/application. It is important that all tiers within the product perform data filtering and sorting the same way to have a guaranteed and predictable result. Upon evaluating various 3rd party products and technologies, which comprise the Costpoint technology stack, we found that all products (with the exception of Microsoft SQL Server) by default perform data comparison and sorting operations in the same way, treating data as case sensitive. Microsoft SQL Server is the only 3rd party product which by default treats data as case-insensitive. At the same time

SQL Server allows the database administrator to choose comparison and sorting rules by selecting the appropriate collation.

The Microsoft SQL Server collation supported with CP7 is Latin1_General_BIN, which makes the SQL Server database compare and sort data in the same way that Java, JavaScript, and Oracle database do. As part of the upgrade to CP7, Deltek is providing a Collation Conversion Tool for customers who use Microsoft SQL Server. For existing Costpoint upgrades, the Collation Conversion tool will need to be run after the upgrade has been successfully completed to bring the Costpoint database to the above supported collation. This is only for databases that are not currently using our recommended collation.

Attention: The Collation Conversion Tool will set the collation of your Microsoft SQL Server database to Latin1_General_BIN. This setting is binary case sensitive, and may have an impact on customer specific programs , reports, data imports, and other applications which interact with Costpoint and/or the underlying Costpoint database. These applications and programs may need to be modified and need to be re-tested as part of your Costpoint 7 upgrade.

For example:

- If custom scripts or stored procedures exist where the table and field names are in lower or mixed case, the scripts and stored procedures will need to be modified so that they match the object case sensitivity which is always uppercase for Costpoint tables.
- If end user queries refer to account names in lower case, and the account names are actually in mixed case or uppercase, the queries will need to be adjusted so that they use the same case as the account names.
- If reports or data import programs interact with Costpoint, they may need to be adjusted and re-tested as well.

Deltek recognizes that this can be a significant change for some customers during the Costpoint 7 upgrade. For additional assistance in evaluating this collation change, and its impact on your existing applications and programs, please contact Deltek Services. For a more detailed explanation of collation, please refer to the Microsoft online help.

If evaluation of the collation impact is not feasible in the time-frame defined for your Costpoint 7 transition, it's possible to run the collation conversion tool after the upgrade is already done.

Deltek will continue to provide support for clients who use a different collation unless Deltek has reason to believe that the reported issue is caused by the unsupported collation. Customers should weigh the level of effort associated with modifying and testing of internally developed programs interfacing with Costpoint against the risk associated with staying on their existing collation settings.

Deltek provides a Collation Conversion tool to help you make the switch to the new collation setting. The tool can be used to change the collation on any schema within a database. This tool converts the collation setting on the database as well as for objects owned by one schema. In order to convert more than one schema within the same database, run this tool multiple times.

The Collation Conversion tool uses the SQL DMO objects for which the SQL Server 2005 Backward Compatibility Feature Pack must be installed before starting the conversion

The entire collation conversion is split into multiple stages and restart capability is provided from the point of failure. You must correct the problem before re-executing the Collation Conversion tool from the point of failure.

Attention: If you are converting your database collation, you must repeat the steps in this section for each of your Costpoint 7.1.1 databases and/or schemas (TRANSACTION, ADMIN, and SYSTEM).

Prerequisites

Before you begin, the following prerequisites should be met:

- Database Server(s) must have SQL Server 2005 Backward Compatibility Feature Pack installed.
 - **SQLServer2005_BC_x64.msi** — For 64-bit installations
 - **SQLServer2005_BC.msi** — For 32-bit installations

Note: You can download this feature pack from Microsoft using the following link:
<http://www.microsoft.com/en-us/download/details.aspx?id=15748>.

- Microsoft .NET Framework 3.5 or 3.5 SP1 (3.5.1) and 1 GB free space to run the install.
- Make a full backup of the database(s) containing the following schemas (DELTEK, CPADMIN, CPSYSTEM).
- Make sure your Transaction schema name is in all uppercase "DELTEK."
- Make sure all Costpoint services and open database connections are closed before starting the collation conversion process.
- Stop the Costpoint 7.1.1 WebLogic Server.
- Complete the data analysis for mixed case records and fix any data that is reported in mixed case before running the collation conversion utility. To run this utility, you can follow the steps documented in the next section. If this step is completed during the "Checking Pre-Upgrade Transaction Database Status" stage, there is not a requirement to repeat this step.
- Due to the nature of updates to each participating column within the transaction schema, the log file for the transaction can grow to large size. If using full recovery option on the database level, please set your transaction log backup to every 15 mins to maximize log file usage during the conversion process period. Even if simple recovery option is selected, the log file can grow larger based on the table size and the number of records within a table. Please make sure enough disk space is available in the drive where the database log file is located to prevent unexpected behavior.

Microsoft SQL Server Data Analysis for Mixed Case Records

Purpose

If you are either upgrading Costpoint from CP 7.0.1 or have previously completed your upgrade to CP 7.1.1 but not yet performed the analysis of your transaction database for data inconsistencies, Deltek highly recommend that you perform this data validation step as part of supporting a case-sensitive database.

Note: Deltek recommends that you perform this step as a precursor to running the upgrade or collation tool.

Please read the section on “Collation Conversion - Mixed Case Data Analysis” and follow the instructions on how to run the analysis and fix the data before proceeding with the actual conversion tool.

Collation Conversion

Purpose

This section provides instructions on how to perform the actual Collation Conversion on your Costpoint 7 Microsoft SQL Server database.

You must have Internet access on the machine where the Costpoint 7.1.1 installer is invoked in order to download the latest DeltekCostpointRequirementsINI.exe file automatically. The file contains the latest OS platforms and database versions supported. The file is automatically downloaded when you launch the Collation installation, assuming that your application server has Internet access.

If your application server does not have internet access, you will need to perform the steps in the [Latest Upgrade Files Download](#) section of this document before you run the DeltekCostpoint711Collation.exe file.

To convert your Costpoint database, complete the following steps:

1. From your Costpoint 7.1.1 Application server, stop the Costpoint 7.1.1 WebLogic Server if it is running.
2. Make a full backup of the database(s) containing the following schemas (**DELTEK**, **CPADMIN**, **CPSYSTEM**) before converting.

