

# Deltek Time & Expense™ 10.0.0

New Installation Guide for Microsoft SQL  
Server®

December 11, 2017

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## Deployment Options

The Deltek Costpoint 7.1 Architecture allows for very flexible and scalable deployment options to meet the specific needs of your business. These options include, but are not limited to, multi-tenancy, optional components, authentication models, database options, load balancing and fail-over configurations, co-deployments with Budgeting & Planning and/or Time & Expense, access controls, and many other important features to consider.

Careful consideration of your deployment is an extremely important step in your planning process. Deltek has provided many resources to assist you in your deployment planning and implementation process and strongly recommends you leverage these resources in order to plan a smooth implementation of your Deltek deployment.

We strongly recommend starting with the document titled *DeltekCostpoint711DeploymentOptionsTechnicalOverview.pdf*, available in Deltek Software Management (DSM). The documents listed in the Related Documentation section include numerous important documents for you to consider as part of your planning and implementation process.

Time & Expense 10.0 **requires** you to carefully consider and choose a deployment option along with your Costpoint instance. You now have the following options:

- **Share Everything** — Robust model where Costpoint and Time & Expense are deployed as one system (one product, one menu), allowing you to leverage your hardware and operational investment



Deltek recommends you use this option, which is required for some current and future enhancements (for example, you must use this option if you plan to utilize Subcontractor Management capability).

- **Share Infrastructure** — Only share WebLogic deployment
- **Share Nothing** — Stand-alone deployment

### Subcontractor (SubK) Management Users

If you choose to leverage the new Subcontractor Management add-on, you must deploy and configure the Share Everything deployment model, where Costpoint and Time & Expense are **co-deployed** as a single system.

## New Installation Checklist

The following is a checklist of the overall steps needed to install Time And Expense 10.0.0. 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>
<b>Pre-Installation</b>		
	1. Costpoint 7.1.1 must be installed and operational.	
	2. All Costpoint 7.1.1 Hot Fixes must be installed.	
<b>Database Tier Installation</b>		
	1. Install Time And Expense 10.0.0 Database using Database Tier Installer.	
	2. Enable JDBC Distributed Transactions.	
<b>Application Tier Installation</b>		
	1. Install Time And Expense 10.0.0 Application Tier Software.	
	2. Configure Time And Expense 10.0.0 Access.	
	3. Reinstall Time And Expense 10.0.0 Windows Service.	
	4. Reconfigure Time And Expense 10.0.0 Windows Service.	
<b>Web Tier Installation (Microsoft IIS)</b>		
	1. Install Time And Expense 10.0.0 Web Tier Software.	
<b>Using Time And Expense 10.0.0</b>		
	1. Set Web Browser Internet options.	
	2. Log in to Time And Expense 10.0.0.	
	3. Install latest Time And Expense 10.0.0 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 later to view the documents listed in this section.

### Release Notes

Document Name	Description
Deltek Time And Expense 10.0 Database Changes	This document describes the database changes between the release of Time And Expense 9.0.1 and Time And Expense 10.0.0.
Deltek Time And Expense 10.0 Release Notes	<p><b>Major New Features</b> — Click this bookmark to view the major new features included in Time And Expense 10.0.0.</p> <p><b>Enhancements</b> — Click this bookmark to view the enhancements included in Time And Expense 10.0.0.</p> <p><b>Known Issues</b> — Click this bookmark to view the known issues that are part of the current release of Time And Expense 10.0.0.</p>

### Entity Relationship Diagrams (ERDs)

Document Name	Description
DeltekTimeAndExpense1000TransactionSchemaERD.zip	This ZIP file contains the ERD for the Deltek Time And Expense 10.0.0 Transaction schema. Use <b>index.htm</b> to view the ERD.

### Other Documents

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

Document Name	Description
Deltek Time And Expense 10.0.0 Menu Mapping 10.0.0 to 9.0.1	This document describes how the menu selections inside Time And Expense 10.0.0 map back to Time And Expense 9.0.1.
Deltek Time And Expense 10.0.0 Menu Mapping 9.0.1 to 10.0.0	This document describes how the menu selections inside Time And Expense 9.0.1 map to Time And Expense 10.0.0.
Deltek Costpoint Interface User Interface QRC	This document is a quick reference card which can be kept handy and used for reference as you navigate Time And Expense 10.0.0. It describes how to navigate through the application.
Deltek Costpoint Interface 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 Time And Expense 10.0.0. It lists the shortcut keys available in Time And Expense, as well as the toolbar icons and buttons.
Deltek Costpoint Interface Views QRC	This document is a quick reference card which can be kept handy and used for reference as you work with Time And Expense 10.0.0. It explains the differences between Table View and Form View.
Deltek Costpoint Interface Query and Lookup QRC	This document is a quick reference card which can be kept handy and used for reference as you work with Time And Expense 10.0.0. It explains how to use the query and lookup functions in Time And Expense.
Deltek Costpoint Interface Setting Up Printers QRC	This document is a quick reference card which can be kept handy and used for reference as you work with Time And Expense 10.0.0. It explains how to set up printers.

## New Installation Overview

This document provides instructions for installing the Deltek Time And Expense 10.0.0 software. During the installation process, you will perform the following:

- Ensure that your system meets the installation prerequisites.



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 Time And Expense 10.0.0.

- Install the Time And Expense 10.0.0 Database Tier software to create your Time And Expense 10.0.0 Transaction domain.
- Install the Time And Expense 10.0.0 Application Tier software.
- Configure Time And Expense 10.0.0 access.
- Install the Time And Expense 10.0.0 Web Tier software to your Internet Information Server, if applicable.



If you need help with this installation, please contact Time And Expense Technical Support at 877.HLP.PROJ (877-457-7765).

## Installation Package Contents

The Time And Expense 10.0.0 installation package contains the following:

- Time And Expense 10.0.0 Database Tier installer
- Time And Expense 10.0.0 Application Tier installer
- Time And Expense 10.0.0 Web Tier installer
- Deltek Time And Expense 10.0.0 New Installation Guide for Microsoft SQL Server

## Installation Prerequisites

### Database Tier Installation Prerequisites

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

Prerequisite Component	Details
Software	All product compatibility information is maintained in the Deltek Product Support Compatibility Matrix available on the Customer Care Support Site <a href="#">here</a> .  Please note the database compatibility levels: SQL Server 2016 (130), SQL Server 2014 (120), and SQL Server 2012 (110).
Passwords	To run the installation, a password is required for Microsoft SQL Server SA user or any user with “sysadmin” privileges.

Prerequisite Component	Details
Firewall Settings	<p>On your Database Server, the Microsoft SQL Server Instance Port (that is, <b>1433</b>) 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"> <li>▪ A dedicated port should be configured for the instance, and such a port should be open for Inbound and Outbound traffic.</li> <li>▪ SQL Browser Service must be enabled and running.</li> <li>▪ SQL Browser UDP Port (that is, 1434) should be open for Inbound and Outbound traffic.</li> </ul> <p>On your Database Server, make sure that <b>Network discovery</b> and <b>file sharing</b> options are switched on.</p>
SQL Server	<p>The Time And Expense 10.0.0 database user needs the following permissions granted:</p> <ul style="list-style-type: none"> <li>▪ Create Function.</li> <li>▪ Create Procedure.</li> <li>▪ Create Table.</li> <li>▪ Create View.</li> </ul>

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 Time And Expense 10.0.0 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 <a href="#">here</a>.</p> <p>Costpoint 7.1.1 must be installed and operational.</p> <p>All Costpoint 7.1.1 Hot Fixes must be applied.</p>

### Time And Expense 10.0.0 Server Startup Prerequisites

Before you start Time And Expense 10.0.0, the following must be met:

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

### Time And Expense 10.0.0 Initial Login Configuration Prerequisites

Before you can log into Time And Expense 10.0.0, 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 <a href="#">here</a>.</p> <p>Adobe Reader 8.0 or later. This is only required for users who want to print Time And Expense 10.0.0 reports in PDF format. Make sure that you select the <b>Display PDF in browser</b> option under the Preference settings for Adobe Acrobat Reader to avoid pulling up a blank IE 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 <a href="#">here</a>.</p> <p>Microsoft Internet Information Server 7.0</p>

### Installation Process for Time And Expense 10.0.0

The Time And Expense 10.0.0 installation process incorporates the following steps:

Component	Change Details
Database Tier Installation	The Database Tier installer creates the following, user defined, user and schema:

Component	Change Details
	<ul style="list-style-type: none"> <li>▪ Transaction Schema (that is, TC_0001)</li> </ul> <p>The Database Tier installer automatically performs all the following actions:</p> <ul style="list-style-type: none"> <li>▪ Restarting the Distributed Transaction Coordinator(MSDTC) Service (if applicable)</li> <li>▪ Creating Time And Expense TRANSACTION Database</li> <li>▪ Upgrading Time And Expense SYSTEM Database (if applicable)</li> </ul>
Application Tier Installation	<p>The Application Tier installer automatically performs all of the following actions:</p> <ul style="list-style-type: none"> <li>▪ Applying Cleanup_CP_Apps Scripts (if applicable)</li> <li>▪ Applying Menu_data Scripts</li> <li>▪ Applying TC.const Scripts</li> <li>▪ Applying TC.msg Scripts</li> <li>▪ Applying TEES Modules Scripts</li> <li>▪ Applying TM.msg Scripts</li> <li>▪ Applying UDT_Templates_Data Scripts</li> <li>▪ Applying UDT_TERMS Scripts</li> <li>▪ Applying TE Metadata Scripts</li> </ul>
Web Tier Installation	<p>The Web Tier installer automatically performs all of the following actions:</p> <ul style="list-style-type: none"> <li>▪ Extracting HelpFiles</li> <li>▪ Resetting Internet Information Server</li> </ul>

## Web Servers Supported In Time And Expense 10.0.0

The Time And Expense 10.0.0 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 Time And Expense 10.0.0 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 and Time And Expense 10.0.0 software is installed.

