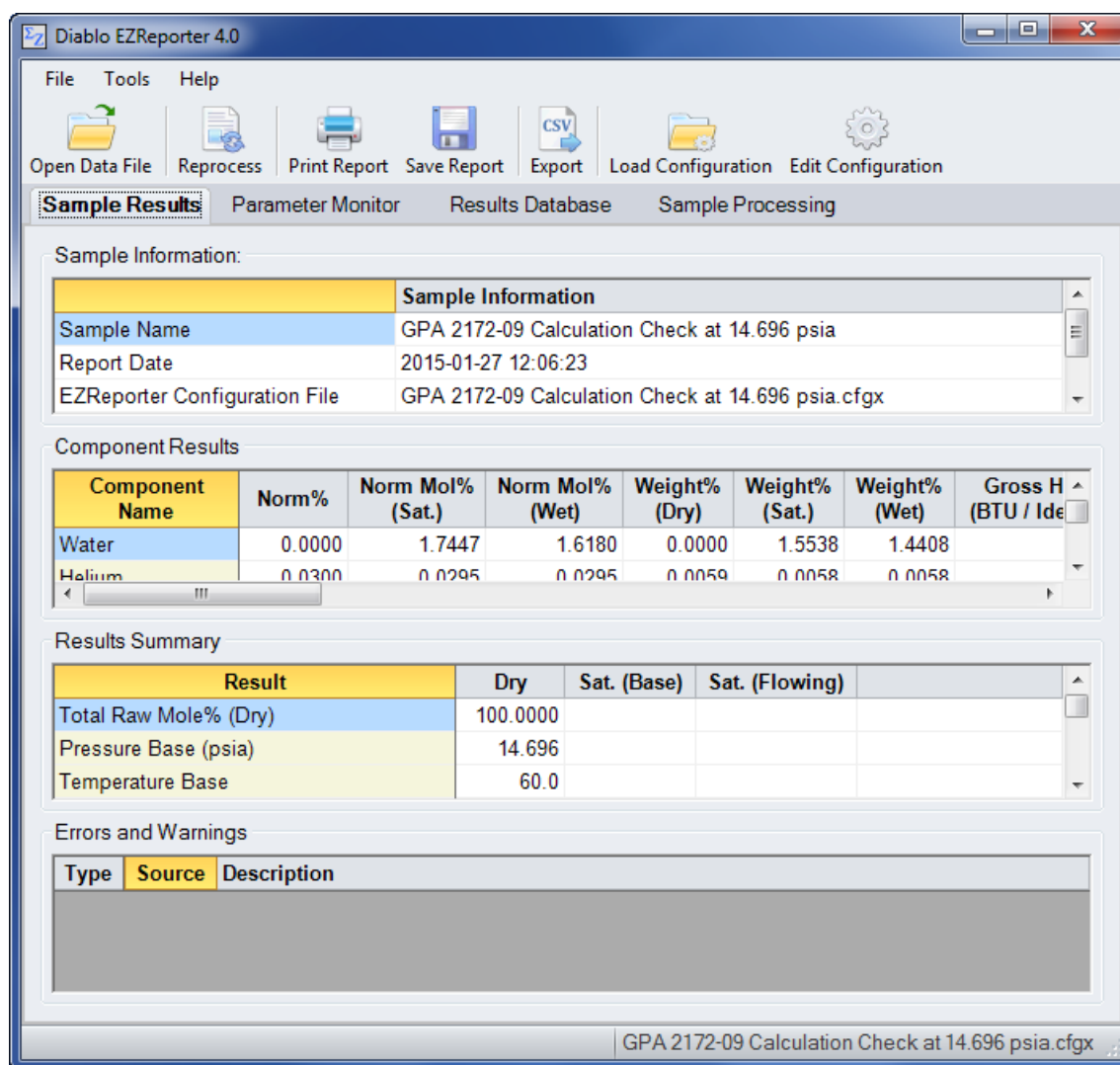


Software Upgrade Guide



Diablo EZReporter 4.0
Software Upgrade Guide

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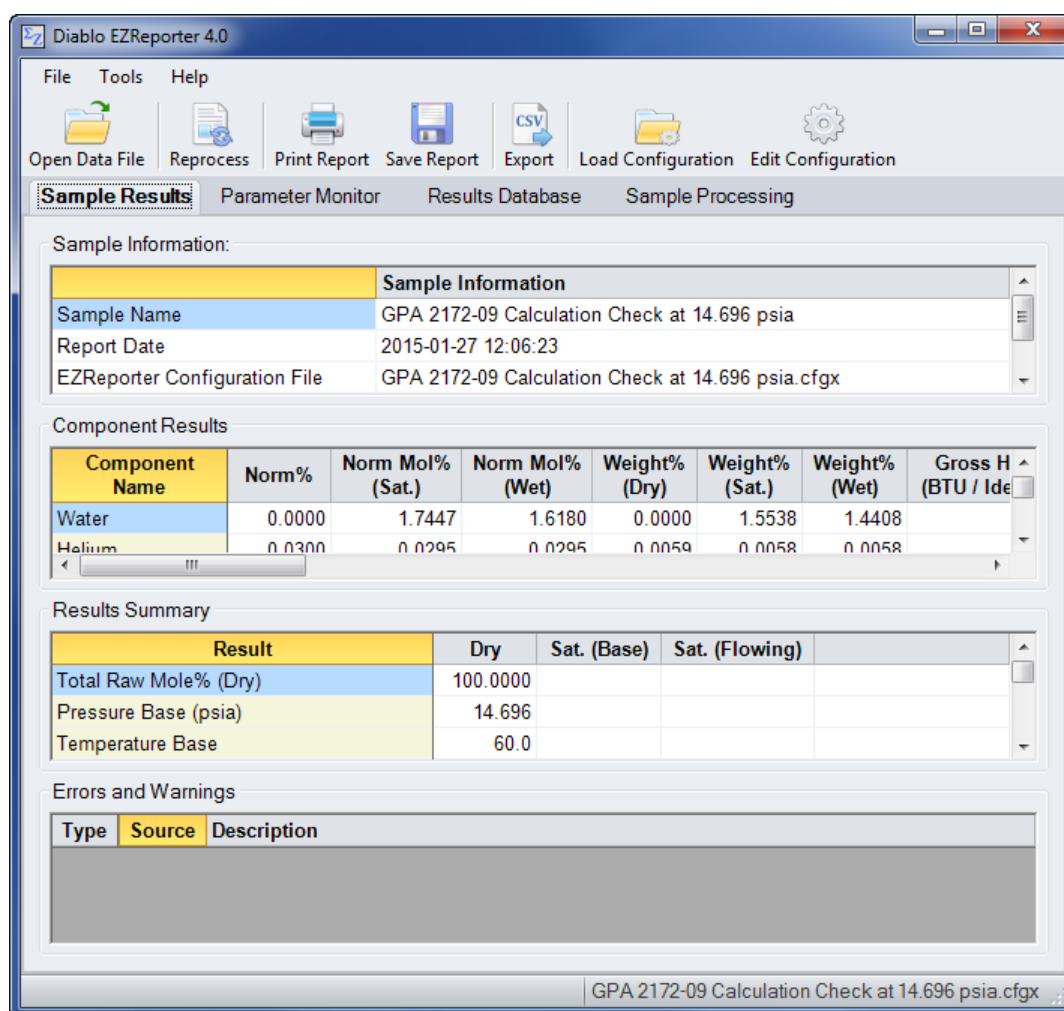
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Introduction

Overview

This guide is intended to familiarize current users of EZReporter 3.0 with the new capabilities of EZReporter 4.0 and provide assistance in making the transition to this new version of the EZReporter software.



