Minisoft® eFORMz™

Version 8.04

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Introduction to eFORMz

Overview

The Minisoft eFORMz product is designed to provide users with a flexible and dynamic tool for creating custom forms, documents, and reports. The Composer and Print Generator are written in 100% Java and can run on any platform on which Java has been ported.

eFORMz operates on any computer platform that supports JAVA including:

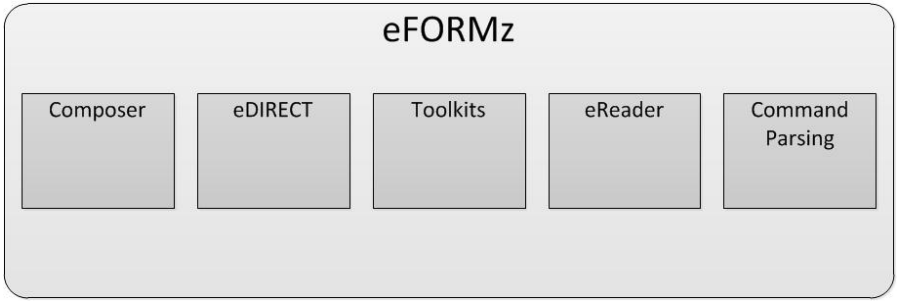
- Windows
- Unix
- Linux
- iSeries/AS400
- HPe3000*
- HP/UX
- AIX
- Sun/Solaris
- Open VMS

eFORMz is also designed to integrate with output from virtually any software application. Supported applications include; Escalate Retail, Info, McKesson, Summit/ Spectrum, Baan, SAP, Amisys, JD Edwards, Oracle, ManMan, QAD, Harris, Growth Power, Jobscope, MAPICS, Great Plains, STW, EPICOR, Lawson, Manhattan Associates and many more.

***NOTE*: Due to the limitations of JAVA on the HPe3000 we are recommending to our HPe3000 users to perform the eFORMz/eDIRECT process on a Windows, Linux, or Unix platform. Contact your Minisoft sales or support representative (support@minisoft.com) for additional information.

Getting to know eFORMz

eFORMz consists of multiple components, called *Client Tools*. The Client Tools function in different methods to support eFORMz for the designing and electronic forms generation. Below is a brief explainations of each of these components.



eFORMz Composer

The eFORMz Composer manages your form designs and electronic forms output. Data can be managed and formatted using variables, rules, and formatting options such as lines per inch, characters per inch, character sets and font style.

The eFORMz Composer does not require you to learn a new forms design tool. Instead, design your forms in a favorite word processor (i.e.: Microsoft Word, WordPerfect), desktop publisher (i.e.: Adobe PageMaker, QuarkXPress), or drawing package (i.e.: CorelDraw, InfoPath). Once the form is drawn eFORMz then captures the output and adds the electronic form to the project file.

eDIRECT

eDIRECT processes output from eFORMz and directs it to one or more different output destinations including EMAIL, PRINT FILE, and FAX. Using eDIRECT, merged print files from eFORMz can be redirected to one or more of the above output destinations simultaneously.

eDIRECT+

eDIRECT+ is a feature of eDIRECT with added features and benefits for clients interested in producing HTML output for emailing (i.e. order or ship confirmations).

eFORMz Toolkits

The eFORMz Toolkits which are available for Windows, Linux/Unix, and iSeries/AS400 host systems, create a user friendly environment to manage the eFORMz process on your host system. With the eFORMz Toolkits you can create, manage, and monitor your form and data merge processes. Refer to Chapter 9 in this manual for instructions on how to use the eFORMz Toolkit utility programs.

eReader

eReader, the eFORMz Document Viewer, is included on the eFORMz installation CD and may be freely copied. Smaller and much faster than Adobe Reader, eReader allows eFORMz users to efficiently print, save, email, and fax their own on-line documents. Users without eFORMz installed on their PC's can view, print, email, and fax forms they receive using eReader.

OnDemand Printing

The OnDemand Print utility, allows one to enter data as a value via keyboard entry and/or a scanner. It also includes an option to use a browse button to select file(s) from specific folders.

Chapter 1

eFORMz Installation Instructions

Introduction

The eFORMz install contains all the necessary components for installing eFORMz on the client and host systems. To install on a host system you must first install eFORMz on a client work station (Windows) and then proceed with installation to a host system. To install on the host systems you will utilize the eFORMz Composer client utility. The following instructions will explain how to install the client and host system installs.

For clients intending to use eFORMz for printing we have the following recommendations for printers processing eFORMz output.

Printer Recommendations

Minisoft recommends the following for printers processing eFORMz output on either a black/white printer, color, or label printers.

Black/White Printer

- HP LaserJet or equivalent with PCL 5e or greater
- Duplex printer for projects requiring duplex printing
- MICR cartridge for projects requiring a MICR line (i.e.:Payroll/Accounts Payable checks)
- 8-16MB Memory. We recommend 16MB of memory for projects that contain large amounts of graphics, duplex processing, etc.

Color Printer

eFORMz Output Type	Printer	Operating System
Image	Color Inkjet / Laser Printer	Windows Operating System
PCL	PCL 5c Laser Printer required { i.e.: HP LJ3800dn }	Windows, HP9000, iSeries\ AS400, Sun, Linux, Windows

- Duplex printer for projects requiring duplex printing
- Black MICR cartridge for projects requiring a MICR line
- 64MB Memory
- 16 pages per minute color

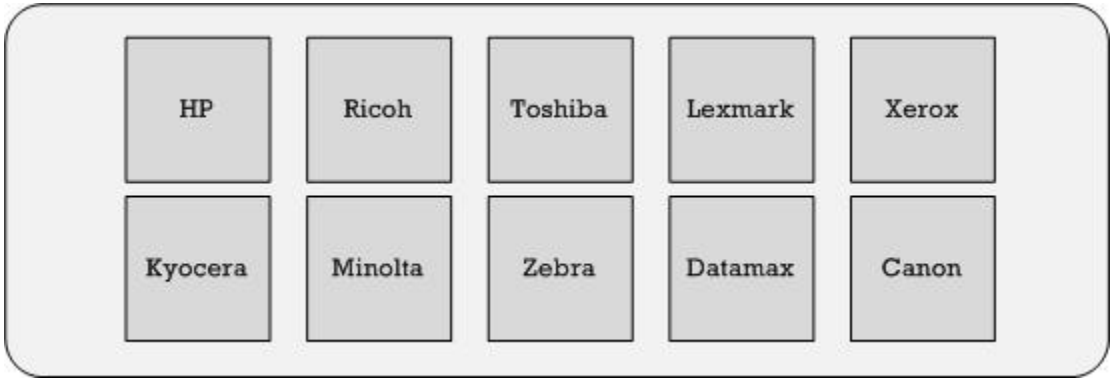
Some color printers print 16 pages per minute black/white but only 4 pages per minute color. Take note of these speeds when choosing a LaserJet printer, otherwise, delays in the printing process may occur.

Label Printers

eFORMz supports Zebra XML compatible printers.

***TIP*:** For printer recommendations please contact your Minisoft support representative (support@minisoft.com or (800) 682-0200).

Just a few of our recommended models



eFORMz Client Install

Recommendations/Requirements

We recommend a PC with the following minimal requirements:

- 2 GB RAM or greater
- 2 GHz or faster
- 1024x768 with 16 bit resolution

Note: Visit our website for frequently asked questions (FAQ):

www.minisoft.com/pages/business/eformz/pages/eformz-faq.html

***NOTE*:** eFORMz requires Java version 1.6 which is automatically installed with the PC install. The PC install will not overwrite your system Java but installs Java in a subfolder under the C:\Minisoft\eFORMz_6\ root folder.

Installation / Upgrade Instructions

Web Install

From our Minisoft website (www.minisoft.com) please register and download the latest eFORMz install. Once the setup file has been downloaded to your PC:

1. Double click the eFORMz executable *eFORMz_full.exe* and follow the on-screen instructions. Default install directory is the C:\Minisoft\eFORMz_6\ folder.

***NOTE*:** To install the eFORMz components on your host system (Unix, Linux, iSeries/AS400, RS6000, HP/UX, Solaris platform) you must first install eFORMz on your PC. Once the PC install is complete host installs can now be performed.

Host Installation

iSeries/AS400 Host Install

Recommendations/Requirements

We recommend the following for AS400's processing the eFORMz merge:

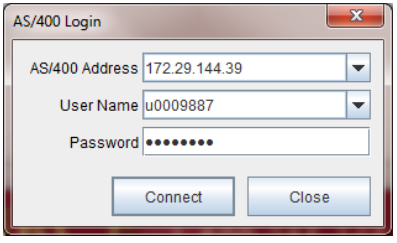
- OS - Version 5 / release level 2 (or greater)
- Java - Release 1.5 (or greater)
- Recommend creating a holding PrintQ for spoolfiles awaiting eFORMz processes.

Note: For updates to your AS400 Java release please contact your software vendor.

Installation and Upgrade Instructions

The following instructions assume you have already installed the eFORMz Composer on your PC.

1. From the eFORMz Composer Menu bar select *Host Tools* > *AS400* > *Install eFORMz*.
2. The AS400 Login dialog box will appear. Enter your *host IP address*, *user name*, and *password*.

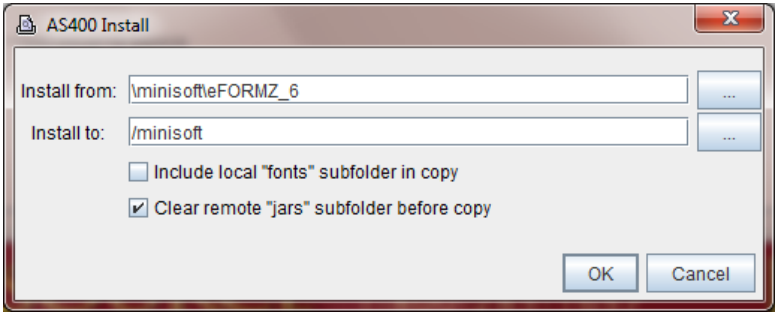


3. Once complete click *Connect*.
4. The AS400 Install dialog box will display. By default eFORMz will transfer the needed jar files from the specified directory in the *Install From* field:

   Default: C:\Minisoft\eFORMz_6\

   The '*Install to'* directory can be specified by clicking the browse button for available Queues on your AS400 system. By default eFORMz installs into the following directory off root:

   /minisoft



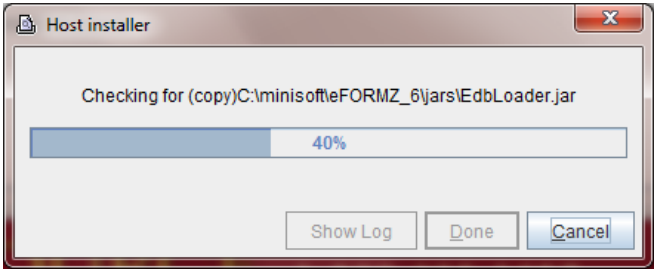
   Options include:

   Include local "fonts" subfolder in copy
   Copies the font files located in the following default directory \Minisoft\eFORMz_6\ fonts to the host directory on the AS400.

   Clear remote "jars" subfolder before copy
   Default checked. Clears the /minisoft/jars/ folder of any default eFORMz .jar files.

   Once complete click *OK*.

5. The installation progress bar will display:



6. Installation is now complete.

Optional Custom eFORMz Job Queue

The AS400 is normally delivered with a maximum batch job limit of one, meaning that only one job can execute at a time. Since the eFORMz Print Monitor runs as a job (efzPM), if executed and left running no other jobs will run. Instead they will remain in a *'jobq'* state until the eFORMz PM is terminated.

One option is to increase the maximum job setting value for QBATCH to a value greater than one. If, however, your jobs require single-thread processing then this may not be the solution for you.

Another method, ***which we recommend***, is to create a separate job queue to run the eFORMz Print Monitor. To do so:

1. Create an eFORMz Library. At the command line enter the following:

   CRTLIB (To modify: WRKLIB EFZLIB)

   Specify the following options:

   Name EFZLIB
   Type *PROD
   Text eFORMz Library

2. Create an eFORMz Job Queue. At the command line enter the following:

   CRTJOBQ (To modify: WRKJOBQ)

   Specify the following options:

   Job Name EFZJOBQ
   Library EFZLIB
   Text eFORMz Job Queue

3. Create an eFORMz Job Description. At the command line enter the following:

   CRTJOBD (To modify: WRKJOBD)

   Specify the following options:

   Job desc. EFZJOBD
   Library EFZLIB
   Job queue EFZJOBQ
   Library EFZLIB

4. To determine the next available sequence number enter the following at the command line:

   DSPSBSD QBASE

   Select option #6 (Job Queue Entries) and check for an unused sequence number.

5. Attach a job queue to an active subsystem. At the command line enter the following:

   ADDJOBQE (To modify: CHGJOBQE)

   Specify the following options:

   Subsystem QBASE
   Library *LIBL
   Jobqueue EFZJOBQ
   Library EFZLIB

   Max active jobs 1 (or number of batch jobs permitted to execute)
   Seq. number _____ (enter value from the previous step)

6. Create a new eFORMz User. At the command line enter the following:

   WRKUSRPRF EFORMZ

   Specify the following options:

   Option 1
   User EFORMZ
   Description eFORMz User
   Password { password }
   Type of User *SYSOPR {System Operator}

   Note: We recommend the minimal security level to be *System Operator.

7. Modify eFORMz Login Profile.

   Login as new user (EFORMZ) and make the following changes:

   Option 1 (user task)
   Option 9 (change your user profile)
   Option F10 (additional parameters)
   Job description EFZJOBD
   Library EFZLIB

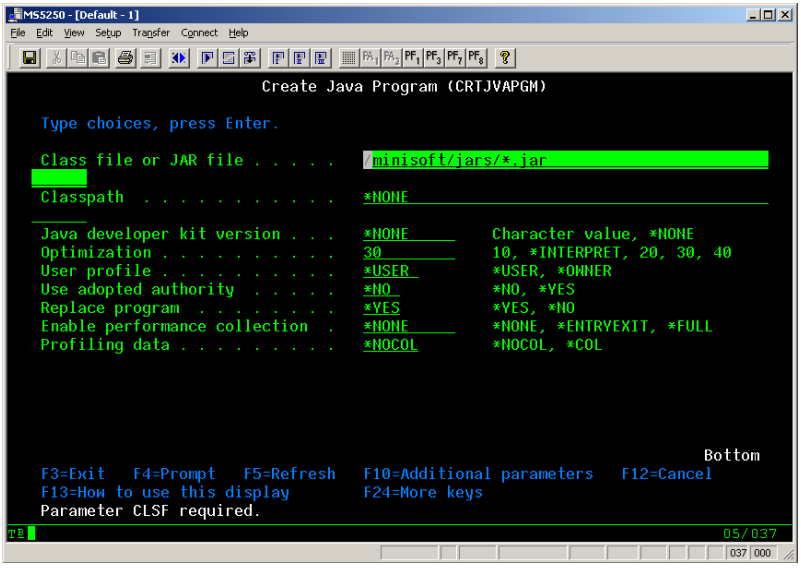
Optional Optimizing

Java applications are interpreted much like “Basic” applications. Interpreted programming languages are typically slower to execute than ‘compiled’ applications. The AS400 has an application that converts Java interpreted applications to native (compiled) code. The command used to convert the Java application is CRTJVAPGM. This command should be run on all java applications to increase performance. As far as eFORMz, this means you will need to run this command on the three supplied eFORMz “.jar” files.

Depending on the size of your AS400, this operation may take a few minutes or a few hours. This step is optional but highly recommended as performance will be increased by a factor of 12.

To convert the AS400 eFORMz jar files that were installed on your host, enter the following at the command line:

CRTJVAPGM



Set the following:

Class file or JAR file:	/minisoft/jars/*.jar
Optimization:	30

NOTE: You may want to run CRTJVAPGM as a batch job considering it may take a considerable amount of time and CPU resources.

Upgrade Instructions

Before proceeding with an upgrade, we recommend creating a backup directory of your /minisoft account. The backup directory can easily be created using the following method from the QSHELL command:

1. Enter ‘qsh’ (QSHELL) from the command line.
2. To copy the directory, enter:

   ===> cp -R /minisoft   /minisoft705

3. Results in two directories:

   /minisoft
   /miinisoftxxx   { backup }

Should you need to revert back to the original version, delete the existing and move the old directory back:

==> rm -r /minisoft
==> mv /minisoftxxx /minisoft

HPe3000 Install

Recommendation

Due to the limitations of JAVA on the HPe3000 we are recommending to our HPe3000 users to perform the eFORMz/eDIRECT process on a Windows operating system. In combination with NetPrint, Minisoft is providing an automated method to redirect your spoolfiles from the HPe3000 to print files on Windows.

Follow the instructions below to install NetPrint on your HPe3000 to monitor and automatically send spoolfiles to a Windows operating system. For further instructions on installing eFORMz on a Windows operating system, see *Chapter 2: Host Install > Windows Install*.

NetPrint Installation Instructions

To install NetPrint on your HPe3000:

1. Insert the eFORMz/NetPrint CD into your CD-ROM drive.
2. From the Taskbar, select RUN.
3. Type: D:\NetPrint\NetPrint.exe (D being the letter of your CD-ROM drive) and follow the on screen instructions.
4 Once NetPrint has been installed, edit your NP92CONF.PUB.MINISOFT file so NetPrint will send spoolfiles to a Windows operating system.
5. Add the following statement to your NP92CONF file (*example only*):

```
NETPRINT D=LP AND P=3
SETVAR
QUEUE WINEFZ
NODE XXX.XXX.XXX.XX
OPTIONS PTYPE=LPD;PURGE;TRIM;NETOPT="BSDv"     {lowercase V for "BSDv"}
NETLOG
END
```

You can modify D=LP to another spool queue device or class name and/or set P=3 to another priority level. More detailed information concerning selection criteria can be found in your NetPrint manual.

QUEUE WINEFZ represents the shared print queue configured on your Windows operating system. Note, they must share the same queue name.

NODE xxx.xxx.xxx.xx is the IP address of your Windows operating system.

Below is an optional NETOPT configuration for Windows, which changes the file name sent from the HPe3000 to Windows:

NETOPT="BSDv, BSDN!SPFNAME-!SPFDFID"

Example: {spoolfile name}-5839_{WINEFZ counter}.dat
INVOICE-5839_1.DAT

Installing eFORMz on a Windows Operating System

Once Netprint has been installed on the HPe3000 you are now ready to install eFORMz on a Windows operating system. For further instructions on installing eFORMz on Windows operating system, see *Chapter 2: Host Install > Windows Install*.

Upgrade Instructions

When updates become available for NetPrint, please follow the upgrade procedures in the NetPrint manual either accompanied with the NetPrint CD or from our website (www.minisoft.com). For upgrade procedures for eFORMz on a Windows operating system, see *Chapter 2: Host Install > Windows Install*.

Unix Environment Install

The eFORMz host install can be installed on a Unix, Linux, HP/UX, RS6000, or Solaris environment. Follow the installation instructions below to install the eFORMz host components on one of the above environments.

Requirements

eFORMz requires the following for Unix environments processing the eFORMz merge:

- Java - Release 1.5 (or greater)

Installation and Upgrade Instructions

The following instructions assume you have already installed eFORMz on your PC. The eFORMz Composer will be used to install the needed components on your Unix system.

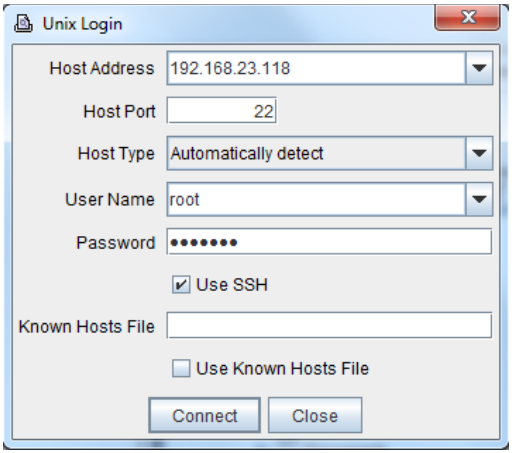
1. From your host machine login as Administrator (root) and create the following directory:

   ```
   mkdir minisoft
   ```

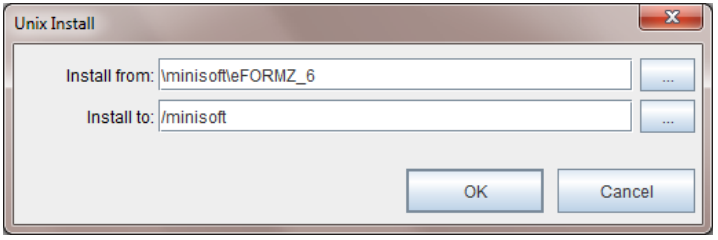
2. Change the attributes of the Minisoft directory to the following:

   ```
   chmod 755 minisoft
   ```

3. Open the eFORMz Composer on your PC and select the *Host Tools* menu. From the menu selection select *Unix > Install eFORMz*.
4. The Unix logon screen will appear. Enter your *host IP address*, *user name*, and *password* and then click *Connect*. If using a Secure Shell account, check the *Use SSH* option and identify the *known_hosts* file if necessary.



5. The Unix Install dialog box displays. By default, the eFORMz_6 folder is the directory eFORMz will be selecting the installation files from. The default install directory on your host system is the *minisoft* directory under *root*.



6. Click *OK* to start the installation process.
7. The Progress dialog box will display. When the installation is complete you will return to the eFORMz Composer main window.

Windows Install

Recommendations

To run eFORMz on your Windows Server for the merge process we recommend a server with the following capabilities:

- 2GB RAM or greater
- 2 GHz or faster

> ***NOTE*:** eFORMz requires Java version 1.6 which is automatically installed with the PC install. The PC install will not overwrite your system Java but installs Java in a subfolder under the C:\Minisoft\eFORMz_6\ root folder.

Installation Instructions

Web Install

From our Minisoft website (www.minisoft.com) please register and download the latest eFORMz install. Once the setup file has been downloaded to your PC:

1. Double click the eFORMz executable *eFORMz_full.exe* and follow the on-screen instructions. Default install directory is the C:\Minisoft\eFORMz_6\ folder.

Once eFORMz has been installed you are now ready to proceed with the automation process, see *Chapter 9: Print Automation* for further information.

Alternative Host-based Processing (HPe3000, AS400, Unix)

The following instructions are for users sending output from one host system (i.e.: HPe3000, AS400, Unix) to a Windows operating platform where the eFORMz merge process will take place. To monitor for incoming print files from another host system follow these steps:

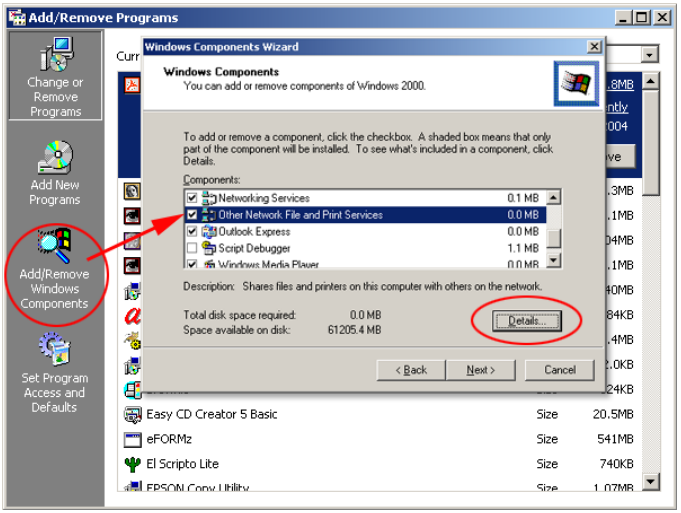
STEP 1: Enable TCP/IP Print Server for LPD Communication

Windows NT

1. Right-click *Network Neighborhood* and select *Properties*.
2. Select the *Services* tab. If *Microsoft TCP/IP Printing* does not appear as a Network Service click *Add*.
3. Click *Microsoft TCP/IP Printing* and click *OK*. Insert the source CD-ROM if you are prompted to do so.
4. Click *Close* and restart the computer when prompted to do so.

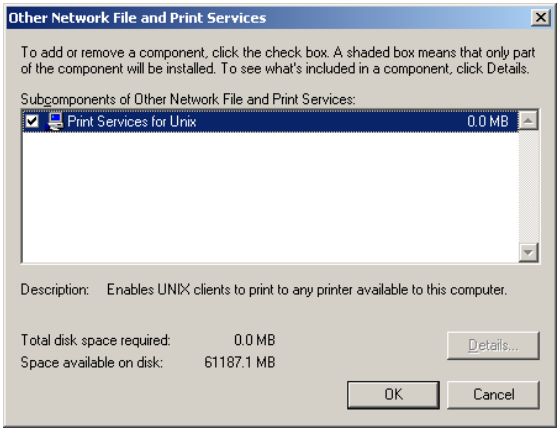
Windows 2000/XP/2003

1. From the Start menu select *Settings* > *Control Panel* > *Add/Remove Programs*.
2. The Add/Remove Programs dialog box will display.
3. Click *Add/Remove Windows components*.



4. *Windows Components Wizard* appears.

5. Click *Other Network File and Print Services* from the Windows Components Wizard.
6. Click *Details*. Make sure the option *Print Services to UNIX* is enabled:



Windows VISTA / 7

From the Start menu select:

1. *Settings > Control Panel > Program and Features.*
2. Select *Turn Windows Features On or Off*.
3. Select *Print Services -> check LPD Print Service*.
4. Click *OK*.

Windows Server 2008

From Server Manager:

1. Click on Add Roles.
2. Select Print and Document Services.
3. Add LPD Services.

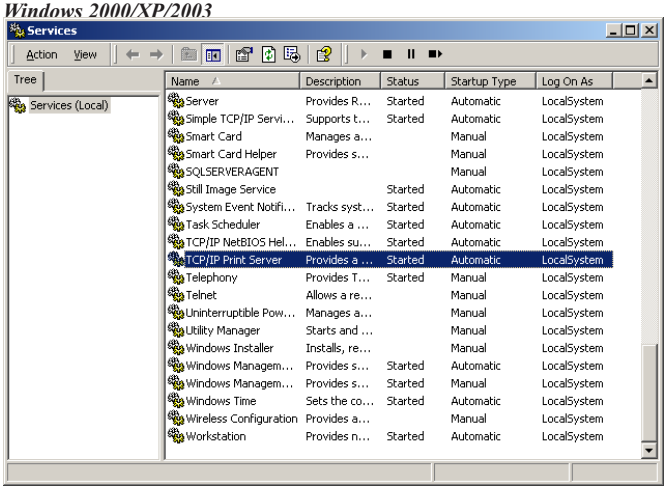
STEP 2: Starting the TCP/IP Print Server Service

Confirm that the TCP/IP Print Server Service has been started:

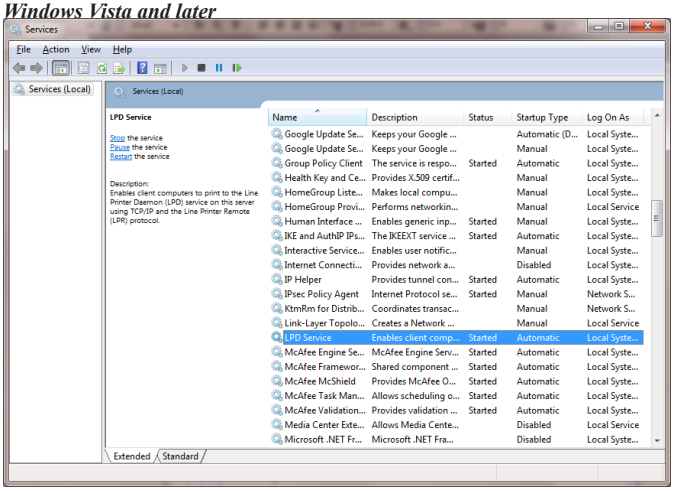
1. From your Windows Control Panel select *Administrative Tools*.
2. Select *Services*. A listing of all services running on your Windows platform will display.

   Windows 2000/XP/2003: Select *TCP/IP Print Server*.
   Windows Vista and later: Select *LPD Services*.
3. Start TCP/IP Print Server (or LPD Services depending on your Windows version), if not started already, and select *Automatic* as the Startup Type.

Windows 2000/XP/2003



Windows Vista and later



STEP 3: Configuring the eFORMz Port Monitor

To capture incoming print files (or spoolfiles) from an alternative host system to a directory on your Windows operating system:

1. Create a new eFORMz Port by running PORTMONITOR.BAT located in the following directory:

   C:\Minisoft\eFORMz_6\

   PORTMONITOR.BAT contains a single statement which causes the *efzmon.dll* to be copied to your Windows system folder and then updates the registry:

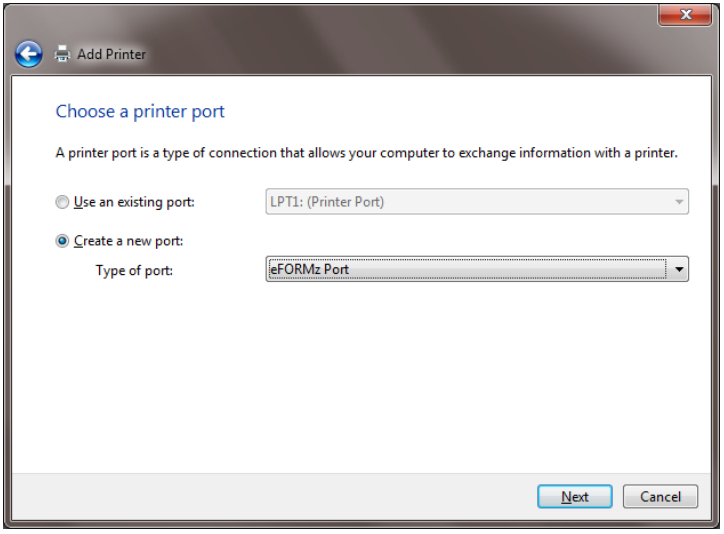
   monset “eFORMz Port” efzmon.dll

> ***NOTE***: The port monitor cannot be added remotely. Windows will not permit the adding of this port from a remote connection. The only way one can do so is from the main console.

> ***TIP***: If you receive any errors when trying to install the port monitor, try running the following file to install VC++ libraries to your registry:
>
> *32bit:*
> C:\Minisoft\eFORMz_6\docs\vcredist_x86.exe
> *64bit:*
> C:\Minisoft\eFORMz_6\docs\vcedist_x64.exe

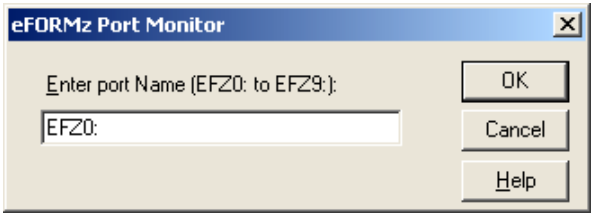
2. Add a new printer via your *Windows Printer Wizard* (*START Menu > Control Panel > Printers > Add Printer*).
3. Select LOCAL PRINTER and then click *Next*.

4. Choose *Create New Printer Port*. From the drop down list select *eFORMz Port*. Click *Next*.



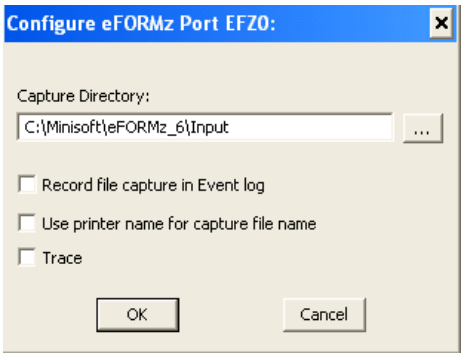
5. From the eFORMz Port Monitor dialog box enter the *port name* and *number (id)*.

   We recommend using the format *EFZn:* where *n* is a value followed by a **colon** ":".



***NOTE*:** The port range displayed above { 1 - 9 } is only an example. The Windows operating system will allow you to exceed this value should you need to do so.

6. Using the browse button for the *Capture Directory* field select the folder where you would like your captured files to reside:

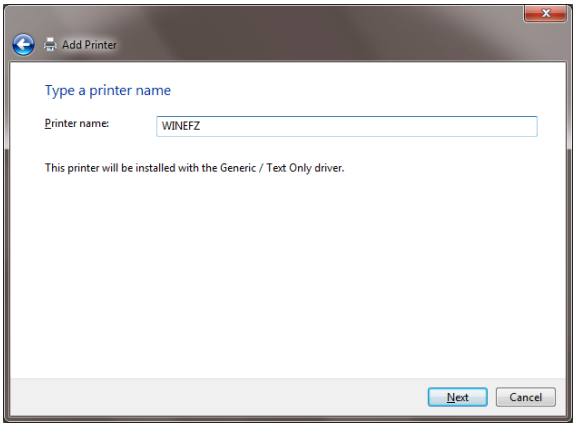


Record file capture in Event log can remain unchecked. Check *Use printer name for capture file name* only if you wish the data file name to replicate the name of the printer, otherwise, leave unchecked. Check *Trace* to implement tracing on the port monitor, leave unchecked.

Click *OK* when complete.

***NOTE*:** The resulting trace file can be found in the Windows System32 folder noted as 'efzmon.tra'.

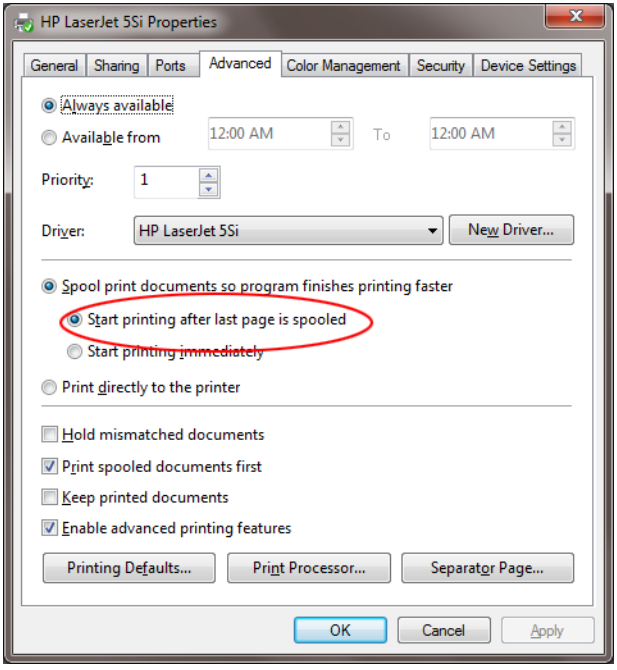
7. Select a manufacturer and model of printer. Anyone will do since we are only concerned with the port associated with the printer.
8. Select *Keep Existing Driver*.
9. Enter a Printer Name. The printer name should match the QUEUE name that is specified on your host system sending the print files (spoolfiles) to your Windows operating system. Once complete your new port will be added:



STEP 4: Configuring your Network Printers

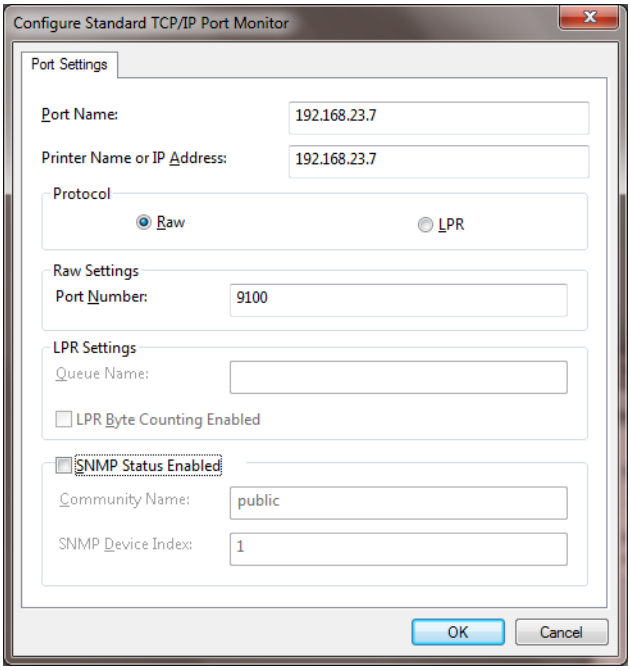
To avoid print interruptions and to permit print spooling to your network printer printing an eFORMz merge, make the following change:

1. From your *Printers and Faxes* dialog box select the network printer configured to print your eFORMz merge processes.
2. Select the *Advanced* tab.
3. From the Advanced tab select *Start printing after last page is spooled*.



4. Next, select the *Ports* tab and select *Configure Port*.

5. The *Port Settings* dialog box will display. *Uncheck* SNMP Status Enabled.



***NOTE*:** If the printer is in an offline state (paper jam, user offline, out of paper, etc...) and eFORMz attempts to send print to the queue then Java complains and the file is not transmitted with the reported error in the eFORMz log. This issue started appearing with the release of Java 5. By unchecking the SNMP box, noted above for each and every printer processed by eFORMz , then the problem is goes away. Unfortunately this box is always checked when one adds a new printer device.

***NOTE*:** Print Spooler must be restarted.

6. Once complete, select *OK*.

Chapter 2

eFORMz Composer

Introduction

The eFORMz Composer allows you to build, maintain, and manage an eFORMz project file. A single eFORMz project file can contain any number of forms, variables, and rules. Each project can contain a number of *Logical Pages,* with each page containing a number of *Forms.* Forms can be created dynamically within eFORMz or using a preferred word processor, desktop publishing, or drawing package.

Each form can contain a number of *Rules*. Rules are used to alter the appearance of data that is displayed on the form. Rules provide you with the options of changing font size and style, moving data, converting ASCII characters to barcodes, and much more.

The vast majority of projects will only have one logical page even though the actual print job may contain several physical pages. For example, if you are creating a payroll print job for your company that consists of 5 employees and the payroll print job simply prints one check after another, this would be considered a single page project as shown in *Illustration 1*.

However, if you are creating a payroll print job for your company that consists of 3 employees and the payroll print job prints a deductions/check followed by an employer deductions without a check, this would be considered a two page project. This would allow you to change and edit the two entities separately. See *Illustration 2*.

Illustration 1: eFORMz Single Page Project

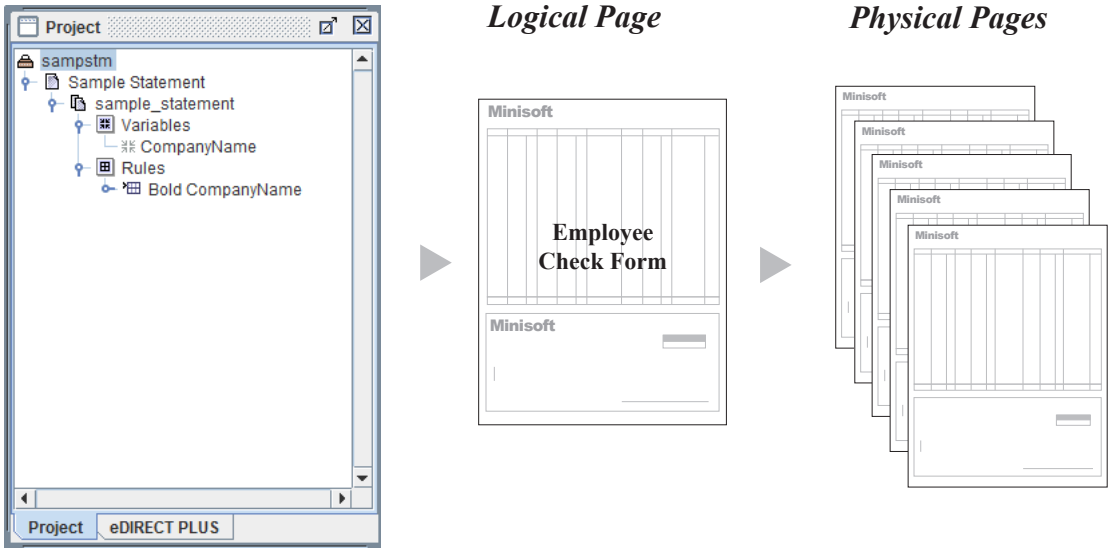
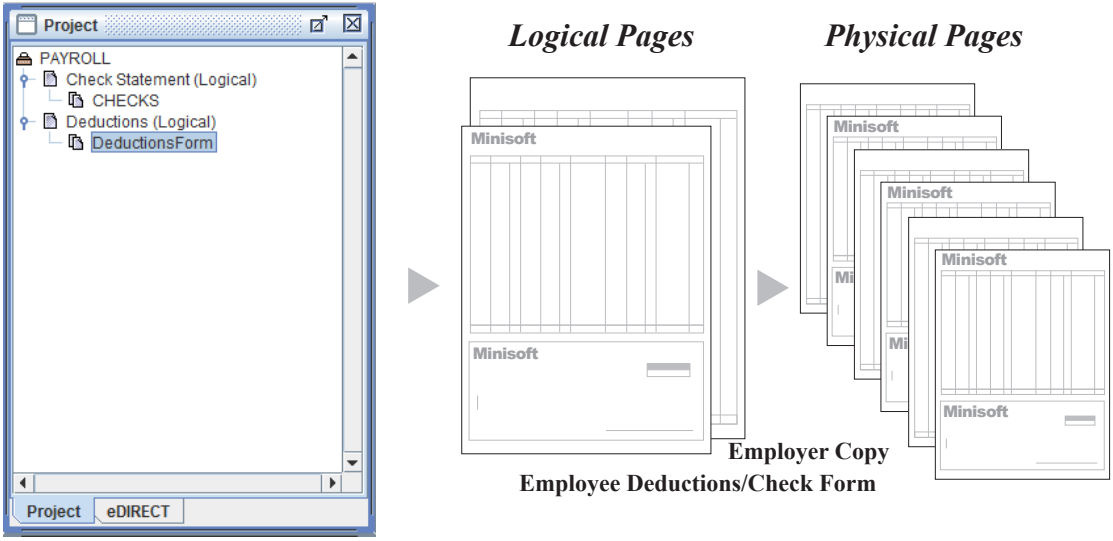
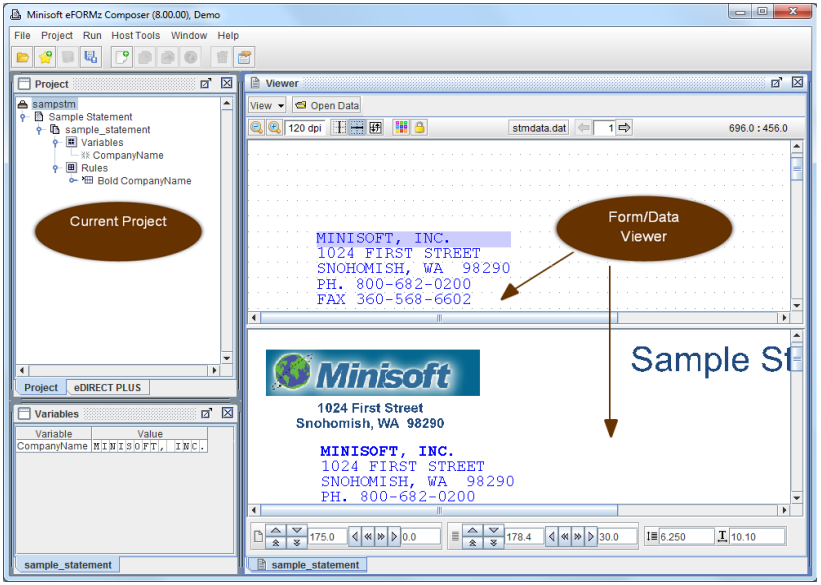


Illustration 2: eFORMz Two Page Project



eFORMz Composer Tour

The eFORMz Composer consists of two main window area's, *Project* and *Viewer*, with each having their own distinct functions. The Viewer can be split into two panes (horizontal or vertical view) with synchronized scroll bars allowing you to customize your display.



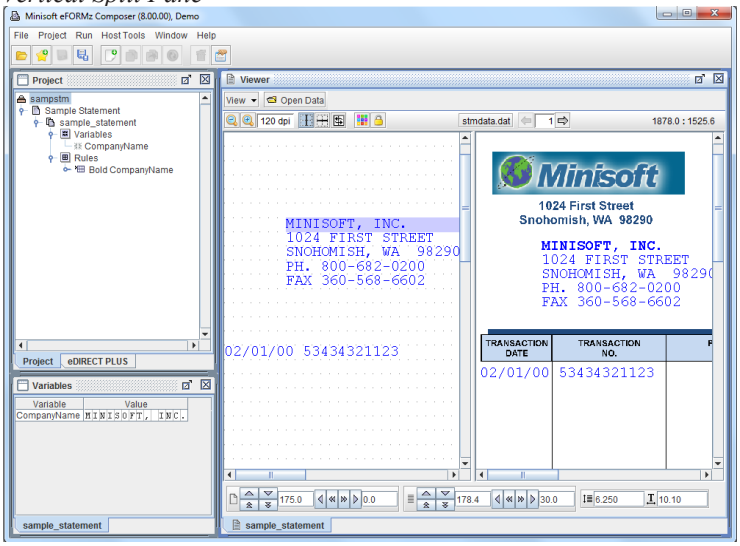
The *Project* window displays the entire project layout:

- project name, pages(s), and form(s)
- variables and rules
- form and data rule conditions and much more.

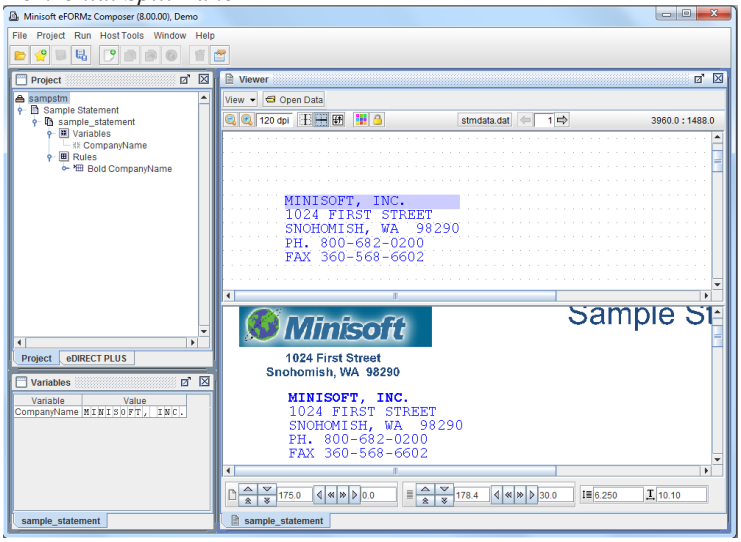
The *Viewer* window displays two main window panes by default:

- Input Data Viewer
  Displays your incoming data. The incoming data is the data you would like to format or manipulate. The Input Data Viewer is also used to create custom variables and conditions for use in rule actions.
- Form and Data Viewer
  Displays your custom form and custom formatted data as it would appear when printed.

Vertical Split Pane



Horizontal Split Pane



Getting Started with eFORMz

To get to know eFORMz start the eFORMz Composer from your *Start* menu by selecting *Programs > eFORMz 8 > eFORMz Composer*. The eFORMz Composer application will open. To view the applications potential, open one of the sample eFORMz project files. From the eFORMz Composer *File* menu:

1. Select *File: Open Project*.
2. The *Open* dialog box will display. From the *Look in* field navigate to the following directory:

   C:\Minisoft\eFORMz_6\Projects\

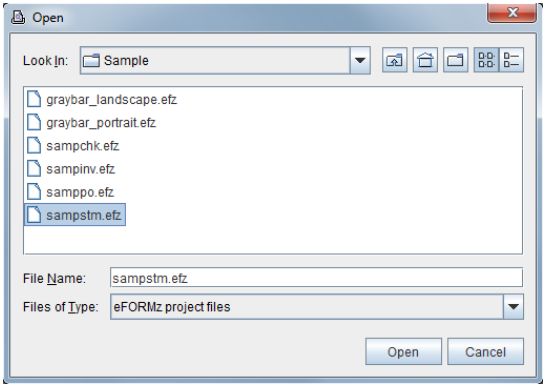
   Choose a project from one of the following folders:

eDIRECT	
sampstm1.efz	Starter eDIRECT project file. *Chapter 10: Quick Start*
sampstm2.efz	Example project showing how a email or fax number can be pulled from the data file to be placed dynamically in eDIRECT.
sampstm3.efz	Example project for database lookup of email address.
eDIRECT+	
SAMPLE-1.efz	Sample HTML output order confirmation. Includes a sample image of the order confirmation (sample-layout.jpg) and the layout in .psd format (sample-layout.psd)
Sample	
sampstm.efz*	Sample statement.
sampinv.efz	Sample invoice.
sampchk.efz	Sample check.
samppo.efz	Sample purchase order.
greenbar_landscape.efz	Sample greenbar in landscape format.
greenbar_portrait.efz	Sample greenbar in portrait format.
Software Provider Templates	

Ecometry	Collate Invoice Statement
Growth Power	Invoice Purchase Order
MAPICS	Invoice Statement
QAD	Purchase Order

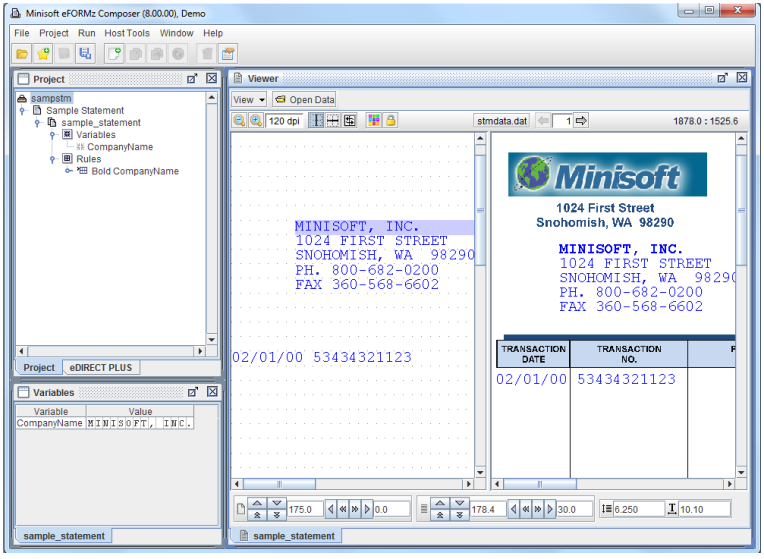
*For this example we are opening the *sampstm.efz* eFORMz project file from the Sample folder.

3. Once the project file has been selected click *Open*.



4. The *Data File* dialog box will display. Select the data file from the *Sample* folder that corresponds to the sample project you selected and then select *Open*.

5. The eFORMz Composer will now display the project file layout in the *Current Project Window*.

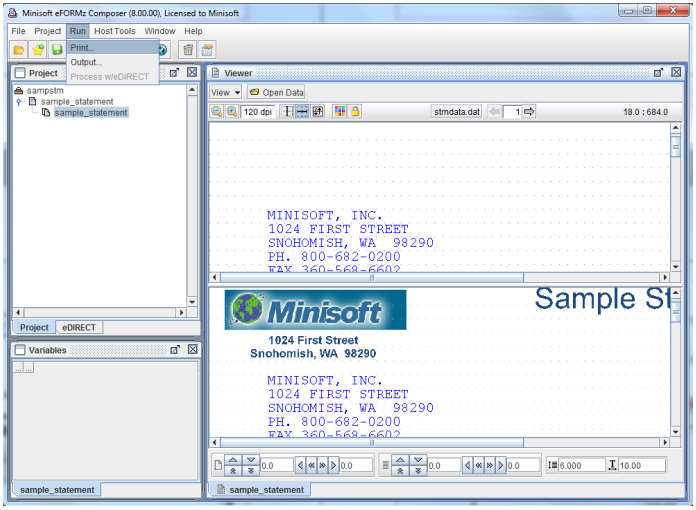


***TIP*:** If the Viewer window does not display as shown above, *right click* the project file name from the Current Project Window and select *Display Forms and Data*.

Printing the Sample Project

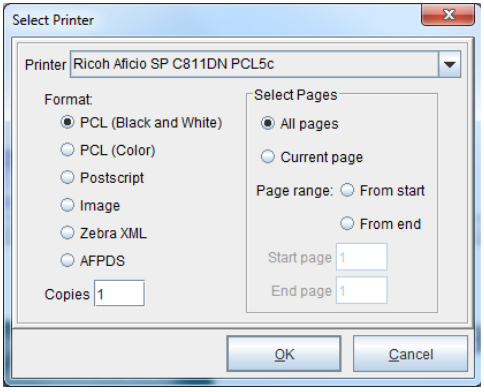
To print the sample project file to a networked printer:

1. From the eFORMz main menu select *Run* > *Print*.



2. The *Select Printer* dialog box will display. Select the printer you would like to print to and then select one of the following formats:

   Format > *PCL (Black and White)* - for black/white printing to a LaserJet printer.
   Format > *PCL (Color)* - for color printing to a LaserJet printer.
   Format > *Postscript* - for printing to a Postscript printer.
   Format > *Image* - for printing to a non-pcl based printer.
   Format > *Zebra XML* - for Zebra XML printers.
   Format > *AFPDS* - IBM's AFPDS/IPDS printers.



3. Click *OK*. The merged form and data will print on your networked printer.

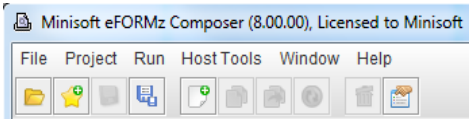
Chapter 3

eFORMz Composer Menus and Project Options

Main Menu Options

The Composer menu bar has the following five menus:

File, *Project*, *Run*, *Host Tools*, *Window,* and *Help*.



File Menu

The File Menu controls the project file with the following items:

Open Project
Opens any previously saved project template.

New Project
Creates a new project template with the supplied name.

Save Project
Saves the currently loaded project by its current name.

Save Project As
Saves the currently loaded project by a new user supplied name.

System Properties
Controls the operation of the eFORMz Composer.

Exit
Closes the currently loaded project and exits the Composer.

Project Menu

The Project Menu controls project items with the following options:

Add New Page to Project...
Adds a new page to your project. You will need to add a page for each logical page of data within your report. Most projects will only contain one logical page regardless of how many physical pages are contained within the report.

Note: See *Chapter 3: Introduction to eFORMz - Project Illustrations 1* and *2*.

Add Form to Page...
Adds a form to a logical page. Adding multiple copies of the same form causes a report to print multiple copies of a page of data.

Replace Form
Replaces an existing form with another. Used extensively when making alterations to your form.

Reload Form
Reloads a previously imported RTF document automatically.

Remove Selected Item
Removes a selected page, form, or rule from the current project. A warning message will be issued prior to the delete.

Properties...
Displays the Properties dialog box of the selected item in the Current Project window (Project, Page, or Form).

Run Menu

Print
Sends a merged print file of your form and current data file to a selected printer.

Output..

PDF File
Produces a merged pdf file of your form and data output.

eFORMz Document Files
Produces an .efd file for eReader.

PCL Files (B/W)
Produces a merged file of your form and data in black/white pcl format.

PRN Files (B/W)
Produces a merged file of your form and data in black/white pcl format.

PCL Files (Color)
Produces a merged file of your form and data in color pcl format.

Postscript Files
Produces a merged file in the standard format for a Postscript printer.

XML
Produces a merged file in standard XML format for a Zebra printer.

HTML
Produces an HTML file of your output.

TEXT
Produces a print file in standard text format.

AFPDS
Produces an AFPDS print file

TIFF, JPEG, PNG, GIF, BMP
Produces an image file in one of the above formats.

Process w/eDIRECT or eDIRECT PLUS
Processes output through eDIRECT.

Host Tools Menu

Local Toolkit
Provides a GUI interface for configuring the eFORMz job process on a Windows operating system (Windows XP/2003/Vista/7). For further information, see *Chapter 9: Print Automation*.

AS400
Provides a GUI interface for configuring the eFORMz job process on your AS400. For further information, see *Chapter 9: Print Automation*.

Unix
Provides a GUI interface for installation, saving, uploading, and downloading files from your Unix system. For further information, see *Chapter 9: Print Automation*.

Window Menu

The *Window* menu allows you to select which windows you would like to have active within the eFORMz Composer.

Project
(default enabled) Displays the *Current Project* window.

Viewer
(default enabled) Displays the form and data *Viewer* window.

Variables
(default enabled) Displays the *Variables* viewer window.

Reset
Restores the default window settings.

Text to XML Editor
Works in conjunction with the *Project Properties > Advanced Preprocessor > Text to XML Converter.* (While the preprocessor is available in all supported version of Java, the editor is only available when the composer is running in Java 6 or later.)

Help Menu

eFORMz Manual
Provides quick access to the eFORMz pdf manual.

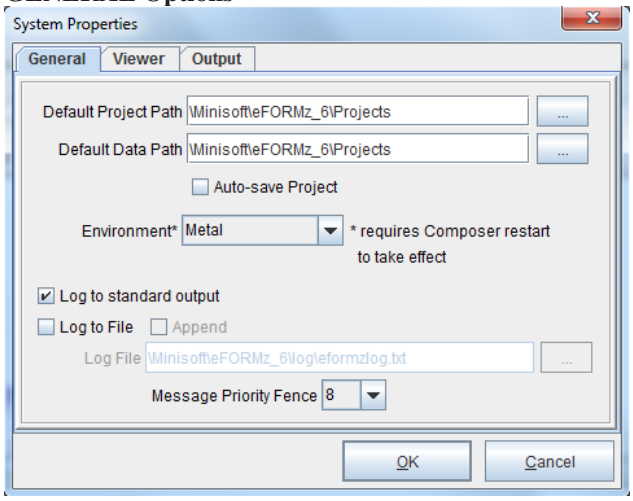
About Minisoft eFORMz
Displays the eFORMz copyright date and version number.

Available Character Sets
Contains a list of accessible character sets.

System Properties

The eFORMz *System Properties* sets the settings for all projects. To access the eFORMz System Properties, select *System Properties* from the eFORMz *File Menu*.

GENERAL Options



Default Project Path
Sets the default folder that will be opened when retrieving a project file.

Default Data Path
Sets the default folder that will be opened when retrieving a data file.

Auto-save Project
Automatically saves changes made to your project file.

Environment
Changes the appearance of the eFORMz application. Shutting down the eFORMz application is required for an appearance to change. Options include: *Metal, CDE/Motif, Windows Classic*. Default is *Metal*.

Log to Standard Output
When checked, logs all messages and standard output from eFORMz to a DOS window.

Log to File
When checked logs all messages and standard output from eFORMz to a text file.

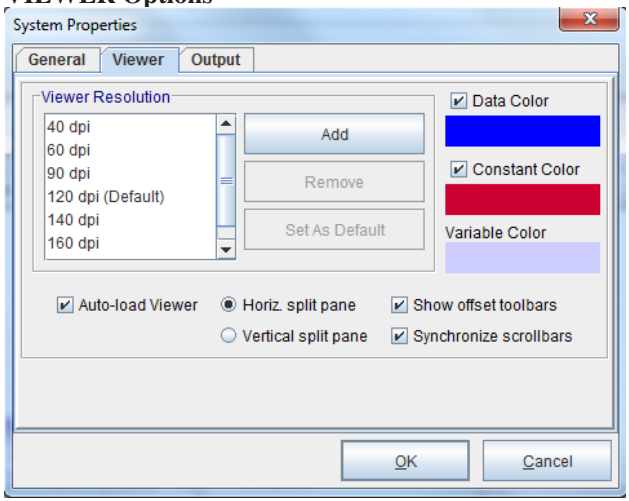
Log file
When "Log to File" is checked use the *Log File* field to specify the path and file name of the log file.

Append
Permits log messages to be appended to the log file.

Message Priority Fence
A message priority fence can filter what messages are displayed or written to the log file.

0-3 - All informative messages
4-7 - Unused
8-11 - Status messages (i.e.: pages output, etc...) only
12-15 - Error and other high priority messages only

VIEWER Options



Viewer Resolution
(Default 120dpi) Controls the default zoom levels. Customize your viewer controls by clicking *Add* or *Remove*.

Data Color
Allows you to change the data color displayed in the viewers.

Constant Color
Allows you to change the constant color displayed in the Form and Data Viewer.

Variable Color
Allows you to change the variable color displayed in the Data and Form Viewer.

Auto-load Viewer
When checked, the Form and Data Viewer automatically reloads when a change has been made to the project rules, properties, or form.

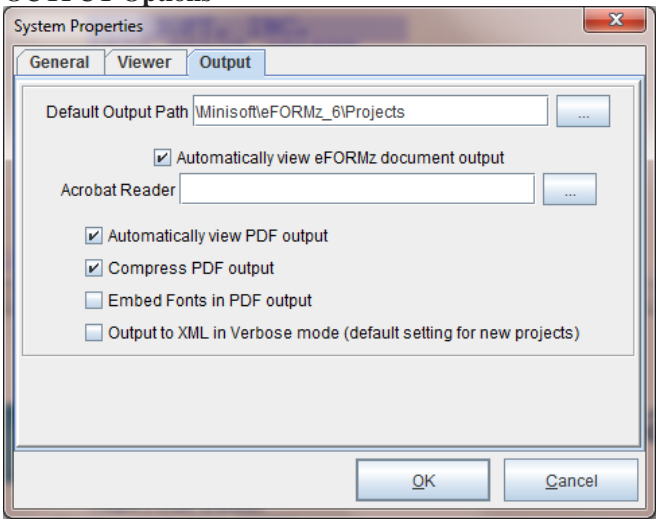
Horizontal Split Pane
Allows you to view your input and output data simultaneously using the horizontal split pane button. Default is checked.

Vertical Split Pane
Allows you to view your input and output data simultaneously using the vertical split pane button.

Show Offset Toolbars
When checked, the Form and Data Toolbar displays allowing you to easily adjust the positioning of your form and data. Default is checked.

Synchronized Scrollbars
Allows scroll bars within the Viewer to become synchronized. Default is checked.

OUTPUT Options



Default Output Path
Specifies the folder the output will be directed to.

Automatically view eFORMz document output
When checked, automatically starts the eReader when an .efd file is created.

Acrobat Reader
Path to the Adobe Acrobat reader executable. Specify if you wish to use a reader other than system default.

Automatically View PDF Output
When checked, the PDF file reader will automatically start after a PDF file has been built from eFORMz. *Note*: Path must be provided for Acrobat Reader.

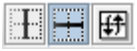
Compress PDF Output
Compresses the eFORMz pdf file output allowing smaller file sizes.

Embed Fonts in PDF Output
Embedded fonts prevents font substitution when a pdf file is viewed or printed. Text will remain in its original font.

Output to XML in Verbose mode
Default unchecked. When unchecked the XML output is condensed using token references. Checked will cause the XML output to be represented in full text XML verbiage.

Viewer Controls

Zoom Control
Controls the zoom level for viewing. The view setting will display to the right of your zoom controller icons. To personalize your view settings, from the eFORMz Composer File Menu select *System Properties: Viewer tab > Zoom Control.*



Vertical/Horizontal Panes
Allows you to customize your Viewer panes to view horizontally or vertically your input and output data simultaneously. Use the *Flip Pane* button to switch the Viewer windows. If you wish to view only one pane, slide the pane separator to one side.

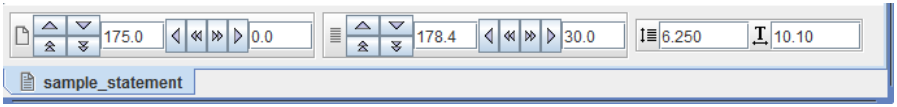
Color Control
Enables/Disables color display in the Input Data Viewer and Form and Data Viewer.

Drag Control
Allows you to lock down movable elements in the Form and Data Viewer. Default is unlocked.

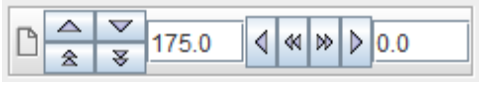
Previous/Next Buttons
Allows you to move back and forth between data pages.

Row/Column Coordinates
The position of your mouse in the Form and Data Viewer. Coordinates based in de-cipoints.

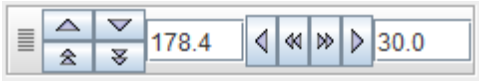
Offset Adjustment Toolbars



When checked, the Form and Data Toolbar displays allowing you to easily adjust the positioning of your form and data.



Form Offset Adjustment Toolbar



Data Offset Adjustment Toolbar

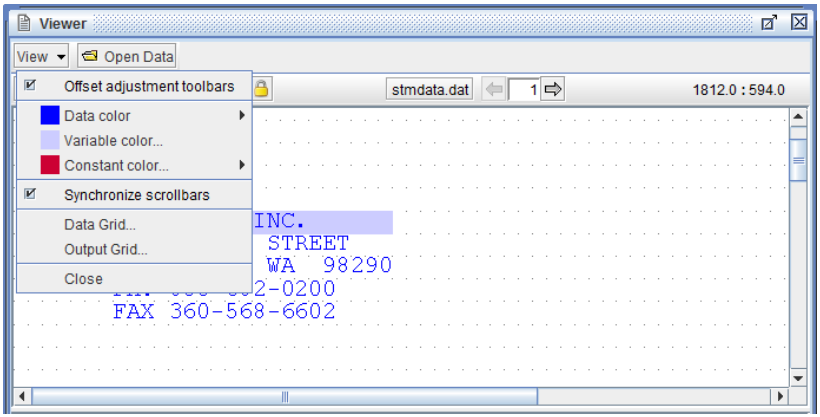
Lines Per Inch - The number of data lines in every vertical inch.

Characters Per Inch - The number of characters per inch horizontally. Used in conjunction with Fixed fonts.

Height - The vertical height of each data character. Used in conjunction with Proportional fonts.

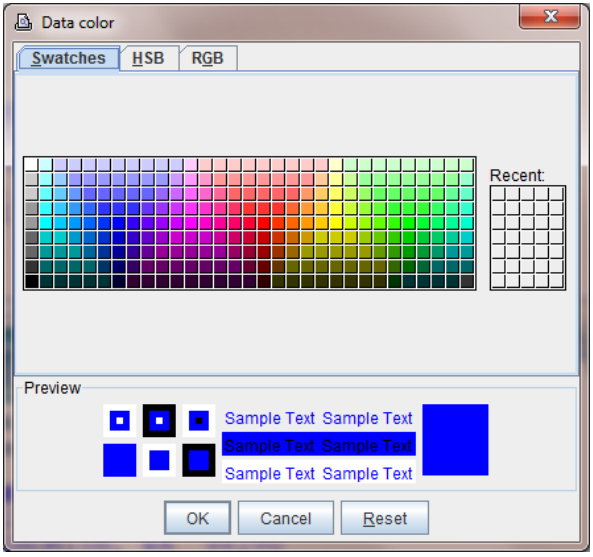
Viewer Menu Options

The eFORMz Viewer has a main menu option that allows you to control different aspects of the viewer such as the data grid, scrollbars, and viewer colors. Note some of the options available in the following headings.



Data, Variable, and Constant Color

Allows you to change the data color displayed in the Viewer.



Data Color
Allows you to change the data color displayed in the Viewer. Disable deactivates the color function. Enable is the default.

Variable Color
Allows you to change the variable colors displayed in the Viewer.

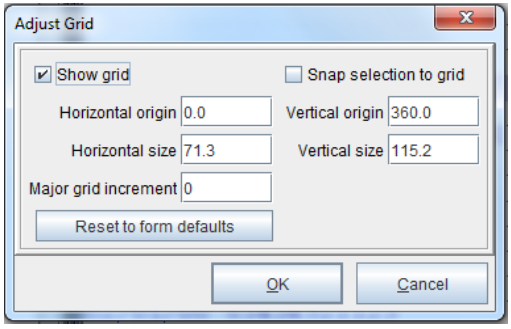
Constant Color
Allows you to change the constant colors displayed in the Viewer. Disable deactivates the color function. Enable is the default.

Synchronize Scrollbars

When checked, scroll bars become synchronized in the Viewer windows.

Data Grid

Allows you to include/exclude the data grid from the Input Data Viewer. Customize the data grid size using the horizontal and vertical decipoint values.



Options Available:

Show Grid
Displays the data grid for easy character selection.

Snap Selection to Grid
Allows you to precisely align objects or data to the grid.

Horizontal/Vertical Origin
Sets the horizontal and/or vertical start of the grid. Values are in decipoints.

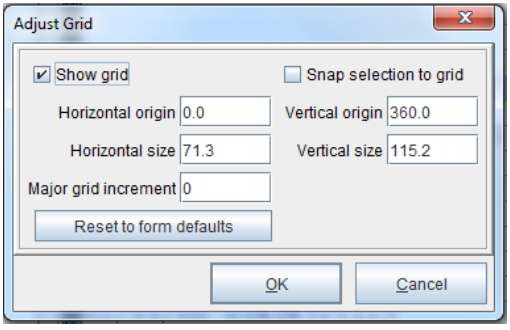
Horizontal/Vertical Size
Sets the horizontal and/or vertical size between each line of the grid. Values are in decipoints.

Major Grid Increment
Controls the number of large increments contained in the grid.

Reset to Form Defaults
Sets origin of size to the default of the form.

Output Grid

Allows you to include/exclude the output grid from the Form and Data Viewer. Customize the data grid size using the horizontal and vertical decipoint values.



Options Available:

Show Grid
Displays the data grid for easy character selection.

Snap Selection to Grid
Allows you to precisely align objects or data to the grid.

Horizontal/Vertical Origin
Sets the horizontal and/or vertical start of the grid. Values are in decipoints.

Horizontal/Vertical Size
Sets the horizontal and/or vertical size between each line of the grid. Values are in decipoints.

Major Grid Increment
Controls the number of large increments contained in the grid.

Reset to Form Defaults
Sets origin of size to the default of the form.

Close Option

Closes the currently displayed tab in the Viewer.

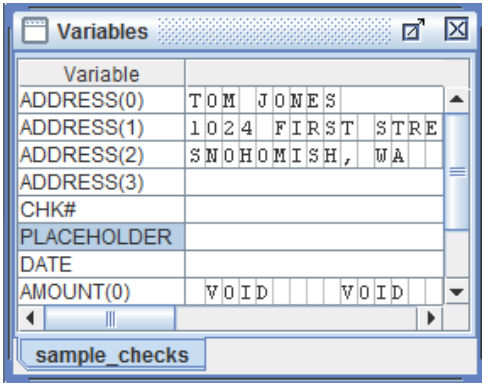
Variables Viewer

The eFORMz Variables Viewer window displays the details of each variable. The information included pertains to:

- The name of the variable.
- The data contained within the variable.

The *Variable* column shows the name of the variable and the number of times it is repeated.

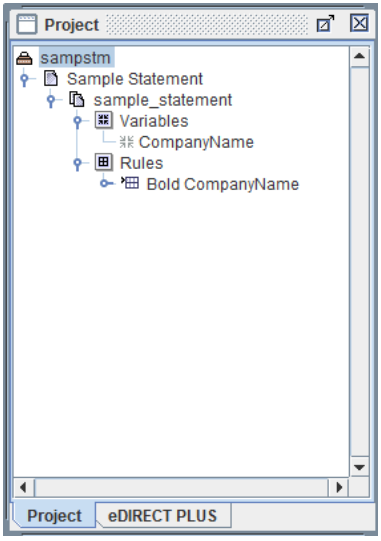
The column to the right presents the data that the variable contains. Variables repeated more than once occupy the corresponding number of lines.



Current Project Options

The Current Project window displays the entire project layout:

- Project Name
- Global Variables
- Page(s)
- Form(s)
- Input and Constant Fields
- Variables
- Procedures
- Form and Rule Conditions
- Document Template
- Rules
- Actions

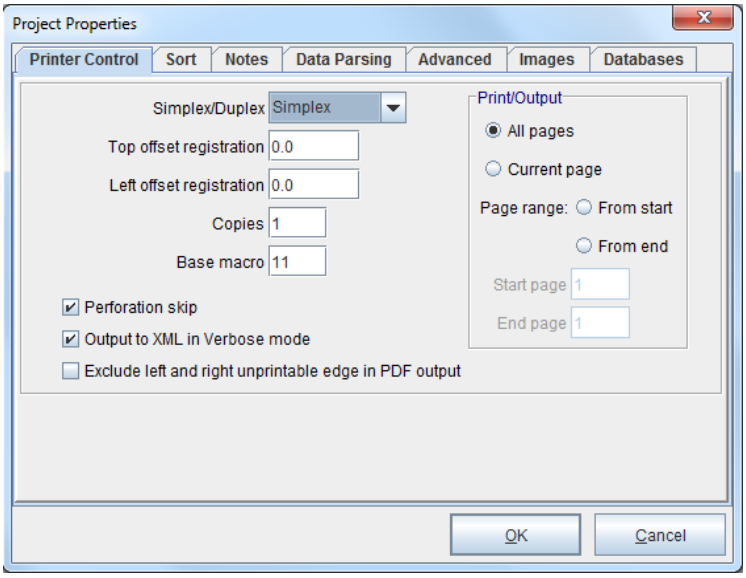


Project Properties

The *Project Properties* controls a project as a whole, for example:

- print orientation
- number of each individual copies
- and data parsing.

To access the Project Properties, select the project name from the Current Project window, *right click*, and select *Properties*:



Printer Control Options

Simplex/Duplex
Simplex
Long-Edge Duplex
Short-Edge Duplex

Top Offset Registration
Sets the top margin position for printing (in decipoints).

Left Offset Registration
Sets the left margin position for printing (in decipoints).

Copies
Sets the number of copies printed for each physical page.

Base Macro
Specifies the macro ID number sent to the printer. Use when a printer contains saved macro's in print memory. Default is 11.

Perforation Skip
A setting often used with tractor-fed printers. Unchecked allows you to use the maximum number of lines per page. Checked reduces the number of available printed lines. Default is checked.

Output to XML Verbose Mode
Default unchecked. When unchecked the XML output is condensed using token references. Checked will cause the XML output to be represented in full text XML verbiage.

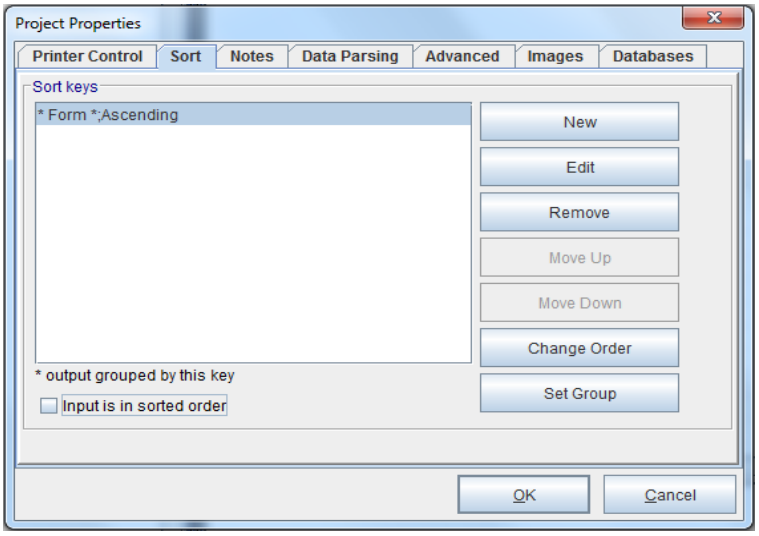
Exclude left and right unprintable edge in PDF output
Excludes the left and right margin from pdf file output.

Print/Output - All Pages
When specified, the merge process will print all pages within a data file.

Print/Output - Current Pages
When specified, the current page being viewed within the eFORMz Viewer will be printed.

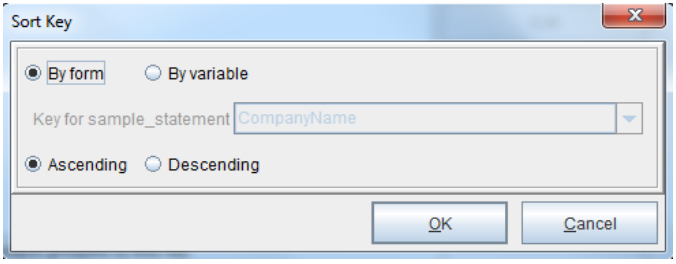
Print/Output - Range of Pages
When selected, the Start Page and End Page fields will become available. Enter the range of pages you would like to print.

Sort Options



The *Sort* tab allows you to sort your data file based on a variable or form. To sort:

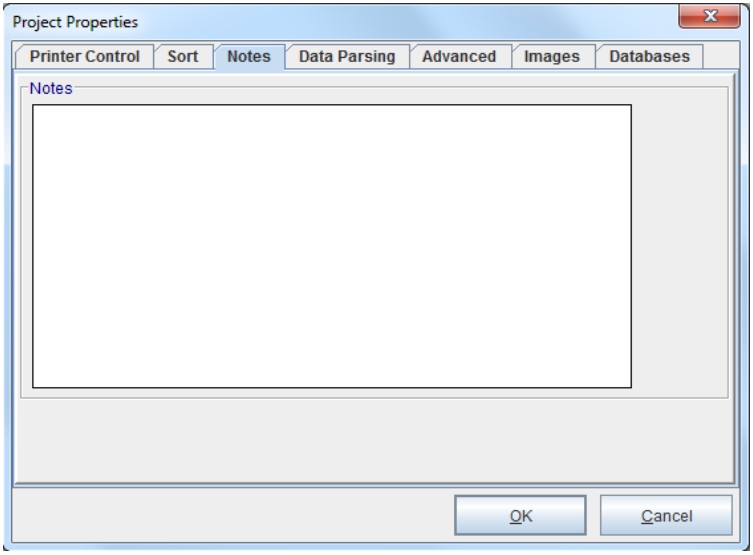
1. Select *New* and choose the variable or form you would like to sort by as well as the Sort Order. Then click *OK*.



2. The variable or form will appear in the 'Sort Keys' field.
3. To change the sort order highlight the variable or form and select *Change Order* (options: *Ascending* or *Descending*). The Set Group option will arrange the order sequence of multiple keys when a particular key is selected. The Input is in Sorted Order.
4. Use the *Remove* button to remove any variable or form from the 'Sort Keys' field.
5. The Move Up and Move Down options will allow you to change the 'Sort Keys' order.

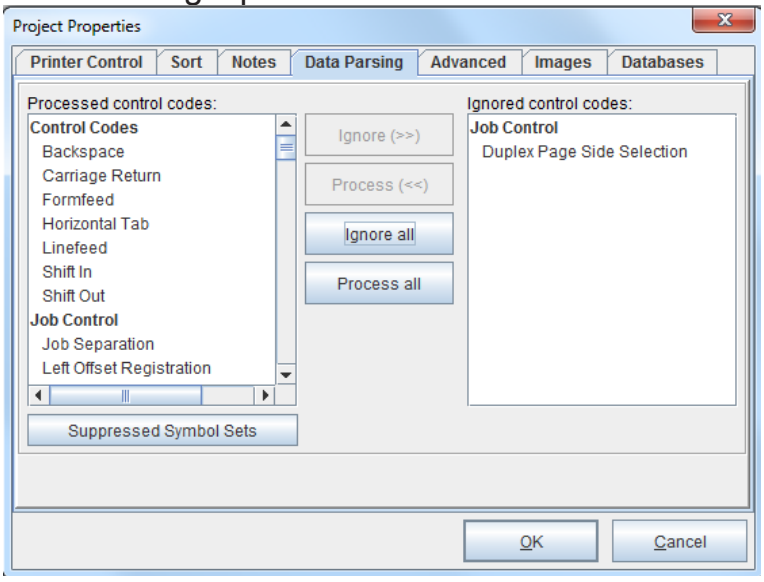
Note: Multiple variables or forms can be added.

Notes Options



This section is available for documenting changes and providing a general explanation of your process.

Data Parsing Options



Processed Control Codes
Contains a listing of possible control codes in your data file.

Ignore (>>)
Moves a selected control code to the Ignore Control Codes list.

Process (<<)
Moves selected ignored control code to the Process Control Codes list.

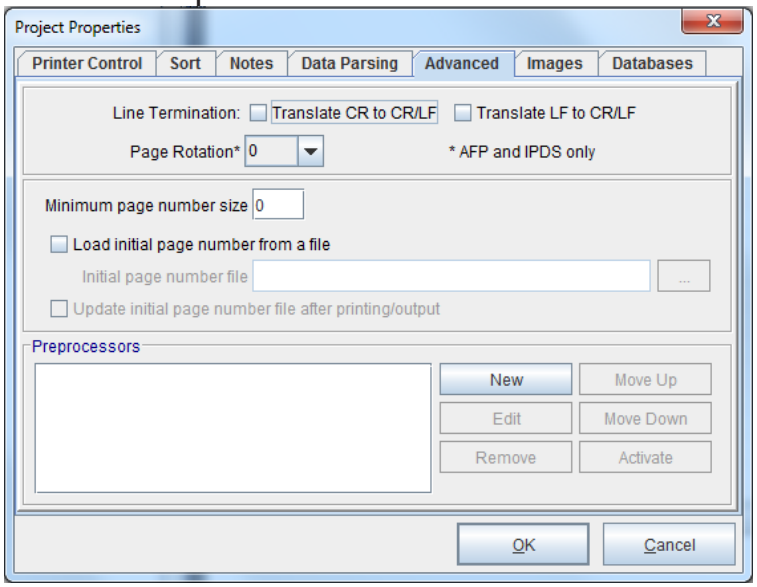
Ignore all
Moves all control codes listed to the Ignore list.

Process all
Moves all ignored control codes to the Process Control Codes list.

Ignored Control Codes
Contains a listing of all ignored control codes.

Suppressed Symbol Sets
(Advanced feature) Allows Softfont symbol sets to be suppressed from the incoming datastream.

Advanced Options



Line Termination:
Translate CR to CR/LF
When selected, a data file containing only carriage returns is translated into a data file containing carriage returns and line feeds.

Translate LF to CR/LF
When selected, a data file containing only line feeds is translated into a data file containing carriage returns and line feeds.

Page Rotation
Positions the page by degrees for Advanced Function Printing and Intelligent Printer Data Stream applications only.

Minimum page number size
Minimum number of characters for page number. If the number of digits of the current page number is less then this value then it will be padded with leading zeroes up to the minimum character size.

Load initial page number from a file
Loads a page number from an external file.

Initial page number file
Specified path to the external page number file.

Update initial page number file after printing/output
Updates the page number file automatically after each process.

Preprocessors
Parses incoming data in one of the following ways:

Skip until a string is found - Ignores incoming string commands until the specified string is found. Specify the number of occurrences the specified string should be skipped.

Replace occurrences of a string - Replaces a specified string with another.

Multiple replace occurrences of a string - Replaces multiple strings with another.

Command parsing - For custom command parsing.

Sequential Line Marker - Marks incoming data based on a search criteria.

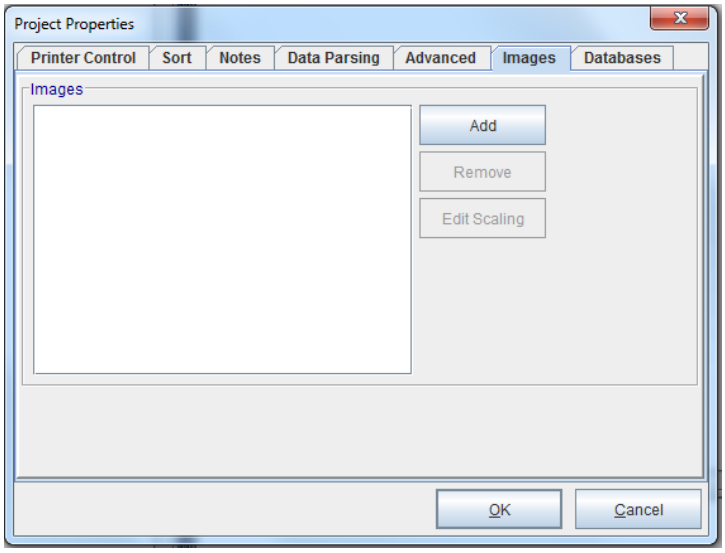
Text file pagination - Searches for a string in a particular column and then issues a formfeed (\f) at the beginning of that line.

Flat file parser -
Ability to parse as input comma delimited or EDI formatted files.

Text to XML Converter -
Converts text files to XML.

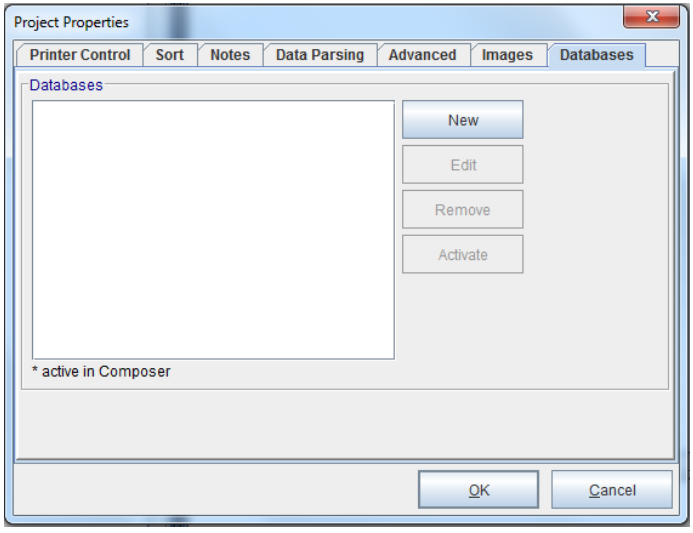
Note: For Command File Processor Parameters and Preprocessor Data Parsing Control Codes, see *Appendix A: eFORMz Preprocessor*.

Images



The Images dialog box allows you to import images (jpg, gif, bmp, prn) into your project file to be used later in an action or variable. Note that all images added to a project are saved in the output in case they are referenced on any of the pages.

Databases Option



New
Allows you to configure a new database connection. Supported database types include Microsoft Access, MySQL, Oracle, and SQL Server, Image, Eloquence, and DB2.

Note: The Driver Class and URL fields are case sensitive. To save the connection information select *Save to File* to create a text file of your connection information. When using the same database for a different project, click the *Load from File* button to select the text file that was created earlier.

If the database cannot be read, a qualifying record cannot be found, or the value of the column is NULL then the variable value will be set to the empty string.

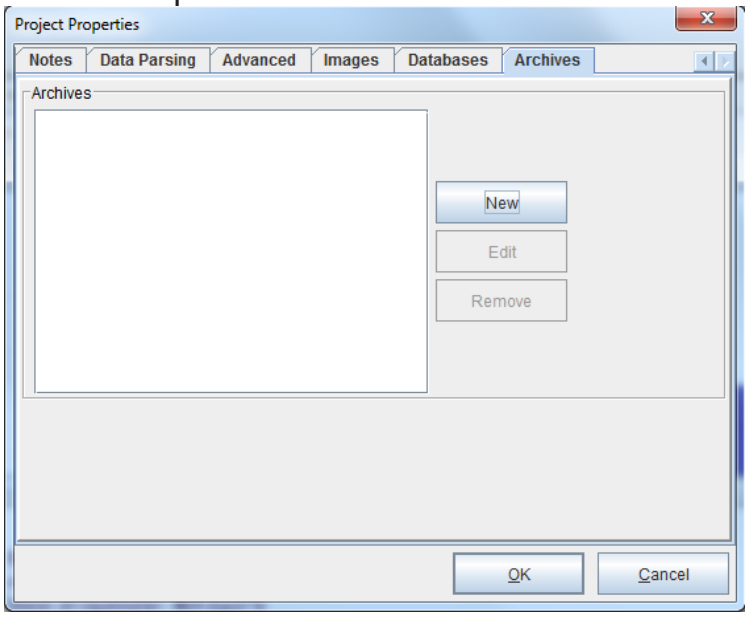
For supported database driver and url path specifications, see *Appendix B: Database URL and Driver Classes*.

Edit
Permits modifications to a database in the list.

Remove
Deletes a database entry from the list.

Activate / Deactivate
Enable or disable connectivity to the selected database when viewed from the Composer only.

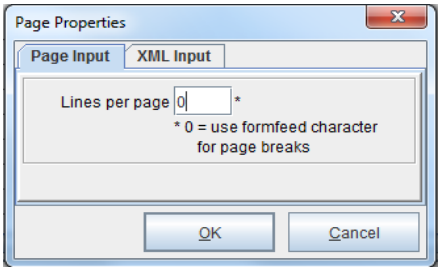
Archives Option



The Archives tab works in conjunction with eDIRECT Plus. The Archive can be configured from within the project or externally in the Archives.xml file. This configuration file consists of a name and a provider name and any other parameters specific to the provider.

Page Properties

The *Page Properties* dialog box provides general information about your logical page. To open the Page Properties dialog box, select a project page from the Current Project window, *right click*, and select *Properties:*



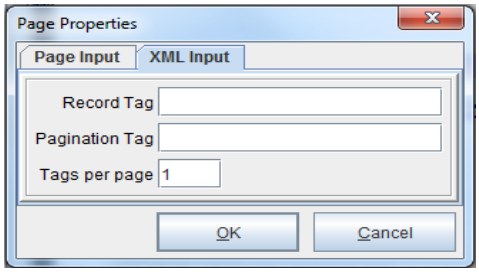
Page Input:

Lines Per Page

Number of lines per each data page. Default settings:

Portrait = 66 lpi
Landscape = 51 lpi

*0=Use formfeed character for page breaks
Zero indicates that the data contains formfeeds. Page breaks will then be issued when a form feed appears in the merge process.



XML Input
Define an XML data source.