## Database Names

The table below lists the database names used in the installation instructions. Clients are free to choose the database name.

Database Name	Description
DELTEKTE	The name of your Time And Expense 10.0.0 database. This database includes the Transaction schema and objects.

## 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 Time And Expense 10.0.0 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 to 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](https://deltek.custhelp.com/app/answers/detail/a_id/52469)



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](#).



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 logon 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 <b>Time And Expense</b> from the drop-down list.
Refine by Category/Version	Expand Service Pack / Hot Fix from the drop-down list and select <b>10.0.0</b> .
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:
  - a. In the **Summary** column, click the link for the desired correction.
  - b. When the desired correction loads, click the links in the **Answers** section to download the files.

## System Requirements

The Time And Expense 10.0.0 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](#).



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



A hardware recommendations document should have previously been distributed to you. For future releases of Time And Expense, 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/app/answers/detail/a_id/38499)

<https://deltek.custhelp.com/ci/fattach/get/1072689/0/filename/DeltekProductSupportCompatibilityMatrix.pdf>

## Time And Expense 10.0.0 Log File Information

The table below provides information on the log files used by the Time And Expense 10.0.0 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 a separate file and the 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.
CP_DBConn_DEServer.log	This file lists the active connections used by the product at a 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 the name of the server will determine the name of the log file. CP_DBConn_<Server>.log

File Name	Description
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 the name of the server will determine the name of the log file. CP_<Server>.log.
CP_Security_DEServer.log	This file captures messages generated by the Costpoint Web security module. Messages such as invalid login attempt due to user id, password, insufficient parameters, and deactivated user account are captured here. In a clustered environment, each server will write to a separate log file, and the name of the server will determine the name of the log file. CP_Security_<Server>.log.
delteke.log	<p>This log file contains information that pertains to the entire domain. It consolidates log records from all application logs and a subset of events recorded in all server logs. All the information gathered is written into a single file.</p> <p>Note: Not all log messages are written into domain. Only those messages that match the defined severity are consolidated.</p>
service.log	<p>This log file contains messages generated by Costpoint Web windows service. It helps in troubleshooting issues related to service startup, which usually occur during the initial configuration stages. In addition to service-related messages, it also contains most of the information that is captured in the DEServer.log. So, once the initial startup issues are sorted out, it is suggested that you disable this log by editing the <b>InstallCPWebasService.cmd</b> (C:\Deltek\Costpoint\71\bin folder), removing the occurrence of "<b>-log:%CP_ROOT%\logs\service.log</b>". If you remove this after installing the service, you will need to uninstall and reinstall the service for the changes to take effect.</p>

## Pre-Installation Instructions

This section provides instructions for requirements prior to installing Time And Expense 10.0.0.

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

- Install and configure Costpoint 7.1.1.
- Apply the latest Costpoint 7.1.1 hot fixes.

### Install and Configure Costpoint 7.1.1

Time And Expense 10.0.0 runs on the Costpoint 7.1.1 framework. So before you can install Time And Expense 10.0.0, you must install Costpoint 7.1.1.

If you do not already have a functioning Costpoint 7.1.1 environment, follow the appropriate installation document to install Costpoint 7.1.1:

- [DeltekCostpoint711NewInstallationForMicrosoftSQLServer.pdf](#).
- [DeltekCostpoint711UpgradeInstallationForMicrosoftSQLServer.pdf](#).

Once you have a functioning Costpoint 7.1.1 environment, accomplish the next step below, *Apply Latest Costpoint 7.1.1 Hot Fixes*.

### Apply Latest Costpoint 7.1.1 Hot Fixes

Time And Expense 10.0.0 requires all Costpoint 7.1.1 hot fixes to be applied prior to installing Time And Expense 10.0.0.

Once you have a functioning Costpoint 7.1.1 environment, follow the appropriate installation document to install the latest Costpoint 7.1.1 framework update and all downloaded hot fixes:

- [DeltekCostpoint711FrameworkUpdateInstallation.pdf](#).
- [DeltekCostpoint711DeployingHotFixes.pdf](#).



Costpoint 7.1.1 Framework Update **MUST** be installed **BEFORE** installing Costpoint 7.1.1 Hot Fixes. Costpoint 7.1.1 Hot Fixes **MUST** be installed **BEFORE** installing Time And Expense 10.0.0.

Once you have the latest Costpoint 7.1.1 framework update installer loaded and have applied all Costpoint 7.1.1 hot fixes, go to the next section, *Database Tier Installation*.

## Database Tier Installation

This section provides instructions and recommendations for creating your Time And Expense 10.0.0 Transaction database and the corresponding users and schemas.

During this installation process, you will install the Time And Expense 10.0.0 Database Tier software to create and populate a Time And Expense 10.0.0 Transaction database schema where transactional data will be stored.



The Time And Expense Database Tier installer creates a SQL Server database user and corresponding schema with the same name.

### Before You Start

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

### Install Database Tier Software

The steps to install the Time And Expense 10.0.0 Database Tier software as well as create the Transaction database are detailed in this section.

You must perform this step on your database server.



For SQL Server cluster installations, the install directory must be a local drive as opposed to a shared drive.

You must have Internet access on the machine where the Time And Expense 10.0.0 installer is invoked in order to automatically download the latest DeltekTimeAndExpense1000DatabaseUpgradeFiles.exe and DeltekTimeAndExpense1000RequirementsINI.exe files automatically. The DeltekTimeAndExpense1000DatabaseUpgradeFiles.exe contains the latest database patch rollback scripts as well as the latest list of Time And Expense 9.0.1 database patches that have been worked into the upgrade. The TimeAndExpense1000RequirementsINI.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.



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 DeltekTimeAndExpense1000DatabaseTier.exe file.

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

1. Run the **DeltekTimeAndExpense1000DatabaseTier.exe** file to launch the Time And Expense 10.0.0 Database Tier installation program. The Welcome to the Time And Expense 10 Installer screen displays.



Due to enhanced security in Microsoft Windows Server 2012, 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 installer file in Windows Explorer and select **Run as Administrator**.

2. Click **Next >**.
3. On the License Agreement screen, review the license agreement, select the **I accept the terms of the license agreement** check box, and click **Next >**.
4. On the Choose Time And Expense Database Scripts Directory screen, click **Browse** to navigate to an installation location for the Time And Expense 10.0.0 Database Tier software. The default installation location is **C:\Program Files\Deltek\Time And Expense\10.0.0** (recommended). Click **Next >**.
5. On the Select Deltek Time And Expense Install Type screen, select **New Install** and click **Next >**.
6. On the Select Database Platform screen, select **Microsoft SQL Server** and click **Next >**.
7. On the Deltek Time And Expense 10.0.0 Transaction SQL Server Database Information screen, complete the following:

Field Name	Action
IP Address or Hostname	<p>Enter the IP address (for example, <b>10.2.2.154</b>) or hostname (for example, <b>dbsvr01</b>) of your Time And Expense 10.0.0 Transaction database server. The default value is your computer name.</p> <p>The values for the IP Address or Hostname cannot be <b>127.0.1.0.1</b> or <b>localhost</b>.</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 of the database server instance. The default port for SQL Server is <b>1433</b>.</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 Time And Expense database. The default value is <b>DELTEKTE</b>. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p><b>\$ - _</b></p>
Instance Name	<p>Enter the name of your database instance. The default value is <b>LOCAL</b>. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p><b>\$ - _</b></p>
User Name	<p>Enter the name of your Transaction user account. The default is <b>TC_0001</b>. The Time And Expense Installer creates a SQL Server schema with the same name as the user name. In addition to</p>

Field Name	Action
	standard alphanumeric characters, the following special characters are also supported: \$ - _
Password	Enter the password for your Transaction user account. In addition to standard alphanumeric characters, the following special characters are also supported: ' ~ # \$ ^ & ( ) - _ + = , .
Confirm Password	Reenter the password for your Transaction 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 <b>sa</b> . 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 or "sysadmin" user account. In addition to standard alphanumeric characters, the following special characters are also supported: ' ~ # \$ ^ & ( ) - _ + = , .

8. Click **Test Connection**. If you have entered the proper database connection information, a message similar to the following displays:

- **"DELTEKTE database and TC\_0001 user will be created. Click Next."**

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

9. After the **"DELTEKTE database and TC\_0001 user will be created. Click Next."** message displays, click **Next >**.

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

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

Once initiated, the installation process will commence and create objects needed for Time And Expense 10.0.0. Please do not interrupt the process. A Windows Command Prompt will appear on your screen that displays the scripts that are being executed.

The installation will perform the scenarios detailed in the [Installation Process for Time And Expense 10.0.0](#) 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.

11. On the InstallShield Wizard Complete screen, select the **Yes, I want to view the log file** check box to open the

DeltekTimeAndExpense1000DatabaseTierInstallLog\_<date>\_<time>.txt file from the C:\Program Files\Deltek\Time And Expense\10.0.0\Logs directory. This check box is selected by default.

12. Click **Finish** to exit the installation.
13. When the DeltekTimeAndExpense1000DatabaseTierInstallLog\_<date>\_<time>.txt file opens, search for the following keywords:
  - **“Error”** – Report any search results to Deltek Time And Expense Technical Support.
  - **“Database Installation For New Time And Expense 10.0.0 Completed Successfully”** and then the line **“\$DBSUCCESS=TRUE”**.

Finding the last item listed above indicates that you successfully installed the Time And Expense 10.0.0 Database Tier software and that you created your user (schema) successfully.

Make sure that your 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.

## Enabling JDBC Distributed Transactions

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

- If the installer is executed on the database server, all required steps to enable distributed transactions were performed during Time And Expense Database Tier installation. This is the most common and simple implementation for most clients and can proceed to application tier installation.
- 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 “Enable JDBC Distributed Transactions and XA for an Instance Using Time And Expense Installer”.
- If Time And Expense is set up using SQL Cluster configuration, please follow the steps documented under “Enable JDBC Distributed Transaction and XA for SQL Cluster Configuration”.