Note: You must have a good backup of all Costpoint databases and schemas before proceeding with the conversion.

3. Install the SQL Server 2005 Backward Compatibility Feature Pack as instructed in the prerequisites above.

Note: The backward compatibility feature must be installed on the database server where the collation conversion is desired.

4. Make sure all Costpoint services and open database connections are closed before starting the collation conversion process.
5. Locate and run **DeltekCostpoint711Collation.exe** to launch the Costpoint Collation conversion program.

Note: Due to enhanced security in Windows Server, it is advised to use the option to **Run as Administrator** when launching the installation executables even when the logged in user has local administrative rights. This option is accessed by right-clicking the installation executable file name in Windows Explorer, and selecting **Run as Administrator** to launch the program.

6. On the Welcome to the Deltek Costpoint Collation Conversion Wizard screen, click **Next >**.
7. On the License Agreement screen, review the license agreement, select **I accept the terms of the license agreement**, and click **Next >**.
8. On the Choose Database Collation Scripts Directory screen, click **Browse** to navigate to an installation location for the Costpoint Collation script files, and click **Next >**.

The default is **C:\Program Files\Deltek\Costpoint\7.1**. You will need to install to a different location for each of your schema conversions. Deltek recommends appending the name of each of your schemas to the default location:

- C:\Program Files\Deltek\Costpoint\7.1\DELTEK
- C:\Program Files\Deltek\Costpoint\7.1\CPADMIN
- C:\Program Files\Deltek\Costpoint\7.1\CPSYSTEM

9. On the Microsoft SQL Server Database Information screen, complete the following:

- **IP Address or Hostname** — Enter the IP address (for example, **10.2.2.154**) or hostname (for example, **dbsvr01**) of your Costpoint 7.1.1 database server. The default is your computer name.

Note: The IP Address or Hostname cannot be 127.0.0.1 or localhost.

- **Port** — Enter the port that your Costpoint 7.1.1 Transaction database server software uses to listen for requests. The default port for Microsoft SQL Server is **1433**.
- **Database Name** — Enter the name of your Costpoint 7.1.1 Transaction (**DELTEKCP**), Admin (**CPADMIN**), or System (**CPSYSTEM**) database.
- **Instance Name** — Enter the name of your corresponding Costpoint 7.1.1 database instance. The default is **LOCAL**.
- **User Name** — Enter the user (**DELTEK**, **CPADMIN**, or **CPSYSTEM**) for your corresponding Costpoint 7.1.1 database.
- **Password** — Enter the password for your corresponding Costpoint 7.1.1 database user.
- **Schema Name** — Enter the schema name (**DELTEK**, **CPADMIN**, or **CPSYSTEM**) for your corresponding Costpoint 7.1.1 database.

Note: The schema name is case-sensitive.

- **SA User Name** — Enter the name of your Microsoft SQL Server SA user. The default is **sa**.
- **SA User Password** — Enter the password for your Microsoft SQL Server SA user.

10. Click **Test Connection**.

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

"Connection Successful. Click Next."

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

11. After the message displays, click **Next >**.
12. On the Pre-Installation Summary screen, review the installation parameters you have selected:

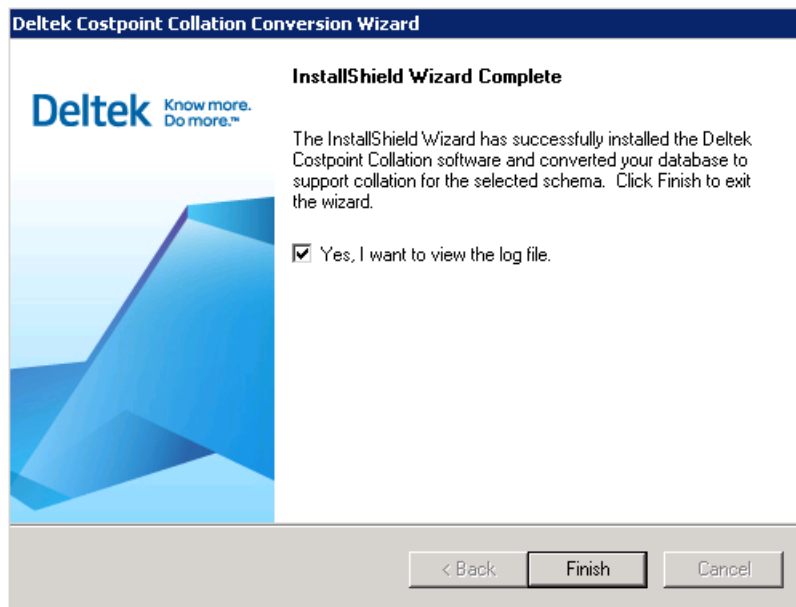
- If you want to change any settings, click **< Back** to go back and make the necessary changes.
 - If you are satisfied with these settings, click **Install >**.
13. When the "You are about to perform a collation conversion on your <Schema_Name> database schema, click select "Yes" to confirm or "No" to cancel." message displays, click **Yes** to begin the conversion.

Note: This conversion can take a long time to complete. Please do not interrupt it. A Windows Command Prompt will also open, showing the scripts being executed.

It will perform the following (stopping if any errors are encountered): Run Collation Conversion.

It is normal for Stage 4 and Stage 6 to run for longer period of time (in hours based on database size). During this time please don't kill the process from task manager or reboot your server.