Record Tag
The Record Tag is the name of the tag in the XML data file that represents a new data page. The name is an absolute node name. If left blank the record tag will be the root.

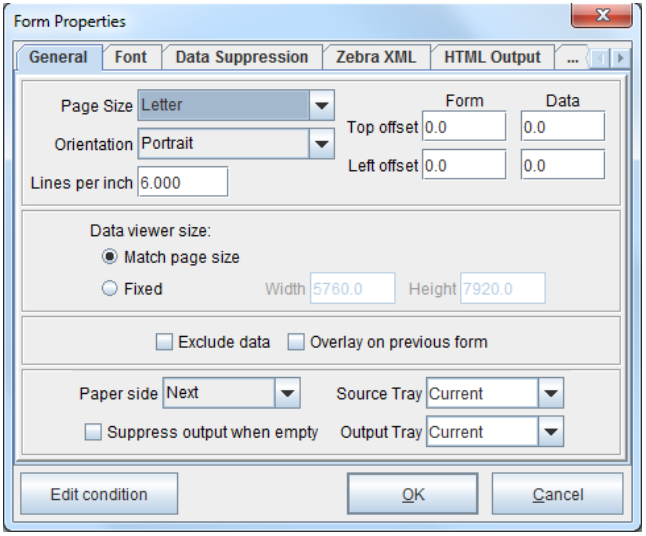
Pagination Tag and Tags Per Page
The *Pagination Tag* is the name of the tag to use for pagination. It is relative to the *Record Tag*. Multiple occurrences of the named tag within the tag named by the *Record Tag* will appear on separate data pages based upon the value of *Tags per page*. If *Pagination Tag* is blank, no pagination takes place.

Form Properties

The *Form Properties* controls the placement of the form and data. To access the *Form Properties*:

1. From the Current Project window select a project form, highlight *Properties* and select *General.*
2. The Form Properties dialog box will display with multiple tabs including *General, Font, Data Suppression,* and *Zebra XML.*

General Tab



Page Size
Available options are Executive, Letter, Legal, Ledger, Letter - no margins, Legal - no margins, Ledger - no margins, A5, A4, A3, Monarch, Com-10, DL, C5, and B5.

Note: For custom page dimension specification, user-specific specifications can be added to the eFORMzCfg_User.xml file. For further information see *Appendix A: User Configuration Files*.

Orientation
Available options are Portrait, Landscape, Reverse Portrait and Reverse Landscape.

Lines Per Inch
The number of data lines to every vertical inch (default 6.0).

Form - Top and Left offsets
Controls the top and left starting position of a project form (values in decipoints).

Data - Top and Left offsets
Controls the top and left starting position of a data file (values in decipoints).

Data Viewer Size
Adjusts the Data Viewer window display to match that of the form (*Match page size*) or a customized view (*Fixed*) for data that extends beyond the form boundaries.

Exclude Data
When selected, the data output will be excluded from the form in display and printed output.

Overlay on Previous Form
Form overlay. When selected, the form will be placed on top of the previous form in the Project Tree.

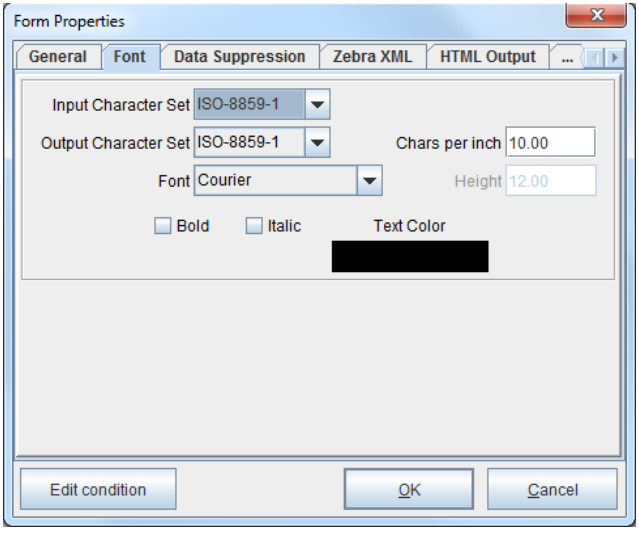
Paper side
Sets the order of the forms when printed. Options: Next, Front, and Back.

Source Tray
(Default is Current Tray) Allows you to specify the tray from which the form will be pulled (i.e. Tray 1, Tray 2, Tray 3, and Tray 4). Based on the escape codes for your printer, the associated tray will need to be specified. For example, <ESC> & 1 x H, where 'x' is the value represented by the tray on the specific printer. For exact escape codes pertaining to your printer, please refer to your printer manual.

Output Tray
(Default is Current Tray) Allows you to specify the tray the form will reside in after being printed. Based on the escape codes for your printer, the associated number will need to be specified. For exact escape codes pertaining to your printer, please refer to your printer manual.

Suppress output when empty
When selected, empty and/or blank pages are not printed. Default is unchecked.

Font Tab



Character Set
(Default is Roman 8) All numbers, letters, and symbols associated with a given coding system.

Font
(Default is Courier) Collection of letters, numbers, and symbols that share a distinctive appearance.

Chars per inch
Sets the number of characters per inch horizontally. Used in conjunction with fixed fonts.

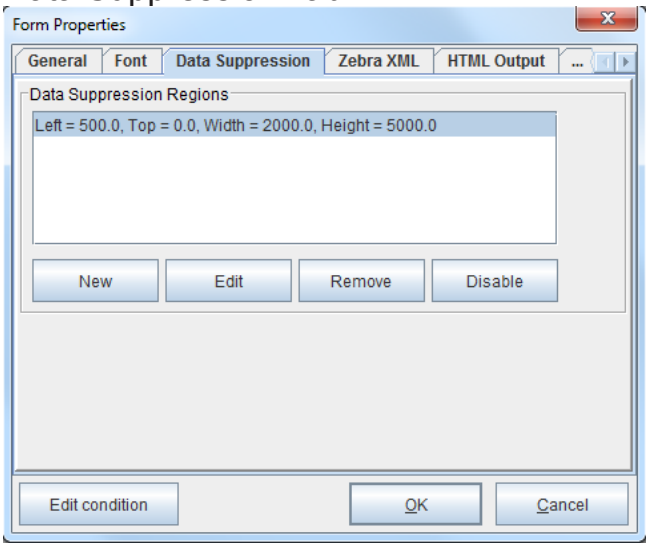
Height
Vertical size of a character. Used in conjunction with proportional fonts.

Bold
Changes character(s) to appear heavy with a dark typeface.

Italic
Changes character(s) to appear with a slant upward and to the right.

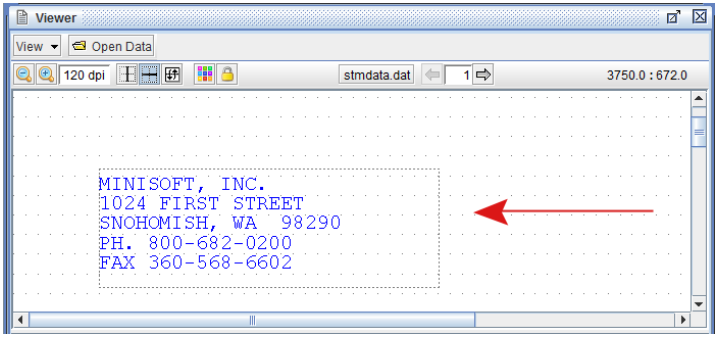
Text Color
Output data color when printed.

Data Suppression Tab

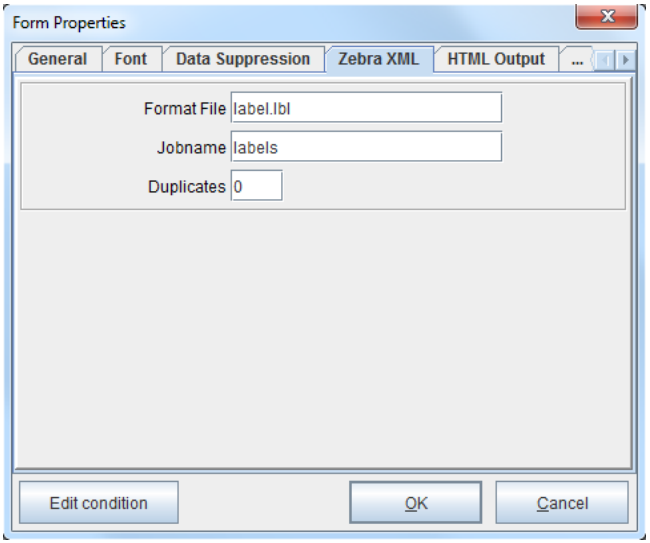


Regional suppression of your incoming data based on coordinate values. Data suppression regions will appear in your Data Viewer. Data within these regions will no longer appear in your Form and Data Viewer.

Data suppression regions will appear as an outline in your Data Viewer:



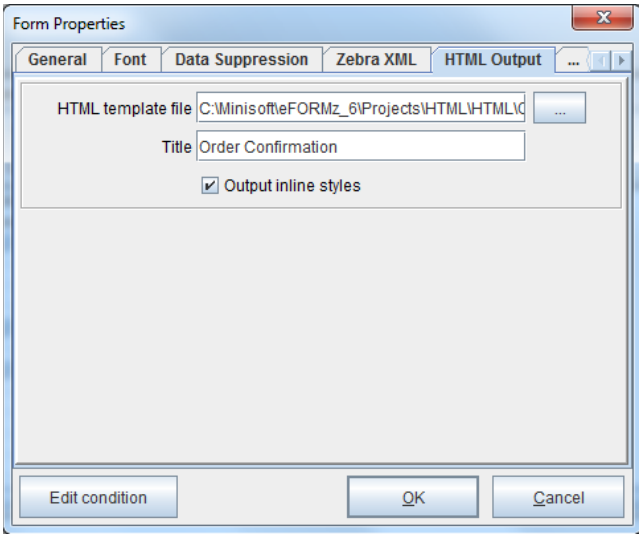
Zebra XML Tab



The Zebra XML tab allows you to generate output in Zebra XML format to send to a Zebra XML supported printer.

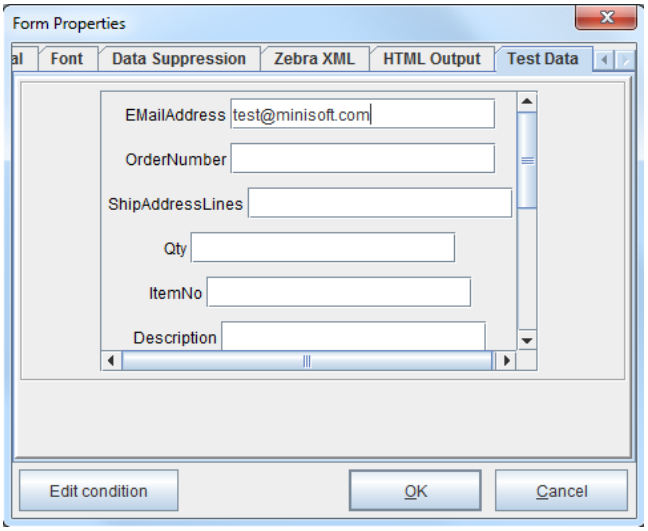
When the output file from eFORMz is sent to the Zebra printer it uses the *Format File* name as the reference to which template file to use within the printer (similar to macros in a laser printer). Create the label design using Zebra's XML Designer software and transfer the label design to the printer prior to printing. From the eFORMz project file create the xml tagged values that are referenced in the Zebra template file. *Jobname* is a unique name assigned to the output and *Duplicates* is the number of copies to print.

HTML Output Tab



The HTML Output tab references an external HTML file as a template for project creation. It is used exclusively with eDIRECT+. For additional detail, see the Alternative Methods of Project Creation Mini-Manual.

Test Data Tab



The Test Data tab allows the user to specify a constant value to act as sample data for a given variable.

Chapter 4

Creating an eFORMz Project File

Capturing a Print File / Spoolfile

STEP 1

The first step to creating and setting up your own eFORMz project file is to capture or create a test print file (or spoolfile) for implementation in an eFORMz project file. We recommend a print file containing 3 or more data pages.

The captured print file (or spoolfile) will be used as a template for building your eFORMz project file. To capture a print file from your host system (Windows, iSeries/AS400, HPe3000, or Unix environment) for creating an eFORMz project see one of the following headings pertaining to your host system.

eFORMz supports the following input file types:

- XML
- EDI
- ASCII Text Files
- PDF Files
- eFORMz Document Files (.efd)

Windows Server

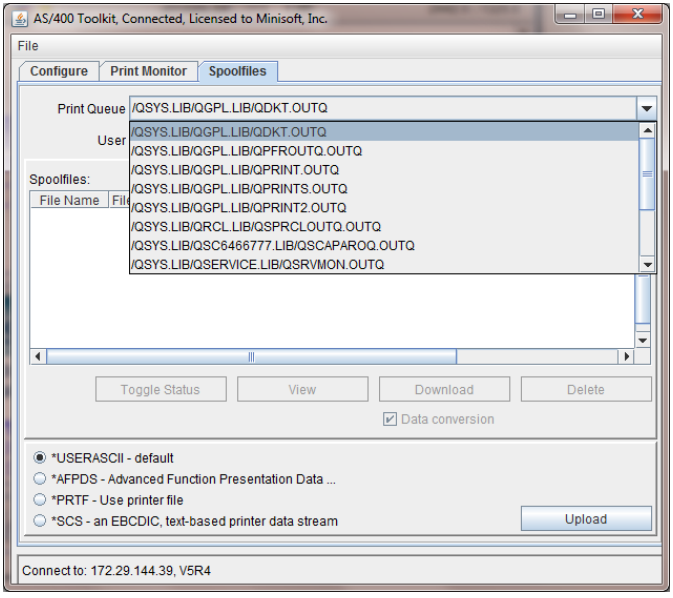
1. Create an ASCII text file from the Windows application producing your data.
2. Save the data file to the projects folder containing your eFORMz project file.
3. We recommend adding a .DAT extension to the file name for easier file selection from the eFORMz Composer.

AS400 Data Capture

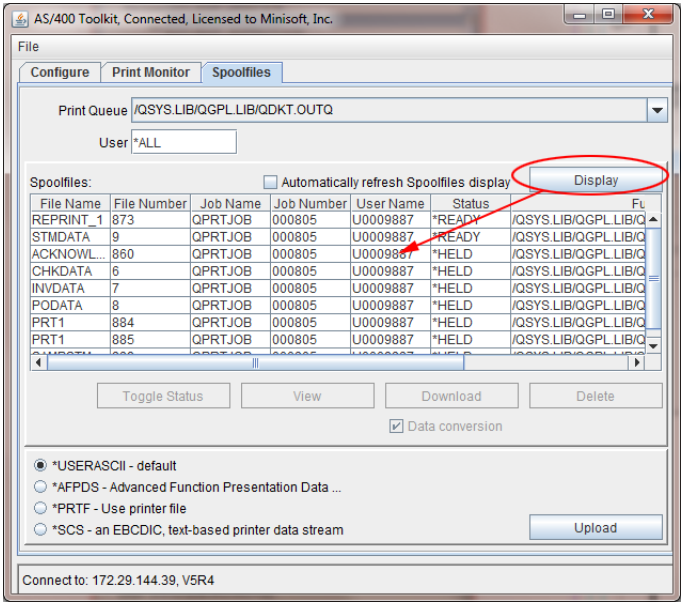
To download a spoolfile for project testing on your PC with eFORMz:

1. From the eFORMz Composer select *Host Tools > AS400 > Toolkit*.
2. The AS400 Login screen appears. Enter your *AS400 IP Address*, *user name*, and *password*. Once complete click *Connect*.

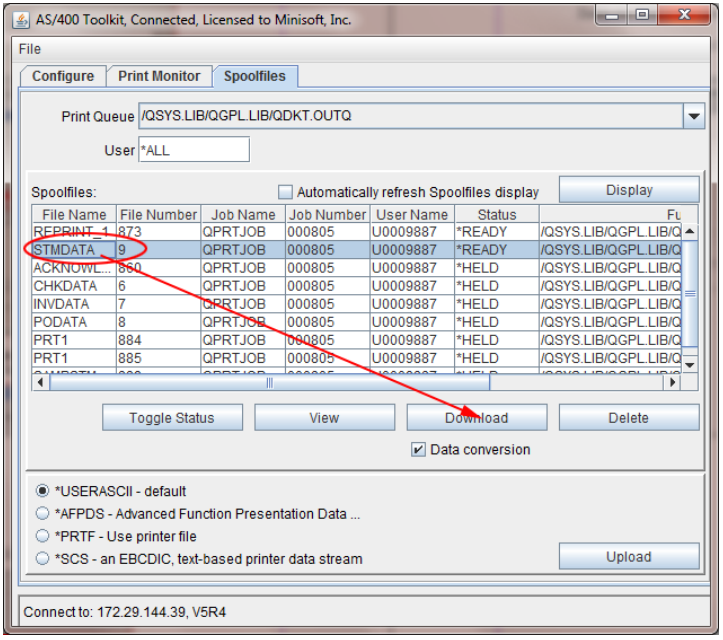
3. The *AS400 Toolkit* dialog box displays. From the Spoolfiles tab, select the queue the spoolfile resides in by selecting the *Print Queue* field. A listing of all print queues will appear.



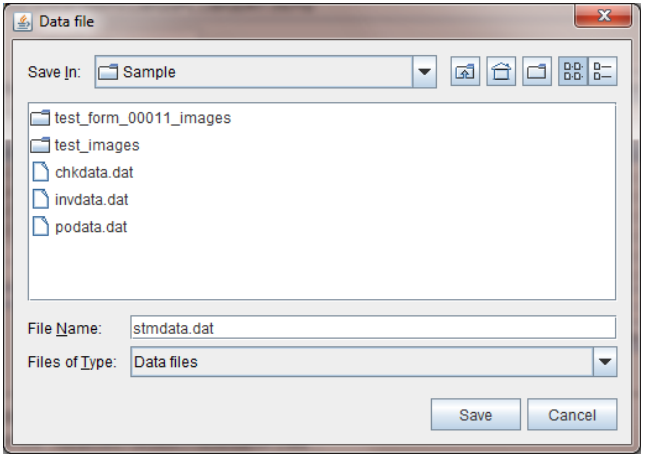
4. Once the queue has been selected click *Display*. The spoolfiles contained in the queue display:



5. From the list of print files appearing within the queue, select a print file you would like to download. Once selected click *Download*.



6. The *Data File* dialog box displays. Select the directory you would like to save your print file to and then enter a new *File Name.* Once complete click *Save*.



The print file is now ready for testing with your eFORMz project.

HPe3000 Data Capture

To capture a spoolfile using NetPrint, simply do the following:

Enter the following command from the PUB.MINISOFT account:

```
:NPFILE {spoolfile ID # without the O}
```

The command file instructs NetPrint to create a disk file of your spoolfile minus the HPe3000 printer control codes. This file, which will match the name of your spoolfile, is created in the PUB group of your MINISOFT account.

Transfer this file as ‘binary” without file labels or ‘save file info’ selected to the same directory as your project on your PC. We recommend adding a .DAT extension to the file name for easier file selection from the eFORMz Composer.

Note: If the NPFILE command is not located on your host system, NPFILE.PUB.MINISOFT, upload (ASCII transfer) the command file that was placed in the following directory when eFORMz was installed (NPFILE):

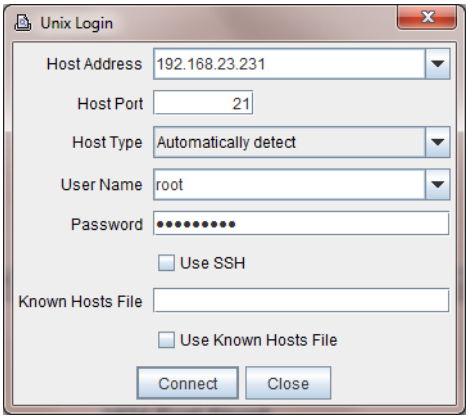
C:\Minisoft\eFORMz_6\doc\

For ESPUL users, upload the ESPFILE command file from this same directory to the PUB group of the RAC account (ASCII transfer).

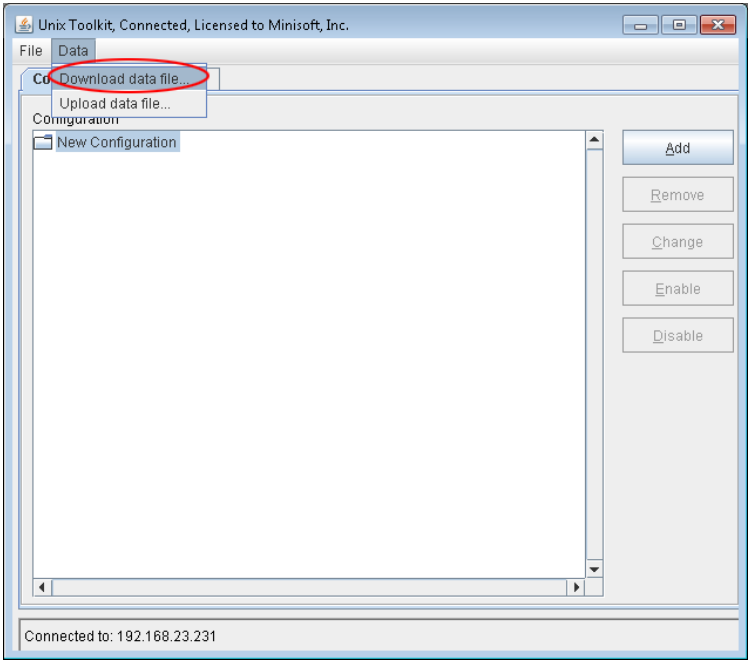
UNIX Environment Data Capture

To download a data file from your Unix system:

1. From the eFORMz Composer select *Host Tools* > *Unix* > *Toolkit*.
2. If a connection has not already been made, the Unix Login dialog box will display. Enter your *Host IP Address*, *user name*, and *password* and click *Connect*.

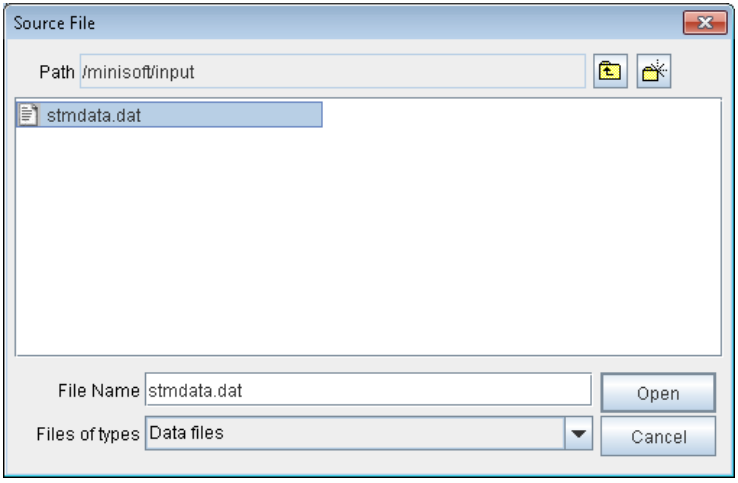


3. The Unix Toolkit displays. From the *Data* menu select *Download Data File*.

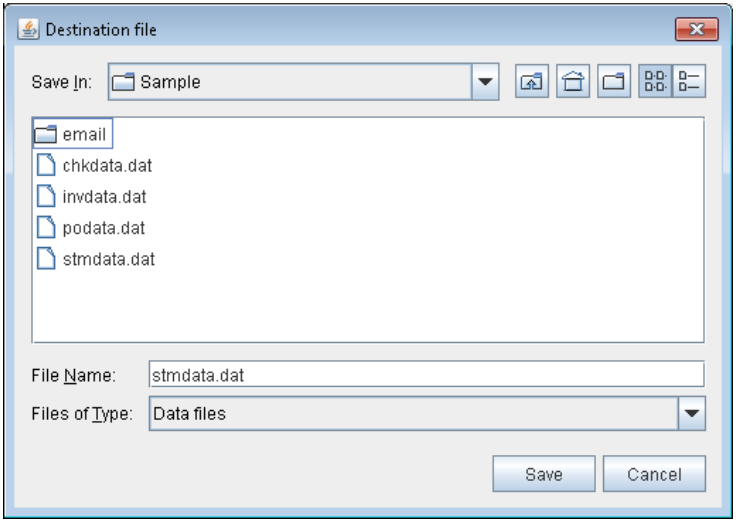


***TIP*:** Upload a data file from your PC using the *Data > Upload data file* option.

4. The *Source File* dialog box displays. Select the data file you would like to download from a directory and click *Open*.



5. The *Destination File* dialog box will display. Specify the directory you would like the data file to reside in on your PC. Click *Save* when complete.



6. After the download process has been completed you will be returned to the main eFORMz Composer screen.

Form Overlay

STEP 2

A form overlay can be applied to your captured data in one of two ways. If you are replacing a pre-printed form, a form overlay can be a replica of your existing pre-printed form. The form overlay can be created using a word processor, desktop publishing or drawing package.

eFORMz also has the ability to create dynamic form overlays. Dynamic form overlays move with your data and can be built and designed from within the eFORMz Composer.

Captured Form Overlay

A form overlay can be created using a word processor, desktop publishing or drawing package. If your using Microsoft Word, a Microsoft Word RTF (Rich Text Format) form can be imported directly into the eFORMz project. For a sample Microsoft Word RTF document provided by Minisoft, see the following example installed with eFORMz:

\Minisoft\eFORMz_6\Projects\Sample\Sample_Statement.rtf

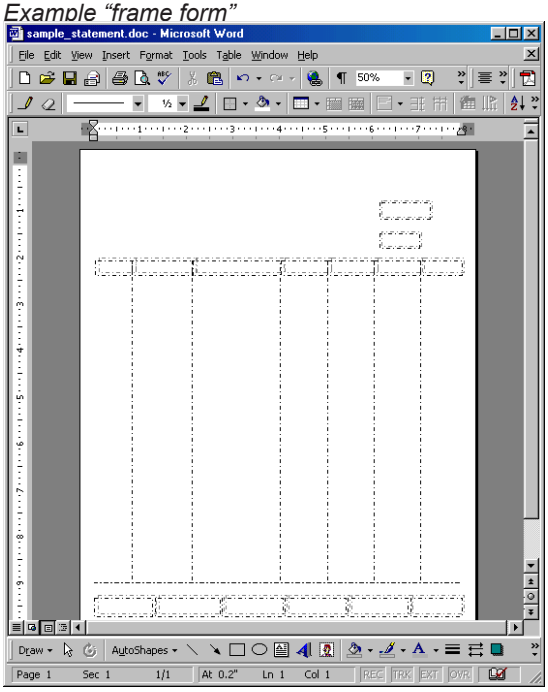
The Microsoft Word RTF file format can be directly loaded into eFORMz using the *Load Form* option from the eFORMz main menu.

If your using an application other than Microsoft Word, capture your form overlay using the methods described in *Appendix C: Alternate Form Template Creation*.

***TIP*:** We recommend designing your form around your data by creating a blank or "frame form" before adding detailed graphics and text.

***TIP*:** If you are interested in printing your company logo in color, save the image as a .jpg, .bmp, .tif or .gif file to be imported into the eFORMz Composer project file as a *Load Image*, *see Chapter 6 > Data Customization > Rule Actions > Load Image*. Otherwise, the logo can be added to your forms template for black/white printing.

Example “frame form”



Dynamic Form Overlay

Dynamic forms can be created through the eFORMz Composer. For further information on Dynamic Forms, see *Chapter 6*.

Creating an eFORMz Project

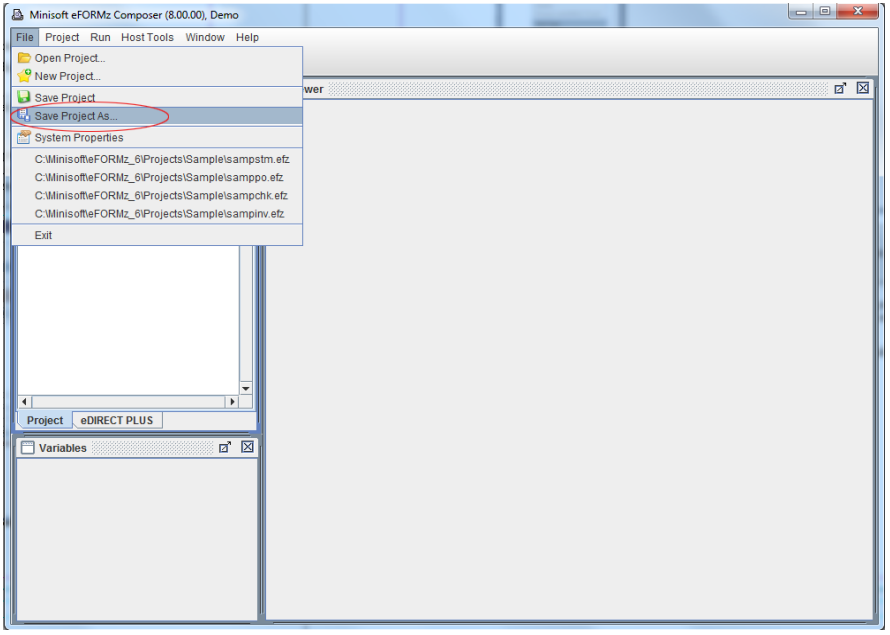
STEP 3

Once you have your data file (print file/spoolfile) and your form template file you now have the components needed to create an eFORMz project file.

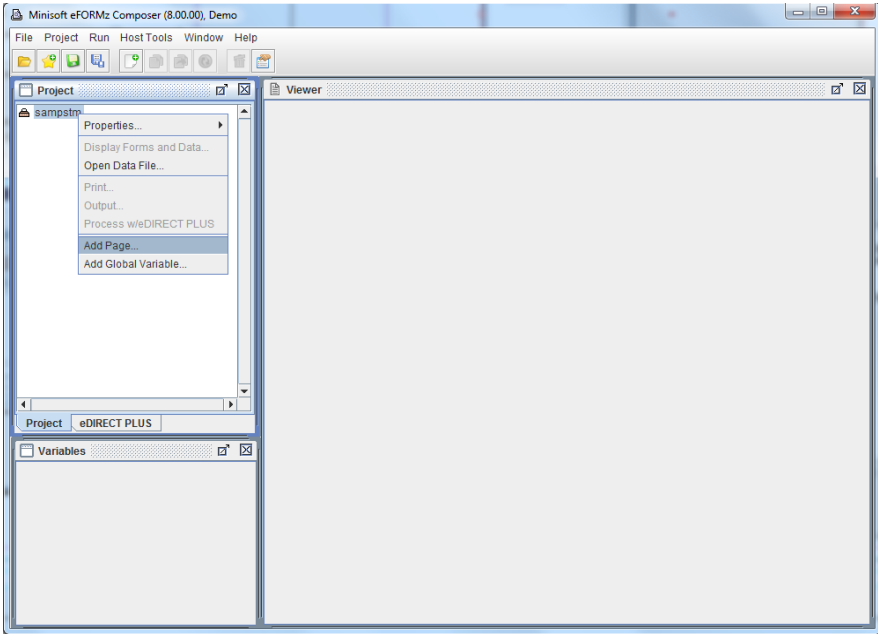
To create a new project:

1. Select *New Project* from the eFORMz *File* menu.
2. Select *File > Save Project As*. From the *Save* dialog enter a new project file name and click *Save*.

> ***TIP*:** When eFORMz was installed a Projects folder was created in the following directory:
> C:\Minisoft\eFORMz_6\Projects\
> We recommend that you create a new folder pertaining to your new project file and place all components (data file, form template file, project file, etc.) in this central location for easy access.



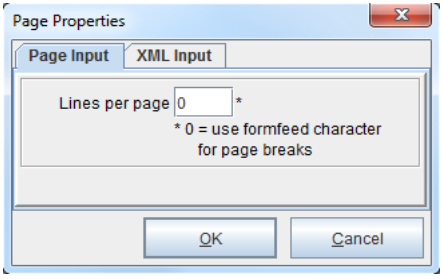
3. From the Current Project Window select your new project file name, *right click*, and select *Add Page*.



***TIP*:** A new 'Page' represents a new *logical page* not the number of printed pages. See *Chapter 3 Introduction to eFORMz* for a further explanation on logical pages.

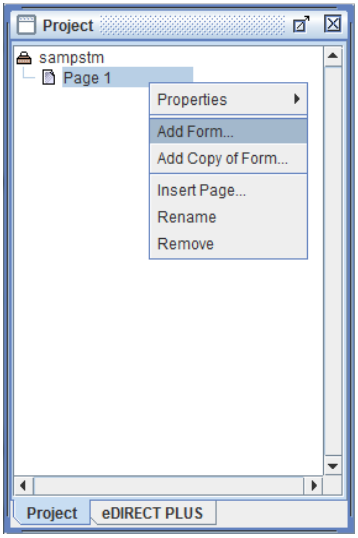
4. The *Page Properties* dialog box displays. Enter the number of *lines per page* and click *OK*. A new page folder will appear in the Current Project window, enter a new name if desired.

   If you are unsure of the number of *lines per page* the Page Properties dialog box can be updated later.

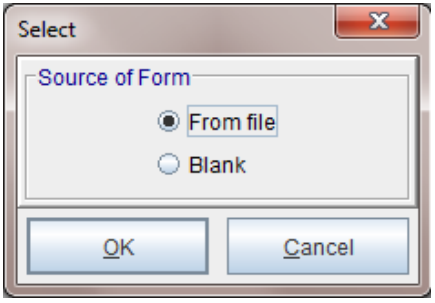


TIP: *Lines per page* is the number of lines per each data page, default settings include Portrait = 66 lpi and Landscape = 51 lpi. Setting the *lines per page* to zero (0) indicates form feeds are contained in the data file and should be used as the data page separator.

5. Using your mouse, *right click* your new page and select *Add Form*.



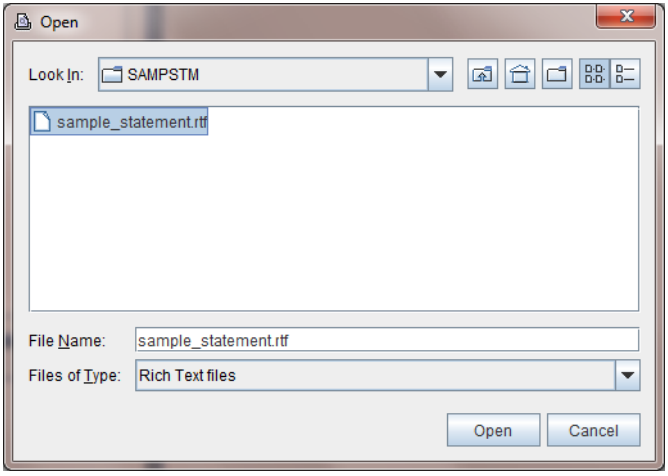
6. The *Select source of form* dialog box displays. Select *From file*.



NOTE: *From file* indicates you are going to select a template form that you created earlier from a form template.

Blank indicates you are going to use an eFORMz blank template which can be set to portrait or landscape in the Forms Properties dialog box. The eFORMz blank template includes no graphical elements.

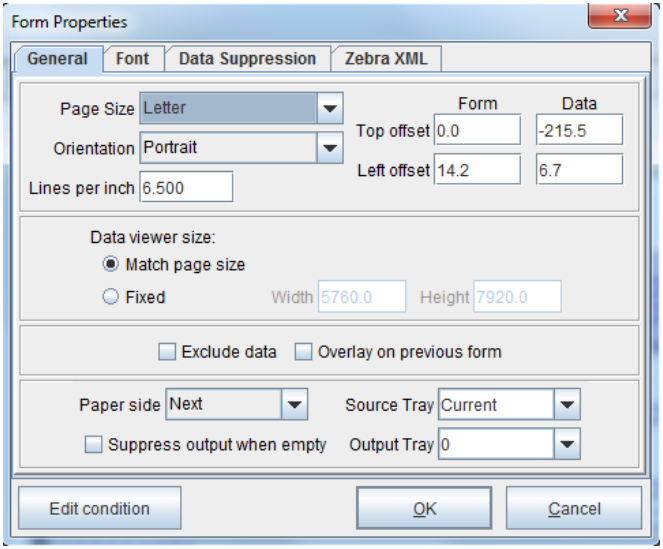
7. The *Open* dialog box displays. Select the form template previously created in STEP 2 of this chapter.



8. From the *Form Properties* dialog box make any necessary changes for example:

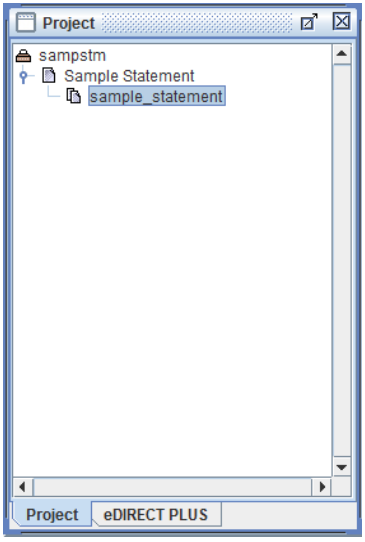
   - page size
   - orientation
   - default font and font size

   The Form Properties dialog box can be edited later by right clicking the form name from the Current Project window and selecting *Properties*.

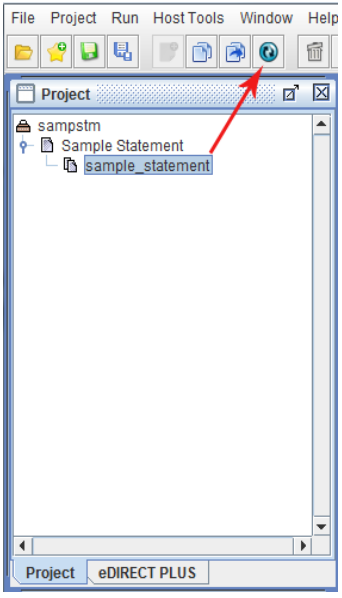


   Once complete click *OK*.

9. Your form template will now appear in the Current Project window.

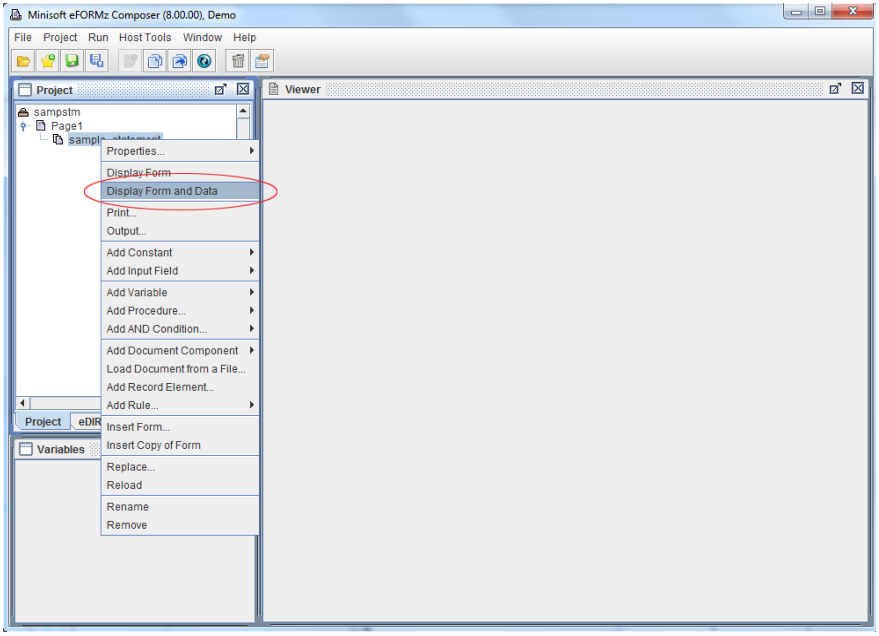


10. To reload your selected form, highlight the form and select the *Reload Form* button from the main toolbar. The Reload Form button is configured through *System Properties* > *Form Editor* tab:

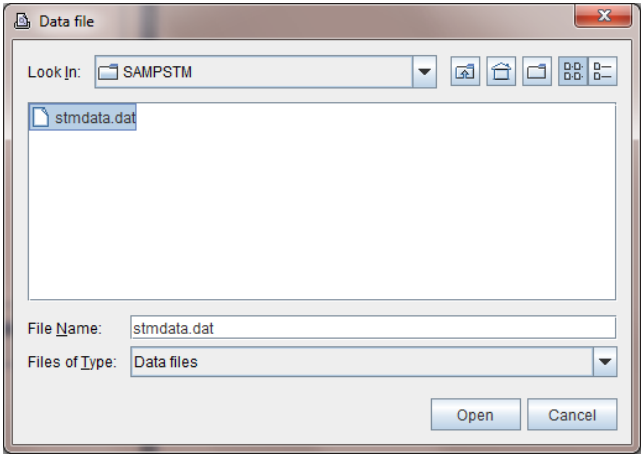


Displaying a Form with Data

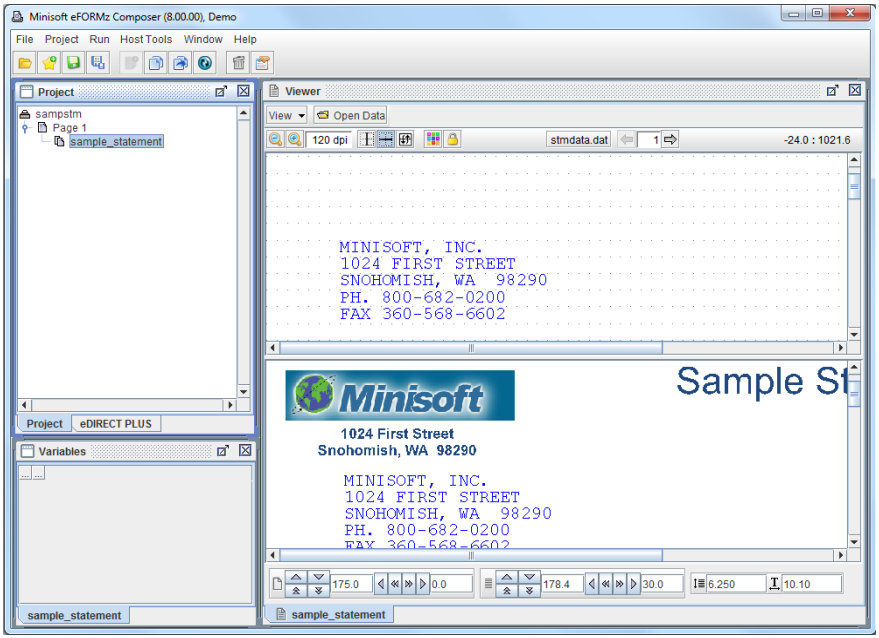
1. To view your form with your test data file (print file/spoolfile) select the project file name from the Current Project window, *right click*, and select *Display Form and Data*.



2. The *Data File* dialog box will display. Select the data file you would like to view your template form with and click *Open*.



3. In the eFORMz Composer Viewer window you should now see a two part window display. Depending on your Viewer settings one window will contain your incoming data (test print file/spoolfile) and another window will contain your incoming data along with your template form merged together.



***TIP*:** If you would like to view only your template form in the Viewer, from the *Current Project* window select the form you would like to display, *right click*, and select *Display Forms*. A new tab will display in the Viewer displaying your form template.

You may note at this point that the form and data do not match exactly. This is where eFORMz gives you the ability to work with customizing the data and form properties in the following ways:

- form and data offset values
- characters per inch
- lines per inch

You may also look at modifying your form template created earlier in a word processor, desktop publishing or drawing package to better align with your input data file.

***TIP*:** If you would like to open a new data file to test with your current project file, open a new data file in one of the following ways:

Option 1: Select the project file name from the Current Project window, *right click*, and select '*Open Data File...'.* The *Data File* dialog box will display. Select a file type and then select the directory your new data file will resides in. Once completed, select *Open*.

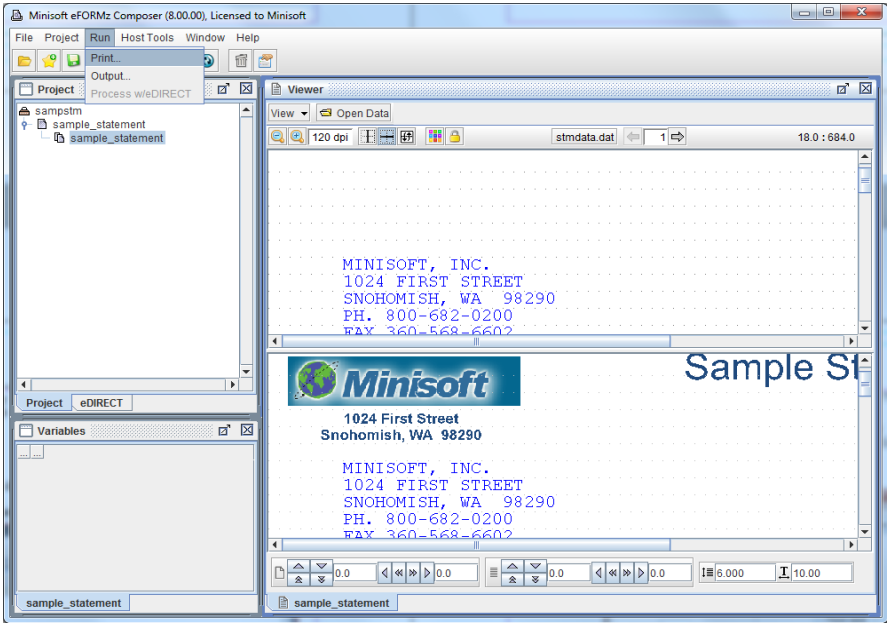
Option 2: From the Viewer window select the *Open Data* button. The Data File dialog box will display. Select a file type and then select the directory your new data file will resides in. Once completed, select *Open*.

Project File Printing

STEP 4

To print your merged form and data using the eFORMz Composer:

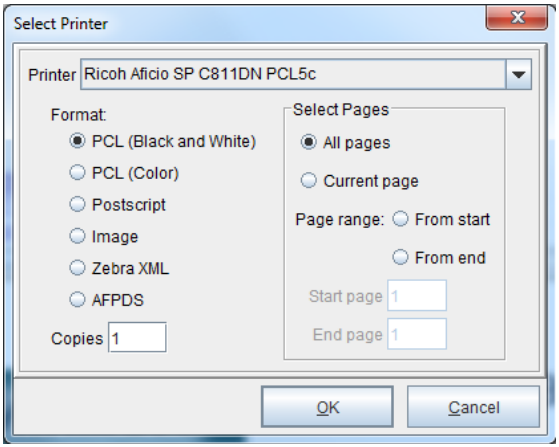
1. From the eFORMz main menu select *Run* > *Print*.



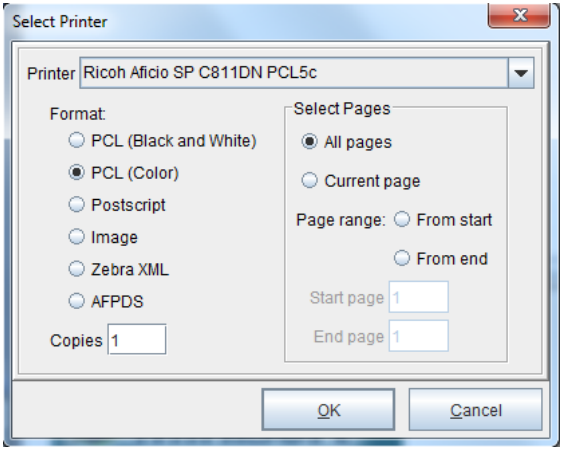
2. From the *Select Printer* dialog box select the printer you would like to print to and then select one of the following:

   Format > *PCL* to print to a black/white laser printer.
   Format > *PCL (color)* to print to a color pcl printer (i.e. HP LJ3800).
   Format > *Postscript* - to print to any Postscript printer.
   Format > *Image* to print to any laser printer.
   Format > *Zebra XML* to print xml output to a Zebra printer.
   Format > *AFPDS* to print to any IBM AFPDS/IPDS printer.

Black/White Printer Options



Color Printer Options



The Printer dialog box allows you to print a range of pages. Select *Page Range* > *From Start* or *From End*. For example, if you would like to print pages 10-20 select *Page Range* > *From Start*:

Start Page = 10
End Page = 20

If you would like to print pages 10 to the end of a file select *Page Range* > *From Start*:

Start Page = 10
End Page = 9999

If, for example, you would like to print all pages minus the last page select *Page Range > From End:*

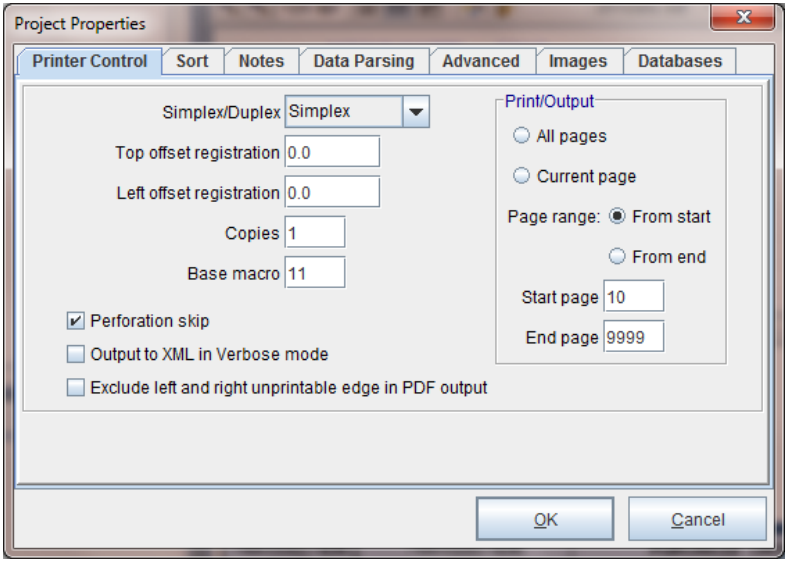
Start Page = 9999
End Page = 1

Also, if you would like to print the last 10 pages of a report select *Page Range > From End*:

Start Page = 9
End Page = 0

***NOTE*:** Reverse page numbering starts at zero (0, 1, 2, 3, 4, ...).

If you would like to set a default page range for the project file edit the *Project Properties > Printer Control* tab:



Chapter 5

eFORMz Composer Data Customization

Customizing your data output

eFORMz gives you the ability to customize your data output using variables and actions. Variables are the primary method used by eFORMz in the customization of your data output. Variables allow the user to store data for later use and create *actions*, *functions*, and *conditions*. Any one variable can be used multiple times in a project layout.

Actions include data placement, barcodes, font sizing and style, and much more. *Functions* allow you to further customize your data output by allowing you to do such things as set values, replace strings and include database lookups. *Conditions* such as 'equal to', 'not equal to', 'less than', and 'greater than' can be applied to both actions and any form you add to your project layout.

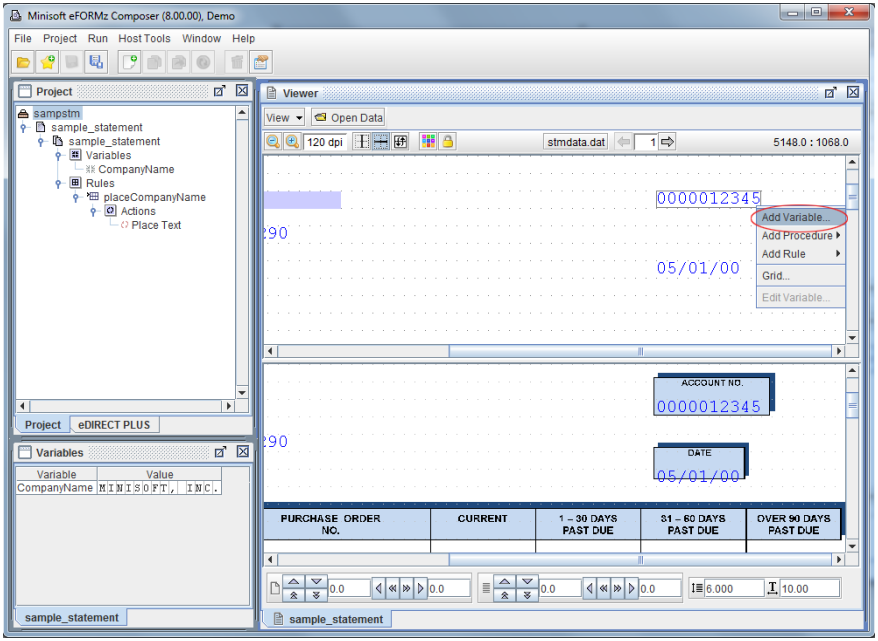
The first step to your data customization is to create a variable. Follow the steps outlined in the following instructions under *Variables > Creating an eFORMz Variable*.

Variables

Creating an eFORMz Variable

There are two methods to create a variable from the eFORMz Composer:

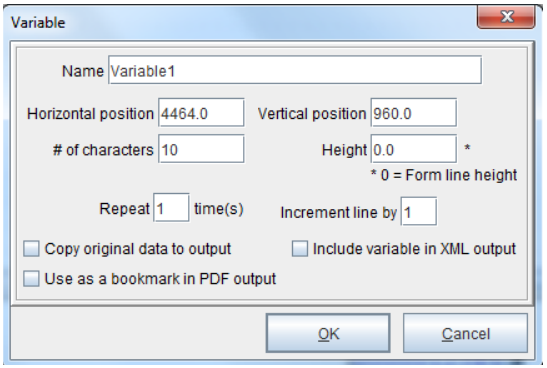
1. From the eFORMz Viewer, *Input Data Viewer,* select a string of characters with your mouse (left click + drag), *right mouse click* and select *Add Variable*.



2. The second method for creating a eFORMz variable is simply right clicking on data input and selecting *Add Variable*. This method only picks up a block of data verses the above that selects a specific number of characters.

> ***TIP*:** Create an empty variable for later use with functions and actions by selecting the *Variable* place holder, *right clicking* and selecting *Add Variable*.

3. The *Variable* dialog box will display:



Variable options include:

Name
Variable name as displayed in the project layout.

Horizontal/Vertical Position
The variable location in decipoints (180 decipoints = 1/4 inch).

# of characters
The number of characters included in a variable.

Height
Variable height. Allows you to customize the variable line height.
**0=Form line height*
Sets the line height to the default of the form.

Repeat
The number of data lines a variable will be implemented.

Increment line by
Enables the skipping of lines. A value of one (1) applies a rule or function to every line selected, a value of two (2) applies a rule or function to every other line, and so on.

Copy original data to output
(Default is unchecked) When checked leaves the selected characters in there original position in the eFORMz Viewer.

Include variable in XML output
For use with eDIRECT when checked, default unchecked. Variable names cannot include special characters such as !, @, $, &, * when this option is selected. This selection option only pertains to projects configured using the 'old' eDIRECT Wizard method of generating output.

Use as a bookmark in PDF output
Variable will be bookmarked for pdf file output.

4. Enter a new variable name.

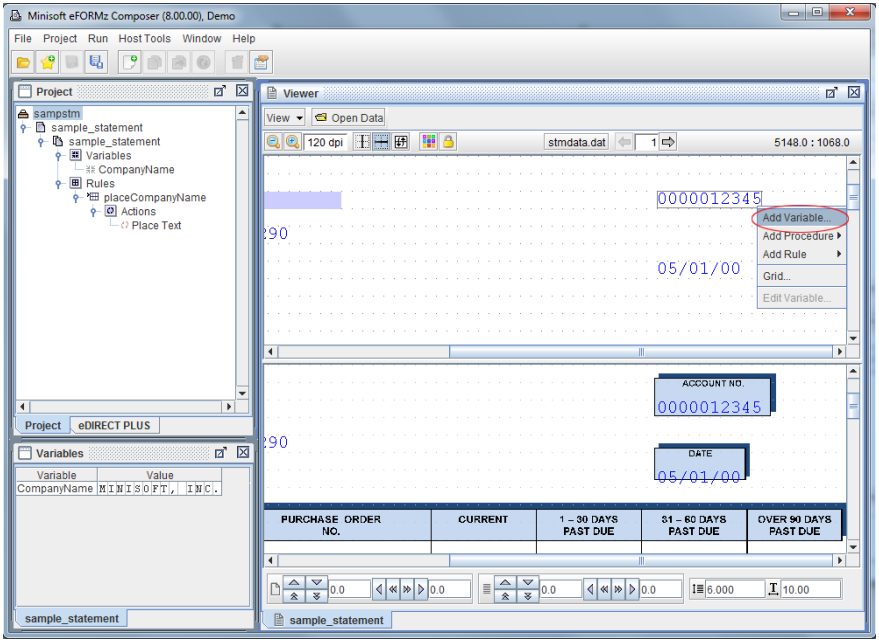
   The *Horizontal* and *Vertical* positions represent the area you selected from the eFORMz Viewer. The number of characters selected from the eFORMz Viewer display in the *# of characters* field.

5. Once complete, click *OK*.

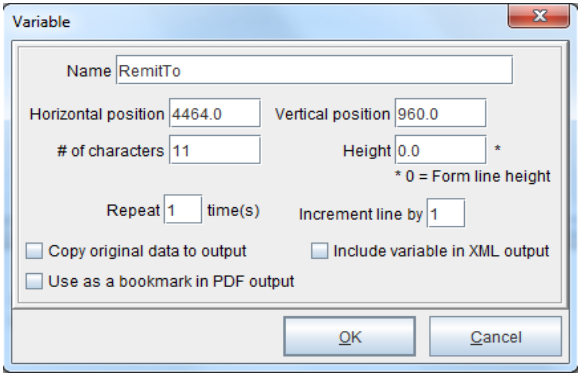
Excluding Data using a Variable

To exclude data from your output:

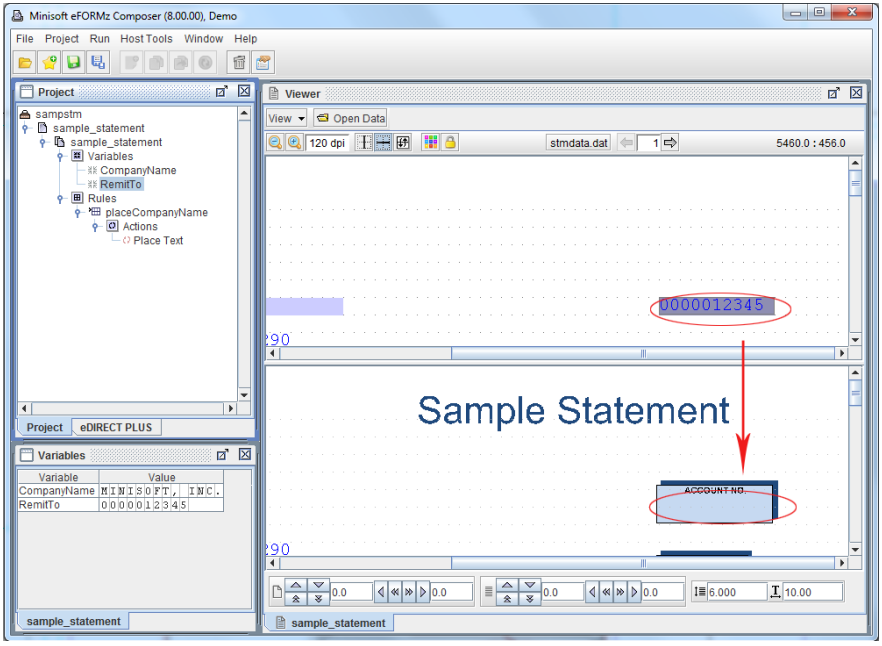
1. From the eFORMz Viewer, Input Data Viewer, select the range of data you would like to exclude, *right click* and select *Add Variable*.



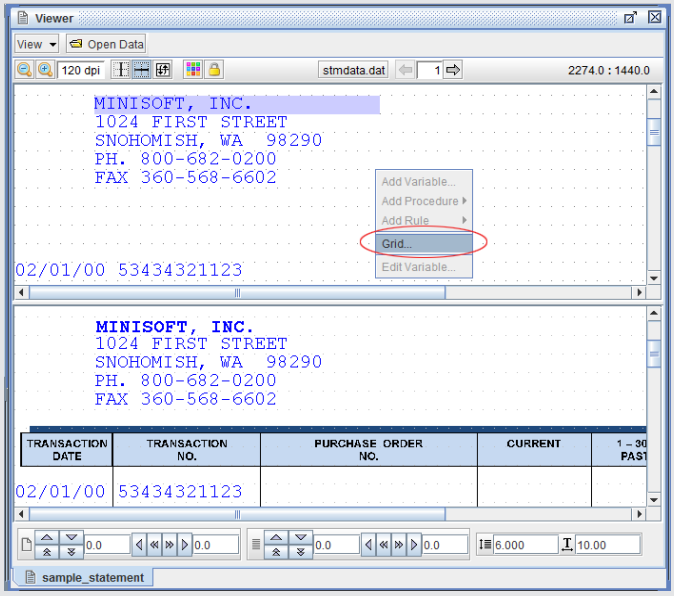
2. The Variable dialog box will display. Enter a new variable name and leave *Copy original data to output* unchecked. Once complete, click *OK*.



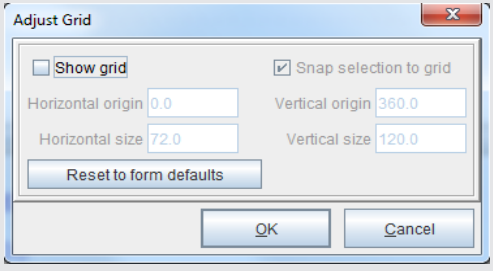
3. The newly created variable will display in the Current Project window. In the eFORMz Viewer the selected data will no longer appear:



***NOTE*:** If the grid in the Input Data Viewer should need to be hidden for any reason, *right click* and select the *Grid* option.



The Adjust Grid dialog box will display. Uncheck *Show Grid.*

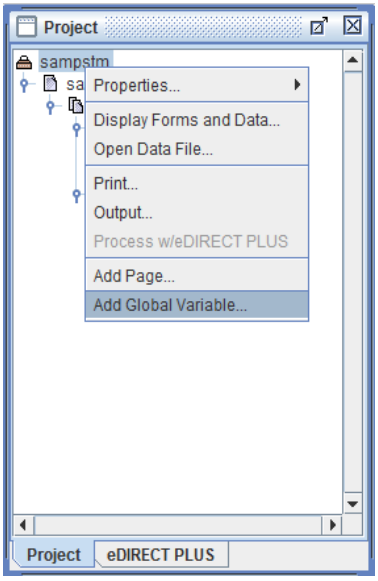


By *right clicking* in the Form and Data Viewer its grid may similarly be suppressed.

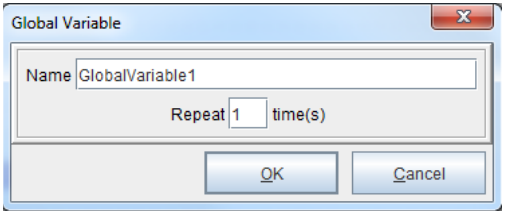
Global Variables

A global variable allows you to capture and apply text and/or numeric values from one page across multiple pages of output. To implement a global variable:

1. From the Current Project window, right click the project name and select *Add Global Variable*:

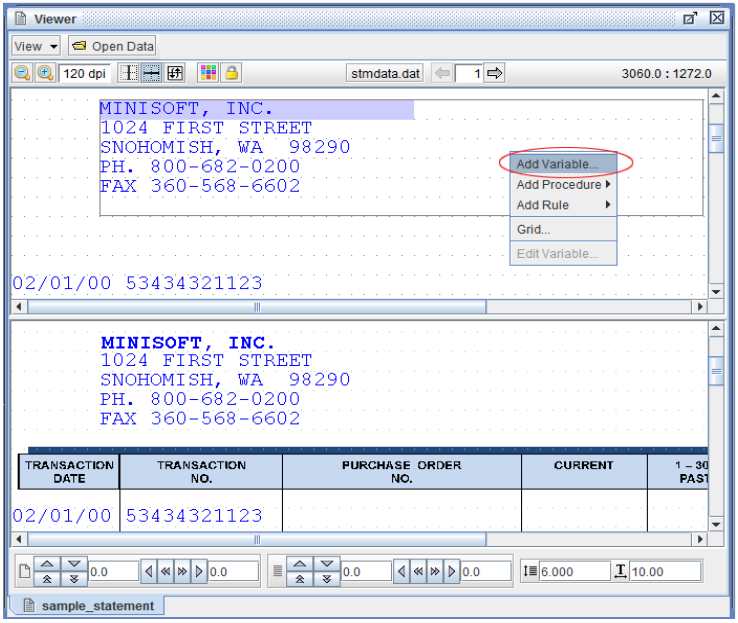


2. The Global Variable dialog box appears. Enter the global variable name and then enter the number of lines the global variable will need to repeat.

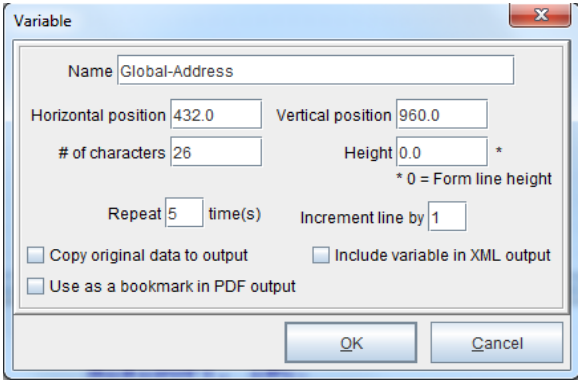


3. The global variable can be populated with a form variable and/or add customized function.

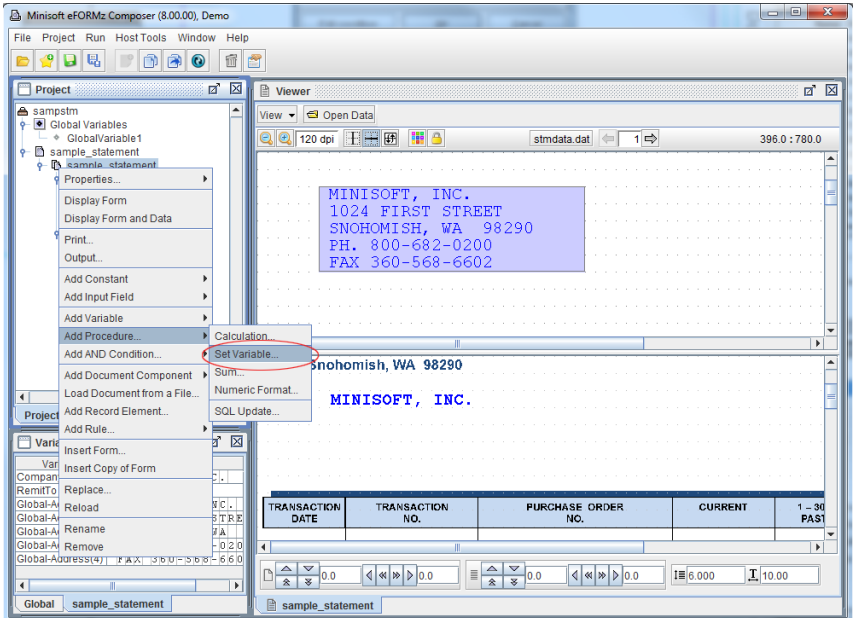
4. Create a form variable to implement as a global variable from the Viewer window by right-mouse clicking and selecting *Add Variable*.



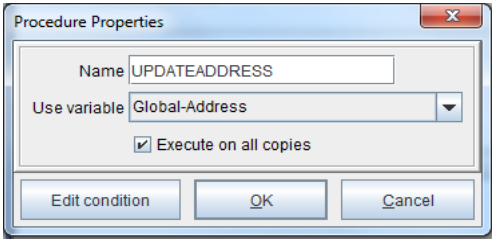
5. Enter a variable name and select *OK*.



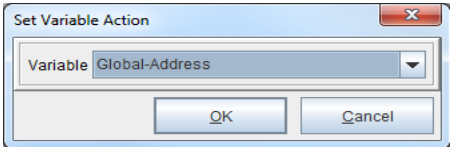
6. Create a procedure that sets the value of the global variable to your new form variable. From the Current Project window *right click* your selected form and select *Add Procedure > Set Variable*.



7. The Procedure Properties dialog box displays. Enter a procedure name and select the form variable you created earlier. Select *OK*.



8. The Set Variable Action dialog box displays. Select the global variable created earlier.

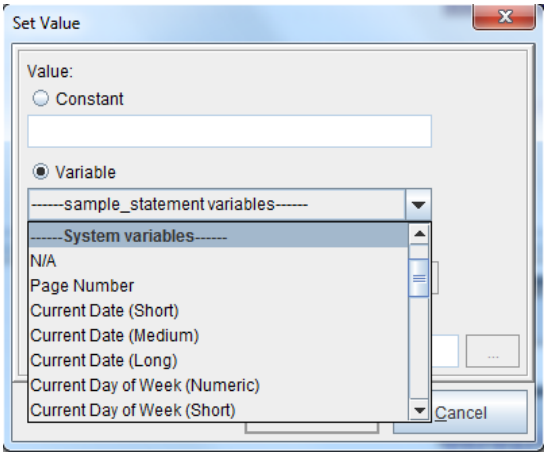


The procedure now sets the global variable. A *condition* on the procedure must also be set in order for the procedure to implement across multiple pages. The condition must match only on the first page.

9. If you would like to implement an action based on the global variable, proceed with creating an action using the global variable on the selected form.

System Variables

System variables are dynamic and implemented at runtime. System variables can be added using *procedures* and *functions*. System variables can be found under the variable option selection, as show below:



Available system variables:

System Variables	
Page Number	*Example: xx*
Current Date (short)	*Example: mm/dd/yy*
Current Date (Medium)	Example: mmm dd, yyyy
Current Date (Long)	Example: m...m dd, yyyy
Current Day of Week (Numeric)	Sunday = 1, Tuesday = 3
Current Day of Week (Short)	Example: Mon, Tue, Wed, Thu, Fri, Sat, Sun
Current Day of Week (Long)	Example: Monday, Tuesday, Wednesday, etc...
Current Day of Month	Example: dd
Current Month (Numeric)	Example: mm
Current Month (Short)	Example: mmm
Current Month (Long)	Example: m...m
Current Year	Example: yyyy
Current Time (Short)	Example: hh:mm am\pm

Current Time (Medium)	Example: hh:mm:ss am\pm
Current Time (Long)	Example: hh:mm:ss am\pm timezone
Current Hour (24)	Example: hh
Current Hour (12)	Example: hh
Current Minute	Example: mm
Current Second	Example: ss
Current Millisecond	Example: mm
AM/PM	Example AM or PM
TimeZone (Short)	Example: PDT
TimeZone (Long)	Example: Pacific Daylight Time
TimeZone (RFC 822)	GMT representation
Current Time (Timestamp)	Returns the current time as the number of milliseconds since 1/1/1970.
Data File Name	Incoming data file name, for example: stmdata.dat
Full Data File Name	Incoming data file name including data file path, for example: path....\stmdata.dat
Data File Timestamp	Returns the data files last modified time as the number of milliseconds since 1/1/1970.
Raw Page Data	Contains all the data from the input page concatenated together. The variable contents are not calculated unless they are actually used.

Variable Functions

eFORMz supports the following variable functions:

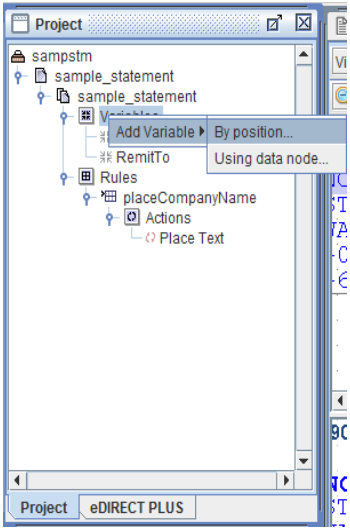
- Concatenate
- Insert String
- Set Value
- Substring
- Replace
- Set value from a declared constant
- Right Trim
- Left Trim
- Uppercase
- Lowercase
- Table Lookup
- SQL Lookup
- Does File Exist
- eVS Barcode Data Generator
- SmartLabel Barcode Data Generator
- Bulk Concatenate

***TIP*:** Variable functions can be enabled or disabled individually by right clicking the function and selecting Active. Unchecking Active will disable the variable function.

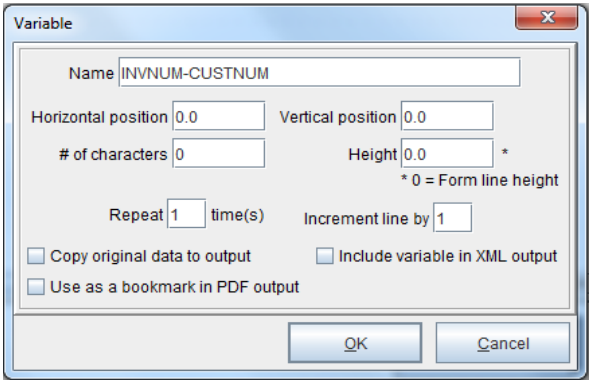
Concatenate

Concatenate will allow you to combine two or more character strings to make one. To implement a concatenate function:

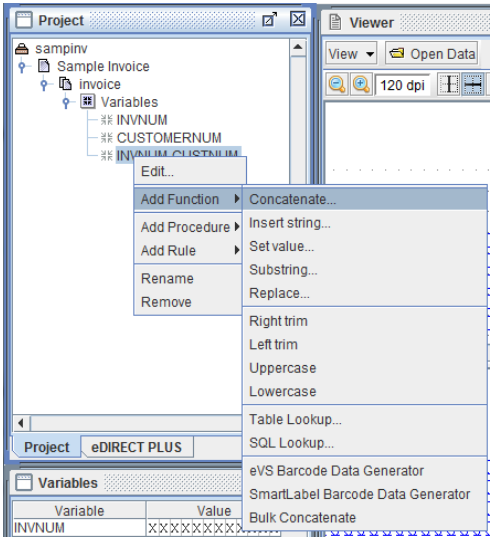
1. From the eFORMz Viewer, *Input Data Viewer*, create a variable for each string that will make up the concatenated string.
2. A third variable can be created to combine the two variables together if you wish to use each of the first two separately and for other rule options. From the Variables placeholder, right click, select *By Position*:



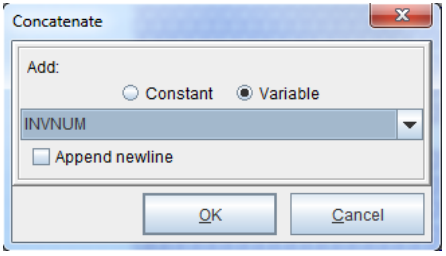
3. Enter a new variable name and then select *OK*.



4. From the Current Project window right click your newly created variable and select *Add Function* > *Concatenate*:



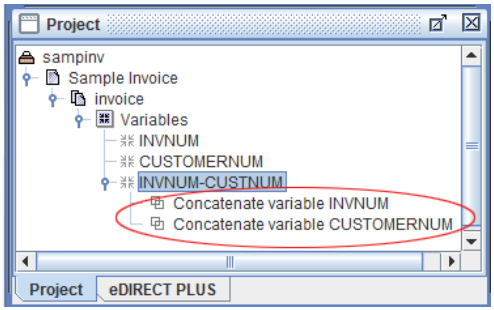
5. From the Concatenate dialog box select the Variable option and then select the first variable you would like to join together.



Select *OK*.

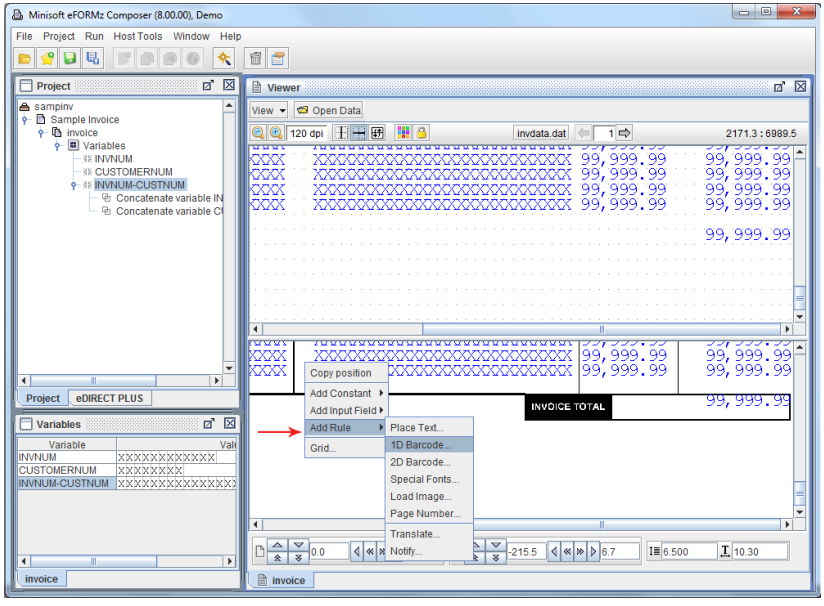
***NOTE*:** The *Append newline* feature will only work in conjunction with the Wordwrap option of the Place Text action.

6. Follow the same procedure for concatenating the second variable.
7. When complete your newly created variable will display both concatenated variables.

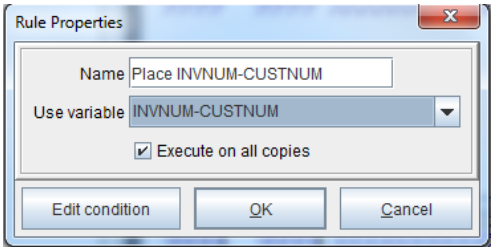


***TIP*:** To create a continuous string that combines multiple variables, create a single variable that contains multiple concatenate functions. By default, a variable containing multiple concatenates functions as one continuous string. To allow for line breaks between the concatenate functions select the *Append newline* option. The *Append newline* option works in conjunction with the wordwrap option of the Place Text Rule.

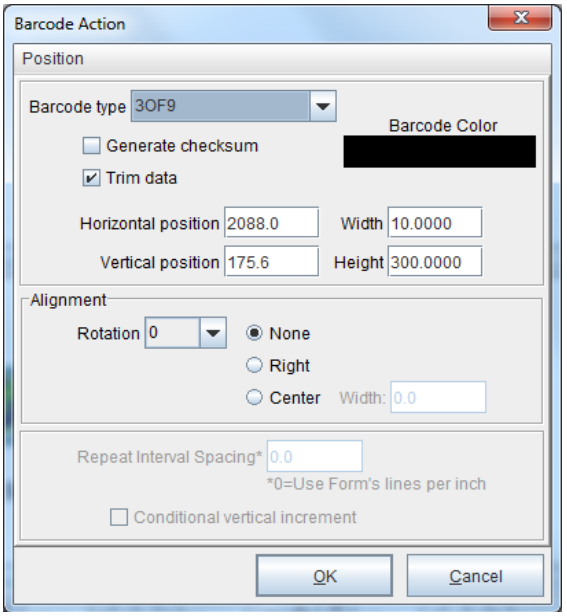
8. Next, create a new rule to display your newly configured string. From the eFORMz Viewer, Form and Data Viewer, *right click* and select *Add Rule > Barcode (or another rule type)*.



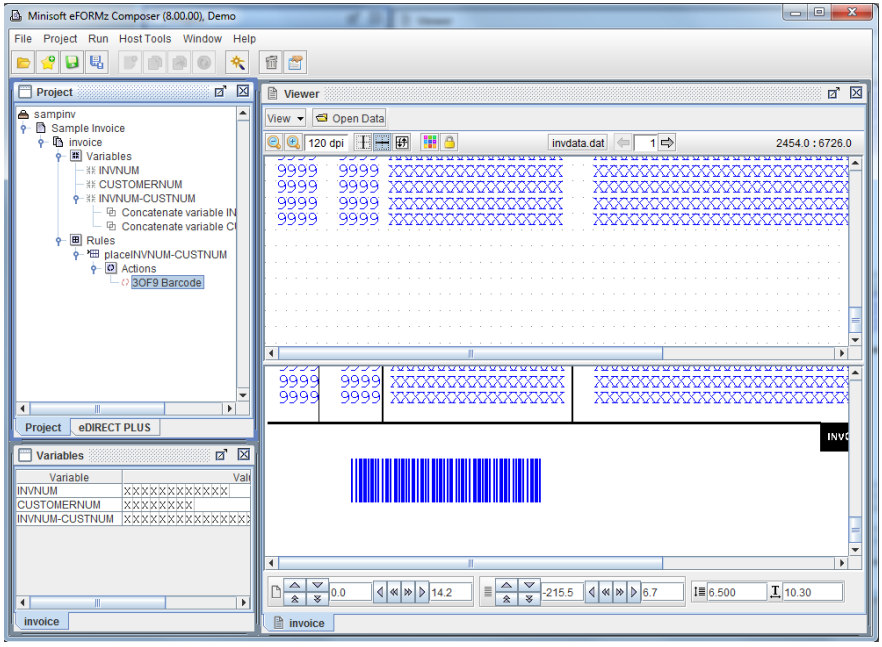
9. The *Rule Properties* dialog box will display. Enter a new rule name and click *OK*.



10. The *Barcode Action* dialog box will display. Select the a barcode type and enter the desired width and height. Once complete, click *OK*.



11. A barcode will display in the eFORMz Viewer. The new barcode is the concatenated string you created earlier with the variable containing the multiple functions.



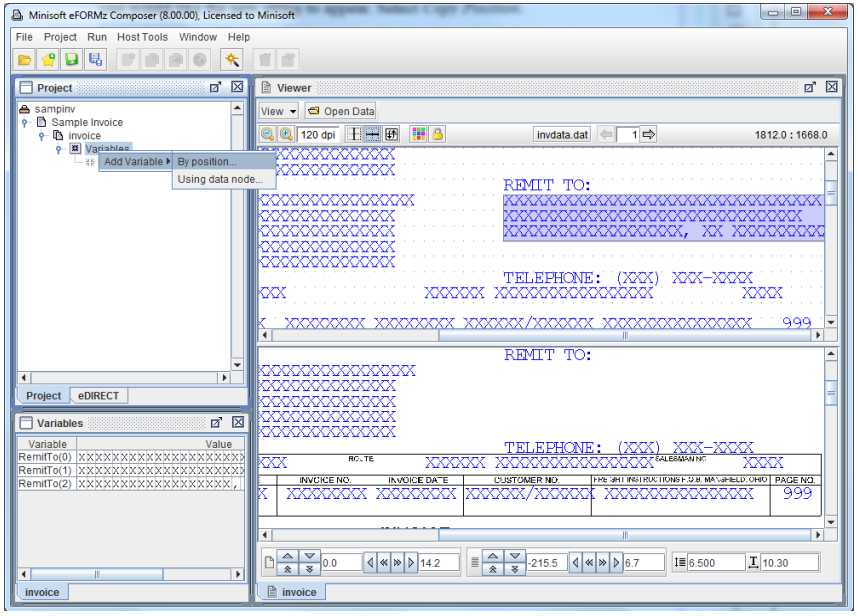
Insert String

Insert a string of characters into your data output in one of two ways:

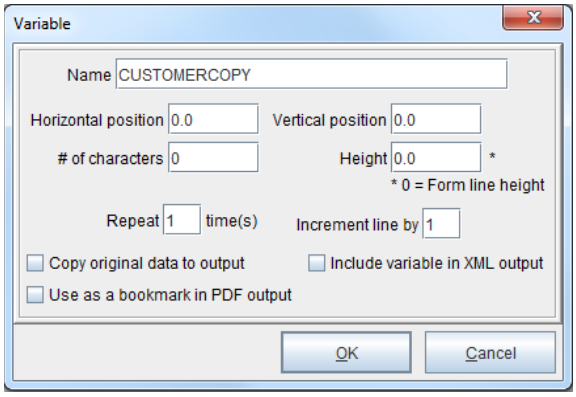
- Place and insert a string of characters in a specified position.
- Insert a string of characters attached to an existing string of data from your incoming data file.

Place and insert a string of characters

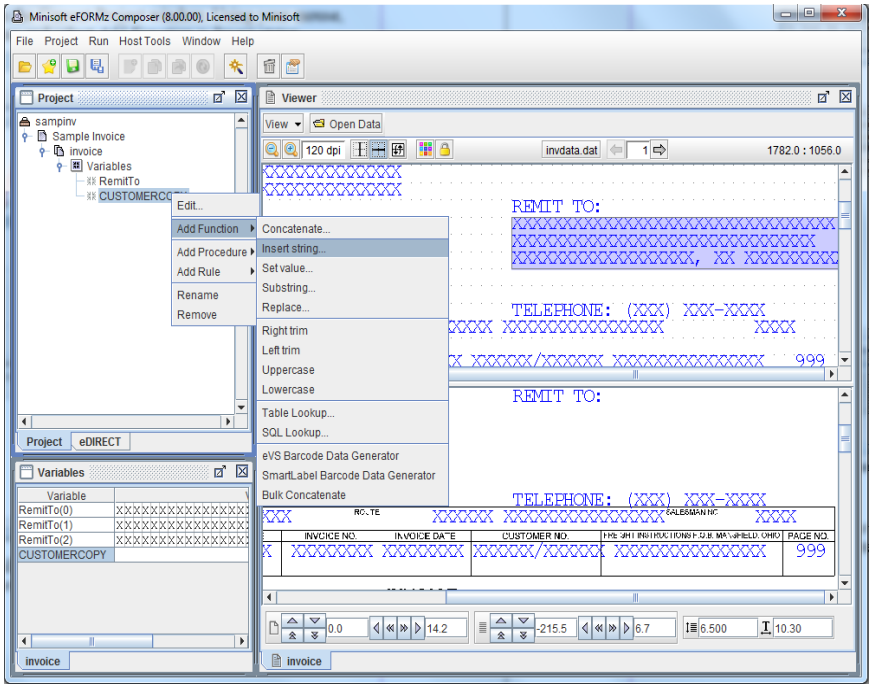
1. In the eFORMz Viewer, Form and Data Viewer, *right click* your mouse in the area you would like the new string to appear. Select *Copy Position*.
2. From the Current Project window select the Variable placeholder, *right click*, and select *By Position*.



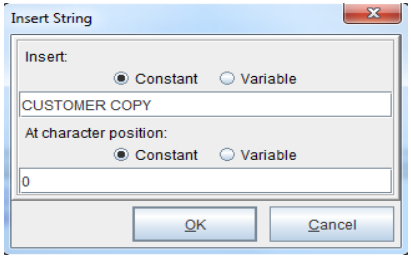
3. The Variable dialog box will display. Enter a new variable name and click *OK*.



4. The new variable will appear in the Current Project window. Using your mouse, *right click* the new variable name and select *Add Function* > *Insert string*.

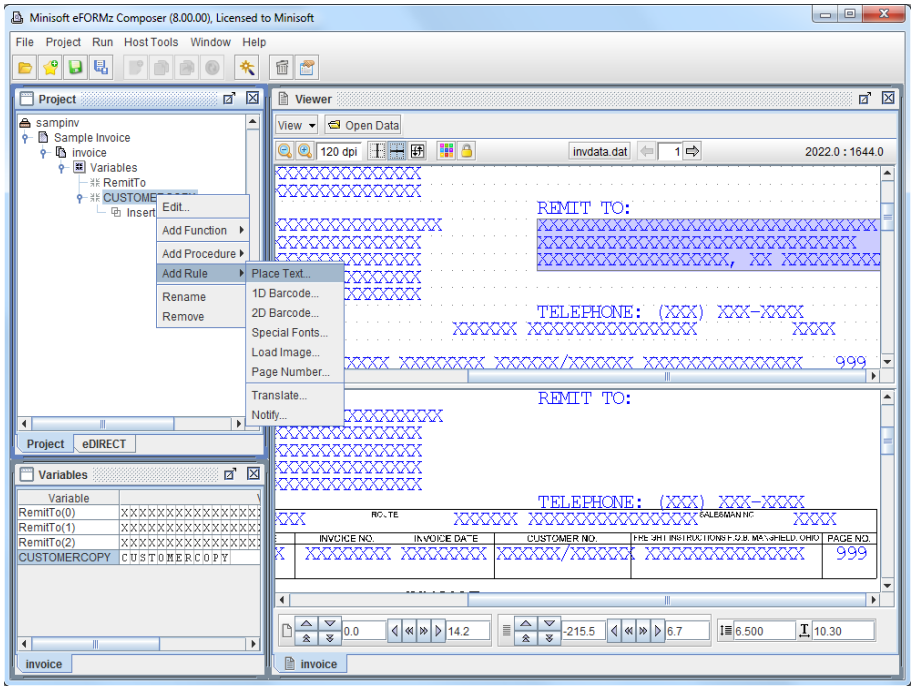


5. The *Insert String* dialog box will display. Enter a *Constant* value, for example, CUSTOMER COPY in the *Insert* > *Constant* field. In the *At character position* field enter zero (0).

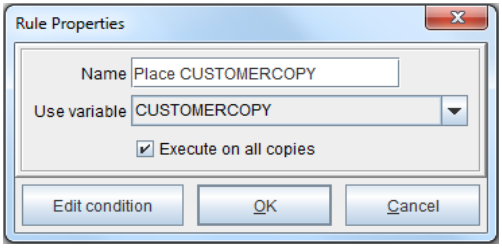


Click *OK*.