Enhancements

EZReporter 4.0 was completely re-written to take advantage of the latest software development technologies. While the overall “look and feel” of EZReporter 4.0 should be familiar to EZReporter 3.0 users, there are a large number of enhancements that have been made to the user interface and program functionality. Some of the more significant enhancements are described below.

New Editions and Modules

- A new “Data Analysis” Edition is being introduced with EZReporter 4.0. The Data Analysis Edition allows you to edit configuration files and reprocess EZReporter data files without requiring you to pay for an instrument processing license.
- The Natural Gas Liquids/Extended calculations and reporting have been moved to a separate Natural Gas Liquids Module that is licensed separately from the Natural Gas Analysis Module.

Enhancements to All Editions

The following enhancements have been made to the base software and are available to all editions of EZReporter.

Data and Configuration Files Enhancements

- The format of EZReporter data files and configuration files has been changed from a Windows “INI” file format to an “XML” file format. This change removes limitations on the types of settings and data that can be stored in the files and will allow better support for languages other than English. See “[Configuration and Data Files](#)” on page 14 for more details on the changes made to EZReporter data and configuration files and support for EZReporter 3.0 files
- EZReporter 4.0 data files can contain the original configuration file that was used to generate the report. This can make it easier to reproduce a report on a different computer.
- EZReporter 4.0 configuration files now contain the export and import templates that were previously saved in separate files. This makes it easier to back up complete configurations and transfer them to different computers.

Report Enhancements

- The fonts for virtually all text fields in EZReporter printed reports and corresponding PDF files can be now customized by the end user.

Text File Export Enhancements

- The export template that defines the format of the exported text file is now saved in the configuration file rather than being located in a separate export template file. This simplifies backup and transferring your configuration to a different computer.
- Export variables in the export template are now color-coded so that they can be easily identified when editing the template.
- A new tool allows you to select from a categorized list of export variables and insert the selected variable into the export template.

Results Processing Enhancements

- Sample processing from chromatography data systems is now integrated into EZReporter through the new “Sample Processing” tab and the use of a “plug-in” connector architecture to add support for different data systems.

- A sample processing log table displays recent samples that have been processed by EZReporter. You can review the raw data from each sample in the table and re-submit the sample for processing.
- Processing of results from multiple instruments is now supported*.
- You can now define “rules” to determine which configuration file is loaded when processing results. Rules can be based on the Sample Name, Method Filename, Sample Comments, or User name. Each instrument can have its own set of rules.

*Requires a multi-instrument EZReporter license.

License Activation Enhancements

- License activation can now be done automatically if your computer has an Internet connection. However, for computers without an Internet connection, manual activation is still an option.

Miscellaneous Enhancements

- The size and size and location of the main EZReporter program window and the configuration editor window are saved and restored upon startup.
- New user-interface elements like toolbars and navigation bars improve ease of use.
- You can now copy and paste results from the EZReporter result tables directly into Excel, Word, or other programs without having to export to a text file first.

Enhancements to the Natural Gas Analysis Edition

The following enhancements are specific to the Natural Gas Analysis Edition of EZReporter.

Enhancements to Water Content Calculations

- A new Water Calculations page has been added to the configuration editor to help create reports requiring results to be calculated under different water content conditions.
- In addition to reporting “Dry” results, you can report “Saturated” results (results for a water-saturated gas at the base temperature and pressure), “Flowing” results (results for a water-saturated gas at a user-specified flowing temperature and pressure), and “As measured” results (results for a partially water-saturated gas as measured by an external water analyzer).
- You can enter the water amount for the “As Measured” calculation using units of either “Mole%” or “Pounds/MMCF”

GPA 2261-13 Reproducibility and Repeatability

- Support for the GPA 2261-13 reproducibility and repeatability criteria have been added*. You can compare two results from the results database or compare a single result with a check standard using either the GPA 2261-00 or 2261-13 reproducibility or repeatability criteria.
- You can enter component amounts for a check standard to use in making reproducibility and repeatability comparisons with sample results*

*Requires the Natural Gas Analysis Edition (or NGL Edition) and Results Database Edition to be licensed.

Enhancements to the Natural Gas Liquids/Extended Edition

The following enhancements are specific to the Natural Gas Liquids/Extended Edition of EZReporter.

GPA 2186-14 Support

- The GPA 2186-14 “Bridging” and “Allocation” calculation methods are now supported in addition to the GPA 2186-02, “Separate” and “Combined” calculation methods supported by EZReporter 3.0.

Licensing

The following tables list the different “Editions” of EZReporter 4.0 that can be licensed, and the modules that will be available for each of those editions. New in EZReporter 4.0 is a Data Analysis Edition. The Natural Gas Liquids (NGL) functionality is now located in a separate module than the Natural Gas Analysis module and requires a separate license.

Software Edition	Modules					
	Base	NGA	NGL	RDB	Processing	Instruments*
Data Analysis	X	X	X			-
Standard	X				X	1
Results Database (RDB)	X			X	X	1
Natural Gas Analysis (NGA)	X	X			X	1
Natural Gas Liquids (NGL)	X	X	X		X	1
NGA RDB	X	X		X	X	1
NGL RDB	X	X	X	X	X	1

*Contact Diablo Analytical for information on multi-instrument licenses.

EZReporter 3.0 Software Upgrades

Please contact Diablo Analytical to receive a quote to upgrade existing EZReporter 3.0 licenses to EZReporter 4.0. The price will depend on 1) the number of licenses, 2) the edition you are upgrading from and upgrading to, and 3) the number of instruments you want to license.

Software Support

New EZReporter 4.0 licenses (including upgrades from EZReporter 3.0) will include one year of software support. During the support period you will be able to install all upgrades of the EZReporter software (including major upgrades). Once your software support has expired, you will not be able to install any upgrades released after the date your support expired. However, you will be able to continue to use your existing version of the software – you just won’t be able to install any later upgrades until you renew support.

The date that your software support expires is displayed in the “License Details” section of the License Status window. When you are less than a month away from the expiration of your software support, a reminder will be displayed on the status bar at the bottom of the main EZReporter window. Support renewal will take effect from the end date of the expired/current subscription, regardless of when the renewal is purchased.

Please contact Diablo Analytical for more information on software support or to renew your support when it is expiring.

Getting Started

Installation

EZReporter 4.0 is installed by running the setup program on the distribution CD or installation program downloaded from our web site.

Important: You must be logged on with Administrator privileges when you install EZReporter (but you can run the software thereafter as a standard user)

There are two different versions of the EZReporter installation program that can be downloaded from our web site:

1. A web-based installer that should be used to update an existing installation of EZReporter 4.0 or to install the software on a computer that has Internet access. This version of the installer will download the required .NET 4.0 Framework files automatically over the Internet if required.
2. A single-file installer that should be used to install EZReporter on a computer with no access to the Internet. This version of the installer includes the full .NET 4.0 Framework and is consequently much larger in size.

Data System Support

Make sure you download the version of the installation program that includes the data system connectors for the manufacturer of the chromatography data system you will be using to control your gas chromatograph.