14. When the conversion has completed, the InstallShield Wizard Complete screen displays, indicating that it has successfully installed the Deltek Costpoint Collation software and converted your database,



15. Perform the following:
- **Yes, I want to view the log file** — Select this check box to open the **DeltekCostpointCollationInstallLog_<date>_<time>.txt** file (from the **<COLLATION_INSTALL_DIR>\Database\Scripts\Collation** directory). It is selected by default.
 - Click **Finish** to exit the installation.
16. When the DeltekCostpointCollationInstallLog_<date>_<time>.txt file opens, perform the following:
- Search for **COLLATION CONVERSION COMPLETED** then the line **\$DBSUCCESS=TRUE**.
 - Above those lines you will also see the following (one DATABASE_NAME per run):

```

11-3-2011 03:16:54 (IS) AppendFileToLogFile - DATABASE_NAME
11-3-2011 03:16:54 (IS) AppendFileToLogFile - -----
11-3-2011 03:16:54 (IS) AppendFileToLogFile - CP_TRANS_DB
11-3-2011 01:51:46 (IS) AppendFileToLogFile - CP_SYSTEM_DB
11-3-2011 01:58:38 (IS) AppendFileToLogFile - CP_ADMIN_DB
11-3-2011 03:16:54 (IS) AppendFileToLogFile -
11-3-2011 03:16:54 (IS) AppendFileToLogFile - (1 rows affected)
11-3-2011 03:16:54 (IS) AppendFileToLogFile - TABLE_NAME
11-3-2011 03:16:54 (IS) AppendFileToLogFile - -----
11-3-2011 03:16:54 (IS) AppendFileToLogFile -
11-3-2011 03:16:54 (IS) AppendFileToLogFile - (0 rows affected)
11-3-2011 03:16:54 (IS) AppendFileToLogFile -
11-3-2011 03:16:54 (IS) AppendFileToLogFile - Thu Nov 03 03:16:11 2011 -- COLLATION CONVERSION COMPLETED
11-3-2011 03:16:54 (IS) AppendFileToLogFile - $DBSUCCESS=TRUE
11-3-2011 03:16:54 (IS) AppendFileToLogFile - End

```

Note: Finding the above text proves that you have successfully converted your database schema.

You must repeat this procedure for each of your Costpoint 7.1.1 databases (TRANSACTION, ADMIN, and SYSTEM).

Troubleshooting

This section provides guidance for troubleshooting issues encountered with the Collation Conversion tool.

Failure after Stage 0 – DMO Test

If you encounter a failure during the Change Collation conversion process, you may see the following message in the log file: **Stage 0 - DMO Test Failed**.

In order to fix the problem, install the SQL Server 2005 Backward Compatibility Components Feature Pack that is included with the distribution. The files can be found in your **<COLLATION_INSTALL_DIR>\Database\Scripts\Collation** folder.

The file names are:

- **SQLServer2005_BC_x64.msi** — Use for 64 bit installations.
- **SQLServer2005_BC_x86.msi** — Use for 32 bit installations.

Failure in Stage 7 – Creation of Foreign Keys

During the change collation process to Latin1_General_BIN, when re-creating foreign keys on the Costpoint tables, it is possible to run into failures in Stage 7. This can happen even though the same foreign key constraint existed on the referencing table before the change in collation. Failure in any foreign keys will result in a failed status of the conversion program.

The error message is visible in the log file found in **<COLLATION_INSTALL_DIR>\Database\Scripts\Collation\Log**. The SQL script that failed is named **<DB_NAME>_<SCHEMA NAME>_CreateScript.sql** and can be found in

<COLLATION_INSTALL_DIR>\Database\Scripts\Collation\DBCollationScripts. The information and location is only provided for informational message and the actual commands needed to re-create are contained within the log file.

One common reason for this failure is the case-sensitivity of the data after the collation change to Latin1_General_BIN. If the data in the referencing table is not in the same case as the corresponding data in the referenced table, it will result in failure during the creation of foreign keys.

The solution is to update the data in the referencing table to match the case of the corresponding data in the referenced table and then restart the Collation Conversion tool. Alternately, you can update the Primary Key in the referenced table if more than one child table references this Primary Key.

Towards the verification section in Stage 9, if there are any foreign key failures, all missing foreign key will be listed similar to the following along with the commands needed to re-create.

3-16-2012 18:18:33 (IS) AppendFileToLogFile - The following foreign keys are missing, please correct the necessary data and rebuild the keys for proper application functionality:

3-16-2012 18:18:33 (IS) AppendFileToLogFile -

3-16-2012 18:18:33 (IS) AppendFileToLogFile - Missing Foreign Key:F21766

3-16-2012 18:18:33 (IS) AppendFileToLogFile - ALTER TABLE [DELTEK].[X_AOPPLNR_IEPD] ADD CONSTRAINT [F21766] FOREIGN KEY

3-16-2012 18:18:33 (IS) AppendFileToLogFile - (

3-16-2012 18:18:33 (IS) AppendFileToLogFile - [SOURCE_ID]

3-16-2012 18:18:33 (IS) AppendFileToLogFile -) REFERENCES [X_AOPPLNR_SFD] (

3-16-2012 18:18:33 (IS) AppendFileToLogFile - [SOURCE_ID]

3-16-2012 18:18:33 (IS) AppendFileToLogFile -) ON DELETE CASCADE

3-16-2012 18:18:33 (IS) AppendFileToLogFile - GO

3-16-2012 18:18:33 (IS) AppendFileToLogFile -

3-16-2012 18:18:33 (IS) AppendFileToLogFile -

3-16-2012 18:18:33 (IS) AppendFileToLogFile - Missing Foreign Key:F21767

3-16-2012 18:18:33 (IS) AppendFileToLogFile - ALTER TABLE [DELTEK].[X_AOPPLNR_SFRD] ADD CONSTRAINT [F21767] FOREIGN KEY

3-16-2012 18:18:33 (IS) AppendFileToLogFile - (

3-16-2012 18:18:33 (IS) AppendFileToLogFile - [SOURCE_ID]

3-16-2012 18:18:33 (IS) AppendFileToLogFile -) REFERENCES [X_AOPPLNR_SFD] (

3-16-2012 18:18:33 (IS) AppendFileToLogFile - [SOURCE_ID]

3-16-2012 18:18:33 (IS) AppendFileToLogFile -) ON DELETE CASCADE

3-16-2012 18:18:33 (IS) AppendFileToLogFile - GO

For example, in the following scenario, the creation of foreign key constraints F21766 and F21767 failed during the collation conversion process. To rectify this issue, find the rows in the referencing table (X_AOPPLNR_SFRD) that do not match rows in the referenced table (X_AOPPLNR_SFD) and re-run the statement to create the foreign keys. If the issue is due to the case-sensitivity of the data, the corresponding rows in the referenced table are updated.

```
SELECT SOURCE_ID FROM X_AOPPLNR_SFRD A WHERE NOT EXISTS (SELECT * FROM X_AOPPLNR_SFD B
WHERE B.SOURCE_ID = A.SOURCE_ID)
```

```
GO
```

```
UPDATE X_AOPPLNR_SFD SET SOURCE_ID = 'DIRECT' WHERE SOURCE_ID = 'Direct'
```

```
GO
```

```
ALTER TABLE [DELTEK].[X_AOPPLNR_IEPD] ADD CONSTRAINT [F21766] FOREIGN KEY
```

```
(
```

```
[SOURCE_ID]
```

```

        ) REFERENCES [X_AOPPPLNR_SFD] (
            [SOURCE_ID]
        ) ON DELETE CASCADE

GO

ALTER TABLE [DELTEK].[X_AOPPPLNR_SFRD] ADD CONSTRAINT [F21767] FOREIGN KEY
(
    [SOURCE_ID]
) REFERENCES [X_AOPPPLNR_SFD] (
    [SOURCE_ID]
) ON DELETE CASCADE

GO