6. Select the newly created rule from the Current Project window and then select *Add Rule* > *Place Text*.



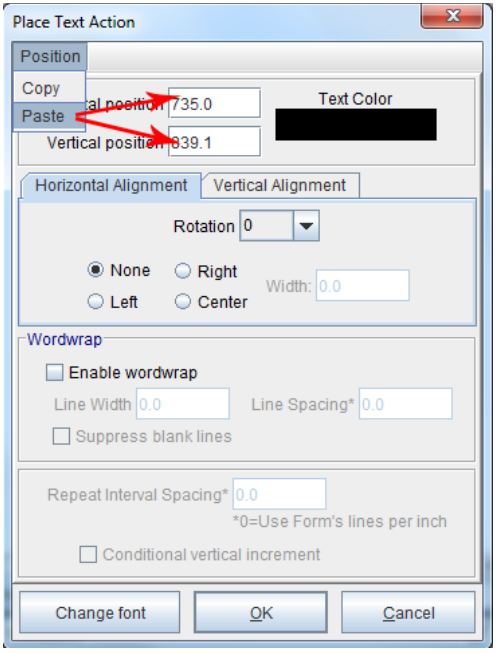
7. The *Rule Properties* dialog box will display. Enter a new rule name and select the previously created variable for the *Use variable* field.



Once complete, click *OK*.

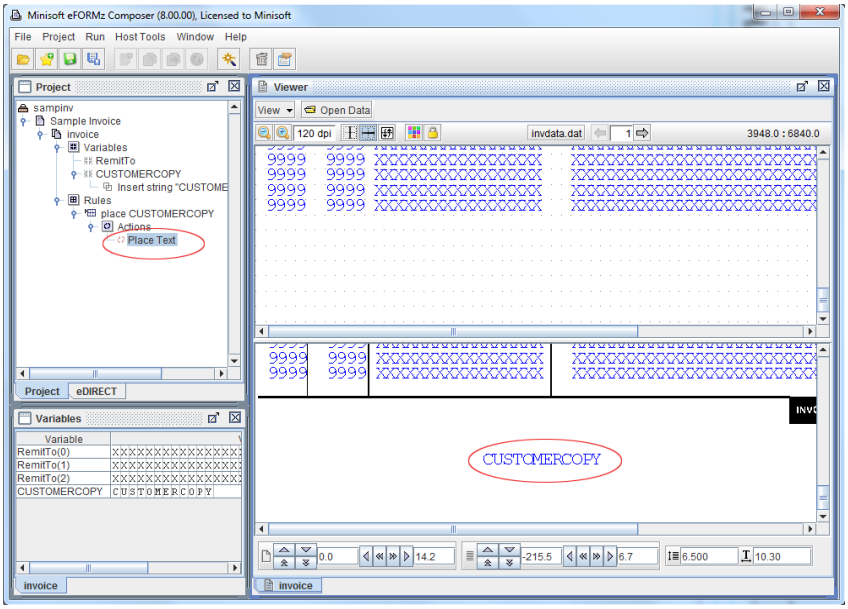
8. From the *Place Text* dialog box select *Position* > *Paste*. The position previously selected will be pasted into the *Horizontal* and *Vertical* position fields.

Select *Change Font* if you would like any font changes to be applied.



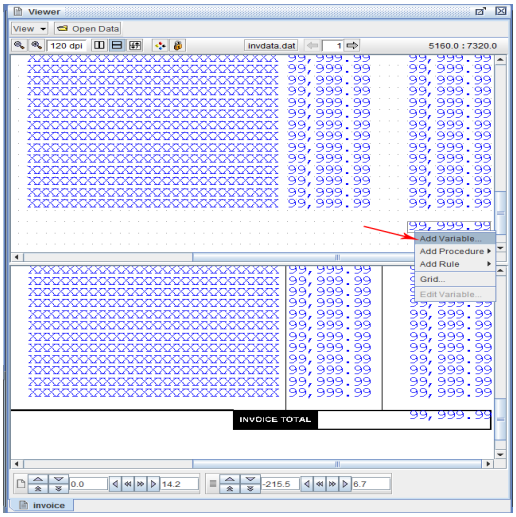
Click *OK*.

9. The text string will appear in the eFORMz Viewer, Form and Data Viewer.

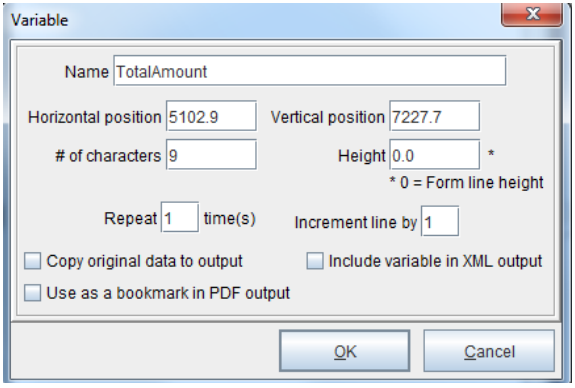


Attach String to Existing Data

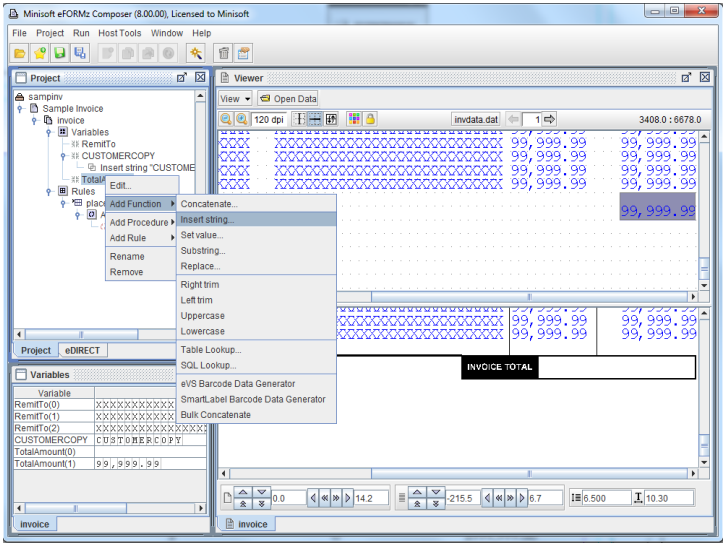
1. From the eFORMz Viewer, Input Data Viewer, select the data you would like to add a string to, *right click*, and select *Add Variable*.



2. The *Variable* dialog box will display. Enter a new variable name and click *OK*.



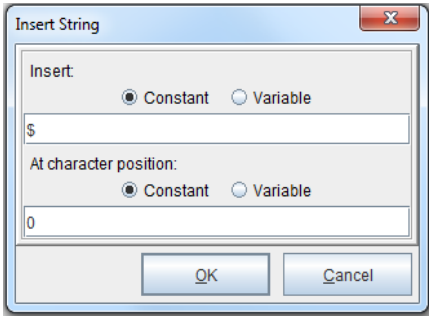
3. The newly created variable will display in the Current Project window. *Right click* the variable name and select *Add Function* > *Insert String*.



4. The *Insert String* dialog box will display. Enter the character string you would like to attach to the selected variable in the *Insert* > *Constant* field. Enter the starting character position in the *At character position* > *Constant* field. Examples:

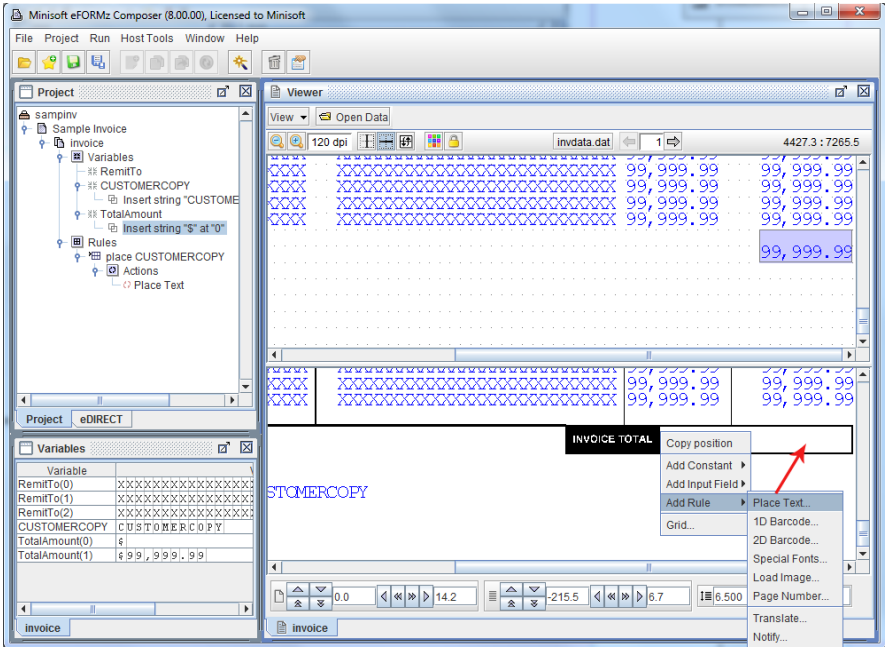
Character String	Character Position	Output
$	0	$999,999.00
/	2	
/	5	03/15/05
.00	7	999,999.00

Note: Character positioning starts at zero (0).

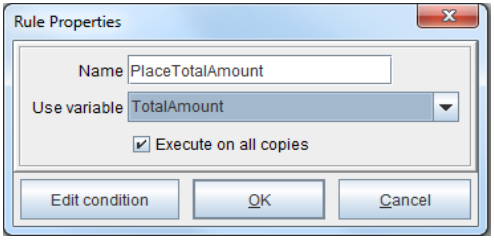


Once complete, click *OK*.

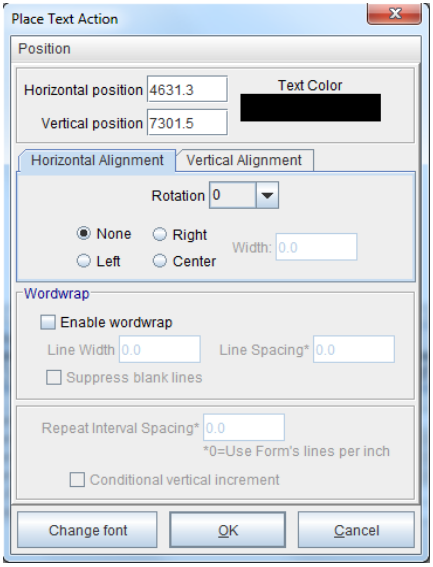
5. From the eFORMz Viewer, Form and Data Viewer, *right click* in the position you would like your new string to appear and select *Add Rule* > *Place Text*.



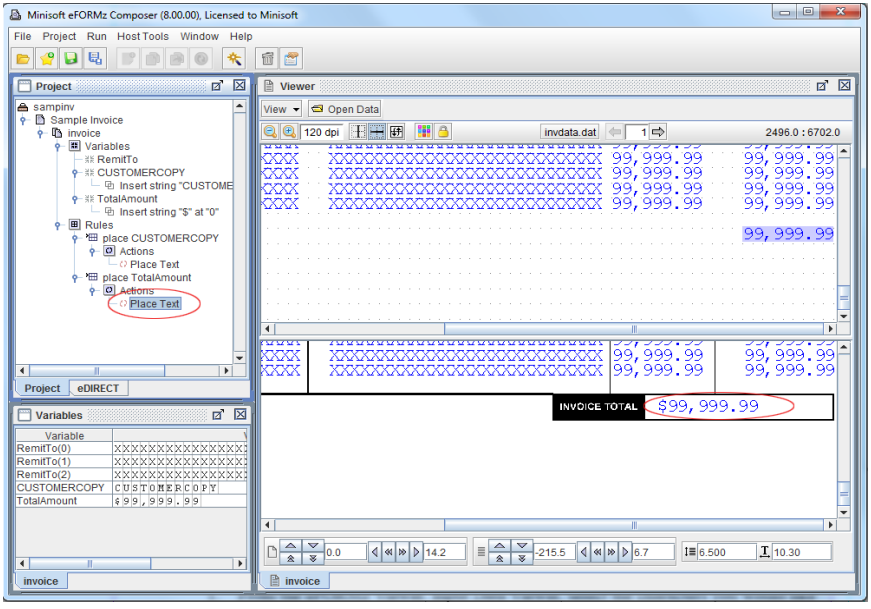
6. From the *Rule Properties* dialog box enter a new rule name and select the previously created variable. Once complete, click *OK*.



7. The *Place Text Action* dialog box will display. Click *OK* if you are complete with the Place Text Action dialog box.



8. Your new rule will appear in the Current Project window and in the eFORMz Viewer, Form and Data Viewer. If the newly created string needs adjusting in the Form and Data Viewer, using your mouse, drag-and-drop the new string into position.

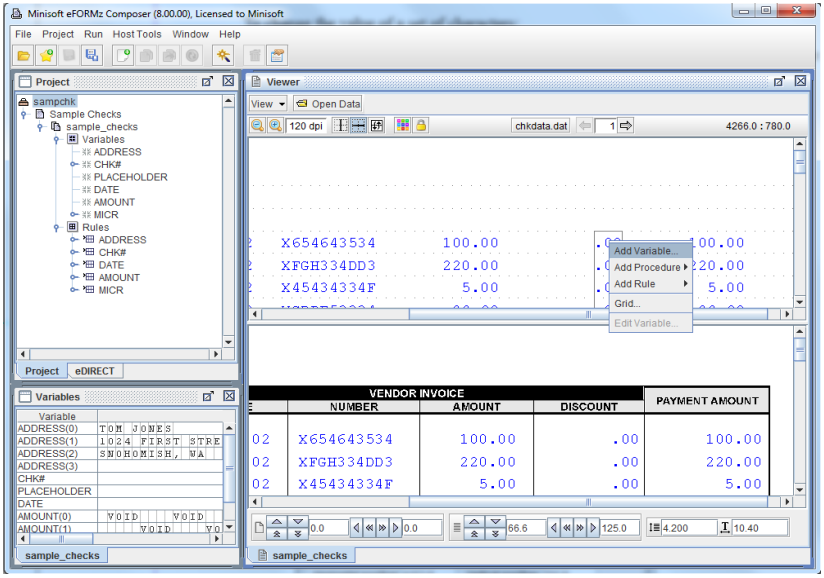


Set Value

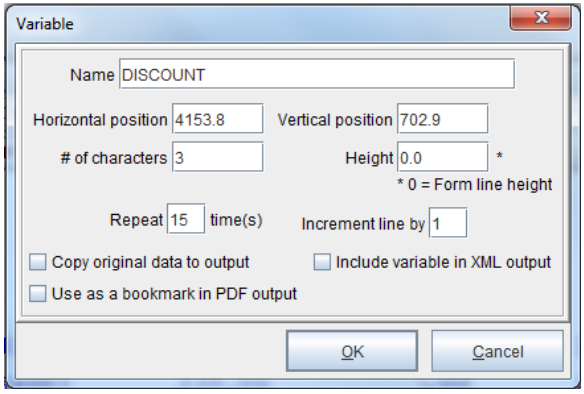
Set a variable to a value using the *Set Value* function. The value will override any preceding functions or values being picked up by the variable.

To change the value of a set of characters:

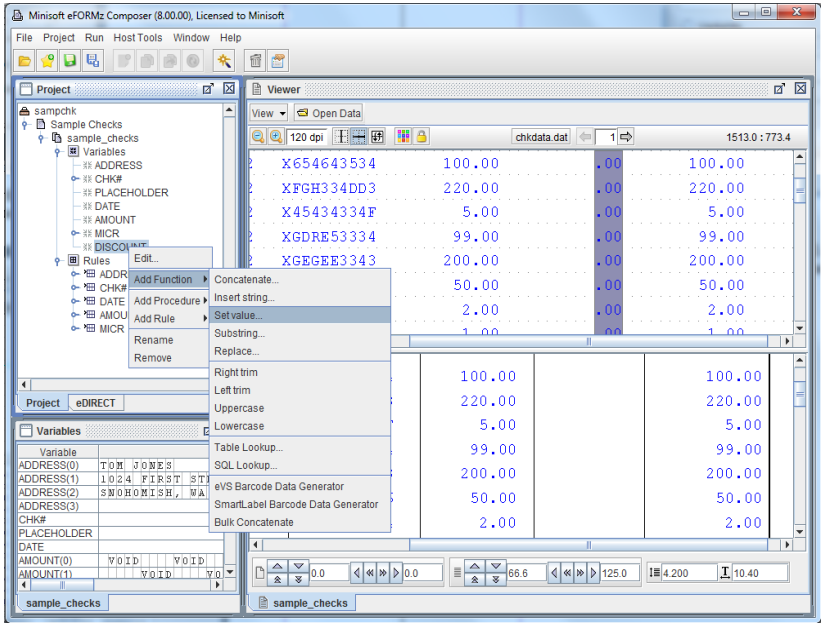
1. From the eFORMz Viewer, Input Data Viewer, select the characters you would like to change. *Right click* and select *Add Variable*.



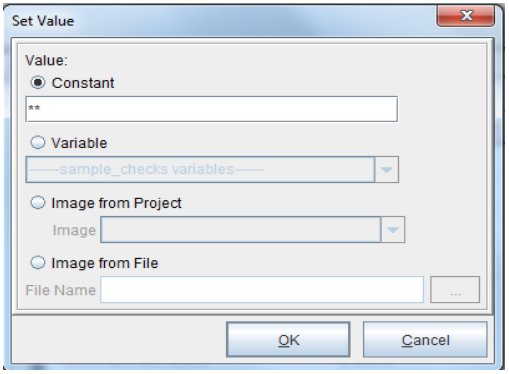
2. The *Variable* dialog box will display. Enter a new variable name and click *OK*.



3. The newly created variable will display in the Current Project window. Using your mouse, *right click* the new variable from the Current Project window and select *Add Function > Set Value*.

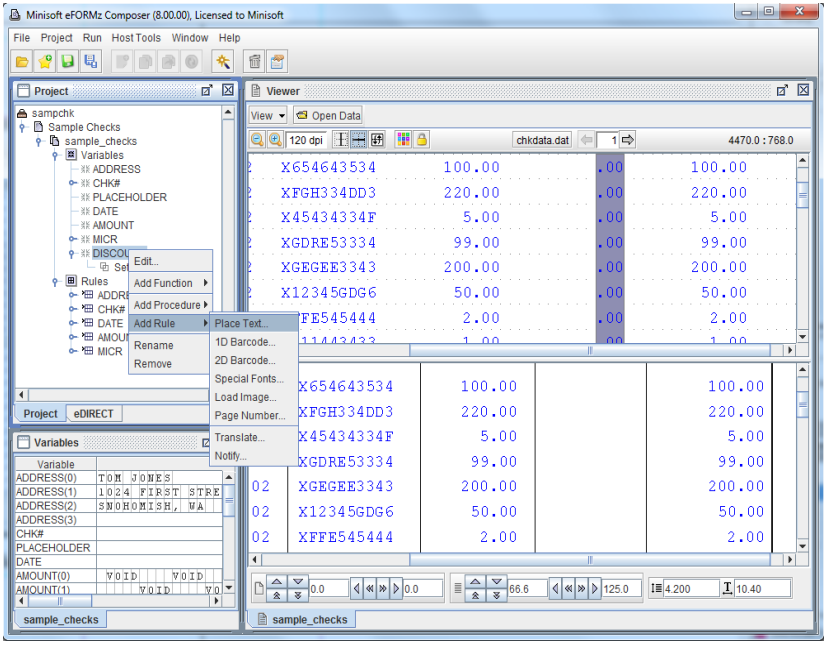


4. The *Set Value* dialog box displays. For the *Value type* select *Constant* and enter a value you would like to set the characters to in the constant value field.

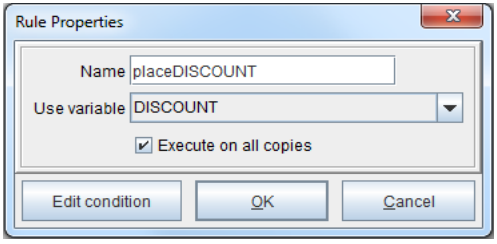


Once complete, click *OK*.

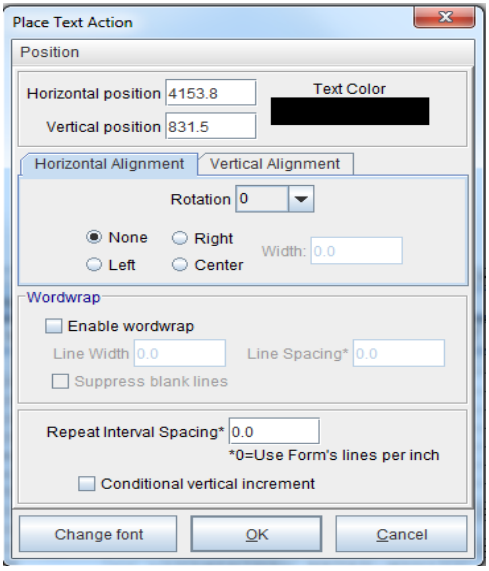
5. The Set Value function will display in the Current Project window. From the Current Project window select the new variable, *right click*, and select *Add Rule* > *Place Text*.



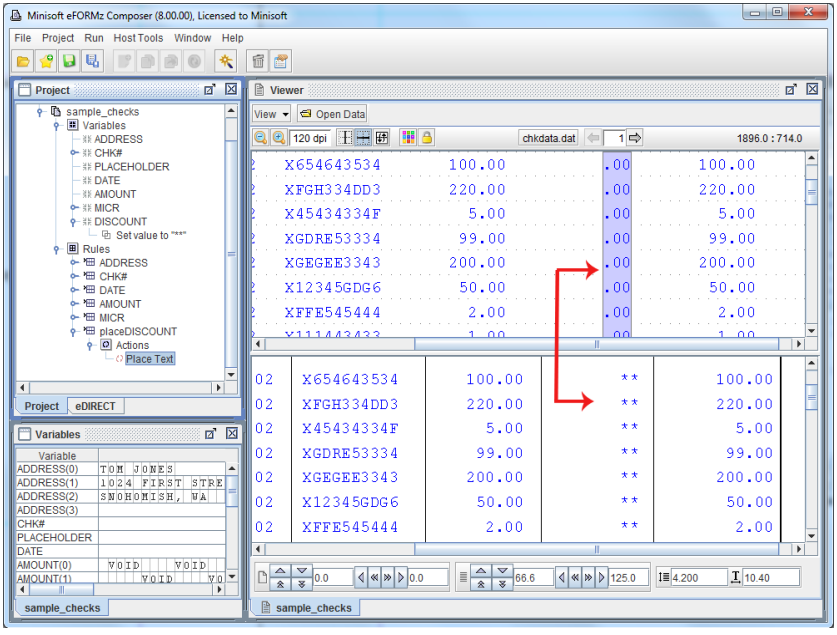
6. The *Rule Properties* dialog box will display, enter a new rule name and click *OK*.



7. The *Place Text Action* dialog box will display. Without making any changes click *OK*.



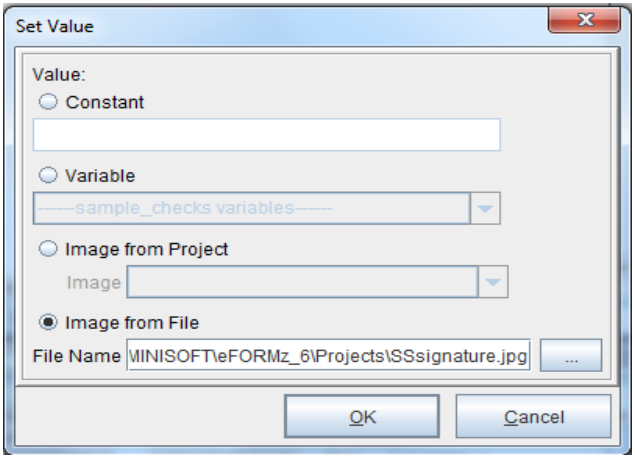
8. The eFORMz Viewer, Form and Data Viewer, displays the character change while the Input Data Viewer displays the original data format.



Setting an Image Value

The Set Value function can also be set to an image. Apply an image in one of the following ways:

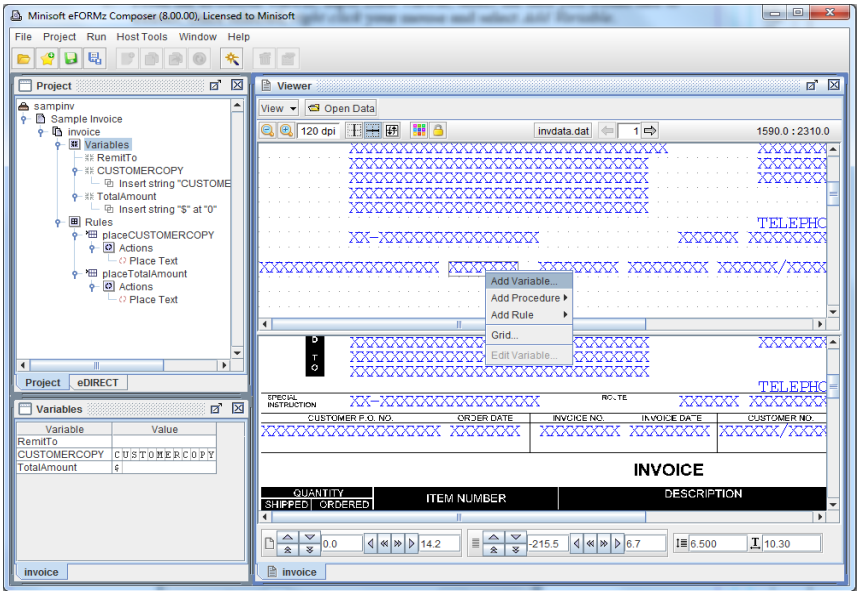
- *Image from project* loads a previously saved image that was imported into the project using the *Project Properties* > *Images* option.
- *Image from file* loads an image from a specified folder. The image will not be stored in the project file.



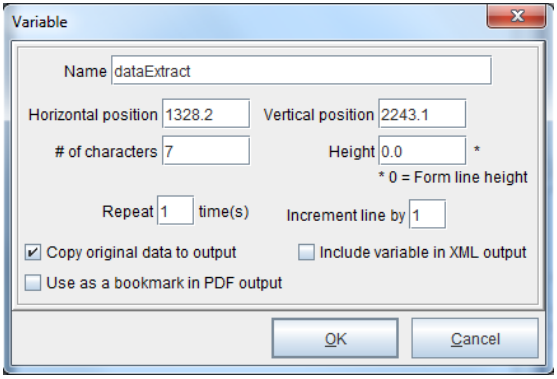
Substring

Extract a string of characters using the substring function from your incoming data file or a custom built variable. For example, to extract a string of characters from your incoming data file:

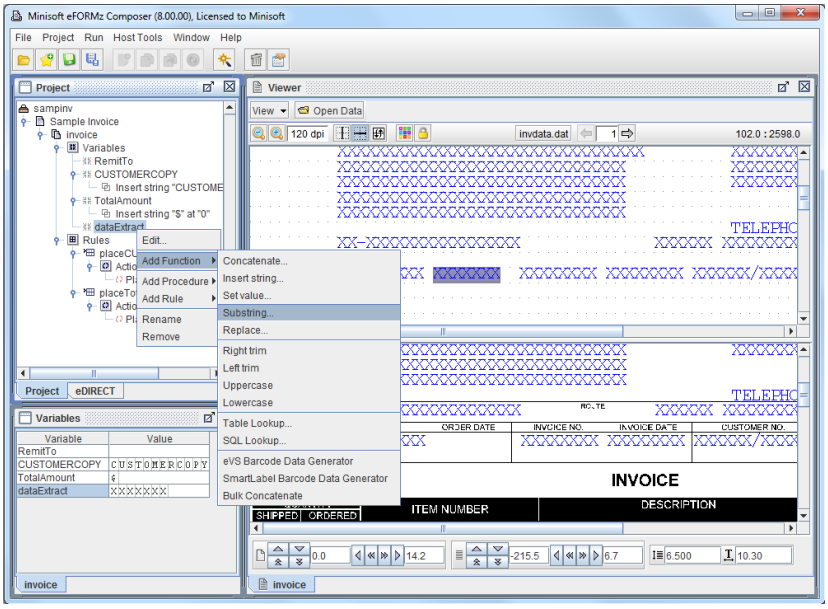
1. From the eFORMz Viewer, Input Data Viewer, select the data you would like to extract. Once selected, *right click* your mouse and select *Add Variable*.



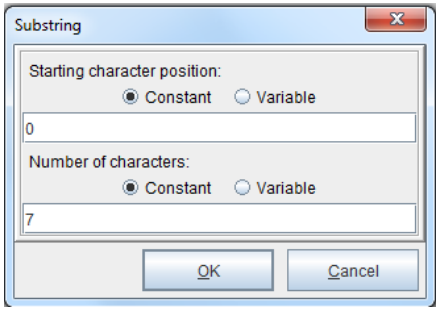
2. From the *Variable* dialog box enter a new variable name. If you would like the original data to appear in your output select *Copy original data to output*. Click *OK*.



3. *Right click* the newly created variable and select *Add Function* > *Substring*.



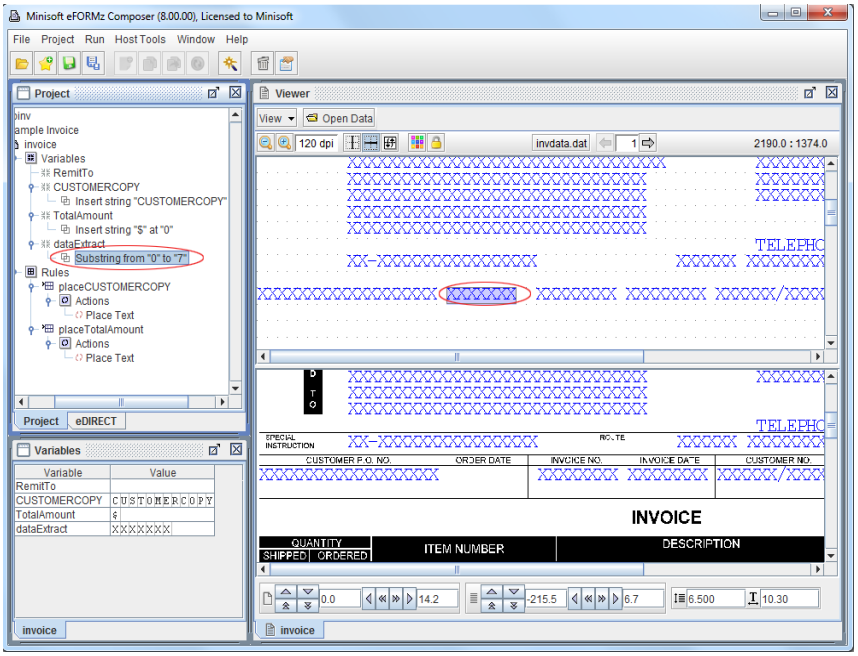
4. From the *Substring* dialog box enter the starting position of the string you would like to extract. Note, for this example we are extracting the entire data. Set the number of character to be extracted.



> ***TIP*:** Specifying a negative value (-1) in the *Starting Character Position* field indicates to start from the end of the string. '0' is the starting position of the string.

Once complete, click *OK*.

5. The new function will display in the Current Project window.

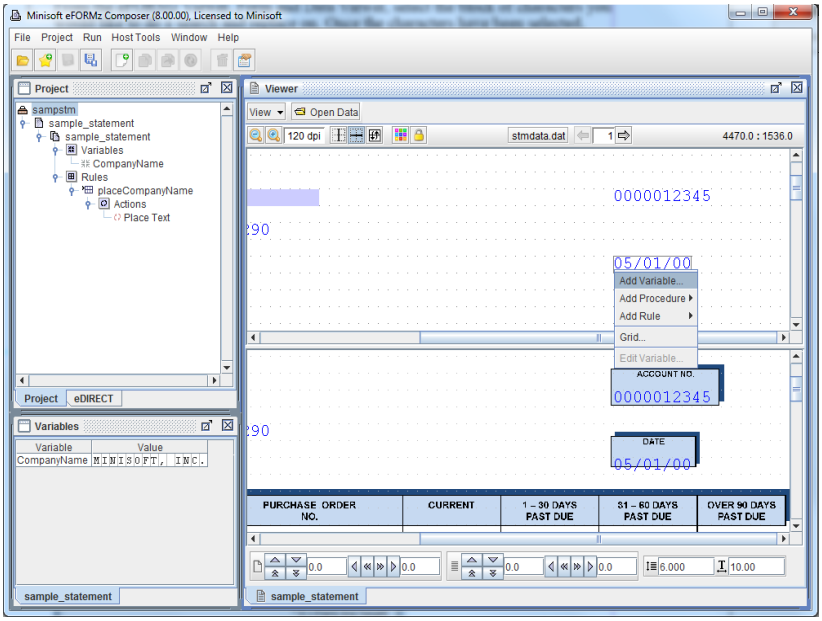


6. The extracted data can now be used for creating a rule or be saved for later use.

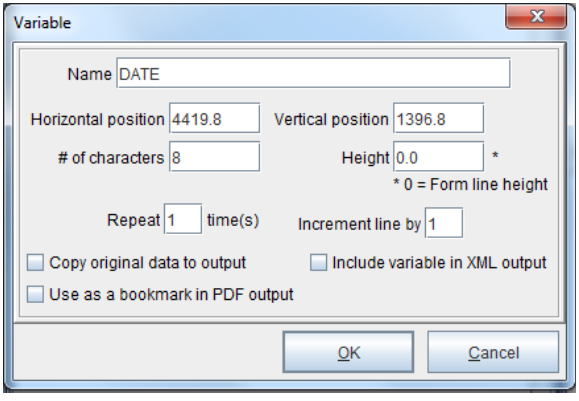
Replace

To replace a character or string of characters with another:

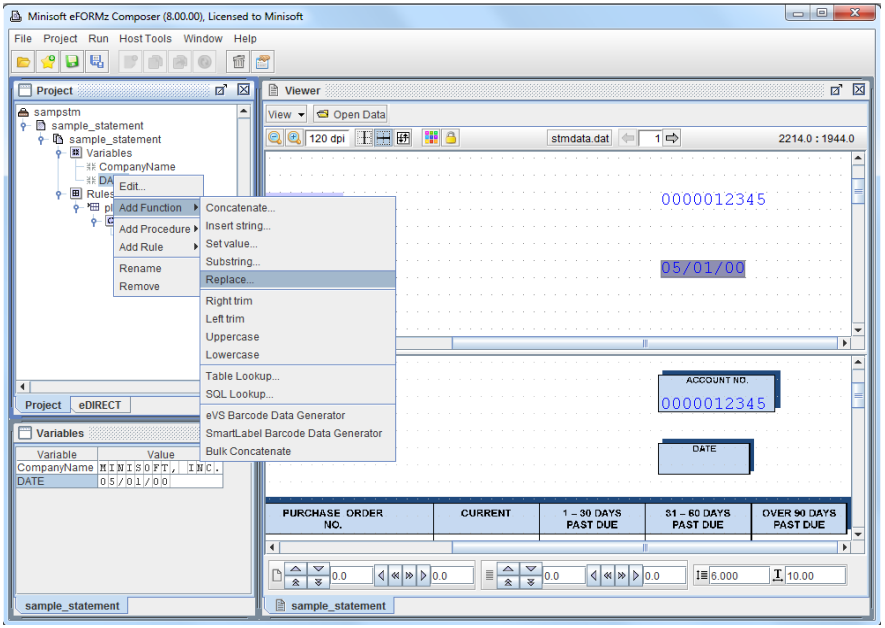
1. From the eFORMz Viewer, Form and Data Viewer, select the block of characters you would like to do a search and replace on. Once the characters have been selected, *right click* using your mouse and select *Add Variable*.



2. The *Variable* dialog box will display. Enter a new variable name and click *OK*.

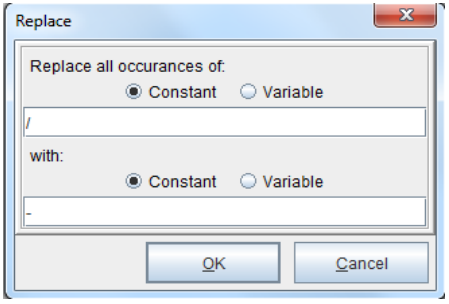


3. From the Current Project window select the newly created variable, *right click*, and select *Add Function* > *Replace*.



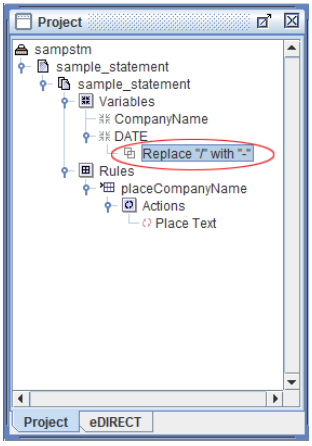
4. The *Replace Text* dialog box will display. From the *Replace all occurrences of* > *Constant* field enter the character(s) you would like to replace.

   From the *with* > *Constant* field enter the character you would like the above character(s) to be replaced with.

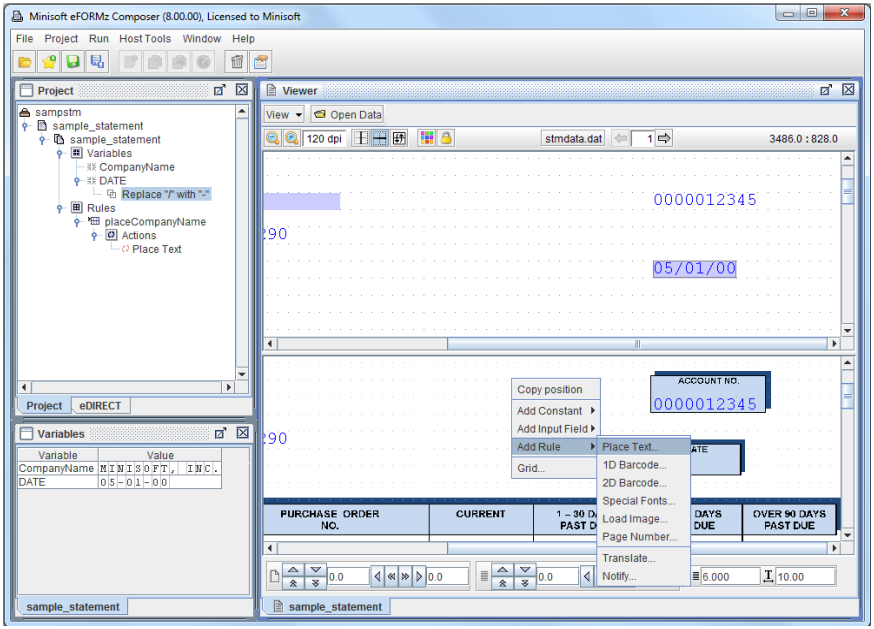


   Click *OK*.

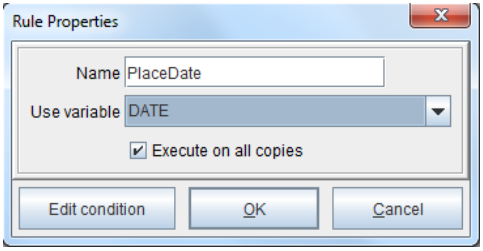
5. The *Replace* function will display in the Current Project window:



6. From the eFORMz Viewer, Form and Data Viewer, *right click* in the area you would like your new string of data to appear. Select *Add Rule* > *Place Text*.

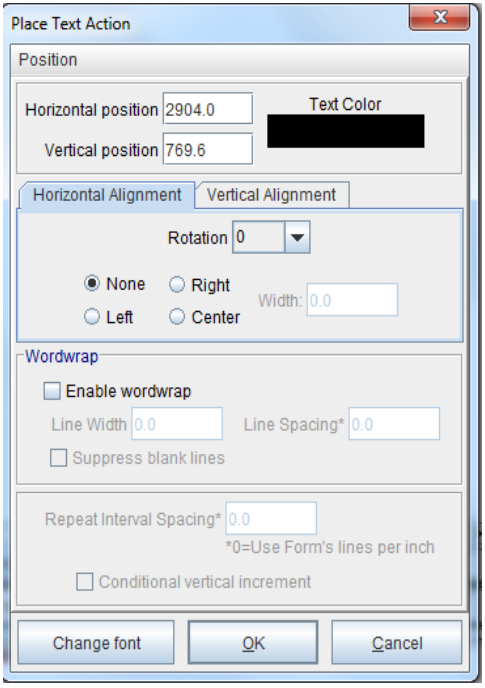


7. The *Rule Properties* dialog box will display. Enter a new rule name and select the newly created variable from the *Use variable* field.

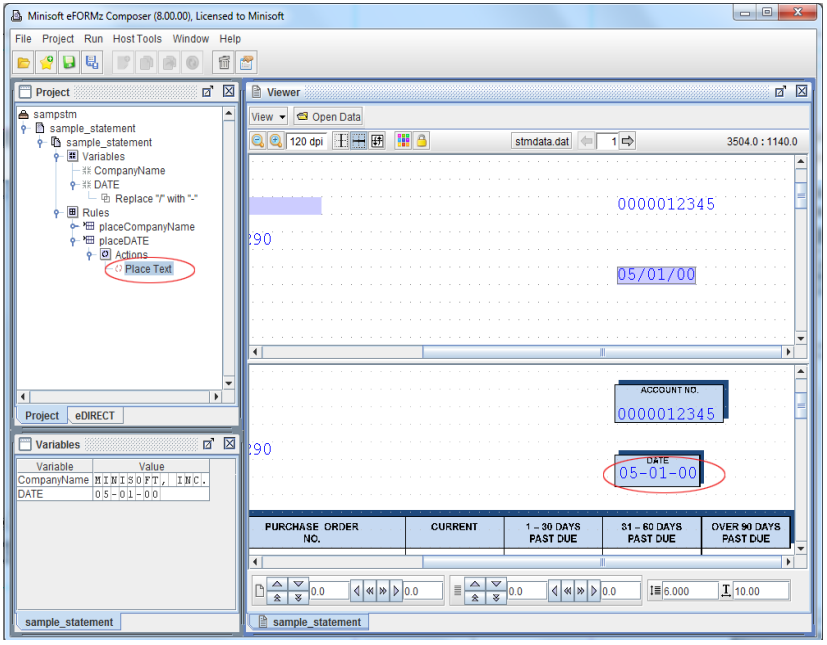


Once complete, click *OK*.

8. The *Place Text Action* dialog box displays. Make the necessary changes and click *OK*.



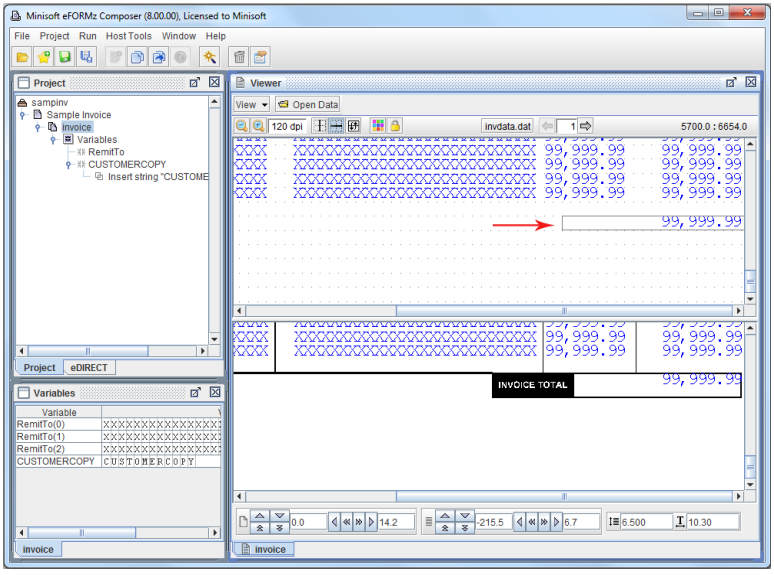
9. The new rule action will display in the Current Project window and in the eFORMz Viewer, Form and Data Viewer.



Right and Left Trim

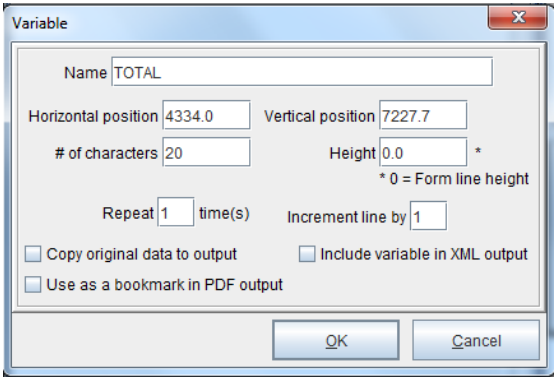
Trim extra blank spaces from the right or left of a variable using the Right and Left Trim functions. To implement a trim:

1. From the eFORMz Viewer, Input Data Viewer, select the data you would like to apply a trim format to.

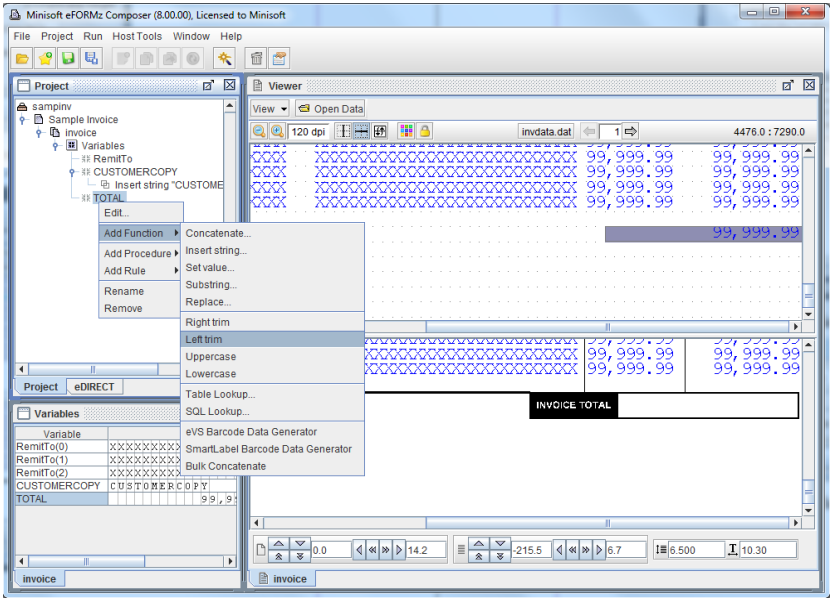


2. Once the string of characters has been selected, using your mouse, *right click* and select *Add Variable*.

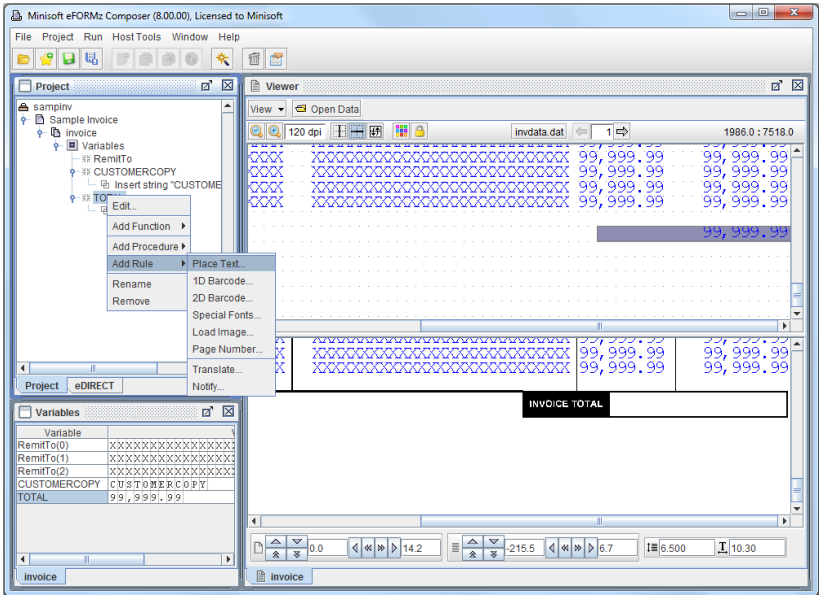
3. The *Variable* dialog box will display. Enter a new variable name and click *OK*.



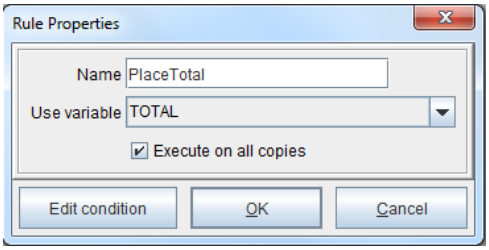
4. The new variable will appear in the Current Project window. Using your mouse, *right click* the new variable and select *Add Function* > *Left Trim* (or *Right Trim*).



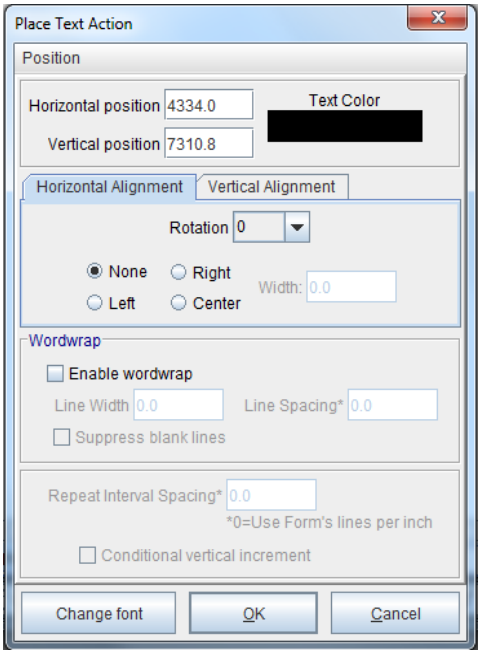
5. Select the newly created variable from the Current Project window. *Right click* and select *Add Rule* > *Place Text*.



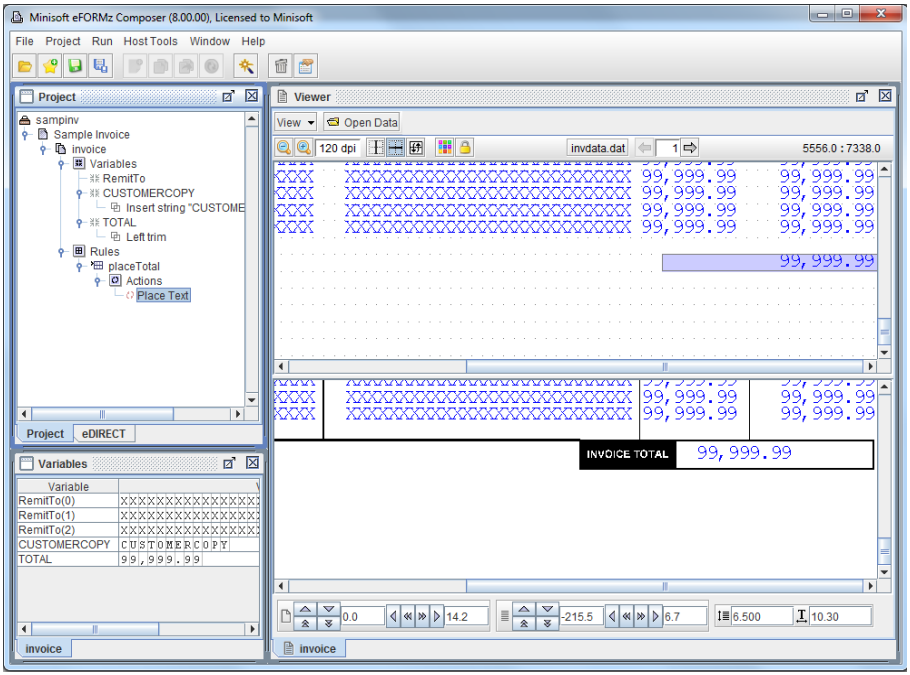
6. The *Rule Properties* dialog box displays. Enter a new rule name and click *OK*.



7. Without changing the horizontal and vertical positions, click *OK*.



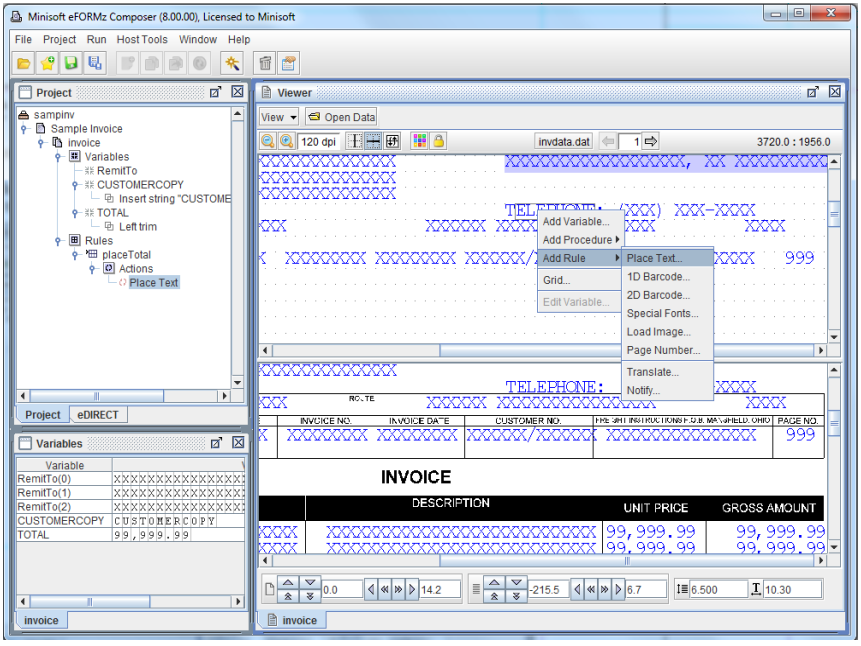
8. The string adjustment will display in the eFORMz Viewer, Form and Data Viewer.



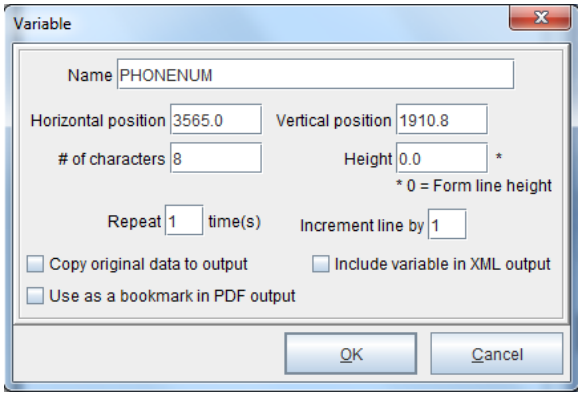
Lowercase and Uppercase

To implement a lowercase or uppercase function to a variable:

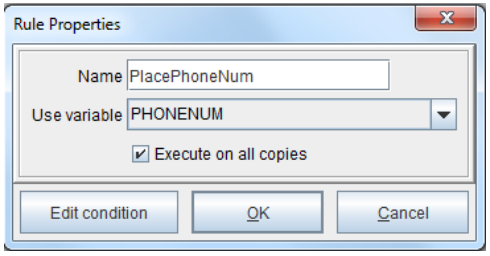
1. From the eFORMz Viewer, Input Data Viewer, select the range of data you would like to transform. Using your mouse *right click* and select *Add Rule* > *Place Text*.



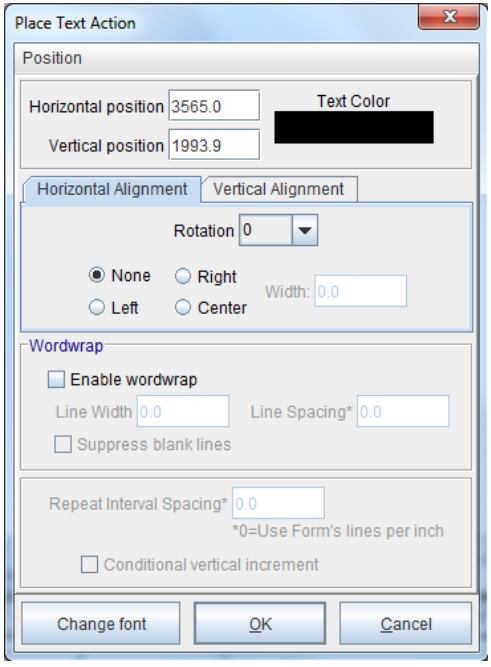
2. The *Variable* dialog box will display. Enter a new variable name and click *OK*.



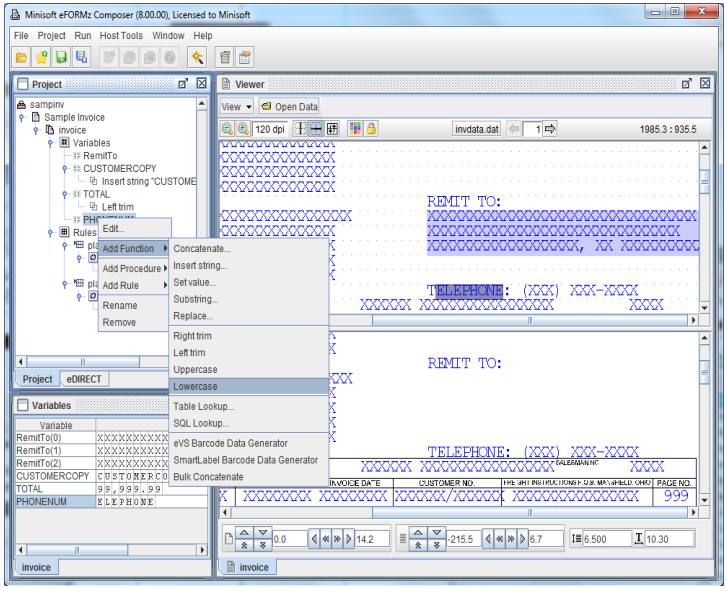
3. From the Rule Properties dialog box enter a new rule name and click *OK*.



4. From the *Place Text Action* dialog box, keep the existing Horizontal and Vertical position and click *OK*.



5. From the Current Project window, the new variable will display. Using your mouse *right click* the variable name and select *Add Function* > *Lowercase* (or *Uppercase*).



6. The Uppercase (or Lowercase) function will be added to the Current Project window. From the eFORMz Viewer, Form and Data Viewer, the function change will display.

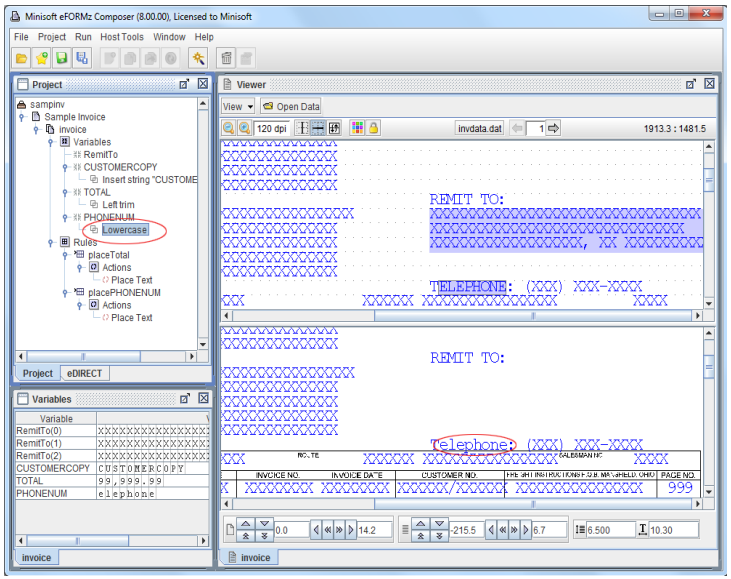
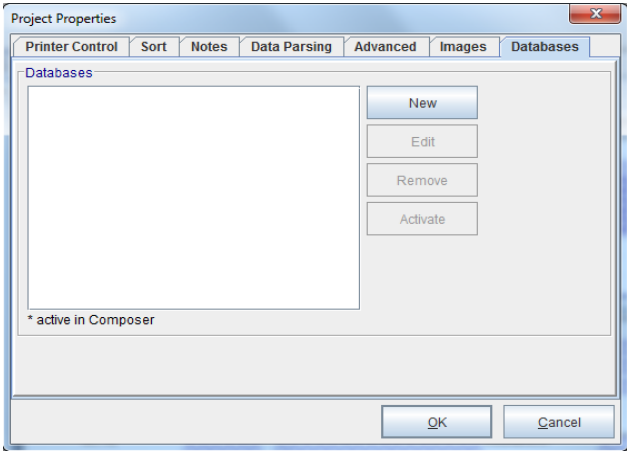


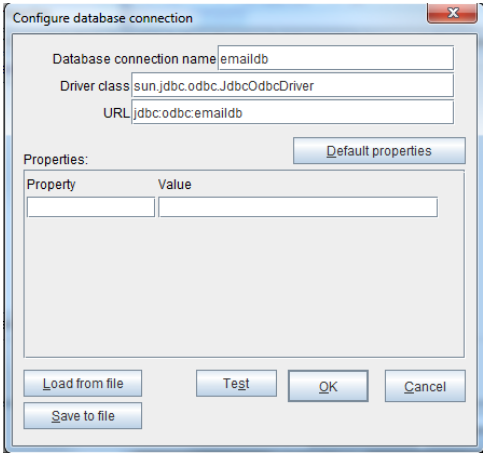
Table Lookup

To implement a database table lookup within the eFORMz Composer:

1. From the *Project Properties* > *Database* tab add a new database reference by selecting *New*.



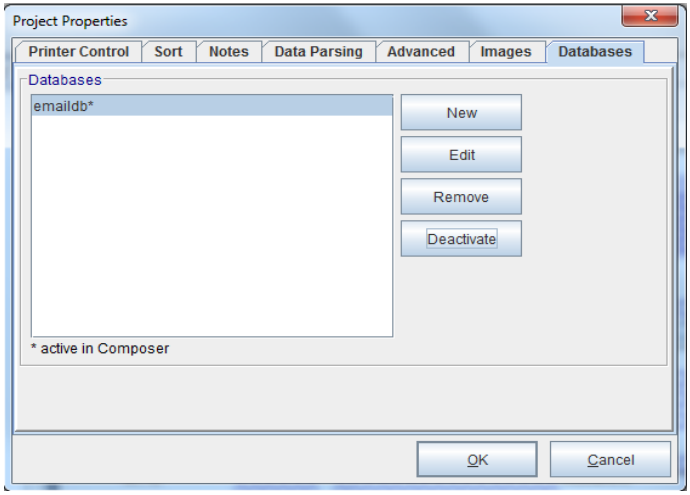
2. The *Configure Database Connection* dialog box displays. Enter the *database name*, *driver class*, and *url*.



***NOTE*:** For further detailed information on supported url and driver classes, see *Appendix B*.

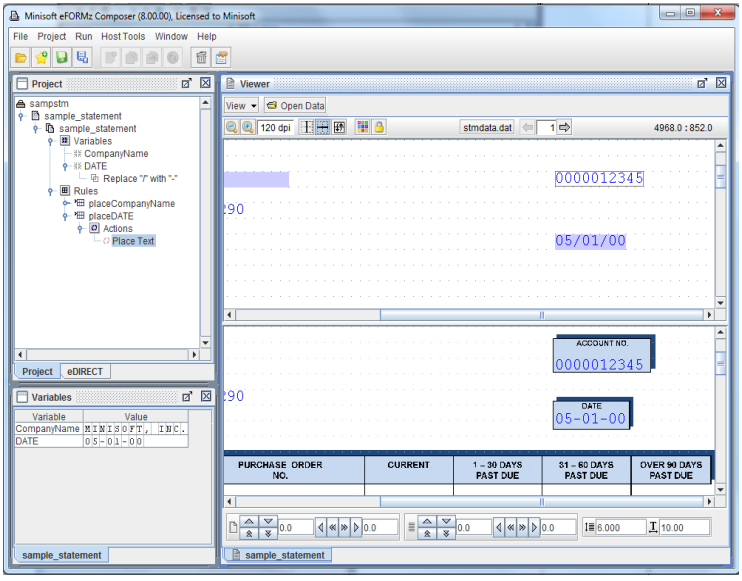
3. Once the database has been configured select *Test* to confirm the connection. Once complete, click *OK*.

4. The database name will display on the *Project Properties* > *Database* tab. Select *Activate* so that the information from the database becomes "real-time" data in the eFORMz Viewer, Form and Data Viewer.

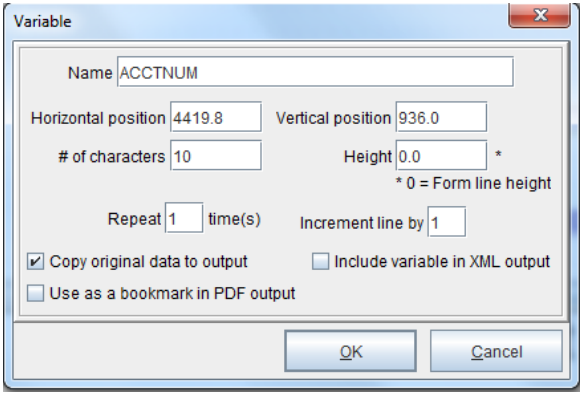


Once complete, click *OK*.

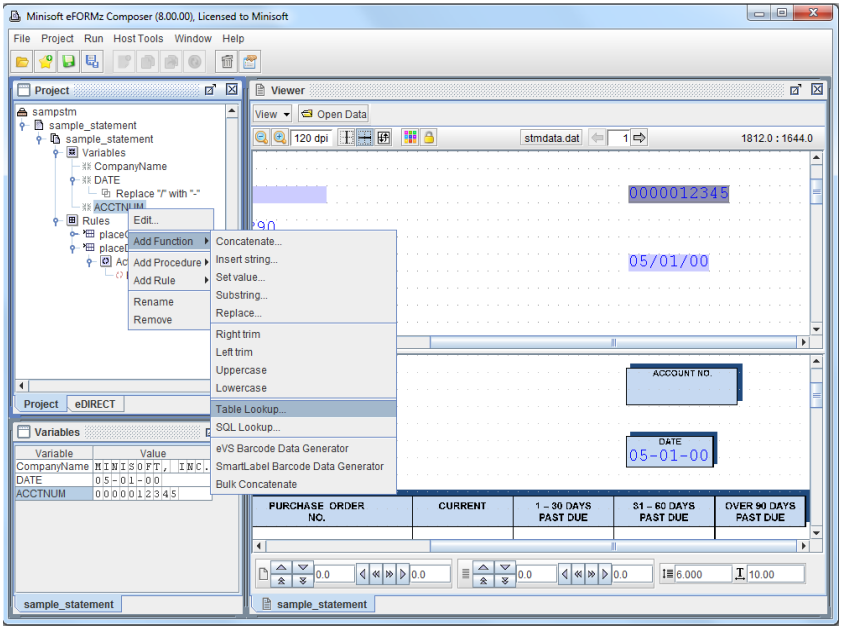
5. From the eFORMz Viewer, Input Data Viewer, select the database key (for example, account number) that you would like to do a database lookup on.



6. *Right click* and select *Add Variable*. The Variable dialog box will display. Enter a new Variable name and click *OK*.

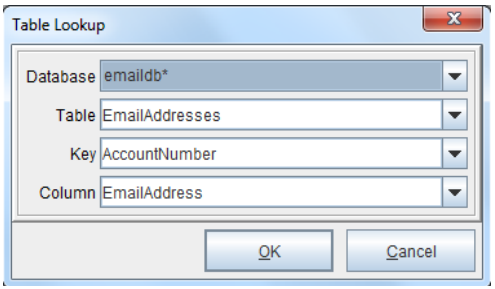


7. Once the new variable displays in the Current Project window, *right click* the new variable name and select *Add Function > Table Lookup.*



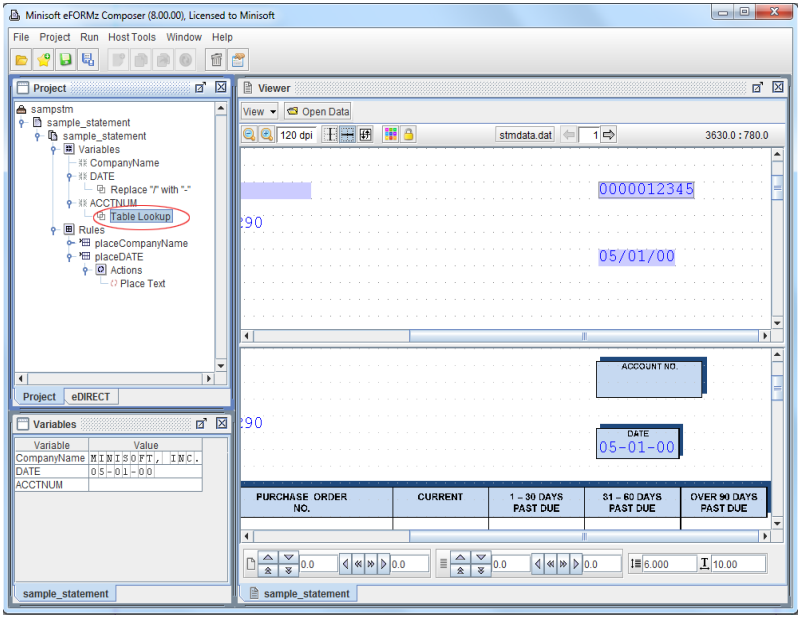
8. The Table Lookup dialog box will display. From the Database drop down field select the database you would like to use.

   Once a database has been selected the Table, Key, and Column fields will become available.

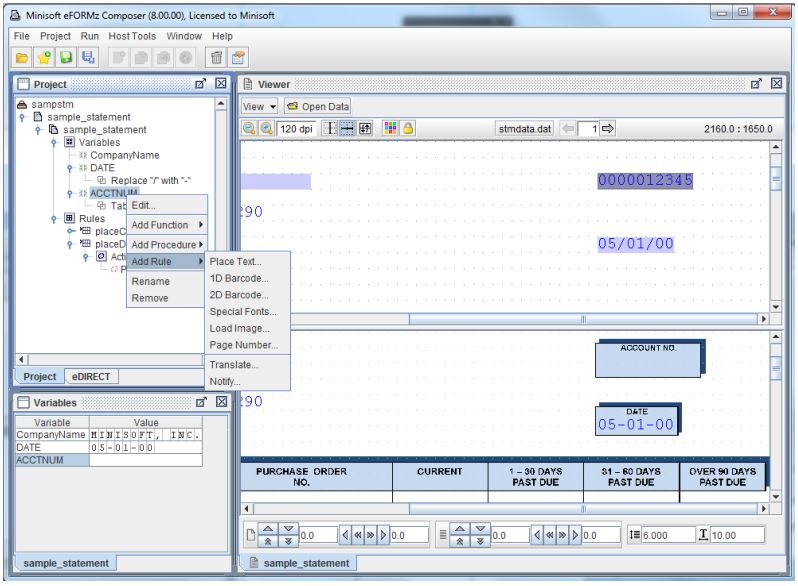


9. Once the selections have been made, click *OK*.

10. Your new variable will now display the Table Lookup function.



11. You can now add a Rule to your project using the new variable with the database lookup.

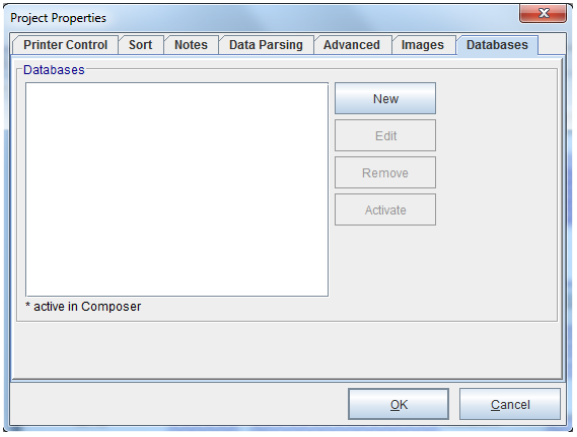


SQL Lookup

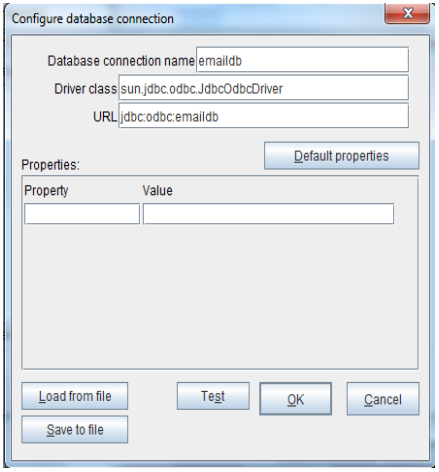
The purpose of a SQL Lookup is to return additional data to your eFORMz project based upon a value in your data file. Normally this value is an indexed item to a table in your database.

To implement an SQL Lookup:

1. If you haven't done so already, from the *Project Properties* > *Database* tab add a new database reference by selecting *New*.



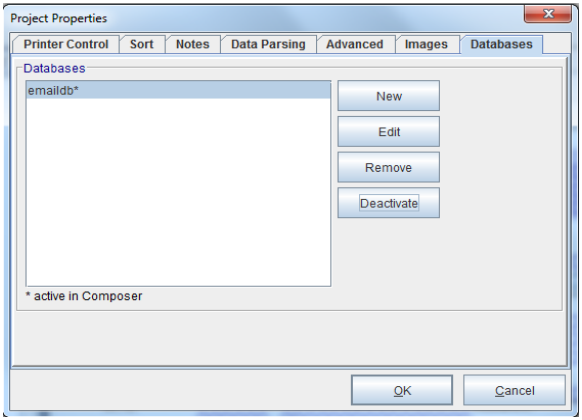
2. The *Configure Database Connection* dialog box displays. Enter the *database name*, *driver class*, and *url*.



***NOTE*:** For further detailed information on supported url and driver classes, see *Appendix B*.

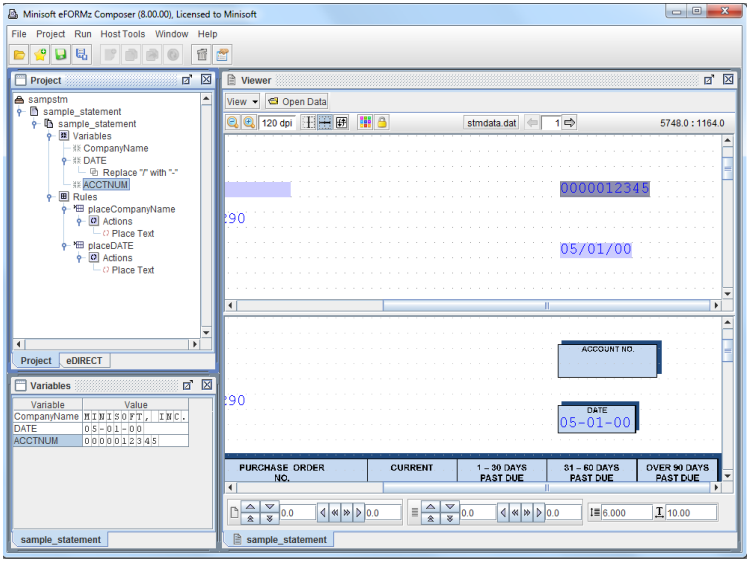
3. Once the database has been configured select *Test* to confirm the connection. Once complete, click *OK*.

4. The database name will display on the *Project Properties* > *Database* tab. Select *Activate* so that the information from the database becomes "real-time" data in the eFORMz Viewer, Form and Data Viewer.



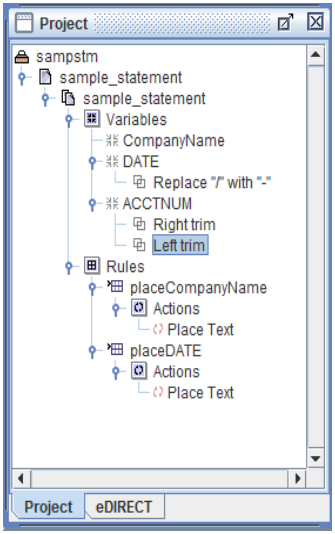
Once complete, click *OK*.

5. Create a variable containing the value you want to find in your database.

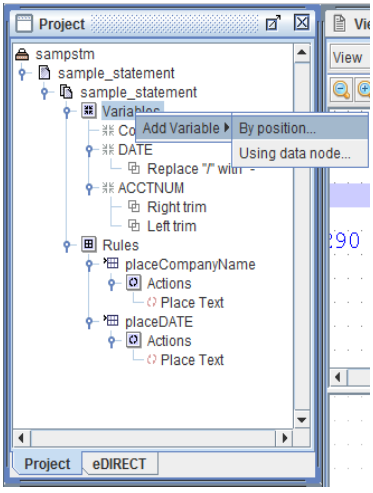


6. Add the functions *Right Trim* and *Left Trim* to the variable. This removes any possible leading and trailing spaces that would cause your lookup to fail.

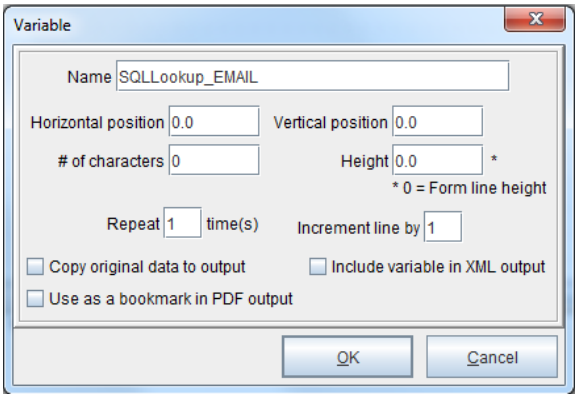
> ***TIP*:** To confirm the value, add a Place Text rule to the display output and or view the results for the variable in the Variables Viewer window.



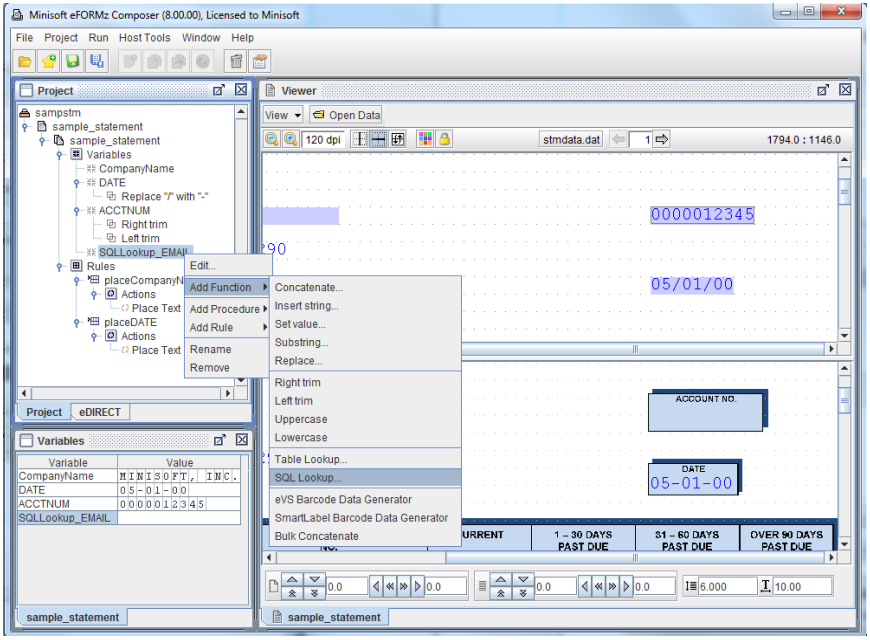
7. Create a second variable to be populated by the first item in your SELECT statement. If more than one column of data will be returned create those variables now. From the variables placeholder right click and select *Variables* > *By Position*.



8. Give your new variable a name and then select *OK*.



9. Select your newly created variable, *right-click,* and select *Function* > *SQL Lookup*.

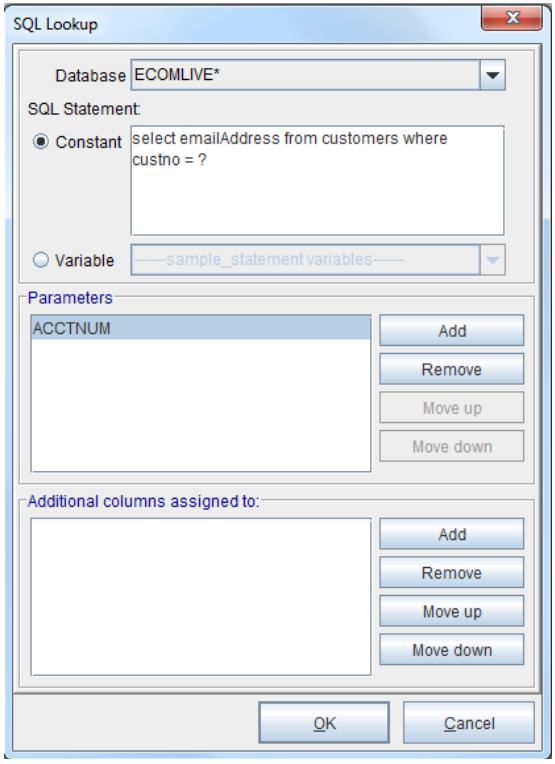


10. The SQL Lookup dialog box appears. In the database dropdown box, select the database you want to access.

11. Enter the SQL Statement you want executed. Use "?" as replacement characters for parameters you want to pass to the statement.

12. Add parameters in the order you want the "?" replaced in your statement.

13. If you are returning more than one column of data, add the additional columns, selecting the variable you want the returned value stored in the '*Additional columns assigned to*' field.



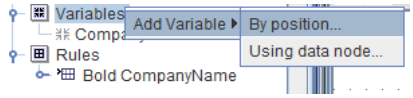
***NOTE*:** For complex queries write a stored procedure and execute it. The stored procedure must return a result set, not just a value.

14. Once complete select *OK*.

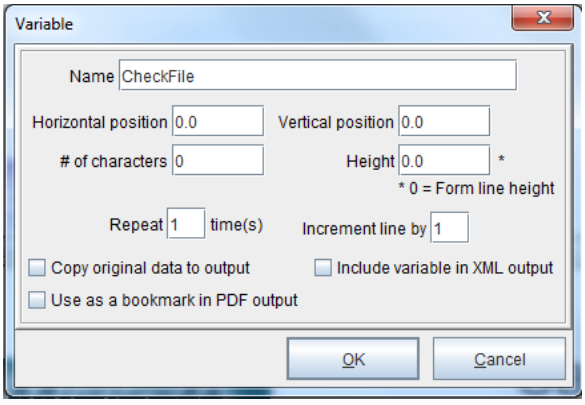
Does File Exist

Add this function to a variable to determine whether a given file exists or does not exist.

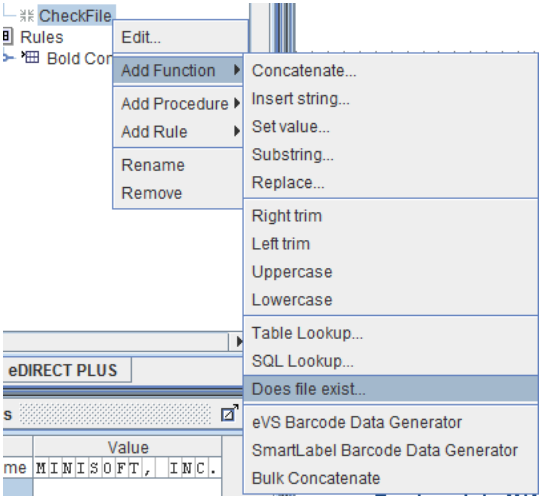
1. To verify if a specific file exists, create a variable *By position*.



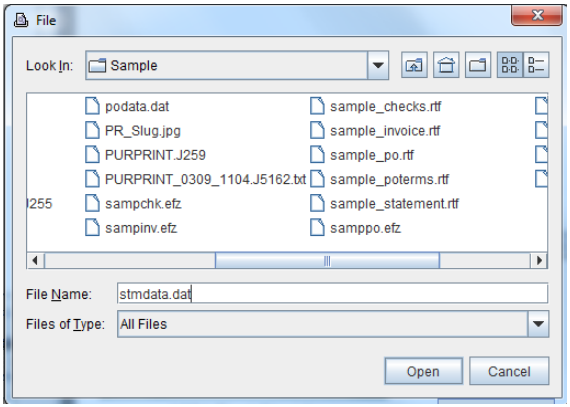
2. Assign the variable a name and select OK.



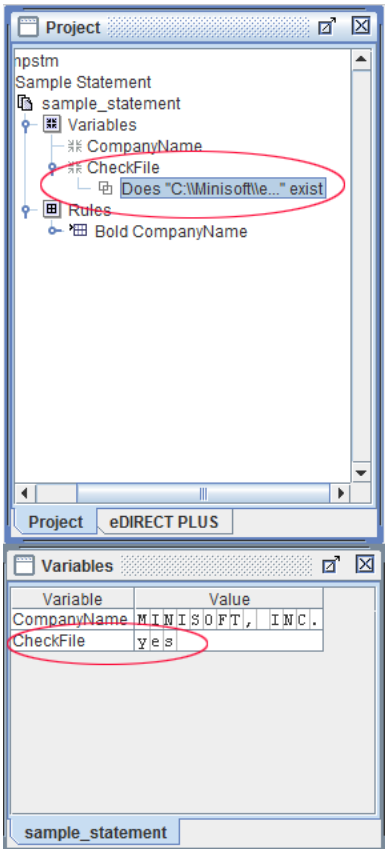
3. *Right click* the variable and select *Add Function > Does file exist...*



4. Type in the name of the file.



5. The answer will display in the Variable Window.



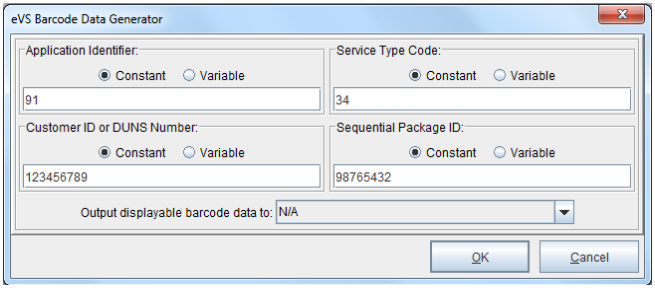
eVS Barcode Data Generator

The Electronic Verification System (eVS), also know as the USPS PRS barcode, allows high-volume package mailers and package consolidators to document and pay postage, including special service fees, using electronic manifest files. The files are transmitted over the Internet to a Postal Service™ database. eVS is designed to make it easy for high-volume package mailers to take advantage of destination entry rates.

eFORMz now provides, as a function to a variable, the ability to generate this barcode using either hard-coded 'constant' values and/or referencing data within the print file using variable assignments.

In the example below, the following values are assigned accordingly:

- Application Identifier
- Service Type Code
- Customer ID or DUNS number
- Sequential Package ID



Application Identifier: The Application Identifier (AI) is a 2-digit code used within UCC/EAN Code 128 that identifies the barcode as a postal barcode. The AI values for Confirmation Services are 91 and 420, and appear as part of the human-readable printed data. If concatenation is used to include the postal routing code (destination ZIP Code), then both the AI of 91 and 420 must appear as part of the human-readable print for the routing barcode component. Neither Application Identifier 91 nor 420 may appear in parentheses

Service Type Code: Service Type Codes (STCs) are two-digit designators included in the Confirmation Services barcode to identify the class of mail and/or type of Extra Services included on that specific mail item. See Table 1 in Appendix G for the Service Type Codes.

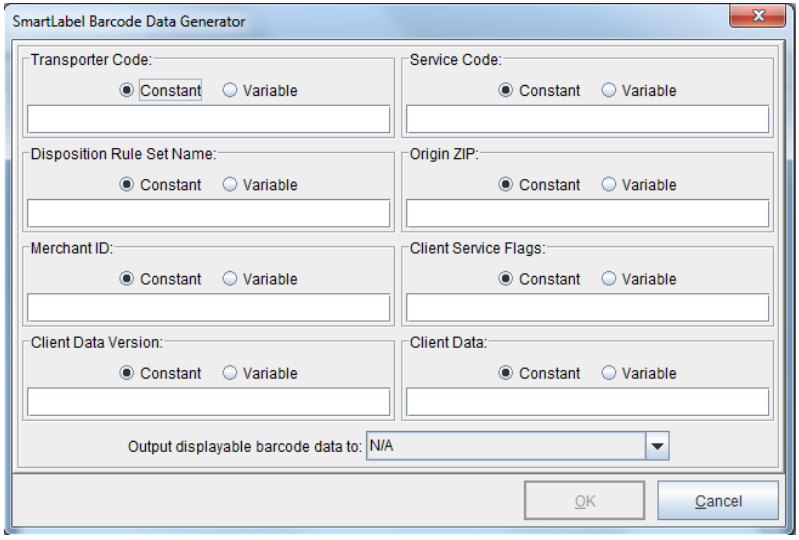
Customer ID/Dun & Bradstreet Number (DUNS): A customer ID number provided by the Postal Service or a DUNS number must be used in the barcode to identify the mailer or the mailer's client. A DUNS number uniquely identifies businesses at specific geographical locations. Mailers or their clients who need to obtain their DUNS may request it by contacting Dun & Bradstreet at (800) 333-0505 or via the Internet at http://www.dnb.com . Mailers with special ID requirements can contact the eVS program office via eVS@usps.gov.

Sequential Package ID: Customers assign an 8-digit Sequential Package Identifier. This string of numbers may be a variable length field of 2 to 8 digits using the UCC/EAN Code 128 symbology.

Check Digit – MOD 10: The MOD 10 check digit validates the barcode authenticity. This value is automatically calculated using the barcode generator and is the last (single digit) value of the barcode.