Program Requirements

The Full .NET 4.0 Framework must be installed before trying to run EZReporter 4.0. The .NET Framework will be installed automatically, if necessary, when you install the software from the distribution CD or use the single-file installer. If you use the web-based installer the .NET 4.0 Framework will be downloaded automatically if necessary. You can also download and install the .NET 4.0 Framework from Microsoft using the following link:

<http://www.microsoft.com/en-us/download/details.aspx?id=17718>

Installation and System Directories

In order to comply with Windows 7 security guidelines, the folders used to store the various EZReporter program, data, configuration, and support files have changed from those used for EZReporter 3.0.

Note: You can access and browse these folders using the “Tools > Browse EZReporter System Folders” menu option.

Program Folder: Contains the EZReporter program executable, required libraries and other read-only support files. The end user should not modify any files in this folder directly.

C:\Program Files (x86)\Diablo EZReporter 4.0

Default Files Folder: Contains configuration template files (.CFGT), and example export and import templates.

C:\ProgramData\Diablo Analytical\EZReporter\Default Files

Settings Folder: Contains the EZReporter configuration files (.CFG).

C:\Users\Public\Documents\Diablo EZReporter\Settings

Default Data Folder: Contains EZReporter data files and is the default location for export text files.

C:\Users\Public\Documents\Diablo EZReporter\Data

ProgramData Folder: Contains log files, and other support files that don't need to be accessed directly by the end user.

C:\ProgramData\Diablo Analytical\EZReporter

Common Documents Folder: this folder contains all of the files that the end user should have to access on a regular basis. It includes the "Settings" folder, the "Data" folder, the "Backup" folder, and the results database file.

C:\Users\Public\Documents\Diablo EZReporter

Technical Support

EZReporter 4.0 is developed and supported by Diablo Analytical, Inc.

Diablo Analytical, Inc.

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Electronic Mail

Use our dedicated support address for e-mail based technical support:

support@diabloanalytical.com

World Wide Web

Access online support resources on our web site:

<http://www.diabloanalytical.com/support.htm>

EZReporter 3.0 Compatibility

EZReporter 4.0 was designed so that it can be installed on the same computer as an existing EZReporter 3.0 installation. The two programs can be run side-by-side. EZReporter 4.0 can open EZReporter 3.0 configuration and data files.

Note: you may need to make changes to the settings of the chromatography data system you are using in order to switch automatic processing back and forth between EZReporter 3.0 and 4.0. Refer to the documentation for the connector plug-in for your chromatography data system for more information.

EZReporter 3.0 Configuration Files

If you open an EZReporter 3.0 configuration file in EZReporter 4.0, it will be converted to the EZReporter 4.0 format and saved with the same name in the EZReporter 4.0 settings folder. You should review the results generated by the converted configuration file and confirm that reports and exported text files are correct for your application. The converted files should produce equivalent results, but depending on the program features used, there may be some additional editing required.

Known Compatibility Issues

The following are the known compatibility issues with converted EZReporter 3.0 configuration files.

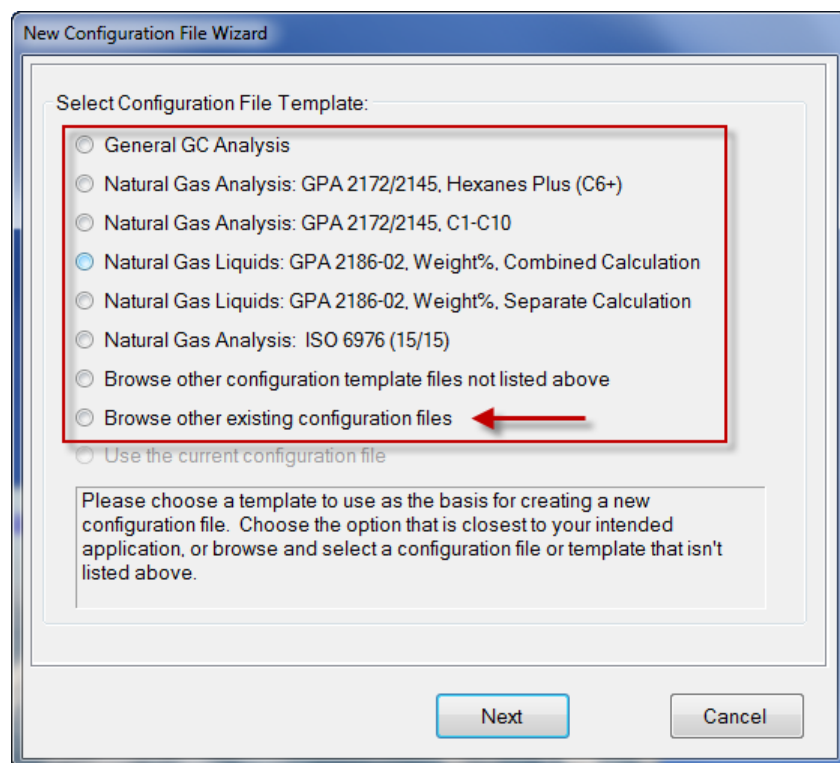
1. **Export Templates:** If you use custom format strings for date/time export variables (InjectionTime, for example), you may have to change the format string. See “Export Template Format” in the reference manual for more information.
2. **Export Templates:** Custom format strings for text export variables (SampleName, for example) are no longer supported. You can use the new fixed-length field export capability to achieve the same results. See “Export Template Format” in the reference manual for more information.

Configuring EZReporter

After installing EZReporter 4.0, you will need to load or create a configuration file and then add and configure an instrument for automatic processing from your chromatography data system.

Select a Configuration Template

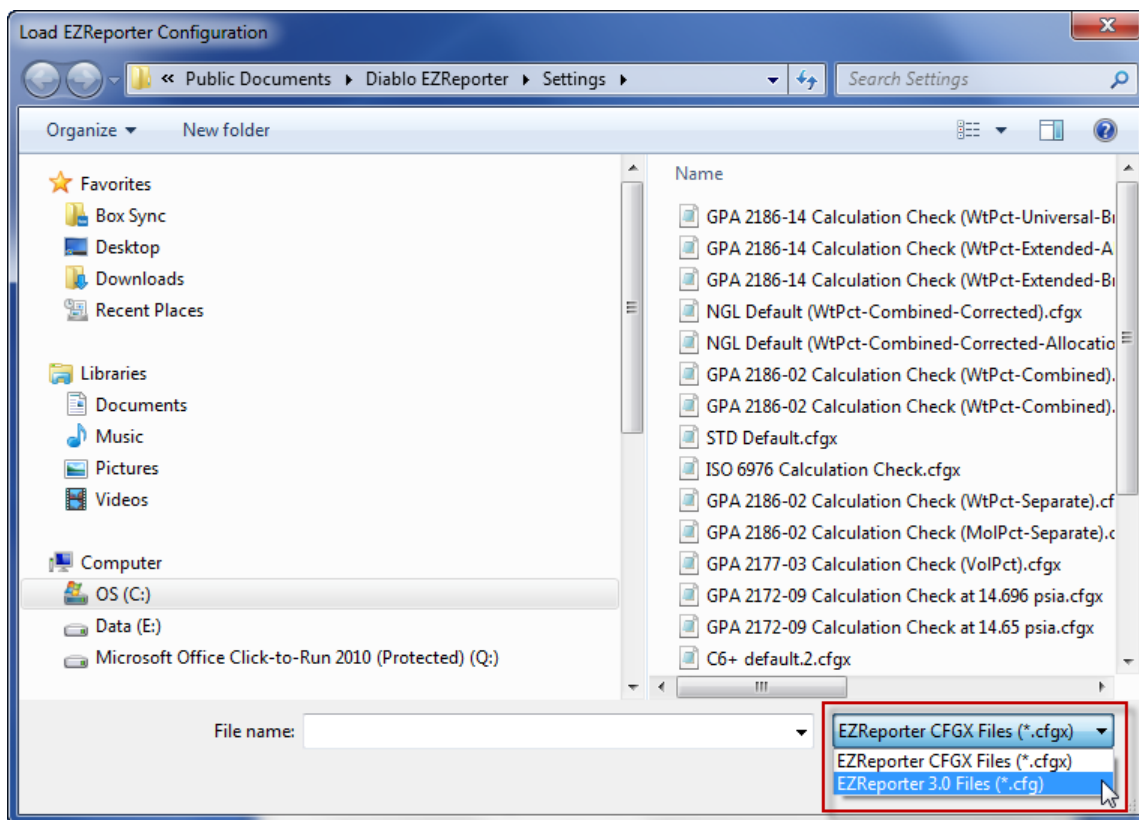
When you start EZReporter 4.0 for the first time, you will be presented with the New Configuration File Wizard, which allows you to choose the configuration template you want to use to create your configuration file.