### Enable JDBC Distributed Transactions and XA for an Instance Using Time And Expense Installer

To perform this procedure, complete the following steps:

1. Create a backup of your Microsoft SQL Server master database.
2. Copy the **DeltekTimeAndExpense1000DatabaseTier.exe** installation file to this database server where Time And Expense database is created.
3. Run the **DeltekTimeAndExpense1000DatabaseTier.exe /enableXA** command to launch the Time And Expense Database Tier enable XA program.
4. On the Microsoft SQL Server for Deltek Time And Expense 10.0.0 Database Information screen, complete the following fields:

Field Name	Action
IP Address or Hostname	<p>Enter the IP address (for example, <b>10.2.2.154</b>) or hostname (for example, <b>dbsvr01</b>) of your Time And Expense 10.0.0 database server. The default value is your computer name.</p> <p>The value entered in the <b>IP Address</b> or <b>Hostname</b> field cannot be <b>127.0.1.0.1</b> or <b>localhost</b>.</p> <p>For SQL Cluster installations, you must specify the SQL Cluster Hostname.</p>
Port	<p>Enter the port that your Time And Expense 10.0.0 database server software uses to listen for requests. The default port for Microsoft SQL Server is <b>1433</b>.</p>
Instance Name	<p>Enter the name of your Time And Expense 10.0.0 database instance used during new install setup. The default value is <b>LOCAL</b>. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p><b>\$ - _</b></p>

Field Name	Action
SA User	<p>Enter the name of your Microsoft SQL Server SA user. The default is <b>sa</b>. 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>' ~ # \$ ^ &amp; ( ) - _ + = , .</p>

5. Click **Test Connection**. If you entered the proper database 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.
6. After the confirmation message displays, 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.”**

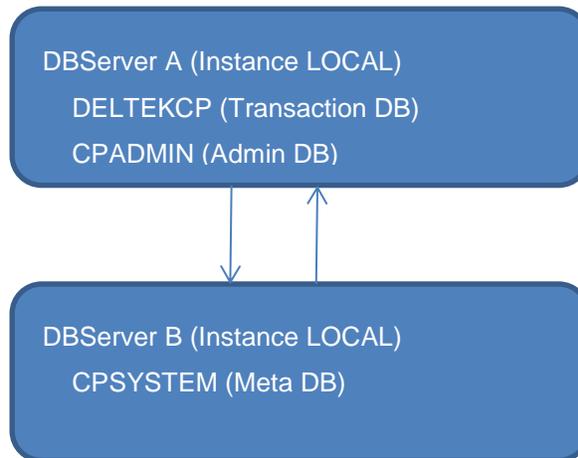


If your Time and Expense 10.0.0 transaction databases reside on different servers, you must perform all of the actions in this step against each of the other servers.

## Enable JDBC Distributed Transaction and XA for Remote Database Servers

If your Costpoint 7.1.1 and Time And Expense 10.0.0 databases reside on different database servers, you must perform this step in each of the servers.

An example for this configuration is shown below.

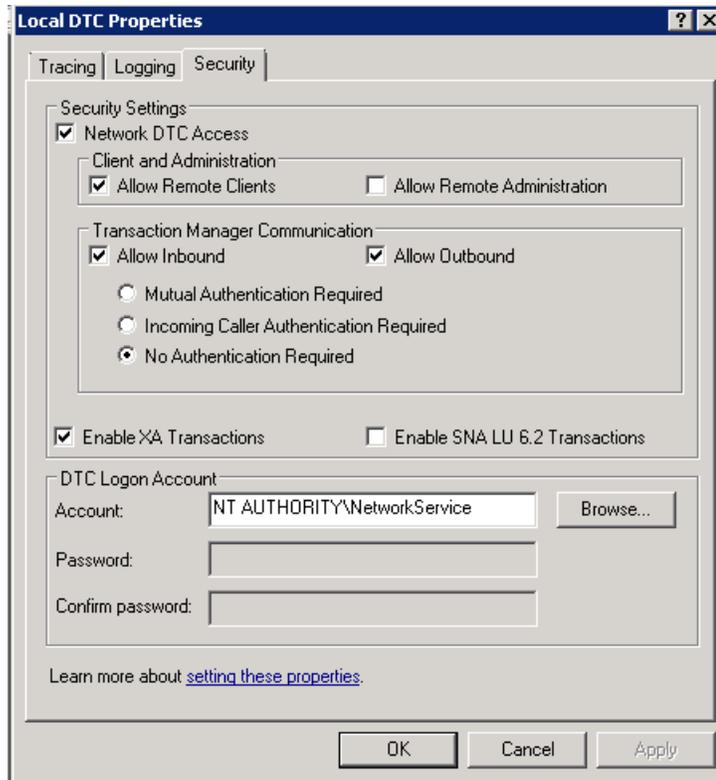


Based on the configuration above, all steps documented to enable distributed transaction should be done on both Server A and Server B.

### To enable distributed transaction, complete the following steps:

1. Perform this step for the database instance using the instructions on “Enable JDBC Distributed Transactions and XA for an Instance Using Time And Expense Installer”.
2. The sequence of steps to open “Component Services” on your server might be different based on your version of Windows OS version.
3. On the left navigation tree, click **Component Services » Computers » My Computer » Distributed Transaction Coordinator**.
4. Select **Local DTC**, right-click, and select **Properties**.
5. On **Local DTC Properties**, select the Security tab.
  - a. Select the **Network DTC Access** check box under **Security Settings**.
  - b. Select the **Allow Remote Clients** check box under **Client and Administration**.
  - c. Select the **Allow Inbound** and **Allow Outbound** check boxes under **Transaction Manager Communication**.
  - d. Select the **No Authentication Required** option.
  - e. Select the **XA Transactions** check box.
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**. A message “The MSDTC service has been restarted” should display.
8. Click **OK**.

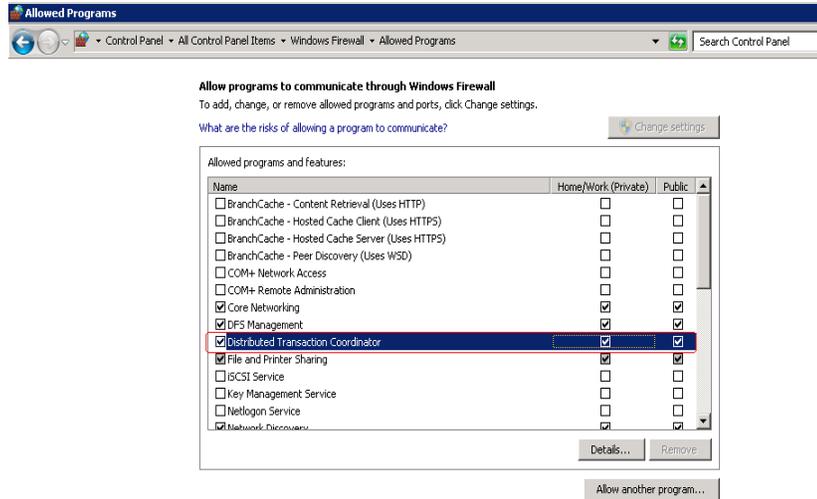
After completing the steps above, your screen selections should look similar to the figure shown below:



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.

9. If your database server is configured for Windows Firewall, and for DTC to function, follow the necessary firewall settings for MSDTC program.
  - a. To open Windows Firewall, click **Start » Control Panel**. In the search box, enter **firewall**, and click **Windows Firewall**.
  - b. In the left pane, click **Allow a program or feature through Windows Firewall**.
  - c. Click **Change settings**. If you're prompted for an administrator password or confirmation, enter the password or provide confirmation.
  - d. Select the **Private** and **Public** check boxes next to **Distributed Transaction Coordinator**, and click **OK**.

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



10. Reboot the server after completing all of the steps above.
11. 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”.
12. Proceed to the [Application Tier Installation](#) section.

## Enable JDBC Distributed Transaction and XA for SQL Cluster Configuration

If your Time And Expense database resides on SQL Cluster configuration and you want to enable the JDBC distributed transaction, complete the following steps:

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



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. Select your configured Distributed Transaction Coordinator Service Name Ex. **DELTEKDTC**, right-click, and select **Properties**.
5. Select the **Security** tab.
6. Select the **XA Transactions** check box.

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**. A message “The MSDTC service has been restarted” should display.
9. Reboot the server after performing the steps above.
10. Repeat for each node participating in the cluster.
11. Proceed to the [Application Tier Installation](#) section.

## Application Tier Installation

The Time And Expense 10.0.0 system uses Oracle's WebLogic Server 12.1.3 and Costpoint 7.1.1 for its application server tier. During the Application Tier installation process, you will install the Time And Expense 10.0.0 software.

As previously mentioned in the [Pre-Installation Instructions](#) section, the Time And Expense 10.0.0 WebLogic application server must already contain WebLogic Server 12.1.3 and Costpoint 7.1.1.

### Before You Start

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

### Install Application Tier Software

This step provides instructions for installing the Deltek Time And Expense 10.0.0 software.

You must perform this step on the machine that will serve as your Time And Expense 10.0.0 **application** server.

You must have Internet access on the machine where the Time And Expense 10.0.0 installer is invoked in order to download the latest DeltekTimeAndExpense1000RequirementsINI.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.



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 Deltek TimeAndExpense1000ApplicationTier.exe file.

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

1. Run the **DeltekTimeAndExpense1000ApplicationTier.exe** file to launch the Time And Expense 10.0.0 Application Tier installation program. The Welcome to the Time And Expense 10 Installer screen displays.



Due to enhanced security in Microsoft Windows Server 2012, 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 DeltekTimeAndExpense1000ApplicationTier.exe file in Windows Explorer and select **Run as Administrator**.

2. Click **Next >**.
3. On the License Agreement screen, review the license agreement, select the **I accept the terms of the license agreement** check box, and click **Next >**.
4. On the Select Deltek Costpoint 7.1.1 Installation Directory screen, navigate to the location where your Costpoint 7.1.1 software is installed. The default directory is **C:\Deltek** (recommended).