SmartLabel Design and Barcode

SmartLabel is an intelligent pre-paid, pre-addressed return-shipping label integrated onto the order summary and shipped with the consumer's merchandise. SmartLabel's dynamic bar code links the package to the customer's original order and provides returns information links vital to both the customer and the retailer.



Transporter Code: This two-digit code indicates the front-end carrier and the service used to induct the package into the Newgistics return network. It occupies positions 2 and 3 within the SmartLabel barcode.

Code	*Description*
21	USPS First Class
25	USPS Return Delivery Unit

Service Code: This two-digit code the Newgistics service requested and the request mechanism. It occupies positions 4 and 5 of the SmartLabel barcode.

Code	*Description*
00	SmartLabel (in box generated by client)
01	Direct label (pre-printed)
10	CSR SmartLabel (generated by Shipment Manager)
20	Consumer SmartLabel (generated by Shipment Manager)

Origin ZIP: This is the 5-digit postal ZIP of the point of origin for the return.

Disposition Rule Set Name: This is the last two characters of the merchant specific Disposition Rule Set name used to determine the sort (disposition) of the package. The set name occupies positions 11-12.

Newgistics Merchant ID: Four character identifier assigned by Newgistics. This identifier may be alphanumeric and occupies position 13-16.

Client Service Flags: These flags indicate order (returns vs exchange) or charge status. They occupy either position 17.

Code	*Description*
0	Standard
1	Complimentary
2	Exchange

Client Data Version: This is a version indicator for client-specified data. During your initial SmartLabel implementation, this value is set to 1. In subsequent revisions to the SmartLabel barcode, the field is incremented. This occupies position 18.

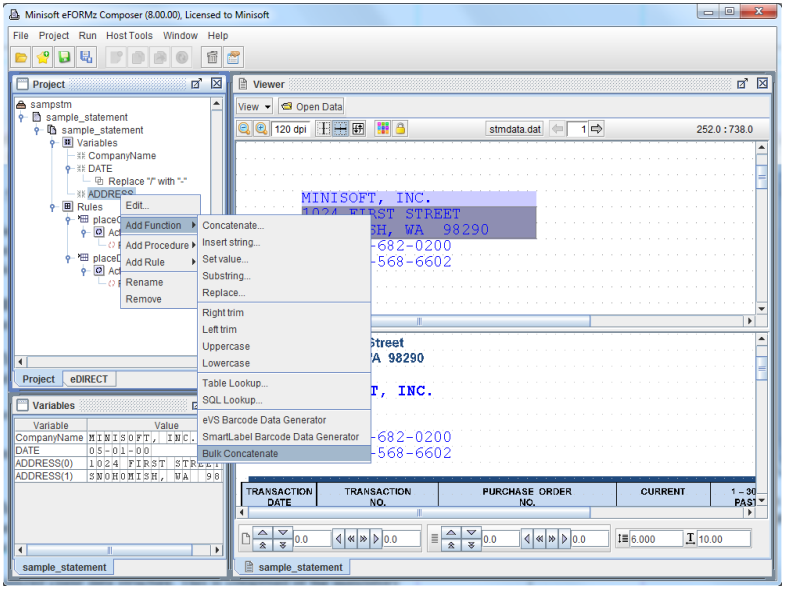
Client Data: This is serialized client data structure. This is composed of the mandatory Return Identifier fields and any other fields identified by your version. The length of this field will be fixed for any particular client version of the barcode. It occupies either position 19-47.

Bulk Concatenate

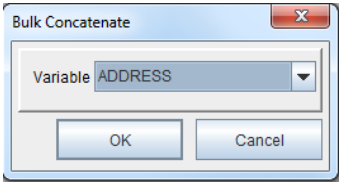
Bulk concatenation refers to the ability to search large sections of text or to display specified text in a string format.

To implement a Bulk Concatenate function:

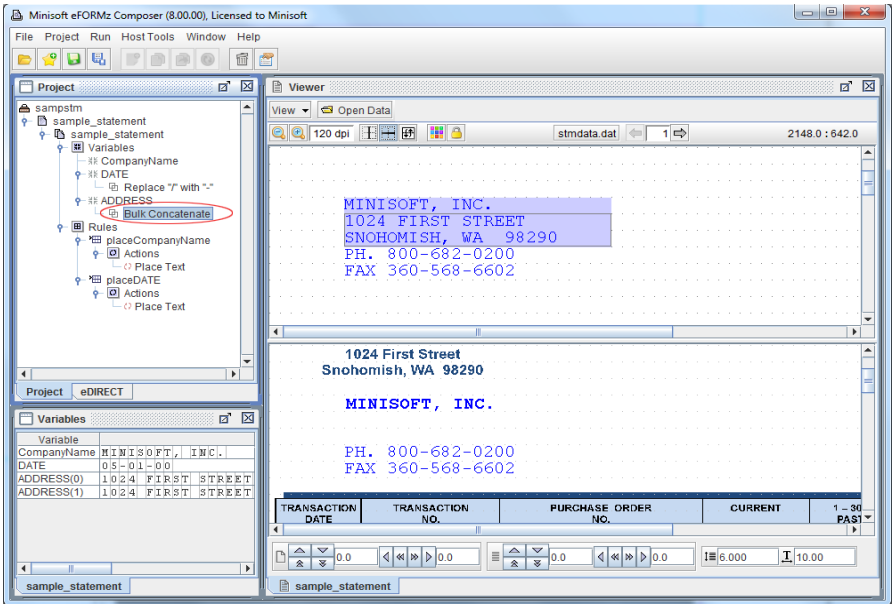
1. From the Current Project window choose a variable, *right click*, and select *Add Function > Bulk Concatenate*.



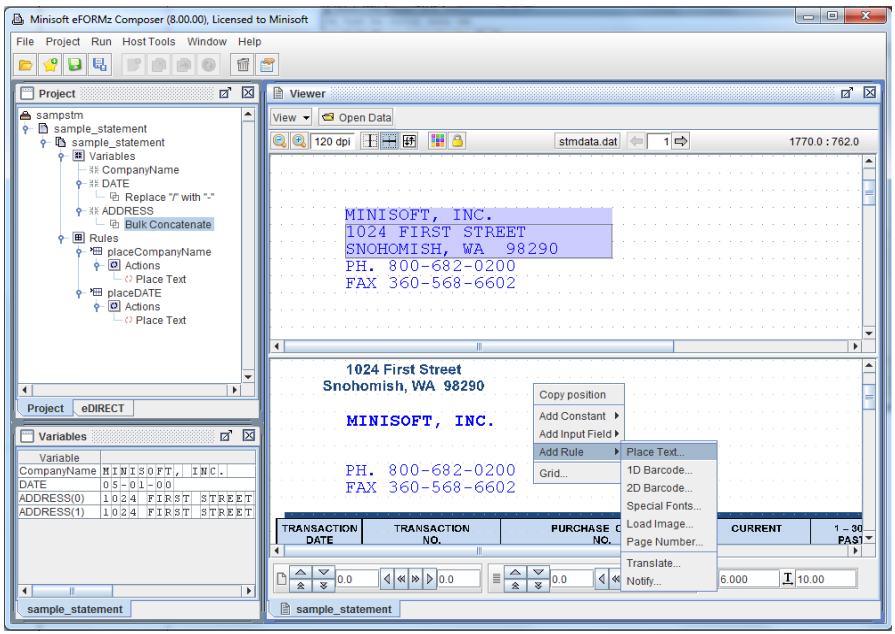
2. The *Bulk Concatenate* dialog box displays. Select a variable, or choose from the range of System Variables.



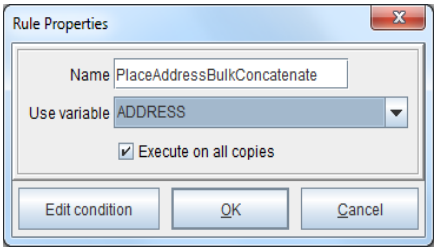
3. The chosen variable will now display the *Bulk Concatenate* function.



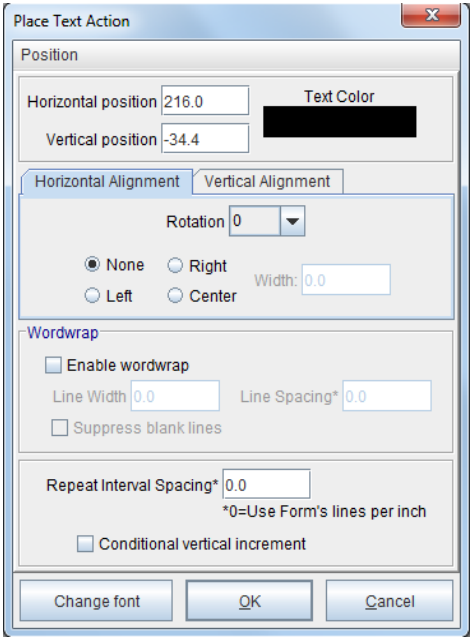
4. From the eFORMz Viewer, Form and Data Viewer, *right click* and select *Add Rule* > *Place Text*.



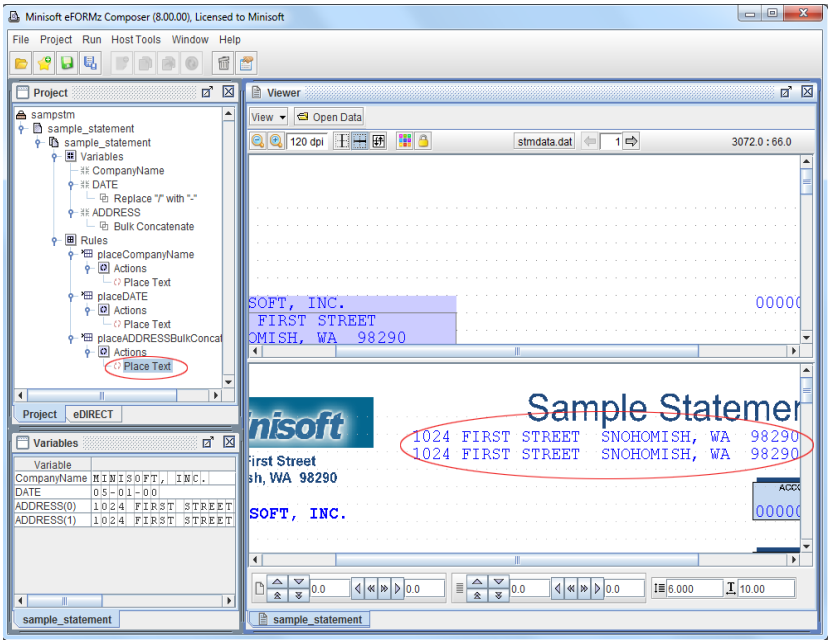
5. From the Rule Properties dialog box enter a new rule name and click *OK*.



6. From the *Place Text Action* dialog box, keep the existing Horizontal and Vertical position and click *OK*.



7. The variable is displayed in a string format in the Form and Data Viewer.



Procedures

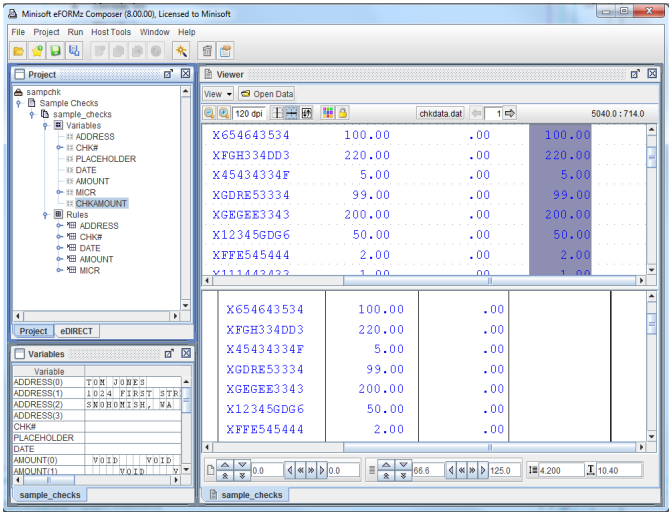
Calculation

Implement numeric math calculations using a calculation procedure in eFORMz. Actions include:

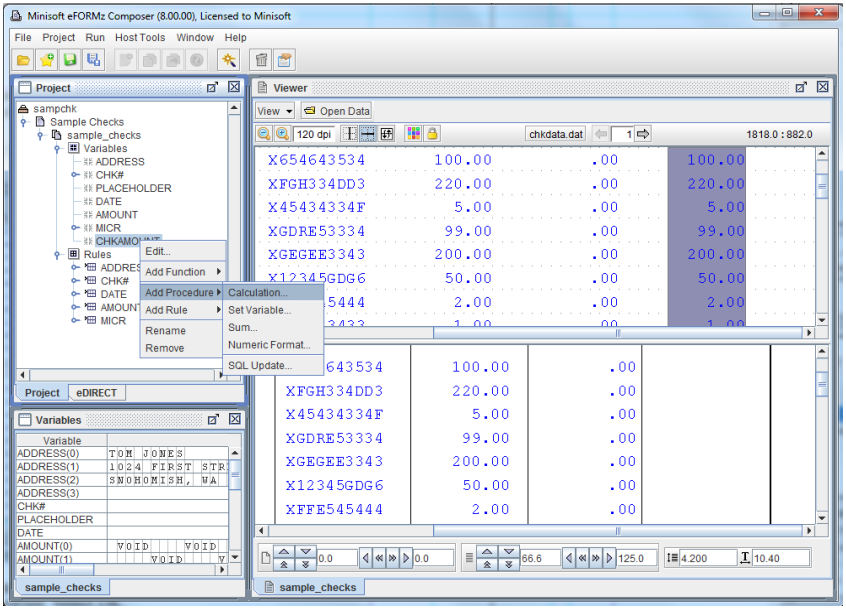
- Add
- Subtract
- Subtract From
- Multiply
- Divide by
- Divide into

The following example will demonstrate the use of the *Add* and *Sum* actions with math calculations. To create a math calculation:

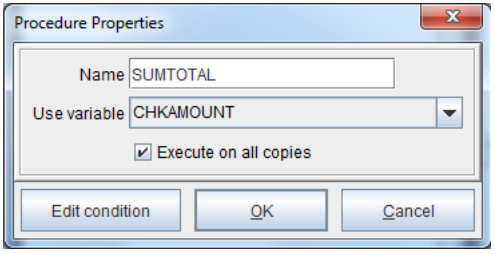
1. Create a variable that encompasses the value(s) you would like to calculate:



2. From the Current Project window *right click* the Form you would like to add the Procedure to, select *Add Procedure* > *Calculation*.

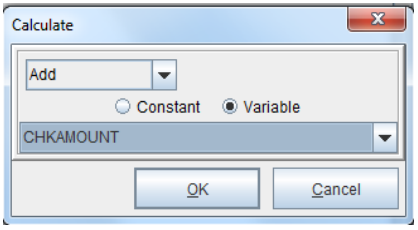


3. The Procedure Properties dialog box will display. Enter a procedure name and then select the variable you created earlier. Select *OK*.

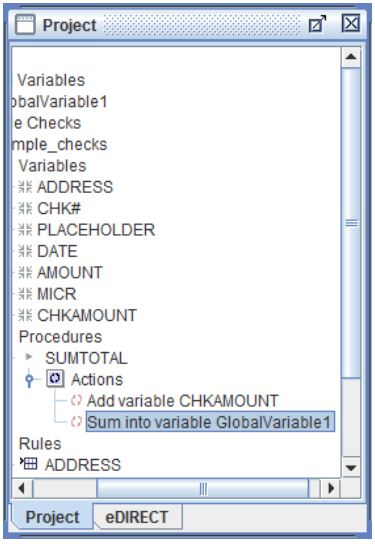


4. The Calculation dialog box displays. Select an action from the drop down box. Options available are *add*, *subtract*, *subtract from*, *multiply*, *divide by*, *divide into*.

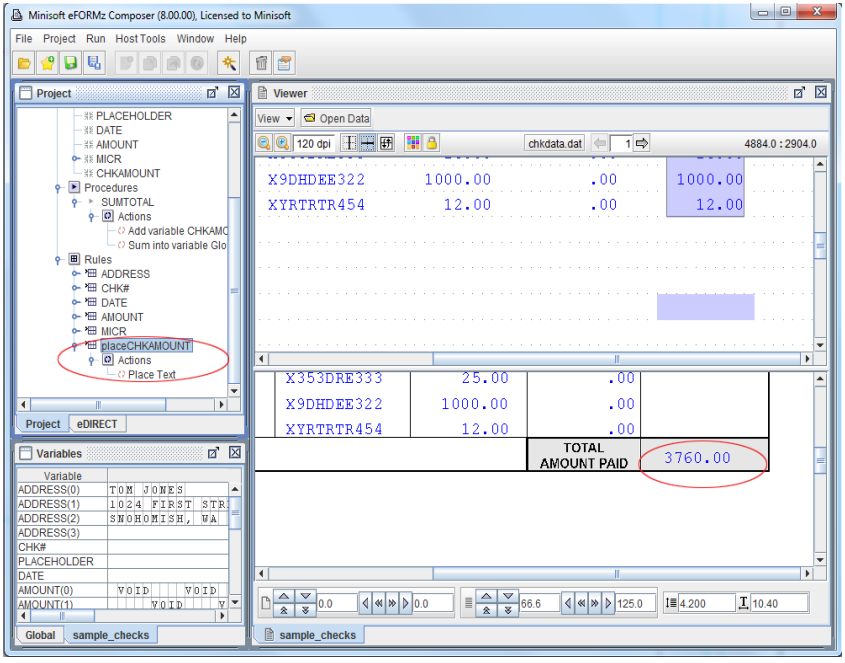
5. Depending on your scenario select either the *Constant* or *Variable* option.



6. Add any other actions to your procedure to create your ending calculation.



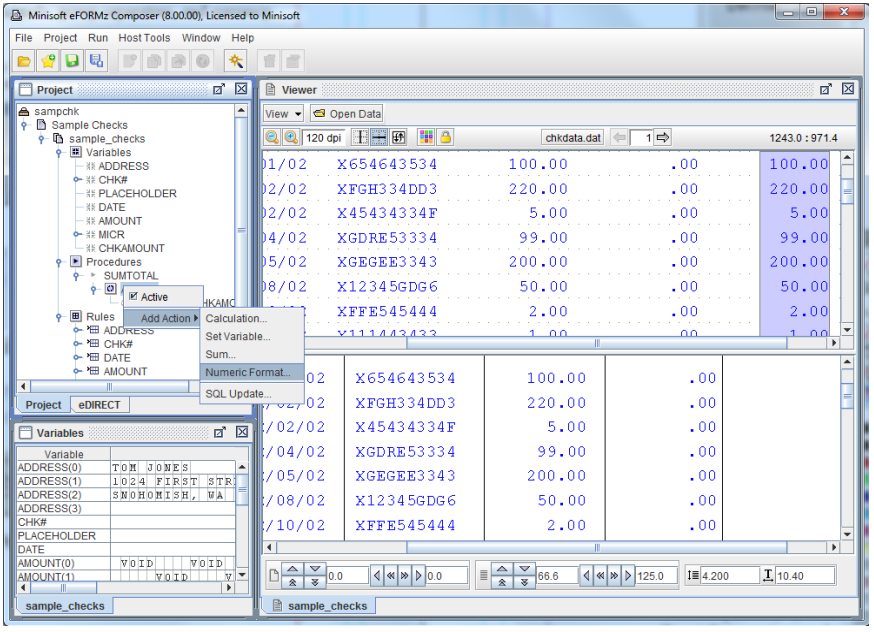
7. Proceed with implementing your procedure based on the needs of your project.



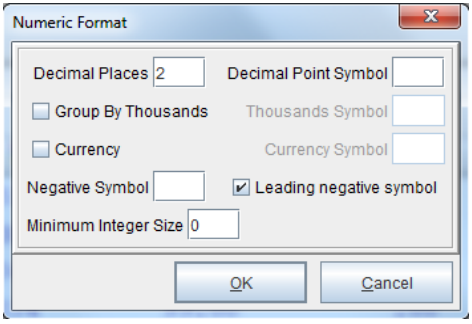
Numeric Format

Format a procedure to a numeric value using decimals, group separators, and currency symbols. To implement a numeric format:

1. From the Current Project window select the Procedure you would like to add the numeric format option to. Right click *Action* and select *Numeric Format*.



2. The Numeric Format dialog box displays. Specify your options and then select *OK*.



Options include:

Decimal Places
Determines the location of the decimal separator in the result string.

Decimal Point Symbol
Default is a (.) period. Customize your decimal point using this option.

Group By Thousands
Serves as both a group separator and a number scaling specifier. As a group separator, it inserts a localized group separator character between each group. As a number scaling specifier, it divides a number by 1000 for each comma specified.

Thousands Symbol
Default separator is a (,) comma. Customize your separator using this option.

Currency and *Currency Symbol*
Default currency sign ($). Sets the numeric value to currency. Set a custom sign in the Currency Symbol field.

Negative Symbol and *Leading negative symbol*
Default symbol (-). Sets the numeric value to negative by adding a negative symbol. To set the negative symbol at start of value select *Leading negative symbol*.

Minimum Integer Size
Placement holder for integer value.

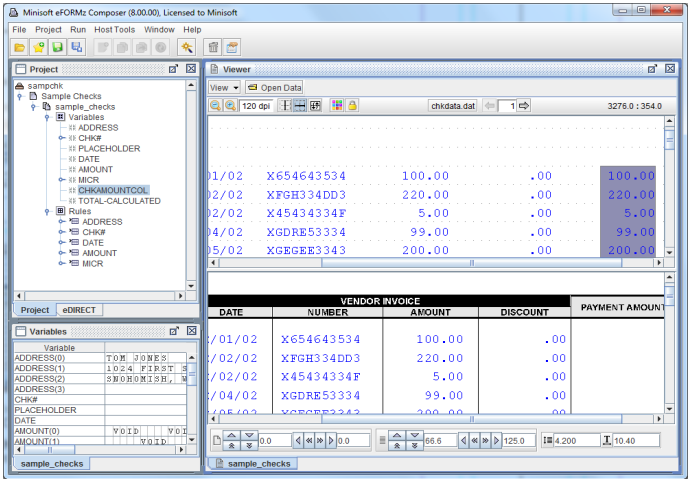
Set Variable

Set a variable using a procedure. For example, a procedure that is running a calculation, when completed, will place the total into another variable. Sum provides an ample illustration.

Sum

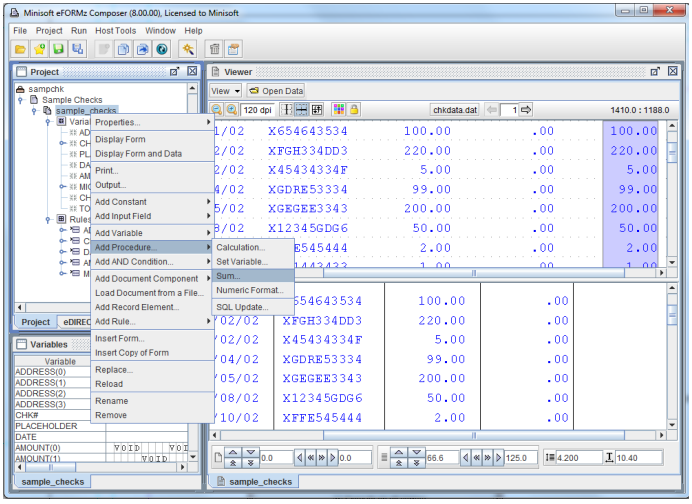
Sum a column of numbers using the following method:

1. Create a variable referencing the column you would like to total:

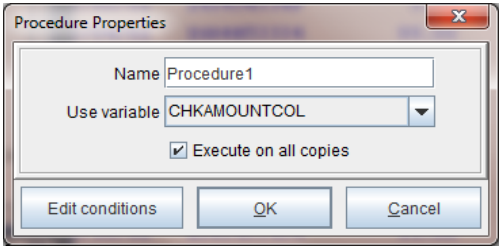


2. A second variable will need to be created to place the total amount in, for example, TOTAL-CALCULATED.

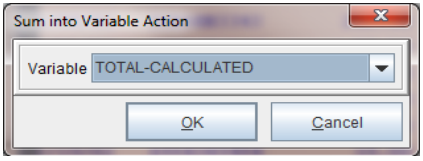
3. Create a Procedure that will then total the amounts together. Right click your form and select *Add Procedure* > *Sum*.



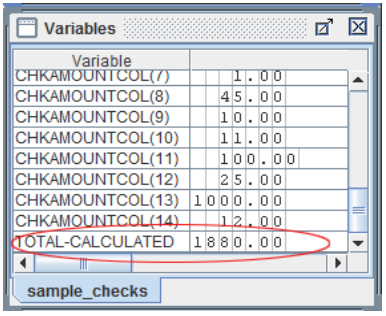
4. From the Procedure Properties dialog box, select the previously created variable that encompasses the amounts you are wanting to sum and then select *OK*:



5. You can then set which variable you would like the Sum total to be placed in, for example, TOTAL-CALCULATED:



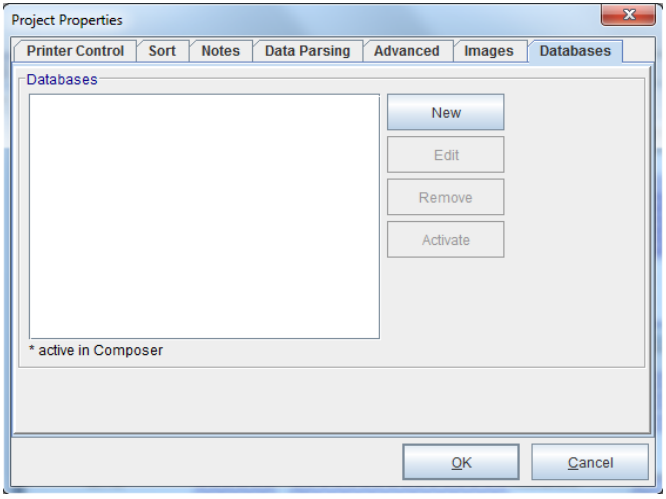
6. From your Variables viewer you can view the totals being calculated automatically:



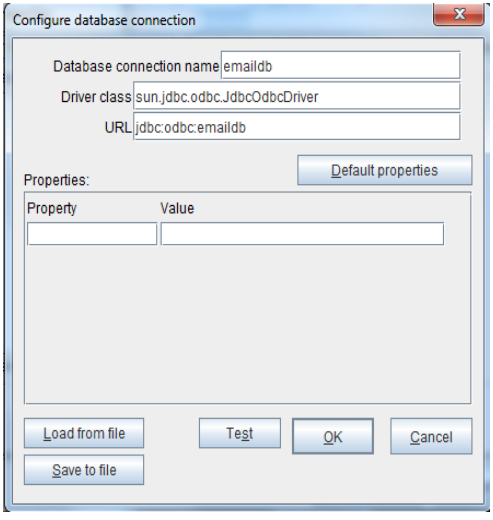
SQL Update

To implement a database SQL update within the eFORMz Composer:

1. From the *Project Properties* > *Database* tab add a new database reference by selecting *New*.

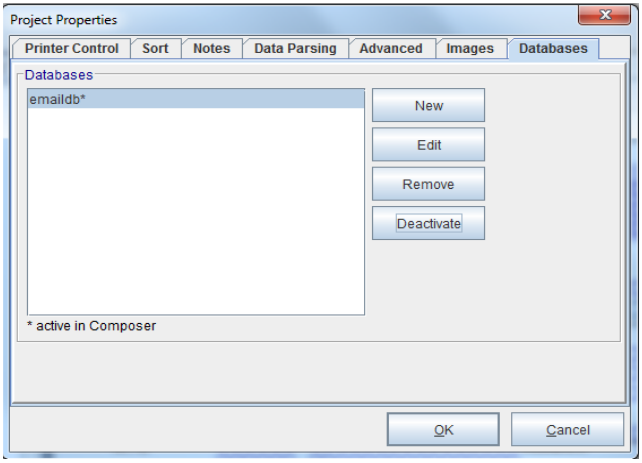


2. The *Configure Database Connection* dialog box will display. Enter the *database name*, *driver class*, and *url*.



***NOTE*:** For further detailed information on supported url and driver classes, see *Appendix B*.

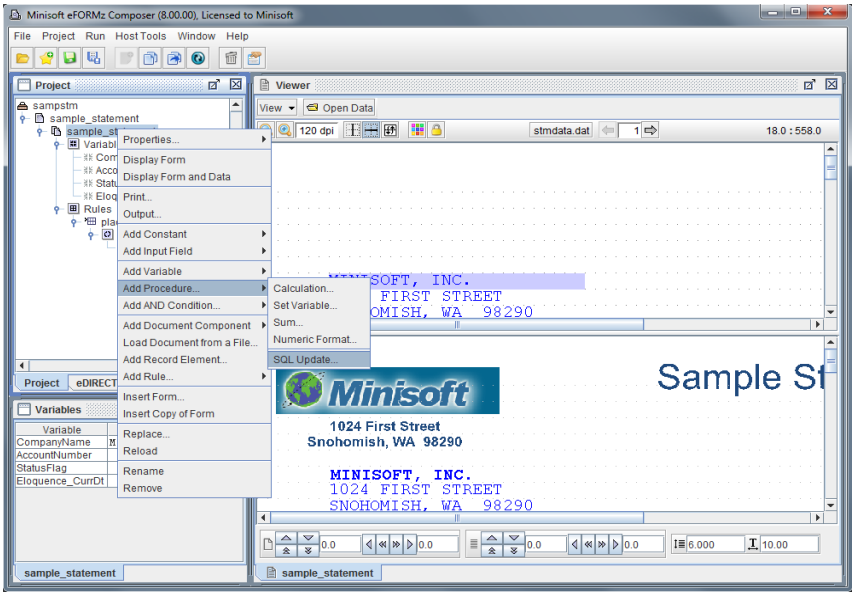
3. Once the database has been configured select *Test* to confirm the connection and then click *OK*.
4. The database name will display on the *Project Properties* > *Database* tab. Select *Activate* so that the information from the database becomes "real-time" data in the eFORMz Viewer, Form and Data Viewer.



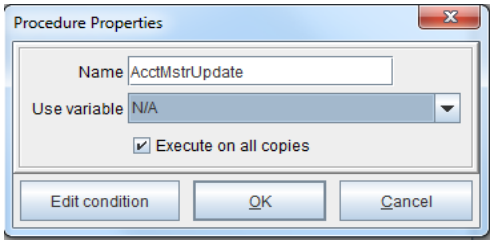
Once complete, click *OK*.

To create the *SQL Update* statement create a new procedure. Note that the new procedure does not need to be attached to a variable:

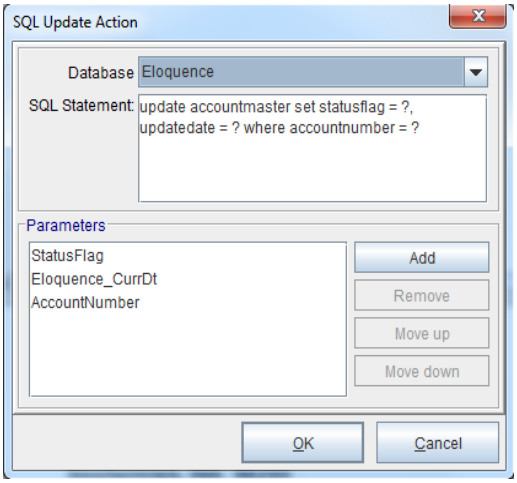
1. From the Current Project window *right click* your form and select *Add Procedure* > *SQL Update...*



2. From the *Procedure Properties* dialog box enter a procedure name and select a variable or N/A for a variable option. Click *OK*.



3. The SQL Update Action dialog box appears:



4. From within the SQL Update dialog box, enter the appropriate SQL statement to either UPDATE, DELETE or INSERT values within your database. In the example above, each question mark (?) is represent by the sequential list of parameters associated with eFORMz variables.

SQL Parameter		*eFORMz Variable*
statusflag	=	StatusFlg
updatedate	=	Eloquence_CurrDT
accountnumber	=	AccountNumber

New parameter-variable assignments can be made by clicking on the *Add* or *Delete* button. To delete a parameter-variable simply select the variable you would like to remove from the list and click *Remove*. There is also the option to rearrange the order by using the *Move up* or *Move down* button.

***NOTE*:** Special caution is advised when specifying a select statement to update a database. Once the database is defined and information is entered in the statement field, real time updates will occur if a data file is processed. This will reflect in immediate changes to your database. Only persons familiar with database design should be permitted to enter this information into the statement field. Minisoft will not be held responsible for information entered resulting in database changes.

5. Once complete, click *OK*.

SQL Load

The SQL Load feature will load variables with values from an SQL query. The variables will occur the same number of times as there are rows returned from the query.

Rule Actions

Once a variable has been created a *Rule Action* can be implemented to transform the look of your output and enhance its function or appearance.

Available rule actions include:

- Place Text
- 1D Barcode
- 2D Barcode
- Special Fonts
- Load Image
- Bar Chart
- Gauge Chart
- Page Number
- Translate
- Notify

> ***NOTE*:** For information on Bar Charts and Gauge Charts, refer to the Graphical Charting Mini-Manual.

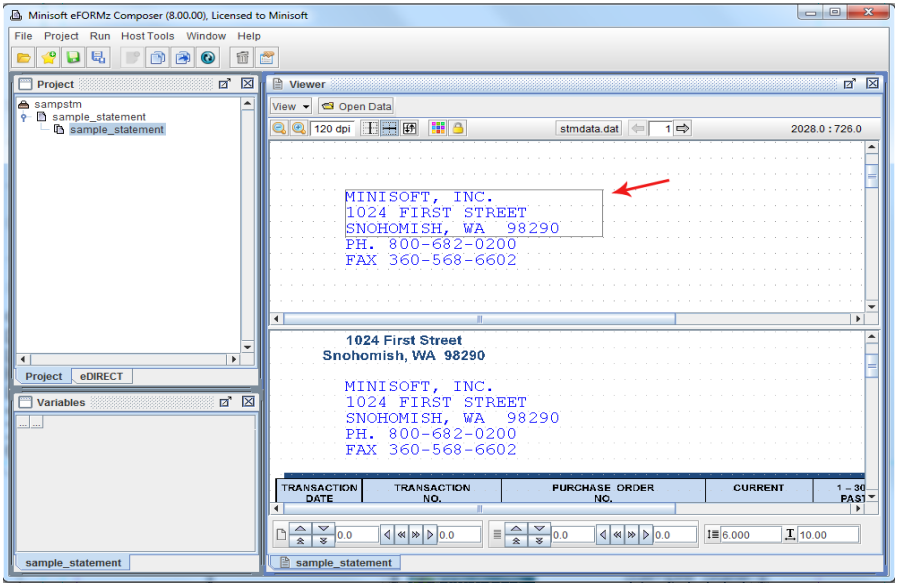
Place Text Action

Place Text allows variables, custom or system, to be placed in a specified location on your output. Place Text actions can be created using multiple methods:

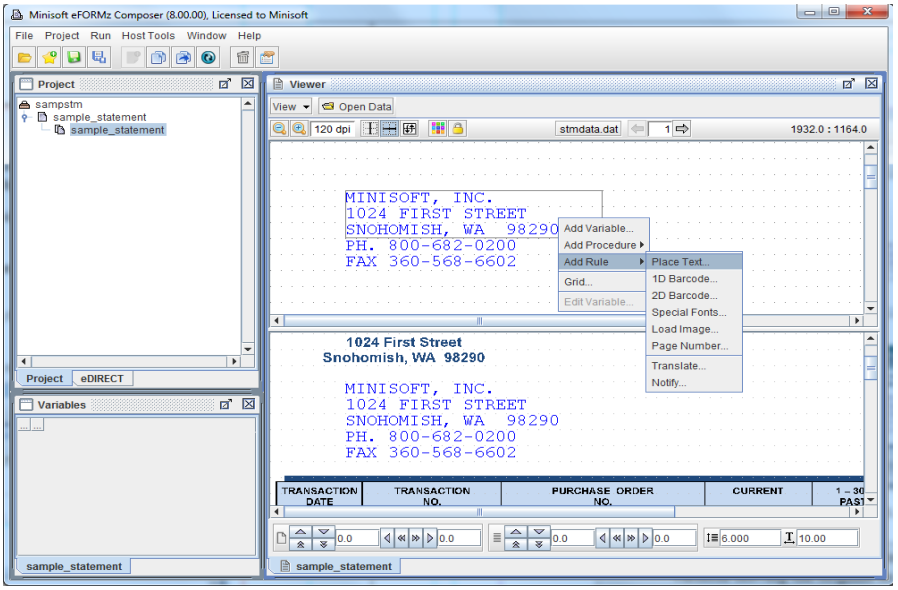
- Right clicking a variable from your current project window
- Selecting data from your Data Viewer
- Scrolling to the location in the Form and Data Viewer where you would like your action to appear
- Direct Reference, which bypasses variables and directly places a particular string of characters.

The following example creates a Place Text action using the *Create Place Text* rule from the Data Viewer.

1. From the eFORMz Data Viewer, select the data you would like to copy or move.

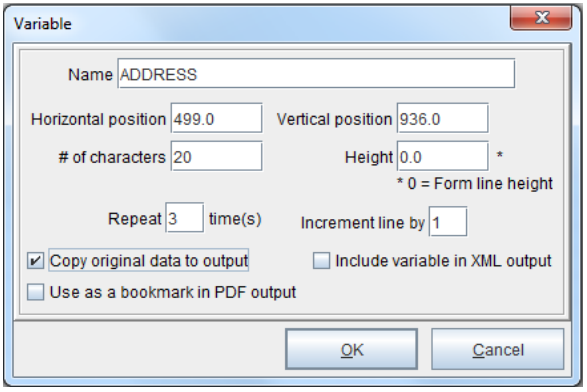


2. *Right click* and select *Add Rule* > *Place Text*.



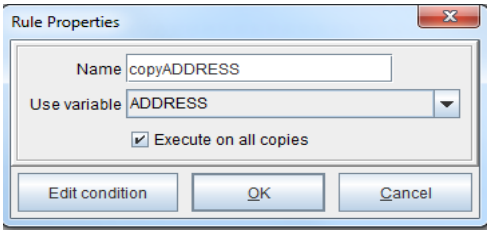
3. The *Variable* dialog box will display, enter a new variable name and select *Copy original data to output*.

> ***TIP*:** Selecting *Copy original data to output* produces a copy of the selected variable leaving the original in place on the output window (eFORMz Viewer). Not selecting this option removes the original placement in the output window and places the selected text in the position supplied in the Place Text dialog box.

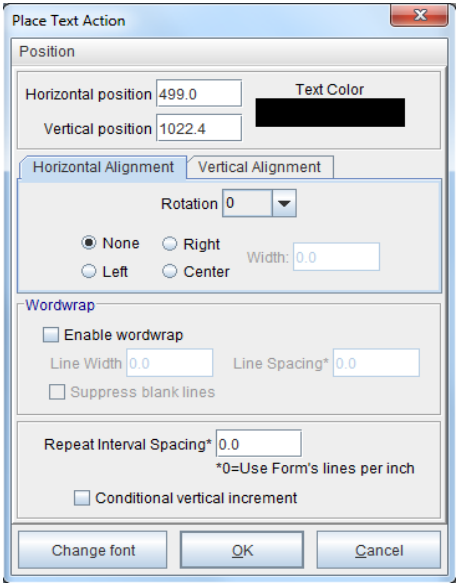


Once complete, click *OK*.

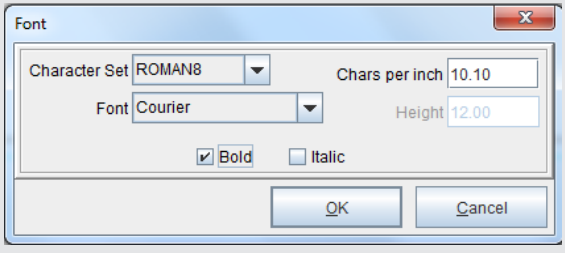
4. From the *Rules Properties* dialog box enter a new rule name and click *OK*.



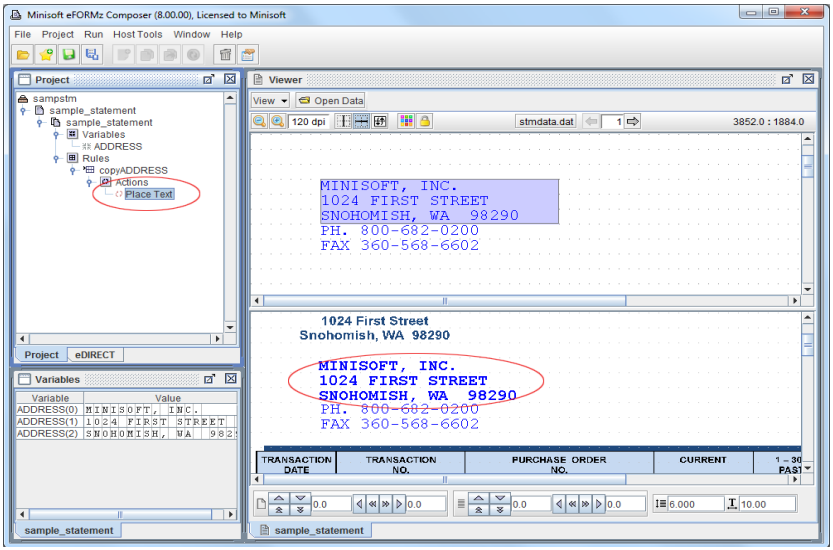
5. The Place Text dialog box will display. If a position was selected earlier, select *Position* > *Paste*. If not, keep the existing horizontal and vertical positions - exact placement can be edited from the eFORMz Viewer later.



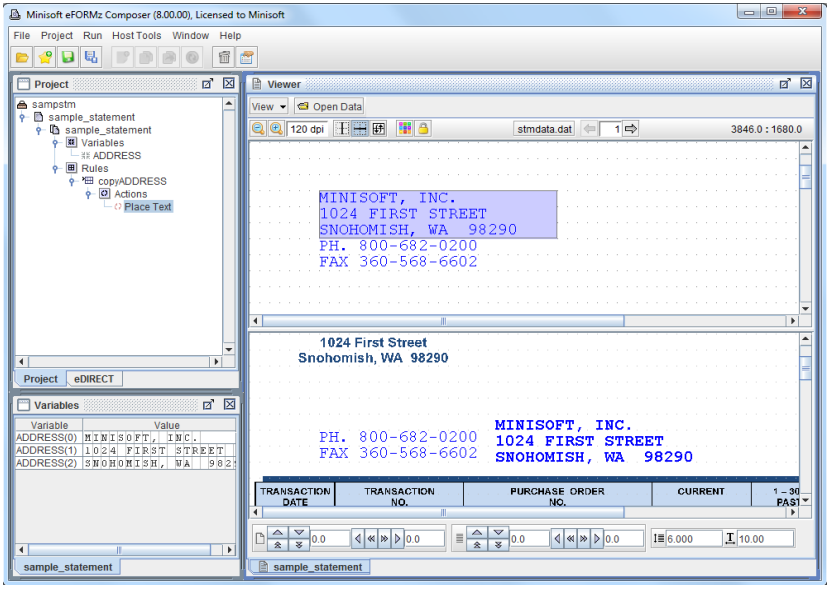
***TIP*:** If you would like to change the font style for the copied selection, select *Change Font*. The Font properties dialog box will display.



6. Once complete, click *OK* from the *Font* and *Place Text* action dialog boxes.
7. The copied data will now appear in the Form and Data Viewer.



8. To place the copied data in the desired position, using your mouse, drag and drop the data into place in the Form and Data Viewer.

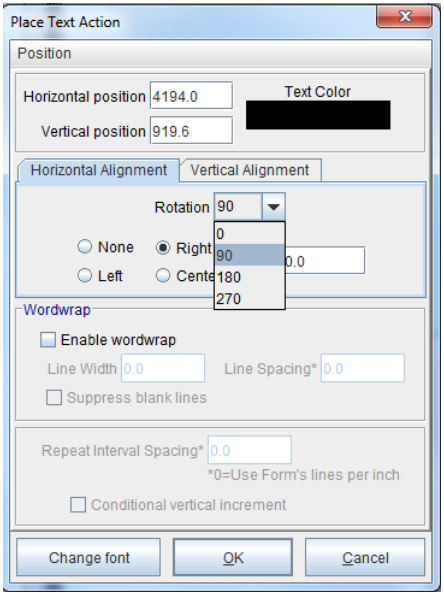


Text Rotation

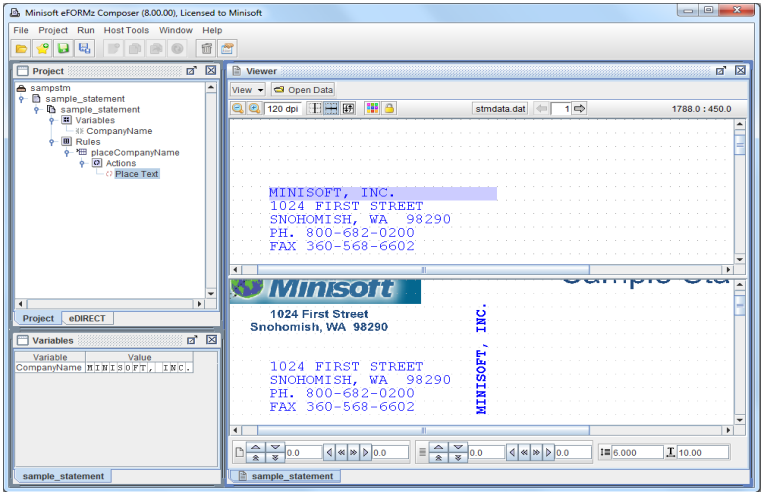
To rotate the characters used for a Place Text action:

1. From the *Place Text Action* dialog box select the rotation angle from the *Alignment* > *Rotation* field. Options available:

   0, 90, 180, or 270 degrees



2. Click *OK* and view your text rotation in the eFORMz Viewer.



Text Word Wrapping

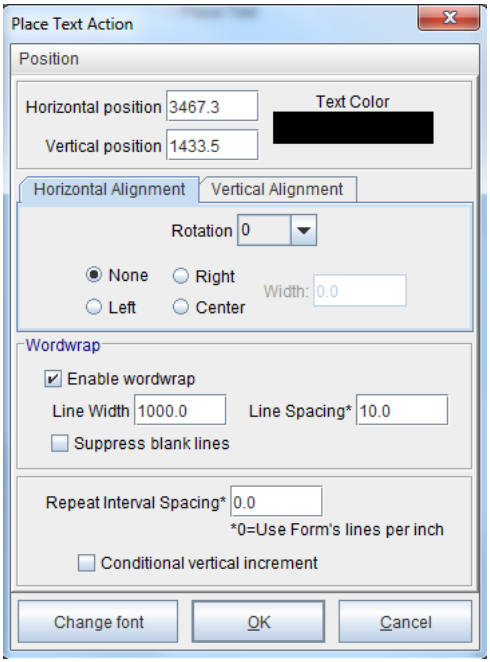
Enable line wrapping on a place text action. Options available:

Line Width - Specifies the wordwrap width in decipoints (720 dec = 1in).

Line Spacing and Repeat Interval Spacing - Specifies the distance between lines. Specify zero (0) if you would like to use the default form's lines per inch.

Conditional vertical increment - When set, the vertical coordinates for actions using repeating variables only gets incremented when the action is actually executed.

Suppress blank lines - When set, it removes space in between wrapped lines. Default is unchecked.



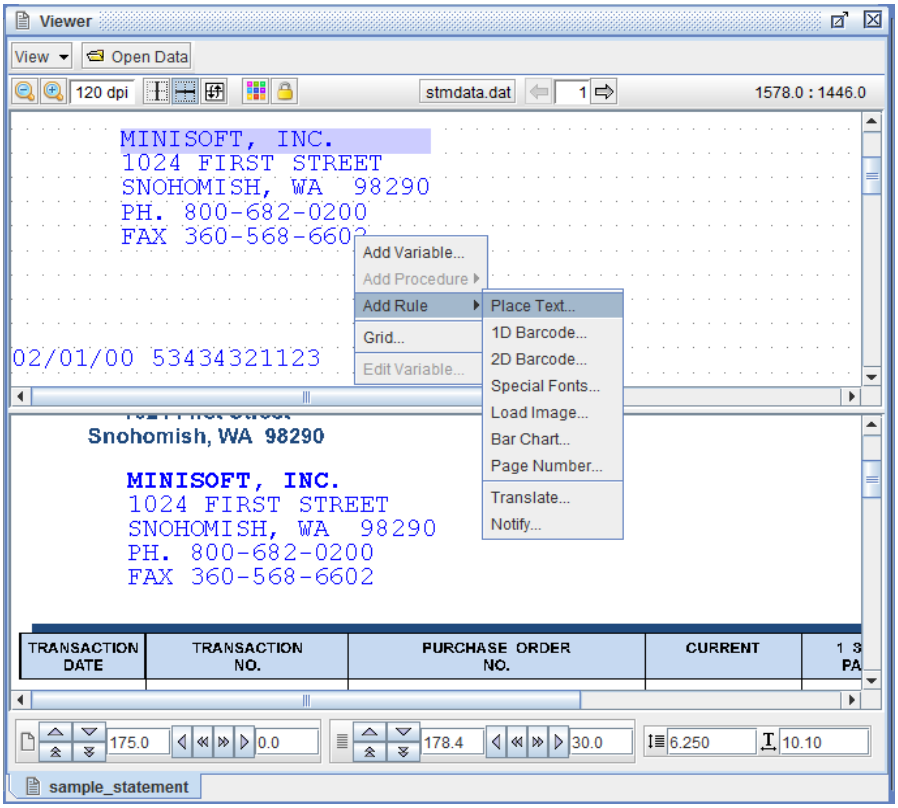
***TIP*:** The *Append newline* feature found in the Concatenate function options will only work in conjunction with the Wordwrap option.

Direct Reference

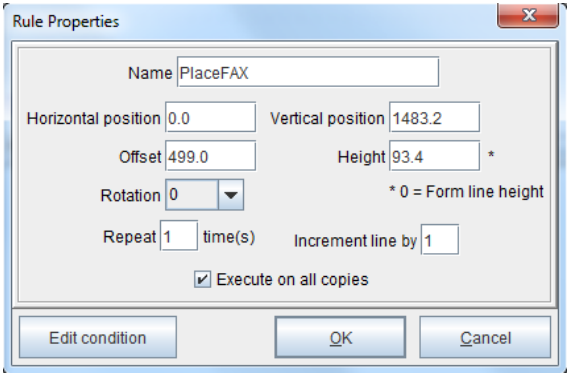
Placing text can be done without the creation of variables. This method is similar to selecting data from the Data Viewer and creating a variable, as a direct reference places a given string of characters in a specified location of the output.

The following is an illustration of a Place Text action using the *Create Place Text* rule from the Data Viewer, without creating a variable.

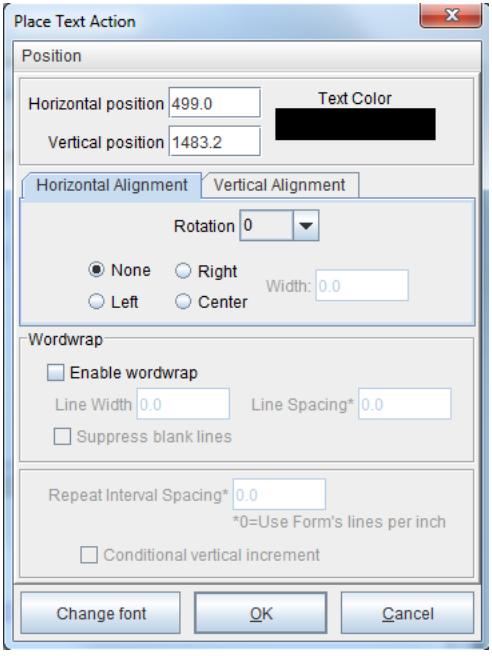
1. From the eFORMz Data Viewer, *right click* the string of characters that are to be placed on the form and select *Add Rule > Place Text.*



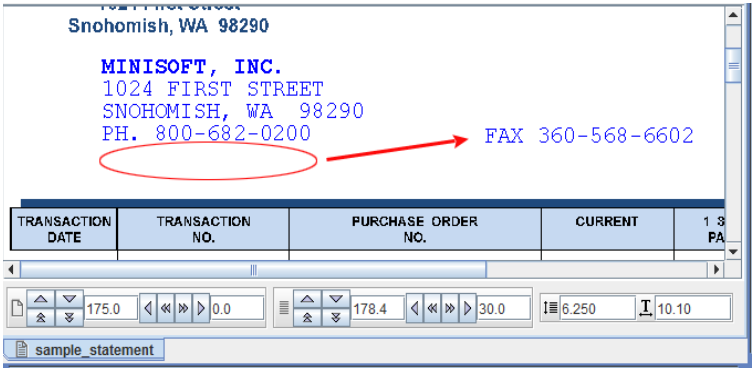
2. The Rule Properties dialog box will display. Enter a value for the *Name* field and click *OK* to proceed.



3. The Place Text Action dialog box will display. Click *OK* to continue.



4. The string of characters will be placed according to its location in the Data Viewer, but like a variable, it can be dragged and dropped.



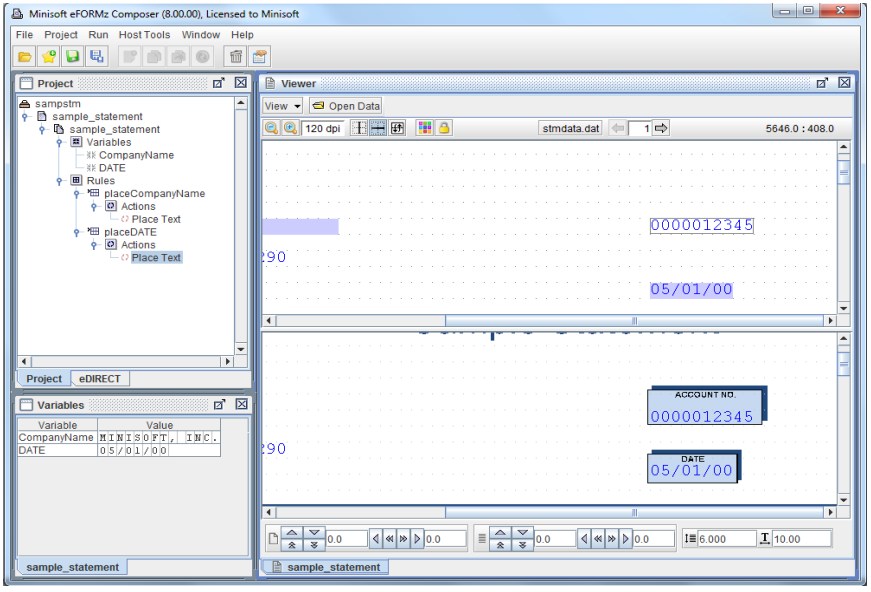
1D Barcodes

1D Barcodes can be created using a custom or system variable. eFORMz supports the following barcode types:

3 of 9	UPCE	CODE128
3 of 9 Extended	EAN8	USER-DEFINED
CODEABAR	EAN13	POSTNET
2 of 5	JAN8	USPS Intelligent Mail
MSI	JAN13	
UPCA	CODE11	

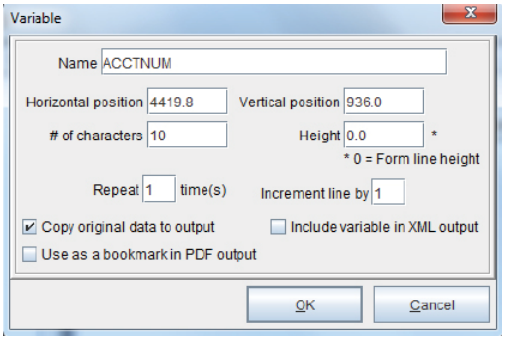
To create a barcode using data from your input file, use the following method:

1. From the Data Viewer highlight the selected range of data you would like to barcode.



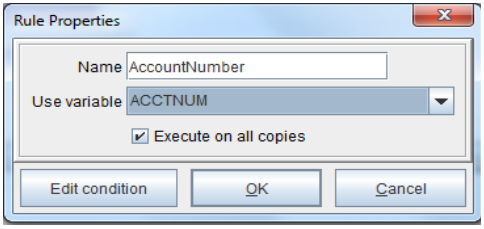
2. *Right click* and select *Add Rule > 1D Barcode*.

3. From the *Variable* dialog box enter a new variable name and click *OK*:



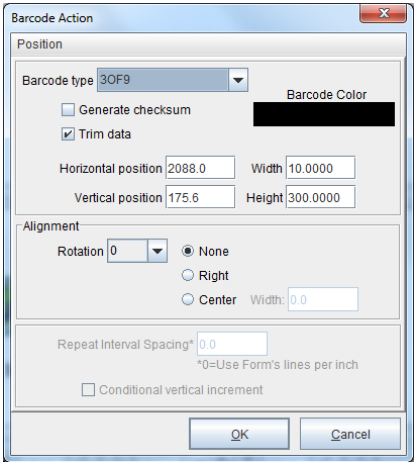
> ***TIP***: If you would like the original data to appear in its original position select *Copy original data to output*.

4. The *Rules* dialog box displays. Enter a new rule name and click *OK*.



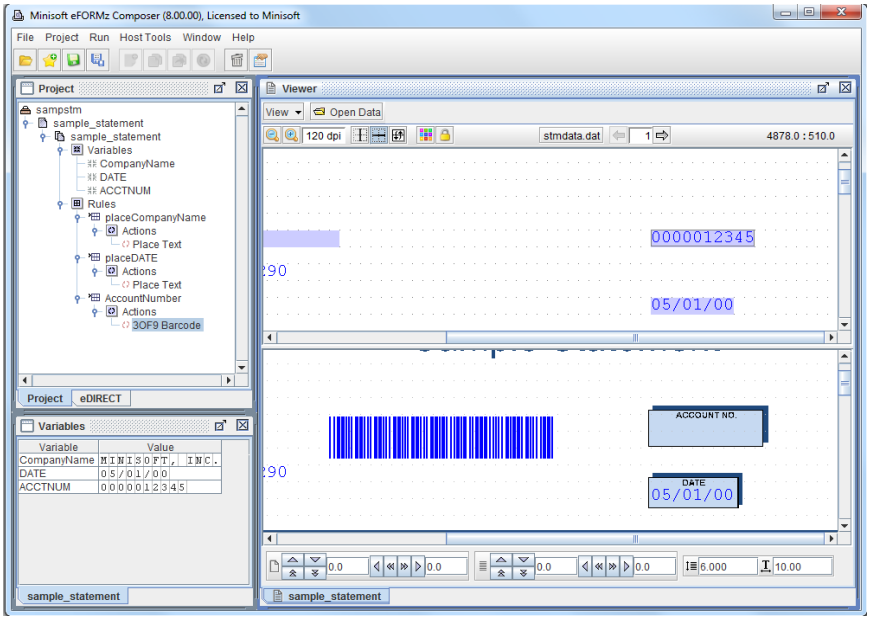
5. From the Barcode Action dialog box, select the barcode type along with the desired width and height. Default values are:

   width = 10 height = 300.0



Once your barcode specifications have been set click *OK*.

6. The newly created barcode will appear in your eFORMz Viewer:

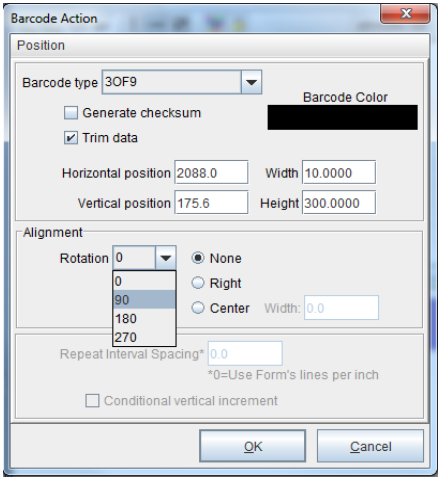


If the barcode is not in the exact position you would like it to be, using your mouse, click-and-drag the barcode into place.

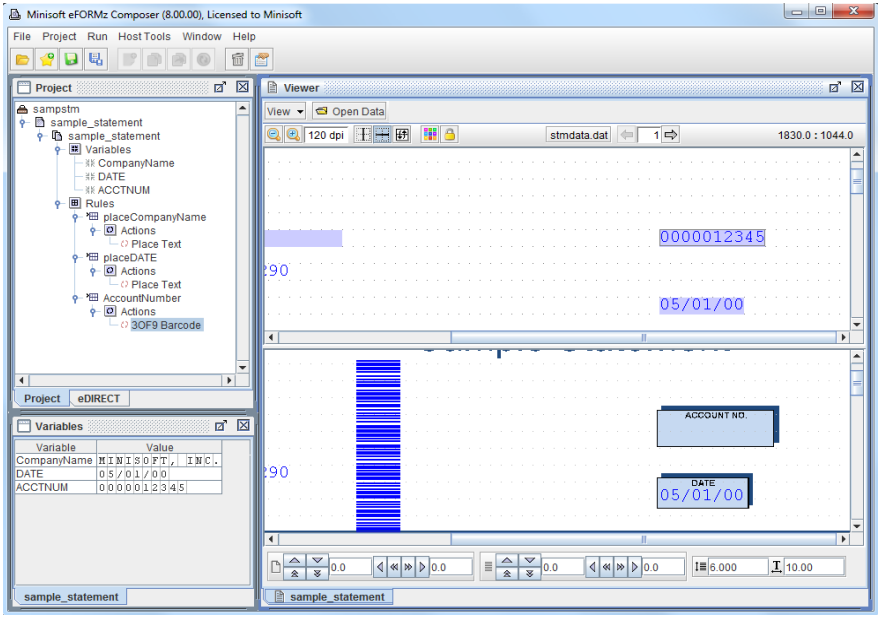
Barcode Rotation

To rotate a barcode:

1. From the *Barcode Action* dialog box, select the rotation angle from the *Alignment* > *Rotation* field. Options available are 0, 90, 180, and 270.



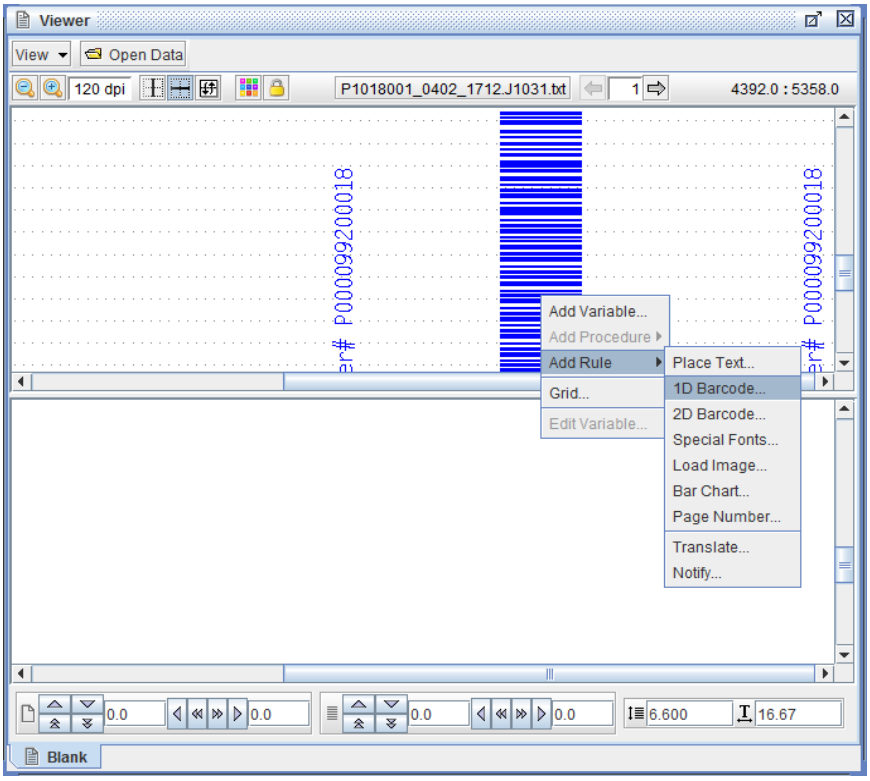
2. Once an angle has been selected, click *OK*. The rotated barcode will now appear in the eFORMz Viewer.



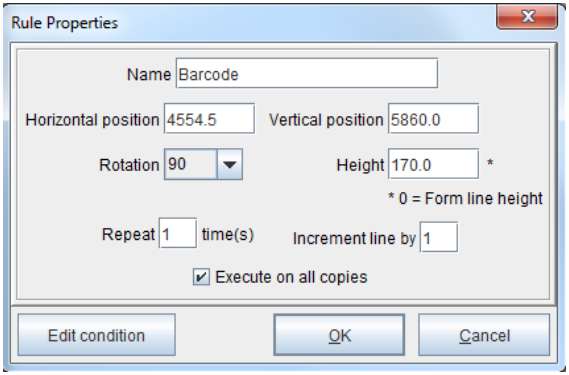
Direct Reference

As with strings of characters, 1D barcodes can be placed directly from the data viewer. All incoming barcodes will appear in the Form Viewer, however, if the barcode needs to be moved or changed in some way, it can be copied by direct reference.

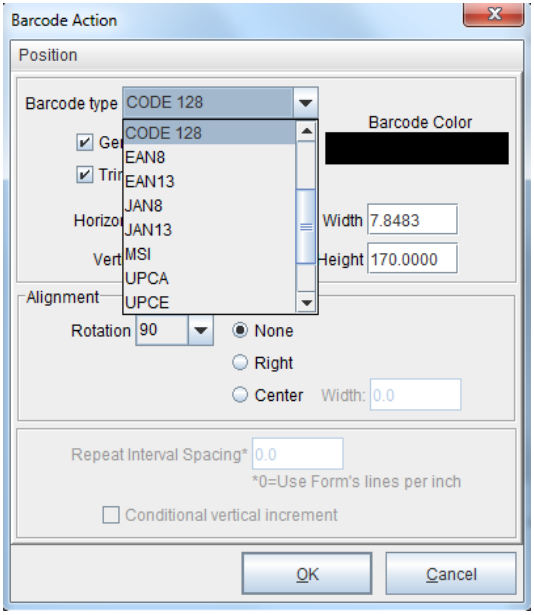
1. From the eFORMz Data Viewer, *right click* the barcode to be placed on the form and select *Add Rule > 1D Barcode.*



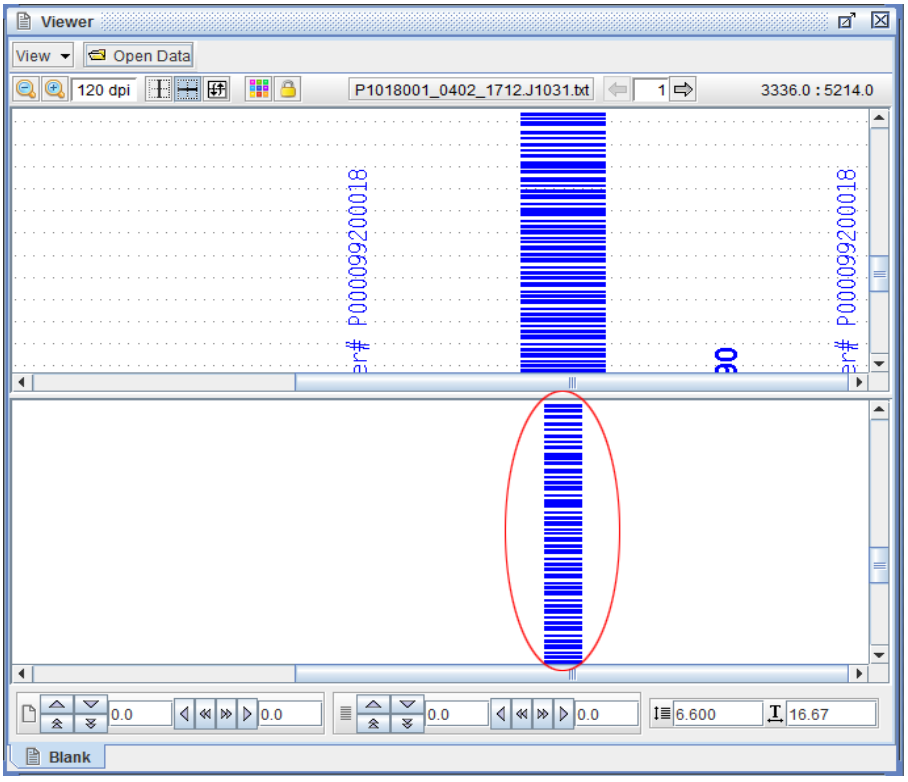
2. The Rule Properties dialog box will display. Enter a value for the *Name* field, and make any adjustments to positioning and size.



3. The Barcode Action dialog box will appear. Select the *Barcode type* and click *OK* to continue.



4. The barcode will be visible in the Form Viewer.



1D Barcode Types

3 of 9

H-P

Code 39 is an alphanumeric bar code that can encode decimal numbers, the upper case alphabet, and the following special symbols:

- . * $ / % +

Code 39 characters are constructed using nine elements, five bars and four spaces. Of these nine elements, two of the bars and one of the spaces are wider than the rest. Wide elements represent binary ones (1), and narrow elements represent binary zeros (0) corresponding to check character values.

3 of 9 Extended

h-p

Full ASCII Conversion

Extended Code 39 encodes the full 128 character ASCII character set by paring Code 39 characters.

Codabar

Codabar is a discrete, numeric code with special characters and four different start/stop characters. Each character is encoded as seven elements, with two or three of the elements wide. While the Codabar check character is undefined, AIM has a recommended check character.

Data:

0-9 - $:/ . + A B C D

2 of 5

012345

Interleaved 2 of 5 code is a numeric only barcode. Each character of this code is represented by five elements, two wide and three narrow. Wide elements are decoded as binary one (1), and narrow elements are decoded as binary zero (0). The wide to narrow element ratio should be between two and three.

Whether or not the elements used to encode a character are bars or spaces depends upon the location of the character within the message. The first character of the message is encoded into the bars immediately following the start character. The second character of the message is encoded into the spaces between the bars of the first character, thus eliminating the intercharacter space. Because of this, Interleaved 2 of 5 is a continuous barcode.

MSI Code

1230

MSI Code is a numeric, continuous code. Each character consists of four bits, using a straight binary encodation. Each bit is encoded in the following way: if the bit is a 1, the pattern to be used is a wide bar followed by a narrow space. If the bit is to be a 0, the pattern is a narrow bar followed by a wide space.

UPC A

UPC A

Version A encodes a twelve-digit number. The first number encoded is the number system character, the next ten digits are the data characters, and the last digit is the check character.

The number system character is printed in human readable form to the left of the UPC symbol. Seven of the ten possible numbers have been assigned.

UPC E

0 0 1 0 2 5 4

Version E allows zeros to be removed from the data to be encoded, resulting in a shorter tag. The encodation of the data characters is different than Version A.

EAN Codes

EAN 13

The EAN Code encode either 13 or 8 characters. The 13 character version is a superset of the UPC A code. The 8-character version is for printing on smaller packages.

EAN 8

The EAN 8 symbol encodes two flag characters, five data characters, and a check character.

JAN Code

The JAN codes are the same as the EAN codes, with the flag characters set to “49”.

Code 11

01234596

Code 11 is a numeric, high-density code with one special character -. Each character is encoded with five elements, either two wide and three narrow, or one wide and four narrow. The wide elements are a binary one (1), and the narrow elements are a binary zero (0).

Code 128

CODE 128

Code 128 is a continuous, multi-level, full ASCII code. Each of the Code 128 characters consists of three bars and three spaces. The bars and spaces may be one, two, three, or four modules wide. The total length of each code 128 character is eleven modules, with the total length of the bar modules odd, and the total length of the space modules even.

Barcode 128 has three different encoding methods: A, B and C. The encoding is determined by the start code. The default encoding method is B and it is used for upper and lower case alpha. A is used for upper case alpha and control characters, and C is used for digits, encoding 2 digits per barcode character. You can specify a different encoding method (either at the start and/or in the middle of the data) by using a special data character. eFORMz uses the exclamation mark to specify special data characters. The sequences for special data characters are:

“!A” - to specify or switch to CODE A
“!B” - to specify or switch to CODE B
“!C” - to specify or switch to CODE C

“!S” - To switch the next data character of CODE B if currently using CODE A, or to switch the next data character to CODE A if currently using CODE B.

There are also 4 different function codes that various organizations use to delimit fields within barcodes They are FNC 1, FNC 2, FNC 3, and FNC 4. The sequences for these are “!1”, !2”, “!3”, and “4”, respectively.

For example:

“[Start_C]FNC1961180417342237010195 1” should be “!C!1961180417342237010195 1”
“[Start_C]FNC142013326” should be “!C!142013326”

For a list of Code 128 characters, visit the encoding tables at: http://www.adams1.com/128table.html

POSTNET

The Postal Service developed the POSTNET (Postal Numeric Encoding Technique) barcode to encode zip code information on letter mail for rapid and reliable sorting by barcode sorters (BCSs). The POSTNET barcode can represent a five-digit ZIP Code (32 bars), a nine-digit ZIP+4 code (52 bars), or an eleven-digit delivery point code (62 bars).

For example:

USPS Intelligent Mail

The US Postal Service is promoting the use of this barcode because it expands the ability to track individual mail pieces and provides customers with greater visibility into the mail-stream. USPS will require the use of this barcode to qualify for automation printing beginning in May 2011. For further information, see:

http://ribbs.usps.gov/OneCodeSolution/USPSIMB_QandA.pdf

2D Barcodes

2D Barcodes can be created using a custom or system variable. eFORMz supports the following 2D Barcodes:

Aztec

MaxiCode

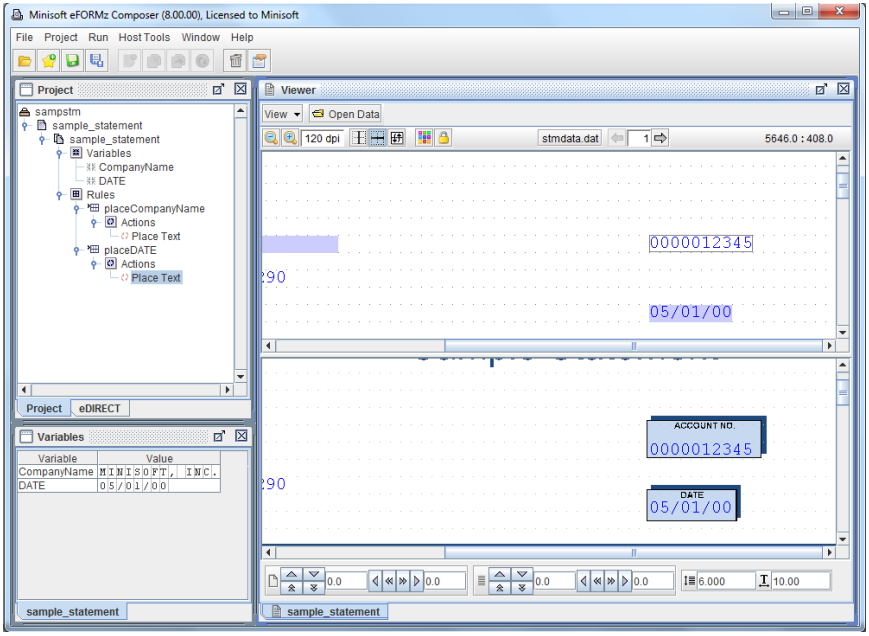
Data Matrix

PDF417

Quick Response (QR)

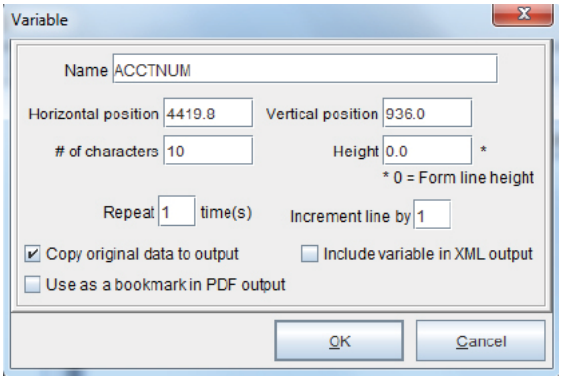
To create a 2D Barcode using data from your input file, use the following method:

1. From the Data Viewer highlight the selected range of data you would like to barcode or create a custom variable.



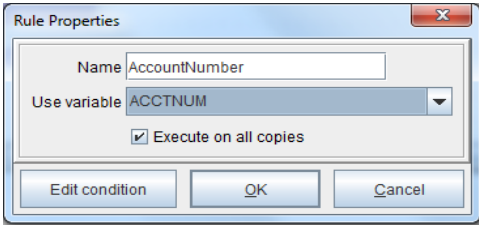
For assistance in creating the correct specification for 2D Barcodes, feel free to contact your Minisoft support representative for further information.

2. *Right click* and select *Add Rule > 2D Barcode*.
3. From the *Variable* dialog box enter a new variable name and click *OK*:

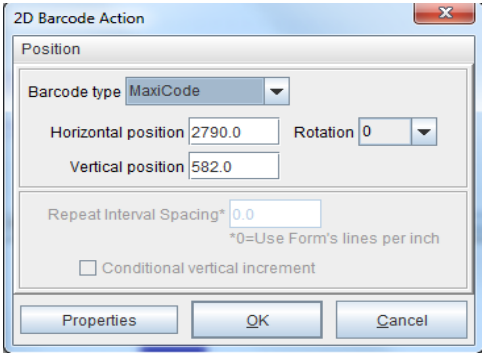


***TIP*:** If you would like the original data to appear in its original position select *Copy original data to output*.

4. The *Rules* dialog box displays. Enter a new rule name and click *OK*.



5. From the *2D Barcode Action* dialog box, select the barcode type:



Once your barcode specifications have been set click *OK*.

6. The newly created barcode will appear in your eFORMz Viewer.

If the barcode is not in the exact position you would like it to be, using your mouse, click-and-drag the barcode into place.

2D Barcode Types

Aztec

The Aztec barcode is a matrix barcode type that does not require quiet zones.

Data Matrix

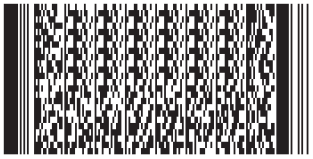
The Data Matrix barcode is a matrix symbol which allows efficient encoding of data into a square barcode, includes data correction.

MaxiCode

The MaxiCode is used primarily by UPS to route and track packages.

PDF417

The PDF417 barcode is a unique 2D barcode type is commonly used on FedEx shipping labels:



QR (Quick Response) Barcode

Efficient, two-dimensional (2D) barcode symbology. This type of barcode is commonly used with smart-phone devices to direct user to additional information about a particular product:

Special Fonts

OCRA

OCRA is a special font that is used for Optical Character Recognition Systems. It is also used for server purposes when an automated systems need a standard character shape defined to properly scan numbers and text without the use of barcodes.

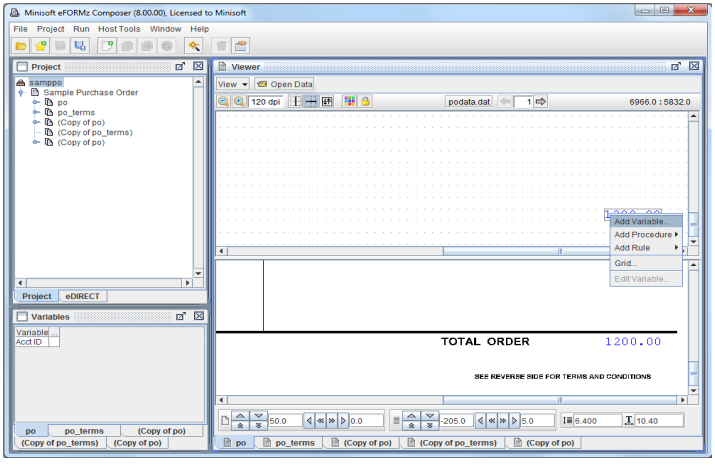
1234567890ABCDEFG

Secure Numeric Font

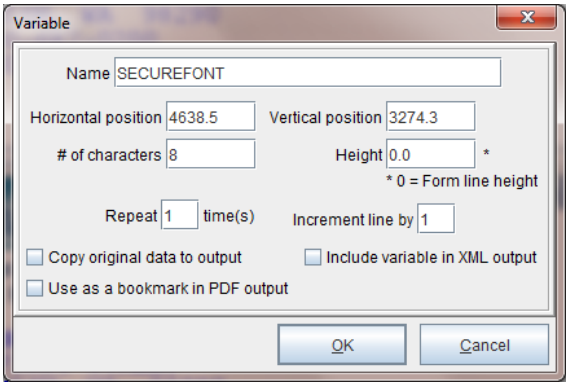
The secure numeric font permits an extra layer of security by imposing a unique font image representing the dollar value of the check, for example:

To create a secure numeric font:

1. From the eFORMz Viewer, *Input Data Viewer*, select the data you would like to apply the secure font to.
2. Right mouse click and select *Add Variable*.

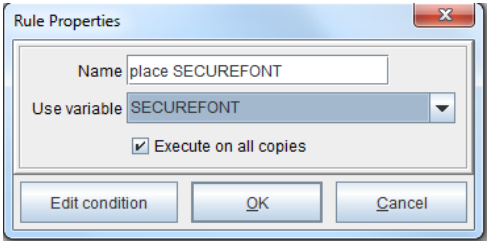


3. From the *Variable* dialog box, enter a new variable name and click *OK*.

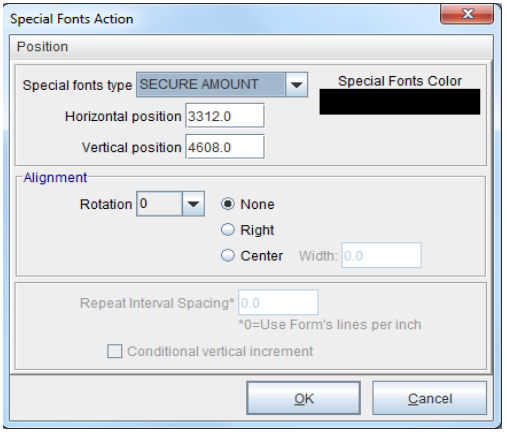


4. Your new variable will appear in the *Current Project* window.

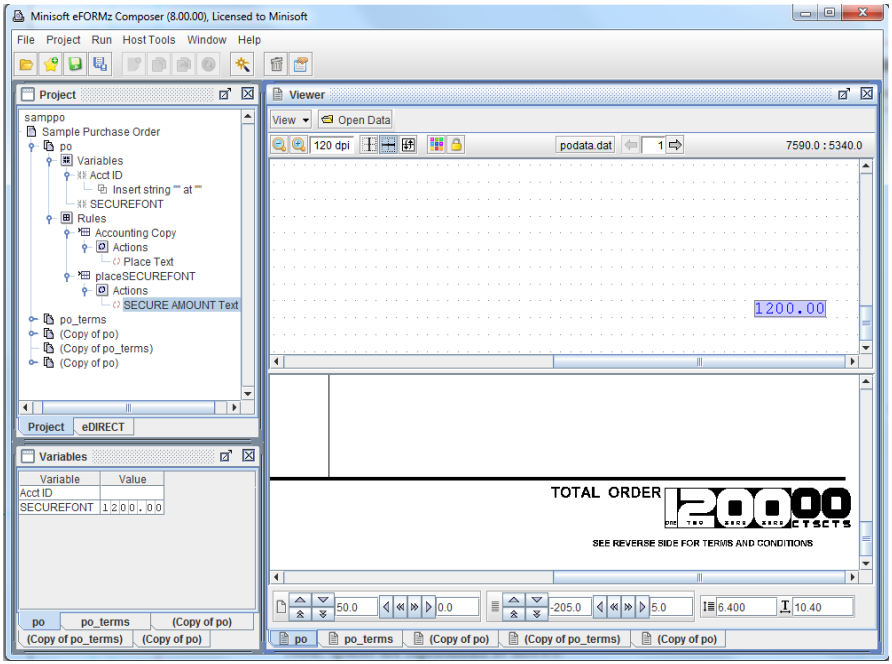
5. Next, create a new *Special Fonts* rule specifying the new variable.



6. The *Special Fonts Action* dialog box will display. Select Position and Paste if you previously selected a location for the secure font to appear, otherwise, select *Secure Amount* from the drop down selection of Special font:



7. The secure font will then appear in the Form and Data Viewer:

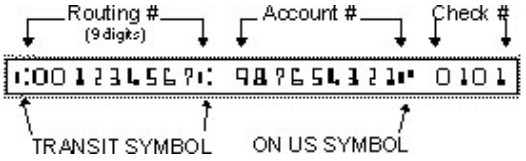


8. To implement the phrase “pay only” to the secure font, a dollar sign ($) can either be inserted at the beginning of the variable using an add Function option:

Note, spaces are represented as arrows:

MICR 13B and CMC-7 Font

The approved MICR 13B and CMC-7 (ISO 1004) font that prints check numbers compatible for magnetic ink reader systems. Below is an example routing number defining each section:



MICR 13B and CMC-7 Symbol Sets

MICR Fonts	
Character	***MICR 13B and CMC-7 Symbols***
1	
2	
3	
4	
5	
6	
7	
8	
9	
0	
$	
-	
/	
&	

Example routing string:

/123456/ &123456789& 9876-532/

Routing string converted into MICR code using eFORMz:

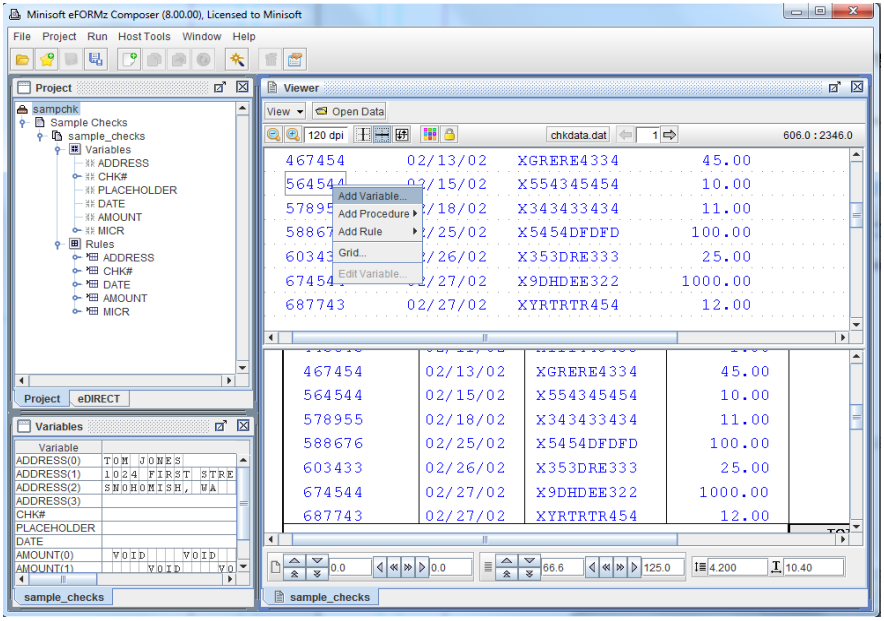
⑈123455⑈ ⑆123456789⑆ 9876⑉5432⑈

***NOTE*:** Routing number combinations may vary.

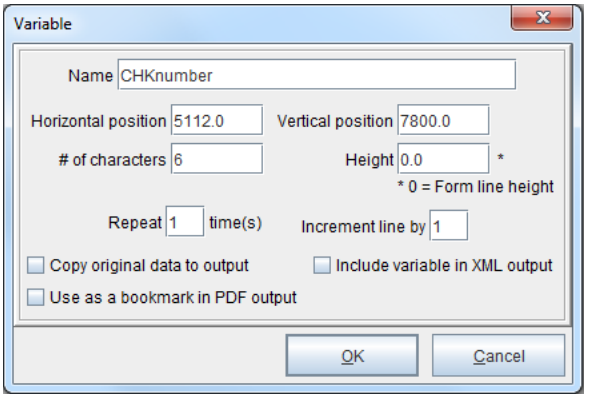
Creating a MICR 13B Routing String

To create a MICR font string:

1. From the eFORMz Viewer, *Input Data Viewer*, select the check number you would like to include in the MICR line.
2. Right mouse click and select *Add Variable*.

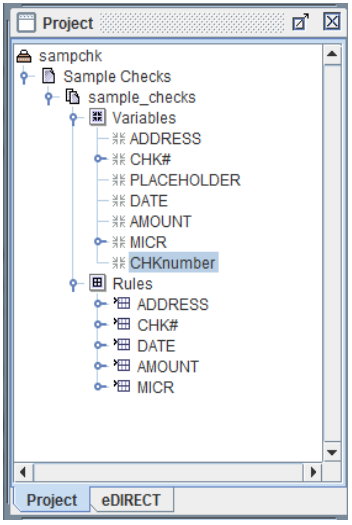


3. From the *Variable* dialog box, enter a new variable name and click *OK*.



***TIP*:** If you do not wish the check number to appear in its original location, confirm that the option *Copy original data to output* is unchecked.