You can choose one of the common default configuration templates, browse for another configuration template, or select an existing configuration file to use as the template for the new file.

If you choose to use an existing configuration file as the template, you can select either an EZReporter 4.0 configuration file (.CFGX) or an EZReporter 3.0 configuration file (.CFG) by clicking the file types list box.

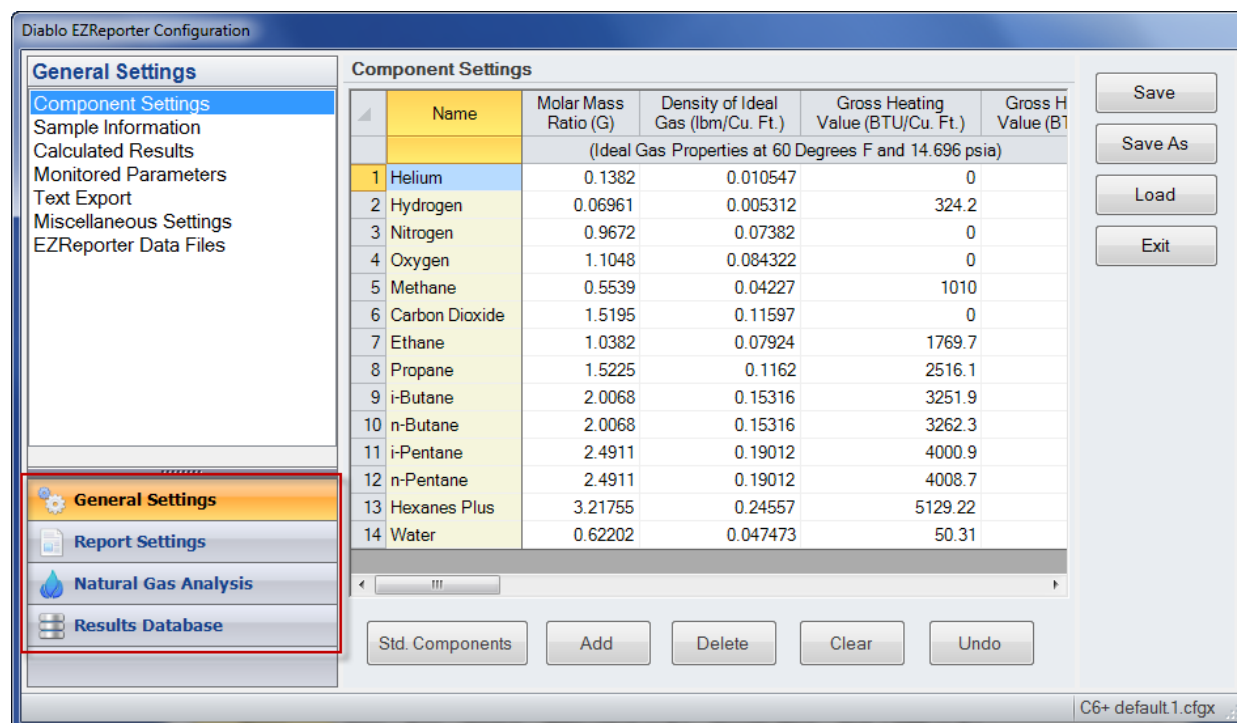
Note: if you choose an EZReporter 3.0 configuration file as the template, it will be converted automatically to an EZReporter 4.0 configuration file and saved in the EZReporter 4.0 settings folder. The original EZReporter 3.0 configuration file will not be modified.



After selecting the configuration template to use, you will be prompted for a configuration file name, and the new configuration file will be saved and loaded.

Review and Edit the Configuration

Once you have loaded a configuration file, you can review and edit the configuration by clicking the “Edit Configuration” button on the main toolbar or by clicking the “Tools > Edit Configuration...” menu option.



To navigate the configuration editor, simply click the desired settings category at the bottom of the navigation bar, and then click the desired settings from the list that is displayed for that category.

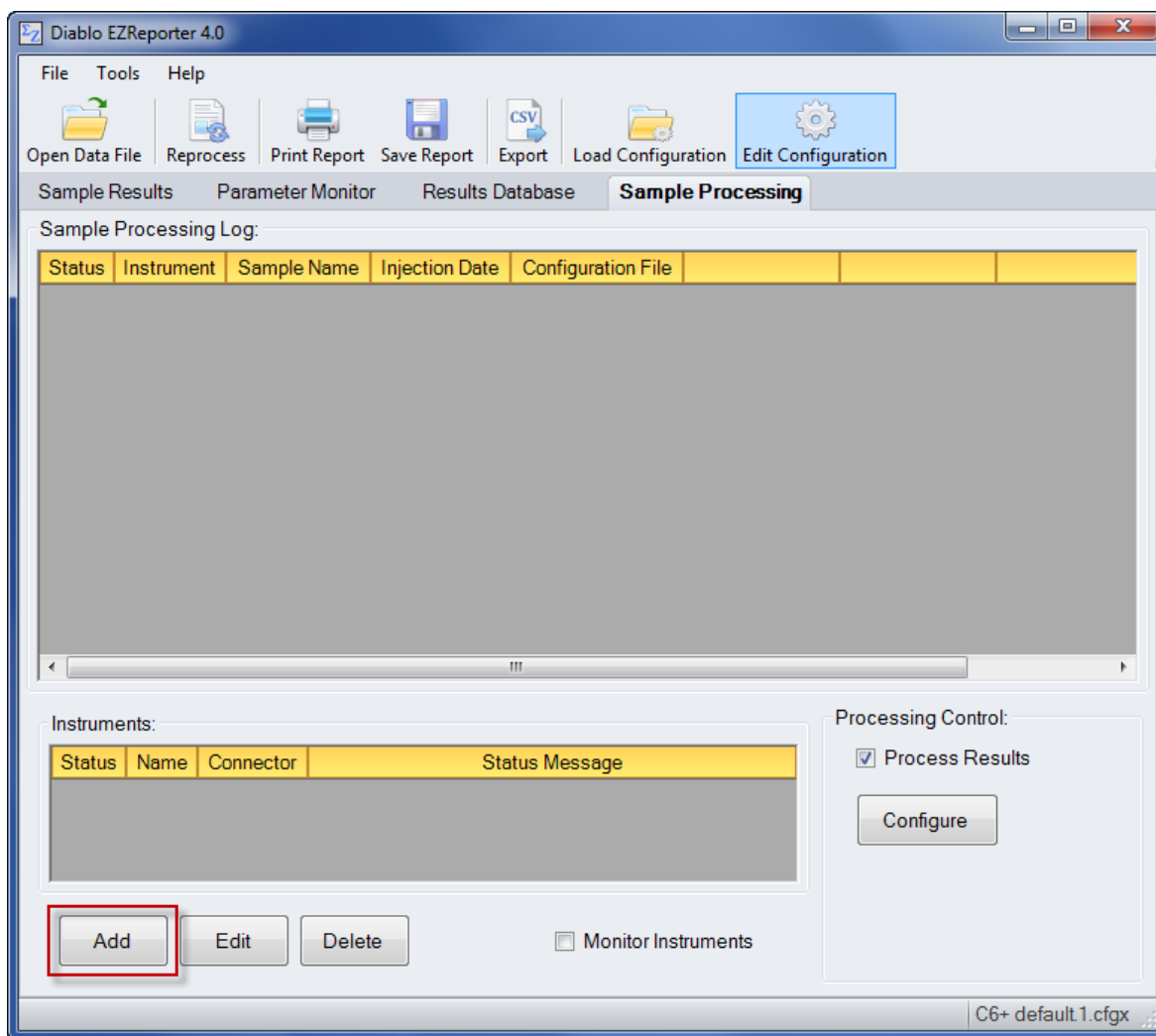
Refer to the EZReporter 4.0 Reference Manual for information on the various configuration settings.