5. Click **Next >**.
6. On the Select Deltek Costpoint System Name screen, select the Costpoint System you will be using to connect to Time And Expense 10.0.0. Click **Next >**.
7. On the Select Database Platform screen, select **Microsoft SQL Server**. Click **Next >**.
8. 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, <b>10.2.2.154</b>) or hostname (for example, <b>dbsvr01</b>) of your Costpoint 7.1.1 SYSTEM (CPSYSTEM) database server. The default value is your computer name.</p> <p>The IP Address or Hostname cannot be <b>127.0.1.0.1</b> or <b>localhost</b>.</p> <p>For RAC installations, you must specify the IP Address or Hostname of one of the instances. Do not use the Virtual IP Address.</p>
Port	<p>Enter the port that your Costpoint 7.1.1 SYSTEM database server software uses to listen for requests. The default port for SQL Server is <b>1433</b>.</p>
Database Name	<p>Enter the name of Costpoint 7.1.1 SYSTEM database. The default value is <b>CPSYSTEM</b>. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p><b>\$ - _</b></p>
Instance Name	<p>Enter the name of your Costpoint 7.1.1 SYSTEM (CPSYSTEM) database instance. The default value is <b>local</b>. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p><b>\$ - _</b></p>
User Name	<p>Enter the name your CPSYSTEM user. The default user is <b>CPSYSTEM</b>. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p><b>\$ - _</b></p>
Password	<p>Enter the password for your CPSYSTEM user. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p><b>' ~ # \$ ^ &amp; ( ) - _ + = , .</b></p>
SA User Name	<p>Enter the name of your Microsoft SQL Server SA user. The default is <b>sa</b>. In addition to standard alphanumeric characters, the following special characters are also supported:</p> <p><b>\$ - _</b></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:  ' ~ # \$ ^ & ( ) - _ + = , .

- Click **Test Connection**. If you entered the proper database 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.

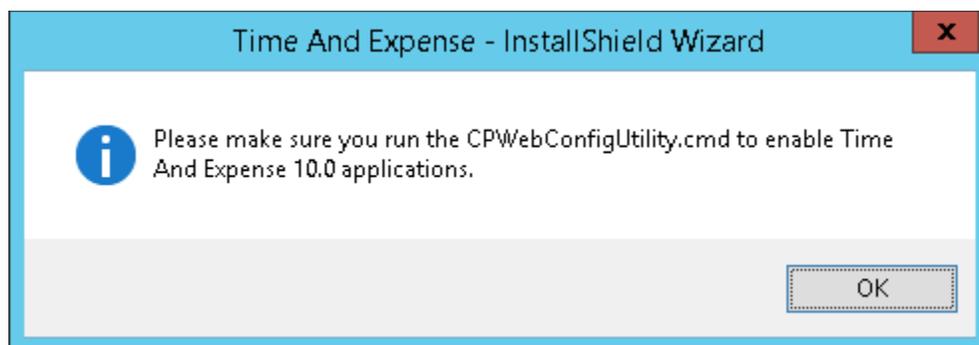
After the “Connection Successful. Click Next.” message displays, click **Next >**.

- On the Choose Deltek Time And Expense License File screen, click **Browse** to navigate to the Deltek-supplied Time And Expense 10.0.0 **LICENSE.ZIP** file. Click **Next >**.
- On the Pre-Installation Summary screen, review the installation parameters you selected:
  - If you want to change any settings, click **< Back** to go back and make the necessary changes.
  - If you are satisfied with these settings, click **Install >** to begin the installation.

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

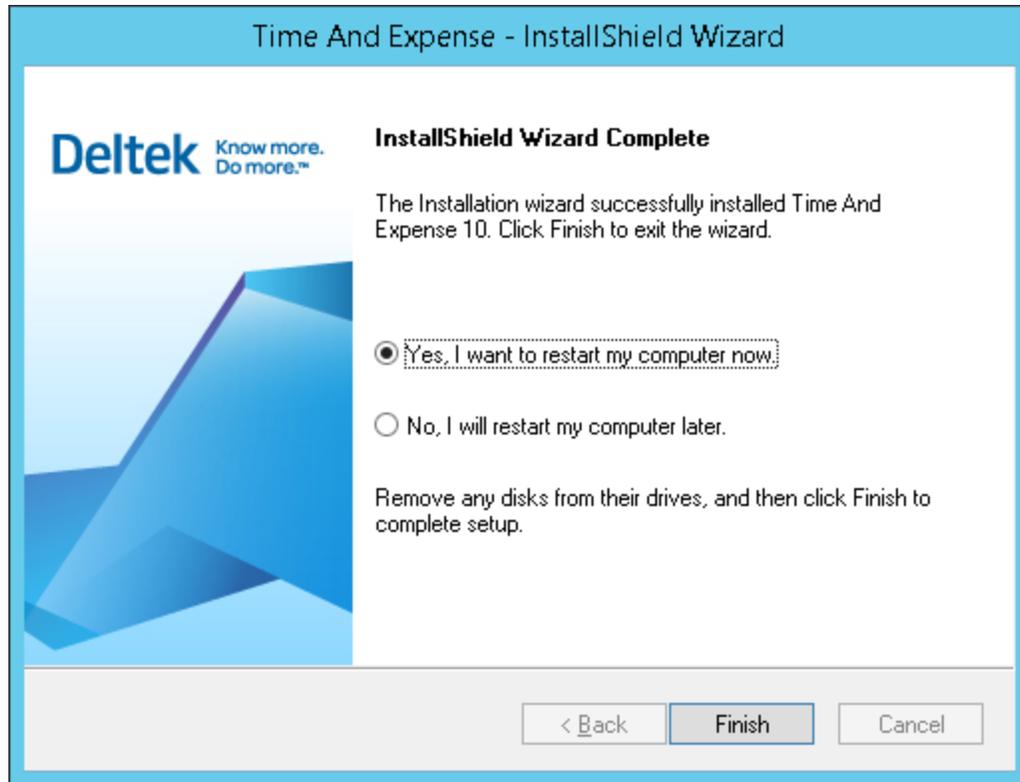
The installation will perform the scenarios detailed in the [Installation Process for Time And Expense 10.0.0](#) section of this document. The installation process will stop if any errors are encountered. If any errors occur during the installation, please refer to the [Troubleshooting Instructions](#) section of this document.

- If there were any errors, the log file **DeltekTimeAndExpense1000ApplicationTierInstallLog\_<date>\_<time>.txt** (from the C:\Program Files\Deltek\Time And Expense\10.0.0\Logs directory) will open.
- The following message displays:



This is just a reminder that there are other steps in this installation document that still need to be performed. Click **OK**.

- When the installation has been completed, the InstallShield Wizard Complete screen displays, indicating it “... **successfully installed Time And Expense 10.0**...”.



Perform the following:

- **Yes, I want to restart my computer now** – Select this option to reboot your Application Server. This option is selected by default.
- Click **Finish** to exit the installation and reboot your Application Server.

15. Once your Application Server has rebooted, open the **DeltekTimeAndExpense1000ApplicationTierInstallLog\_<date>\_<time>.txt** file from the C:\Program Files\Deltek\Time And Expense\10.0.0\Logs directory.
16. When the **DeltekTimeAndExpense1000ApplicationTierInstallLog\_<date>\_<time>.txt** file opens, search for the following keyword:
  - **“Error”** – Report any search results to Deltek Costpoint Technical Support. The following error messages can be ignored:
    - OnInstallingFile - Installing: C:\Deltek\Costpoint\71\applications\enterprise\APP-INF\classes\com\deltek\enterprise\application\te\ad\commonad\importengine\ImportErrorStatusCodes.class
    - OnInstallingFile - Installing: C:\Deltek\Costpoint\71\applications\enterprise\APP-INF\classes\com\deltek\enterprise\application\te\common\utils\ErrorCodes.class

## Configure Time And Expense 10.0.0 Access

The steps to configure your Costpoint 7.1.1 system to recognize Time And Expense 10.0.0 are detailed in this section.

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

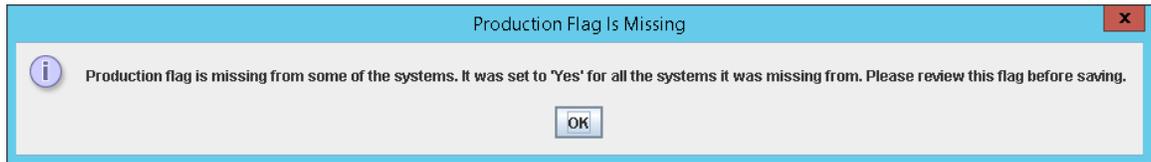
**To configure Time And Expense 10.0.0, complete the following steps:**

1. With your Costpoint 7.1.1 service running, click **Start » All Programs » Costpoint 7.1.1 » Start Costpoint 7.1.1 Config Utility**. For Windows Server 2012, right-click **Start** and select **Search**. Under **Costpoint 7.1.1**, right-click **Start Costpoint 7.1.1 Config Utility**, and click **Run as administrator**.