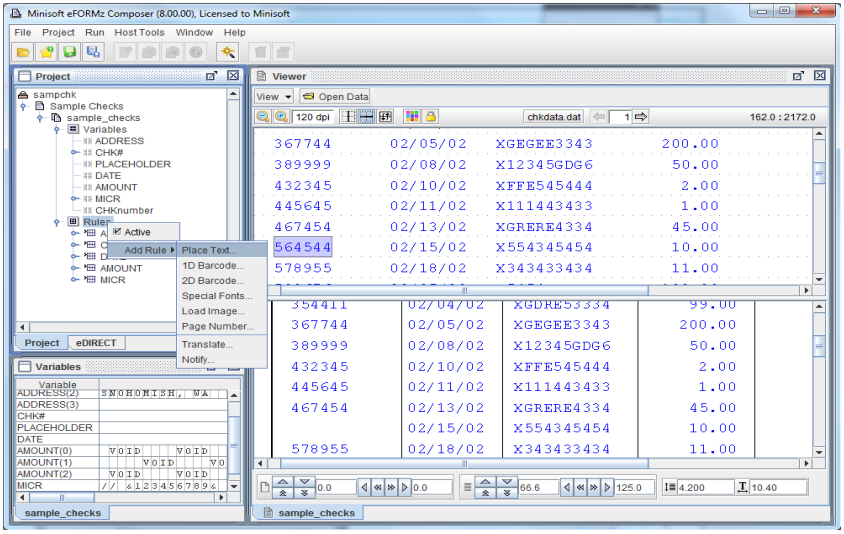
4. Your new variable will appear in the *Current Project* window:



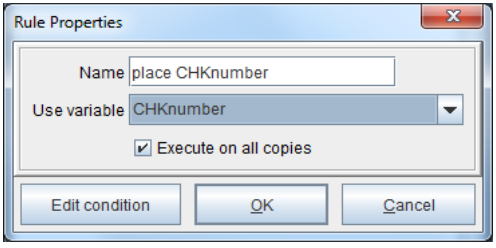
If the check number needs to be placed in a second position, for example, in the check number placeholder do the following, otherwise, see instruction number 5.

From the eFORMz Viewer, Form and Data Viewer, right mouse click in the area you would like the check number to appear and select *Copy Position*.

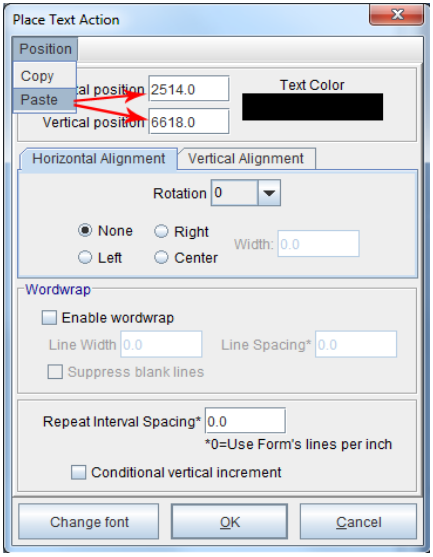
From the *Current Project* window select *Rules* > *Add Rule* > *Place Text*.



From the *Rule Properties* dialog box enter a new rule name. Select *CHKnumber* as the variable type and click *OK*.

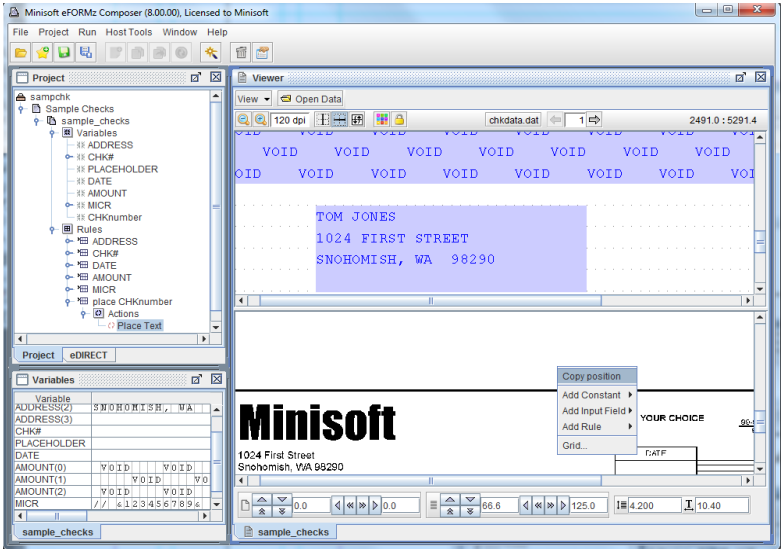


The *Place Text* dialog box will display, select *Position* > *Paste*. The coordinates copied earlier will display in the horizontal and vertical position fields.

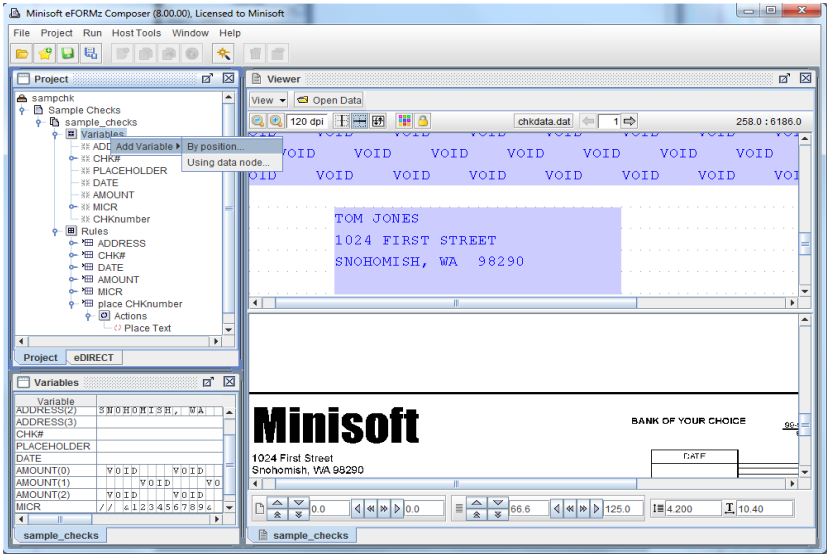


Click *OK* from the Move Action dialog box and the check number will appear in the Form and Data Viewer. To slightly adjust the position, take your mouse and click-and-drag the check number into position.

5. From the eFORMz Viewer, Form and Data Viewer, right mouse click in the area you would like the MICR sting to appear and select *Copy Position*.

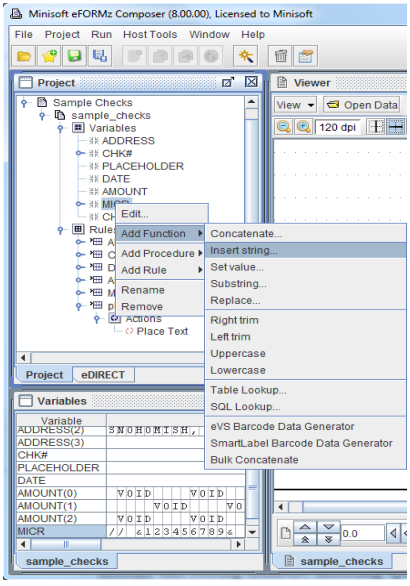


6. From the Current Project window create a new variable by selecting *Variable* > *Add Variable* > *By Position*.



7. The *Variable* dialog box will display, enter a new variable name and click *OK*.

8. Select the new variable from the Current Project window, *right click*, and select *Add Function* > *Insert String*.



9. The Insert Text dialog box will display. For this example we are going to split the MICR line into three sections:

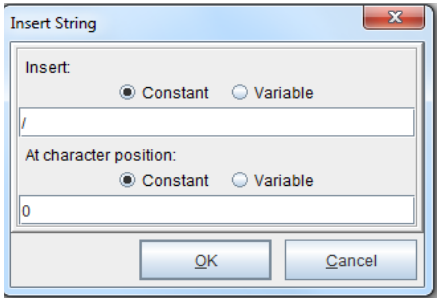
   /567888/ &123456789& 9876-5432/

   - first character string / (ON US)
   - check number (6 digit number)
   - account and routing numbers including special characters (/ &123456789& 9876-5432/)

   Note: Routing number combinations may vary.

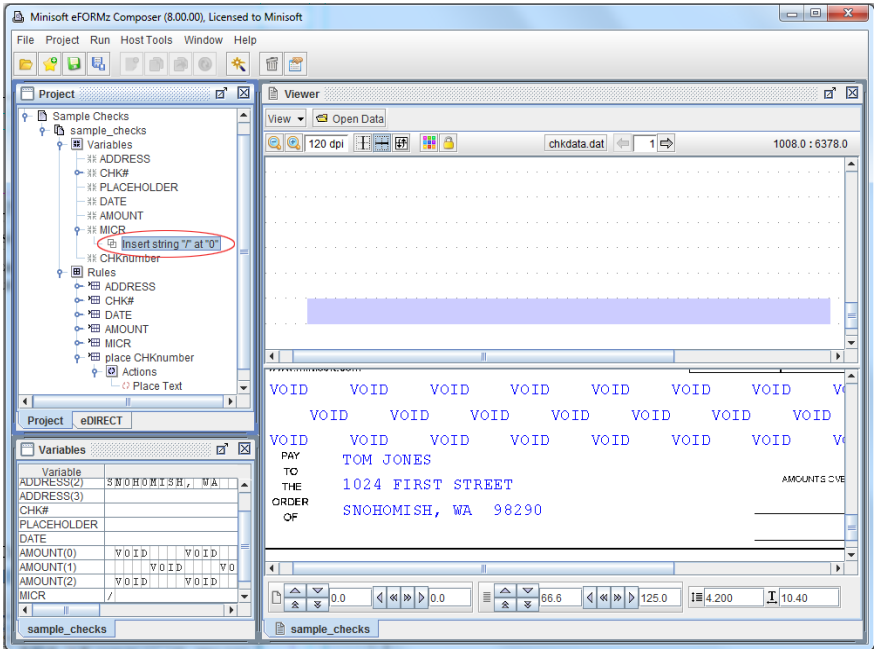
MICR Font		
Character	***Symbol***	***Meaning***
$		Amount
-		Dash
/		ON US
&		Transit

10. From the *Insert > Constant* field enter the starting character of your MICR line. In the *At character position Constant* enter character position *0*.



Click *OK*.

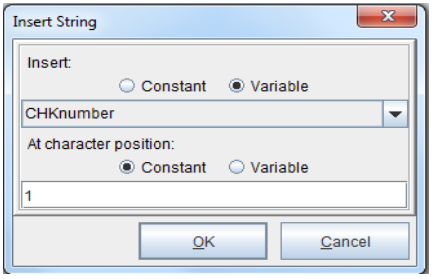
11. Your new variable string will appear in the Current Project window.



12. From the *Current Project* window highlight the same variable as before (MICR), *right click* and select *Insert String*.

13. The Insert String dialog box will display. Since a check number variable was created earlier (CHKnumber), select *Variable* for the Insert field. From the list of options select the variable name, CHK*number,* which was created earlier.

    Enter the number one (1) in the *Constant* field for the *At Character Position*.

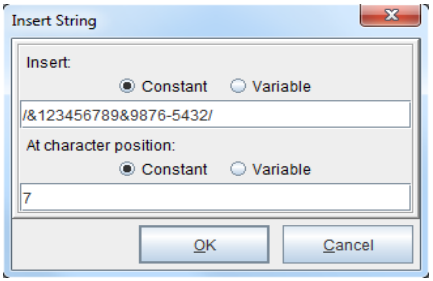


    Click *OK*.

14. Create a third string for the variable *MICR*. *Right click MICR* and select *Add Function > Insert string*.

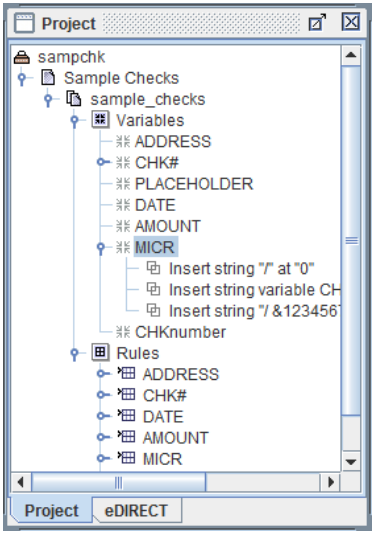
15. The Insert String dialog box will display.

    Insert the remaining characters, account and routing numbers into the *Insert > Constant* field. In the *At Character Position* field enter the starting position of the remaining character, in this case, character position 7.



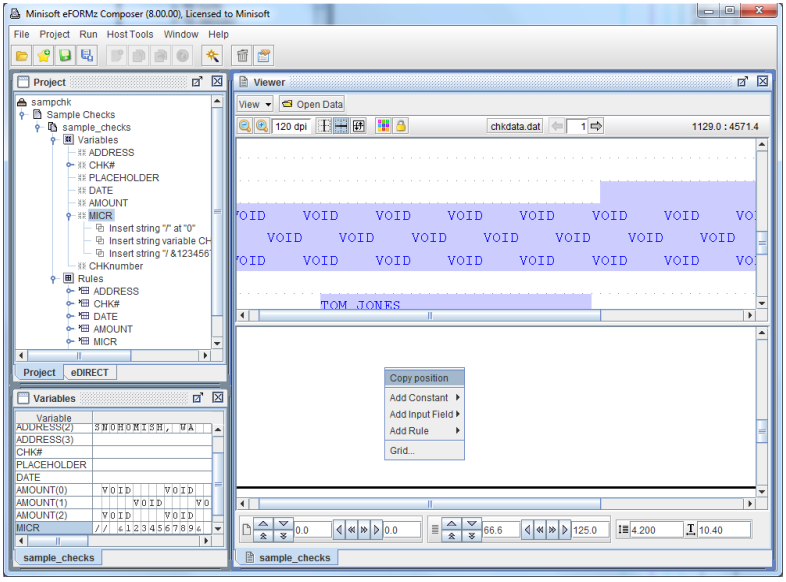
    Once complete, click *OK*.

16. The Current Project window will display all three *Insert String* functions.

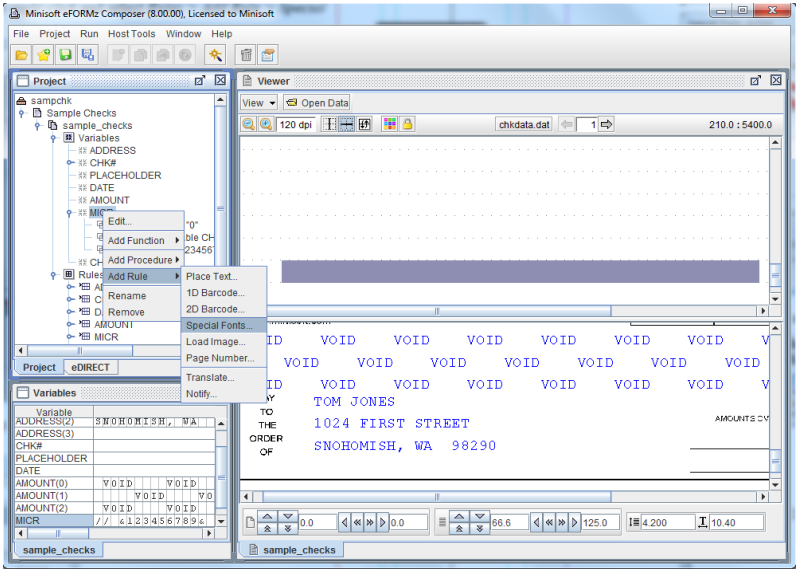


To place the MICR line:

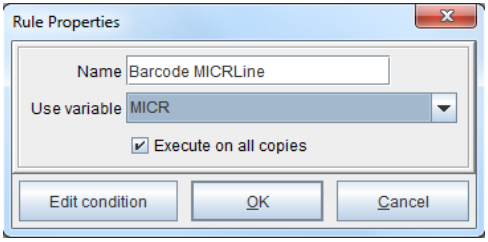
1. From the eFORMz Viewer, Form Viewer, *right click* in the area you would like the MICR line to appear and select *Copy Position*.



2. From the Current Project window *right click* and select *Rules* > *Add Rule* > *Special Fonts*.

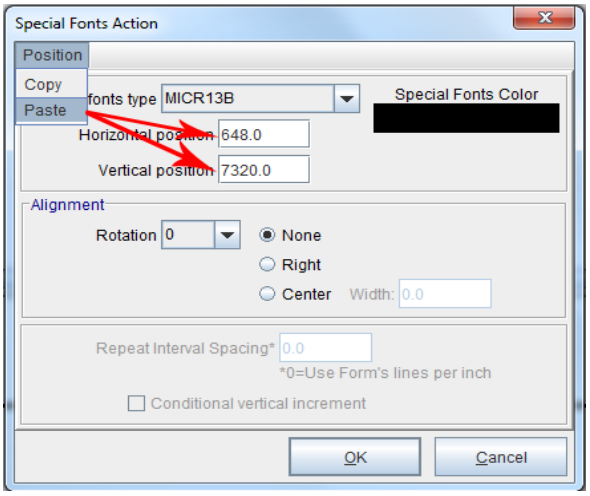


3. The *Rules* dialog box will display. Enter a new rule name and select *MICRstring* as the variable selection.



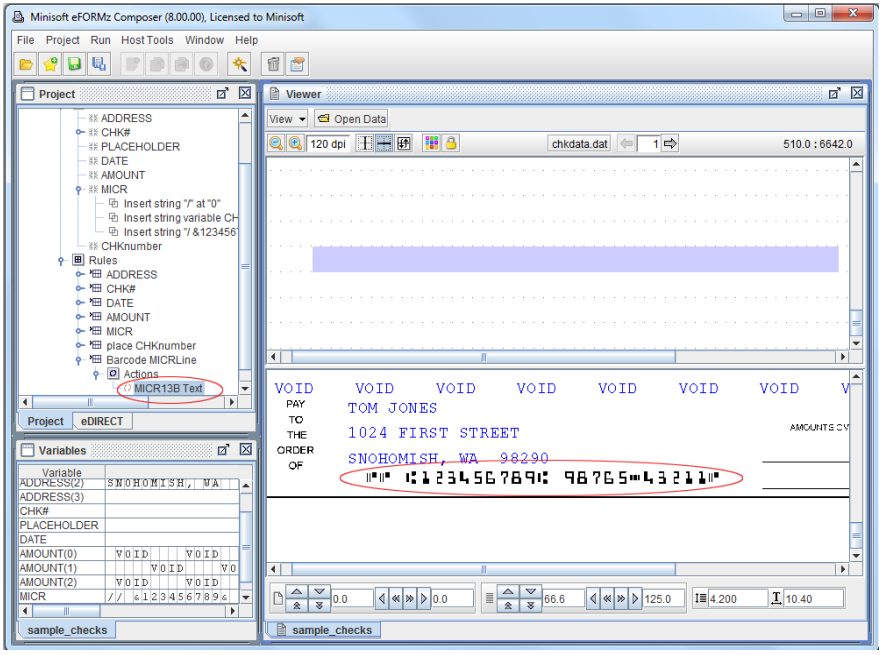
Click *OK*.

4. The Special Fonts Action dialog box will display, select *Position* > *Paste*. The position previously selected will appear in the Horizontal and Vertical fields.



Select *MICR13B* as the font type and click *OK*.

5. Once complete, the MICR line will display in the Form and Data Viewer. Using your mouse, position the MICR line into position.



Translate

Translate characters in a custom variable or specified range in your data file. To translate or convert data in a selected range:

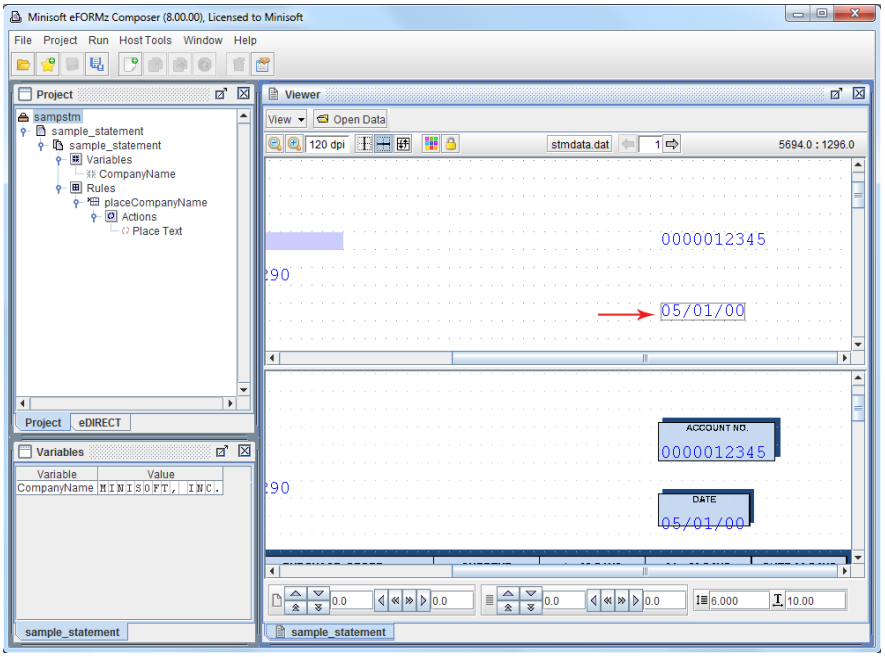
1. From the eFORMz Viewer, *Input Data Viewer*, highlight the selected range that contains the data you would like to translate. For example, translate the forward slash (/) contained in the date to dashes (-):

   Change:

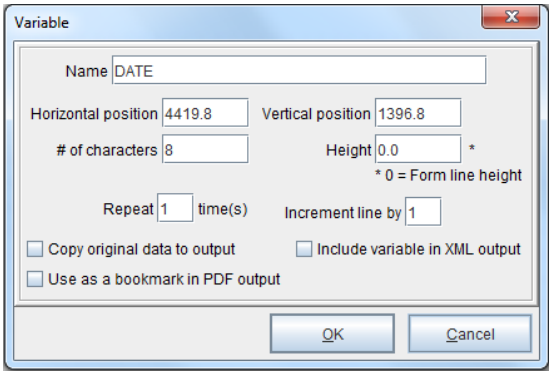
   05/01/00

   To:

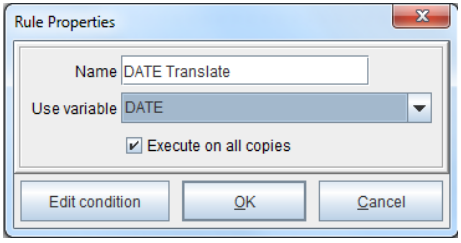
   05-01-00



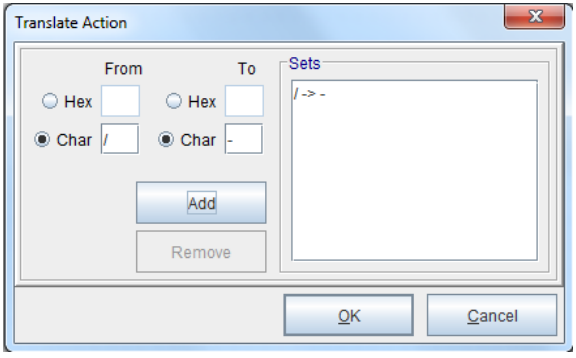
2. Using your mouse, *right click* and select *Add Rule* > *Translate*.
3. The Variable dialog box will display. Enter a new variable name and click *OK*.



4. The Rule Properties dialog box will display. Enter a new rule name and click *OK*.



5. From the Translate dialog box, select *Char* for character change and then enter the translation in the *From* and *To* fields. When complete, click *Add* to add the translation set to the *Sets* field:



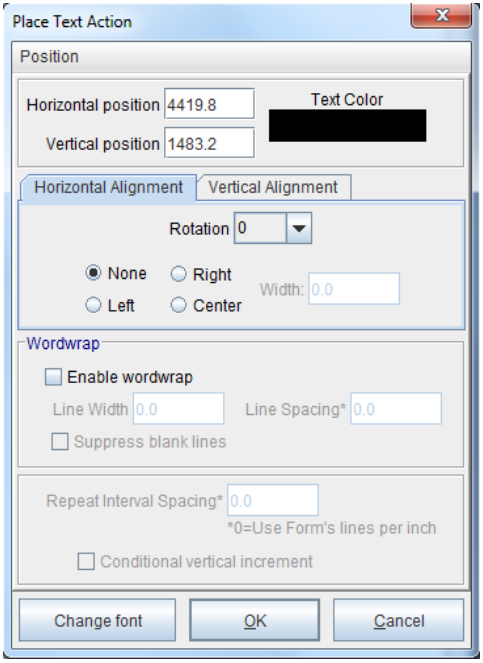
Once complete, click *OK*.

6. To view your newly formatted data in the eFORMz Viewer, create a *Place Text* rule by selecting the same rule you created for Translate (DATE Translate).

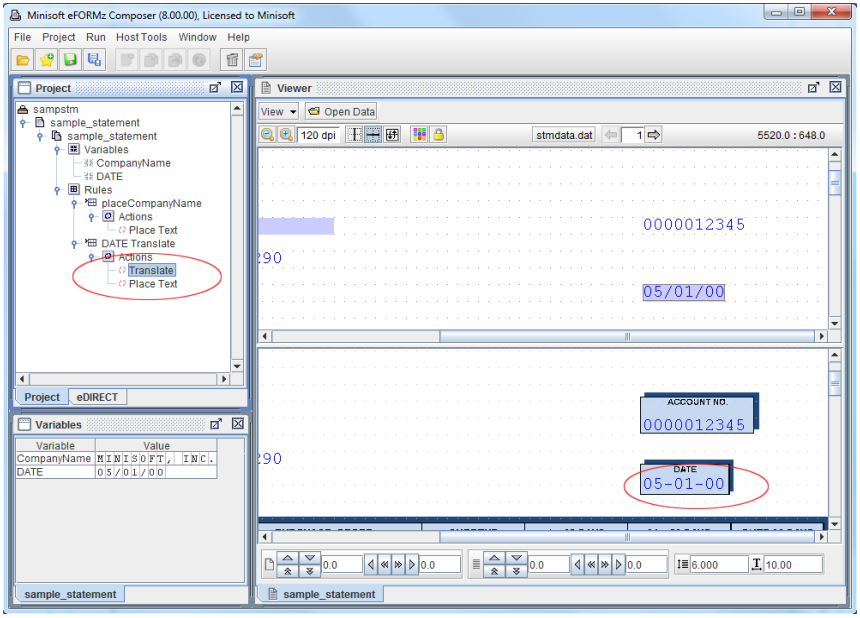
   Right click the *DATE Translate* rule and select *Add Action > Place Text*.

7. The Place Text dialog box will display. In the horizontal and vertical position fields the original position of the translated data will appear.

   If you would like to make changes to the position of the fields, after clicking *OK*, use your mouse in the Form and Data Viewer to reposition the translated fields.



8. Once complete, click *OK*. The translation will display in the eFORMz Viewer.



Load Image

Load a .jpg, .gif, .bmp, .tif, .prn, .pdf, .png, or .frm file using the Load Image action. Load image will allow you to place an image anywhere on your form and data output. Conditions can also be used to allow the image to only appear when called for.

Images can be loaded in one of six ways:

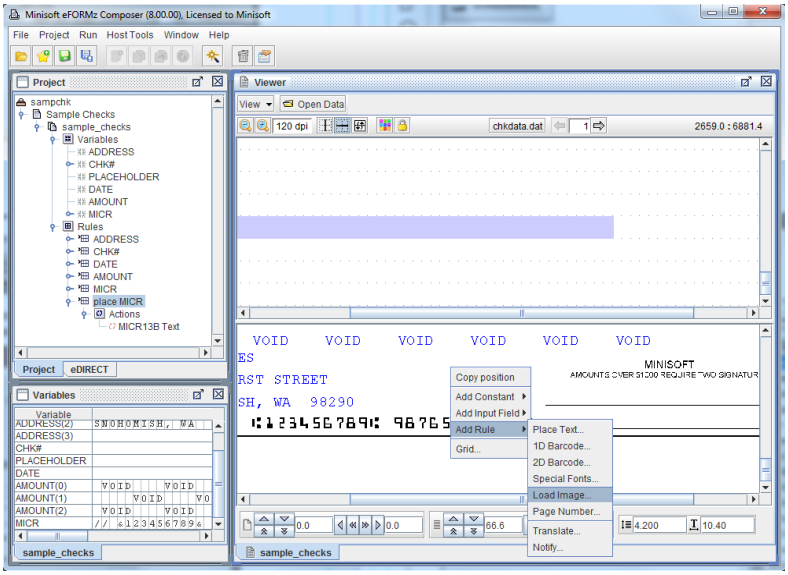
- *Project* loads a previously saved image that was imported into the project using the *Project Properties* > *Images* option.
- *Project using Rule Variable* loads a specified image from the Project Properties > Images based on a variable.
- *File* loads an image from a specified folder. The image will not be stored in the project file.
- *File using Rule Variable* loads a specified image from a folder based on a specified variable.
- *PDF file* loads a pdf file from a specified folder. The image will not be stored in the project file.
- *PDF file using the Rule Variable* loads a pdf file from a folder based on a specified variable.

***NOTE*:** Images stored in the project will cause larger project file sizes.

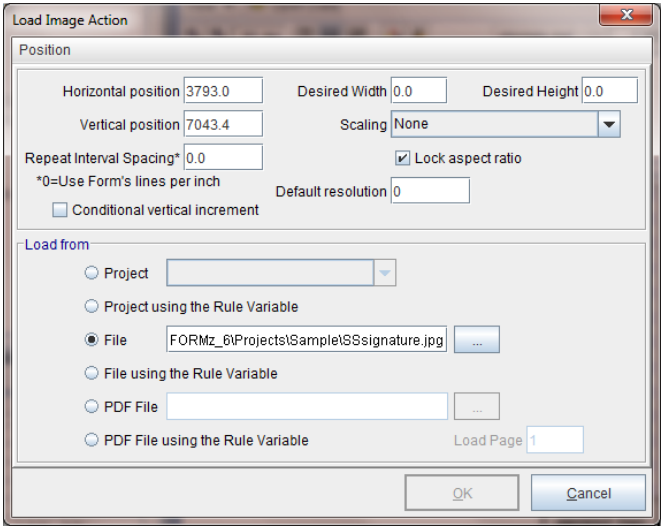
***NOTE*:** For multi-page TIFF or PDF files, see *Chapter 7* > *Dynamic Forms* > *TIFF or PDF Generated Dynamic Forms*.

To load an image into an eFORMz project:

1. From the eFORMz Viewer, Form and Data Viewer, *right click* near the position you would like the image to appear.
2. Select *Add Rule* > *Load Image...*:



3. The Image Element dialog box will display. Select *Load Image from Project* or *Load Image from File*. For this example we will be loading an Image from a file.



Options include:

Desired width and height are configured in decipoints (720 decipoints = 1 in). Set the width and height for the *shrink to desired size* or *fit to desired size* options.

Scaling options include *None*, *Shrink to desired size*, *Fit to desired size*.

None leaves the size as is. *Shrink to desired size* will reduce the size of the image if it does not fit in the desired width and height specified. *Fit to desired size* will change the size of the image to match the desired width and height specified. The *Lock aspect ratio* option, when true, will keep the ratio of the images dimensions the same when scaling. This option figures which ratio (desired width / image width or desired height / image height) is needed for scaling both dimensions of the image to make it shrink or fit within the desired rectangle.

Lock aspect ratio will keep the ratio of the image dimensions when scaling.

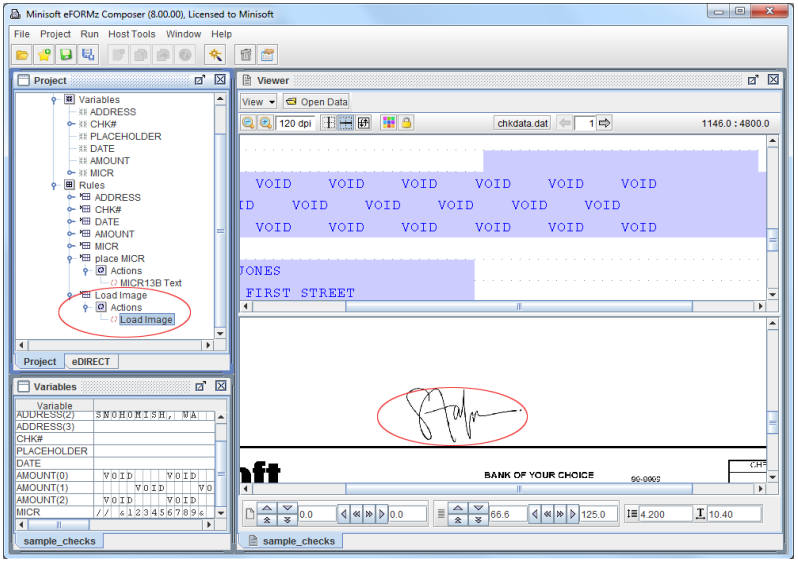
Conditional Vertical Increment when set, the vertical coordinate for actions using repeating variables only gets incremented when the action is actually executed.

Default resolution sets the resolution of the incoming image file.

To specify the image from a file folder select the browse (...) button.

4. Once complete, click *OK*.
5. The signature will automatically display in your eFORMz Viewer.

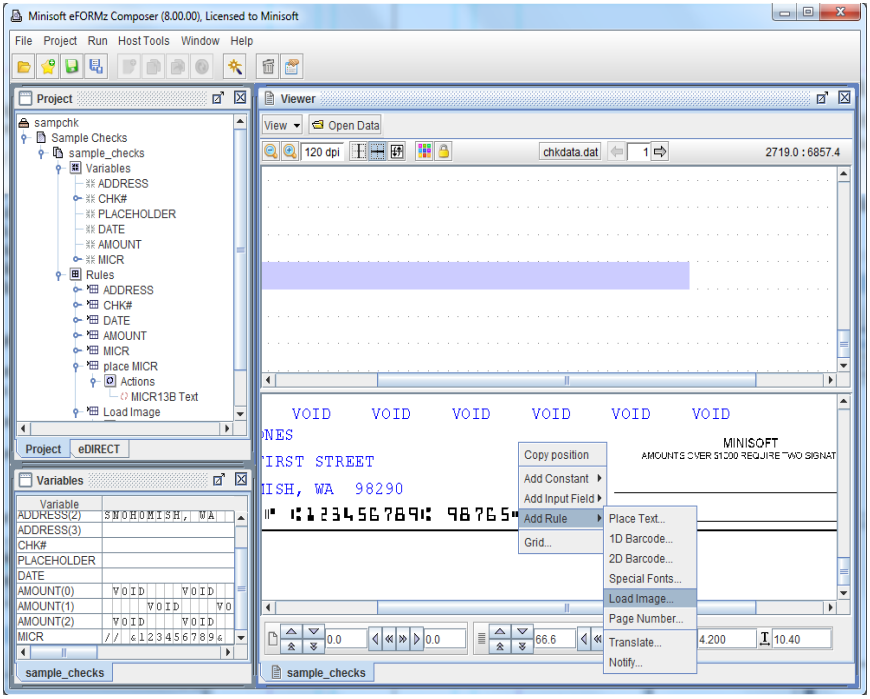
> ***TIP*:** If the signature does not appear in the exact location you would like it to appear, simply use your mouse to drag and drop into position.



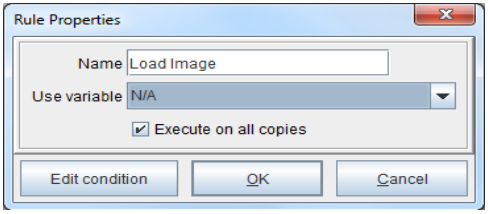
Load Image Based on a Condition

In the following example (SAMPCHK.efz) a signature will be added based on the contents of the data file. For example, if the check number appears in the data page a signature will be applied.

1. Using the SAMPCHK project file scroll down to view the area where the signature will be applied.
2. *Right click* and select *Add Rule > Load Image*.



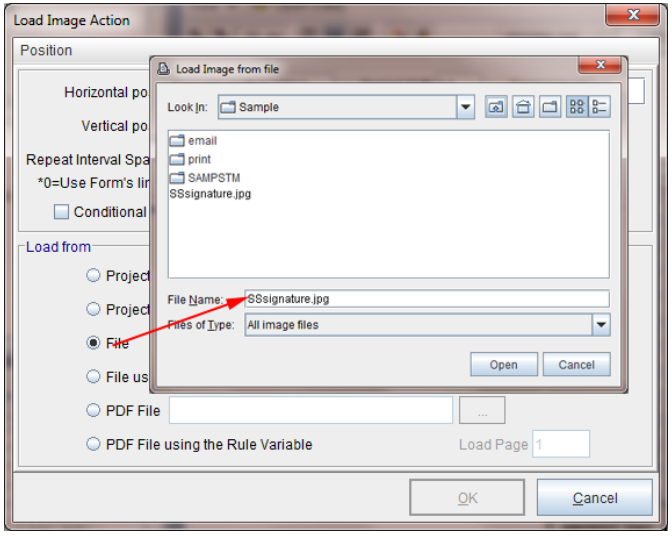
3. From the Rules dialog box enter a new rule name and select N/A as your variable type. Click *OK*.



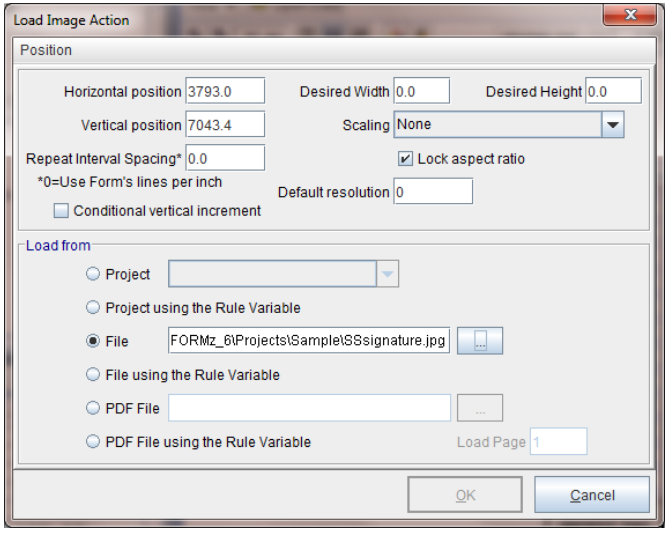
4. From the Load Image Action dialog box select *Load Image from Project* or *Load Image from File*.

   For this example we will be selecting *Load Image from File*.

5. Select *Load Image from File* and using the browser button (...) select the signature image you would like to appear.

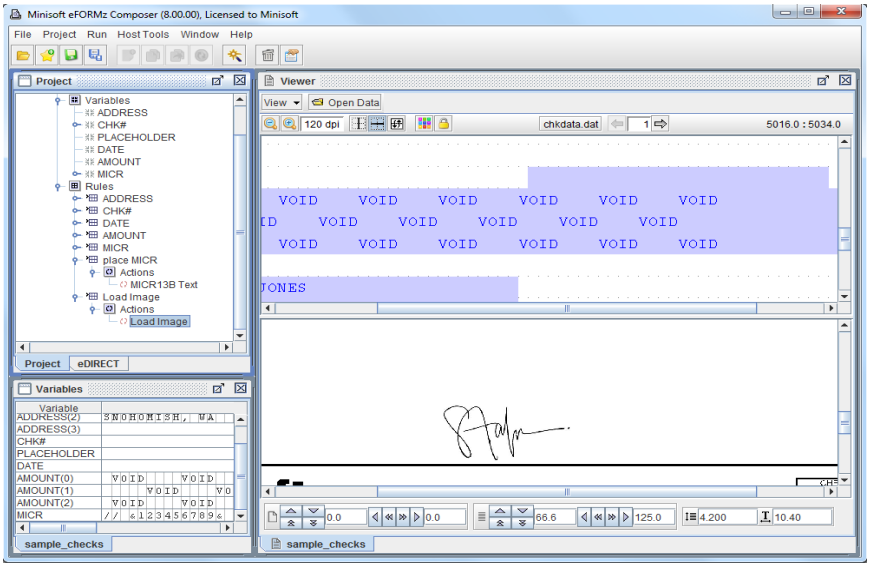


6. Once the image has been selected, the path specifications will display in the Load Image Action dialog box.



Once complete, click *OK*.

7. The Form and Data Viewer will display the check signature.

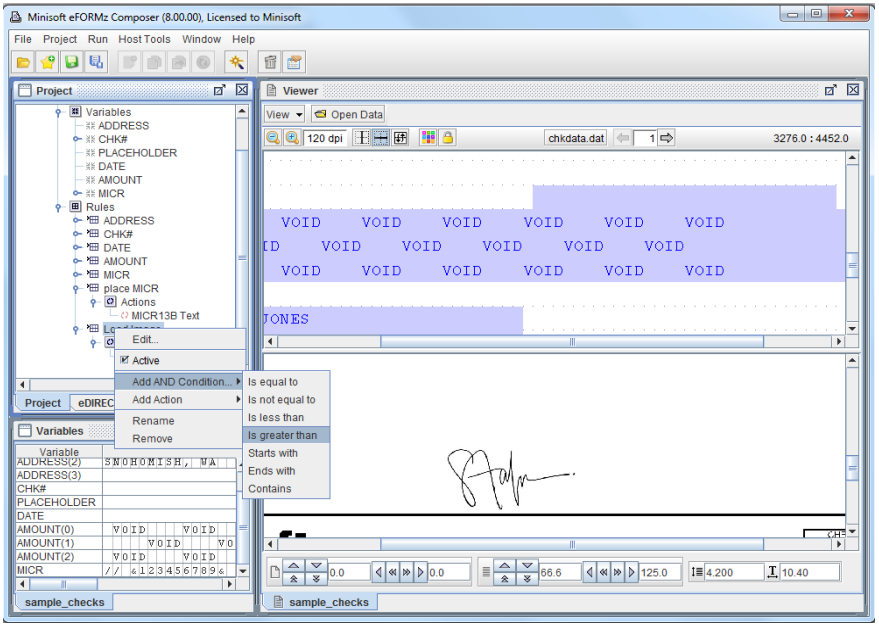


8. Create a condition for the new Load Image action that applies the signature only when a check number is present in the data file.

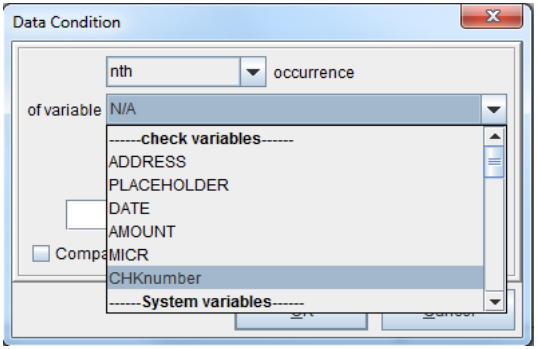
9. From the Project Template select *Rule* > *Load Image*, *right click*, and select *Add AND Condition*. From the list of conditions select one of the following options:

   Is equal to Is not equal to
   Is less than Is greater than
   Starts with Ends with
   Contains

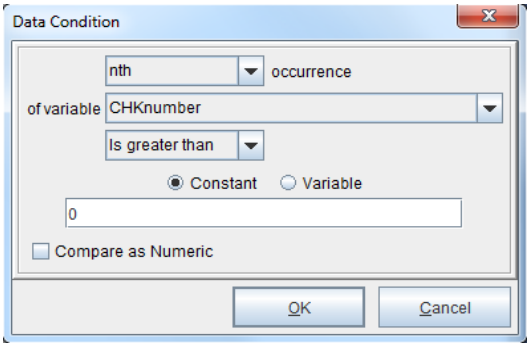
   For this example we are going to select *Is greater than*.



10. The Data Condition dialog box will display. From the *Use variable* field select the check number variable (CHK#).



11. In the Constant field, enter an amount to be compared to.



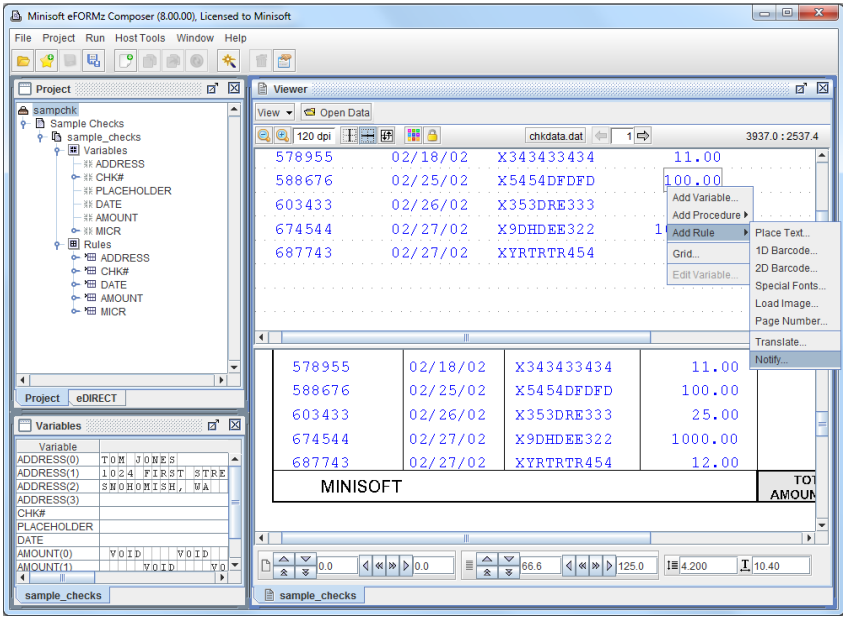
Once complete, click *OK*.

12. Scroll through your data pages in the Form and Data Viewer. The signature will only appear on pages containing a check number.

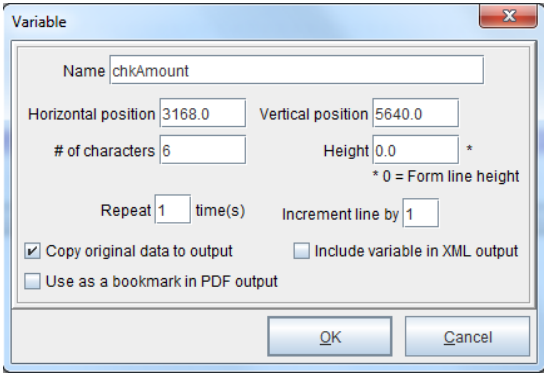
Notify

Setup a rule action to notify an individual or multiple individuals via email when a process is ran. The Notify action can be conditionally based.

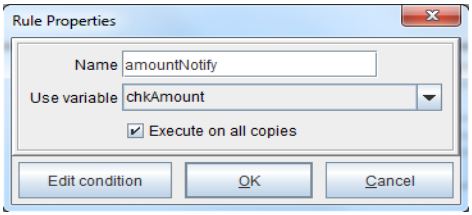
1. From the Data Viewer select the string of characters you would like to monitor, *right click*, and select *Add Rule* > *Notify*.



2. The Variable dialog box will display. Enter a new variable name. To keep the existing data in place select *Copy original data to output*. Once complete, click *OK*.

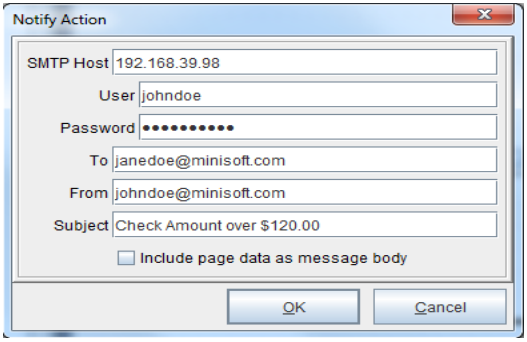


3. The Rules Properties dialog box displays. Enter a new rule name and click *OK*.



4. From the Notify Action dialog box enter the necessary information:

   SMTP Host is your email server.
   User is the username to connect to your email server.
   Password is your password to connect to the SMTP Host.
   To is the intended recipient of the email.
   From is the company email address.
   Subject is the description of the specified email.
   Include page data as message body includes the data page in the body of the email.

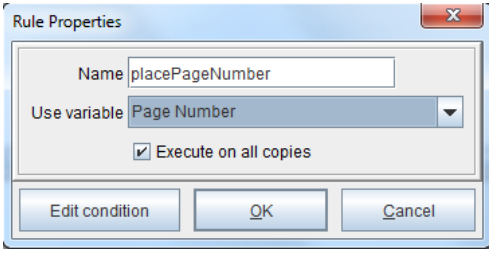


   Once complete, click *OK*.

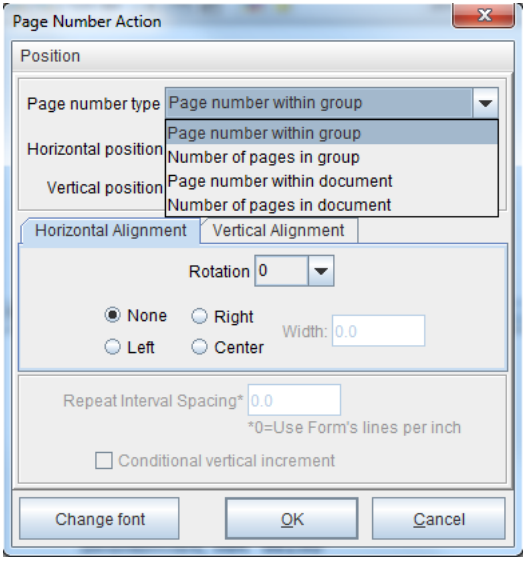
Page Number

Place the page number of a form based upon the number of pages it contains or its location within a series of pages. Options include: *Page number within group, Number of pages in group, Page number within document* and *Page number in document.*

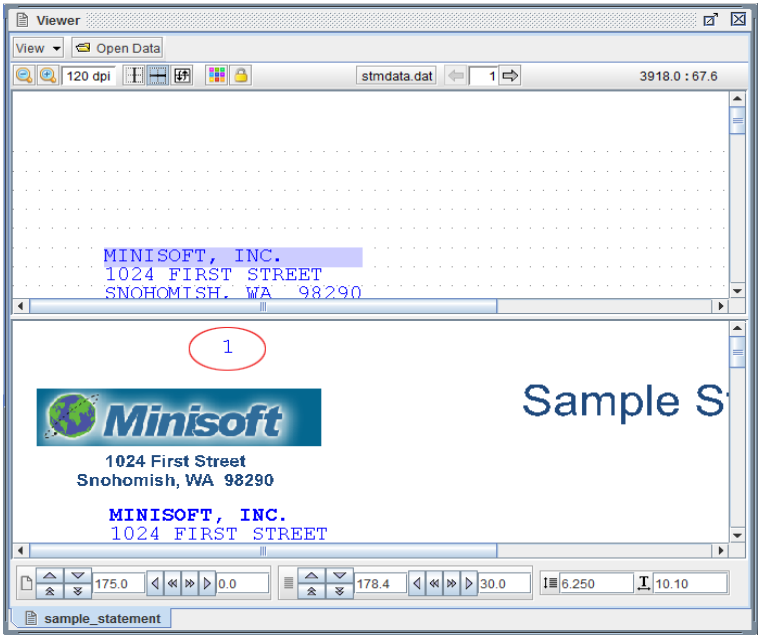
1. *Right click* in the Form and Data Viewer and select *Add Rule > Page Number.*
2. The Rule Properties dialog box will appear. Enter a new rule name and select the System Variable *Page Number.*



3. The Page Number Action dialog box will display. Choose the desired option from the *Page number type* field.



4. The page number will automatically show up in the Form and Data Viewer.



Constant Actions

Creating a Constant

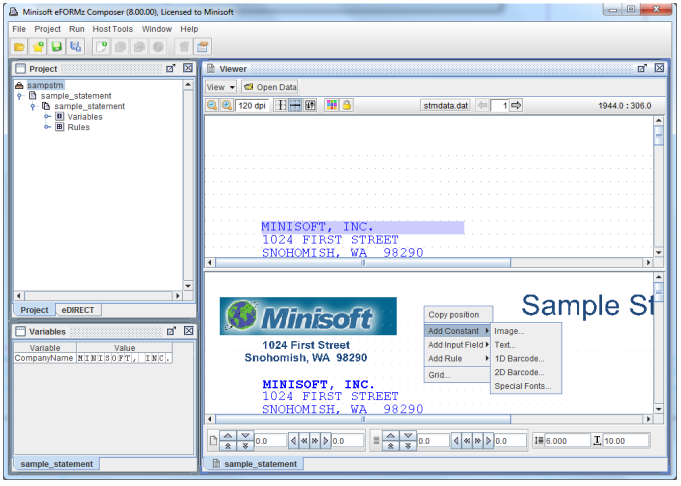
eFORMz allows you to add constant values to your data output. Apply a constant value to your form that will display on every page. Choose one of the following or all:

- Images
- Text
- 1D Barcode
- 2D Barcode
- Special Fonts

To create a constant value:

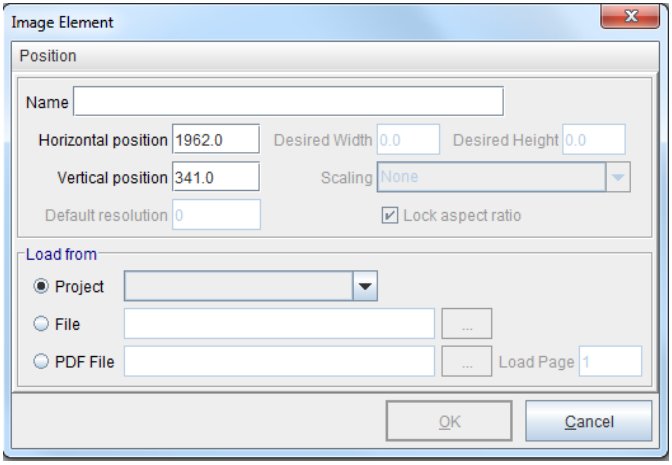
1. From the eFORMz Viewer, Form and Data Viewer, *right click* your mouse in the area you would like the image to appear and select *Add Constant > Image, Text, 1D Barcode, 2D Barcode or Special Fonts*.

> ***TIP*:** If the position of the constant value needs to be adjusted simply drag the element into position using your mouse.



Image

If *Image* has been selected as the constant value, the Image Element dialog box will display:



Available options include:

Load from Project
Select an image previous loaded into the project file through the *Project Properties* > *Image* dialog box.

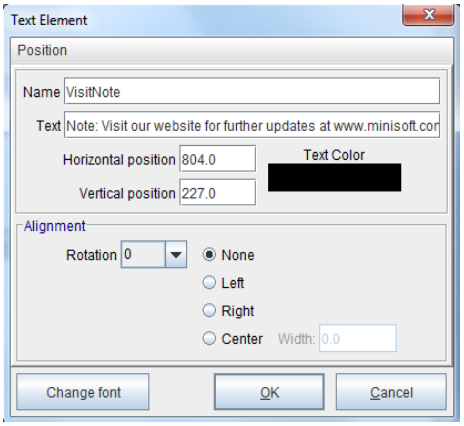
Load from File
Use the browse button to select the image you would like to add to your form as a constant value.

Load from PDF File
Use the browse button to select a PDF file, then in the *Load Page* field, specify the page you would like to add to your form as a constant value.

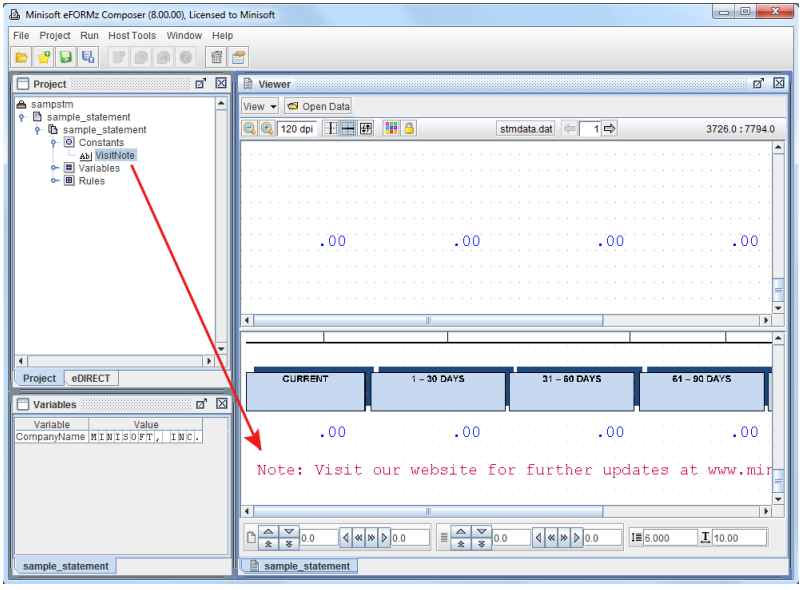
Once an image file has been selected, click *OK*. Your constant image element should now appear in the eFORMz Viewer.

Text

If *Text* has been selected as the constant value, the Text Element dialog box will display:

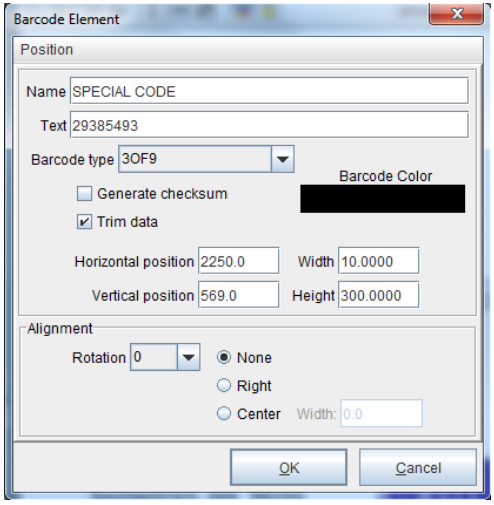


Enter the text string you would like to have added to your form as a constant value. Also, if needed, set the character alignment and font style. Once complete, click *OK*. Your new constant value will now appear in the eFORMz Viewer.

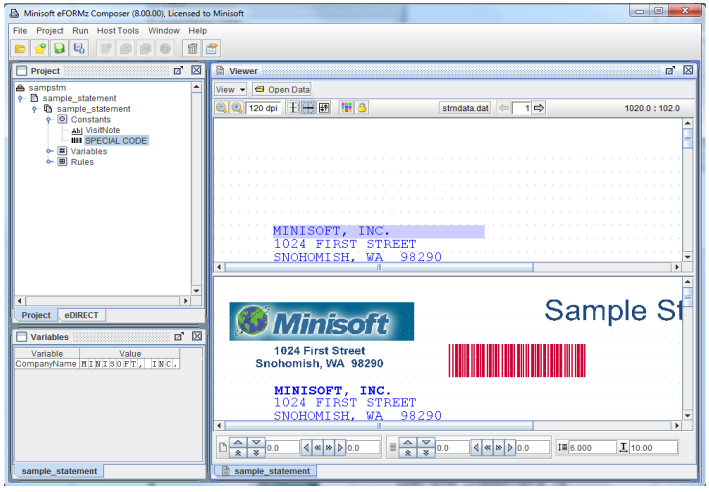


1D Barcode

If 1D *Barcode* has been selected as the constant value, the Barcode Element dialog box will display:

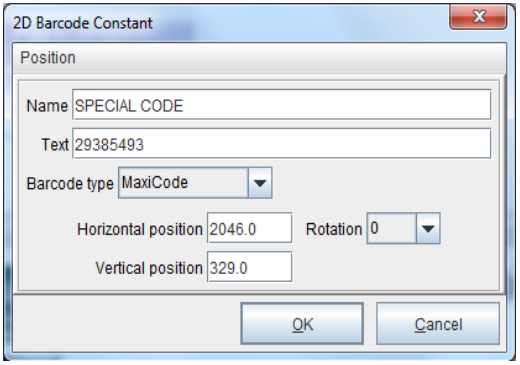


Enter the characters or numeric values you would like to barcode into the *Text* field. From the *Barcode type* drop down box select the barcode type you would like to use. Adjust the width, height, and alignment if needed. Once complete click *OK*.

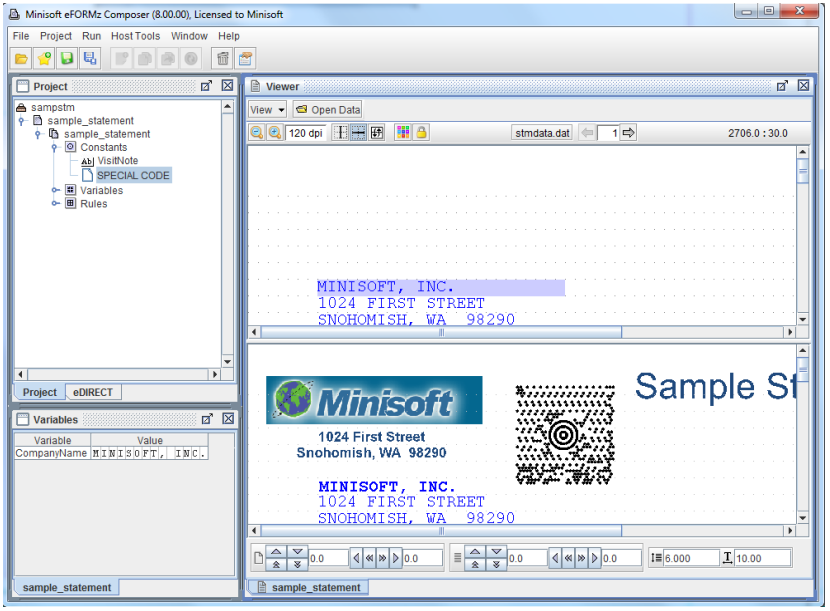


2D Barcode

If 2D *Barcode* has been selected as the constant value, the 2D Barcode Constant dialog box will display:

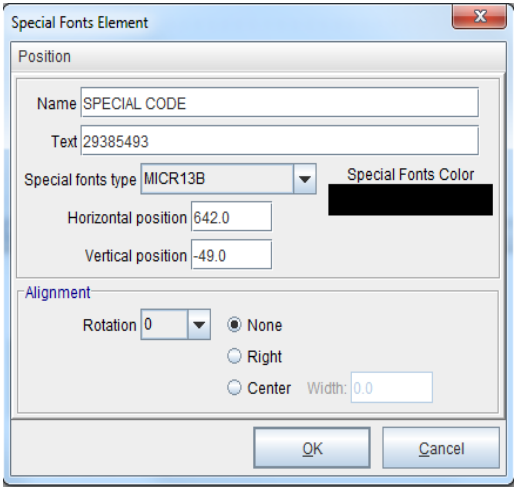


Enter the characters or numeric values you would like to barcode into the *Text* field. From the *Barcode type* drop down box select the barcode type you would like to use. Adjust the height and alignment if needed. Once complete click *OK*.

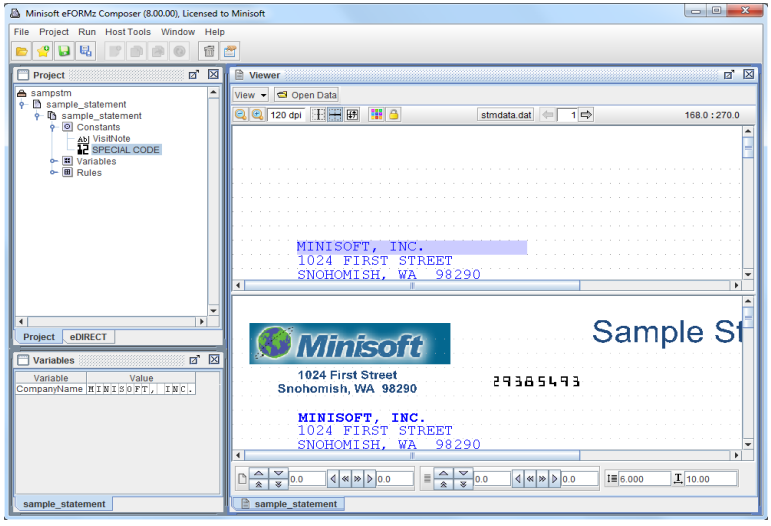


Special Fonts

If *Special Fonts* has been selected as the constant value, the Special Fonts Element dialog box will display:



Enter the characters or numeric values you would like to barcode into the *Text* field. From the *Special fonts type* drop down box select the barcode type you would like to use. Adjust the height and alignment if needed. Once complete click *OK*.



Conditional Processing

eFORMz allows you to place conditions on Rules and Procedures. Setting a condition on a Rule/Procedure determines whether or not the Action associated with the Rule/Procedure is processed.

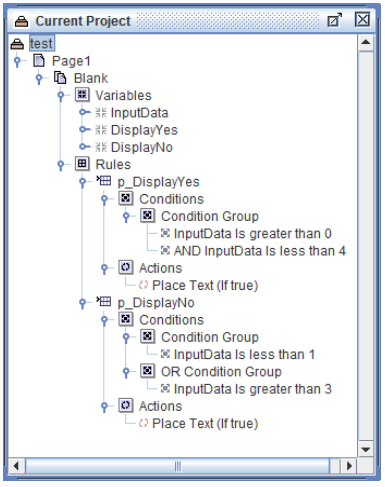
eFORMz supports these logical operators:

- AND
- OR
- NOT

And the following data conditional operators:

Is equal to	Starts with
Is not equal to	Ends with
Is less than	Contains
Is greater than	

In the below example the word “YES” is displayed (variable DisplayYes) if the value of the variable InputData is equal to 1, 2, or 3. The word “NO” is displayed if the value if InputData is not 1, 2, or 3.



Adding a Condition

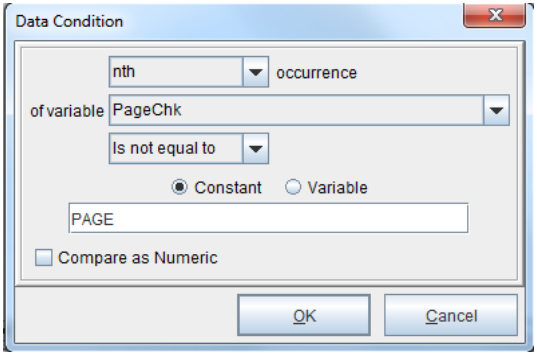
The following example will demonstrate how a project can be implemented for conditional logic. Let's say, there is a need to add special wording to an output file based on the state (Colorado or Oklahoma) and if it is the last page of the order:

1. Create two variables, one looking at your state check and another looking for a check if it is the final page of the order. In this example we will be using the following variables:

   PageChk and *State_Chk*

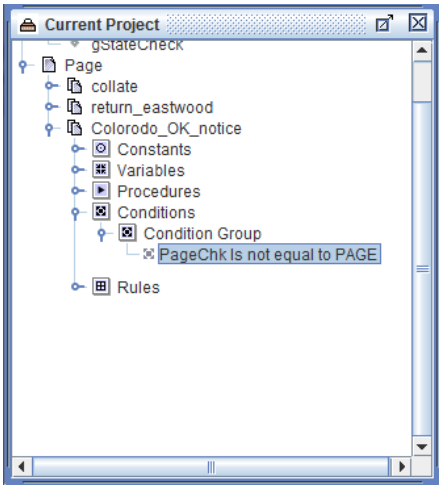
2. Right click your form and select *Add AND Condition*, followed by selecting the data conditional operator you would like to work with. For this example, the conditional operator used for our first variable will be '*Is not equal to'*. Once selected the *Data Condition* dialog box displays.

3. Select the variable you would like the condition to be based on (*PageChk*) and then confirm your conditional operator along with your comparison value. For this example, the comparison value will be on the word 'PAGE':



Once complete, select *OK*.

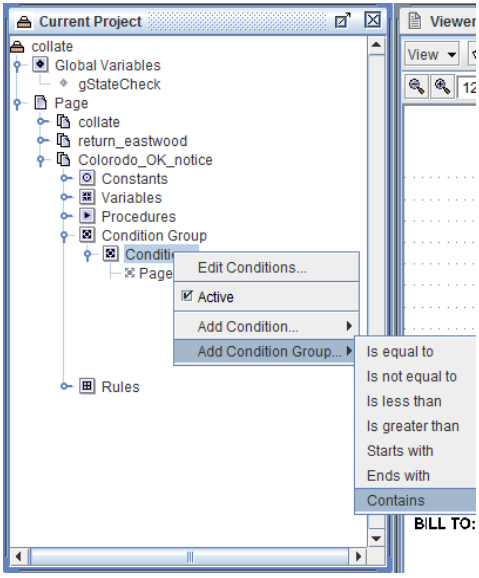
4. Your new condition will now appear under *Condition* > *Condition Group*:



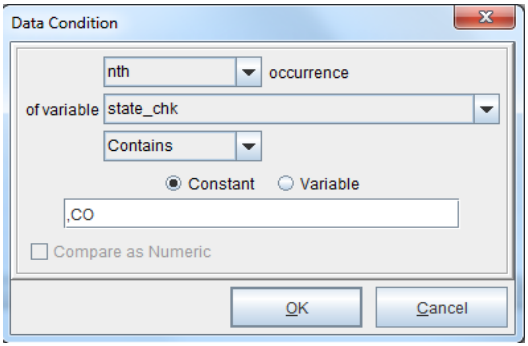
Next, add the second conditional check (*State_Chk*). Since the second conditional check has multiple options (Colorado OR Oklahoma) the condition becomes an 'AND Condition Group'.

To create an 'AND Condition Group' containing OR conditions:

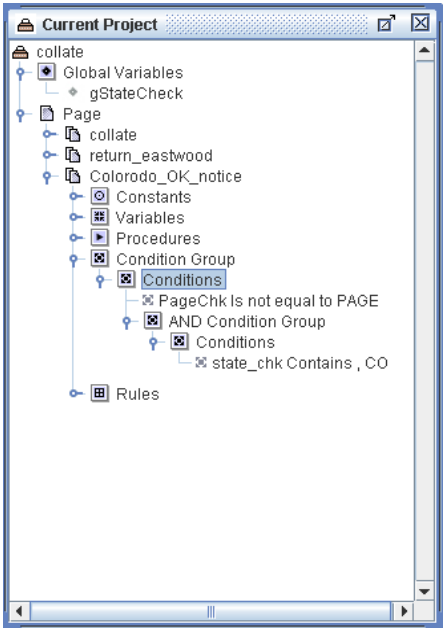
1. Right click *Condition* and select *Add Condition Group*. Select a conditional type, for example *Contains*:



2. The Data Condition dialog box displays. Select the variable you would like the condition to be based on (*State_Chk*) and then confirm your conditional operator along with your comparison value. For this example, the comparison will be on the state of Colorado (*CO*):

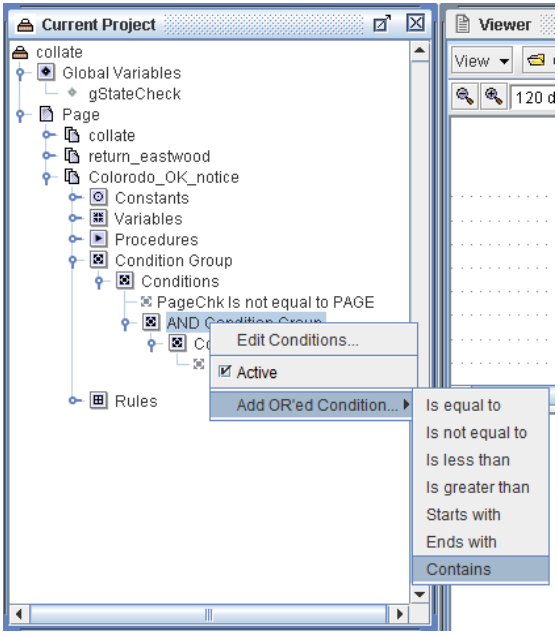


3. Your new condition will now appear under *AND Condition Group*, as show below:

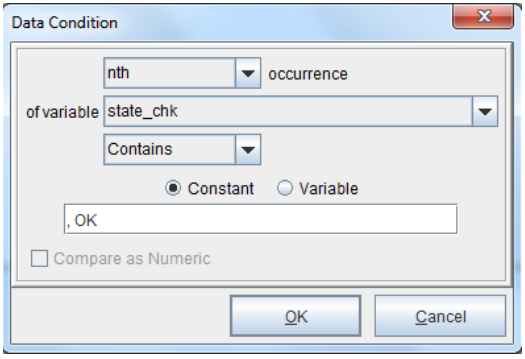


4. The next step is to create the second conditional check, causing the AND Condition Group to contain an OR option since we are looking for multiple comparisons (Colorado *OR* Oklahoma).

5. Right click '*AND Condition Group*' and select *Add OR'ed Condition*. Select a conditional type, for example *Contains*:

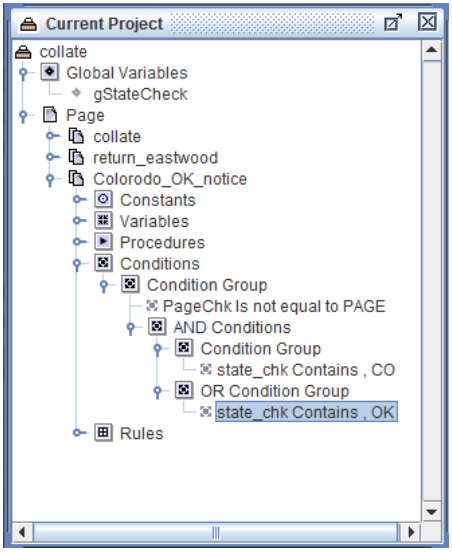


6. The Data Condition dialog box displays. Select the variable you would like the condition to be based on (*State_Chk*) and then confirm your conditional operator along with your comparison value. For this example, the comparison will be on the state of Oklahoma (*OK*):



Once complete, select *OK*.

7. An *OR* condition will then appear with your '*AND Condition Group*', as shown below:



Once complete you now have a conditional group.

Chapter 6

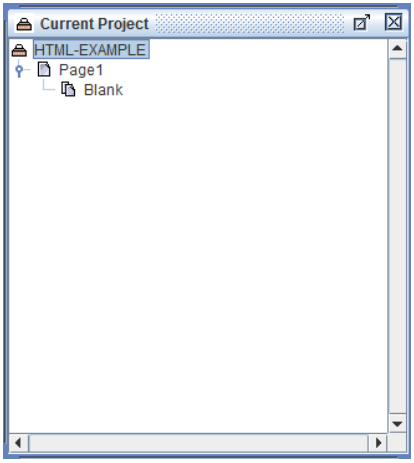
Dynamic Forms

Overview

Dynamic form overlays allow you to create forms that move with your data or can be used in conjunction with creating HTML output. For example, take a standard text or xml file output and turn it into a custom order confirmation to be emailed to a client. The customized dynamic forms for HTML output can be customized with urls, links, pictures, and tables (see *Example 1*). Dynamic forms can also be used to create free flowing forms (see *Example 2*).

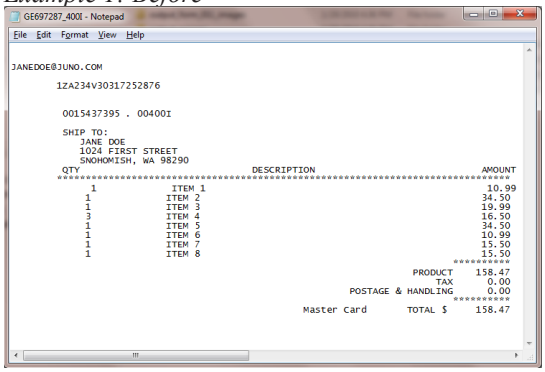
Implementing a Dynamic Form

1. Create a new project that includes a page and blank form using the default settings:

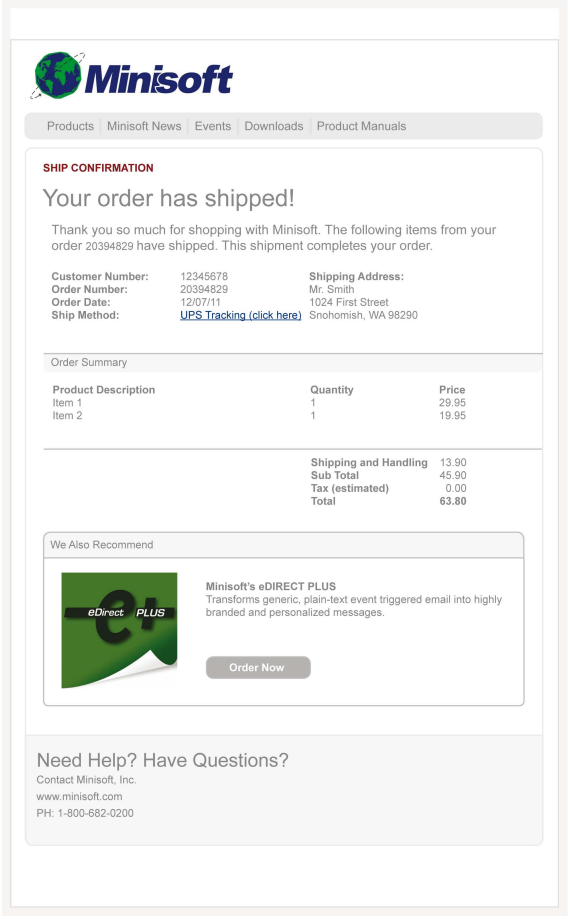


***NOTE*:** Since we will be creating variables and rules to reposition the data dynamically, when the Form Properties appears, select *Exclude Data* from the General tab.

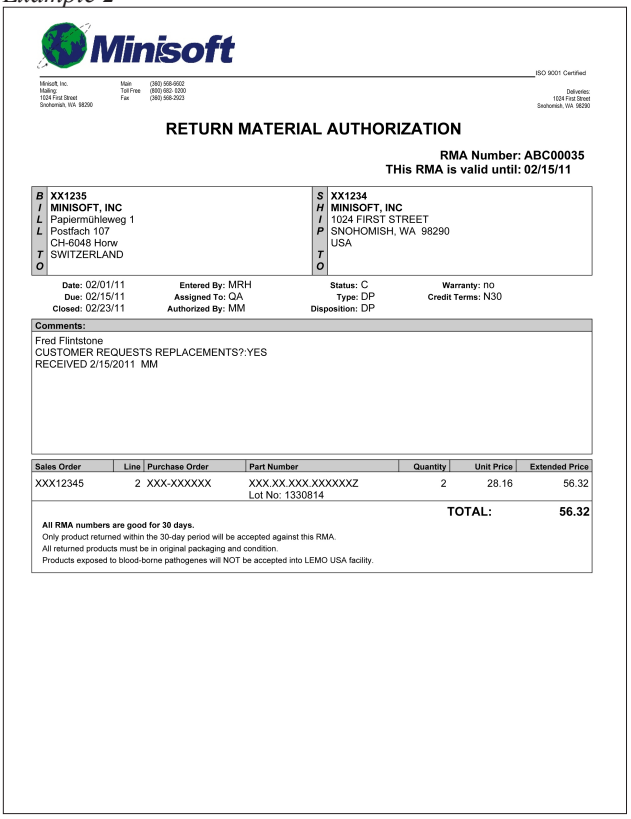
Example 1: Before



Example 1: After



Example 2



Minisoft

ISO 9001 Certified

Minisoft, Inc.
Mailing:
1024 First Street
Snohomish, WA 98290

Main (360) 568-9002
Toll Free (800) 663- 0200
Fax (360) 568-2003

Deliveries:
1024 First Street
Snohomish, WA 98290

RETURN MATERIAL AUTHORIZATION

RMA Number: ABC00035
THis RMA is valid until: 02/15/11

BILL TO	SHIP TO
XX1235 **MINISOFT, INC** Papiermühleweg 1 Postfach 107 CH-6048 Horw SWITZERLAND	**XX1234** **MINISOFT, INC** 1024 FIRST STREET SNOHOMISH, WA 98290 USA

Date: 02/01/11 **Entered By:** MRH **Status:** C **Warranty:** no
Due: 02/15/11 **Assigned To:** QA **Type:** DP **Credit Terms:** N30
Closed: 02/23/11 **Authorized By:** MM **Disposition:** DP

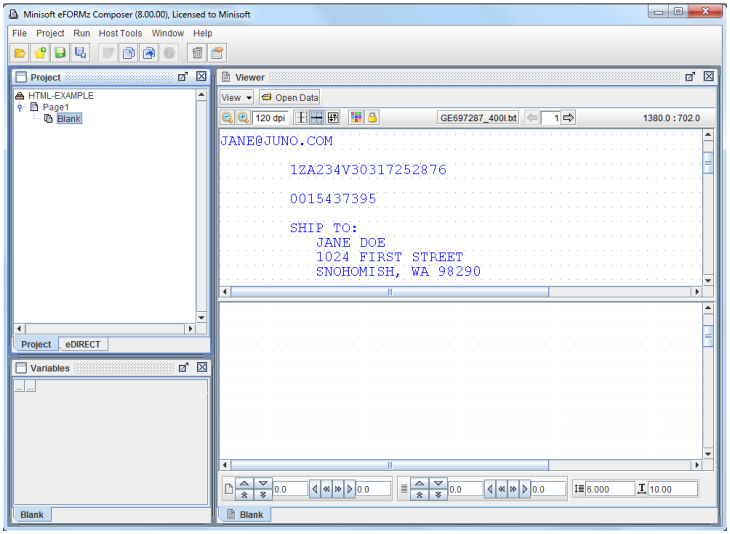
Comments:

Fred Flintstone
CUSTOMER REQUESTS REPLACEMENTS?:YES
RECEIVED 2/15/2011 MM

Sales Order	Line	Purchase Order	Part Number	Quantity	Unit Price	Extended Price
XXX12345	2	XXX-XXXXXX	XXX.XX.XXX.XXXXXXZ Lot No: 1330814	2	28.16	56.32
					TOTAL:	**56.32**

All RMA numbers are good for 30 days.
Only product returned within the 30-day period will be accepted against this RMA.
All returned products must be in original packaging and condition.
Products exposed to blood-borne pathogenes will NOT be accepted into LEMO USA facility.

2. Open the data file you would like to use to create your dynamic form. The data will appear in the Data Viewer:



3. Assign the necessary variables you would like to add to your dynamic form.

> ***NOTE*:** For specific instructions concerning configuring a dynamic form for *QAD* and *RedPrairie Direct Commerce* users, see our advanced resource documents using the following link:
> http://www.minisoft.com/pages/general/manuals/manuals.html

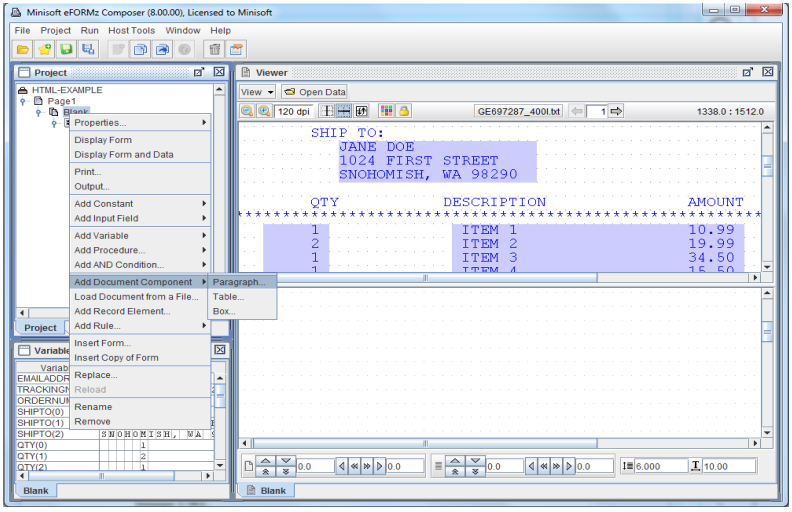
Dynamic Document Template

To implement a dynamic document, a dynamic component must be added to a form. A dynamic component includes:

- paragraph
- table
- and box

To include a dynamic component:

1. Right click your form and select *Add Document Component* > *Paragraph, Table,* or *Box*:



***NOTE*:** For specific instructions concerning configuring a dynamic form, see the advanced eFORMz document, *eFORMz Mini-Manual* > *Document Template*:
http://www.minisoft.com/pages/general/manuals/manuals.html

Chapter 7

Host Project Transfer

iSeries/AS400

When you are ready to transfer a project to your host:

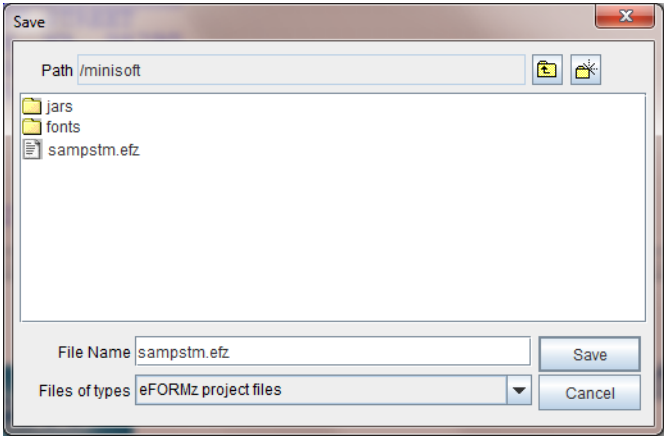
1. Open the project file from within the eFORMz Composer.

   From the main task bar select *File* > *Open Project*. The *Open* dialog box will appear. Select the project file you would like to upload to your host system.

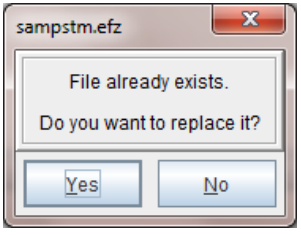
2. From the *Host Tools* menu select *AS400* > *Save Project.* The *Save* dialog box will display.

***NOTE*:** If you are not already logged in, an AS400 login dialog box will appear.

Select the directory you would like to save your project to (*default directory: minisoft*) and then click *Save*.



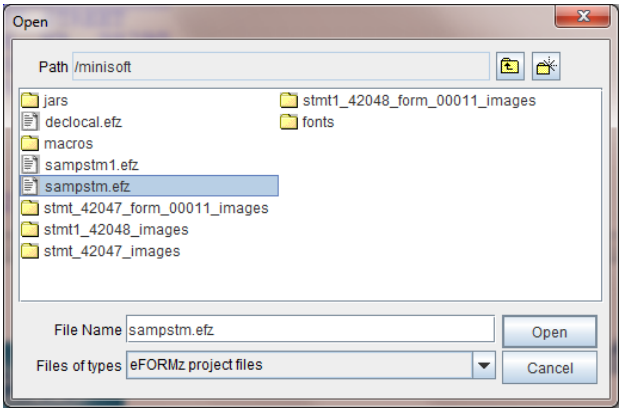
Your eFORMz project file will be uploaded to the AS400 directory. If the file already exists a dialog box will appear asking you if you would like to overwrite the existing file. Click *Yes* for overwrite or *No* to cancel the process.



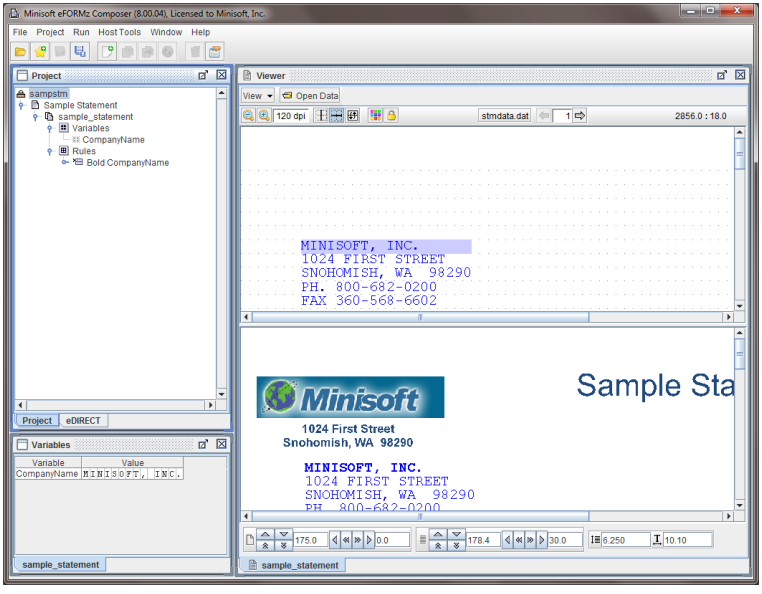
To open an existing project located on the AS400 host system:

1. From the eFORMz Composer main menu select *Host Tools* > *AS400* > *Open Project*.
2. The *Open* dialog box will display. Select the project file you would like to open from one of the AS400 directories. The *Open* dialog box defaults to the Minisoft directory.

   Once your project file has been selected click *Open*.



3. An open *Data File* dialog box will display. If you have an existing data file on your PC select the data file from its directory, otherwise, click *Cancel*.
4. Your project file will display in the eFORMz Composer.



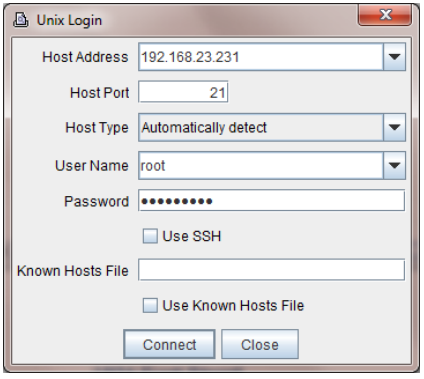
HPe3000

Due to the limitations of JAVA on the HPe3000 we are recommending to our HPe3000 users to perform the eFORMz/eDIRECT process on a Windows, Linux, Unix, or Solaris platform.