Configure Instrument for Processing

After selecting and loading a configuration file, you must next configure EZReporter to process results from your chromatography data system.

Add an Instrument

First, you must add and configure an instrument. Switch to the “Sample Processing” tab of the main window, and click the “Add” button below the instruments table.



Select the Data System Connector

In order to process results from your chromatography data system, you must select the Data System Connector for the data system you are using, and then “Edit” the connector to select and apply any connector-specific settings. Please refer to the reference manual or help file for the particular Data System Connector you are using.

Important: The data system connectors available for you to select will depend on which version of the installation program you used to install the EZReporter 4.0 software. Make sure that you download the installer that includes support for the chromatography data system you are using to control your gas chromatograph.

Edit Instrument

Instrument Name:

Data System Connector: Diablo Instrument Connector Edit

Configuration File Mode: Use Active EZReporter configuration file

Default Instrument Configuration File: ...

Rules:

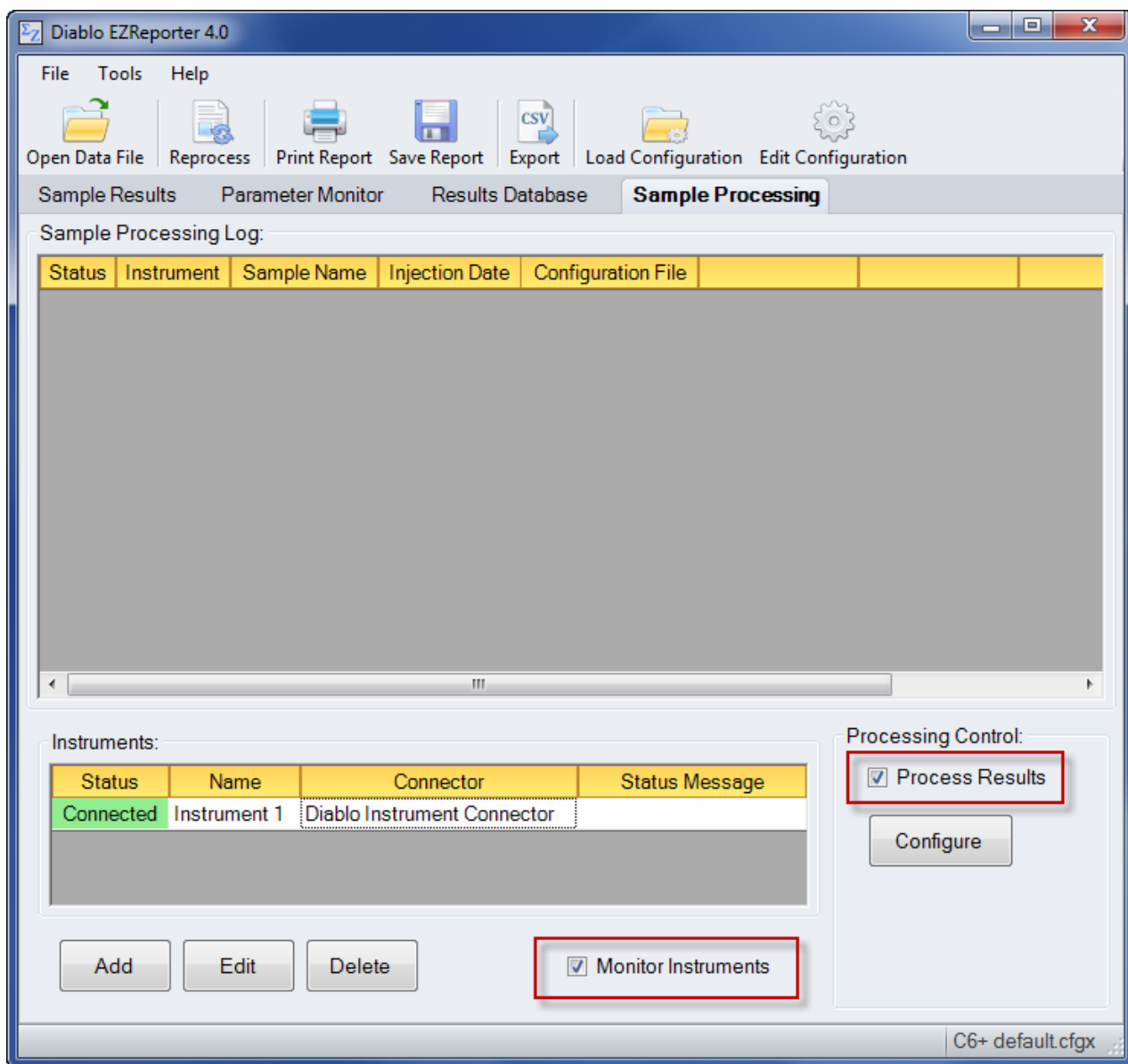
Parameter	Condition	Condition Text	Load Configuration File
-----------	-----------	----------------	-------------------------

Add Delete

Save Cancel

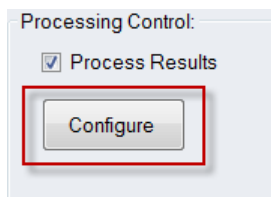
Enable Instrument Monitoring and Sample Processing

After configuring the instrument, you are ready to begin monitoring the instrument and processing results. Check the “Monitor Instruments” checkbox to begin monitoring the instrument for results and the “Process Results” checkbox to process results automatically as soon as they are received from the connector.