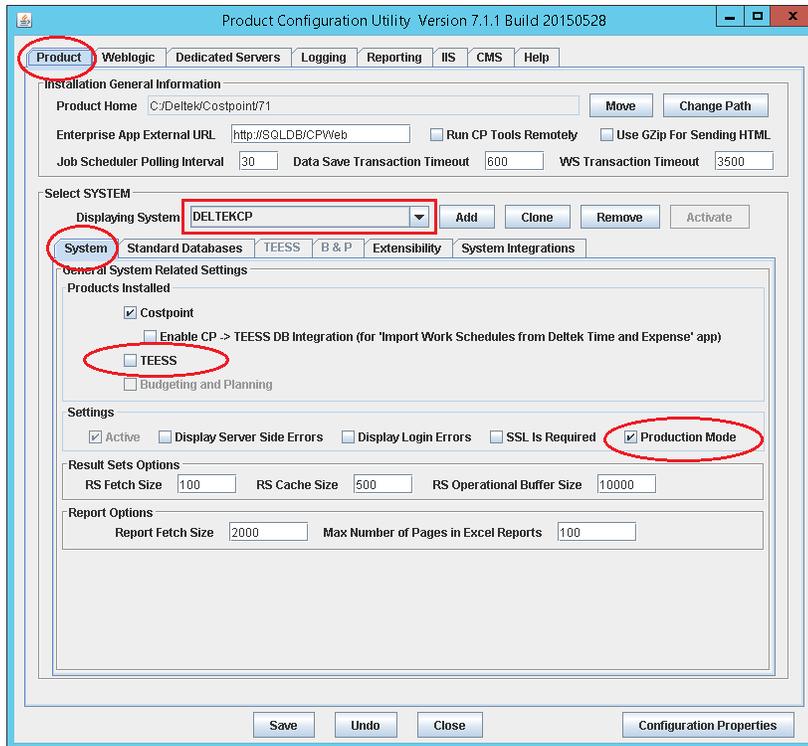
Due to the enhanced security in Windows Server 2012, it is advised that you use the **Run as Administrator** option when launching this command even if the logged in user has local administrative rights.

2. On the Select Your Configuration Options screen, make sure the **Product Application Configuration** check box is selected and click **Next**.
3. The following message displays:



This will be cleared once the changes about to be made are saved. Click **OK**.

4. On the Costpoint Configuration Utility screen, perform the following:
  - a. Click the **Product** tab.
  - b. On the **Displaying System** field, select the Costpoint System that you are configuring for Time And Expense 10.0.0 (that is, **DELTEKCP**) from the drop-down list.
  - c. Click the **System** tab.
  - d. In the Products Installed group box, select the **TEESS** check box.
  - e. In the Settings group box, make sure the **Production Mode** check box is selected.

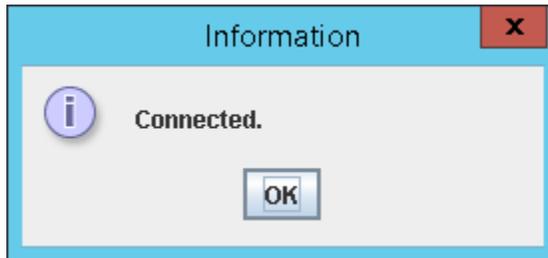


5. On the Costpoint Configuration Utility screen, select the **TEESS** tab and perform the following:

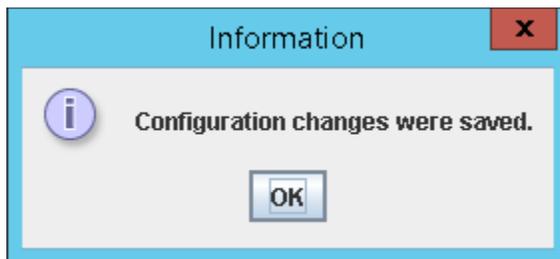
Field Name	Action
Database Vendor	Select <b>MS SQL Server</b> .
Host	<p>Enter the IP address (for example, <b>10.2.2.154</b>) or hostname (for example, <b>dbsvr01</b>) of your Time And Expense 10.0.0 TRANSACTION (DELTEKTE) database server. The default value is your computer name.</p> <p>The IP Address or Hostname cannot be <b>127.0.1.0.1</b> or <b>localhost</b>.</p> <p>For SQL Server Named Instances, you need to enter the Host\Named Instance, that is, <b>10.2.2.154\INSTANCE1</b>.</p> <p>For RAC installations, you must specify the IP Address or Hostname of one of the instances. Do not use the Virtual IP Address.</p>
Port	<p>Enter the port that your Time And Expense 10.0.0 TRANSACTION database server software uses to listen for requests. The default port for SQL Server is <b>1433</b>.</p> <p>For Named Instance entered with Host above this field will be disabled.</p>
DB Name	Enter the name of the Time And Expense 10.0.0 TRANSACTION database. The default value is <b>DELTEKTE</b> .

Field Name	Action
User	Enter the name of your Time And Expense 10.0.0 TRANSACTION user. The default user is <b>TC_0001</b> .
Password	Enter the password for your <b>TC_0001</b> user.
Confirm Password	Reenter the password for your <b>TC_0001</b> user.
URL	Accept the default.

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



- Click **OK**. If you were unable to connect, review the information entered and try again.
- On the Costpoint Config Utility screen, click **Save**. The following message displays:



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

## Reinstalling Costpoint 7.1.1 Windows Service

This step provides instructions for reinstalling the Costpoint 7.1.1 Windows service.

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

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

- Click **Start » Administrative Tools » Services**.
- On the Services window, scroll down the **Services** list, right-click the **Costpoint 7.1.1** service, and click **Stop**.
- 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**.

## Reconfiguring and Starting Costpoint 7.1.1 Windows Service

This step provides instructions for reconfiguring and starting the Costpoint 7.1.1 Windows service.



Reinstalling the Costpoint 7.1.1 Windows service above means you need to reset or reconfigure all settings you initially configured with your Costpoint 7.1.1 Windows service.

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

**To reconfigure the 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** list, right-click the **Costpoint 7.1.1** service, and click **Properties** on the shortcut menu.



If you do not find the Costpoint 7.1.1 service, it must not have installed properly in the previous step. Please go back and try that step again.

3. On the Costpoint 7.1.1 Properties screen, click the Recovery tab, and perform the following:

Option	Description
First failure	Change the drop-down selection from <b>Take No Action</b> to <b>Restart the Service</b> .
Second failure	Accept the default value, <b>Take No Action</b> .
Subsequent failures	Accept the default value, <b>Take No Action</b> .
Reset fail count after	Change from <b>0</b> to <b>1</b> days.
Restart service after	Accept the default of <b>1</b> minute.

4. Click **Apply**.
5. On the Costpoint 7.1.1 Properties screen, click the Log On tab and complete the following:

Field Name	Action
Account	Enter the domain Account (for example, domain\useraccountname).  If you are using a domain service login account instead of using the "Local System Account", select <b>This Account</b> .
Password	Enter the password for the domain Account.
Confirm Password	Reenter your password for the domain Account.

6. Click **Apply**. Make sure that the login account for the Costpoint Service is in the local Administrators group on the Application Tier server.

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

7. 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 immediately indicate that it has started. However, please note that it takes several minutes for the Costpoint 7.1.1 service to fully initialize.

After you have started 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\7.1.1\logs\DEServer.log](#) file and report any errors to Deltek Costpoint 7.1.1 Technical Support.

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8. Click **OK** to close the Costpoint 7.1.1 Properties screen.
9. Close the Services window.

## Web Tier Installation

The steps to integrate your Time And Expense 10.0.0 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 includes an integrated Web server component that you can use with the Time And Expense 10.0.0 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](#).

### Install Web Tier Software

The steps to integrate the Time And Expense 10.0.0 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 Time And Expense 10.0.0 installer is invoked in order to download the latest DeltekTimeAndExpense1000RequirementsINI.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 application server has Internet access.



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 Deltek TimeAndExpense1000WebTier.exe file.

**To install Time And Expense 10.0.0 on your Microsoft IIS Web server, complete the following steps:**

1. Run the **DeltekTimeAndExpense1000WebTier.exe** file to launch the Time And Expense 10.0.0 Web Tier installation program. The Welcome to the Time And Expense 10 Installer screen displays.



Due to enhanced security in Microsoft Windows Server 2012, 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 DeltekTimeAndExpense1000WebTier.exe file in Windows Explorer and select **Run as Administrator**.

2. 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 7.1.1 Web Server Directory screen, click **Browse** to navigate to an installation location for the Deltek Costpoint 7.1.1 IIS software.  
The default is **C:\Deltek**.
5. Click **Next >**.
6. On the Pre-Installation Summary screen, review the installation parameters you selected:
  - If you want to change any settings, click **< Back** to go back and make the necessary changes.
  - If you are satisfied with these settings, click **Install >** to begin the installation.

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

The installation will perform the scenarios detailed in the [Installation Process for Time And Expense 10.0.0](#) 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 Time And Expense 10.0.0 Costpoint directory, C:\Deltek\Costpoint\71\applications. For the Application Server (WebLogic) to deploy hot fixes and updates, this directory must be shared with Co-Owner (Full Control) rights.

7. On the InstallShield Wizard Complete screen, select the **Yes, I want to view the log file** check box to open the DeltekTimeAndExpense1000WebTierInstallLog\_<date>\_<time>.txt file from the C:\Program Files\Deltek\Time And Expense\10.0.0\Logs directory. This check box is selected by default.
8. Click **Finish** to exit the installation.
9. When the DeltekTimeAndExpense1000WebTierInstallLog\_<date>\_<time>.txt file opens, search for the following keywords:
  - **“Error”** – Report any search results to Deltek Time And Expense Technical Support.

# Time And Expense 10.0.0 Initial Login Configuration

The steps to configure your browser and verify your Time And Expense 10.0.0 Application Tier and Web Tier installations are detailed in this section. To confirm that these servers are functioning properly, you will log in to Time And Expense 10.0.0 and preview a report.

## Before You Start

Make sure that you meet all [Time And Expense 10.0.0 Initial Login Configuration Prerequisites](#).

## Time And Expense 10.0.0 Printer Configuration

This step is optional. It provides configuration instructions for your Application Tier WebLogic Server to allow you to print Time And Expense 10.0.0 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.



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

You must perform this step on your Time And Expense 10.0.0 application server.

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

1. Click **Start » Printers and Faxes**. For Windows Server 2012, right-click **Start**, select **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 Time And Expense 10.0.0 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 Time And Expense 10.0.0 system are detailed in this section.

This step must be performed on all Windows client workstations that will access your Time And Expense 10.0.0 WebLogic application server.