```

After successfully creating all the listed failed foreign keys, re-run the conversion tool to confirm the final step is completed with a successful message. Re-running the installer will only verify that all required foreign keys are re-created and no further action is necessary.

For example, during the creation of constraints, if the create script fails midway through the execution, re-executing the script may result in other types of errors because some of the constraints were created previously.

Note: If you run into errors during collation conversion and are unable to troubleshoot the issue, please contact Deltek Technical Support.

Data Consistency Check and Validation

With the collation change, the data is now sensitive to application behavior. Even with all sections of the collation conversion being successful, there are application behaviors that will fail to pick up records when data is in mixed case where it is expected to be all in upper-case. In order to aid in earlier deduction of this problem, some key tables in Costpoint are analyzed during the final step of the verification. If all verification is completed successfully, the following will be the only message you will see towards the data consistency check.

```

3-16-2012 18:18:33 (IS) AppendFileToLogFile - Stored Procedure spCheckDataConsistency Created Successfully
3-16-2012 18:18:33 (IS) AppendFileToLogFile - Total Number of Columns being analyzed: 8415
3-16-2012 18:18:33 (IS) AppendFileToLogFile -
3-16-2012 18:18:33 (IS) AppendFileToLogFile - Fri Mar 16 18:12:02 2012 -- Stage 9 Check Data Consistency Processed Successfully ...

```

If any of the data consistency check fails, this section will contain the table and column information and a list of unique values that has mixed case data. The list here does not represent the number of records that are affected; it only lists unique values that are in mixed case. You have to correct the data to upper case before application usage for proper application functionality. If more than one table is listed, all actions will have to be completed before proceeding with the application usage. The total number of columns analyzed may vary based on any custom tables created in a specific client environment.

Unable to Connect to Costpoint 7.1.1 after Collation Conversion

If you are unable to connect to Costpoint 7.1.1 after converting the collation on all three of your database schemas (Transaction, Admin, and System), you need to check the following:

- **Start Costpoint 7.1 Config Utility** — On the Costpoint tab, on the Database Information tab, you may need to update the User under your Meta Segment and Admin Segment sections. The user

name case will need to match the case of your schema name for all segments. The Data Segment will be fine since DELTEK is created in uppercase automatically for you.

- **Start Costpoint 7.1 DBWizard** — Re-run the Link-View option.
- **Costpoint 7.1.1 Windows Service** — Stop and restart your Costpoint 7.1.1 Windows service.

Post-Installation Configuration

System Configuration Installation

The steps to upgrade other Costpoint 7.0.1 systems to Costpoint 7.1.1 are detailed in this section.

Attention: The database upgrades to Costpoint 7.1.1 for the additional systems must have already been completed before performing this section.

You must perform this step on your Costpoint 7.1.1 application server.

You must have Internet access on the machine where the Costpoint 7.1.1 installer is invoked in order to download the latest DeltekCostpointRequirementsINI.exe file automatically. The file contains the latest OS platforms and database versions supported. The file is automatically downloaded when you launch the System Configuration installation, assuming that your application 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 Upgrade Files Download](#) section of this document before you run the DeltekCostpoint711SystemConfiguration.exe file.

To upgrade other Costpoint systems, complete the following steps:

1. Run the **DeltekCostpoint711SystemConfiguration.exe** file to launch the Costpoint 7.1.1 System Configuration 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 Costpoint screen, click **Next >**.
3. On the License Agreement screen, review the license agreement, select **I accept the terms of the license agreement**, and click **Next >**.
4. On the Choose Deltek Costpoint Installation Directory screen, click **Browse** to navigate to the location of your Deltek Costpoint 7.1.1 software, and click **Next >**

The default option is **C:\Deltek**. Click **Next >**.

5. On the Costpoint System Information screen, locate the **System Name** field and select one of your additional Costpoint 7.0.1 System Names from the drop-down list, and click **Next >**.
6. On the Microsoft SQL Server SA User Information screen, complete the following fields, and click **Next >**.

Schema Tablespace Information	Field Name	Action
Costpoint Transaction Information	SQLServer SA User Name	Enter your Microsoft SQL Server SA user name. The default value is sa .
	SQLServer SA User Password	Enter the password for your Microsoft SQL Server SA user.
Costpoint Admin Information	SQLServer SA User Name	Enter your Microsoft SQL Server SA user name. The default value is sa .
	SQLServer SA User Password	Enter the password for your Microsoft SQL Server SA user.
Costpoint System Information	SQLServer SA User Name	Enter your Microsoft SQL Server SA user name. The default value is sa .
	SQLServer SA User Password	Enter the password for your Microsoft SQL Server SA user.

- On the Deltek Costpoint System Install Type screen, select **Upgrade Install**, and click **Next >**.
One of the following screens displays:
 - Choose License File.
 - Pre-Installation Summary.
- If the Choose License File screen displays, click **Browse** to navigate to the folder containing the Deltek supplied LICENSE.ZIP file, and click **Next >**.
- 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 Changes for Costpoint 7.1.1](#) section of this document. The installation process will stop if any errors are encountered. If any errors occur during the installation, please refer to the [Troubleshooting Instructions](#) section of this document.

- On the InstallShield Wizard Complete screen, select the **Yes, I want to view the log file** check box to open the DeltekCostpoint711SystemConfigurationLog_<date>_<time>.txt file from the C:\Program Files\Deltek\Costpoint\7.1.1\logs directory).
This check box is selected by default.
- Click **Finish** to exit the installation.
- When the DeltekCostpoint711SystemConfigurationLog_<date>_<time>.txt file opens, do a search for the search string **error**, and report any found to Deltek Costpoint Technical Support.