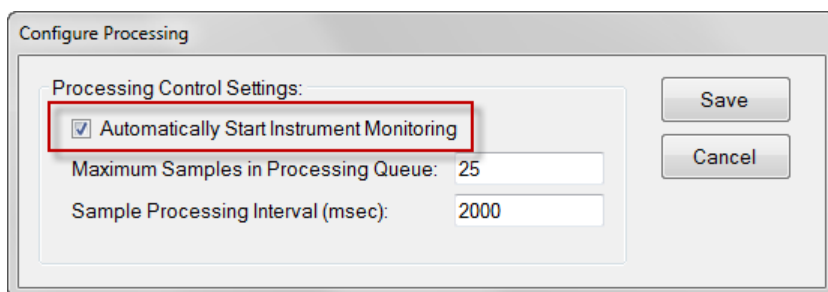


Start Instrument Monitoring Automatically

If you want EZReporter to begin monitoring for results from all configured instruments automatically after starting up, click the “Configure” button in the Processing Control panel:

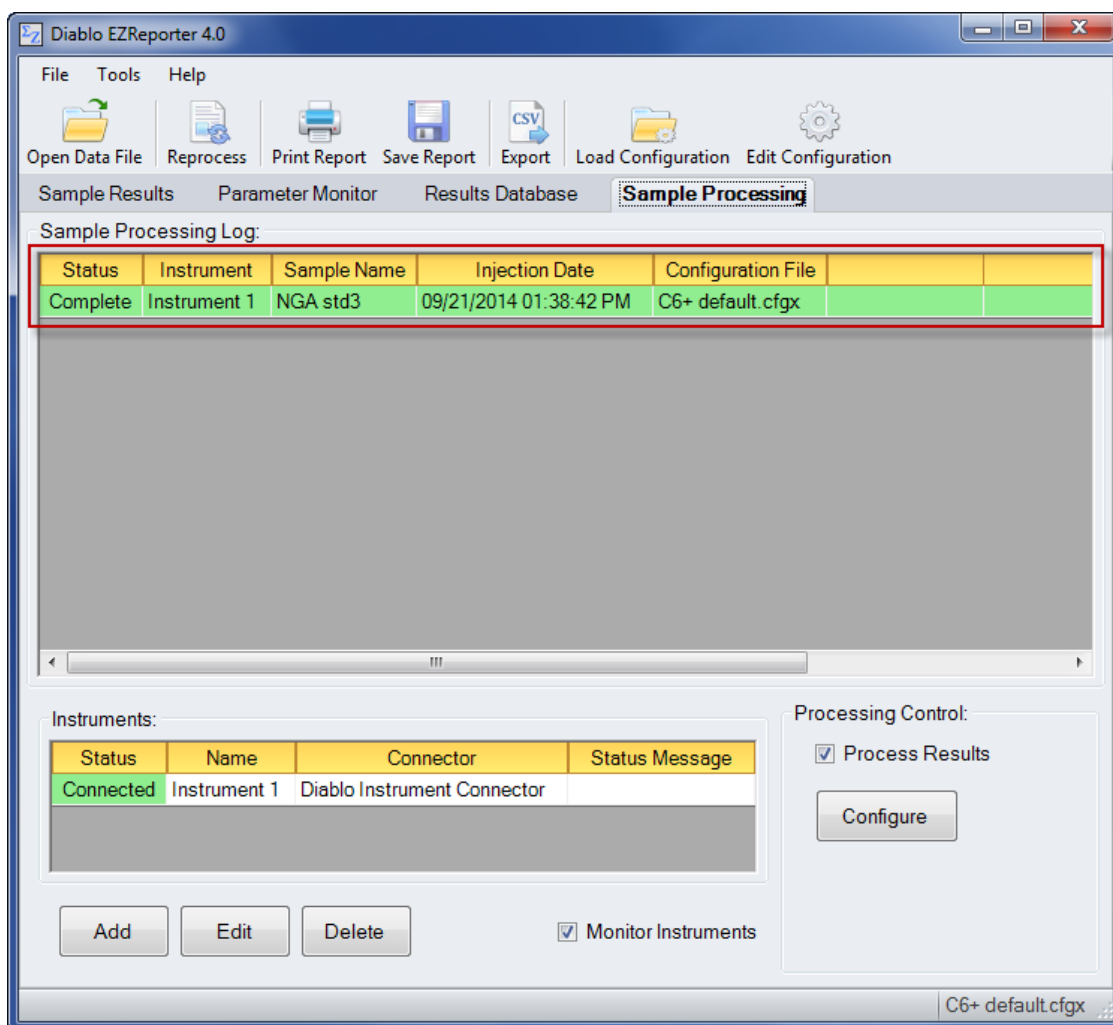


In the “Configure Processing” window, check “Automatically Start Instrument Monitoring”, and “Save”:



Processing Results

If you enable instrument monitoring and your instrument is connected, then new samples will be displayed in the Sample Processing Log table as they are received from the chromatography data system. If you have also checked “Process Results”, then the sample results will be processed and reported automatically in the order they are received.

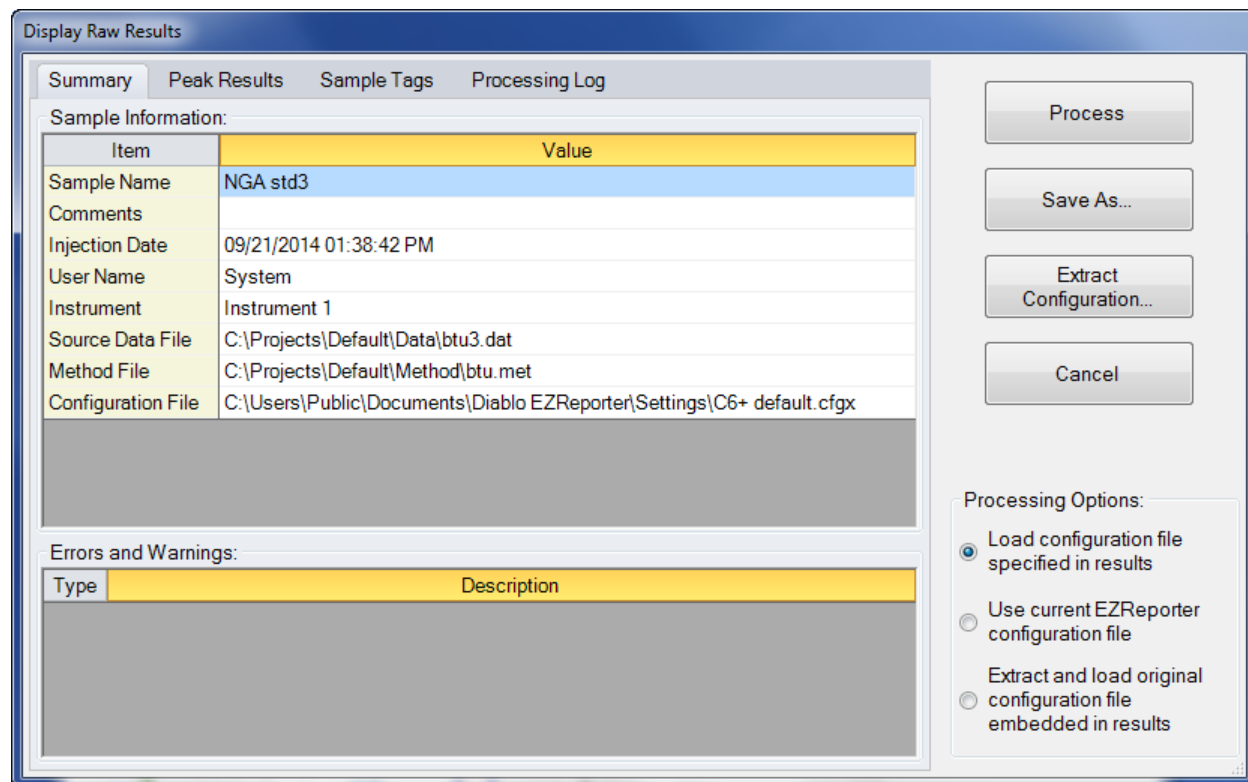


Reviewing and Reprocessing Raw Results

You can review the “raw” sample results generated by the chromatography data system by double-clicking the desired sample in the Sample Processing Log. The “Display Raw Results” window allows you to view the sample information,

peak results, and sample tags provided by the chromatography data system, and the processing log generated by the data system connector.