**To configure the browser settings for accessing the Time And Expense 10.0.0 system, complete the following steps:**

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

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

4. Click **OK** to close the Settings screen.
5. On the Internet Options screen, click the Security tab, and click **Trusted sites » Sites**.  
Depending on your environment, you may need to add your Time And Expense 10.0.0 URL under **Local Internet** instead of **Trusted sites**.
6. On the **Add this website to the zone**, enter **http://<IPAddress or ComputerName>**, where **<IPAddress or ComputerName>** identifies your Time And Expense 10.0.0 WebLogic application server or IIS Web server, depending on which server you will be using to access Time And Expense 10.0.0 (for example, <http://10.2.2.154>).
7. Clear the **Require server verification (https:) for all sites in this zone** check box.
8. Select the check box, and click **Add**. And then, click **Close**.
9. 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.
10. Click **OK** to close the Internet Options screen.
11. 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 Time And Expense 10.0.0 URL, such as **http://<IPAddress or ComputerName>**, where **<IPAddress or ComputerName>** identifies your Time And Expense 10.0.0 WebLogic application server or IIS Web server (for example, **http://10.2.2.154**).
12. Close your Web browser.

## Log In To Time And Expense 10.0.0

The steps to log in to Time And Expense 10.0.0 are detailed in this section.

You can perform this step from any Windows client workstation that has TCP/IP access to your Time And Expense 10.0.0 WebLogic application server.

### To log in to Time And Expense 10.0.0, 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>

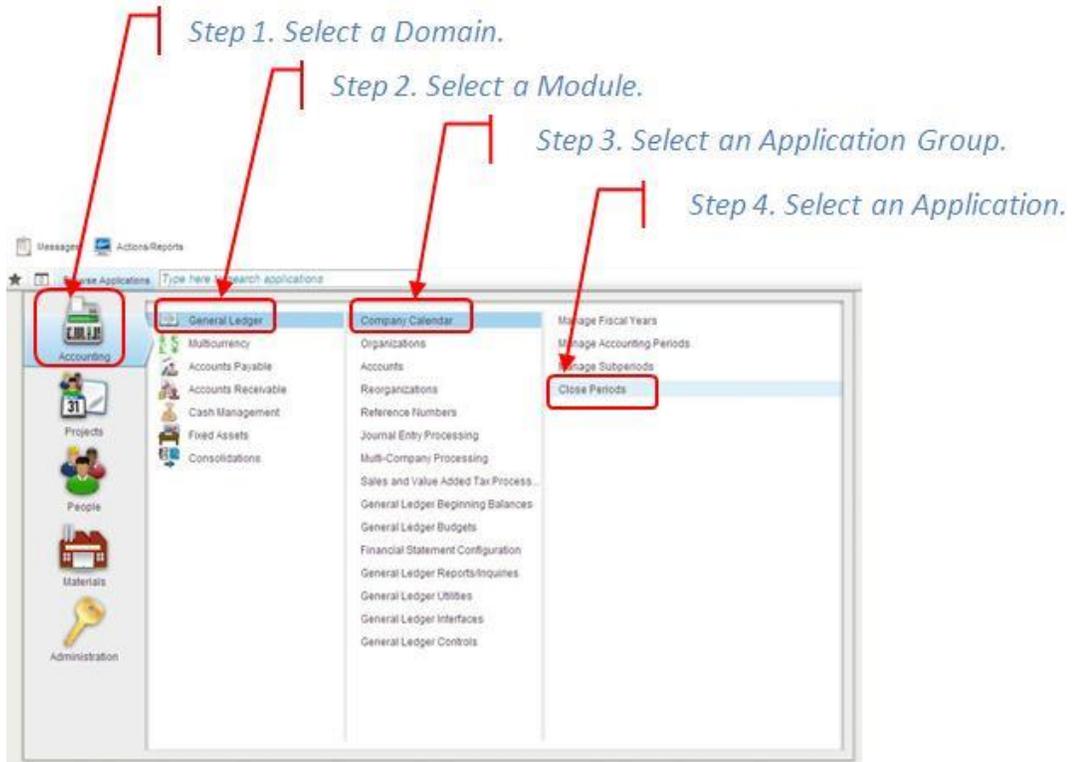
Where **<AppServerIPAddress or ComputerName>** identifies your Time And Expense 10.0.0 WebLogic application server and **<Port>** identifies the unique port number that your Time And Expense 10.0.0 WebLogic application server uses to listen for connections. You specified this port value during the Time And Expense 10.0.0 software installation. The default is 7009 (for example, <http://10.2.2.154:7009>).

Or where **<WebServerIPAddress or ComputerName>** identifies your Time And Expense 10.0.0 IIS Web server (for example, <http://10.2.2.156/cpweb>).

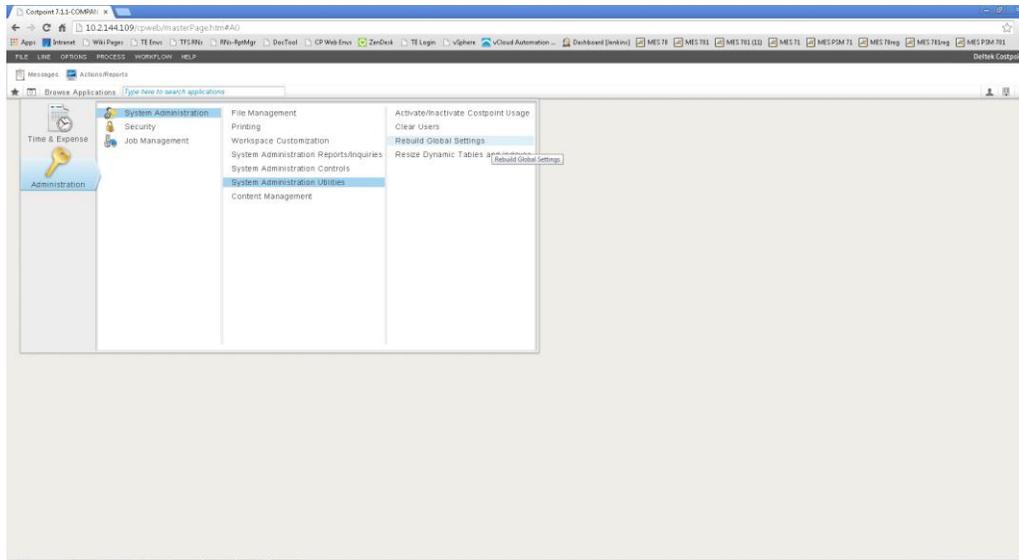
- When the Deltek Costpoint 7 Welcome screen displays, complete the following:

Field Name	Action
Username	Enter <b>CPSUPERUSER</b> .
Password	Enter <b>password</b> . 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 <b>&lt;Your_System_Name&gt;</b> , where <b>&lt;Your_System_Name&gt;</b> identifies the system name you assigned to your Time And Expense 10.0.0 system during the Application Server Installation. Typically, customers use a system name that is identical to their Time And Expense 10.0.0 Database name, <b>DELTEKCP</b> .
SHOW ADDITIONAL CRITERIA	<p>Click <b>+</b> to display these additional fields:</p> <ul style="list-style-type: none"> <li><b>Application</b> — Accept the blank default value, or enter a specific Time And Expense 10.0.0 application (for example, <b>COSTPOINT MENU</b>).</li> <li><b>Company</b> — Enter your company ID (for example, <b>1</b>).</li> <li><b>Validation Frequency</b> — Accept the default drop-down value, <b>Field</b>. After you have successfully logged in to Time And Expense 10.0.0, review the online help for a detailed explanation of the value you can select for this field.</li> </ul>
Remember log in information	Select this check box to have the system remember your login information. This check box is not selected by default.

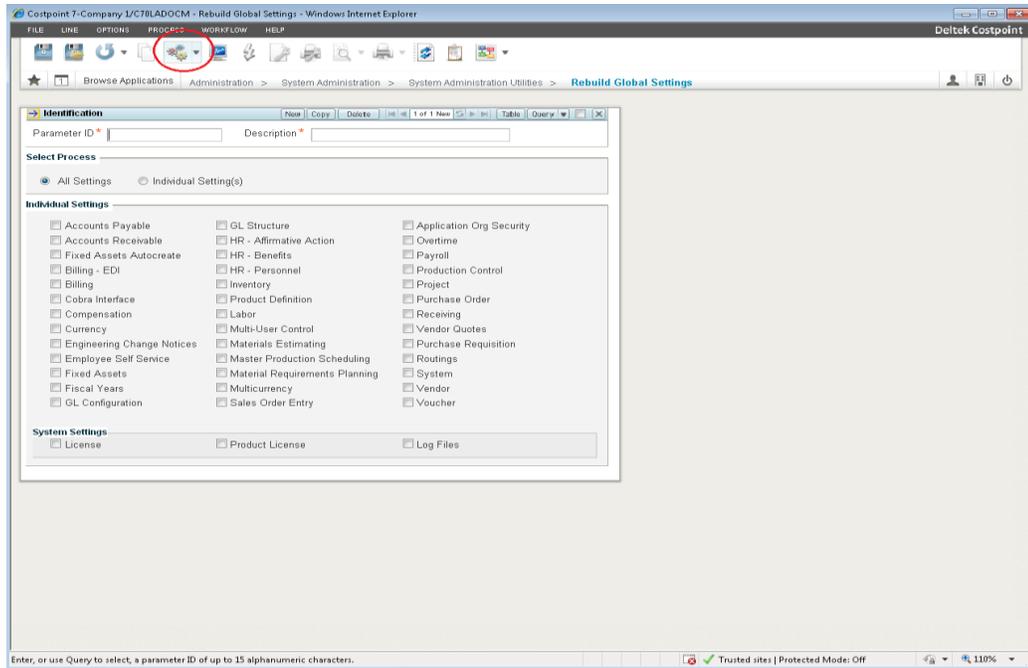
- Click **Log In**.
- Contact Custom Solutions at Deltek if the following message displays: "Warning: The custom programs and the database version are not compatible. The custom programs may not work properly. Please contact Custom Solutions at Deltek. Do you want to continue with the login?"
- Click **OK** and a screen similar to the sample shown below displays:



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

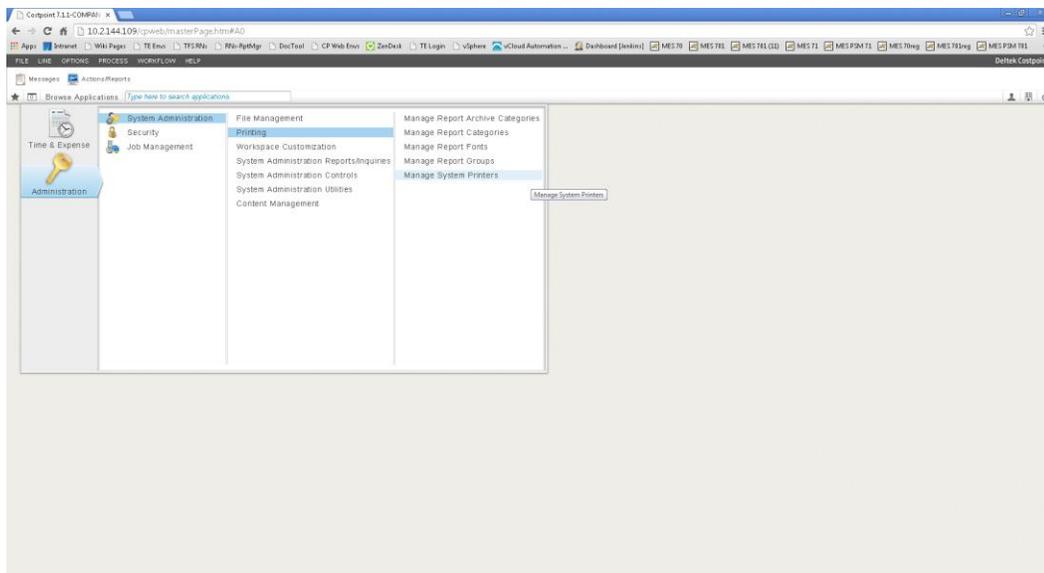


- On the Rebuild Global Settings screen, click **Default Action**.

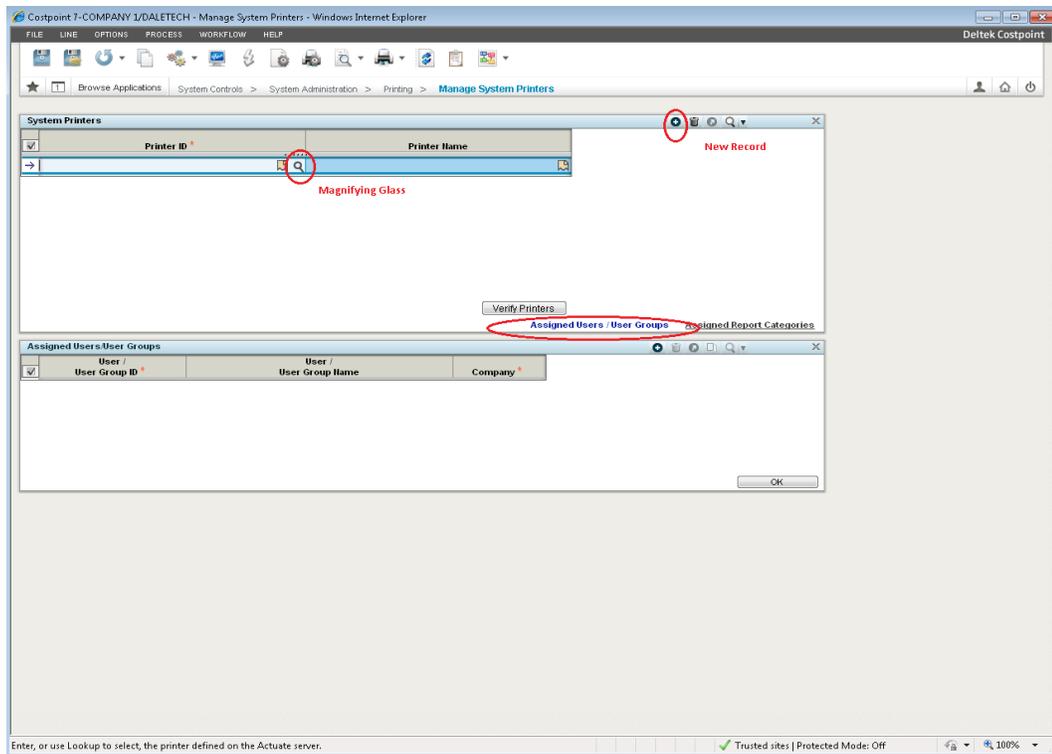


If you click the right side (down arrow) of the **Default Action** button, you must also select **Reload Settings**.

8. On the Processing Complete screen, click **OK**.
9. Select **File » Close Application** to close the Rebuild Global Settings screen. Click **OK** on the unsaved changes message.
10. From the main menu screen, click **Administration » System Administration » Printing » Manage System Printers**.



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



12. Complete the following fields:

Field Name	Action
Printer ID	Click  to display all printer objects that are available on your Application Server. To select the appropriate printer object, click the check box to the left of the printer object name and click <b>SELECT</b> .
Printer Name	Enter a descriptive name for the printer object.

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

14. 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  for one of these fields. Select a User/User Group that should have access to the printer object you specified above.
Company	Click  and select a Company for this User/User Group.

15. Click **SELECT**. You must repeat Step 14 for each User/User Group that you want to assign the printer object that you specified in Step 12.

16. Click **Save**. Click **OK** when the following message displays: “Record modifications completed without error.”  
 You must repeat steps 12–16 for any printer objects on your Application server that you want to make available to your Time And Expense 10.0.0 system users.
17. Click **File** » **Log-out** to exit Time And Expense 10.0.0.
18. Close your Web browser.

## Verify Time And Expense 10.0.0 Printer Configuration

The steps to verify your Time And Expense 10.0.0 printers are detailed in this section.

This step can be performed from any Windows client workstation that has TCP/IP access to your Time And Expense 10.0.0 WebLogic application server.

### To verify your Time And Expense 10.0.0 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 Time And Expense 10.0.0 WebLogic application server and <Port> identifies the unique port number that your Time And Expense 10.0.0 WebLogic application server uses to listen for connections. You specified this port value during the Time And Expense 10.0.0 software installation. The default is 7009 (for example, <http://10.2.2.154:7009>).

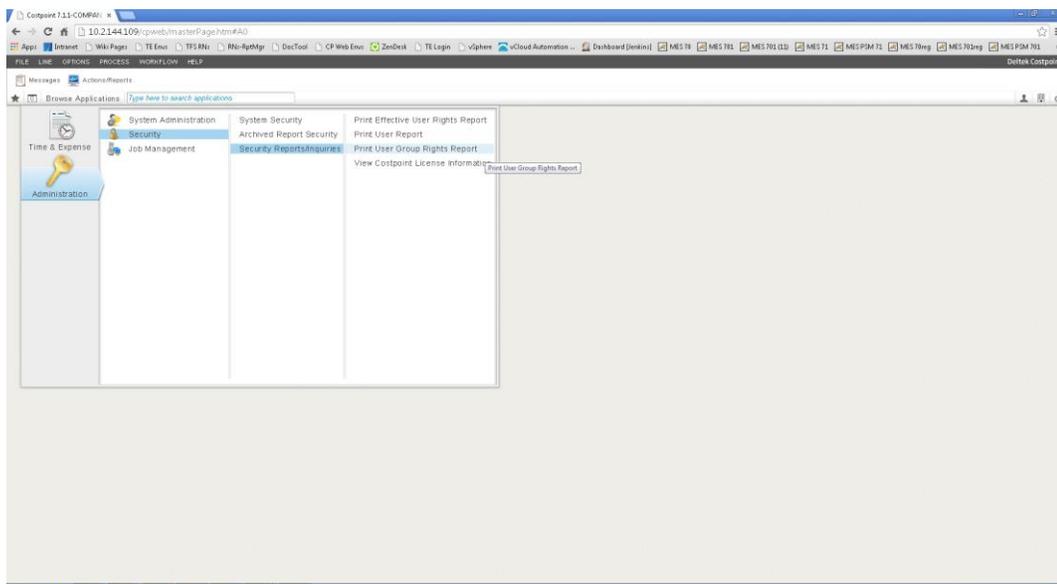
Or where <WebServerIPAddress or ComputerName> identifies your Time And Expense 10.0.0 IIS Web server (for example, <http://10.2.2.156/cpweb>).

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

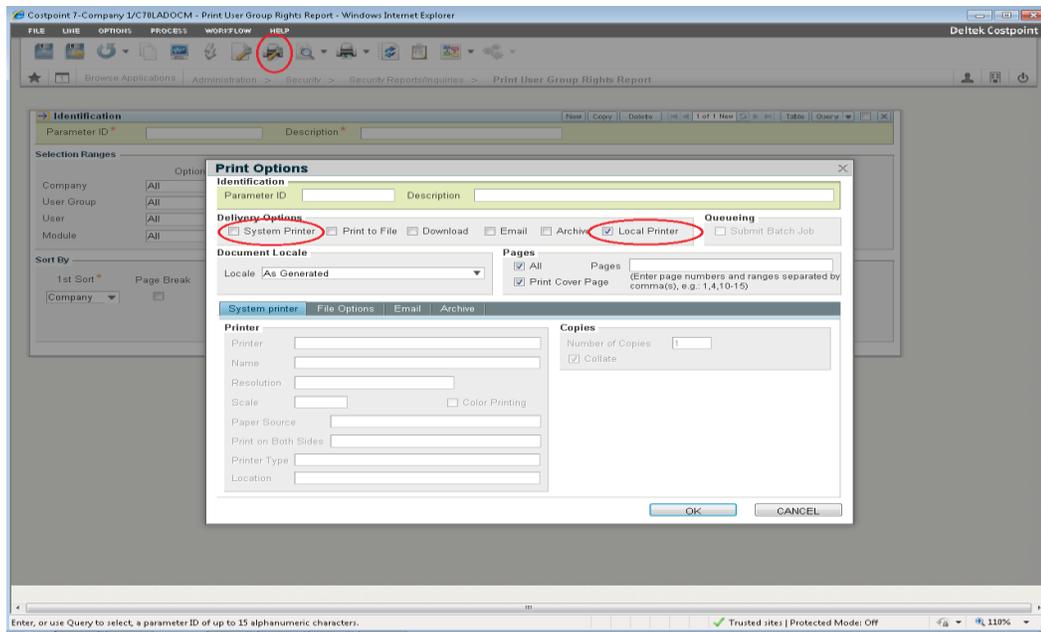
Field Name	Action
Username	Enter <b>CPSUPERUSER</b> .
Password	Enter the CPSUPERUSER user password. The default is <b>password</b> .
System	Enter <b>&lt;Your_System_Name&gt;</b> , where <b>&lt;Your_System_Name&gt;</b> identifies the system name you assigned to your Time And Expense 10.0.0 system during the Application Server Installation process. Typically, customers use a system name that is identical to their Time And Expense 10.0.0 Database name, <b>DELTEKCP</b> .
SHOW ADDITIONAL CRITERIA	Click <b>+</b> to display these additional fields: <ul style="list-style-type: none"> <li>▪ <b>Application</b> — Accept the blank default value, or enter a specific Time And Expense 10.0.0 application (for example, <b>COSTPOINT MENU</b>).</li> <li>▪ <b>Company</b> — Enter your company ID (for example, <b>1</b>).</li> <li>▪ <b>Validation Frequency</b> — Accept the default drop-down list value, <b>Field</b>. After you have successfully logged in to Time</li> </ul>