13. Repeat this procedure for any additional Costpoint 7.0.1 systems that you want to convert to Costpoint 7.1.1.

Apply Latest Costpoint 7.1.1 Hot Fixes

After you have a functioning Costpoint 7.1.1 environment, follow the **DeltekCostpoint711DeployingHotFixes.pdf** installation document to install the latest Costpoint 7.1.1 hot fixes.

WebLogic Server Configuration

The following methods to start and stop your Costpoint 7.1.1 WebLogic Server are detailed in this section:

- Start the Costpoint 7.1.1 WebLogic Server as a Windows service
- Start the Costpoint 7.1.1 WebLogic Server from the Windows Start menu
- Start the Costpoint 7.1.1 WebLogic Server from a Windows Command Prompt
- Stop the Costpoint 7.1.1 WebLogic Server as a Windows service
- Stop the Costpoint 7.1.1 WebLogic Server from a Web browser

Start Costpoint 7.1.1 WebLogic Server as a Windows Service

The steps to start your Costpoint 7.1.1 WebLogic Server as a Windows service are detailed in this section.

This step must be performed on your Costpoint 7.1.1 WebLogic application server.

To start your Costpoint 7.1.1 WebLogic Server when it is installed as a Windows service, complete the following steps:

1. Click **Start » Administrative Tools » Services**.
2. On the Services window, scroll down the **Services** list, right-click the **Costpoint 7.1.1** service, and click **Properties** on the shortcut menu.
3. On the Costpoint 7.1.1 Properties screen, click the General tab.
4. Click **Start** to start the Costpoint 7.1.1 service.

The service will indicate that it started immediately. However, please note that it will take several minutes for the Costpoint 7.1.1 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 7.1.1 service, check the C:\Deltek\Costpoint\71\logs\DEServer.log file and report any errors to Deltek Costpoint 7.1.1 Technical Support.

5. Click **OK** to close the Costpoint 7.1.1 Properties screen.
6. Close the Services window.

Start Costpoint 7.1.1 WebLogic Server from the Start Menu

The steps to start your Costpoint 7.1.1 WebLogic Server from the Windows Start menu are detailed in this section.

This step must be performed on your Costpoint 7.1.1 WebLogic application server.

To start your Costpoint 7.1.1 WebLogic Server from the Windows Start menu, complete the following steps:

1. Right-click **Start**, select **Search**, enter **Costpoint 7.1.1**, right-click **Start Costpoint 7.1.1**, 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. This will open a Windows Command Prompt and launch a command script that starts the Costpoint 7.1.1 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 7.1.1 WebLogic Server to start.

3. If your Costpoint 7.1.1 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 7.1.1 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\71\logs\DEServer.log file.
 - Contact Deltek Costpoint 7.1.1 Technical Support.

Start Costpoint 7.1.1 WebLogic Server from the Windows Command Prompt

The steps to start your Costpoint 7.1.1 WebLogic Server from a Windows Command Prompt are detailed in this section.

This step must be performed on your Costpoint 7.1.1 WebLogic application server.

To start your Costpoint 7.1.1 WebLogic Server from a command line shell, complete the following steps:

1. Open a Windows Command Prompt, navigate to the **C:\Deltek\Costpoint\71\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 7.1.1 WebLogic Server to start.
2. If your Costpoint 7.1.1 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 7.1.1 WebLogic Server encounters errors during the startup process, the message will not display, and the command line shell (DOS window) may terminate.
3. If you do not receive the message or the command line shell (DOS window) terminates, you need to:
 - Make a copy of the C:\Deltek\Costpoint\71\logs\DEServer.log file.
 - Contact Deltek Costpoint 7.1.1 Technical Support.

Stop Costpoint 7.1.1 WebLogic Server as a Windows Service

The steps to stop your Costpoint 7.1.1 WebLogic Server when it is running as a Windows service are detailed in this section.

This step must be performed on your Costpoint 7.1.1 WebLogic application server.

To stop your Costpoint 7.1.1 WebLogic Server when it is installed as a Windows service, complete the following steps:

1. Click Windows **Start » Administrative Tools » Services**.
2. On the Services window opens, scroll down the Services list, right-click the **Costpoint 7.1.1** service, and click **Properties** on the shortcut menu.
3. On the Costpoint 7.1.1 Properties screen, click the General tab.
4. Click **Stop** to stop the Costpoint 7.1.1 service.
5. Click **OK** to close the Costpoint 7.1.1 Properties screen.
6. Close the Services window.

Stop Costpoint 7.1.1 WebLogic Server from the Web Browser

The steps to stop your Costpoint 7.1.1 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 7.1.1 WebLogic application server.

To stop your Costpoint 7.1.1 WebLogic Server from a Web browser, complete the following steps:

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 7.1.1 WebLogic application server and **<Port>** identifies the unique port number that your Costpoint 7.1.1 WebLogic application server uses to listen for connections.

You specified this port value during the Costpoint 7.1.1 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, select the **Control** tab.
6. Select the check 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 is displayed, click **Yes**.
9. Close the Web browser screen.

Change CPSUPERUSER User's Password

The steps to change the CPSUPERUSER user's password are detailed in this section.

This step may be performed from any Windows client workstation that has TCP/IP access to your Costpoint 7.1.1 WebLogic application server.

To change the CPSUPERUSER user's password, complete the following steps:

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 7.1.1 WebLogic application server and <Port> identifies the unique port number that your Costpoint 7.1.1 WebLogic application server uses to listen for connections. You specified this port value during the Costpoint 7.1.1 software installation. The default is **7009** (for example, **http://10.2.2.154:7009**).

Or where <WebServerIPAddress or ComputerName> identifies your Costpoint 7.1.1 IIS Web server (for example, **http://10.2.2.156/cpweb**).