To reprocess the raw results, choose one of the “Processing Options” and then click the “Process” button. The results will then be re-submitted to EZReporter for reporting using the configuration file specified by the Processing Option you selected. You can also save the raw results to an EZReporter data file by clicking, “Save As”, and if your raw results contain the original configuration file used to process results, you can extract that configuration file and save it to disk by clicking, “Extract Configuration”.



Configuration and Data Files

The format of EZReporter data files and configuration files has changed from a Windows “INI” file format in EZReporter 3.0 to an “XML” file format in EZReporter 4.0. This change removes limitations on the types of settings that can be stored in the files and allows better support for languages other than English.

EZReporter Data Files

EZReporter 4.0 data files are XML files with either an “.EZRX” file extension (uncompressed data files) or an “.EZR” file extension (compressed data files). Compressed data files are simply standard data files that have been compressed into a “Zip” file and then renamed with the “.EZR” file extension.

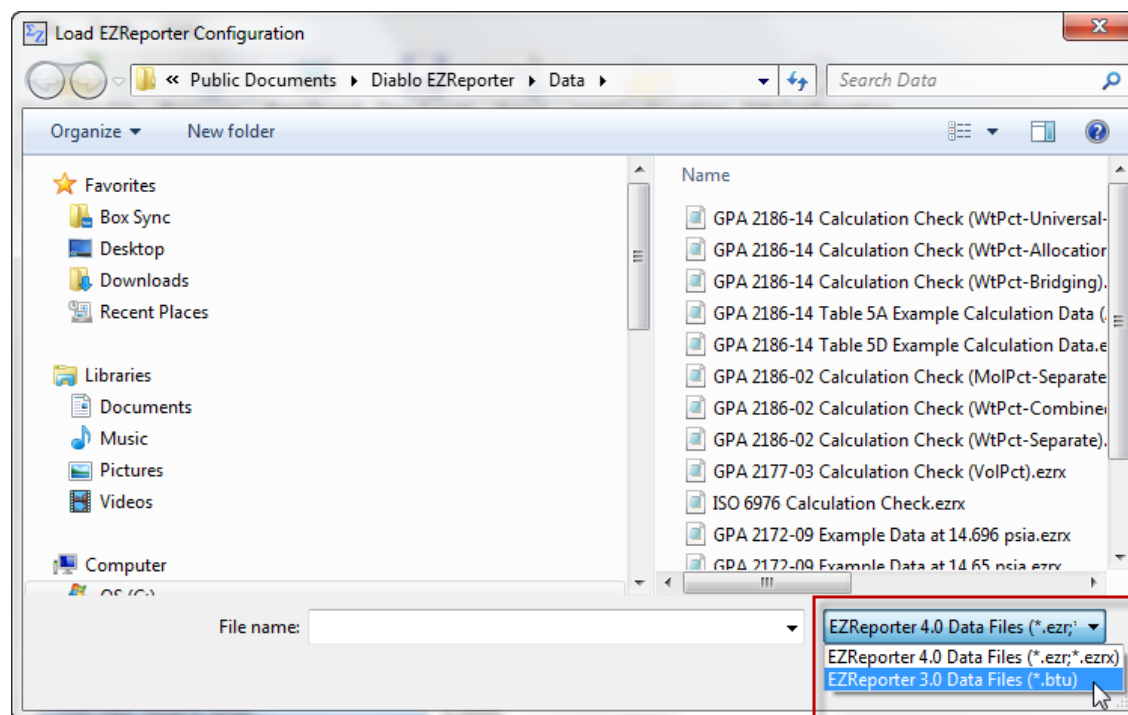
Default Data Directory

The default data directory in EZReporter 4.0 is:

C:\Users\Public\Documents\Diablo EZReporter\Data

EZReporter 3.0 Data Files

EZReporter 4.0 can load and process EZReporter 3.0 (.BTU) data files. To load an EZReporter 3.0 data file, click the “Files > Open Data File...” menu option, and then select “EZReporter 3.0 Data Files (*.btu)” in the file types list box. Then, browse to the folder containing your EZReporter 3.0 data files (usually C:\Program Files (x86)\Diablo EZReporter\Data).



EZReporter Configuration Files

EZReporter 4.0 configuration files are XML files with either a “.CFGX” file extension (configuration files) or a “.CFGT” file extension (configuration template files). Configuration template files are used to create new configuration files with the “New Configuration File Wizard”. A number of default configuration template files are installed with the software.

Configuration Template Files

Configuration template files are stored separately from the configuration files in the folder,

C:\ProgramData\Diablo Analytical\EZReporter\Default Files

Whenever the EZReporter software is installed or upgraded, the default template files will be updated to be compatible with the version of EZReporter being installed. However, configuration files created from the template files are not overwritten or modified during installation as could be the case with EZReporter 3.0.

Configuration Files

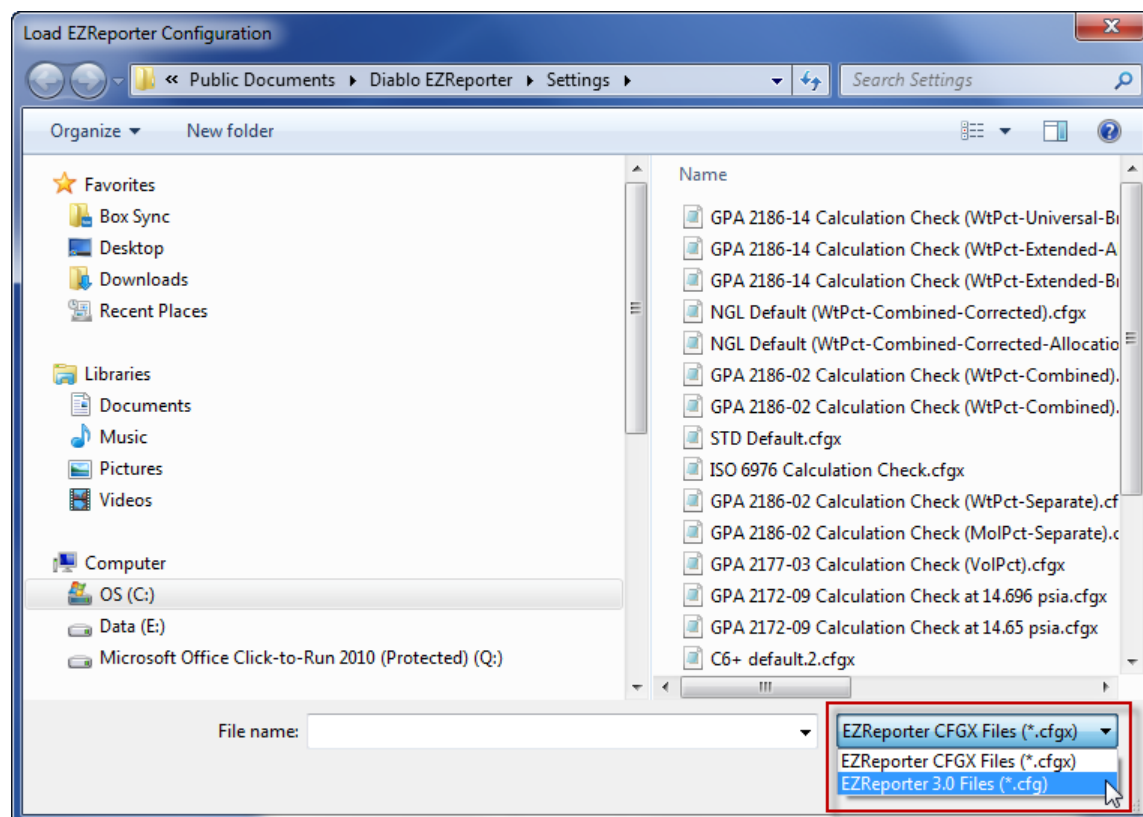
Configuration files are stored in the folder,