Field Name	Action
	And Expense 10.0.0, review the online help for a detailed explanation of the value you can select for this field.
Remember log in information	Select this check box to have the system remember your login information. This option is not selected by default.

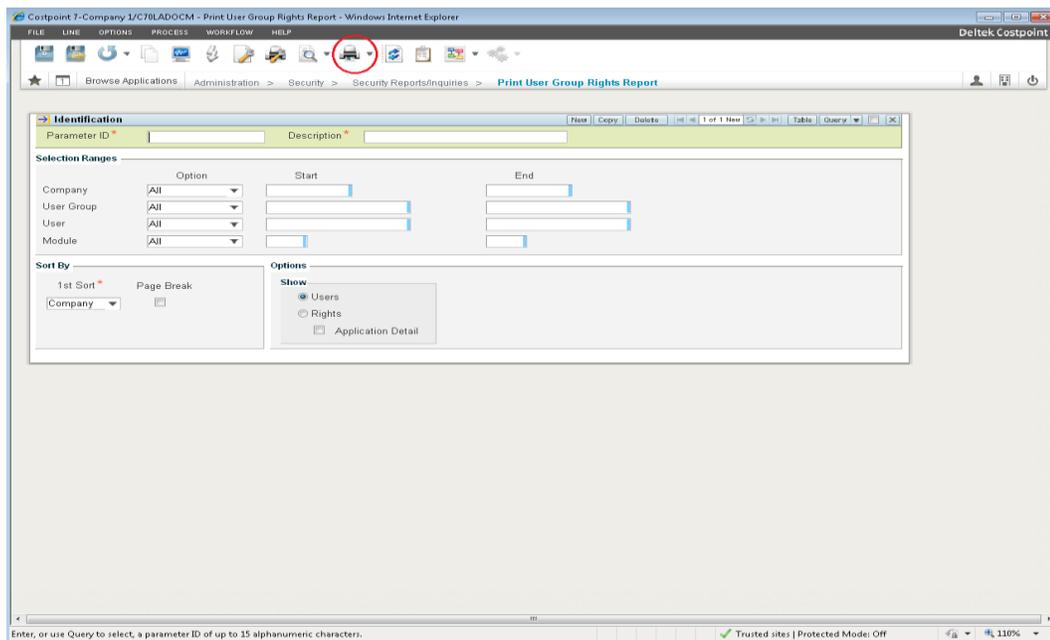
3. Click **Log In**.
4. Click **OK** if the following message displays: “Warning: The custom programs and the database version are not compatible. The custom programs may not work properly. Please contact Custom Solutions at Deltek. Do you want to continue with the login?”
5. From the main menu screen,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



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



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



If the User Group Rights Report prints correctly, then your Time And Expense 10.0.0 Application Server printer setup is working properly. If the report does not print correctly, please contact Deltek Time And Expense 10.0.0 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 Time And Expense 10.0.0 system. Please refer to the [Related Documentation](#) section for a list of all documentation included with the Time And Expense 10.0.0 release.

## Post-Installation Configuration

### Apply Latest Time And Expense 10.0.0 Hot Fixes

Updates to Time And Expense 10.0.0 will be released in a Cumulative Update installer.

Once you have a functioning Time And Expense 10.0.0 environment, follow the **DeltekTimeAndExpense1000DeployingHotFixes.pdf** installation document to install the latest Time And Expense 10.0.0 hot fixes.

### Troubleshooting Instructions

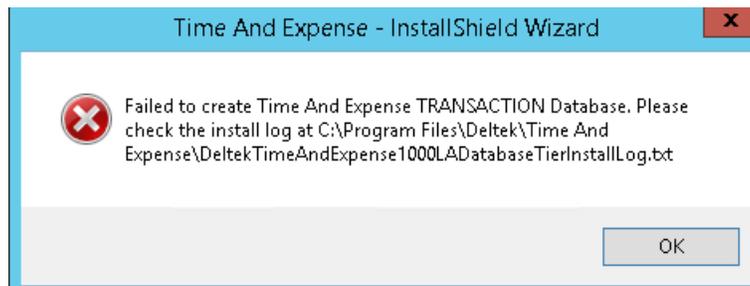
Troubleshooting instructions for problems with the Database Tier installation are detailed in this section.

#### How to Remedy a New Database Tier Installation That Failed

The steps to repair a Time And Expense 10.0.0 Database Tier installation that has failed are detailed in this section.

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

1. Click **OK** if, during the Database Tier Installation, you receive the following error message: “Failed to create Time And Expense TRANSACTION Database”



2. After the installation has stopped 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 opens the DeltekTimeAndExpense1000DatabaseTierInstallLog\_<date>\_<time>.txt file from the C:\Program Files\Deltek\Time And Expense\10.0.0\logs directory).
3. Click **Finish** to exit the installation.
4. When the DeltekTimeAndExpense1000DatabaseTierInstallLog\_<date>\_<time>.txt file opens, run a search for the “**error**” search string. Report all errors found to Deltek Time And Expense Technical Support.  
  
Under error conditions on new installs, the installer does not provide an option to restart. One of several actions might be required.
5. After performing the required actions from Technical Support, perform the following:
  - a. From Programs and Features (Add/Remove Programs), select **Deltek Time And Expense 10.0.0 Database** and click **Uninstall**.
  - b. Proceed to the [Database Tier Installation](#) section at the beginning of this document and restart this installation at the **Install Database Tier Software** step.

## Latest Upgrade Files Download Instructions

The Time And Expense 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 **DeltekTimeAndExpense1000DatabaseTier.exe /?**

The instructions to download the latest Time And Expense 10.0.0 Database upgrade and DeltekTimeAndExpense1000RequirementsINI 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:**

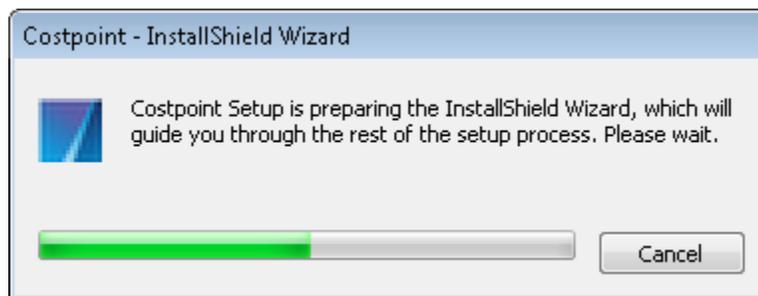
1. Run the applicable command to retrieve the files from DSM:

**DeltekTimeAndExpense1000DatabaseTier.exe /filedynamicdownload**

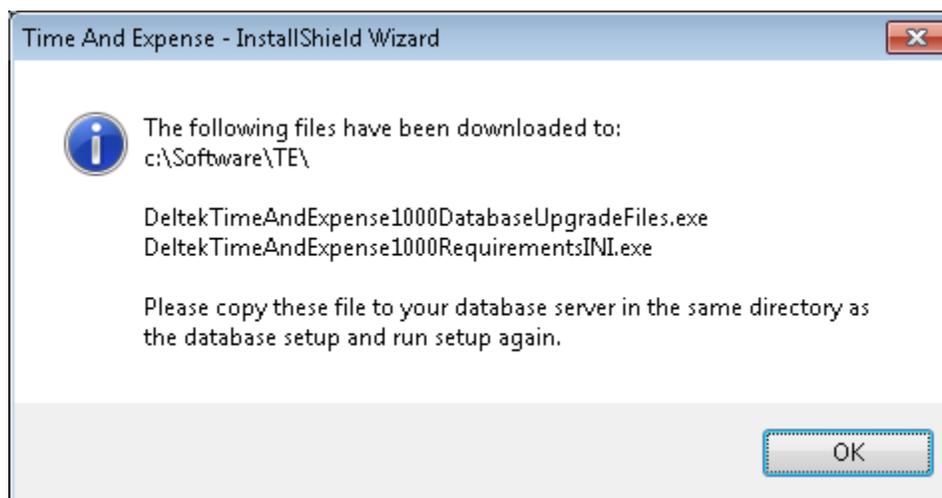
**DeltekTimeAndExpense1000ApplicationTier.exe /filedynamicdownload**

**DeltekTimeAndExpense1000WebTier.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 **DeltekTimeAndExpense1000DatabaseUpgradeFiles.exe/ DeltekTimeAndExpense1000RequirementsINI.exe** file(s) to your server, in the same folder as your '.exe' installer file.



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