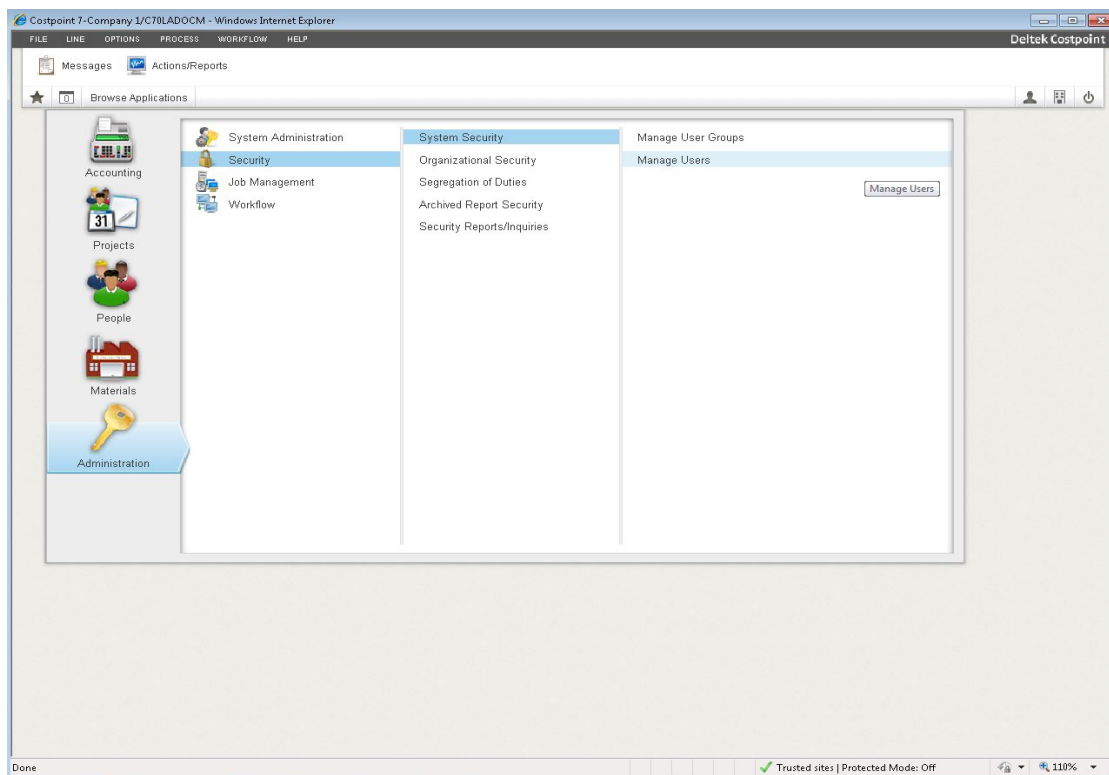
2. On the Deltek Costpoint 7 Welcome screen, complete the following fields.

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 7.1.1 system during the Application Server Installation process. Typically, customers use a system name that is identical to their Costpoint 7.1.1 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 7.1.1 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 7.1.1, review the online help for a detailed explanation of the value you can select for this field.

Field Name	Action
Remember log in information	Select this check box to have the system remember your login information. This option is not selected by default.

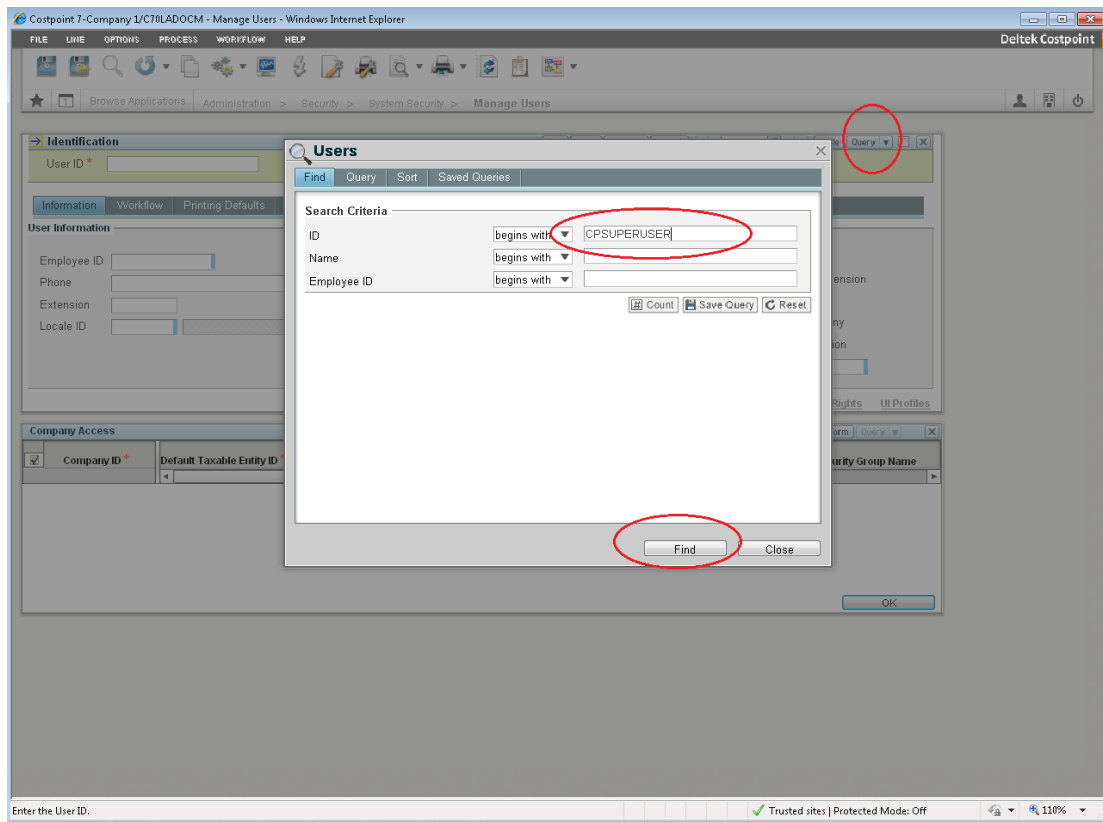
- Click **Log In**.
- Click **OK** if the following message displays:

“Warning: The custom programs and the database version are not compatible. The custom programs may not work properly. Please contact Custom Solutions at Deltek. Do you want to continue with the login?”
- From the main menu screen, click **Administration » Security » System Security » Manage Users**.