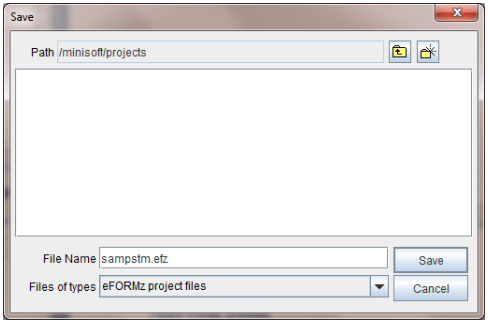
UNIX

To save a project file to your Unix host system:

1. From the eFORMz Composer open the project you would like to upload to the Unix host machine *(File > Open Project)*.
2. Once the project file has been opened, select *Host Tools > Unix > Save Project*.
3. The *Unix Login* dialog box displays. Enter your *Host IP Address*, *user name*, and *password* and then click *Connect*.



4. The Save dialog box will display. Enter the name you would like the project to have on the Unix system in the *File Name* field. By default the project path is the *minisoft* directory under *root*. Click *Save*.



5. Once the save has completed you will returned to the eFORMz Composer.

***NOTE*:** After the transfer of the project file to the host system, a change to the attributes of the project file must take place. From your host machine:

1. Logon as Administrator (root).
2. Change the directory to *minisoft*.
3. From the *minisoft* directory change the attributes of the project file:
   chmod 755 {project name}.efz

Note, you will also need to do the above attribute change once you have created the command file.

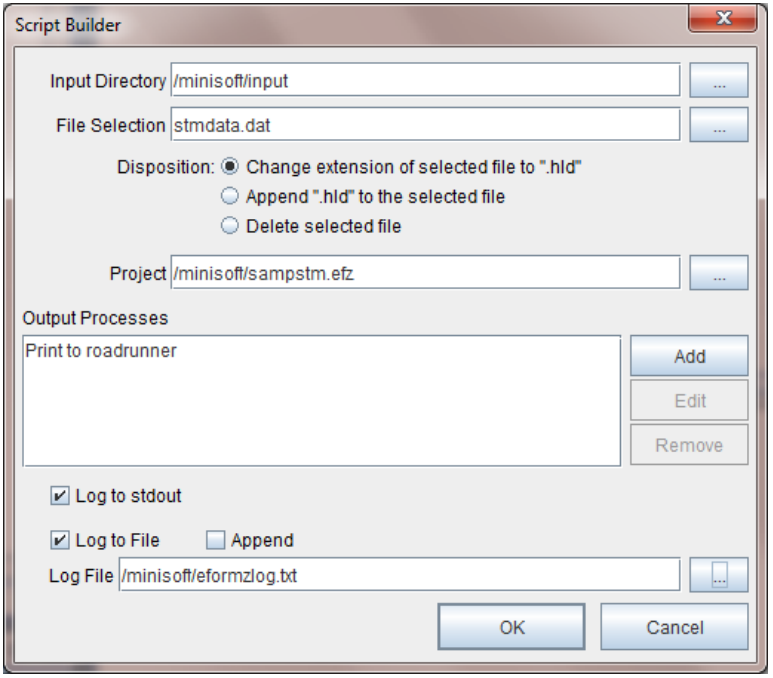
***TIP*:** A project file can also be opened from the Unix system:

1. From the eFORMz Composer select *Host Tools* > *Unix* > *Open Project*. Login using your *username* and *password* and click *Connect*.
2. Select the directory where your project file is located and select the project file you would like to open.
3. Click *Open.* Your project file appears in the eFORMz Composer. Make the necessary changes and then select *Host Tools* > *Unix* > *Save Project* to save your project file back to the Unix system.

If you are planning on implementing the merge process via a command process use the following instructions to create a project script file. If you are running the Unix Toolkit and implementing an automated job process, see *Chapter 9: Print Automation > Unix Toolkit* for implementing the automated job process in which a script file is not needed.

To create the script (.cmd) file:

1. From the eFORMz Composer main menu select *Host Tools > Unix > Save Project Script*.
2. The *Script Builder* dialog box will display:



Input Directory
Using the browse button select the directory your data files will reside in to be merged with an eFORMz project file.

File Selection
Using the browse button select the data file name. Use asterisks (*) for multi data file selections (i.e. sampstm*.dat or *stm.dat).

Disposition
If you would like the print file to remain in the input directory after a merge has taken place, select *Change extension of selection file to ".hld".*

If you would like the print file to maintain its original extension select *Append ".hld" to the selected file.* This will cause the *.hld* to append to the end of the original extension.

If you would like to delete the print file from the input directory after a merge has taken place, select *Delete selected file.*

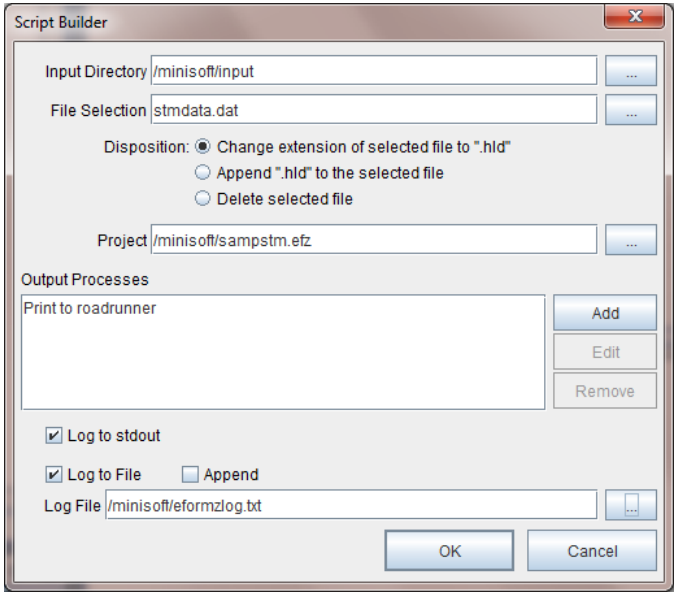
Project
Using the browse button select the project file you would like the data files to be merged with. Default project directory is */minisoft* under root.

Output Process
Output process types include *print*, *file output*, and *eDIRECT*.

Print - Allows you to select the printer you would like to print your merged output to.

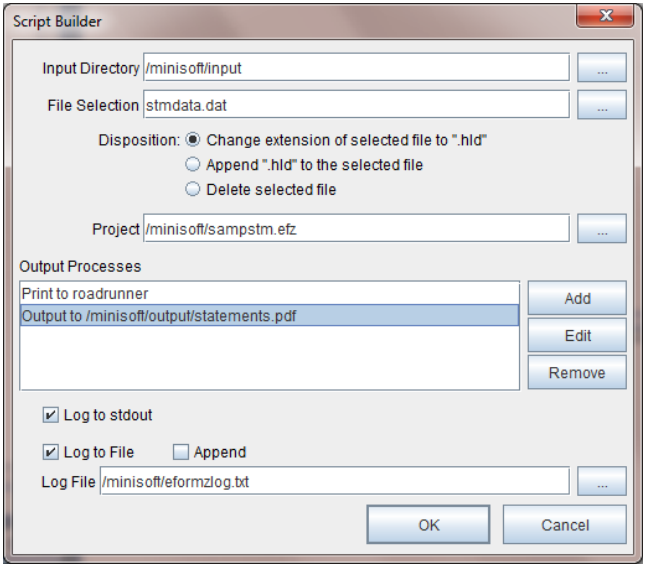
File Output - Allows you to output your merged file to PDF, PCL, PRN, XML, or another . Using the browse button select the directory you would like your output to reside in.

eDIRECT - Allows you to specify an eDIRECT process.



Note: Multiple processes can be added to the Output Processes.

3. Once your output types have been defined they will appear in the Output Process field. Use the *Add*, *Edit*, or *Remove* buttons if necessary.



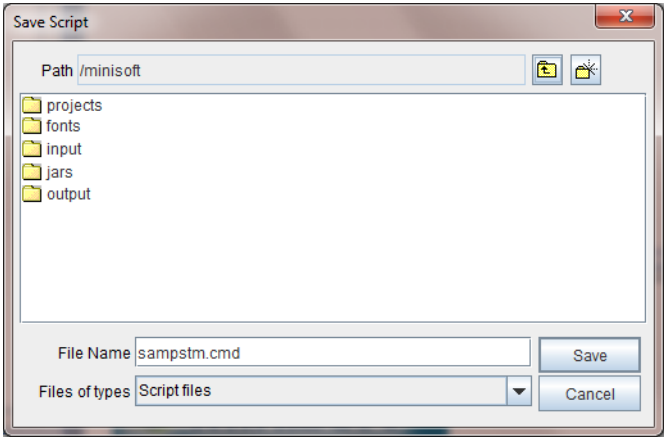
4. Select the logging format.

   Log to stdout - Logs to your display output.

   Log to File - Logs all processes to a log file as defined in the *Log File* field. To set the log file name and location on the Unix system select the browse icon.

5. Once complete, click *OK*.

6. The *Save Script* dialog box displays. Enter a command file name (.cmd) and click *Save*.



***NOTE*:** After the transfer of the command file to the host system, a change to the attributes of the command file must take place. From your host machine:

1. Logon as Administrator (root).
2. Change the directory to *minisoft*.
3. From the *minisoft* directory change the attributes of the project file:
   chmod 755 {command file name}.cmd

***TIP*:** You can also edit an existing script file from a Unix system by selecting *Host Tools* > *Unix* > *Edit Project Script*. Login to your host system and select the script file you would like to edit from the specified directory. The script file will display in the *Script Builder*. Make the necessary changes and then click *Save*.

Script Command Options

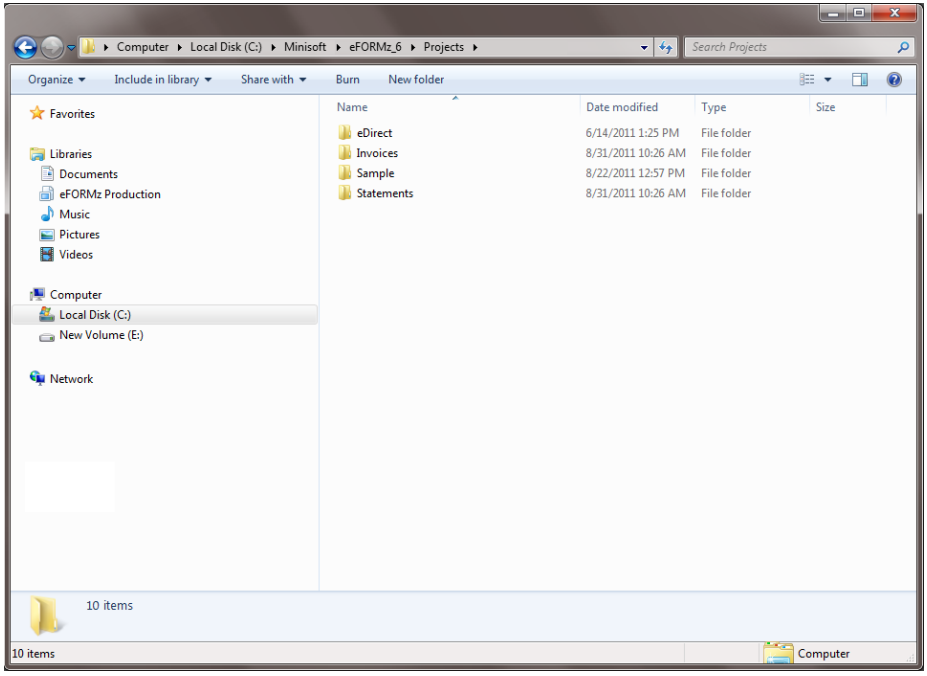
Script Command	Example
-a <filename>	Append to logfile. Example: -a “eformzlog.txt”
-c <directory><filemask> <copy to directory>	Copy files after output. Example: -c ”/minisoft/input/*.hld /minisoft/backup”
-d <directory>	Specify input directory. Example: -d ”/minisoft/salesorders”
-e <basedirectory>	Process with eDIRECT. The base directory will be the directory the eDIRECT output will be sent to. Example: -e ”/minisoft/invoice/output”
-f <filemask[:disposition>]	Specify file selection and optionally disposition. Optional dispositions include: rename and delete Example: -f ”inv.data:rename”
-help	-help
-l <filename>	Log to file. Example: -l ”eformzlog.txt”
-n <directory><filemask> <destination printer>	Print files after output. Example: -n “/minisoft/output/*.prn roadrunner”
-o <filename>	Output to file. Output file extension options include: .pdf, .prn, .pcl, .xml. Example: -o ”inv.pdf”
-p <project>	Specify project file. Example: -p ”sampinv.efz”
-r <directory><filemask>	Delete files after output. Example: -r ”/minisoft/input/*.hld”
-t <printer> or -tc <color printer>	Printer name. Example: -t ”LJ5si” or -tc “LJ3800DN”
-u <basefilename>	Output to file with unique names. Output file extension options include: .pdf, .prn, .pcl, .xml. Example: -u ”inv_.pdf”
-v	Logs to Stdout.
-x <command>	Execute external command after output. Command options: mv - move command Example: -x ”mv /minisoft/input/*.hld /minisoft/backup”

Windows

Transfer your eFORMz project files to a directory on your Windows Server running the eFORMz merge process. When eFORMz was installed on your Windows Server a *Projects* folder was created in the following directory:

C:\Minisoft\eFORMz_6\

Multiple directories can be added to the *Projects* folder for organizing your eFORMz project files, for example:



Chapter 8

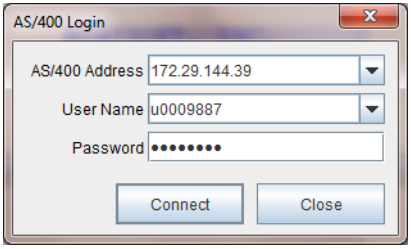
Print Automation eFORMz Toolkits

iSeries/AS400 Toolkit

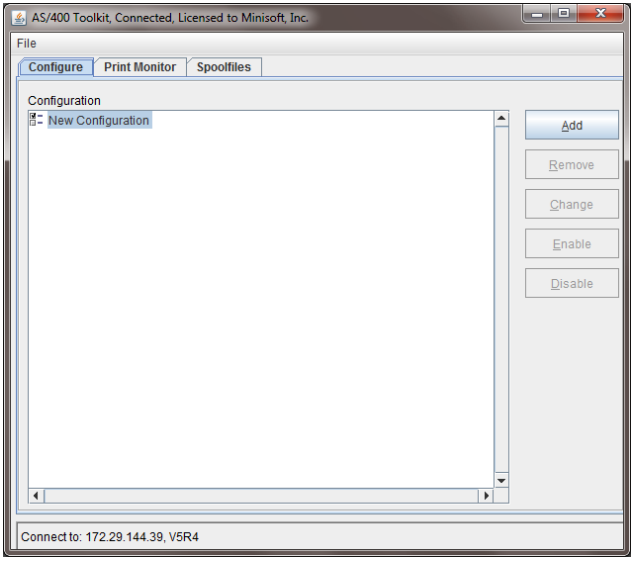
The AS400 Toolkit provides a GUI interface allowing you to configure your eFORMz job process on your host system from your PC. It also allows you to access print queues, send/receive spoolfiles, and start/shutdown the eFORMz Print Monitor.

To start the AS400 Toolkit:

1. From the eFORMz Composer main menu select *Host Tools* > *AS400* > *Toolkit*.
2. The AS400 Login dialog box will display. Enter your *AS400 IP address*, *user name*, and *password*. Once complete click *Connect*.



3. The AS400 Toolkit displays:



The *Configure* tab allows you to configure the eFORMz merge process defining the queues to pull print files from, projects to be merged with the print files, and how the merge process will be outputted.

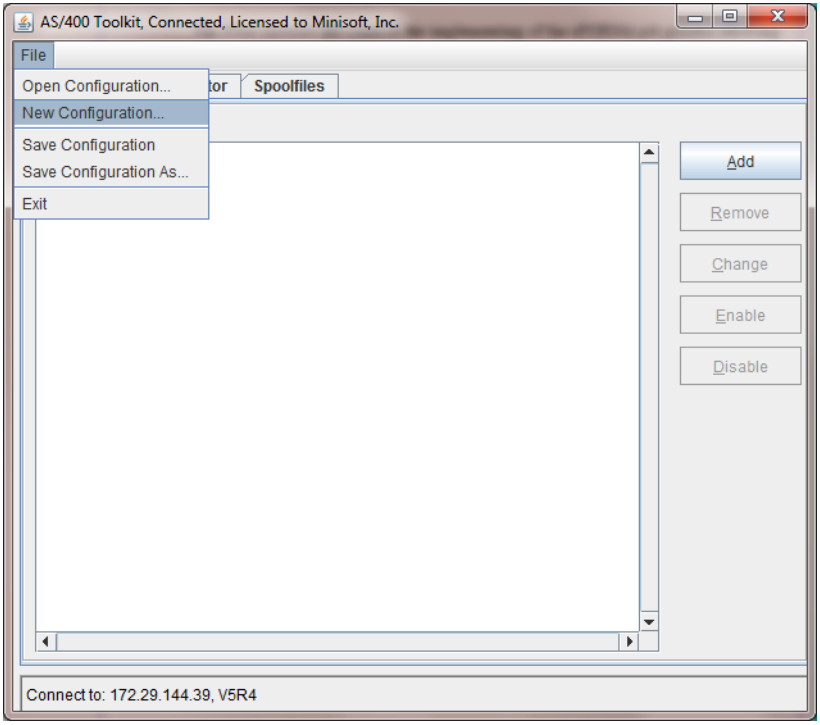
The *Print Monitor* tab controls the implementing of the eFORMz job process allowing you to submit and shutdown each job process.

The *Spoolfiles* tab allows you to send and receive print files from your AS400. It also allows you to delete, view, and toggle the status of a selected print file on the AS400.

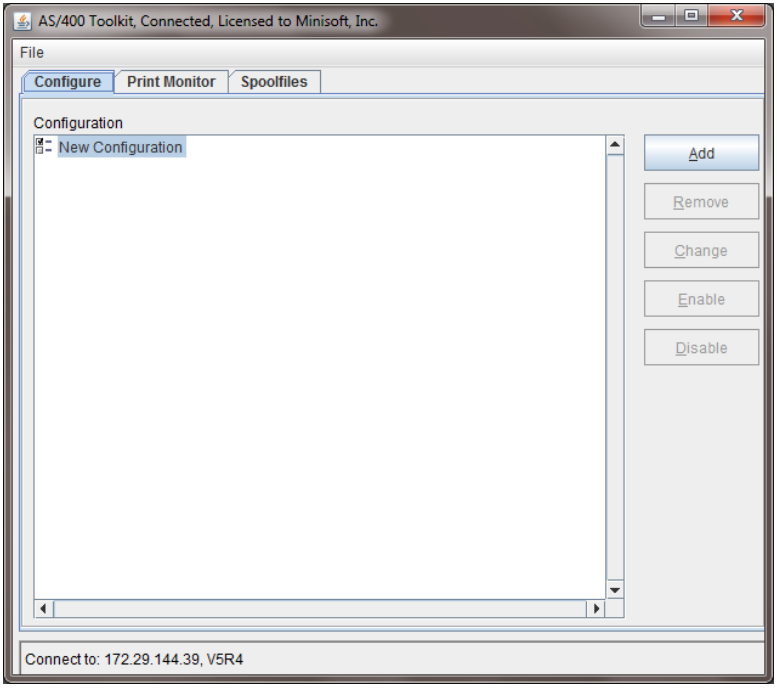
AS400 Configuration File

To configure a job process on your AS400 a configuration file must first be created:

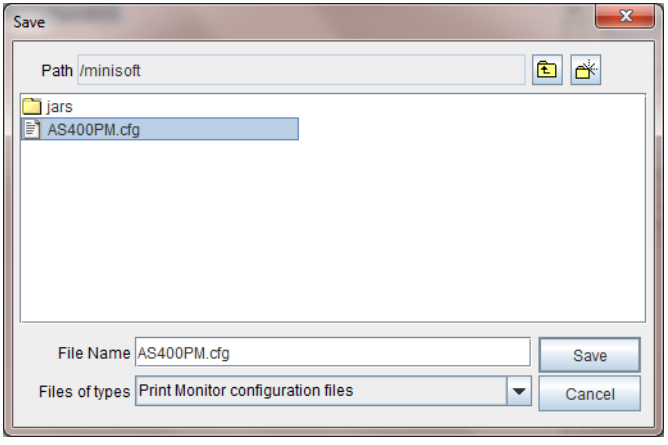
1. From the Toolkit *File* menu select *New Configuration*.



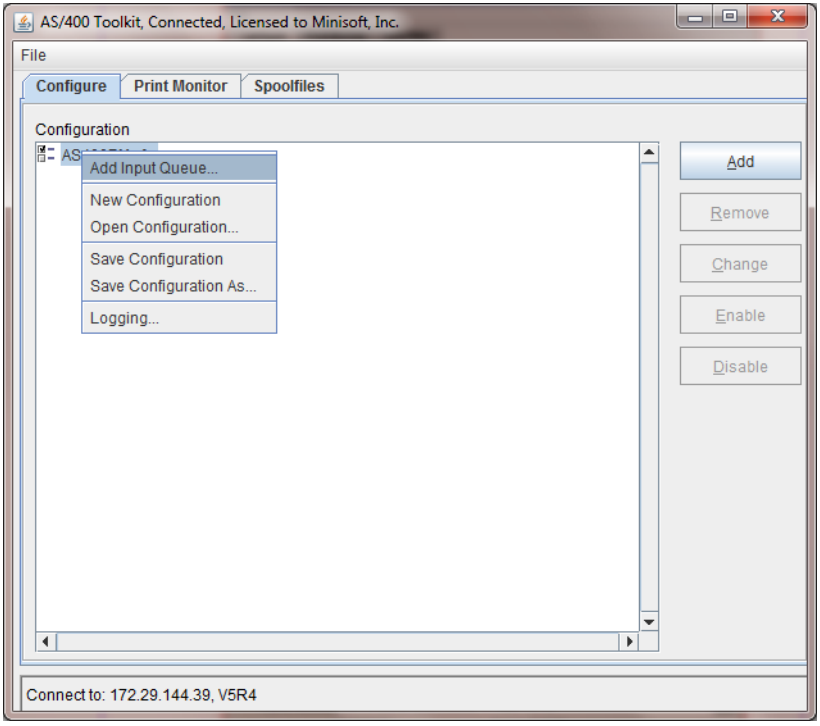
2. A configuration folder displays in the *Configure* tab. *Right click* the *New Configuration* folder and select *Save Configuration*.



3. The *Save* dialog box will display. From the *File Name* field enter a new configuration file name and click *Save*.



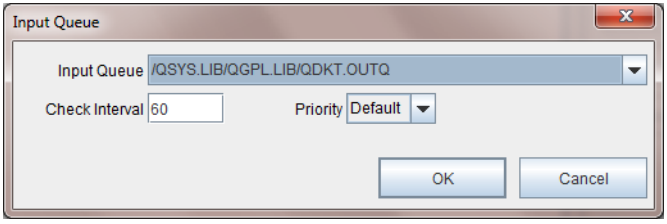
4. The new configuration file name displays in the *Configure* tab. Using your mouse *right click* the configuration file name and select *Add Input Queue*.



5. The *Input Queue* dialog box displays. From the *Input Queue* dropdown option select the queue your source spoolfiles are residing in to be merged with an eFORMz project file.

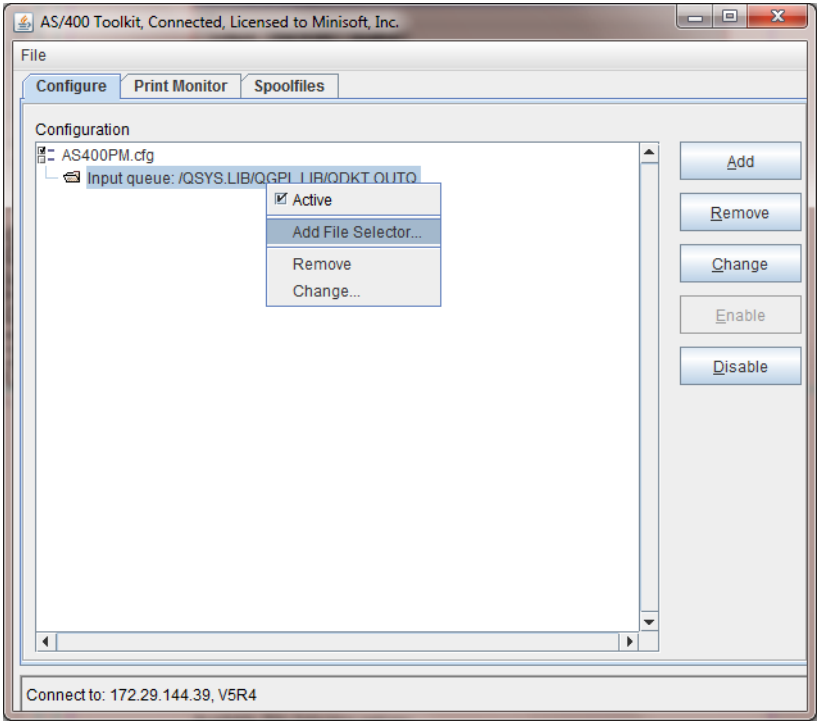
   Check Interval represents the number of seconds between scans for new spoolfiles in the input queue directory. Default is 60 seconds.

   Priority sets the priority setting for the individual input queues. Each input queue executes a queue monitor in a separate thread. Control the execution priority of each thread individually based on the priority. The higher the priority (1-10), the more execution time is given to a thread in relation to other threads and processes.

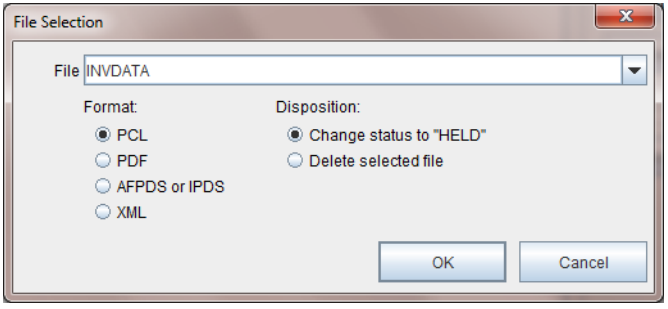


   Once complete, click *OK*.

6. The Input Queue directory now displays in your *Configure* tab. *Right mouse click* the *Input Queue* directory and select *Add File Selector*.



7. The *File Selection* dialog box displays. Select the source spoolfile name from the *File* dropdown field and click *OK*:

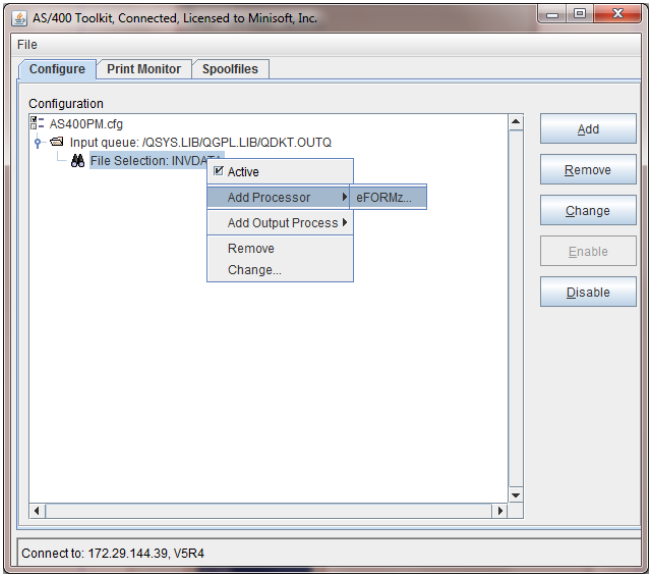


Available *File Selection* options:

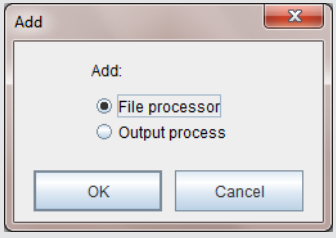
*Rename selected file to *.hld* allows you to keep the original spoolfile after a merge is complete. eFORMz will not look at the file again until the status is changed from hold.

Delete selected file deletes the selected file after a merge process has taken place.

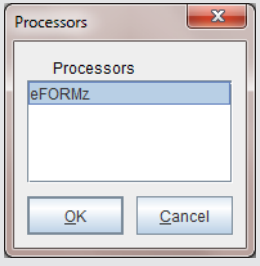
8. The *File Selection* option will display in the *Configure* tab. *Right click* the File Selection option and select *Add Processor* > *eFORMz*.



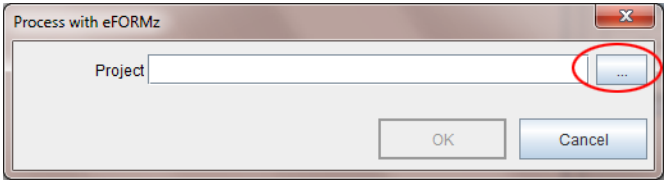
TIP: If you have selected *Add* from the side panel you will receive the following dialog box, select *File processor* and click *OK*.:



From the *Processors* dialog box select *eFORMz* and click *OK*:

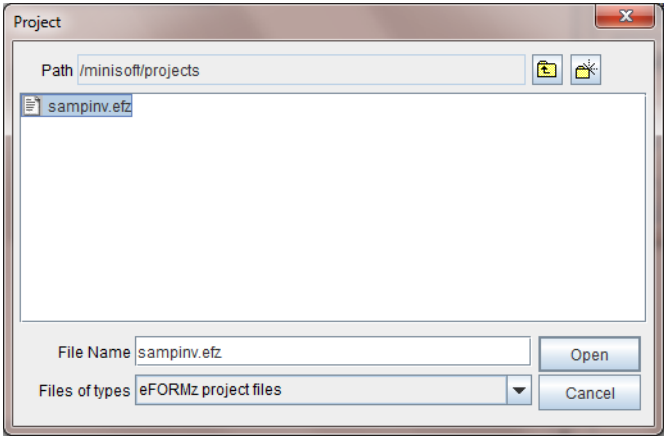


9. The *Process with eFORMz* dialog box displays. Select the browse button to browse for the selected project file on the AS400 that will merge with the selected print files:

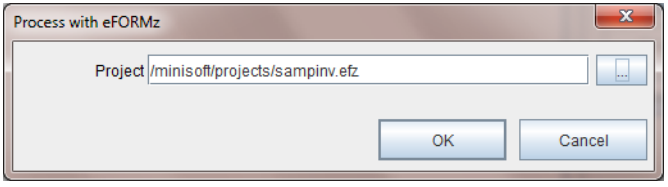


10. From the *Project* dialog box select the project file to be merged with the source print file. The default project directory is Minisoft.

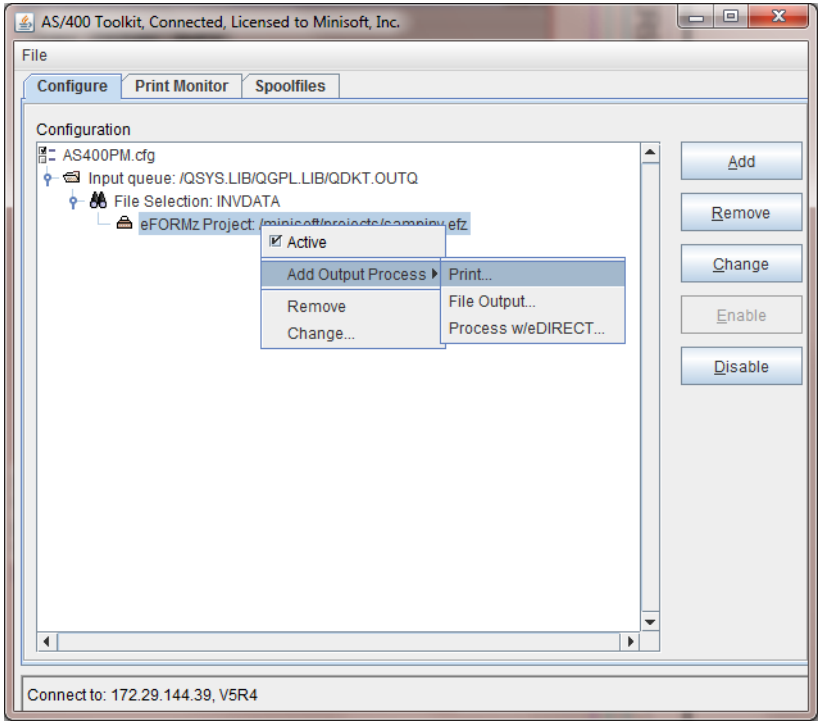
    To navigate to an alternative directory use the directory back button. Once a project file has been selected click *Open*.



11. The project path and name will display in the Project field, click *OK*.



12. Add an output process. *Right click* the project file name and select *Add Output Process > Print*.



Multi-Processing

The AS400 Toolkit allows multiple processes of a single statement, for example, a print file may need to be merged with two different project files or a merged file needs to be printed to two different printers at the same time. Instead of creating separate entries, a simple addition can be made to a single statement to allow multiple processes.

To output a single process to multiple destinations, such as:

- printers
- file output types
- and eDIRECT

Select the *eFORMz Project File* field from the AS400 Toolkit, *right click*, and select *Add Output Process.*

Print...
When selected, implements the *Print Queue* dialog box. Select a new queue to send your merged output to. Having multiple output queues allows for multiple job process.

File Output...
When selected, implements the *Output to a File* dialog box. Use the browser icon to locate the directory on your AS400 that you would like the output to be sent to. Available output types include *pdf*, *pcl*, *prn*, *efd*, and *xml*.

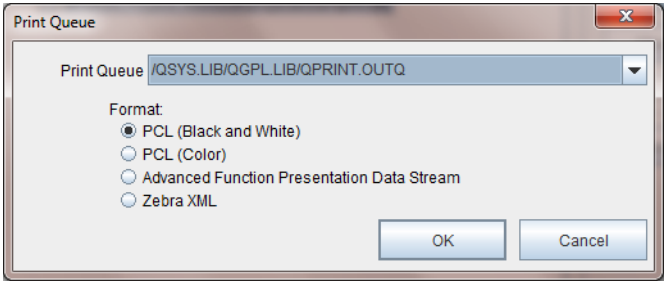
Process w/eDIRECT
When selected, implements the *Process w/eDIRECT* dialog box. From the *Base Directory* field use the browser button to locate the directory you would like the output from eDIRECT to be stored.

If needed, a *Post Processing Command* field is available.

To process your print files with multiple project files create a second processor by selecting the *File Selection* field, *right clicking*, and selecting *Add Processor* > *eFORMz*. Using the browser button select a new project file. Once this file has been referenced it will appear in the *Configure* tab.

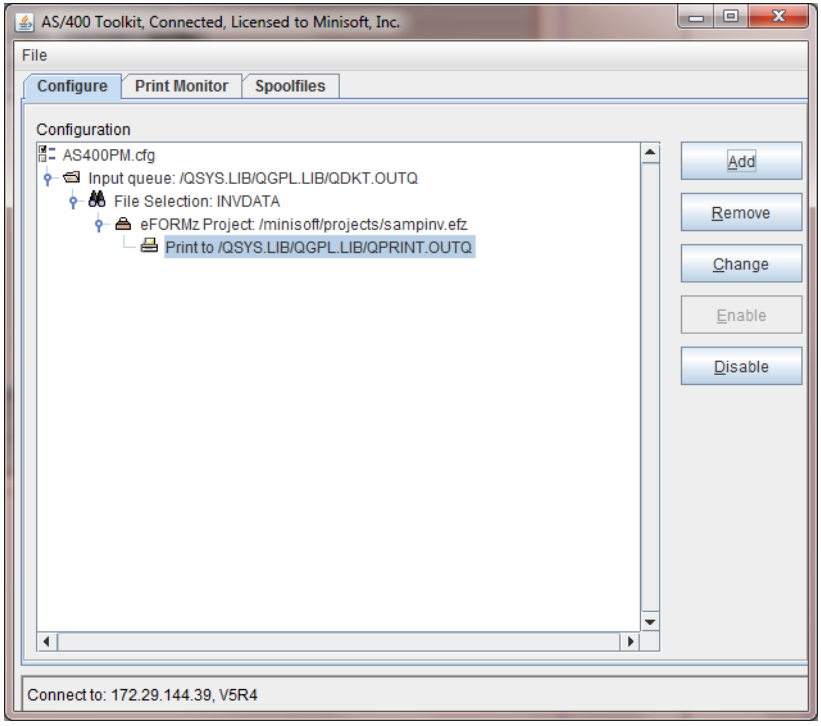
13. The *Print Queue* dialog box displays. Select the output queue (Print Queue) you would like your merged output file to reside in.

    If you wish the merged output file to be printed automatically select an output queue with an attached printer.



    Click *OK*.

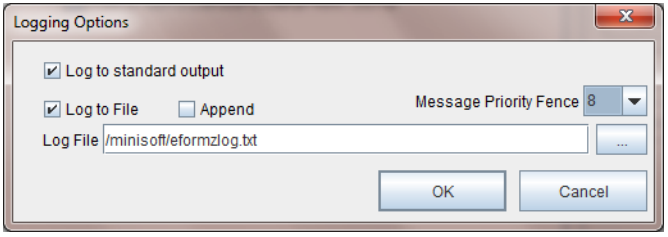
14. Once complete with your configuration file setup, select *Save Configuration* from the *File* menu.



Logging the AS400 Job Processes

To log the activity of the AS400 efzPM job process edit your configuration file and make the following changes:

1. From the *Configure* tab select the configuration file name (*as400pm.cfg*), *right click*, and select *Logging*.
2. The *Logging Options* dialog box displays:



3. Select the following options:
   - *Log to standard output* logs to a queue print file.
   - *Log to File* logs activity to the file specified in the *Log File* field. To select the location and name of the file select the browse button (...). The *Log to File* dialog box displays. Enter a file name (*eformzlog.txt*) and click *Open*.

     Note: The */minisoft* directory is the default directory for the log file.
   - *Append* will append new logging information to an existing log file, otherwise, the log file will be cleared when the job process is restarted.
   - *Message Priority Fence* allows you to filter which messages are displayed or written to in the log file. Options available:

     0-3 - Informative messages
     4-7 - Unused
     8-11 - Status messages (i.e.: pages output, etc...)
     12-15 - Error and other high priority messages
4. Once complete, click *OK*.

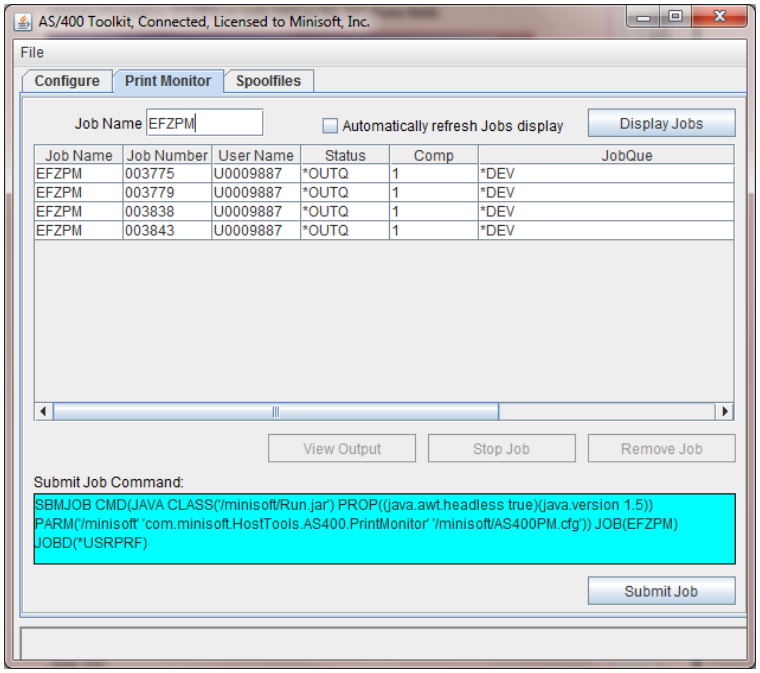
To view the activity of an active log file on your AS400, simply enter the following command at an AS400 command line:

DSPF '/minisoft/eformzlog.txt'

/minisoft being the directory the log file is saved in.

AS400 Print Monitor

The AS400 Print Monitor allows the user to monitor the eFORMz job process. The default job name is EFZPM as indicated in the *Job Name* field.



Display Jobs
Displays the currently running jobs on your AS400. To view all job processes running on the AS400 enter **all* in the *Job Name* field, otherwise, enter the specific job name you would like to view.

Automatically refresh Job display
Automatically refreshes the display so the most current changes are viewable.

View Output
Permits viewing of the monitor log from a job in the *OUTQ* status.

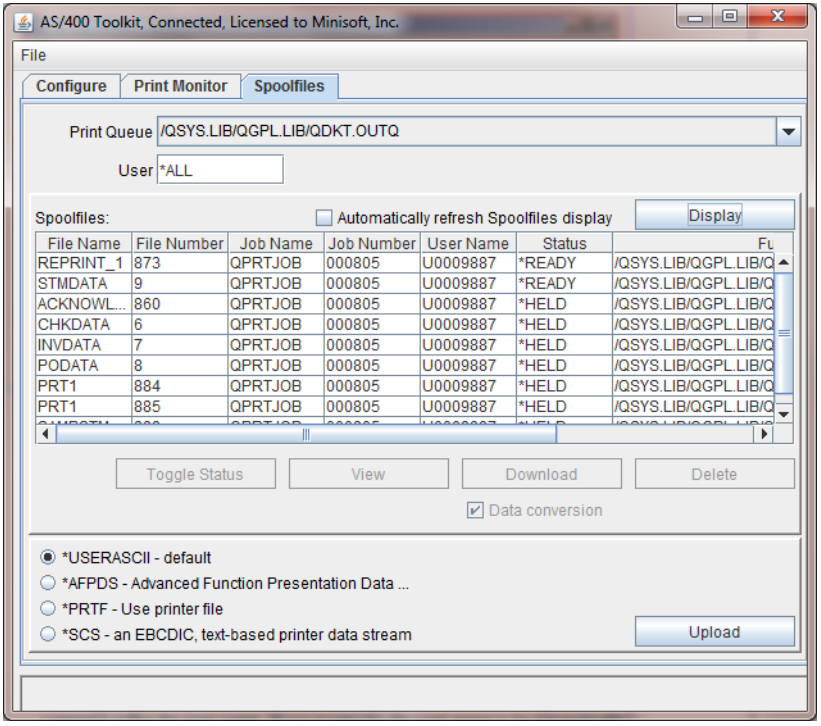
Stop Job
Stops the selected job from the table above.

Remove Job
Removes the selected job reference from the table above.

Submit Job
Submits the EFZPM job. The job command is displayed in the Submit Job Command box and can be edited if needed for custom job processing.

AS400 Spoolfiles

The AS400 Spoolfiles tab allows you to monitor spoolfiles on your AS400.



Print Queue

Allows you to view the available spoolfiles within a print queue on the AS400.

User

Allows you to view spoolfiles created by a specified user name. To see all spoolfiles within the selected queue enter **all* as the User.

Display

Once a print queue has been selected, use the Display button to view the spoolfiles contained within the print queue. If you would like the print queue to be automatically refreshed select *Automatically refresh Spoolfiles display*.

Once a spoolfile has been selected from the print queue listing the *toggle status*, *view*, *download*, and *delete* options become available.

Toggle Status

Allows you to change the status of a selected spoolfile from the display list. Spoolfiles can be changed from held to ready or ready to held.

View
Allows you to view a selected spoolfile from the display list.

Download
Downloads a selected spoolfile from your AS400 host system to your PC. By default the *Data Conversion* option is selected to download the spoolfile in ASCII PCL format. Uncheck this option if you wish to download the file in its existing format.

Delete
Deletes a selected spoolfile from the display listing.

To upload print files from your PC to the AS400 host system use the *Upload* button. Selecting *Upload* displays the Data File dialog box allowing you to select a file for upload.

When the *Open* button is selected from the Data File dialog box, the print file is placed in the print queue selected from the *Spoolfiles* tab. Options available when uploading a print file:

USERASCII - default
AFPDS - Advanced Function Presentation Data
PRTF - Use printer file
SCS - an EBCDIC, text-based printer data stream

AS400 Toolkit Quick Reference	
Logging Options	*Log to Standard Output* Logs activity to the QPRINT queue. *Log to File* Logs activity to a text file. Default file name eformzlog.txt. *Log File* Defines the location and name of the log file. *Append* Appends logging activity to the log file. When unchecked the log file will be overwritten each time the queue monitor is restarted. *Message Priority Fence* 0-3 - All informative messages 4-7 - Unused 8-11 - Status messages (i.e.: pages output, etc...) only 12-15 - Error and other high priority messages only
Input Queue Options	*Input Queue* The queue the AS400 Toolkit (queue monitor) will monitor for new print files. Asterisk (*) or question mark (?) can also be used as wild card entries in the source Input Directory. *Check Interval* Number of seconds the queue monitor will wait before checking the input queue for new print files. *Priority* Sets the priority setting for the individual input queues. Each input queue executes a queue monitor in a separate thread. Control the execution priority of each thread individually based on the priority. The higher the priority (1-10) the more execution time is given to a thread in relation to other threads and processes.
File Selection Options	*File Selection* Print file name selection field. Asterisk (*) or question mark (?) can also be used as wild card entries in the source print file name. For example: *stmdata, stm????, or ???data* *File Selection Statement* Allows for multiple file selection criteria. The delimiter between each file selection can be a space, comma, plus, or minus. If the delimiter is a space, comma, or plus the next file selection goes in an 'include' list. If the delimiter is a minus, the next file selection goes in an 'exclude' list. A data file must match one of the selections in the include list and not match any of the selections in the exclude list to be processed. *For example:* File select = PO* - PO1 - PO2 Files processed = All PO files, with the exception of PO1 and PO2 *Disposition* Renames the print file from the Input queue to "held" after the queue monitor has processed it. The queue monitor will not process a "held" file again.

	Delete selected file Deletes the print file from the Input Directory after the queue monitor has processed it.
Processor Options	*eFORMz* Merges a print file with an eFORMz Project file. *eFORMz Project Reference File (.efr)* Allows one to perform "table-formatted' lookups on project names based on the name of the print file. For example: efr text file: <ProjectReference> <Ref Datafile="P2310201_*" Project="/minisoft/projects/sampstm.efz" /> <Ref Datafile="P5310201_*" Project="/minisoft/projects/sampstm_d2.efz" /> </ProjectReference> Toolkit Project File reference: /minisoft/projects/projectable.efr
Output Process Options	*Print* Sends output to a networked printer. *File Output* PDF eFORMz Document Files PCL (B/W) PRN Files (B/W) PCL Files (Color) Postscript Files Zebra XML Files HTML Files Text Files AFPDS Files *eDIRECT* Email Fax Print
Output Variable File Name Options	Defines the output file name to match the variable defined. Variables include: <directory> , <datafilename>, <datafileext>, <project> Example: c:\outputdirectory\<datafilename>.pdf *Note*: The queue monitor variables can also be used by the Copy, Delete, and Print files post-processing commands.
File Output... Create Unique File Name	Creates a unique file output name every time a process is run. The unique file name must contain at least 3 characters. For example: invoice_{system date/time stamp}.pdf

Local Toolkit

Configuring the Local Toolkit

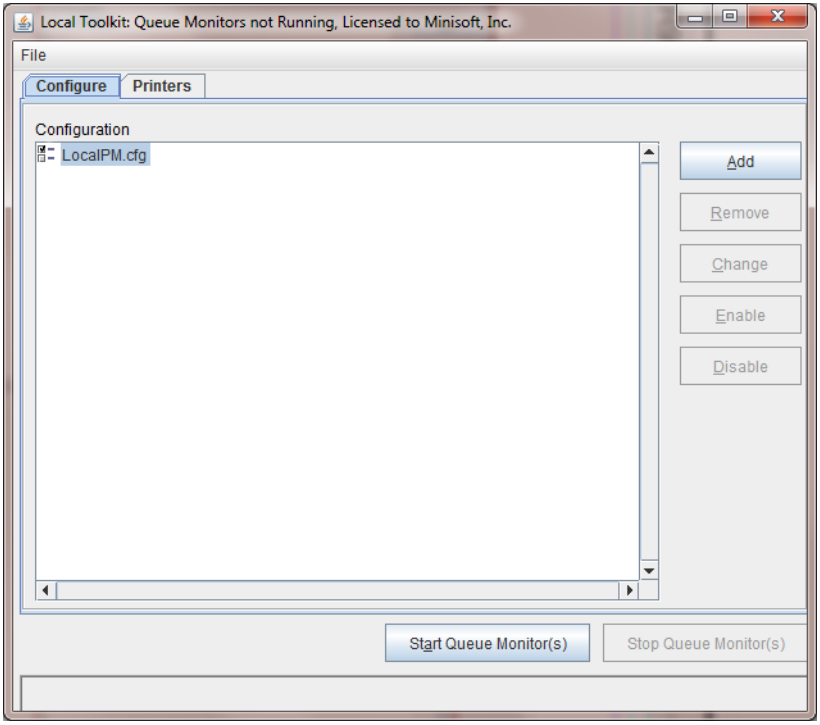
The Local Toolkit provides a GUI interface allowing you to configure an eFORMz Queue Monitor process on your Windows PC or Server.

To run the Local Toolkit:

1. Open the Local Toolkit by selecting:

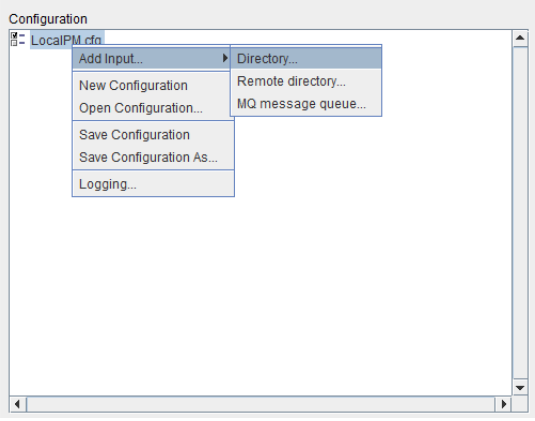
   Start > Programs > eFORMz 7 > Local Toolkit

2. The *Local Toolkit* dialog box will display:

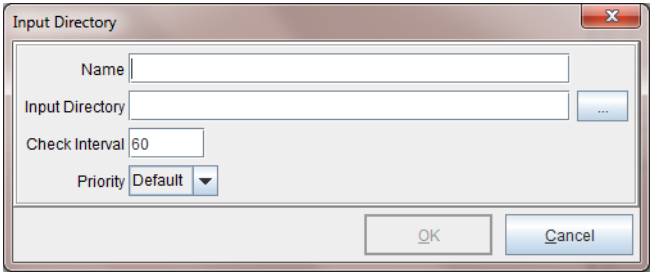


3. To configure the default configuration file (*LocalPM.cfg*) select the configuration file name from the *Configure* tab. Using your mouse, *right click,* and select *Add Input*.

   The *Input Directory* is the directory where your source print file will reside and be pulled to be merged with an eFORMz project.



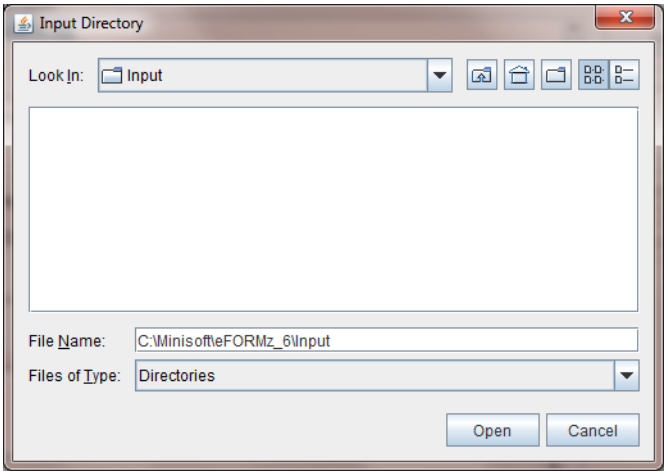
4. The *Input Directory* dialog box will display. To specify the input directory click the browse button (..):



5. The *Input Directory* dialog box displays. Using the *Look in* field navigate to the input directory where your print files reside.

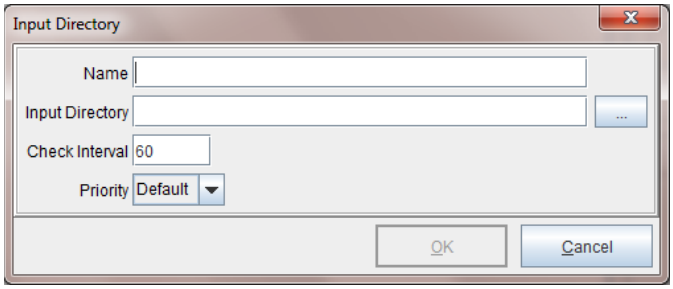
   Minisoft has provided the following default directory if you wish to use it:

   C:\Minisoft\eFORMz_6\Input



6. When you have the input directory located click *Open* to return to the Input Directory.

> ***TIP*:** If the Local Toolkit will be monitoring for files or sending files across the network and running as a Windows Service you must use UNC paths. For example:
>
> \\ServerName\minisoft\eFORMz_6\input\
>
> Asterisk (*) or question mark (?) can also be used as wild card entries in the source Input Directory.



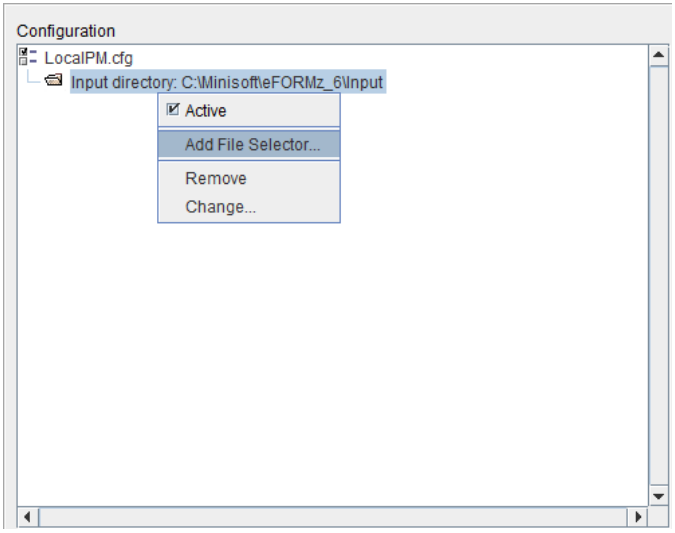
Name a descriptive title assigned to an input directory to better identify the selection location of print files to be processed by eFORMz.

Check Interval indicates the number of seconds the Queue Monitor will wait before checking the input directory for new print files.

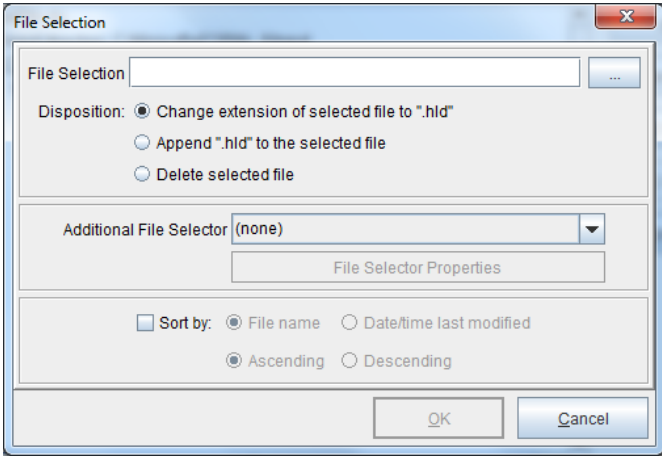
Priority sets the priority setting for the individual input directories. Each input queue executes a queue monitor in a separate thread. Control the execution priority of each thread individually based on the priority. The higher the priority (1-10) the more execution time is given to a thread in relation to other threads and processes.

Once complete, click *OK*.

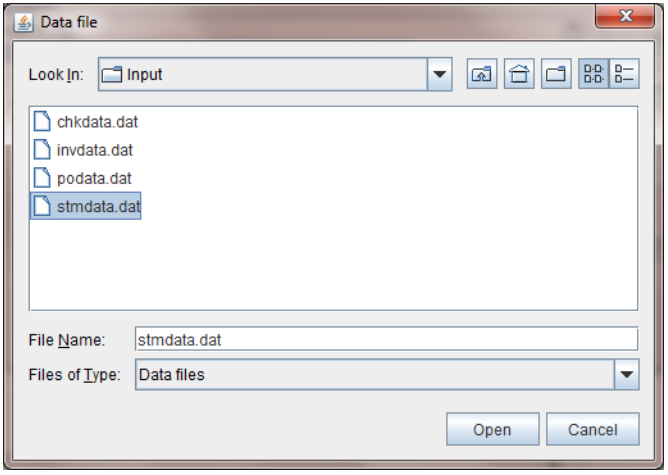
7. *Right click* the *Input Directory* field and select *Add File Selector*:



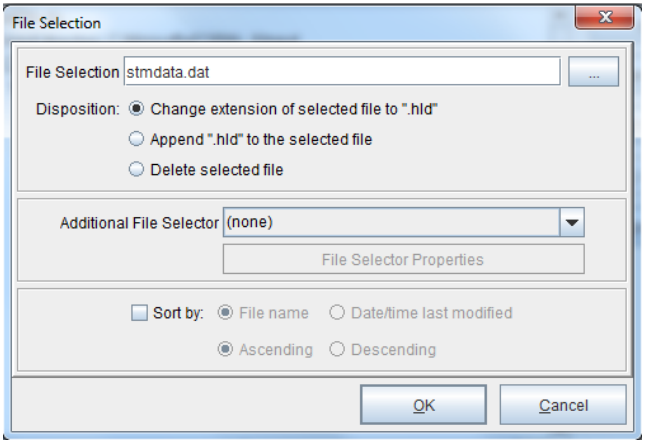
8. From the *File Selection* dialog box use the browse button to select a print file to be merged with an eFORMz project from the input directory:



9. From the input directory folder select the print file to be merged with an eFORMz project file and click *Open* from the *Data File* dialog box:



10. The *File Selection* field will now display with the specified print file to be merged with an eFORMz project. Select a disposition option and click *OK*.



File Disposition Options:

- If you would like the print file to remain in the input directory after a merge has taken place, select *Change extension of selection file to ".hld".*
- If you would like the print file to maintain its original extension select *Append ".hld" to the selected file.* This will cause the *.hld* to append to the end of the original extension.
- If you would like to delete the print file from the input directory after a merge has taken place, select *Delete selected file.*

***TIP*:** An asterisk (*) or question mark (?) can also be used as wild card entry in the source print file name. For example:

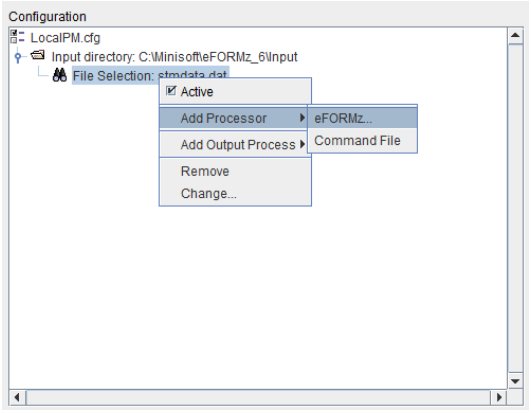
stmdata.dat stm????.dat ???data.

The 'File Selection' option also allows for multiple file selection criteria. The delimiter between each file selection can be a space, comma, plus, or minus. If the delimiter is a space, comma, or plus the next file selection goes in an 'include' list. If the delimiter is a minus, the next file selection goes in an 'exclude' list. A data file must match one of the selections in the include list and not match any of the selections in the exclude list to be processed. For example:

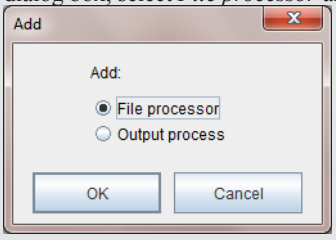
File select = PO*.DAT - PO1.DAT - PO2.DAT

Files processed = All PO files, with the exception of PO1.DAT and PO2.DAT.

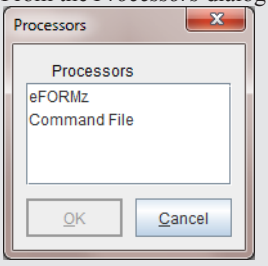
11. Using your mouse, *right click,* the file selection field and select *Add Processor* > *eFORMz* to specify a project to be merged with your file selection:



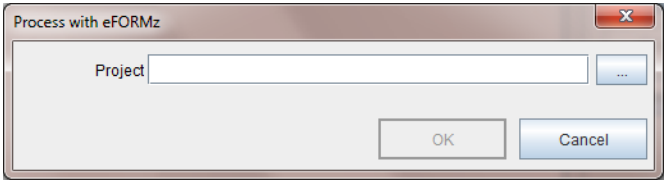
NOTE: If you have selected *Add* from the side panel you will receive the following dialog box, select *File processor* and click *OK*:



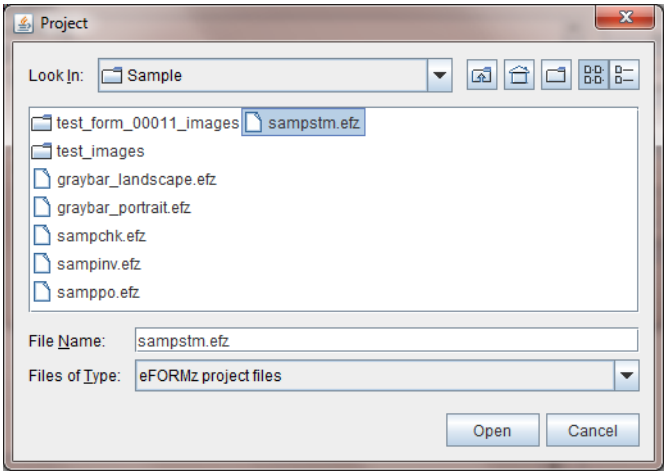
From the *Processors* dialog box select eFORMz and click *OK*:



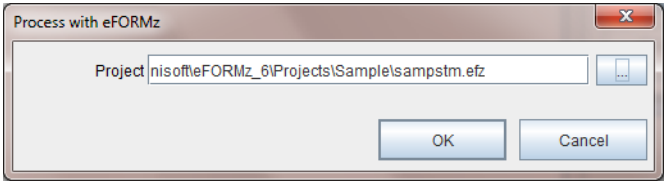
12. From the *Process with eFORMz* dialog box use the browse button to select the project file you would like your file selection to be merged with:



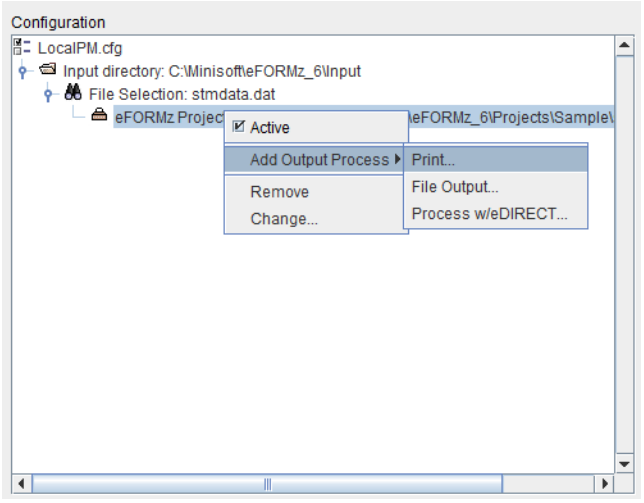
13. Once the project file has been located using the *Project* dialog box click *Open*.



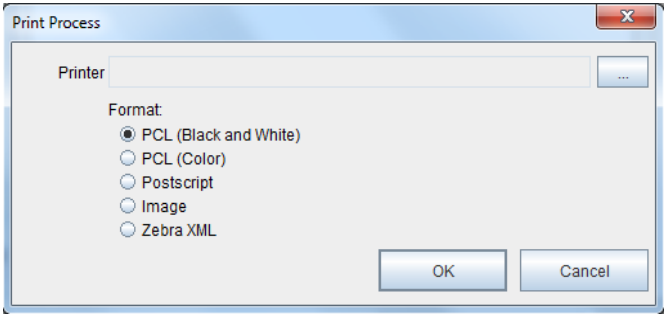
14. The project and project path will appear in the *Project* field. Click *OK*.



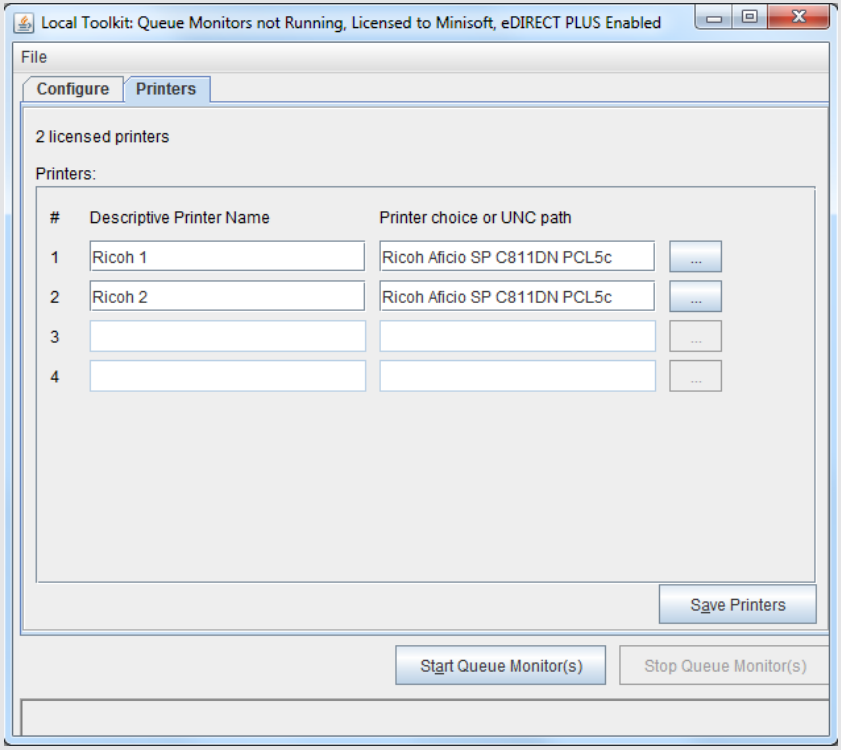
15. The project file selection will appear in the *eFORMz Project* field. Using your mouse, *right click* the *eFORMz Project* field and select *Add Output Process* > *Print*:



16. The *Print Process* dialog box will display. Using the browse button select the printer you would like to print your merged print file to and click *OK*:

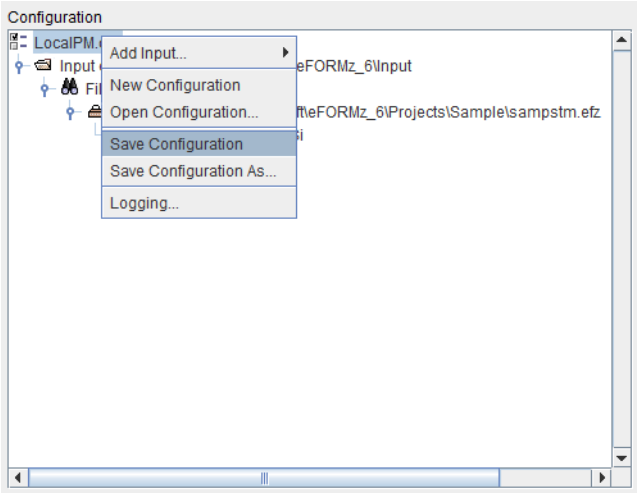


***NOTE*:** Printers are added through the Printers tab. Descriptive names can be added to each one of these devices.



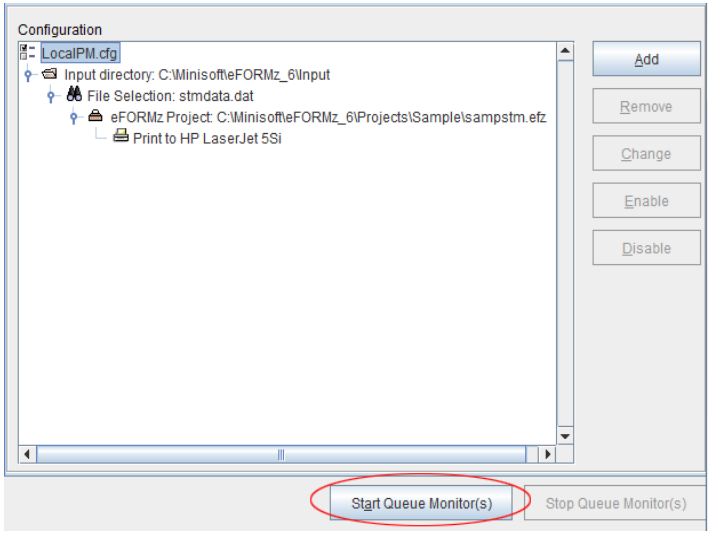
The customer's eFORMz Printer License Purchase Agreement determines the number of printer devices that can be specified. The default is a 2-printer license. Should you need to increase the number of printers an updated license file is necessary. Please contact Minisoft Sales at *sales@minisoft.com* or *800-682-0200*.

17. Once the configuration has been made select the configuration file name, *right mouse click* and select *Save Configuration*:

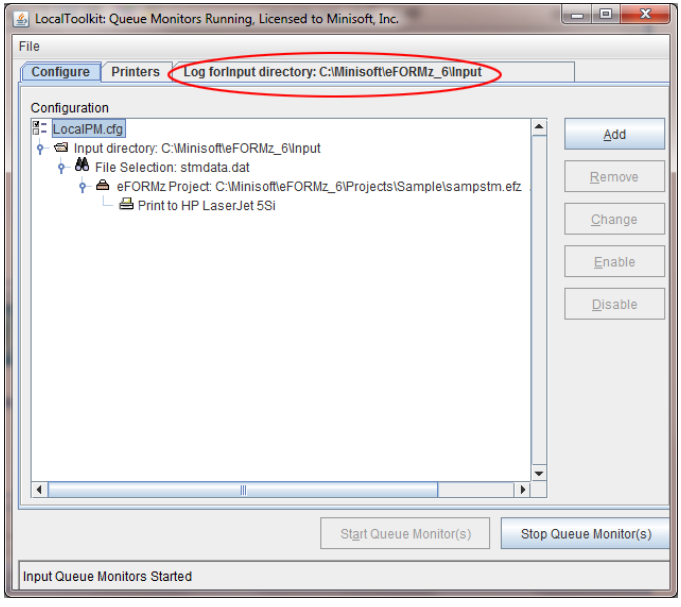


Starting the Local Monitor Job

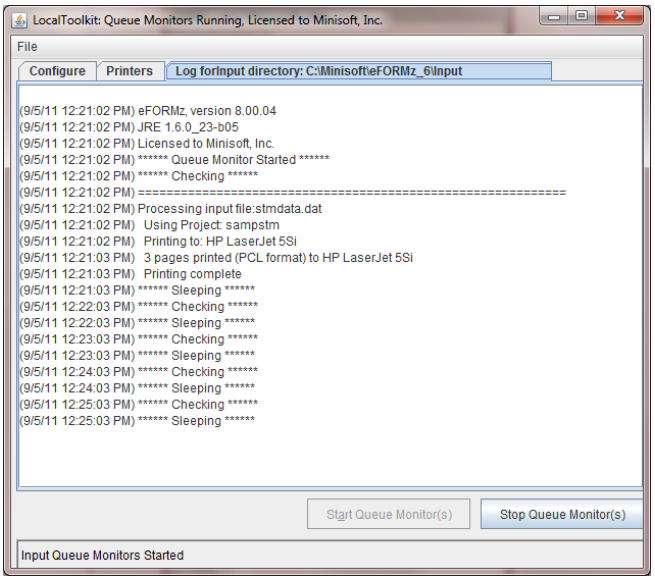
Once the configuration has been saved, start the Local Monitor process by clicking *Start Queue Monitor*:



Once the queue monitor has been started a Log tab will display:

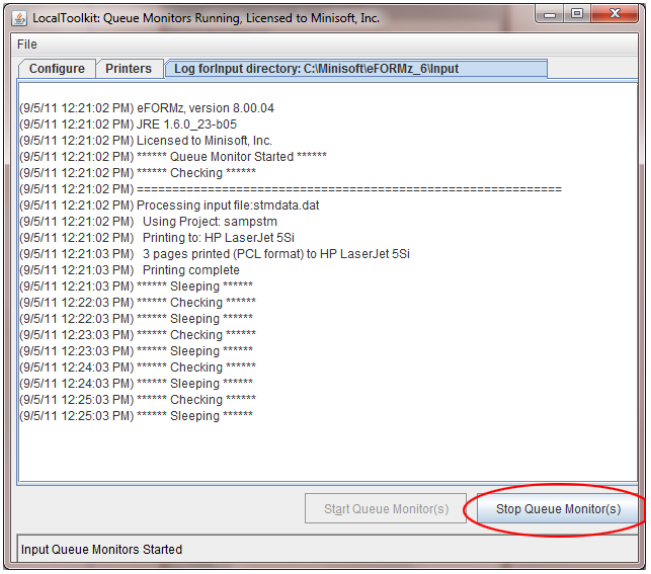


Switch to the log tab to view the queue monitor activity:



Log display based on Message Priority Fence '0', default 8.

To stop the queue monitor click *Stop Queue Monitor* from either the *Log* tab or the *Configure* tab:



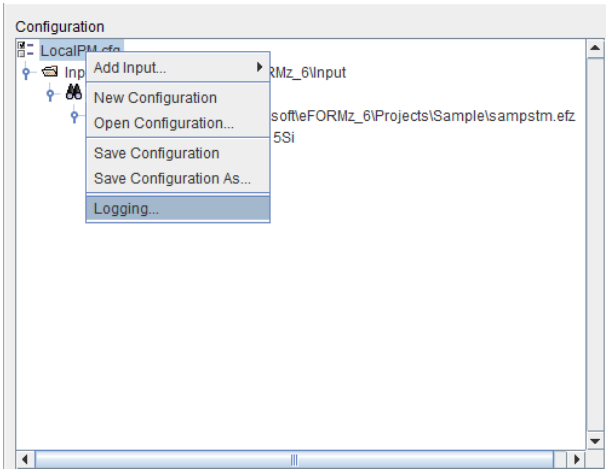
Local Toolkit Logging

The Local Toolkit allows you to log the queue monitor job process in one of three ways:

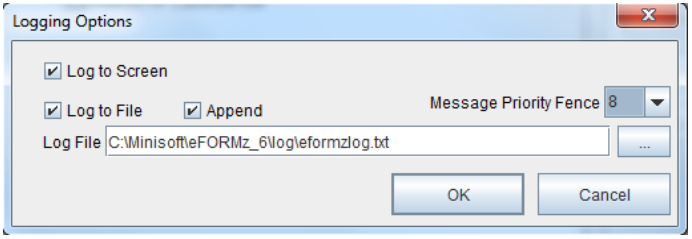
- *log to screen*
- *log to file*
- *log to screen and file*

To configure the logging process:

1. Using your mouse, *right click* the *Local Toolkit* configuration file name (default filename *LocalPM.cfg*) and select *Logging*:



2. The *Logging Options* dialog box will display:



Select the type of logging process:

- *Log to Screen*
  Logs the queue monitor activity to the log tab in the Local Toolkit.
- *Log to File*
  Logs the queue monitor activity to a text file. Configure the log file destination using the browse button, default location *C:\Minisoft\eFORMz_6\log\eformzlog.txt*.
- *Append*
  Appends logging activity to the specified log file. When unchecked the log file will be overwritten each time the queue monitor is restarted.

> ***TIP:*** Both the *Log to Screen* and *Log to File* options can be selected. We recommend selecting *Log to Screen*, *Log to File*, and *Append*.

- *Message Priority Fence*
  Logging fence filters which messages are displayed or written to in the log file. Options available:

  0-3 - All informative messages
  4-7 - Unused
  8-11 - Status messages (i.e.: pages output, etc...) only
  12-15 - Error and other high priority messages only

3. Once complete, click *OK*.

Local Toolkit Multi-Processing

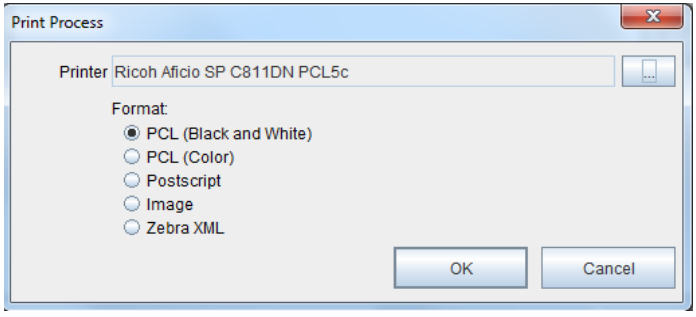
The Local Toolkit allows multiple processes of a single statement, for example, a print file may need to be merged with two different project files or a merged file needs to be printed to two different printers. Instead of creating separate entries, a simple addition can be made to a single statement to allow multiple processes.

To output a single process to multiple destinations, for example:

- printers
- file output types
- and eDIRECT

Select the eFORMz Project file field, *right click* and select *Add Output Process*.

Print...
When selected, implements the *Print Process* dialog box. Select the printer you wish to print to by selecting the browse button. To add multiple printers to a process select *Add Output Process* > *Print* and select a second printer.



File Output...

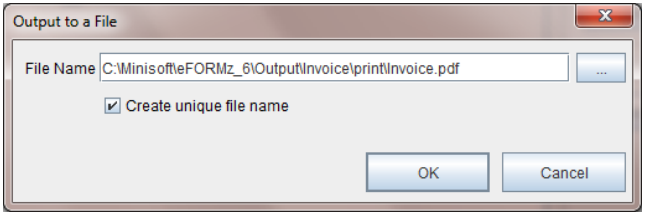
Implements the *Output to a File* dialog box. Use the browse icon to locate the directory you would like the file output to be placed. Available output types include *pdf*, *pcl*, *prn*, *postscript, efd*, *xml*, *AFPDS* and *text*.

If you would like the output file to have a unique file name check *Create unique file name*. For example:

invoice_{system date/time stamp}.pdf

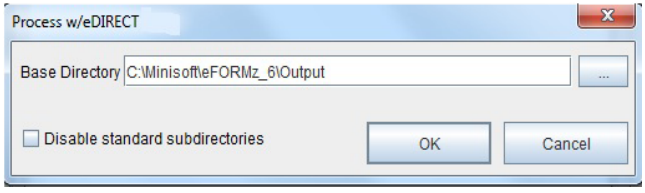
Unchecked causes the output file name to consistently remain the same for every time a process is run. For example:

invoice.pdf



Process w/eDIRECT

Implements the *Process w/eDIRECT* dialog box. Use the browser button to locate the directory you would like the output from eDIRECT to be stored.



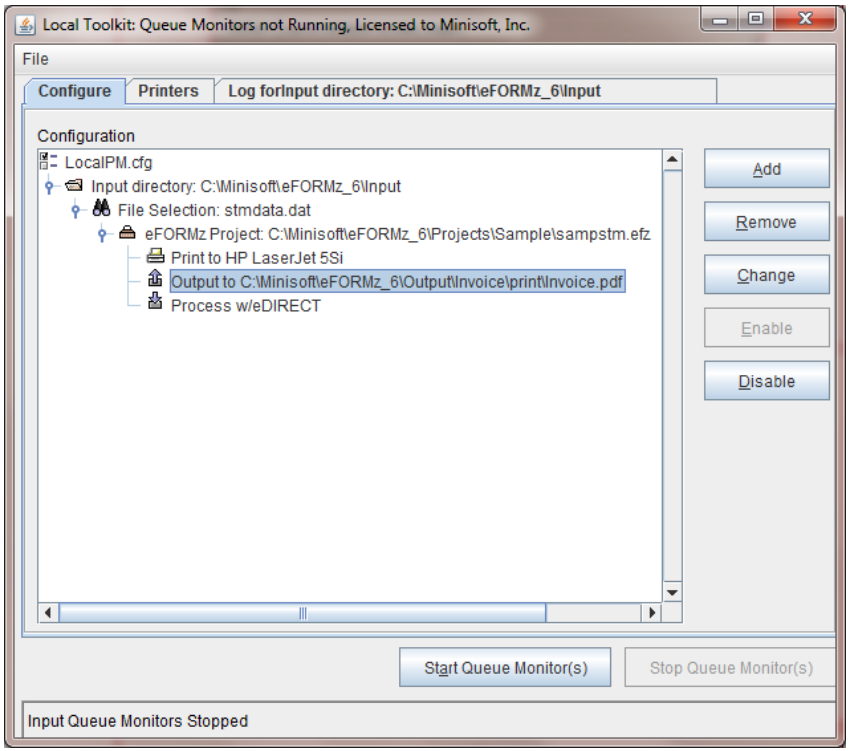
***NOTE**:* Unless disable option is checked, new subfolders are automatically created under the base directory for each eDIRECT output process:

email - /email
print - /print
fax - /fax

Each output process can also have multiple post processing commands:

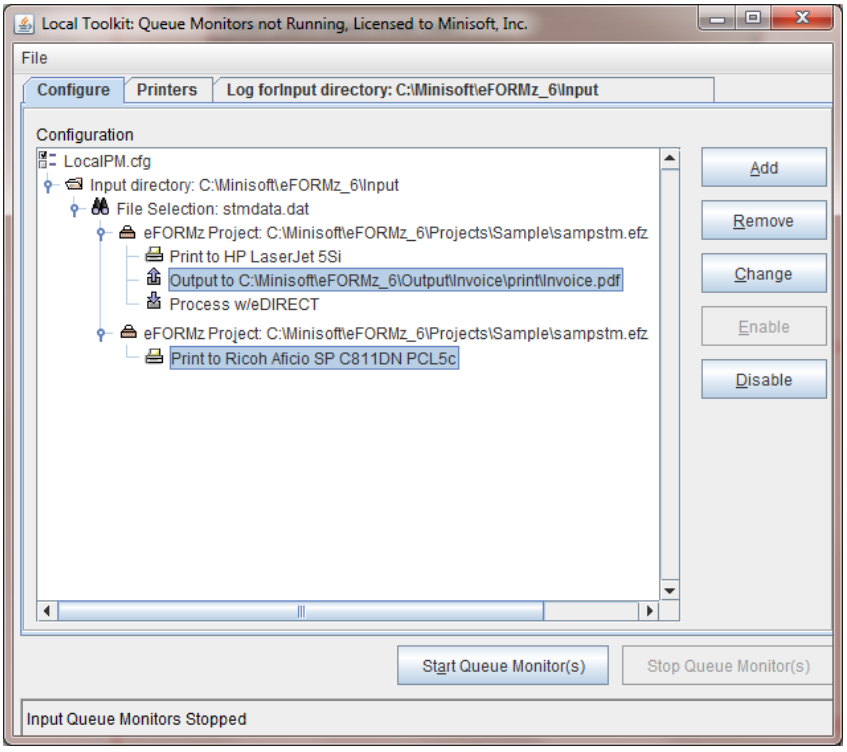
Print Files
Copy Files
Delete Files
External Commands

Once your output types have been defined they will appear in your configuration table:



To process your print file selection with multiple projects create a second processor by selecting the *File Selection* field, *right clicking* and selecting *Add Processor > eFORMz*.

Using the browser button, select a new project file. Once this file has been referenced it will appear in the *Configure* tab:



For example, if the original project merge was with a project file containing 4 copies that printed to the upstairs printer in your office but now another copy needs to print on the downstairs office printer. By adding a second process using a project file containing only one copy both outputs can be processed at the exact same time.

TIP: An additional option in the eFORMz Local Toolkit is the *eFORMz Command File* processor option. The print file defined in the *File Selection* field will be treated as a command file containing command file parameters.

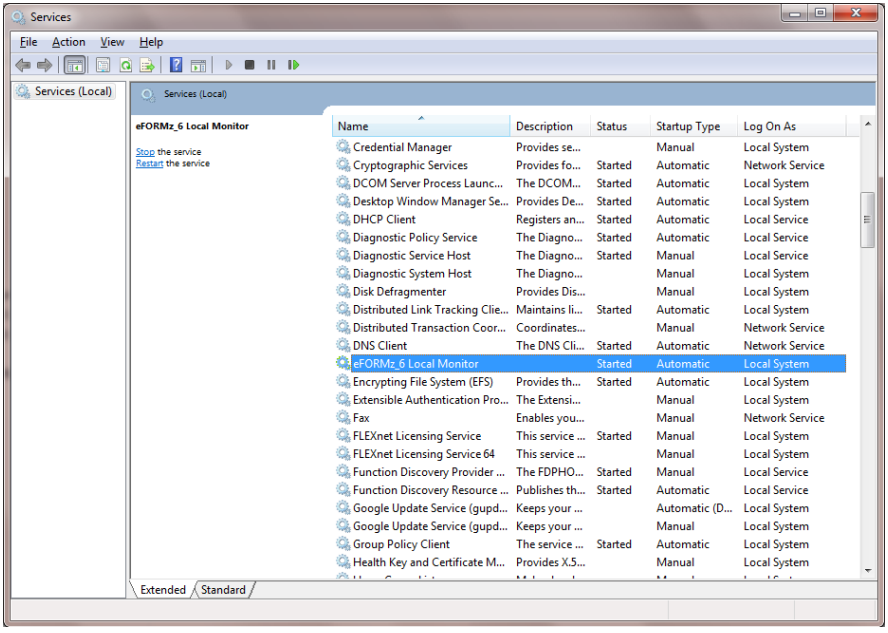
Running as a Windows Service

Implement the Local Toolkit as a Windows Service that will startup automatically. To configure the Local Toolkit as a Windows Service:

1. From the START menu select *Programs* > *eFORMz 8* > *Windows Service* > *Print Monitor - Create*.

> ***NOTE to Windows 64 users:*** A Windows Service for Windows 64 is provided. Before installing the 64-bit version of the Print Monitor (Local Toolkit service), confirm you are running a 64-bit version of java. From a DOS window enter: *java -version*. If nothing is returned or indicates you are running 32-bit java, install the 32-bit release of the Print Monitor. Otherwise, install 64-bit java on your system and then run the Print Monitor (64-bit).

2. Check the Windows Services for the new *eFORMz_6 Local Monitor* (*Administrative Tools* > *Services*).



3. Change 'Startup Type' from *Manual* to *Automatic* and click *Start*.

NOTE: For configuration file changes to take affect you must stop and restart the service. If the eFORMz Local Monitor appears to process, yet nothing prints (the number of pages printed does not appear in the log file) this indicates that access is limited.

Check the 'Log On' tab on the Properties window for the service itself. The default is 'Local System account', however, it does not always have the rights to access printer and/or mapped drives necessary for printing. In this event, select 'This Account' and enter a login id and user password that has the rights and capabilities. When the monitor service is restarted it will run with the same rights as the user configured on the 'Log On' tab.

NOTE to Windows Vista and 7 users: To run Minisoft's *Windows Service Create* or *Remove* you must change the program properties to run as an Administrator before implementing. *Right click Service Create* or *Remove* from *Start > Programs > eFORMz 7* and select *Properties > Run as Administrator*.

To remove the *eFORMz_6 Local Monitor* as a Windows Service:

1. Confirm that the *eFORMz_6 Local Monitor* service has been stopped.
2. From the START menu select *Programs > eFORMz 8 > Windows Service - Remove*.

Local Toolkit Quick Reference	
Windows Service	Local Toolkit Windows Service compatible.
Logging Options	*Log to Screen* Logs activity to the Local Toolkit Log Tab when the queue monitor is started. *Log to File* Logs activity to a text file. Default file name eformzlog.txt. *Append* Appends logging activity to text file. When unchecked text file will be overwritten each time the queue monitor is restarted. *Message Priority Fence* 0-3 - All informative messages 4-7 - Unused 8-11 - Status messages (i.e.: pages output, etc...) only 12-15 - Error and other high priority messages only *Log File* Defines the location and name of the log file.
Input Directory Options	*Input Directory* The directory the queue monitor will monitor for new print files. *Note*: If the Local Toolkit will be monitoring for files across the network and running as a Windows Service you must use UNC paths. For example: \\ServerName\minisoft\eFORMz_6\input\ Asterisk (*) or question mark (?) can also be used as wild card entries in the source Input Directory. *Check Interval* Number of seconds the queue monitor will wait before checking the input directory for new print files.
File Selector Options	*File Selection* Print file name selection field. Asterisk (*) or question mark (?) can also be used as wild card entries in the source print file name. For example: *stmdata.dat, stm????.dat, or ???data.* *File Selection Statement* Allows for multiple file selection criteria. The delimiter between each file selection can be a space, comma, plus, or minus. If the delimiter is a space, comma, or plus the next file selection goes in an 'include' list. If the delimiter is a minus, the next file selection goes in an 'exclude' list. A data file must match one of the selections in the include list and not match any of the selections in the exclude list to be processed. For example: File select = PO*.DAT - PO1.DAT - PO2.DAT Files processed = All PO files, with the exception of PO1.DAT and PO2.DAT. *Rename selected file to *.hld* Renames the print file from the Input Directory to hold after the queue monitor has processed it. The queue monitor will not process an .hld file again.