C:\Users\Public\Documents\Diablo EZReporter\Settings

EZReporter 3.0 Configuration Files

EZReporter 4.0 can load EZReporter 3.0 (.CFG) configuration files. The .CFG file will be converted automatically to an EZReporter 4.0 .CFGX file and saved in the EZReporter 4.0 Settings folder. The original EZReporter 3.0 .CFG file is not modified in any way.

To load an EZReporter 3.0 configuration file, click the “Files > Load Configuration...” menu option, and then select “EZReporter 3.0 Files (*.cfg)” in the file types list box. Then, browse to the folder containing your EZReporter 3.0 data files (usually C:\Program Files (x86)\Diablo EZReporter\Settings).

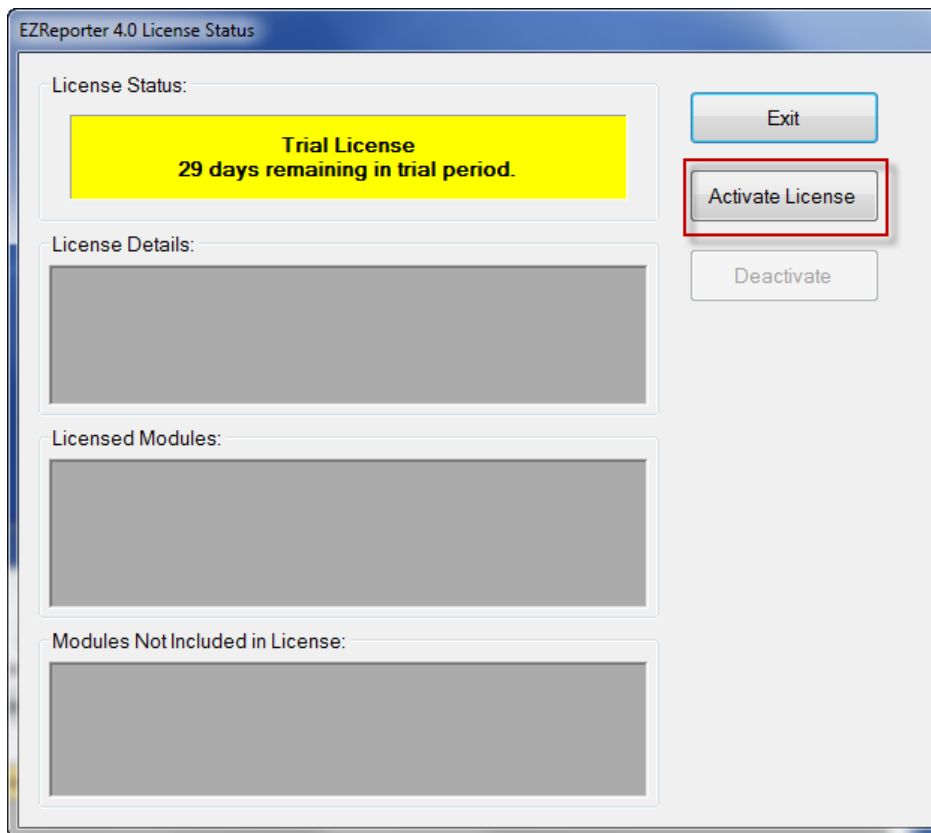


License Activation

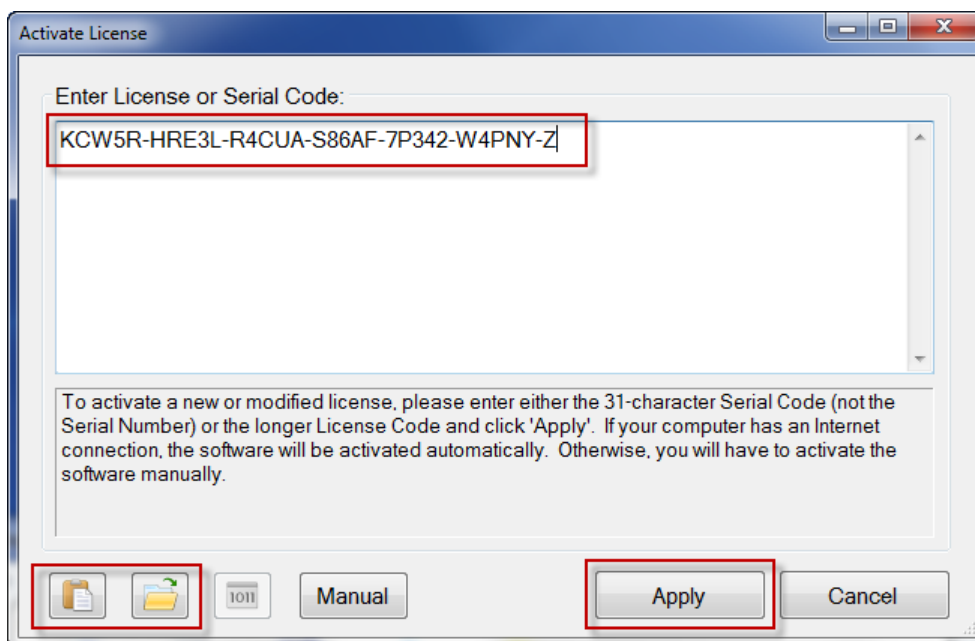
When you run EZReporter 4.0 for the first time, you will have a trial license that allows you to use and evaluate all of the program modules for up to 30 days. The program is fully-functional during the trial period. In order to continue using the software after the 30-day trial period, you must purchase a license for the desired program modules, and then activate the software.

Important: Once the software has been activated, only the modules that were included in the license you purchased will be available.

To activate your license, click the “**Activate License**” button on the License Status window that is displayed when you start the software or when you click the menu option, “Help > License Status...”.



When you purchase your software license, you will receive a 31-character Serial License Code (this is different than the shorter Serial Number). To activate the software, you must enter that License Code into the text box on the “Activate License” window. If you copy the Serial License Code to the Windows Clipboard from an email message, you can paste into the text box using the “Paste” button. Alternatively, if you received a text file containing the Serial License Code, you can load it using the “File Open” button.



After entering the Serial License Code, click the “Apply” button. If your computer is connected to the Internet, the software will contact the License Server and automatically activate the software.

If your computer is not connected to the Internet, or if there is a problem contacting the License Server, then you will need to activate the software manually by clicking the “Manual” button and following the instructions.

After activating your license, EZReporter functionality will reflect the program modules that you licensed.

Refer to the EZReporter Software License Guide for more information about licensing and activation.

Note: An Internet connection is only required when applying an activation code or deactivating the software. No Internet connection is required during normal operation of the software.

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