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

Post-Installation Configuration



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

Post-Installation Configuration

The screenshot shows the 'Manage Users' window in a web browser. The 'Authentication' tab is active. The 'Authentication Method' is set to 'Costpoint Database'. The 'Costpoint Password' and 'Verify Password' fields are empty and highlighted with red circles. The 'Company Access' table is visible below the authentication settings.

Company ID	Default Taxable Entity ID	Org Security Group ID	Labor	SSN	Cost	Price	Company Name	Org Security Group Name
1	ALL						Company 1	Group Code to all Orgs
APPLEJACK2	1234567869	ALL					Apple Jacks 2	ALL orgs
3	54-5665897	3ALL					European Exchange Company	Comp 3 OrgSec Grp-AllOrg
MTCORP	2323						MTCORP	
WEB	WEIN						Web Company	
711BIGBYTE	711BIG1	ALL					711 Big Byte	All

- After the CPSUPERUSER user information loads in 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. 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.

- Click **Save**.
- After the confirmation message is displayed at the bottom of the screen, click **File » Close Application** to close the Enter/Manage Users screen.
- Click **File » Log-out** to exit out of Costpoint 7.1.1.
- Close your Web browser.
- 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 7.1.1 WebLogic application server and <Port> identifies the unique port number that your Costpoint 7.1.1 WebLogic application server uses to listen for connections. You specified this port value during the Costpoint 7.1.1 software installation. The default is 7009 (for example, **http://10.2.2.154:7009**).

Or where <WebServerIPAddress or ComputerName> identifies your Costpoint 7.1.1 IIS Web server (for example, **http://10.2.2.156/cpweb**).

14. On the Deltek Costpoint 7 Welcome screen, complete the following fields:

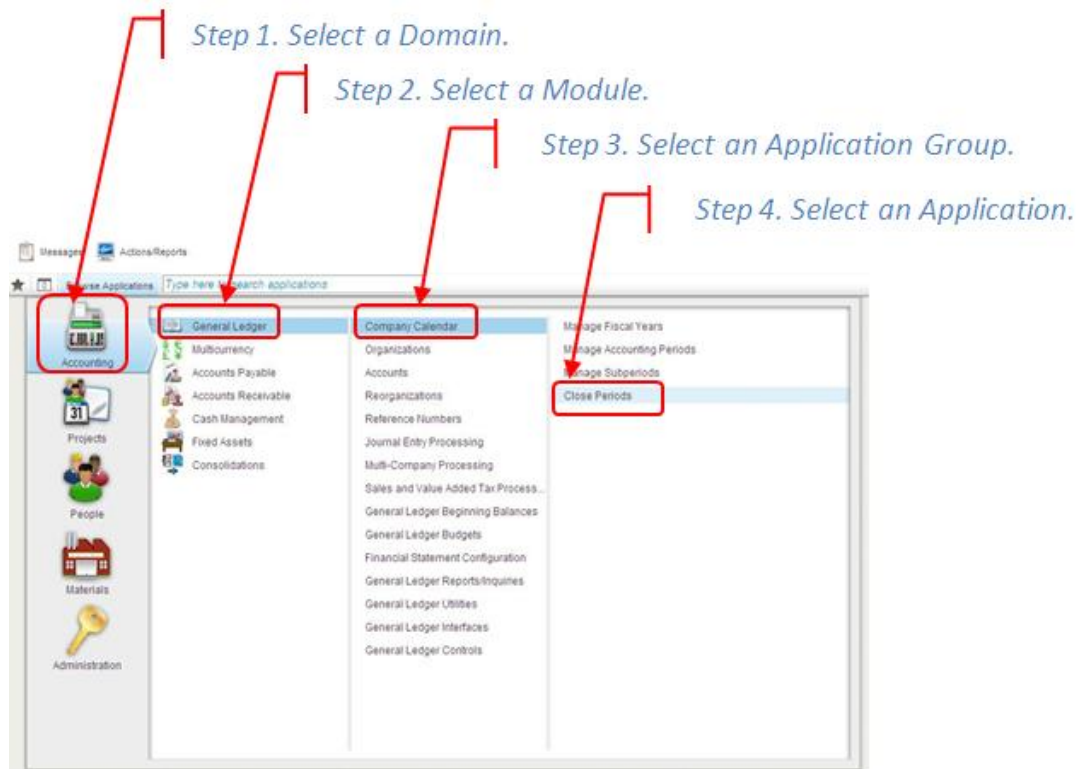
Field Name	Action
Username	Enter CPSUPERUSER
Password	Enter the CPSUPERUSER user's password. The default is password .
System	Enter <Your_System_Name> , where <Your_System_Name> identifies the system name you assigned to your Costpoint 7.1.1 system during the Application Server Installation process. Typically, customers use a system name that is identical to their Costpoint 7.1.1 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 7.1.1 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 7.1.1, 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.

15. Click **Log In**.

16. Click **OK** if the following message displays:

"Warning: The custom programs and the database version are not compatible. The custom programs may not work properly. Please contact Custom Solutions at Deltek. Do you want to continue with the login?"

A screen similar to the following displays. You can begin accessing and using the Costpoint 7.1.1 system.



If you are unable to log in to Costpoint 7.1.1, contact Deltek Costpoint 7.1.1 Technical Support.

Secure Sockets Layer (SSL) Encryption with Costpoint 7.1.1 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 7.1.1.

Costpoint Web's Support for SSL

Costpoint 7.1.1 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 7.1.1 environment.

Informational Resources for Implementing SSL

You can implement SSL on either or both of your Costpoint 7.1.1 system's IIS and WebLogic Server components. For help on implementing SSL, please refer to the following URLs:

- WebLogic Server
 - http://download.oracle.com/docs/cd/E12840_01/wls/docs103/secmanage/ssl.html — 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 7.1.1 and specific instructions for configuring SSL.
 - <http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/5e0119a8-deed-4056-9592-e721a4889a71.msp?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 7.1.1 system.

Troubleshooting Instructions

Troubleshooting instructions for problems with the Database Tier installation are detailed in this section.

How to Re-Run a Database Tier Installation that Failed

The steps to repair a Costpoint 7.1.1 Database Tier installation that has failed are detailed in this section.