	Append ".hld" to the selected file Causes the .hld extension to append to the end of the original file extension maintaining the original file name. *Delete selected file* Deletes the print file from the Input Directory after the queue monitor has processed it.
Processor Options	*eFORMz* Merges a print file with an eFORMz Project file. *Command File* The print file defined in the File Selection field will be treated as a command file containing command file parameters. *eFORMz Project Reference File (.efr)* Allows one to perform "table-formatted' lookups on project names based on the name of the print file. For example: efr text file: <ProjectReference> <Ref Datafile="P2310201_*" Project="C:\Minisoft\eFORMz_6\projects\sampstm.efz" /> <Ref Datafile="P5310201_*" Project="C:\Minisoft\eFORMz_6\projects\sampstm_d2.efz" /> </ProjectReference> Toolkit Project File reference: C:\Minisoft\eFORMz_6\projects\projectable.efr
Output Process Options	*Print* Sends output to a networked printer. *File Output* PDF — AFPDS Files eFORMz Document Files — Text Files PCL (B/W) — HTML Files PRN Files (B/W) — Zebra XML Files PCL Files (Color) — Postscript Files *eDIRECT* Email Fax Print
Output Variable File Name Options	Defines the output file name to match the variable defined. Variables include: <directory> , <datafilename>, <datafileext>, <project> Example: c:\outputdirectory\<datafilename>.pdf *Note*: The queue monitor variables can also be used by the Copy, Delete, and Print files post-processing commands.
File Output... Create Unique File Name	Creates a unique file output name every time a process is ran. The unique file name must contain at least 3 characters. For example: invoice_{system date/time stamp}.pdf

UNIX Toolkit

Configuring the Unix Toolkit

The Unix Toolkit provides a GUI interface allowing you to configure an eFORMz Queue Monitor process on your Unix server.

To run the Unix Toolkit:

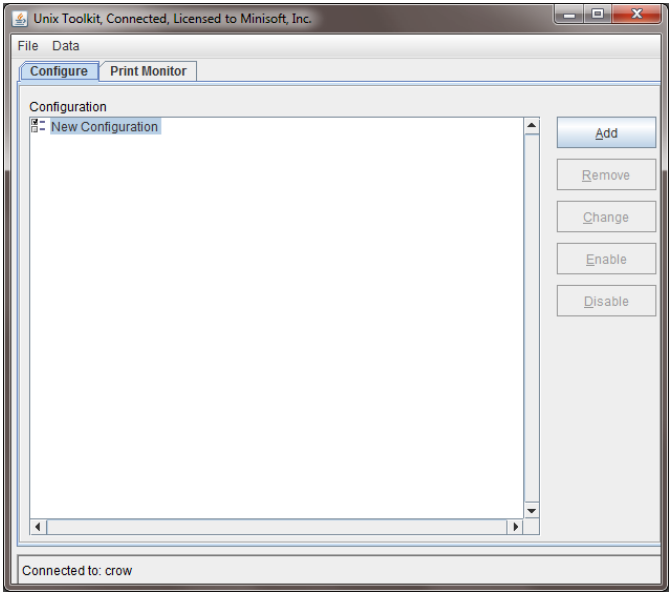
1. Open the Unix Toolkit by selecting:

   Start > *Programs* > *eFORMz 8* > *Toolkit - Unix*

   or from the eFORMz Composer select *Host Tools* > *Unix* > *Toolkit*.

2. From the Unix login dialog box enter your *Host IP Address*, *username*, and *password*.

3. The Unix Toolkit will display:



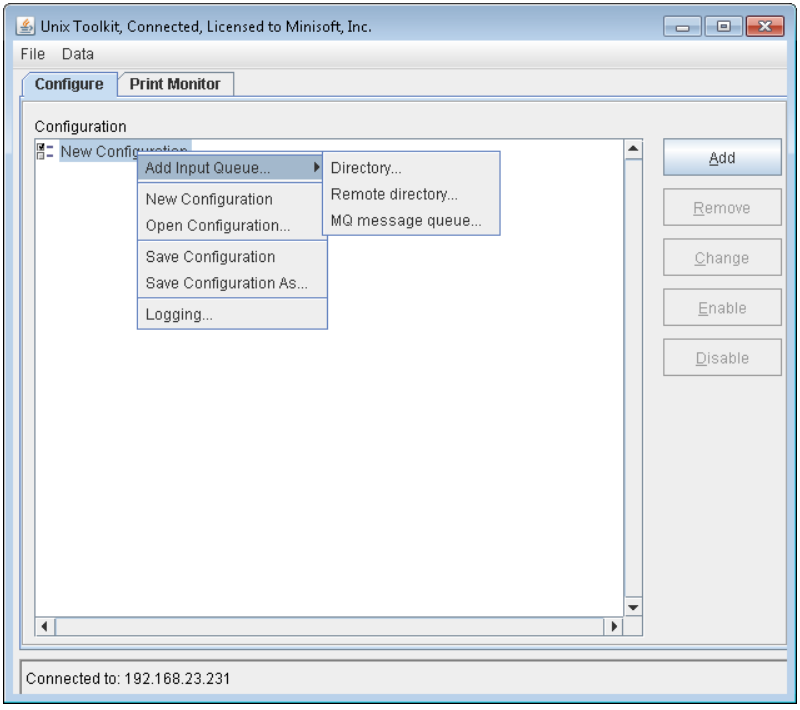
4. To configure the default configuration file (*UnixPM.cfg*) select the configuration file name from the *Configure* tab. Using your mouse, *right click* and select *Add Input Queue*. The *Input Queue* is the directory where your source print file will reside and be pulled to be merged with an eFORMz project. Print files can be pulled from the following queue types:

   Directory: Local system directory.

   Remote Directory: A remote server directory accessed via SSH (sFTP) from the unix box.

   MQ Message Directory: Reading from an IBM MQ Message Queue from a remote server.

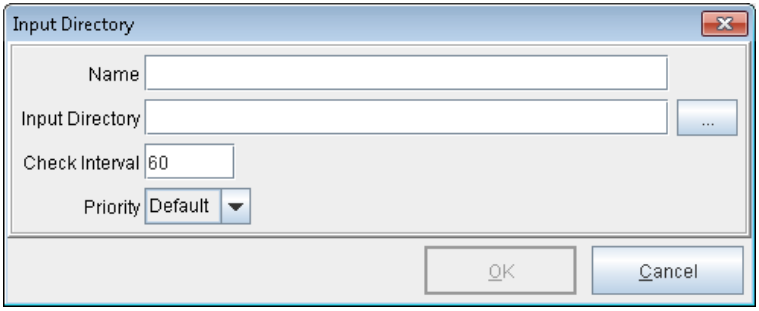
> ***NOTE:*** 'New Configuration' may appear as the configuration file name, if so, select *Save Configuration As* from the *File* menu to save or rename the configuration file name.



Step 1: Configure the Input Directory

If selecting Directory as your input type, the *Input Directory* dialog box will display.

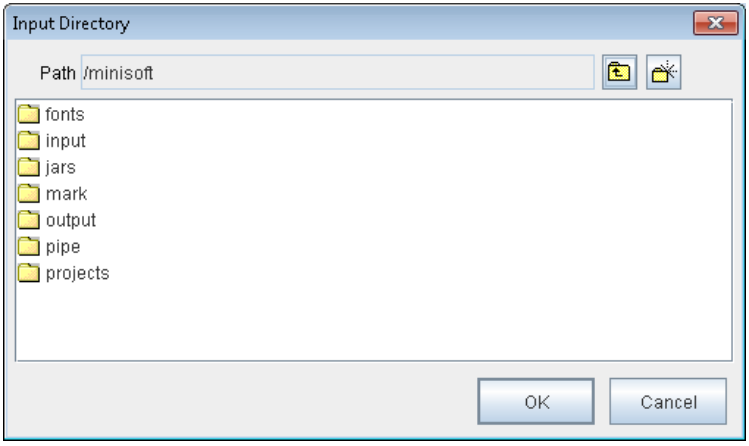
1. To specify the location of the input directory click the browse button (...):



2. From the *Input Directory* dialog box navigate to the input directory where your print files reside.

   Minisoft has provided the following default directory if needed:

   /minisoft/input/



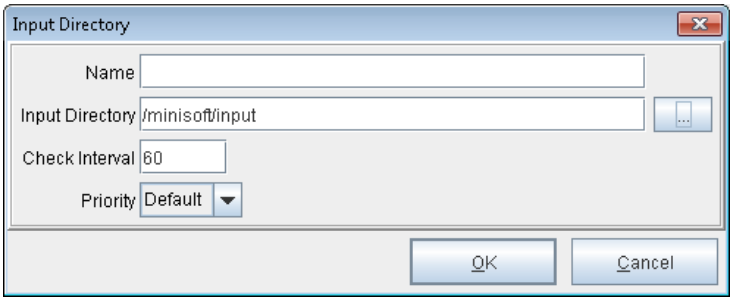
   When you have the input directory located, click *OK*.

3. The *Input Directory* dialog box now specifies the input directory path. Asterisk (*) or question mark (?) can also be used as wild card entries in the source Input Directory.

Name a descriptive title assigned to an input directory to better identify the selection location of print files to be processed by eFORMz.

Check Interval indicates the number of seconds the monitor will wait before checking the input directory for new print files.

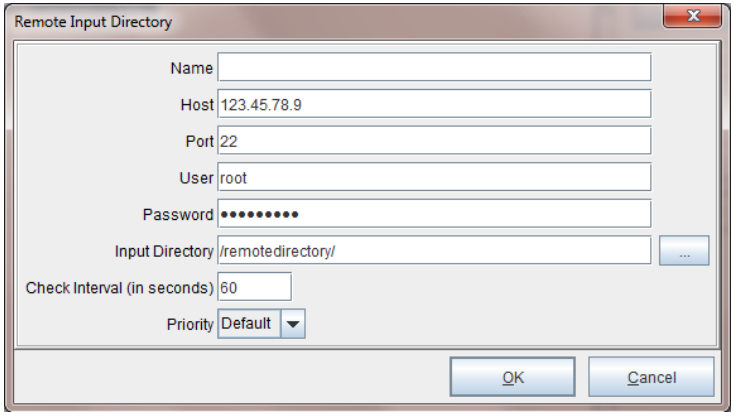
Priority sets the priority setting for the individual input directories. Each input queue executes a queue monitor in a separate thread. Control the execution priority of each thread individually based on the priority. The higher the priority (1-10) the more execution time is given to a thread in relation to other threads and processes.



4. Once complete, click *OK*.

Remote Input Directory

If selecting Remote Directory, the Remote Input Directory dialog box displays.



Name field is a descriptive title assigned to an input directory to better identify the selection location of print files to be processed by eFORMz.

Host, Port, User, Password is the remote server location to connect to.

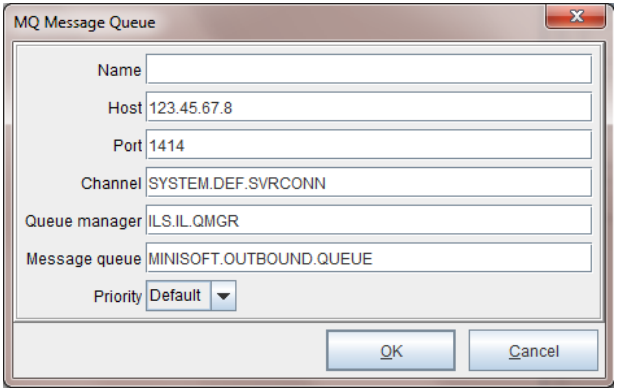
Input Directory is the remote server directory path where your input file resides.

Check Interval indicates the number of seconds the monitor will wait before checking the input directory for new print files.

Priority sets the priority setting for the individual input directories. Each input queue executes a queue monitor in a separate thread. Control the execution priority of each thread individually based on the priority. The higher the priority (1-10) the more execution time is given to a thread in relation to other threads and processes.

MQ Message Directory

If selecting MQ Message Directory, the below dialog box displays.



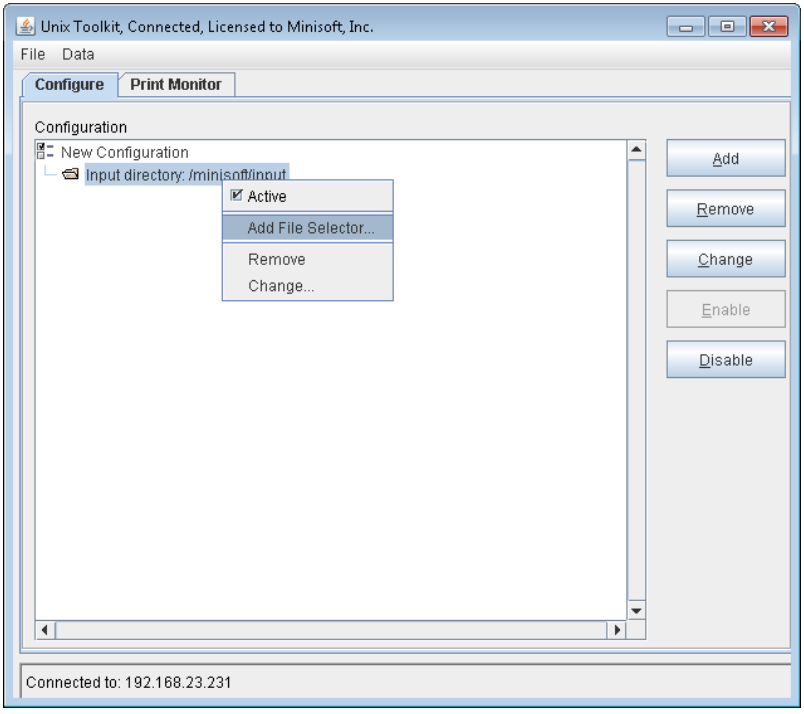
A *channel* is the subsystem through which the connection is made, for example "SYSTEM.DEF.SVRCONN".

A *queue manager* is the application used to handle the data, for example "ILS.IL.QMGR".

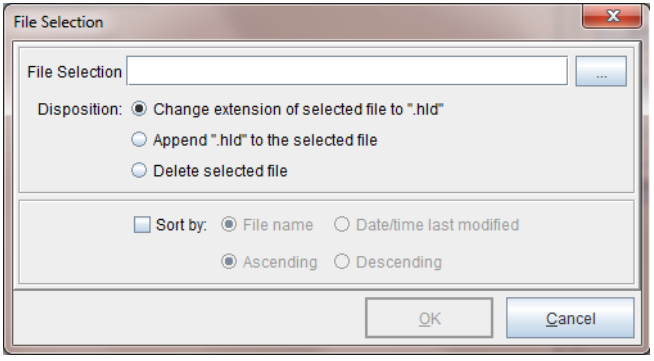
A *message queue* is the name of the virtual directory we read from, for example "MINISOFT.OUTBOUND.QUEUE".

Step 2: Adding a File Selection

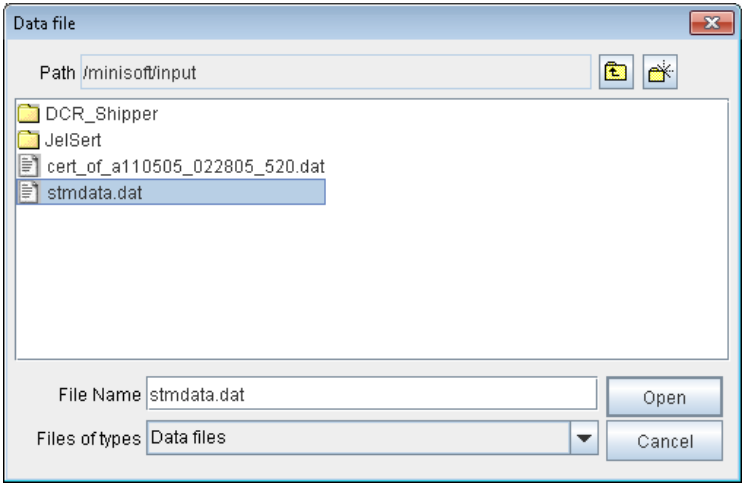
1. Once your Input directory has been set, *right click* the *Input Directory* field and select *Add File Selector*:



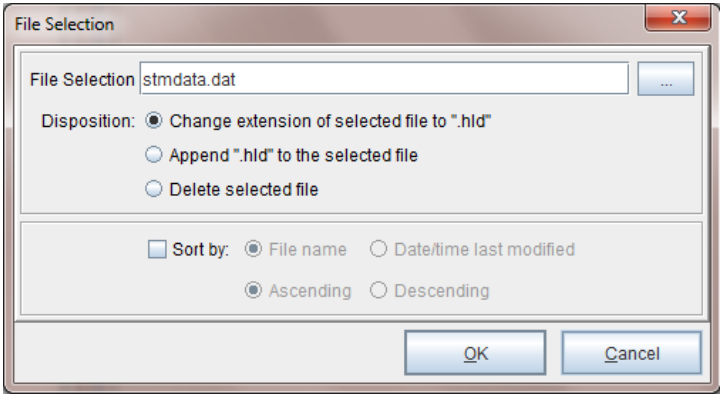
2. The *File Selection* dialog box will display. Using the browse button select a print file to be merged with an eFORMz project from the input directory:



3. Using the *Data File* dialog box select a print file that is to be merged with the eFORMz project file, once selected click *Open*:



4. The *File Selection* dialog box will display with the specified print file to be merged with the eFORMz project file.



Note: See the following Note for wild card examples.

File Selection Options:

- If you would like the print file to remain in the input directory after a merge has taken place, select *Change extension of selection file to ".hld".*
- If you would like the print file to maintain its original extension select *Append ".hld" to the selected file.* This will cause the *.hld* to append to the end of the original extension.
- If you would like to delete the print file from the input directory after a merge has taken place, select *Delete selected file.*

Sorting options in Ascending or Descending order:

- Sort based on the *file name* of the incoming data file name.
- Sort based on the *date/time* of the incoming data file.

TIP: An asterisk (*) or question mark (?) can also be used as wild card entry in the source print file name. For example:

stmdata.dat stm????.dat ???data.

The 'File Selection' option also allows for multiple file selection criteria. The delimiter between each file selection can be a space, comma, plus, or minus. If the delimiter is a space, comma, or plus the next file selection goes in an 'include' list. If the delimiter is a minus, the next file selection goes in an 'exclude' list. A data file must match one of the selections in the include list and not match any of the selections in the exclude list to be processed. For example:

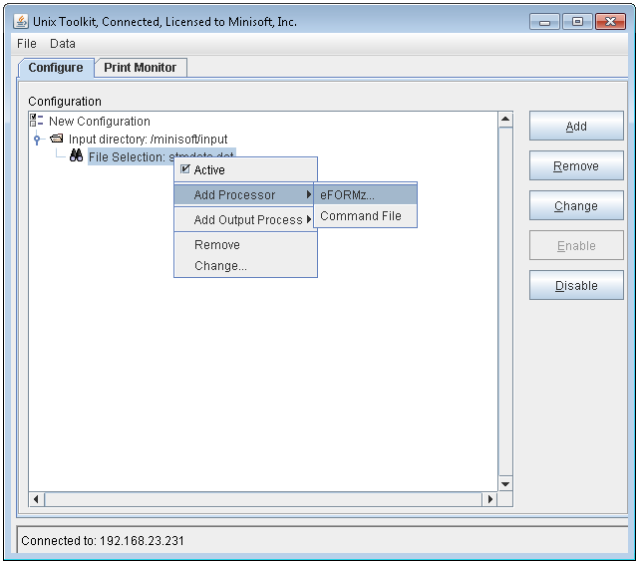
File select = PO*.DAT - PO1.DAT - PO2.DAT

Files processed = All PO files, with the exception of PO1.DAT and PO2.DAT.

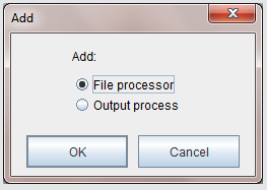
Step 3: Adding a Processor

The next step is to add a processor that merges your input file with your project file.

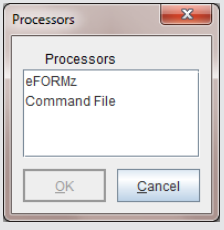
1. *Right mouse click* the *File Selection* field and select *Add Processor* > *eFORMz* to specify a project to be merged with the selected file selection:



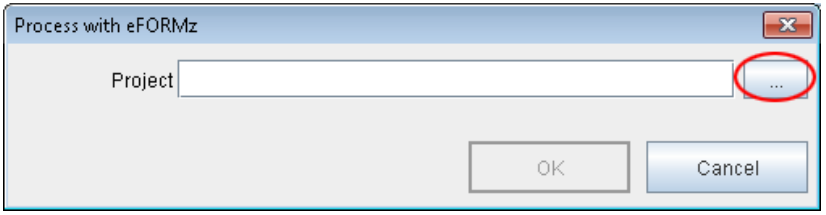
***NOTE*:** If you have selected *Add* from the side panel you will receive the following dialog box, select *File processor* and click *OK*.:



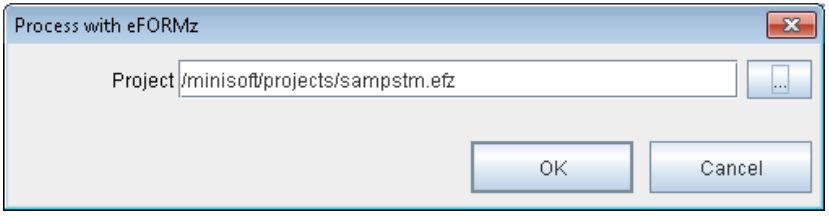
From the *Processors* dialog box select *eFORMz* and click *OK*:



2. The *Process with eFORMz* dialog box displays. Using the browse button select the project file you would like your file selection to be merged with:



Once you have located the project file click *Open* from the *Project* dialog box.



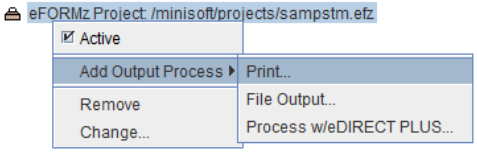
Once the project file has been selected click *OK* and the project file selection will appear in the *eFORMz Project* field.

Step 4: Output Process

Using your mouse *right click* the *eFORMz Project* field and select one of the following options:

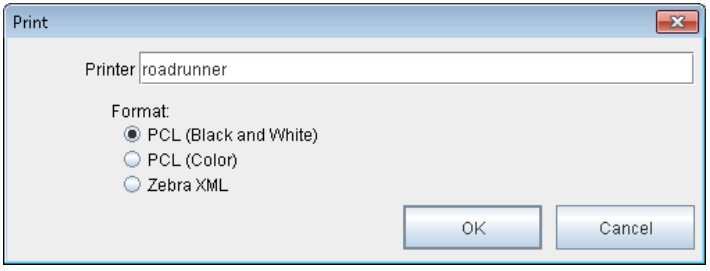
- *Print*
- *File Output*
- *Process w/eDIRECT*

from the *Add Output Process* option:



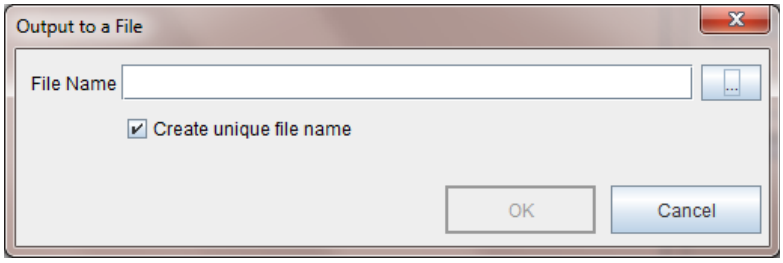
Print Output

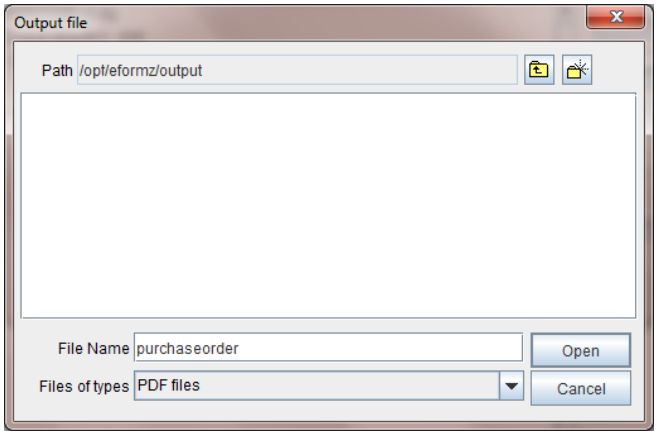
From the *Print* dialog box enter the printer name you would like to print to:



File Output

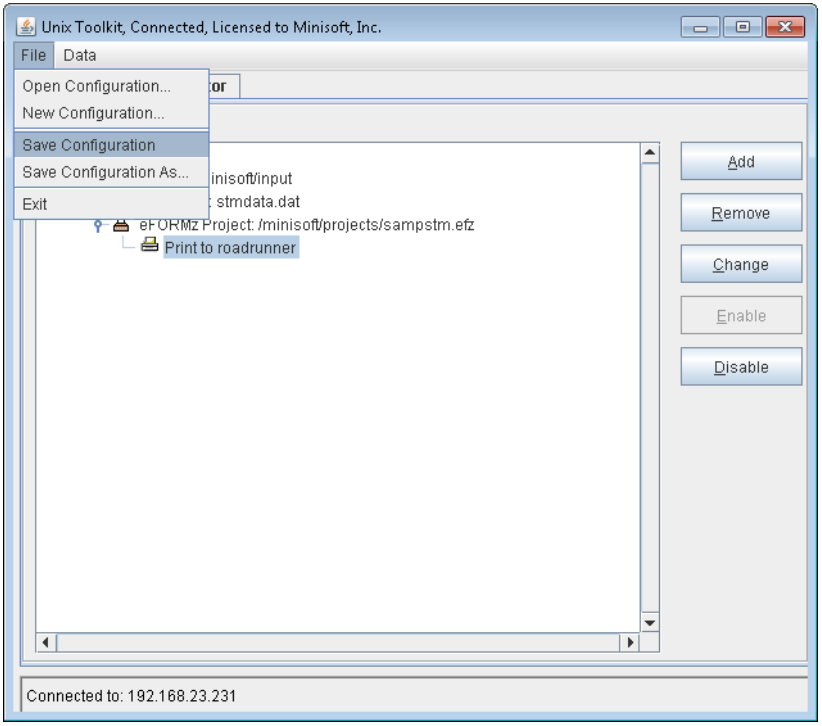
Create output for pdf, efd (eFORMz Document), pcl, prn, postscript, xml, html, and text. Using the browse button, select the location where you would like the output to reside. The option to create a unique file name will automatically add a unique file tag to the created file:





Step 5: Saving your Configuration

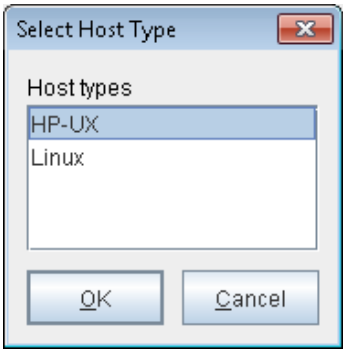
When you are complete with the configuration file setup save your configuration file. *Right mouse* click the configuration file name and select *Save Configuration*:



Step 6: Starting the Unix Print Automation

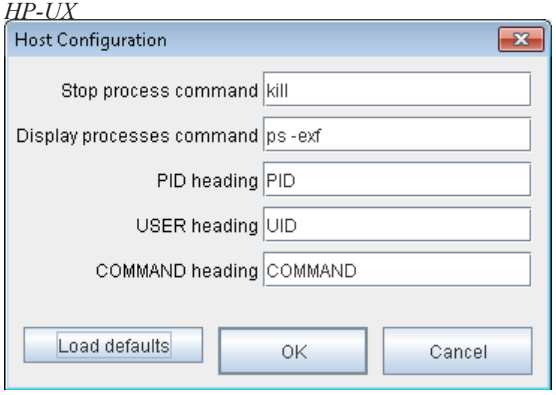
Start the automated job process on your Unix box using the Print Monitor tab:

1. From the Print Monitor tab select *Configure Host*.
2. Select *Load Defaults*, which will allow you to choose a host type. These host type options when selected will automatically fill-in the Host Configuration information. You can then customize anyone of the settings after it has been loaded into the Host Configuration dialog box.

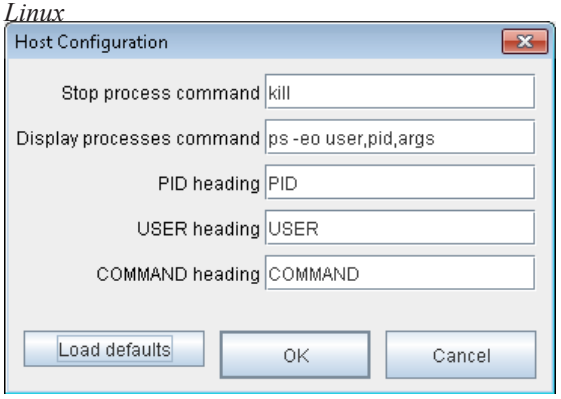


3. Select Ok and the default settings will appear in the Host Configuration dialog box:

HP-UX

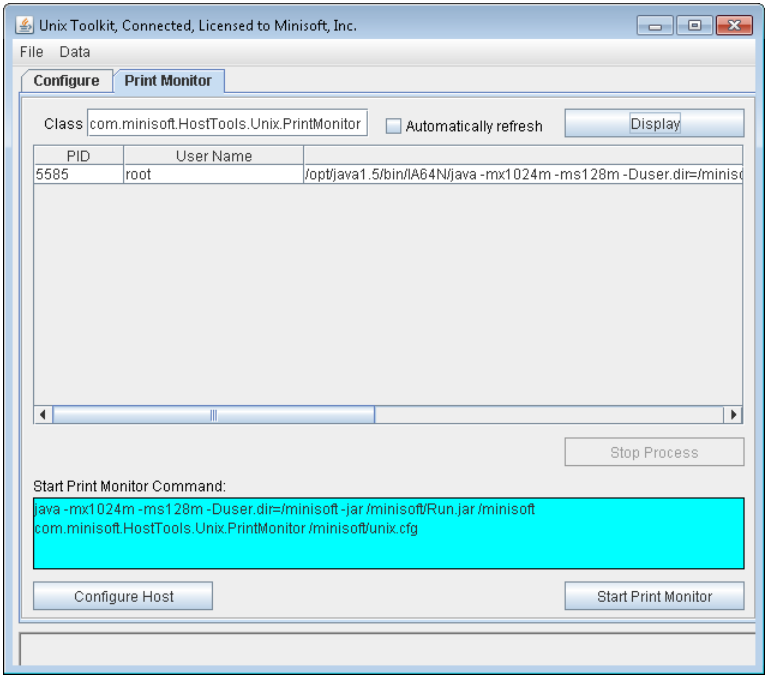


Linux



4. Once your Host Configuration commands and headings have been defined select *OK*.

5. Selecting *Start Print Monitor* will start the print monitor, initiating the configuration file to monitor for files to be merged with the configured eFORMz Project files.



6. Stop the Print Monitor simply by selecting *Stop Process*.

NOTE: If any changes have been made to the configuration file the Print Monitor must be stopped and restarted inorder for the changes to take affect.

Alternative Print Automation Process

1. If the command file does not already exist, upload the following file to the */minisoft* directory:

   C:\Minisoft\eFORMz_6\runUnix.cmd

   The runUnix.cmd contains the following commands:

   ```
   java -mx1024M -ms128M -jar Run.jar - com.minisoft.HostTools.Unix.PrintMonitor /
   minisoft/UnixPM.cfg
   ```

2. From the *minisoft* directory change the attributes of the command file:

   chmod 755 runUnix.cmd

3. Next, start the monitor process via the following command:

   # /minisoft/runUnix.cmd

   If you would like the job process to not be tied to the terminal enter the following:

   # nohup /minisoft/runUnix.cmd &

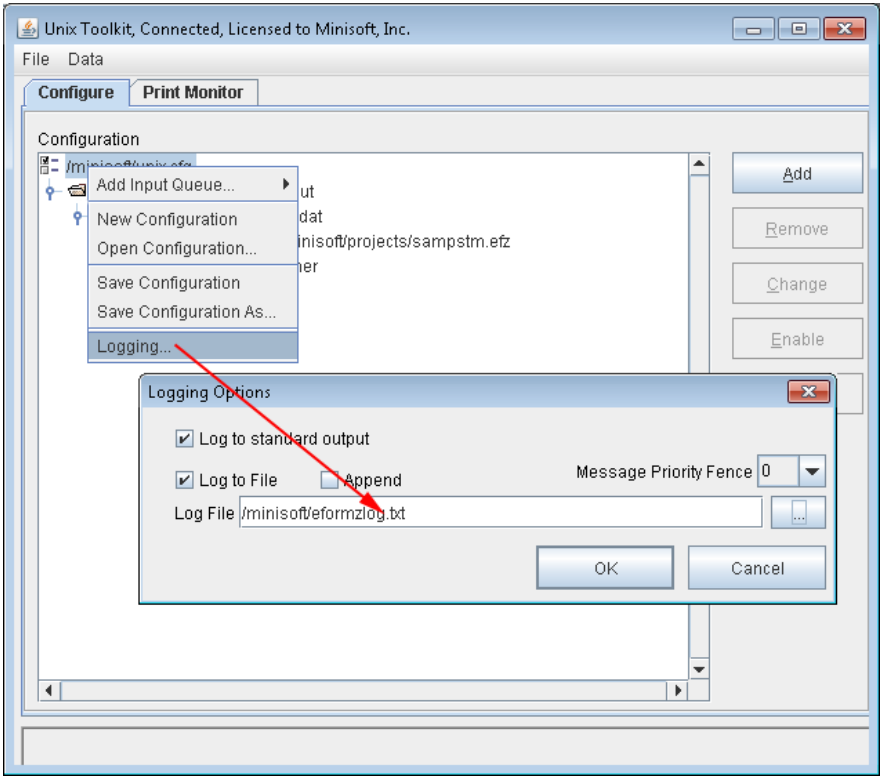
   After the above command is executed something like the following will appear:

   [1] 575
   # Sending output to nohup.out

Logging the Unix Job Process

To monitor and log the Unix job process:

1. From the Unix Toolkit select the *UnixPM.cfg* configuration file name, *right click* and select *Logging*.
2. The *Logging Options* dialog box displays:



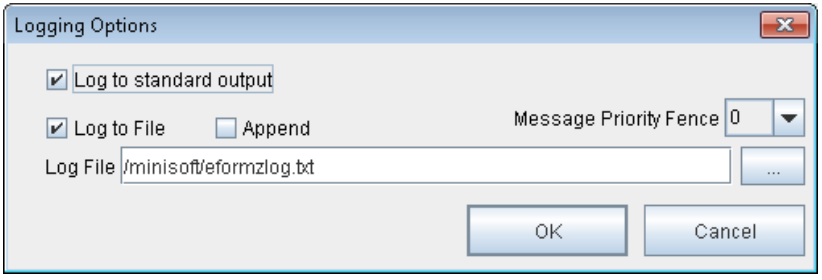
Select the type of logging process:

- *Log to Standard output*
  Logs the queue monitor activity to the standard output log *nohup.out*.
- *Log to File*
  Logs the queue monitor activity to a text file. Default *minisoft/eformzlog.txt*.
- *Append*
  Appends logging activity to the specified *'log to file'*. When unchecked the log file will be overwritten each time the queue monitor is restarted.

> ***TIP:*** Both the *Log to Standard output* and *Log to File* options can be selected. We recommend selecting *Log to Standard output*, *Log to File*, and *Append*.

- *Message Priority Fence*
  Filters which messages are displayed or written to the log file. Options include:

  0-3 - All informative messages
  4-7 - Unused
  8-11 - Status messages (i.e.: pages output, etc...) only
  12-15 - Error and other high priority messages only



3. Once complete click *OK*.

Unix Toolkit Quick Reference

Logging Options

Log to Standard Output
Logs activity to Unix.

Log to File
Logs activity to a text file. Default file name eformzlog.txt.

Append
Appends logging activity to text file. When unchecked text file will be overwritten each time the queue monitor is restarted.

Message Priority Fence
0-3 - All informative messages
4-7 - Unused
8-11 - Status messages (i.e.: pages output, etc...) only
12-15 - Error and other high priority messages only

Log File
Defines the location and name of the log file.

Input Directory Options

Input Directory
The directory the queue monitor will monitor for new print files. Asterisk (*) or question mark (?) can also be used as wild card entries in the source Input Directory.

Check Interval
Number of seconds the queue monitor will wait before checking the input directory for new print files.

Priority
Sets the priority setting for the individual input queues. Each input queue executes a queue monitor in a separate thread. Control the execution priority of each thread individually based on the priority. The higher the priority (1-10) the more execution time is given to a thread in relation to other threads and processes.

File Selector Options

File Selection
Print file name selection field. Asterisk (*) or question mark (?) can also be used as wild card entries in the source print file name.

For example: *stmdata.dat, stm????.dat, or ???data.*

File Selection Statement
Allows for multiple file selection criteria. The delimiter between each file selection can be a space, comma, plus, or minus. If the delimiter is a space, comma, or plus the next file selection goes in an ‘include’ list. If the delimiter is a minus, the next file selection goes in an ‘exclude’ list. A data file must match one of the selections in the include list and not match any of the selections in the exclude list to be processed.

For example:
File select = PO*.DAT - PO1.DAT - PO2.DAT
Files processed = All PO files, with the exception of PO1.DAT and PO2.DAT.

	Change extension of selected file to ".hld" Renames the print file from the Input Directory to hold after the queue monitor has processed it. The queue monitor will not process a .hld file again. *Append ".hld" to the selected file* Causes the .hld extension to append to the end of the original file extension maintaining the original file name. *Delete selected file* Deletes the print file from the Input Directory after the queue monitor has processed it.
Processor Options	*eFORMz* Merges a print file with an eFORMz Project file. *eFORMz Project Reference File (.efr)* Allows one to perform "table-formatted' lookups on project names based on the name of the print file. For example: efr text file: <ProjectReference> <Ref Datafile="P2310201_*" Project="C:\Minisoft\eFORMz_6\projects\sampstm.efz" /> <Ref Datafile="P5310201_*" Project="C:\Minisoft\eFORMz_6\projects\sampstm_d2.efz" /> </ProjectReference> Toolkit Project File reference: C:\Minisoft\eFORMz_6\projects\projectable.efr *Command File* The print file defined in the File Selection field will be treated as a command file containing command file parameters.
Output Process Options	*Print* Sends output to a networked printer. *File Output* PDF eFORMz Document Files PCL (B/W) PRN Files (B/W) PCL Files (Color) Postscript Files Zebra XML Files HTML Files Text Files AFPDS Files eDIRECT Email Fax Print

Output Variable File Name Options	Defines the output file name to match the variable defined. Variables include: <directory> , <datafilename>, <datafileext>, <project> Example: c:\outputdirectory\<datafilename>.pdf *Note*: The queue monitor variables can also be used by the Copy, Delete, and Print files post-processing commands.
File Output... Create Unique File Name	Creates a unique file output name every time a process is ran. The unique file name must contain at least 3 characters. For example: invoice_{system date/time stamp}.pdf

Chapter 9

eDIRECT Module

Introduction to eDIRECT

eDIRECT is a processing module of eFORMz that allows you to output your merged reports to multiple destinations or output types simultaneously, including:

- Print (Print File)
- E-Mail
- Fax
- HTML Email output (eDIRECT PLUS)
- Database (eDIRECT PLUS)
- Archive (eDIRECT PLUS)
- SMS (eDIRECT PLUS)

> ***NOTE*:** In the Demo version of eFORMz, eDIRECT PLUS is automatically enabled. However, once the product is licensed, the eDIRECT PLUS tab will only display if it has been purchased.

Each output type is symbolized by one of the following icons:

Print (Print File)
Output is directed to a printer or as a file to a specified directory. Print file output types include pdf, efd, pcl, text, and html.

E-Mail
Output is directed to an email server with the ability to attach pdf, efd, pcl, text, or html file output.

Fax
Output is directed to a fax server which faxes your output to the specified fax number.

eFORMz will automatically create a Print File, E-Mail or Fax destination folder in the base directory that the process is executed from for user manageability.

Each output type can contain single or multiple conditions:

Conditions
Defines a condition.

Each output type has multiple elements that are defined with the following symbols:

Print Element
Element that signifies output to a specific printer device.

Generated Element
Element that contains generated content. The type of content is shown after the element name.

Constant Element
Element that has a constant value. The type of content is shown after the element name.

Attachment Element
Element that signifies an attachment. The type of content being attached is shown below the element name.

Database Lookup Element
Element that reads from a database. The method used to lookup the element in the database is shown after the element name.

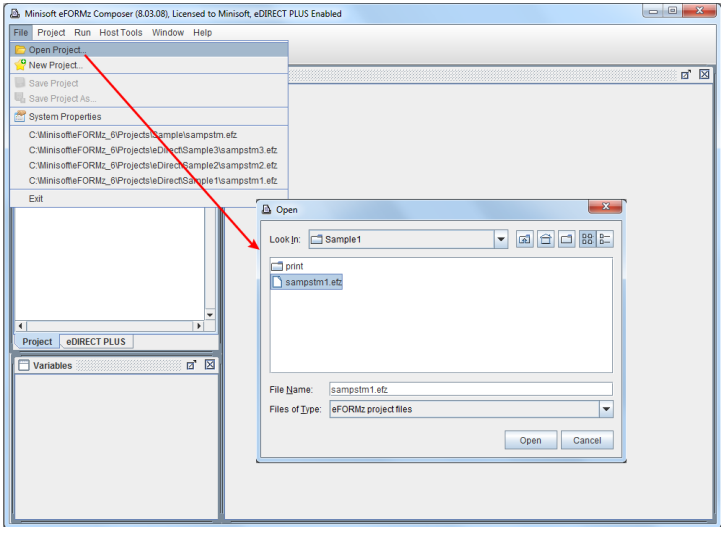
Quick Start

E-Mail

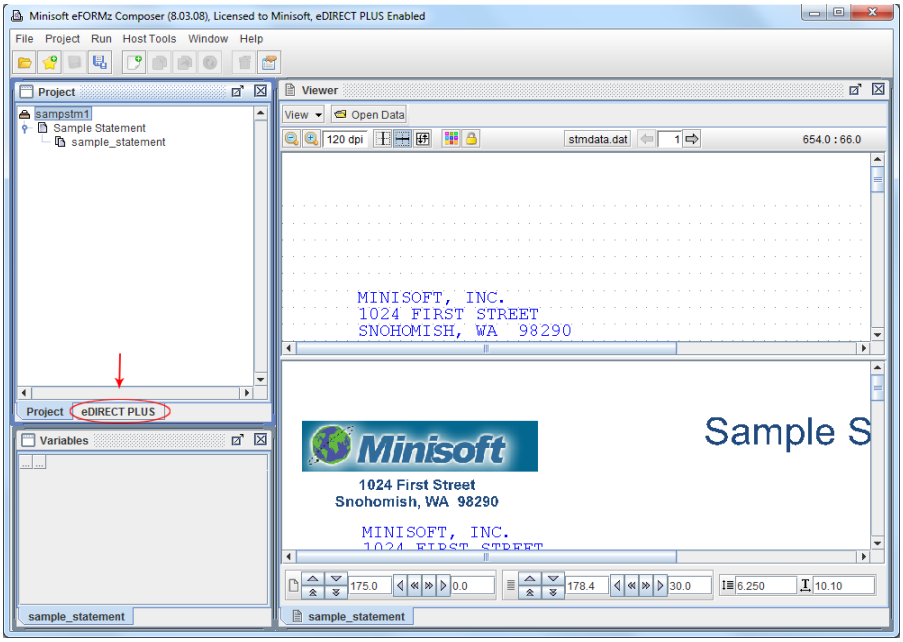
The following example will familiarize you with eDIRECT and demonstrate how to easily send merged output to a specified e-mail address using eDIRECT.

Once eFORMz has been installed on your PC start the eFORMz Composer:

1. From your Start Menu select *Programs* > *eFORMz 8* > *eFORMz Composer*:
2. The eFORMz Composer window will display.
3. From the File Menu select *File* > *Open Project*.
4. Open the sampstm1.efz project file located in the *C:\Minisoft\eFORMz_6\Projects\eDirect\Sample1* folder:



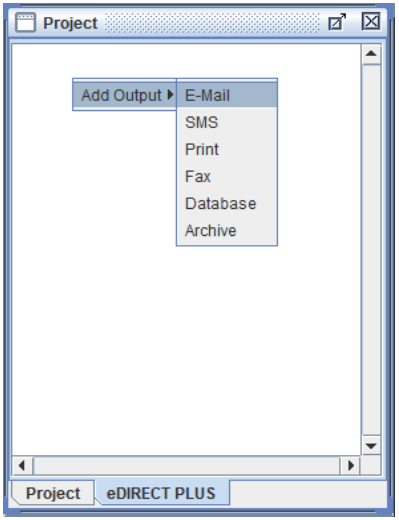
5. The sampstm1.efz project will appear in the Form and Data Viewer.
6. Switch to the eDIRECT (or eDIRECT PLUS) tab.



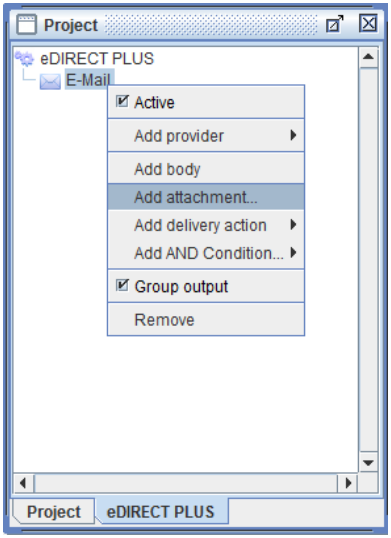
Configuring the E-Mail Output Destination

For our quick start example we will be sending all merged output as an email with a PDF file attachment.

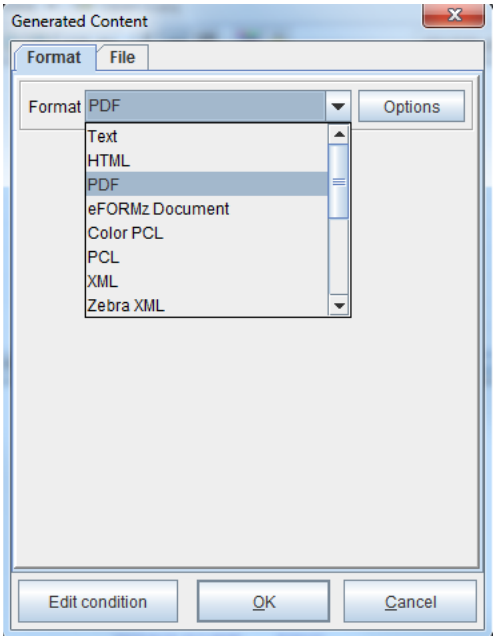
1. *Right click* in the Project window, highlight *Add Output* and select *E-Mail*.



2. *Right click* the *E-Mail* icon and choose the *Add attachment* option.



3. Select *PDF* from the *Format* drop-down menu.



Options available:

Text
Attachment will be in text file format.

HTML
Attachment will be in HTML format.

PDF
Attachment will be in PDF format.

eFORMz Document
Attachment will be in an eFORMz Document format.

Color PCL
Attachment will be in PCL file format (color).

PCL
Attachment will be in PCL file format (B/W).

XML
Attachment will be in XML format.

Zebra XML
Attachment will be in Zebra XML format.

TIFF
Attachment will be in TIFF format.

PNG
Attachment will be in PNG format.

JPEG
Attachment will be in JPEG format.

GIF
Attachment will be in GIF format.

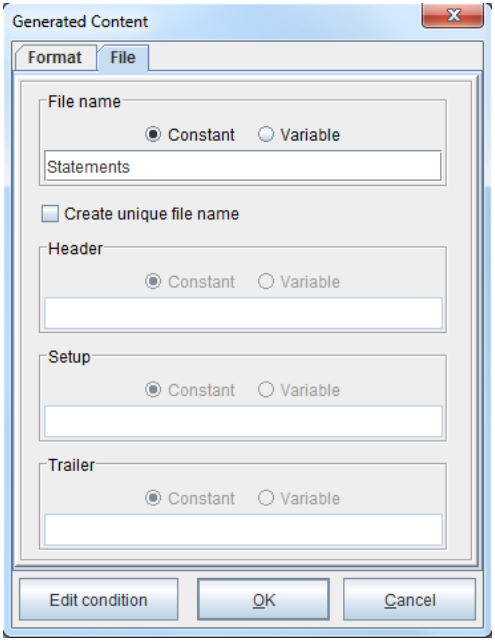
BMP
Attachment will be in BMP format.

AFP
Attachment will be in AFP format.

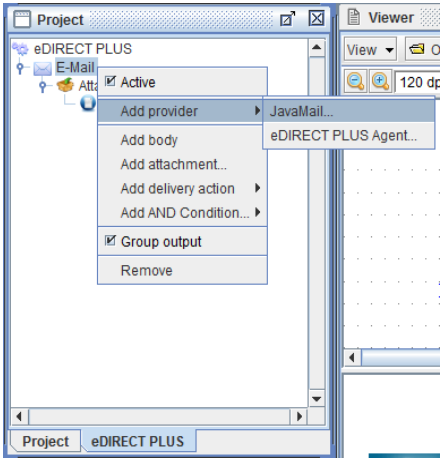
Postcript
Attachment will be in Postcript format.

NONE
No attachment will be included in the email.

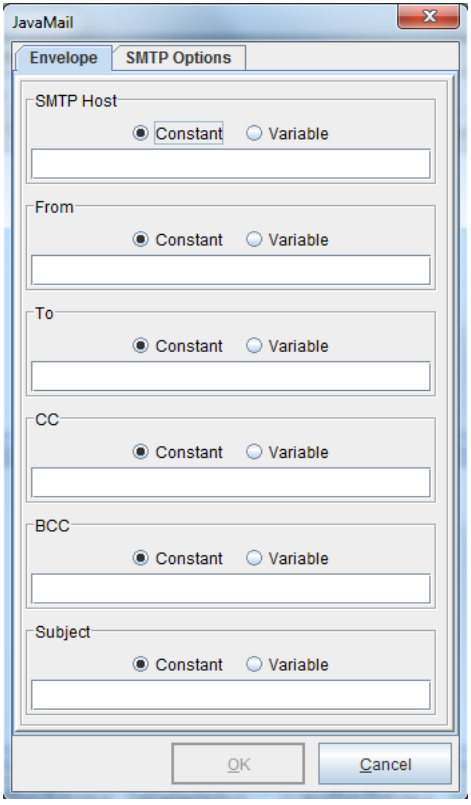
4. Switch to the File tab. Enter a value in the *File name* field or select a *Variable*.



5. *Right click* the *E-Mail* and select *Add provider* > *JavaMail*.



6. The Envelope tab of the JavaMail dialog box will display.



Element Options:

SMTP Host
IP address or name of the email server that will be used to send the generated emails. By default this is a constant element. Port # can be included by adding a colon (hosting.companyname.com:2525) as the separator.

From
An email address that designates who the email is from. By default this is a constant element.

To
An email address that designates the recipient of the email. This can be a constant, bound, or database tag reference.

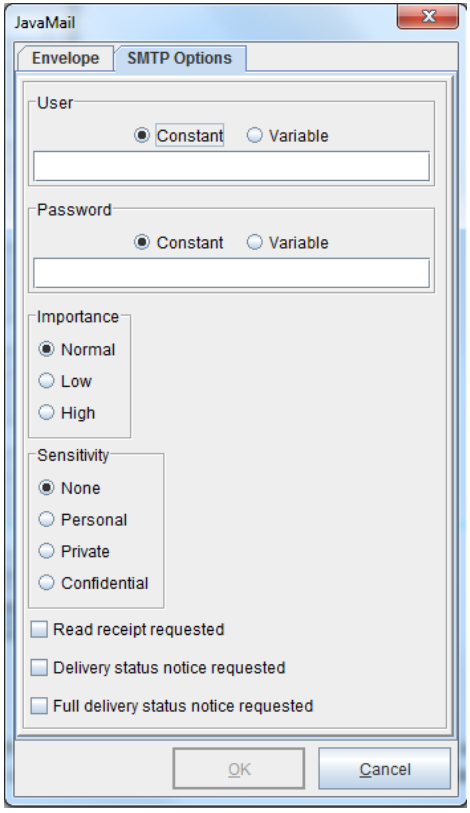
> ***TIP*:** Multiple email addresses can be separated by a semicolon (;), making sure a space separates the semicolon and the following email address. For example:
>
> JohnDoe@minisoft.com; JaneDoe@minisoft.com

CC
An email address for CC recipients. Multiple email addresses can be separated by a semicolon (;).

BCC
An email address for BCC recipients. Multiple email addresses can be separated by a semicolon (;).

Subject
The subject of the email. By default this is a constant element.

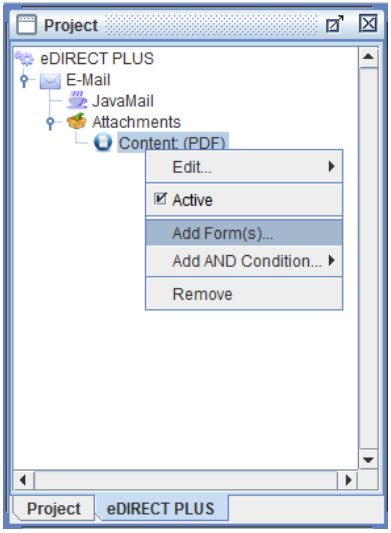
SMTP Options
For SMTP host authentication.



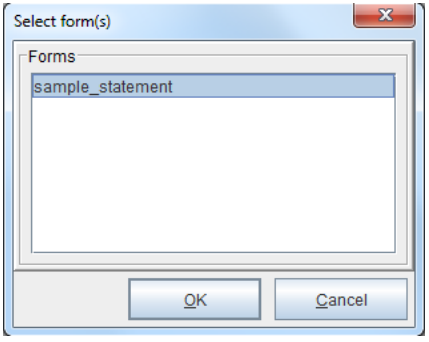
***NOTE*:** If real client and user email information is used, they will receive an email when the eDIRECT process is run. We suggest using your own email server and email address for testing purposes only.

7. When complete click OK.

8. *Right click* the *Content: (PDF)* element and select *Add Form(s)*.

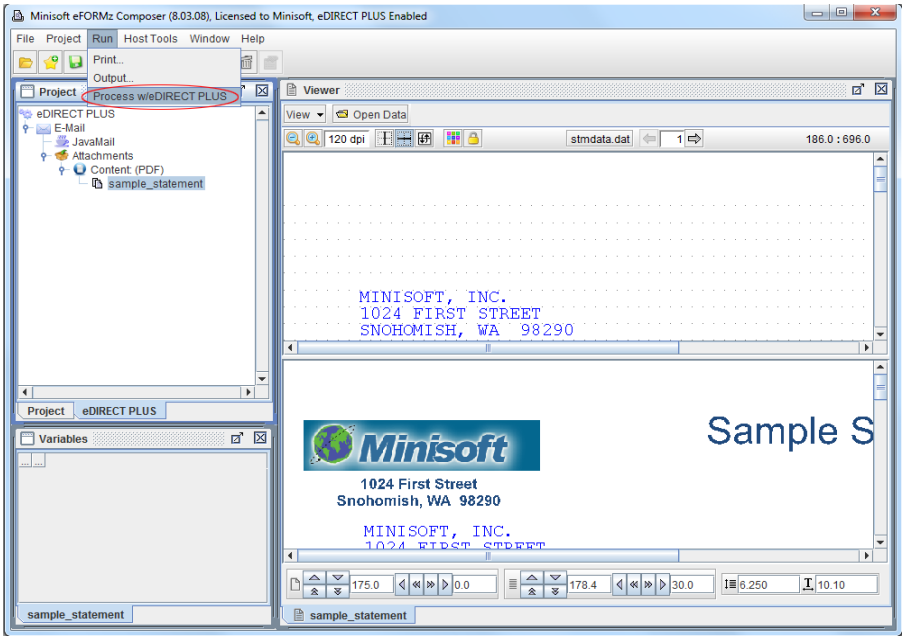


9. Choose the form that will be sent as a PDF attachment.



Run the eDIRECT Process

1. From the eFORMz Main Menu, select *Run* > *Process w/eDIRECT*.



2. Check your email account.

Fax

In this quick start example, we will be using eDIRECT to output all merged data and forms to a particular fax number. To send all merged output to a fax machine you will need a fax server. After setting up the fax server, note the configured header information, for example:

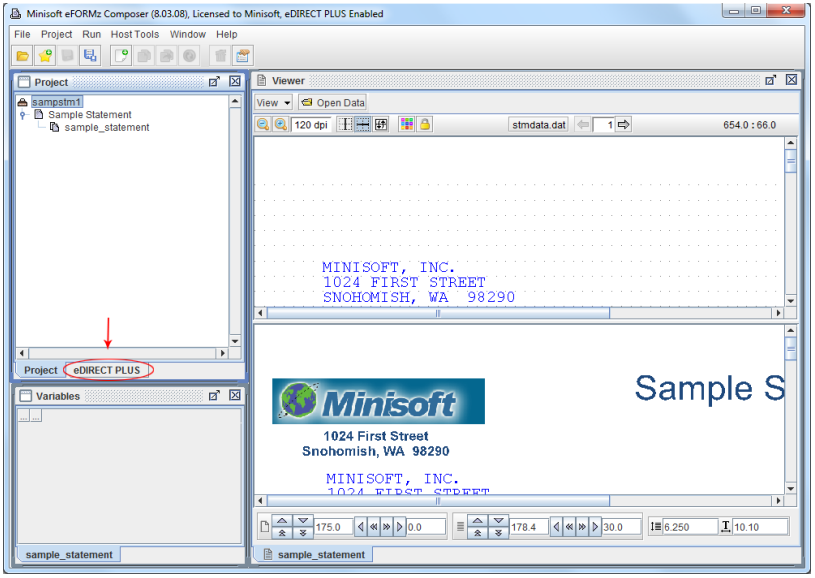
@@Number 123-456-7890@@

123-456-7890 is the number of the fax machine you would like to send your output to.

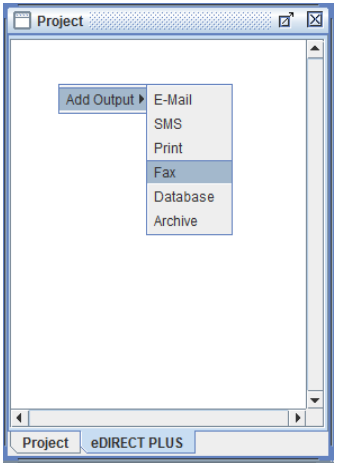
Note: Header information may vary between different fax servers.

The header information will be outputted by eDIRECT and directed to the fax server which will process the header information to send the merged output to the correct fax machine. To specify the header information in eDIRECT, follow these instructions:

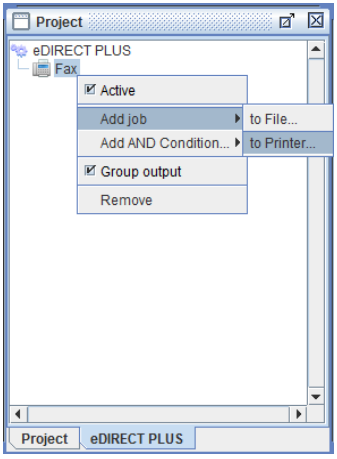
1. From the eFORMz Composer window select the *File* menu > *Open Project*.
2. Open the sampstm1.efz project file located in the *C:\Minisoft\eFORMz_6\Projects\eDirect\Sample1* folder.
3. The sampstm1.efz project file appears in the Form and Data Viewer. Switch to the eDIRECT (or eDIRECT PLUS) tab.



4. *Right click* in the Project window, highlight *Add Output* and select *Fax*.



5. *Right click* the *Fax* output destination and select *Add job* > *to Printer*.

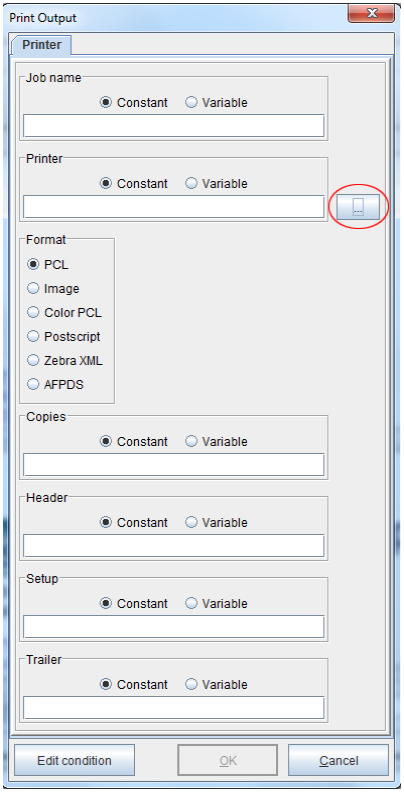


Job Options:

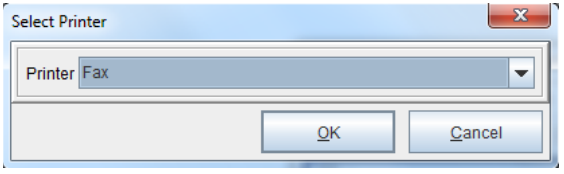
to File
Acts as an input directory, putting all of the output files in a directory that is monitored by the fax server and then sent to the specified fax number accordingly. For more information, go to the *Directing Output to a Fax Server* section.

to Printer
Sends the output to the printer queue monitored by your fax server.

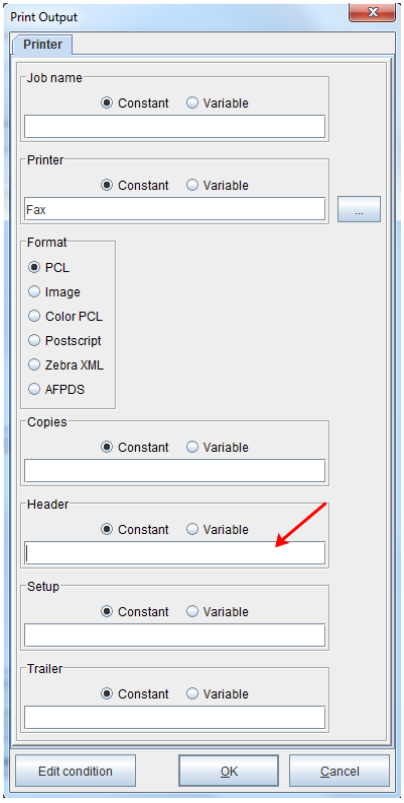
6. The Print Output dialog box will display. To define the printer queue monitored by your fax server, select the browse button from the *Printer* field.



7. Choose the *Fax* option.



8. Enter the fax server header information in the *Header* field.



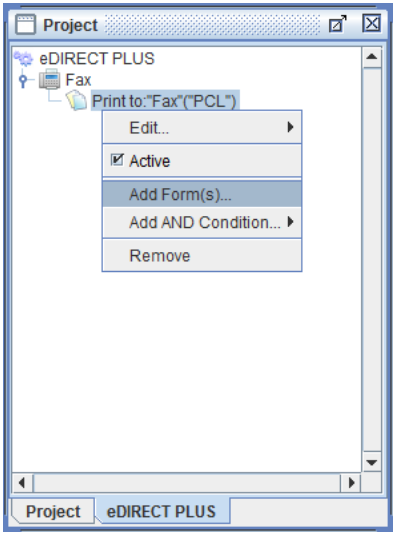
For example:

@@Number 123-456-7890@@

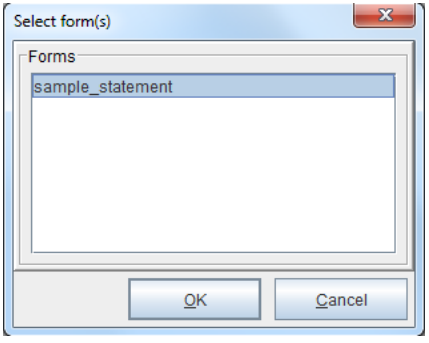
Note: Header information may vary between different fax servers.

9. Click *OK*.

10. *Right click* the *Print to:* element of the *Fax* output destination and select *Add Form(s)*.

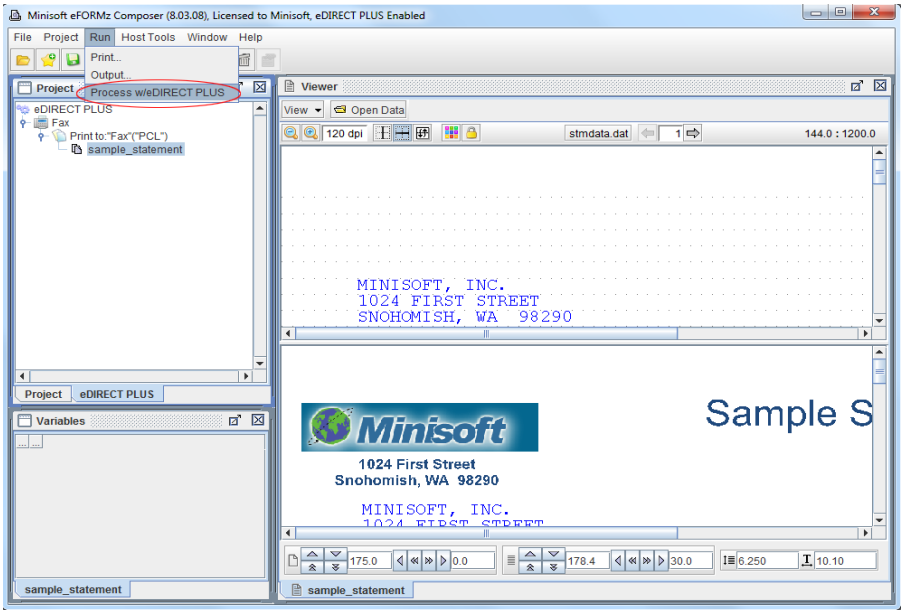


11. Choose the form and click OK.



Run the eDIRECT Process

1. From the eFORMz Composer select *Run* > *Process w/eDIRECT*:



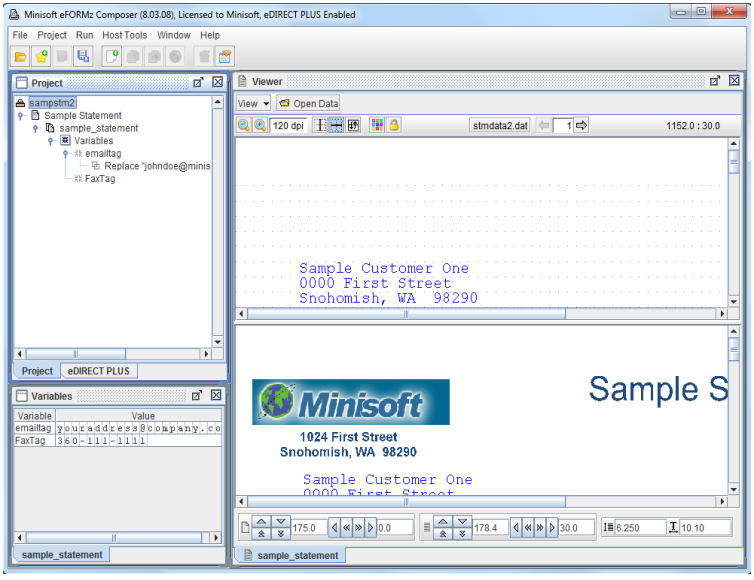
2. To redirect Fax output to a specific folder or fax queue, see *Chapter 9: Print Automation* > *Local Toolkit*.

Variable Reference

E-Mail

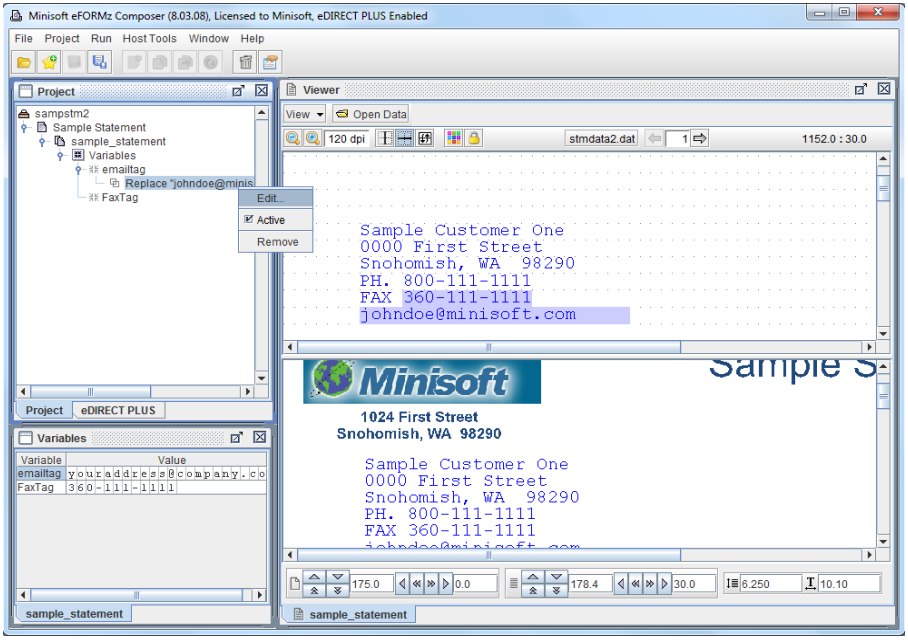
The following example will demonstrate how to take a tagged email address from the original data file and using eDIRECT distribute the email to the specified recipients:

1. Start the eFORMz Composer.
2. From the File menu select *File > Open Project*.
3. The Open dialog box appears. Select the *sampstm2.efz* project file from the *C:\Minisoft\eFORMz_6\Projects\eDirect\Sample2* directory.
4. Another dialog box will appear allowing you to select the associated data file (stmdata2.dat).
5. The *sampstm2.efz* project file displays.

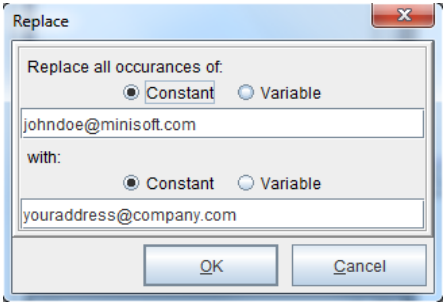


6. From the Project window select the *Replace* function located under the *emailtag* variable.

7. Using your mouse, *right click* and select *Edit*.



8. From the Replace dialog box enter your email address with the one indicated in the Constant field ("youraddress@companyname.com"):



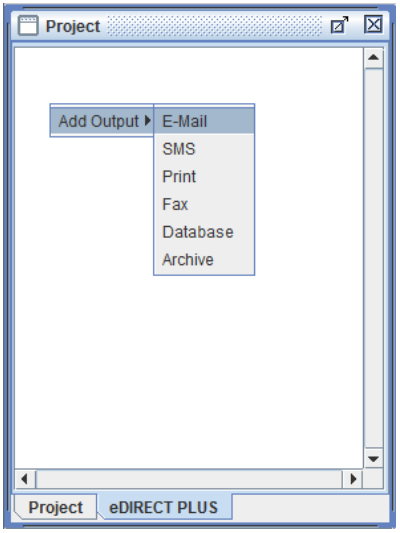
Once complete click *OK*. Your email address will appear in the Form and Data Viewer.

9. From the Project window, switch to the eDIRECT (or eDIRECT PLUS) tab.

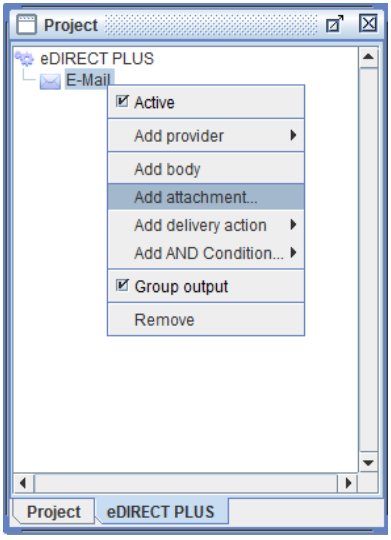
Configuring the Output Destination

In the following example, all merged output will be sent as an email attachment to the specified email address contained in the data file. If a page does not contain an email address, as do pages 3 and 4, eDIRECT will simply skip these pages for emailing and create a PDF file for later use.

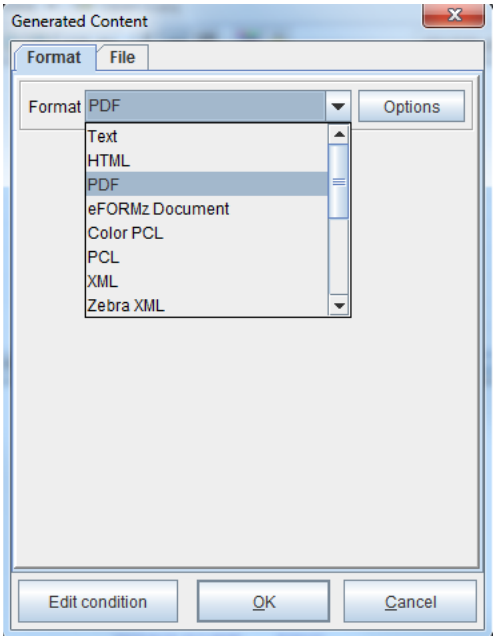
1. *Right click* in the Project window and select *Add Output* > *E-Mail*.



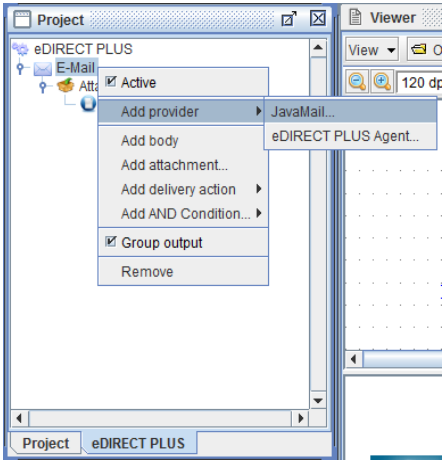
2. *Right click* the *E-Mail* icon and choose the *Add attachment* option.



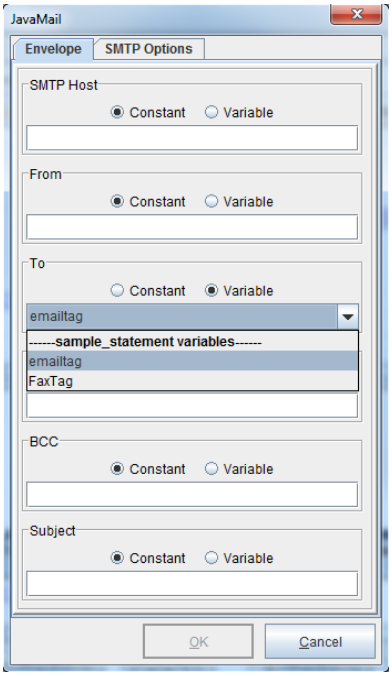
3. Select *PDF* from the *Format* drop-down menu.



4. *Right click* the *E-Mail* and select *Add provider* > *JavaMail*.

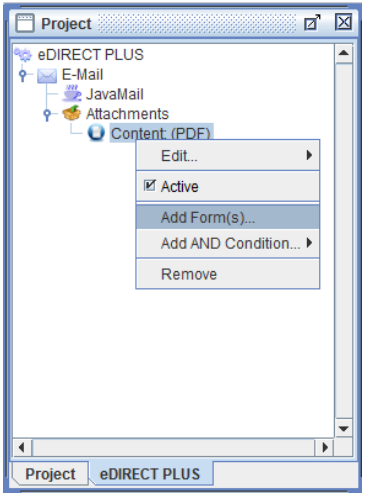


5. The Envelope tab of the JavaMail dialog box will display. In the *To* field, select the *Variable* radio button and pick the *emailtag* variable from the drop-down menu.

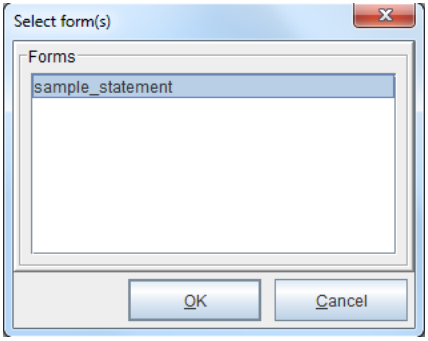


6. Configure your email server IP address, sender (From), subject, and body. If CC and BCC are needed configure these also. Click *OK*.

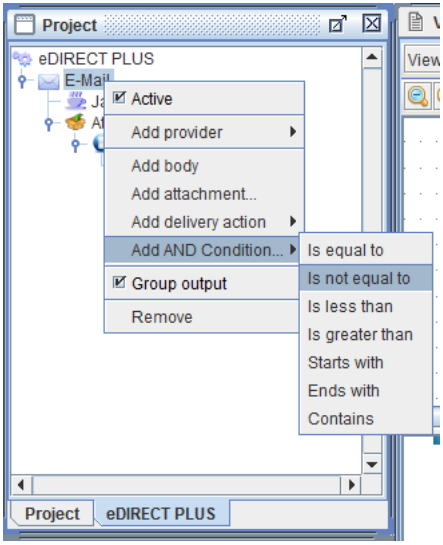
7. *Right click* the *Content: (PDF)* element and select *Add Form(s)*.



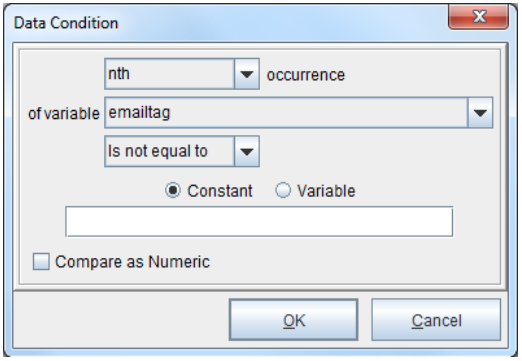
8. Select the form to be sent as a PDF attachment.



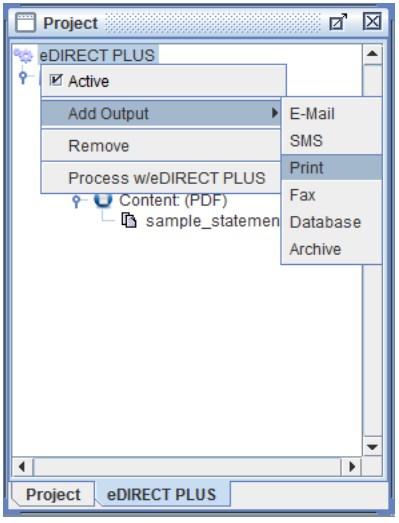
9. To ensure that only the output with an email address is sent as an attachment, *right click E-Mail* and select *Add AND Condition > Is not equal to*.



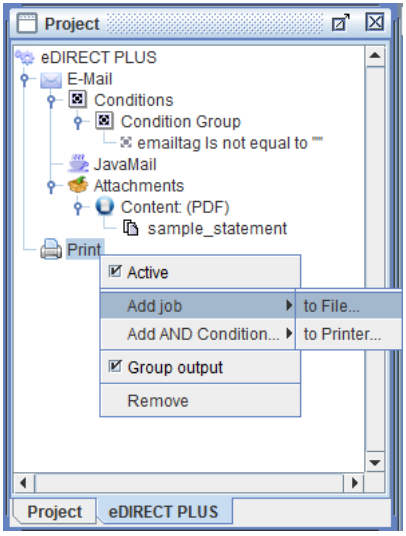
10. Select 'nth' occurrence of variable *emailtag is not equal to* an empty value. If the *emailtag* variable has no email address value, then an email attachment will not be sent. If the email address is contained in the data file, an email will be sent as an attached PDF file. Click OK.



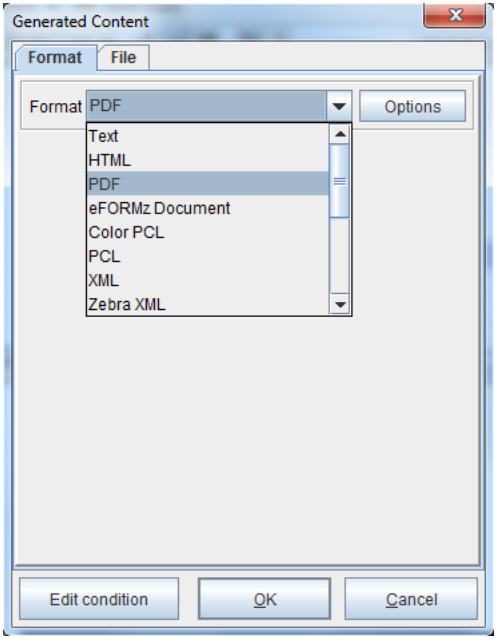
11. Add a print file process to create PDF files of pages that do not contain an email address. *Right click* in the Project window and select *Add Output* > *Print*.



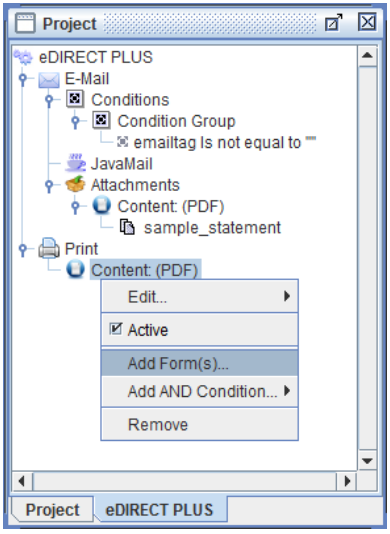
12. *Right click* the *Print* icon and select *Add job > to File*.



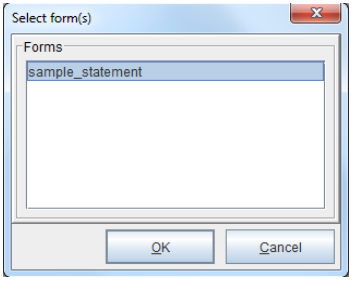
13. From the *Format* list, select *PDF*.



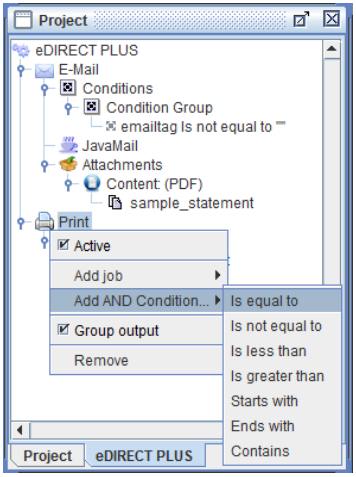
14. *Right click* the *Content: (PDF)* and choose the *Add Form(s)* option.



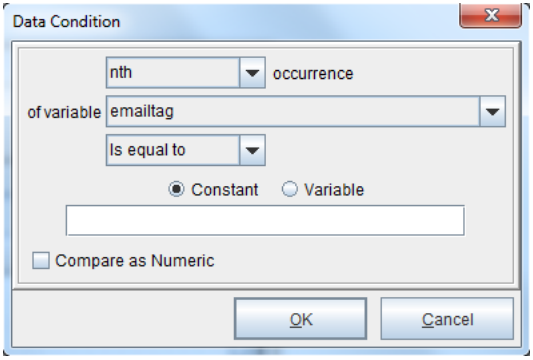
15. Pick the form and click OK.



16. *Right click Print* and select *Add AND Condition > Is equal to*.

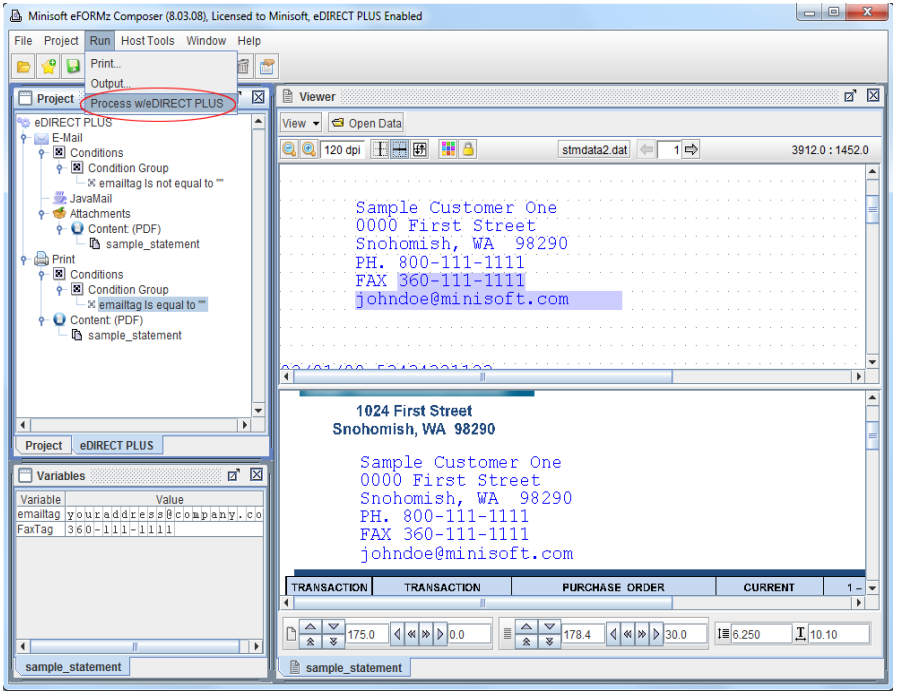


17. Select 'nth' occurrence of variable *emailtag is equal to* an empty value. If the *emailtag* variable has no email address value, then a PDF file will be generated. Click OK.



Run the eDIRECT Process

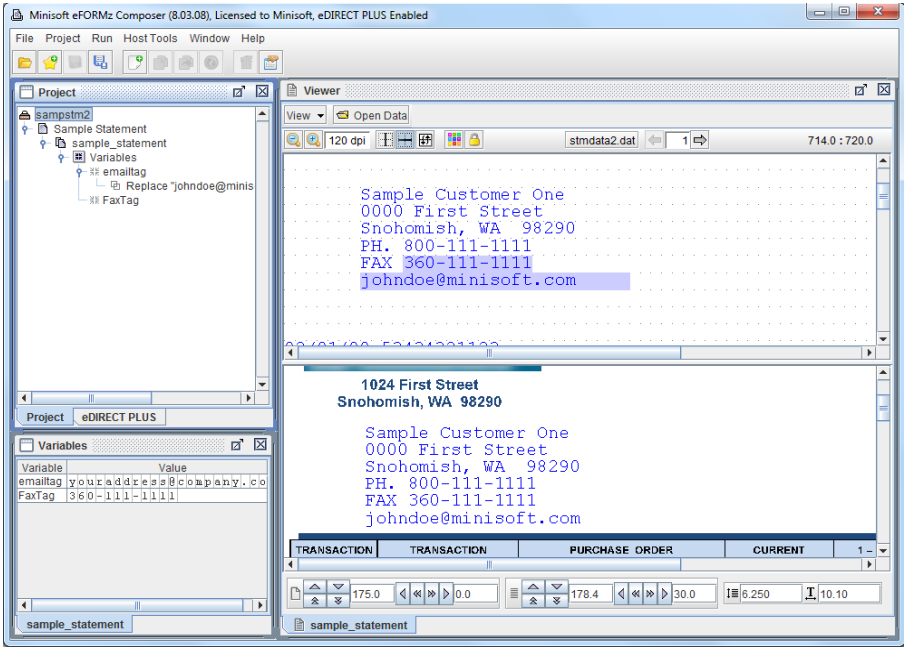
1. From the eFORMz Composer select *Run > Process w/eDIRECT*.



FAX

The following example will demonstrate how to take a tagged fax number from a data file and using eDIRECT, direct the merged output to a fax server:

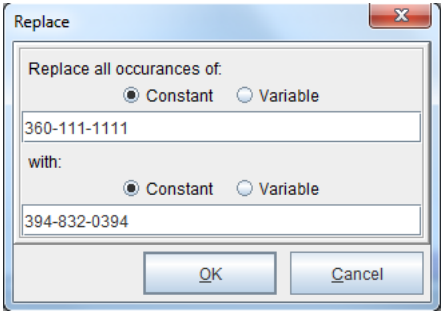
1. From the eFORMz Composer select the *File* menu > *Open Project*.
2. The Open dialog box appears. Select the sampstm2.efz project file from the C:\ Minisoft\eFORMz_6\Projects\eDirect\Sample2\ directory.
3. If a data file has not already been selected the Data File dialog box will display. Select the data file pertaining to the project file, in this case *stmdata2.dat*.
4. The sampstm2.efz project file will display in the Project window.



5. A variable tag has been added to the project file tagging the fax number. To change the fax number, *right click FaxTag* and select *Add Function* > *Replace*.

6. The Replace dialog box displays. In the *Replace all occurrence of* > *Constant* field enter the fax number displayed in the data file (360-111-1111).

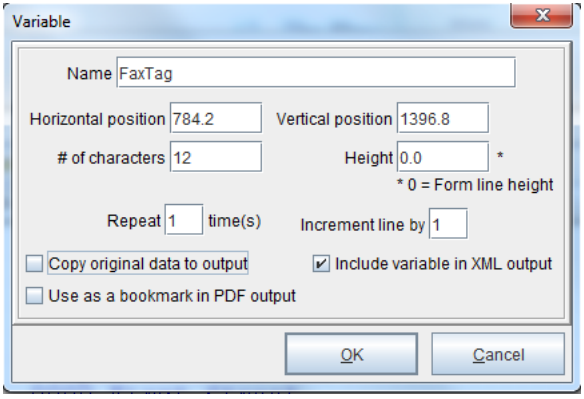
   Enter the number you would like to replace the existing fax number with (*with:* > *constant* field).