If you encounter a failure during the Database Tier upgrade process, complete the following steps:

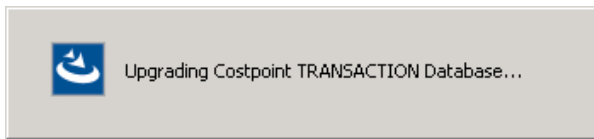
1. Click **OK** if, during the Database Tier Installation, you receive the following error message:
"Failed upgrading Costpoint (ADMIN, SYSTEM, or TRANSACTION) Database."
2. After the installation has completed and a failed installation error message displays on the InstallShield Wizard Complete screen, select the **Yes, I want to view the log file** check box.
This option opens the DeltekCostpoint711DatabaseTierInstallLog_<date>_<time>.txt file from the C:\Program Files\Deltek\Costpoint\7.1.1\logs directory.
3. Click **Finish** to exit the installation.
4. When the DeltekCostpoint711DatabaseTierInstallLog_<date>_<time>.txt file opens, run a search for the **error** search string. Report all errors found to Deltek Costpoint Technical Support.
5. Only after you have fixed the error, run the DeltekCostpoint711DatabaseTier.exe file to launch the Costpoint 7.1.1 Database Tier installation program again.

You will then see the following message:



6. Click **OK** to begin re-running the installation.

A message similar to the following displays:



Repairing the installation will re-run the installation from the point of failure. The way Deltek has written the database scripts, there is no harm in running them again. Database objects created, modified, or dropped during the initial run will not be repeated during subsequent runs.

Please do not interrupt the installation process.

7. After the installation has completed, select the **Yes, I want to view the log file** check box on the InstallShield Wizard Complete screen.

This opens the DeltekCostpoint711DatabaseTierInstallLog_<date>_<time>.txt file from the C:\Program Files\Deltek\Costpoint\7.1.1\logs directory).

8. Click **Finish** to exit the installation.
9. When the DeltekCostpoint711DatabaseTierInstallLog_<date>_<time>.txt file opens, search for the following keywords:
 - **Error** – Report any search results to Deltek Costpoint Technical Support. You can ignore **DBCC execution completed. If DBCC printed error messages, contact your system administrator** search results.
 - **Database Upgrade To Costpoint 7.1.1 META(SYSTEM) Completed Successfully** and then the line **\$DBSUCCESS=TRUE.**
 - **Database Upgrade To Costpoint 7.1.1 ADMIN Completed Successfully** and then the line **\$DBSUCCESS=TRUE.**
 - **Database Upgrade To Costpoint 7.1.1 TRANSACTION Completed Successfully** and then the line **\$DBSUCCESS=TRUE.**

Finding the three items listed above indicates that you have successfully installed the Costpoint 7.1.1 Database Tier software and that you have upgraded all of your Costpoint databases.

There will be a new log file created each time you have to repair the Database Tier install. You may need to look into multiple log files to find all of the above messages.

10. Return to the “Application Tier Install” section to continue with your Costpoint 7.1.1 installation.

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:

- Open Command Prompt in Administrator Mode
- Navigate to the directory where the installer is located
- Type **DeltekCostpoint711DatabaseTier.exe /?**

The instructions to download the latest Costpoint 7.1.1 Database upgrade and DeltekCostpointRequirementsINI 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, complete the following steps:

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

DeltekCostpoint711DatabaseTier.exe /filedynamicdownload

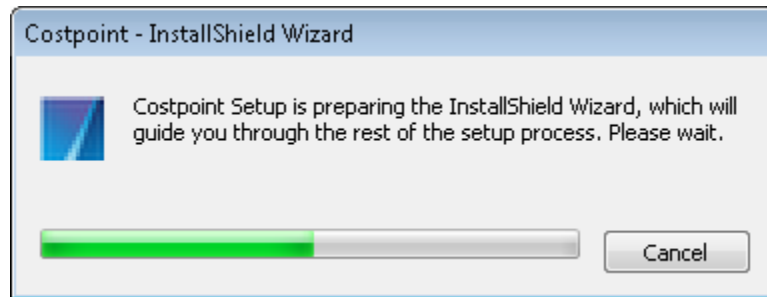
DeltekCostpoint711ApplicationTier.exe /filedynamicdownload

DeltekCostpoint711WebTier.exe /filedynamicdownload

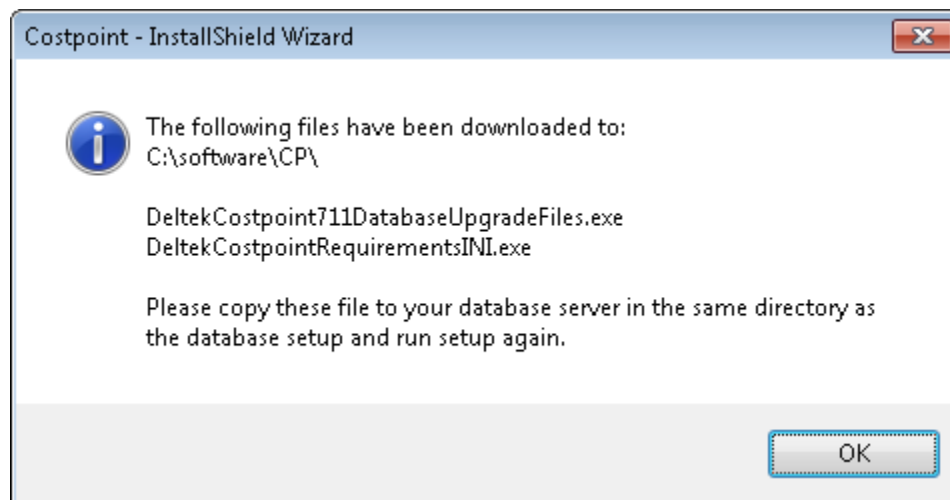
DeltekCostpoint711Collation.exe /filedynamicdownload

DeltekCostpoint711SystemConfiguration.exe /filedynamicdownload

You will see the following screen.



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



3. Copy the downloaded **DeltekCostpoint711DatabaseUpgradeFiles.exe/**
DeltekCostpointRequirementsINI.exe file(s) to your server, in the same folder as your '.exe'
installer file.

About Deltek

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