   Once complete click *OK*.

7. From the Project window, *right click FaxTag* and select *Edit*.

8. The Variable dialog box displays. Uncheck *Copy original data to output*.

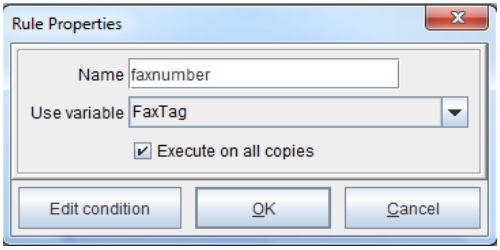


   Once complete, click *OK*.

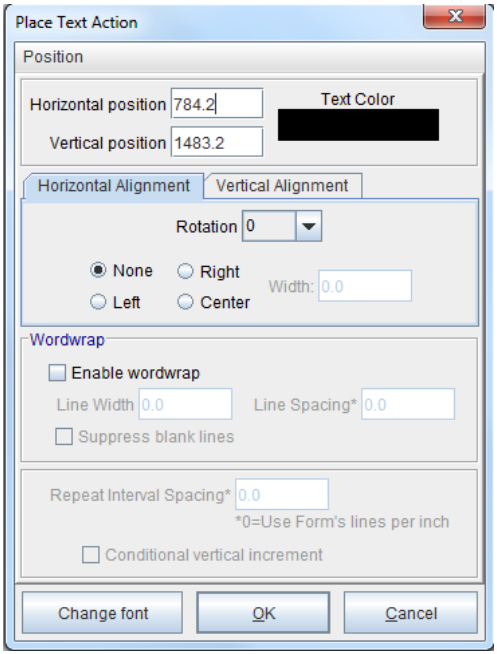
9. The fax number will disappear from the Form and Data output window. To apply the new fax number to the Form and Data output create a new rule.

10. *Right click FaxTag* and select *Add Rule* > *Place Text*.

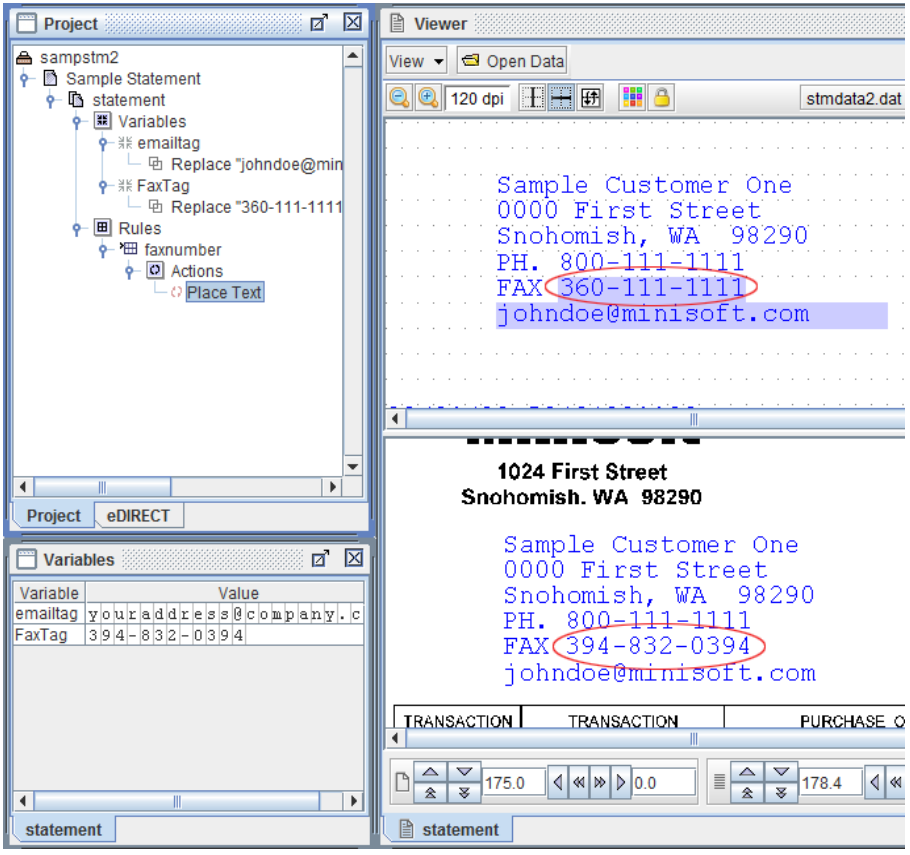
11. The Rule Properties dialog box displays. Enter a new rule name and click *OK*.



12. The Place Text dialog box displays. Keep the existing horizontal and vertical positioning and click *OK*.



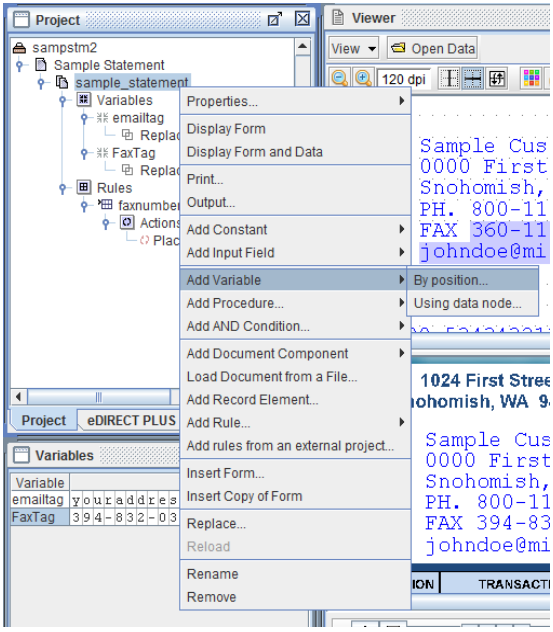
13. The new fax number appears in the Form and Data Viewer.



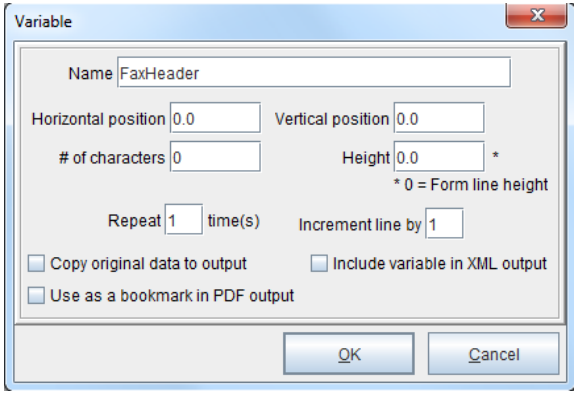
eDIRECT Tab

For our example we will be sending all merged output to a specified fax number contained in the data file. If using real data, the fax number could vary from page to page. To allow eFORMz to send the merged output to the different fax devices do the following:

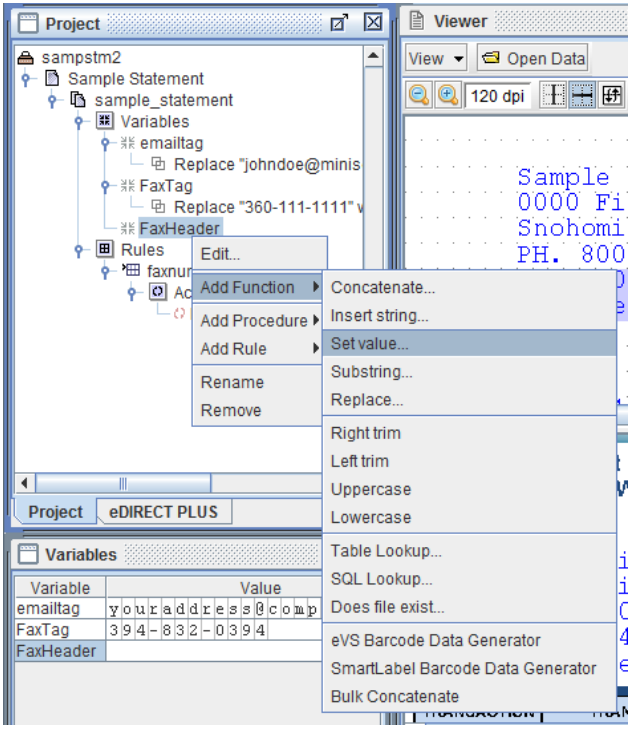
1. *Right click* the form (sample_statement) and select *Add Variable* > *By position*.



2. Enter a name and click OK.



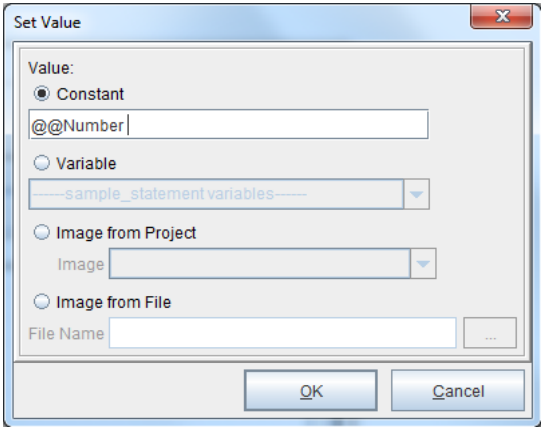
3. *Right click* the *FaxHeader* variable and select *Add Function* > *Set Value*.



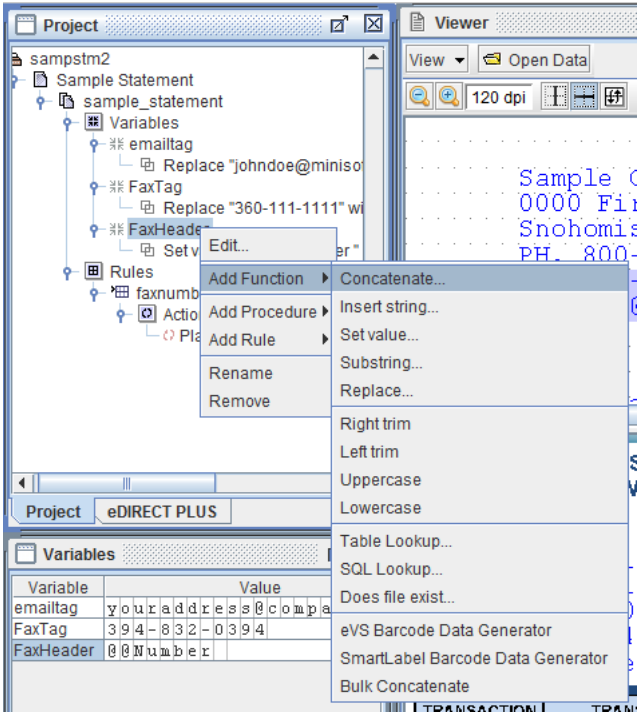
4. Enter your fax header information, for example:

   @@Number

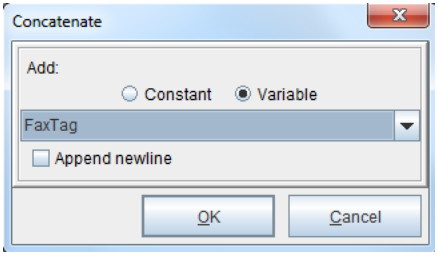
   Note: Leave a space for where the fax number will normally appear.



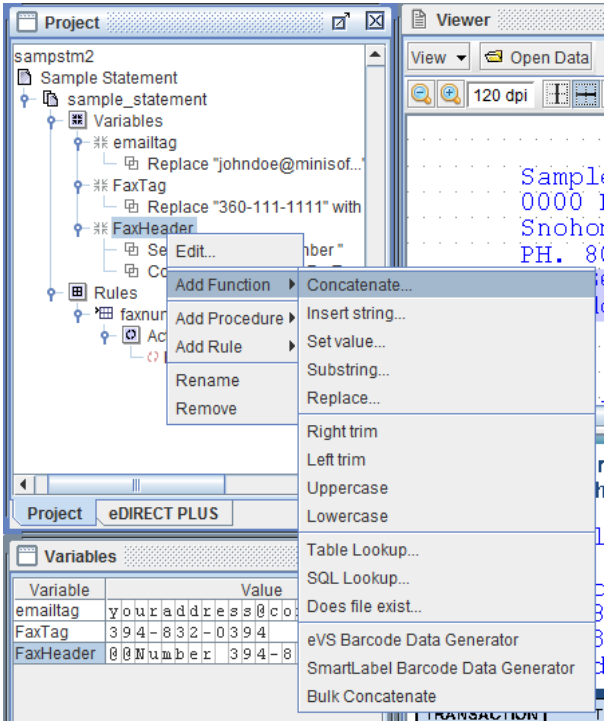
5. *Right click FaxHeader* and select *Add Function* > *Concatenate*.



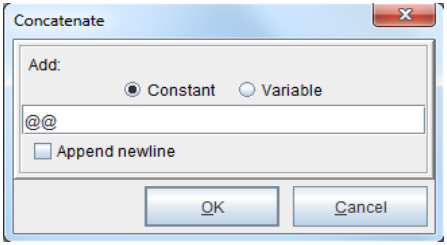
6. Choose the *FaxTag* variable from the *Variable* drop-down menu.



7. *Right click* the *FaxTag* variable and select *Add Function* > *Concatenate*.

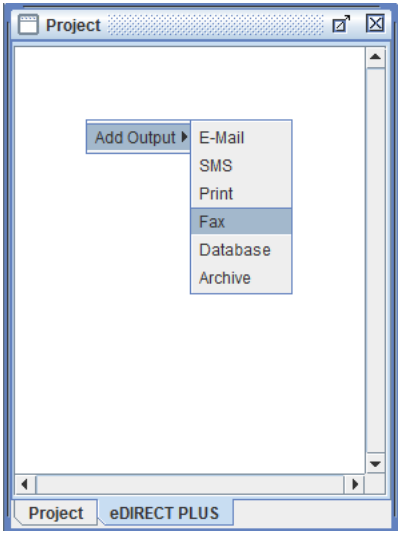


8. Enter the remainder of the fax header. Click OK. The *FaxHeader* will now contain the following: @@Number <FaxTag>@@.

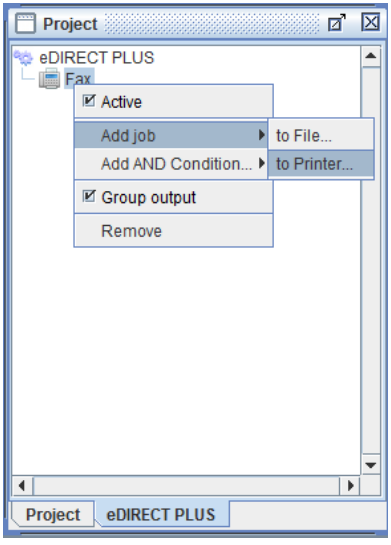


9. From the Project window switch to the eDIRECT (or eDIRECT PLUS) tab.

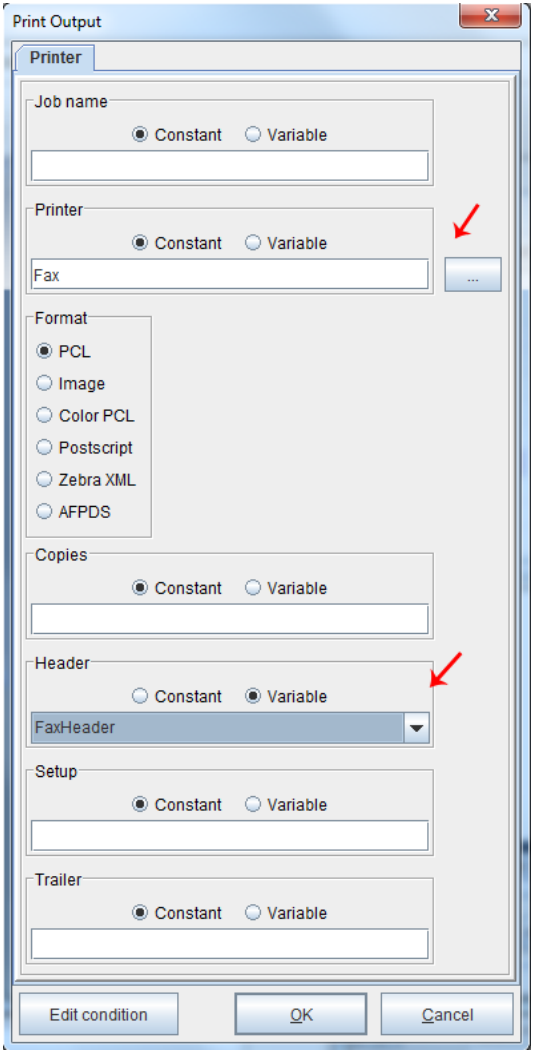
10. *Right click* in the Project window and select *Add Output > Fax.*



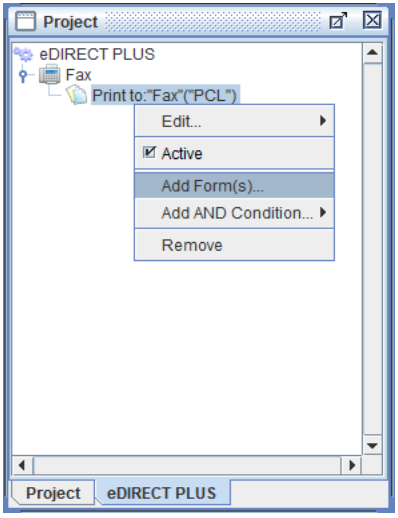
11. *Right click* the *Fax* output destination and select *Add job > to Printer*.



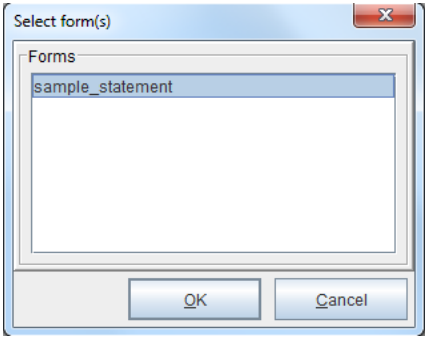
12. In the *Printer* field, add the fax server print queue. In the *Header* field, select the *FaxHeader* variable from the drop-down menu.



13. *Right click Print to:* and select *Add Form(s)*.



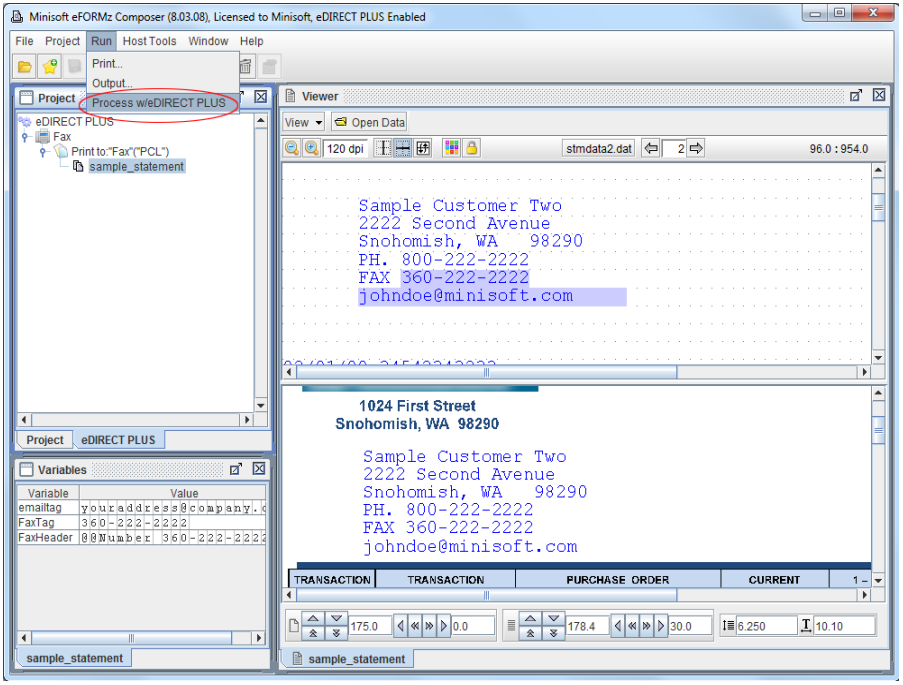
14. Pick the appropriate form. Click OK.



The Fax output destination now references the fully qualified Fax header, which references back to the fax tag placed within the project file. In this way, if a data file contains multiple fax numbers, merged output will be directed to the corresponding fax number.

Run the eDIRECT Process

1. From the eFORMz Composer select *Run > Process w/eDIRECT*:



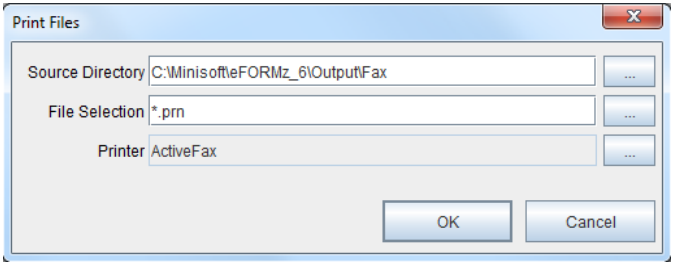
To redirect fax output to a specific folder monitored by your fax server, instead of *Add job > to Printer*, the user would select *Add job > to File* (See Step 11). See *Chapter 9: Print Automation > Local Toolkit* for more details.

Directing Output to a Fax Server

When Fax output is specified in eDIRECT, eFORMz simply creates a merged print file (.prn) containing the fax header information in record 1 of the merged output. This header information is necessary for processing by a fax server. The merged print file is created in a subfolder (\fax) under the output directory which automatically gets created if one does not already exist.

There are two options available for processing the merged print file to a fax server:

1. If the fax server software can be configured to monitor a folder for the eFORMz merged print file, you can either have the fax server software monitor the output directory containing the subfolder for the fax output from eFORMz or using an 'external' command redirect the output to a folder on the fax server using a MOVE command.
2. The other option is to instruct eFORMz to 'PRINT' the merged print file to the fax print queue. To do so, add a Print File post process command after the *Process with eDIRECT* entry. The *Source Directory* will be \fax folder and the *File Selection* field refers to the print files generated during the merge process. Please note that wild-card entries are permitted.



***TIP*:** It is recommended to delete, rename, or move these files using a *post process command* after they have been processed by your fax server otherwise they will be transmitted over again.

Advanced eDIRECT Features

- Sorting
- Attach Name Option
- SMTP Options
- PDF Encryption
- PDF Viewing
- Creating Dynamic Subfolders
- File Header and Trailer Options

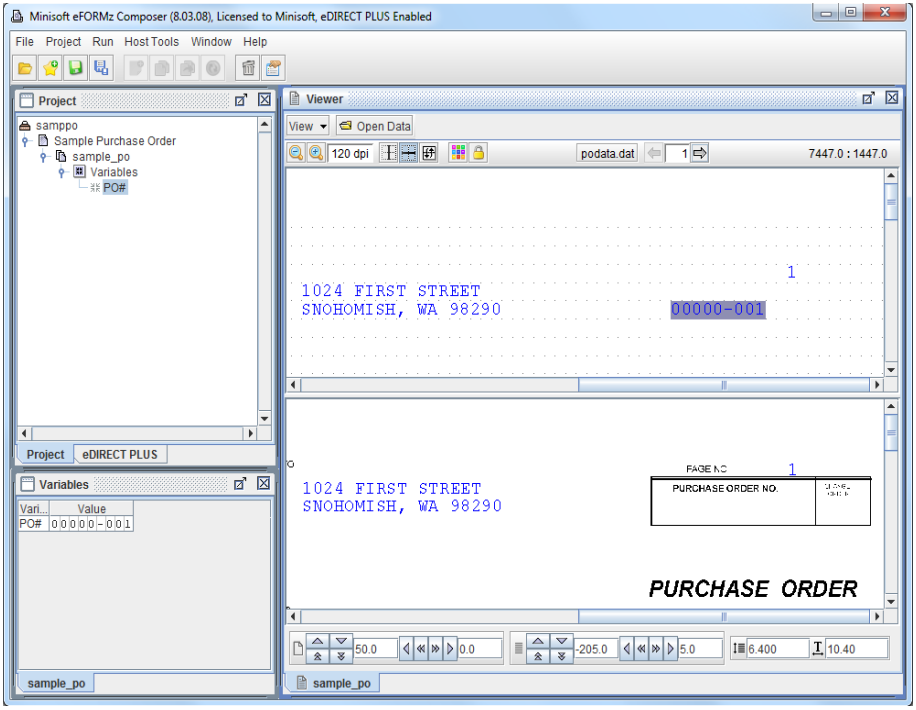
Sorting

Variable Group - E-Mail and Faxing

When eDIRECT processes e-mail addresses or fax numbers based on a reference within a data file or database, identical e-mail addresses or fax numbers are grouped together allowing for consolidated file attachments.

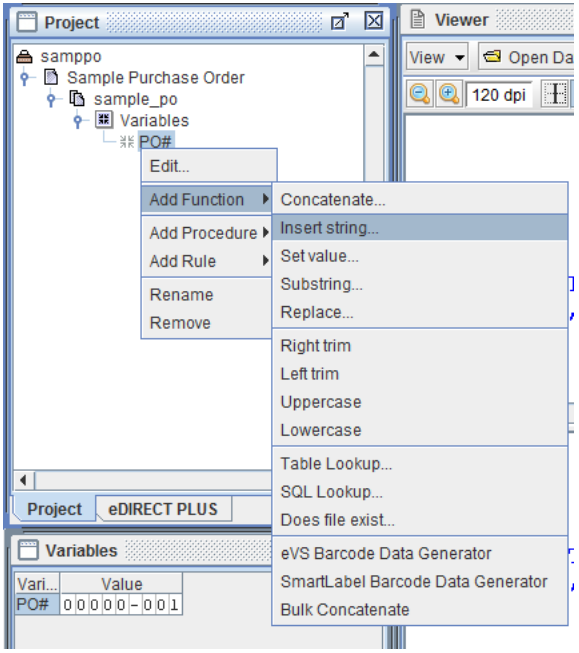
If, for example, purchase orders are being processed and the same e-mail address or fax number appears consecutively but pertains to a different purchase order number, the Sort tab from the Project Properties can then be used to separate these pages by purchase order number.

1. For example, add a variable that tags the PO Number within your data file.

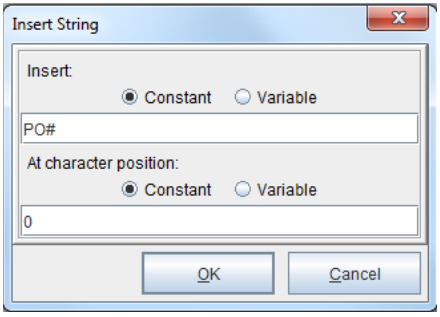


Note: For instructions on how to add a variable, see *Chapter 6: Data Customization*.

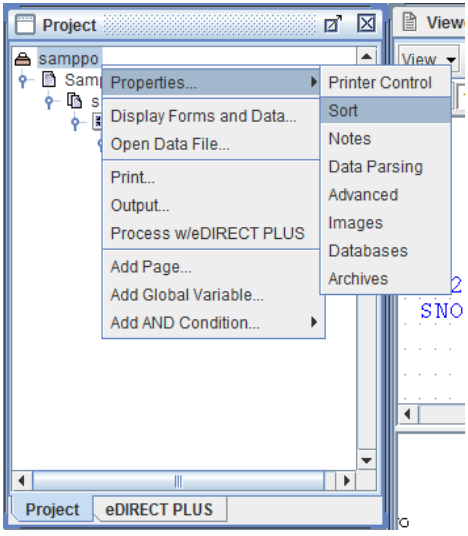
2. *Right click* the variable and select *Add Function* > *Insert String*.



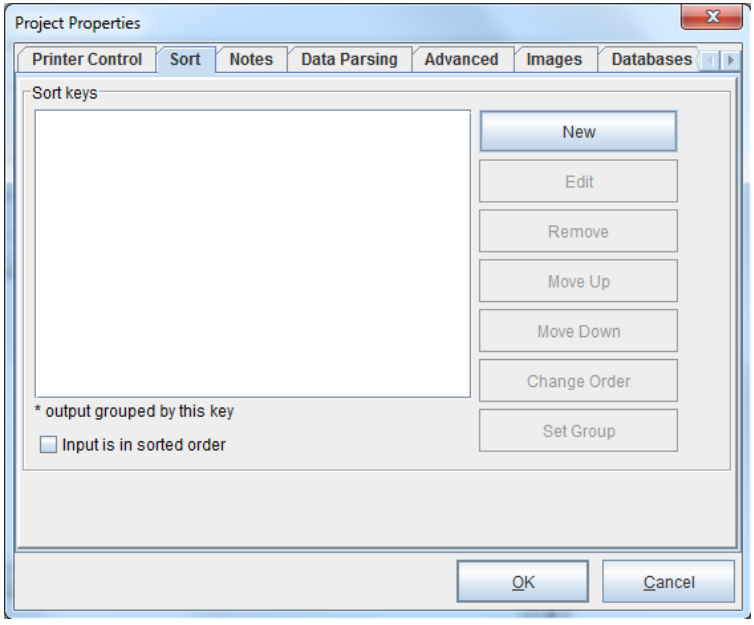
3. Enter a constant value at the beginning of the variable data. Click *OK*.



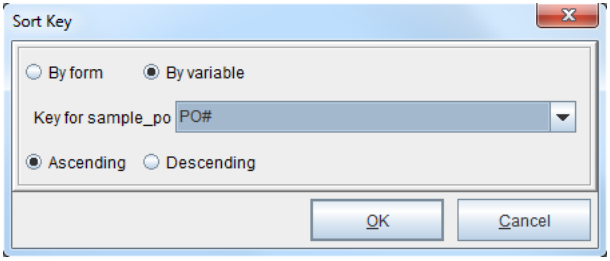
4. *Right click* the project and select *Properties* > *Sort*.



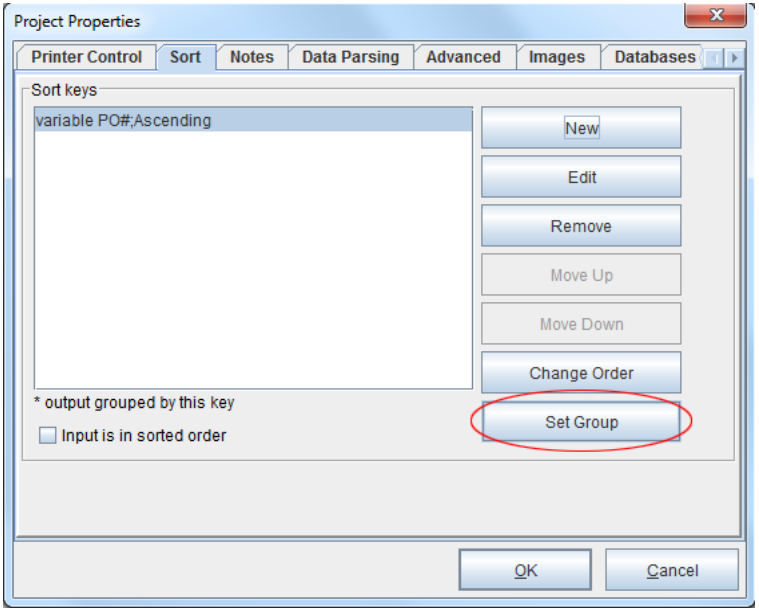
5. From the Sort tab, select the *New* option.



6. The Sort Key will display. Choose the *By variable* option and pick the variable created earlier from the drop-down menu. Click *OK*.

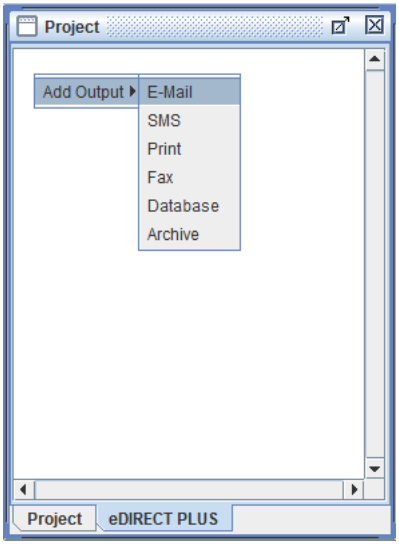


7. Select the Set Group button and click OK.

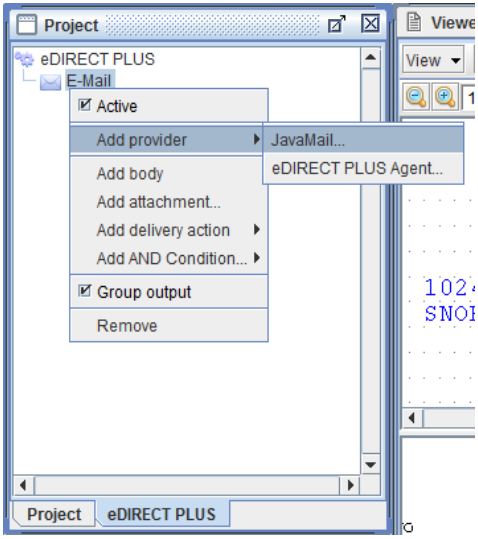


***NOTE*:** For more on the Sort feature, refer to the Sort section in the Project Properties portion of *Ch. 3: eFORMz Composer Menus and Project Options*.

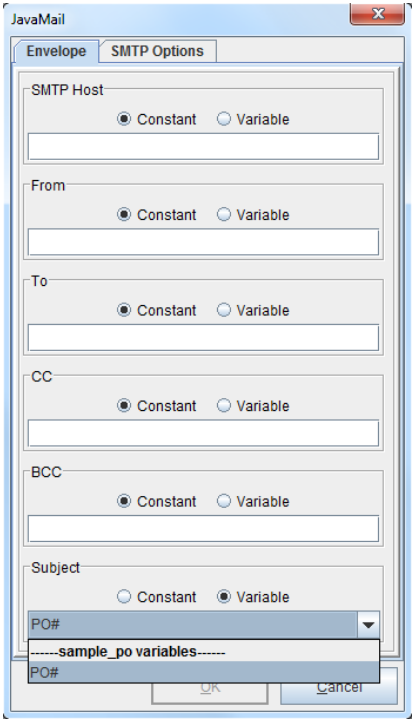
8. Switch to the eDIRECT (or eDIRECT PLUS) tab. *Right click* in the Project window and select *Add Output* > *E-Mail*.



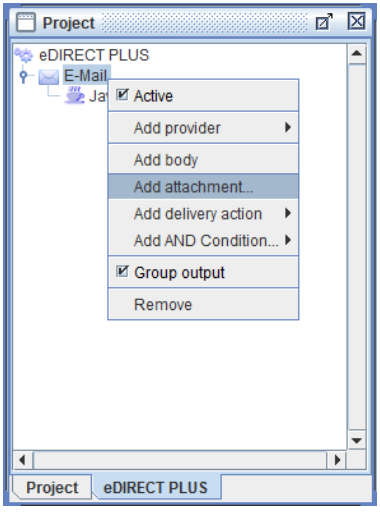
9. *Right click* the *E-Mail* and select *Add provider* > *JavaMail*.



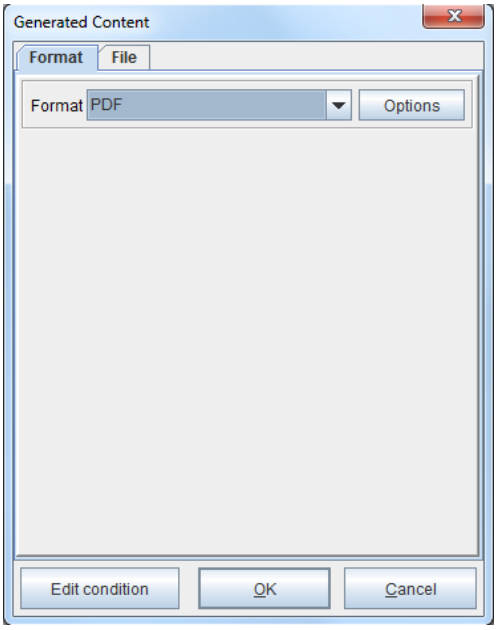
10. Enter information for the necessary fields. For the *Subject* field, select the variable created earlier from the drop-down menu. When complete, click *OK*.



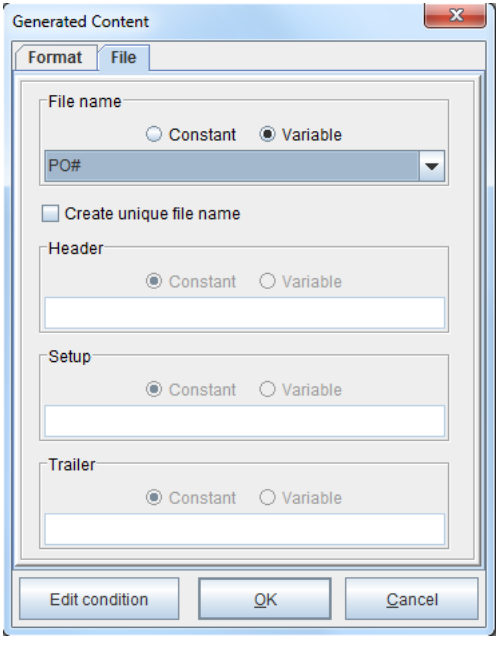
11. *Right click E-Mail* and select *Add attachment*.



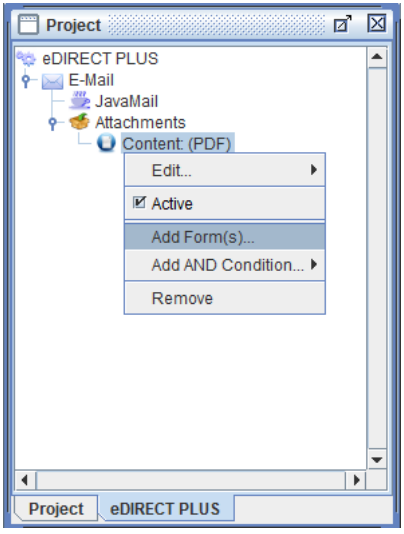
12. Choose *PDF* and switch to the File tab.



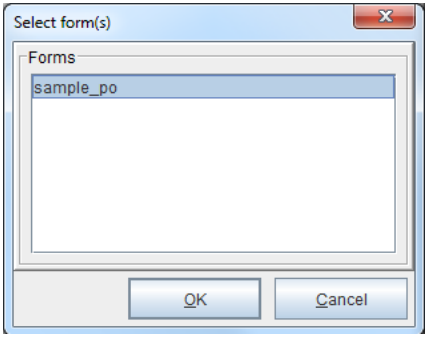
13. Select the variable created earlier for the *File name*. Click *OK*.



14. *Right click Content: (PDF)* and select *Add Form(s)*.



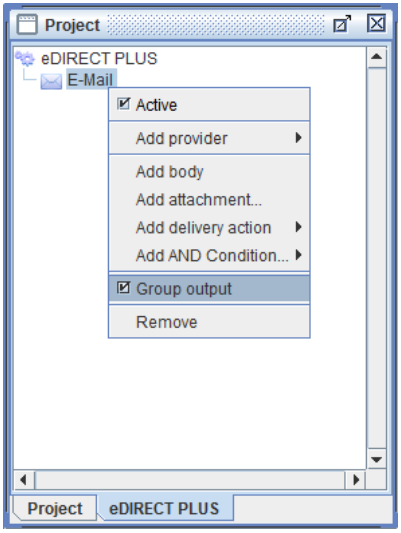
15. Choose the appropriate form and click *OK*.



16. From the eFORMz Main Menu, highlight *Run* and pick the *Process w/eDIRECT* option.When the process is implemented, a file containing multiple purchase orders will be split based on the Sort key that has been set in the Project Properties.

Group Output

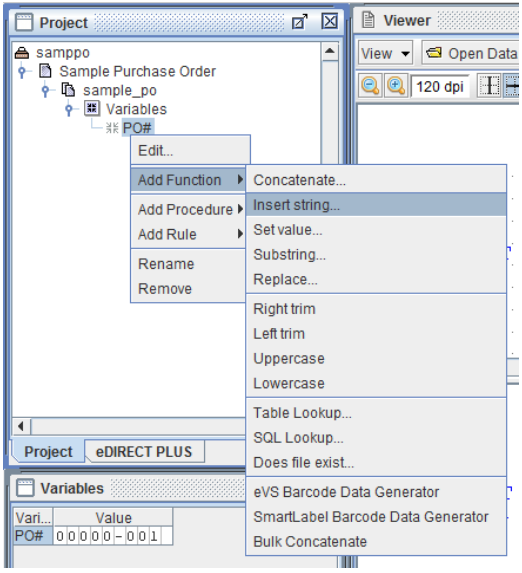
eDIRECT output can be set to have the output grouped (which is the current default) or not grouped. The selection is done with a check menu item on the popup menu for the output node. If checked, individual pages are consolidated into a single output file (print, email, fax).



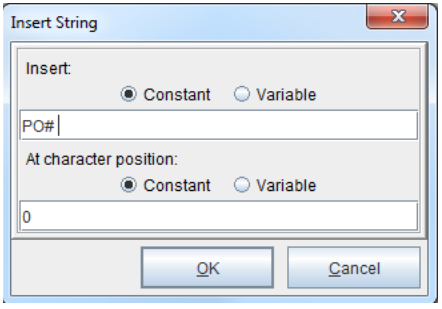
Attach Name Option

When a pdf file is created by eFORMz, by default, the project file name is attached to the corresponding pdf file. If, for example, purchase orders are being processed and they need the pdf file name to have the attached purchase order number, use the following procedure:

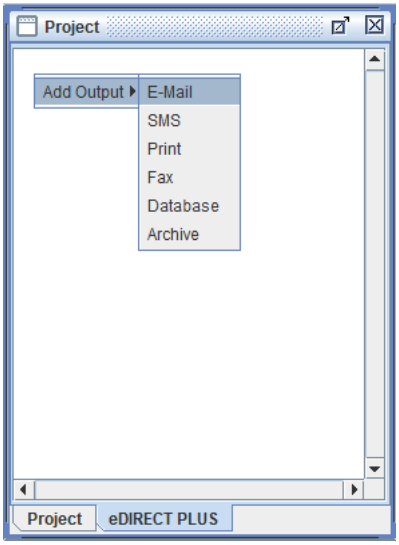
1. Tag the appropriate field (i.e. purchase order number) using a variable within the eFORMz Composer.
2. *Right click* the variable and select *Add Function* > *Insert String*.



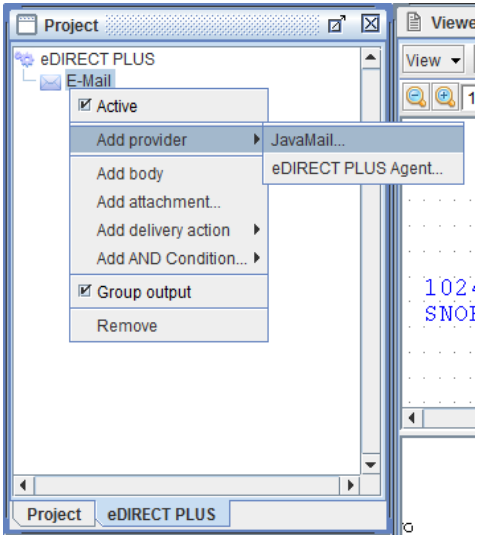
3. Enter a constant value at the beginning of the variable data. Click *OK*.



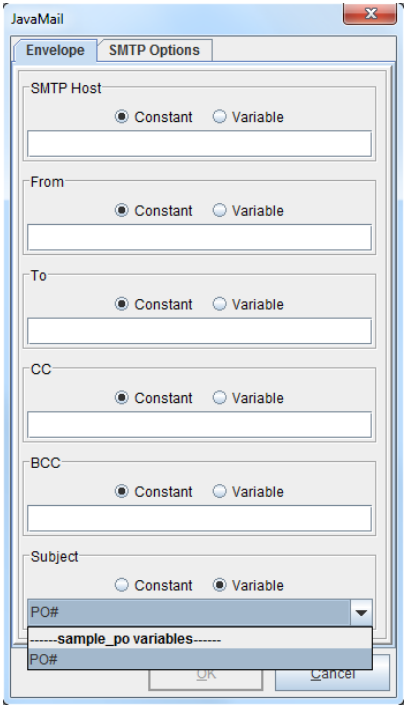
4. Switch to the eDIRECT (or eDIRECT PLUS) tab. *Right click* in the Project window and select *Add Output* > *E-Mail*.



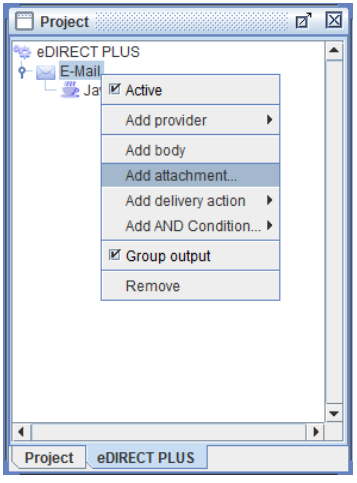
5. *Right click* the *E-Mail* and select *Add provider* > *JavaMail*.



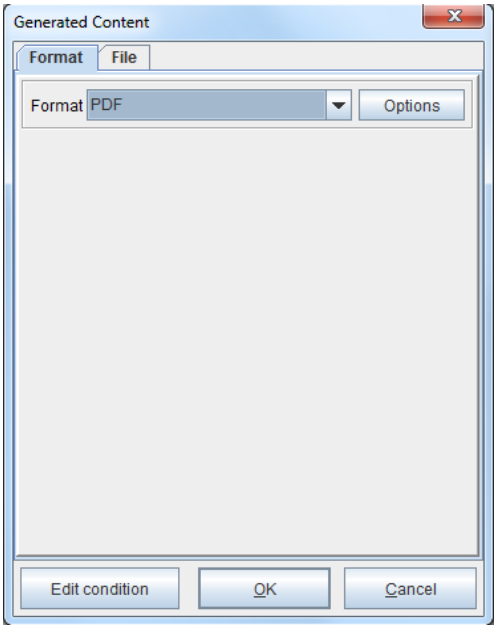
6. Enter information for the necessary fields. For the *Subject* field, select the variable created earlier from the drop-down menu. When complete, click *OK*.



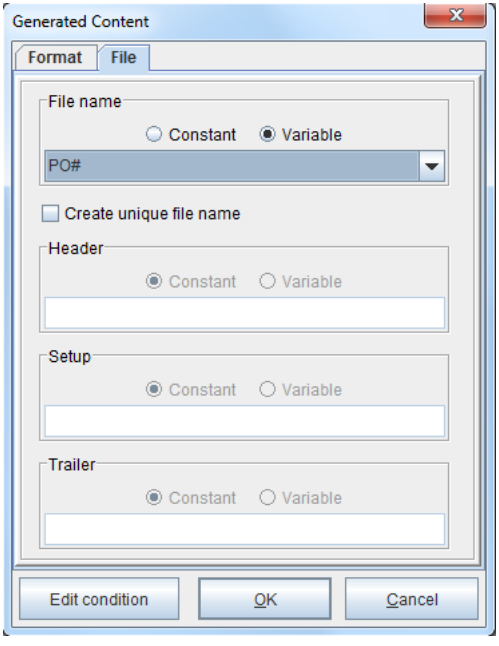
7. *Right click E-Mail* and select *Add attachment*.



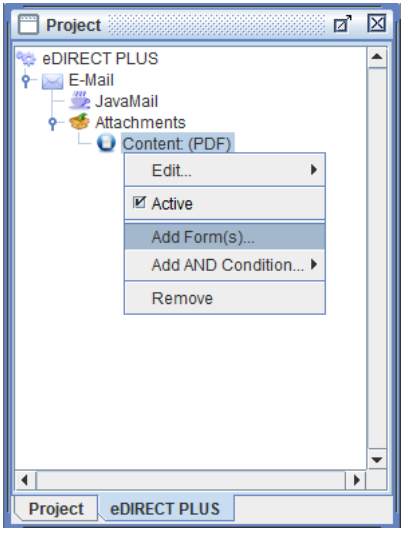
8. Choose *PDF* and switch to the File tab.



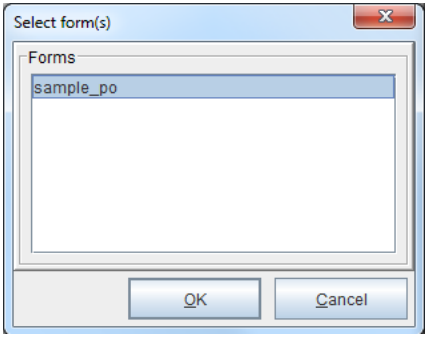
9. Select the variable created earlier for the *File name*. Click *OK*.



10. *Right click Content: (PDF)* and select *Add Form(s)*.



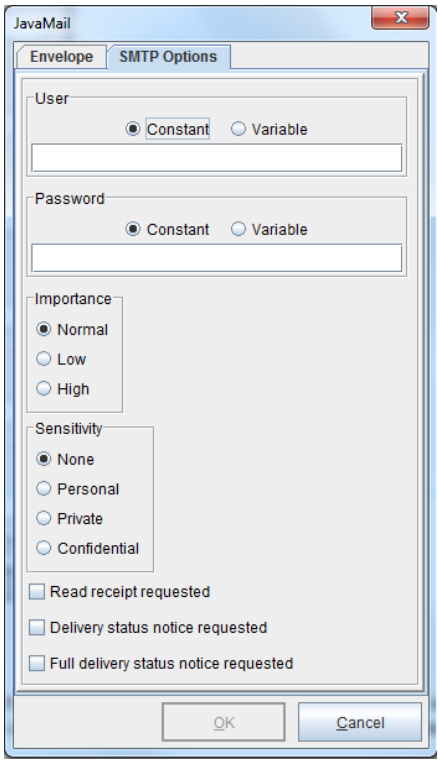
11. Choose the appropriate form and click *OK*.



12. From the eFORMz Main Menu, highlight *Run* and pick the *Process w/eDIRECT* option.

SMTP Options

eFORMz allows you to enable Simple Mail Transfer Protocol (SMTP) within eDIRECT. In order for this option to function, the server used must support SMTP.



Options include:

User and *Password* used if needed.

Importance sets the priority of the email. Options include normal, low, high.

Sensitivity sets the condition of the email. Options include none, personal, private, confidential.

There are three request options: *Read receipt requested*, *Delivery status notice requested* and *Full delivery status notice requested*.

PDF Encryption

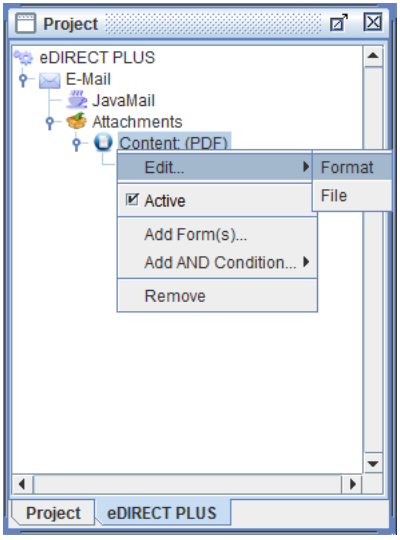
Encrypt your PDF documents in one of the following ways:

- Standard 40-bit
- Standard 128-bit
- AES 128-bit (Advanced Encryption Standard)

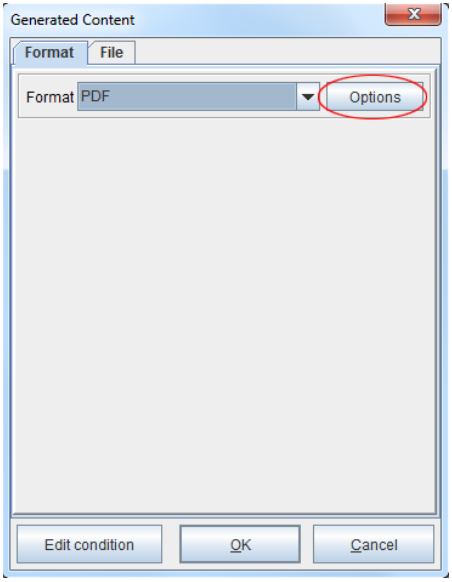
Implementing PDF Encryption

To implement PDF Encryption from eDIRECT:

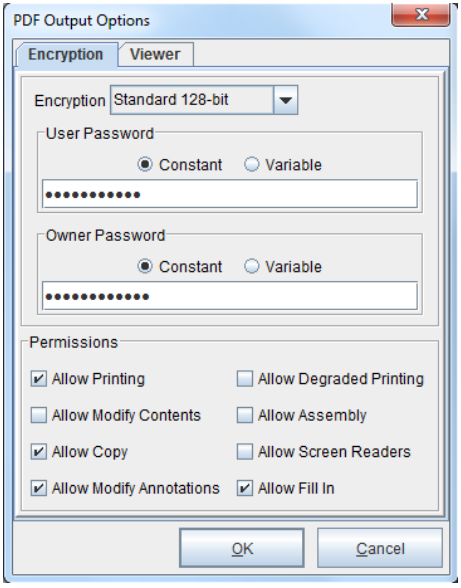
1. *Right click Content: (PDF)* and select *Edit* > *Format*.



2. Select *Options* and edit the available encryption options.



3. The PDF Output Options dialog box will display:



Encryption
Options include *Standard 40-bit*, *Standard 128-bit* and *AES 128-bit* encryption. Encryption is used to enforce restrictions on your document. The permissions that can be granted or restricted depend on the strength of the encryption (*40-bit* vs. *128-bit*). If you are using 40-bit encryption, every permission that has the remark 128-bit below is granted automatically. If you want to revoke these permissions, you need to use 128-bit encryption.

User Password
Refers to the 'open password'.

Owner Password
Refers to the 'permissions password'.

The maximum password length is 32 characters. You may enter 32 characters or more but only the first 32 characters will be taken into account. One or both of the passwords fields can be empty. If a user password is not specified, all users will be able to open the document without being prompted for a password, but the permissions and restrictions (if any) will remain in place.

For a higher level of encryption for your document, choose 128-bit key length and always set both passwords, using different strings and all 32 characters for each one. If a password you choose is shorter than 32 characters, it will be padded with default padding.

Allow Printing
(*Default checked*) Printing the document.

Allow Degraded Printing
(128-bit) Printing the document, lesser quality printout than Allow Printing.

Allow Modify Contents
Modifying the contents—for example, changing page content, inserting or removing pages.

Allow Assembly
(128-bit) Inserting, removing, rotating pages and adding bookmarks are allowed. Contents of a page cannot be changed, unless *All Modify Content* is allowed.

Allow Copy
(*Default checked*) Copying or extracting text and graphics from the document, including technologies such as screen readers or other accessibility devices.

Allow Screen Readers
(128-bit) Extracting text and graphics from document using an accessibility devices.

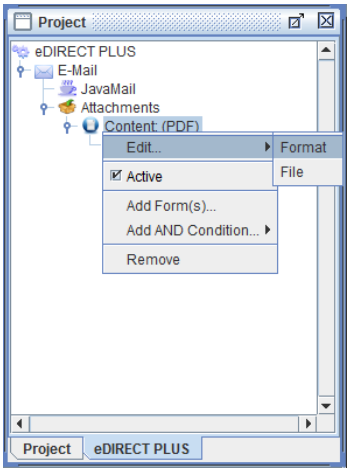
(*Default checked*) *Allow Modify Annotations*
Adding or modifying text annotations and interactive form fields.

(*Default checked*) *Allow Fill In*
(128-bit) Filling form fields; adding or modifying annotations only if *Allow Modify Annotations* is granted.

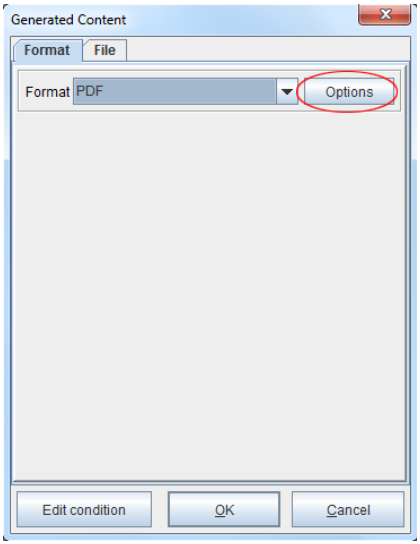
PDF Viewing

To modify PDF viewing options for PDF documents:

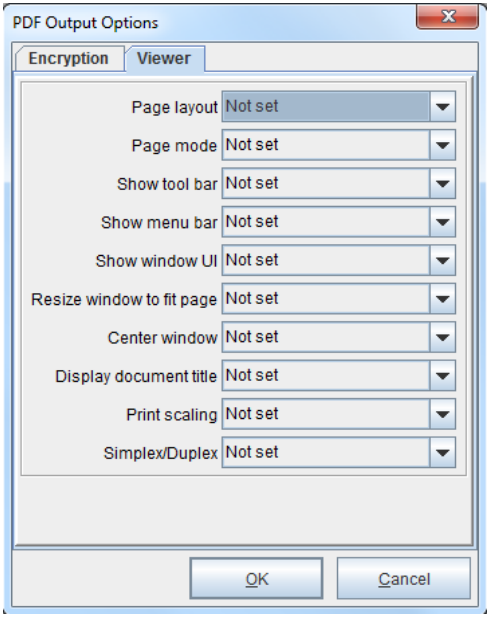
1. *Right click Content: (PDF)* and select *Edit* > *Format*.



2. Select *Options*.



3. The PDF Output Options dialog box will display. Switch to the Viewer tab:



Page layout
The page layout to be used when the document is opened:

Single page - Display one page at a time *(default)*.

One column - Display the pages in one column.

Two columns, odd on the left - Display the pages in two columns, with odd-numbered pages on the left.

Two columns, odd on the right - Display the pages in two columns, with odd-numbered pages on the right.

Two pages, odd on the left - Display the pages two at a time, with odd-numbered pages on the left.

Two pages, odd on the right - Display the pages two at a time, with odd-numbered pages on the right.

Page mode
Sets how the document should be displayed when opened:

None - Neither document outline, nor thumbnail images visible *(default)*.

Show Outlines - Document outline visible.

Show Thumbnails - Thumbnail images visible.

Full screen - Full-screen mode. No menu bar, window controls, or other windows will be visible.

Show tool bar
Displays (or hides) the toolbar.

Show menu bar
Displays (or hides) the menu bar.

Show window UI
Displays (or hides) the window user interface.

Show menu bar
Displays (or hides) the menu bar.

Resize window to fit page
Adjusts the window to fit the page.

Center window
Centers the window.

Display document title
Displays the title of the PDF document.

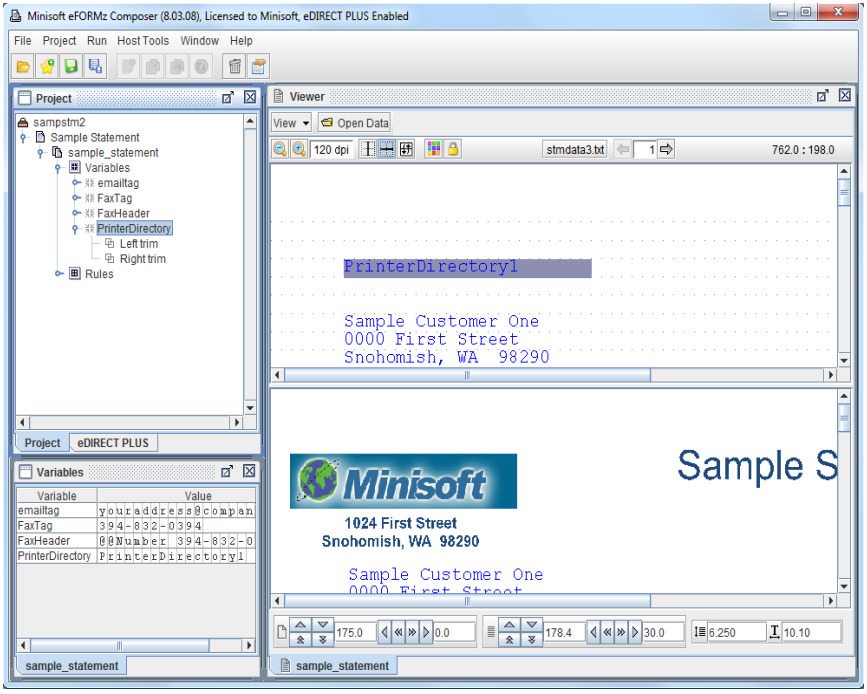
Print scaling
The *Default* option scales the PDF to a printable area.

Simplex/Duplex
Printing options include *Simplex*, *Short Edge Duplex*, and *Long Edge Duplex*.

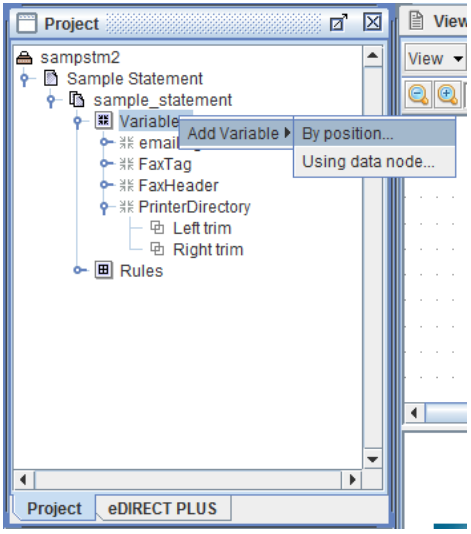
Creating Dynamic Subfolders

Dynamic subfolders can be created in eDIRECT under the parent directories of Print, Fax, or E-Mail. Subfolders can be dynamically created using variables from within the project file, for example:

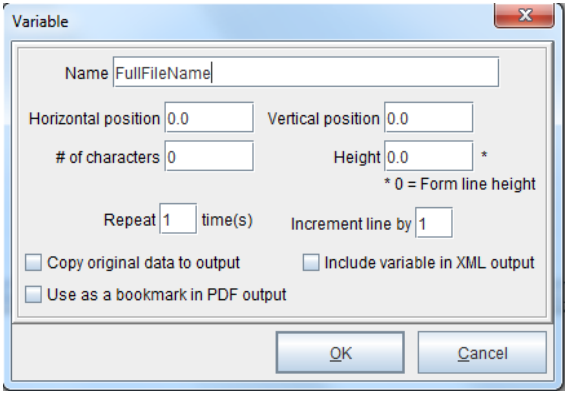
1. Create a variable that references a data element from within your data file:



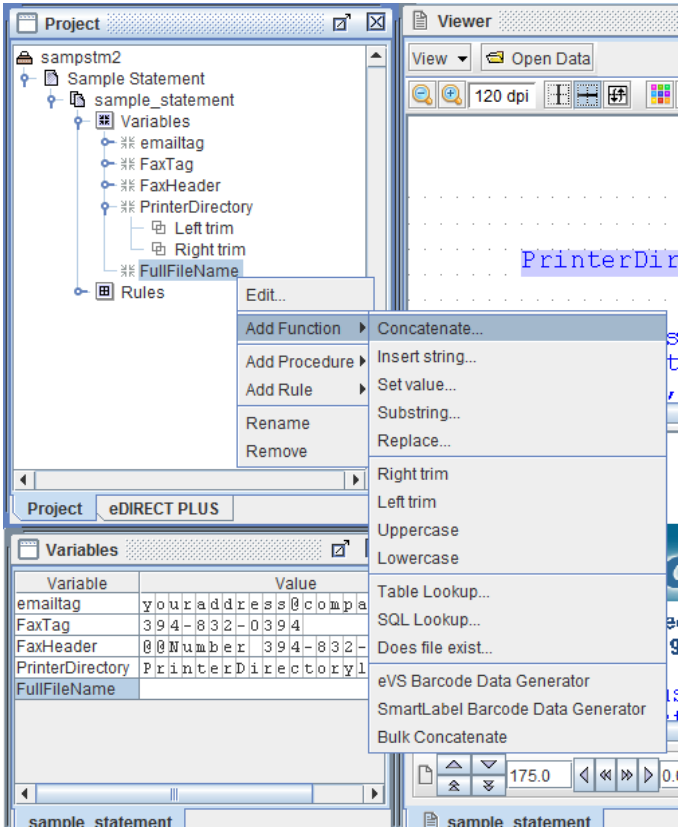
2. Add a variable *By position*.



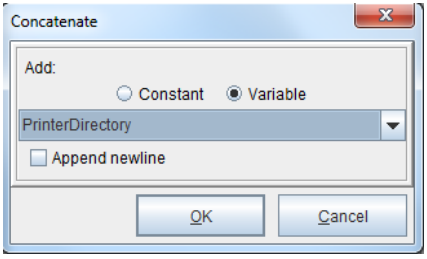
3. Enter a name and click *OK*.



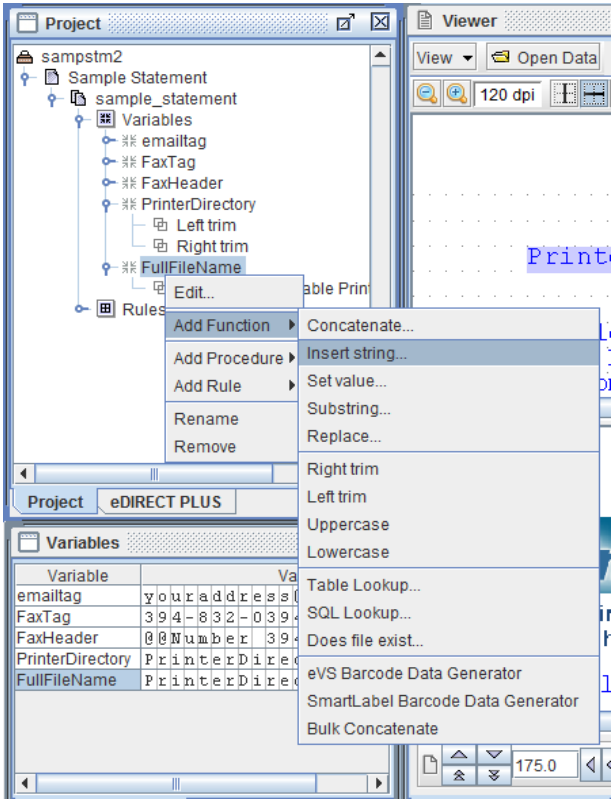
4. *Right click* the variable and select *Add Function* > *Concatenate*.



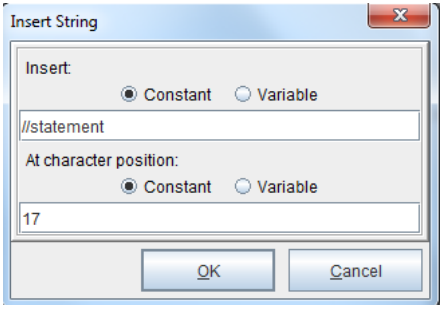
5. Pick the variable created earlier that references the data element.



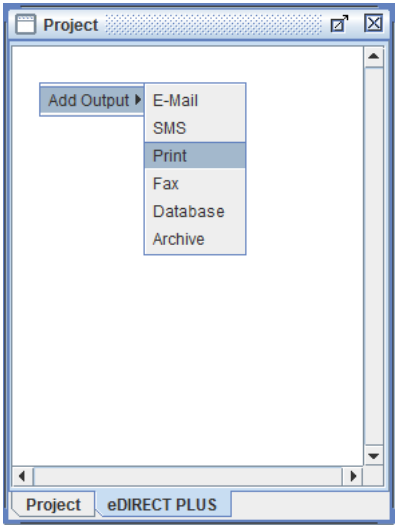
6. *Right click* the variable created by position and select *Add Function* > *Insert String*.



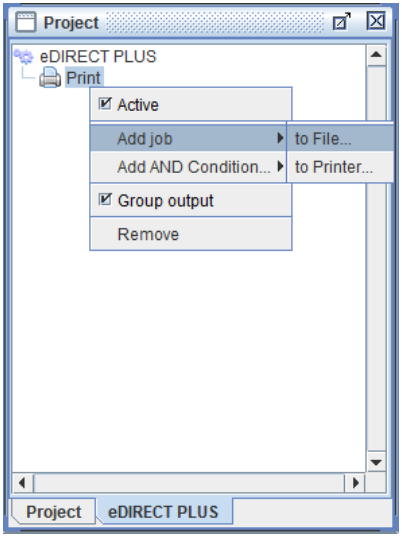
7. Insert two forward slashes (//) to the end of the variable, followed by a constant value. The forward slashes indicate that the reference appearing before them is the dynamic folder reference. The constant value after the slashes will be the file name of the output. Click *OK*.



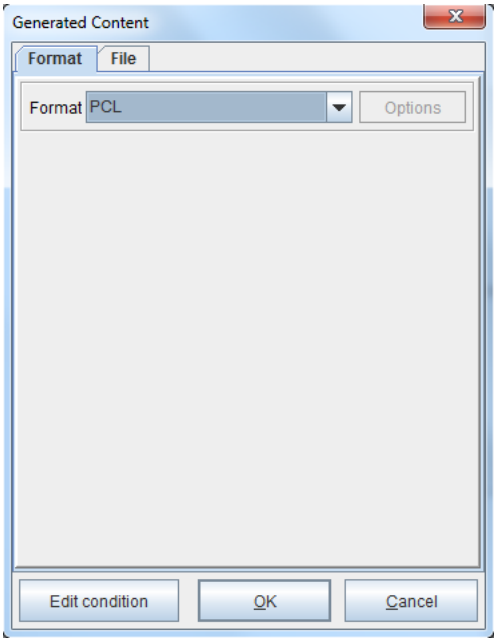
8. Switch to the eDIRECT (or eDIRECT PLUS) tab. *Right click* in the Project window and select *Add Output > Print*.



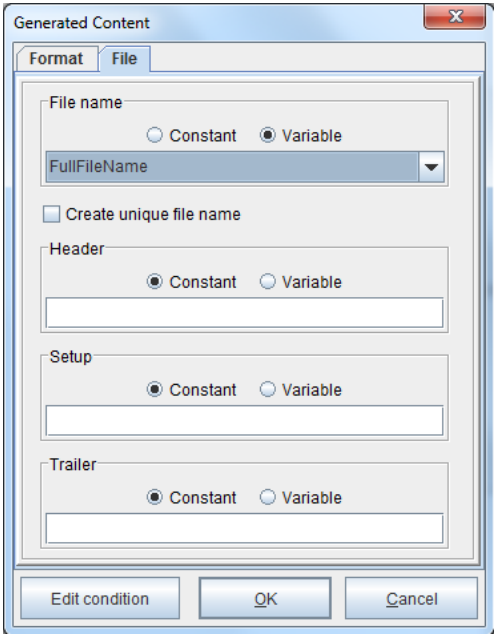
9. *Right click Print* and select *Add job > to File*.



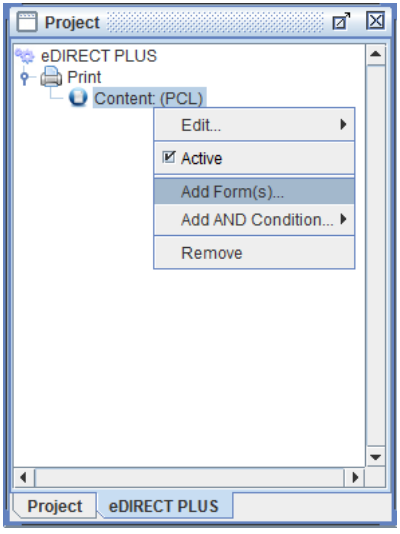
10. Choose the *Format* and switch the File tab.



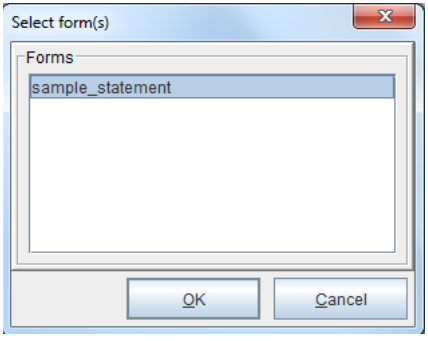
11. In the *File name* field, select the variable created earlier by position. Click *OK*.



12. *Right click* the *Content* icon and select *Add Form(s)*.



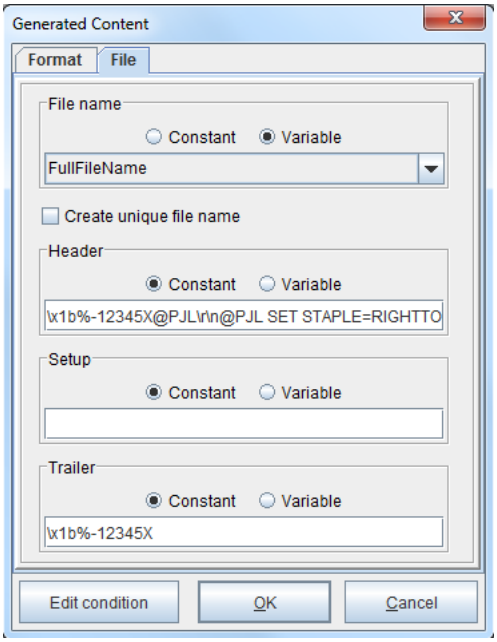
13. Pick the form and click *OK*.



14. From the eFORMz Main Menu, navigate to *Run* and select *Process w/eDIRECT*. Check the project directory. For this example, the Print directory should now have a new folder based on the variable reference. The new folder should also contain the specified output.

File Header and Trailer Options

Using the File Header and Trailer option, custom code can be added to file output. For example, if PJL codes for stapling need to be added to the output file enter the beginning and ending PJL codes into the File Header and Trailer fields.



Chapter 10

eReader and Forms Fill-in

Introduction to eReader

eReader, the eFORMz Document Viewer, allows vendors and customers to correspond using documents produced by eFORMz, Minisoft's electronic forms product.

Clients, do you sometimes wish you could electronically reply to vendors using the pdf documents you receive via email or on-line from a vendor? Vendors, do you sometimes wish your clients could reply electronically back to you using the eFORMz documents you produce?

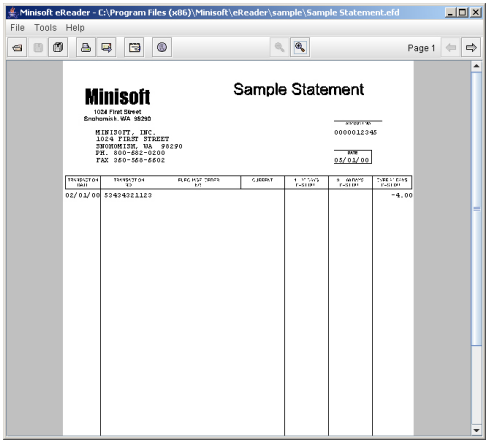
eFORMz and eReader give you this ability.

Vendors can easily add predefined "fill-in" fields to their eFORMz documents. Your customers, without the need of eFORMz, can enter data in the "fill-in" fields allowing them to save, print, email, and fax the forms they receive using eReader.

Unlike other on-line document viewers, which require you to purchase a full version software package, eReader allows users to print, save, email, and fax their own on-line documents with ease. No additional software or licensing needed!

Installation

eReader is automatically installed with the client installation of eFORMz (PC version). Once eFORMz has been installed start eReader from the *START menu* by selecting *All Programs > eFORMz 7 > eReader*. eReader will startup:



To view an example of an eReader file select *Open* from the *File* menu. From the following directory open an example eReader document file:

C:\Program Files\Minisoft\eReader\sample\

Example files include:

Sample Check.efd
Sample PO.efd
Sample Statement.efd

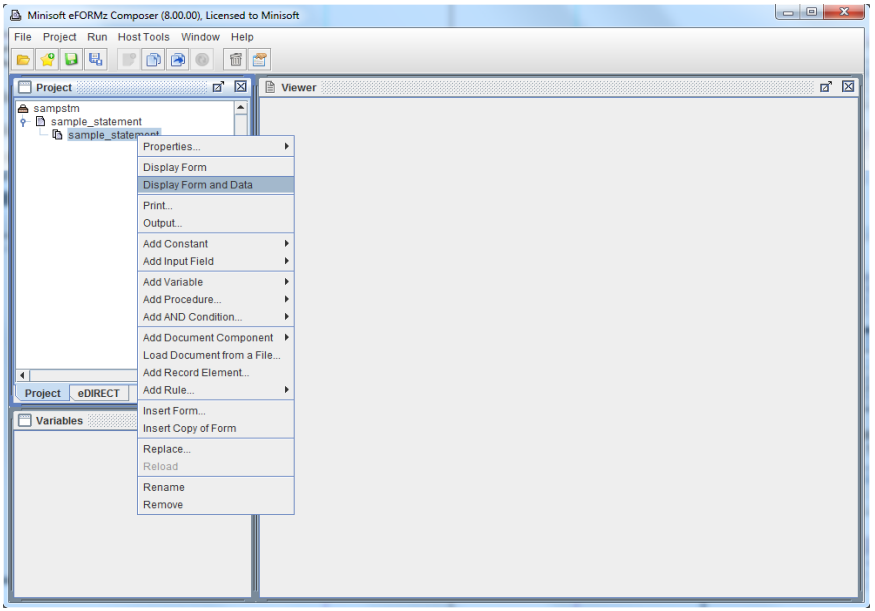
For a complete eReader manual see:

C:\Minisoft\eFORMz_6\doc\eReader_manual.pdf

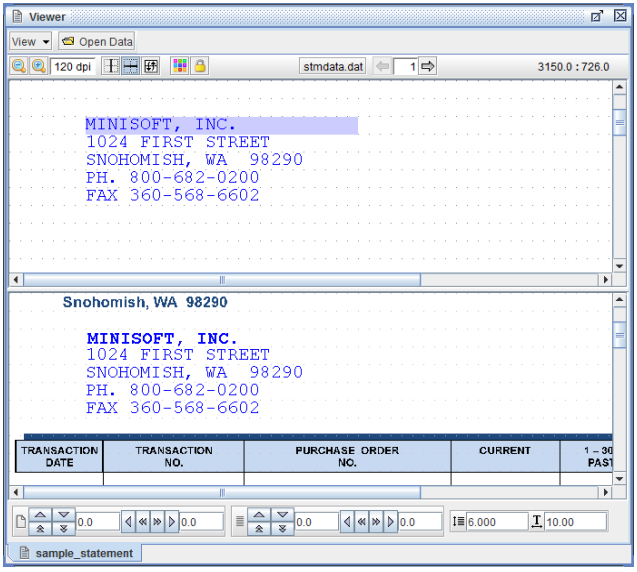
Creating an eReader Document File

To create an eReader document file that includes form fill-in's:

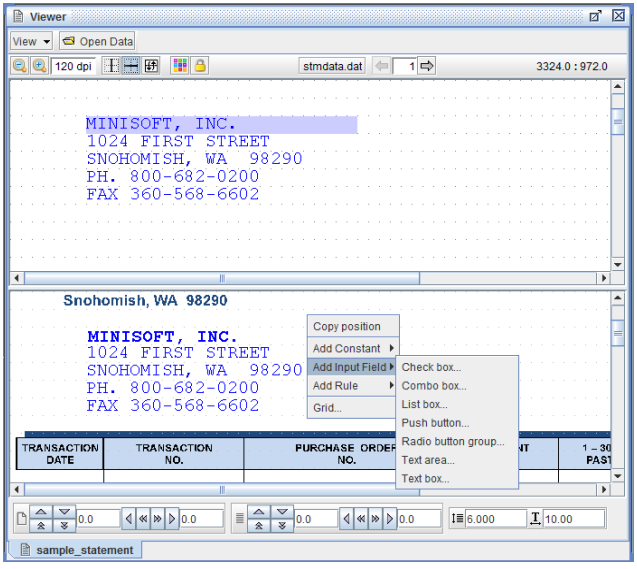
1. Open an eFORMz project file you would like to add form fill-in's to.
2. Display your forms and data in the eFORMz Viewer by selecting your form from the Current Project window. *Right click* and selecting *Display Form and Data*.



3. Your form and data file will now appear in the eFORMz Viewer.

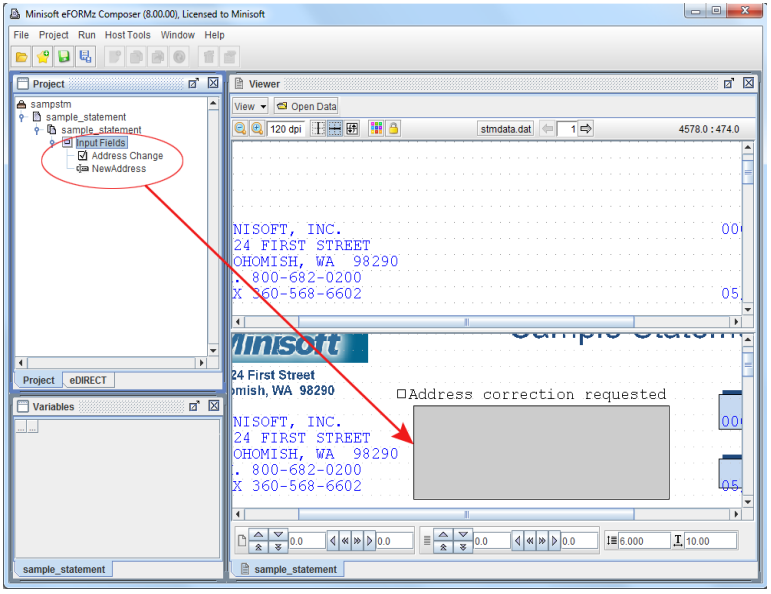


4. Using the Form and Data Viewer add your input fields to your eFORMz project file. *Right click* in the Form Viewer and select *Add Input Field*.



5. The following input field options are available:
   - Check Box
   - Combo Box
   - List Box
   - Push Button
   - Radio Group
   - Text Area
   - Text Box

   For a detailed description of each input field see the heading *Input Fields* in this chapter.
6. Select one of the input fields you would like to add to your form.
7. A dialog box pertaining to that input type will display.
8. Enter the options necessary and click *OK*.
9. Your input field will now appear in your Form and Data Viewer. Also note a change has occurred in your Current Project window, the project layout now displays a placeholder for all input fields.



***TIP*:** If you would like to edit one of the input fields displayed in the Form and Data Viewer, *right click* the input field from the Viewer and select *Edit*.

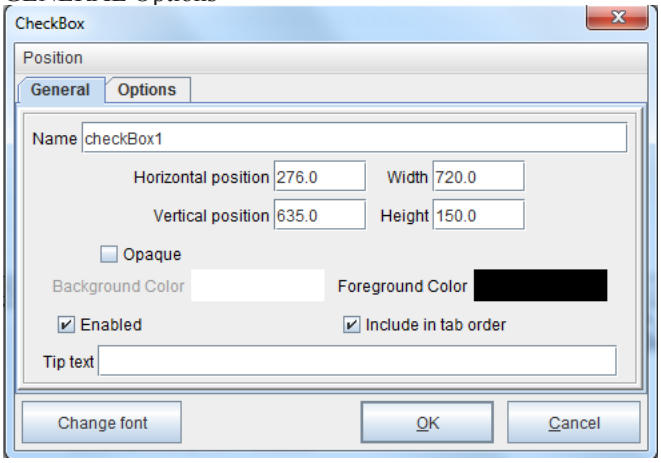
Input Fields

Available input field types include:

- Check Box
- Combo Box
- List Box
- Push Button
- Radio Group
- Text Area
- Text Box

CheckBox

GENERAL Options



Name - Input data field name.

Horizontal/Vertical Position
(Decipoints) Input data field position in the Form and Data Viewer.

Width
Text box width in decipoints.

Height
Text box height in decipoints.

Opaque
If set, the control will have an opaque background the color of the "Background Color" property, otherwise, the control will be transparent.

Background Color
Text box background color.

Foreground Color
Text box foreground color.

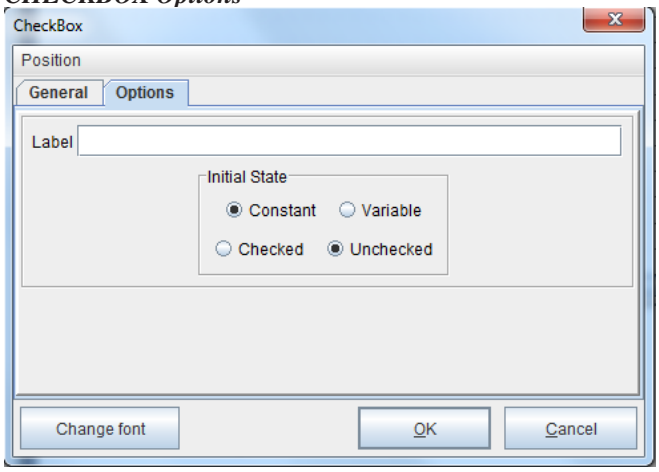
Enable
(Default checked) When unchecked the text box input field will become shaded.

Include in tab order
Check this option if you would like to include the text box in a tab order determined by the order the fields are defined in the project file.

Tip Text
Include a text tip when the mouse scroll over the text box input field.

Change Font
Allows you to change the default text font contained in the input field.

CHECKBOX Options



Label

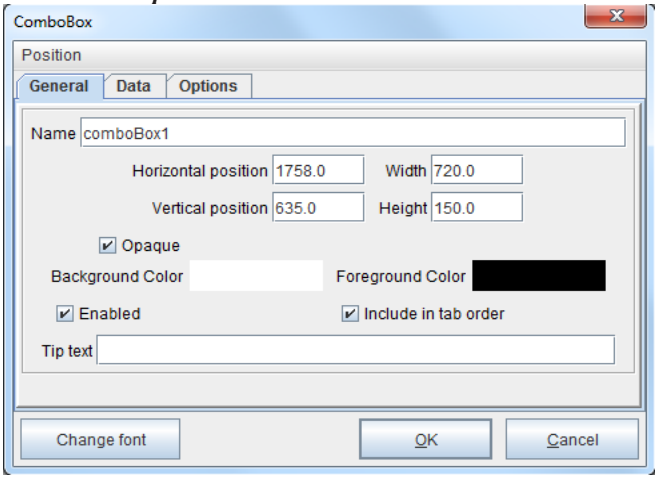
The text you would like to see displayed next to the check box.

Initial State

Indicated whether the check box is to appear checked or unchecked.

ComboBox

GENERAL Options



Name
Input data field name.

Horizontal/Vertical Position
(Decipoints) Input data field position in the Form and Data Viewer.

Width
Text box width in decipoints.

Height
Text box height in decipoints.

Opaque
If set, the control will have an opaque background the color of the "Background Color" property, otherwise, the control will be transparent.

Background Color
Text box background color.

Foreground Color
Text box foreground color.

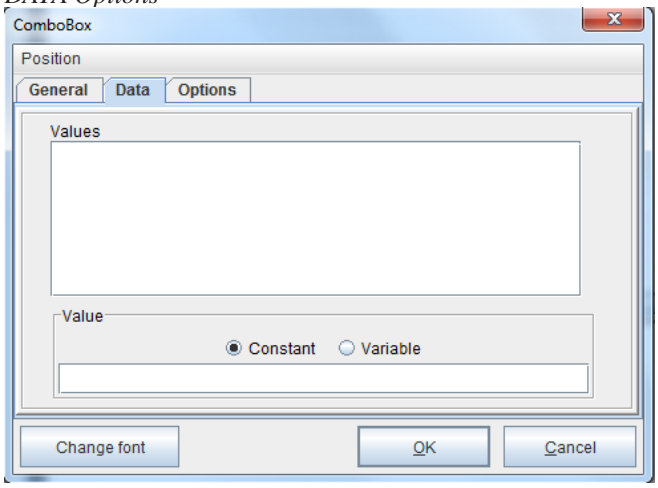
Enabled
(Default checked) When unchecked the text box input field will become shaded.

Include in tab order
Check this option if you would like to include the text box in a tab order determined by the order the fields are defined in the project file.

Tip Text
Include a text tip when the mouse scroll over the text box input field.

Change Font
Allows you to change the default text font contained in the input field.

DATA Options



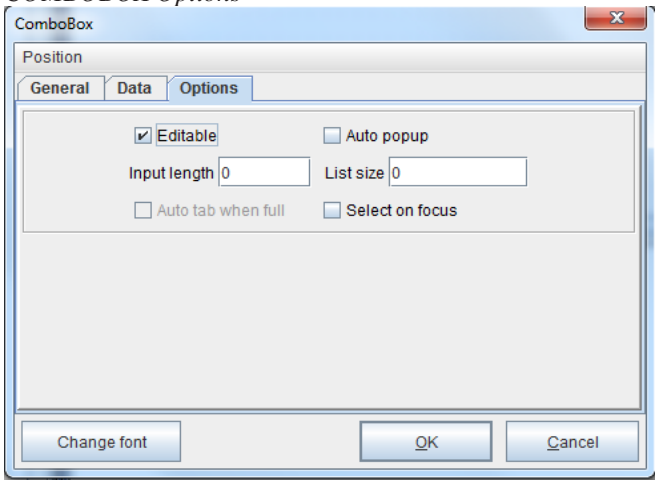
Values

List of data items that can be selected from a drop-down list.

Value

The text you would like to have initially display in the combo box field.

COMBOBOX Options



Editable

Allows you to enter a value into the combo box field to perform a search. Note, options must be in alphabetical order.

Auto Popup

Displays the list of values to choose from in the combo box. Note, options must be in alphabetical order if you desire searching be available.

Input Length

Limits the number of characters displayed in the combo box after an item has been selected.

List Size

Limits the number of items displayed in the combo box.

Auto tab when full

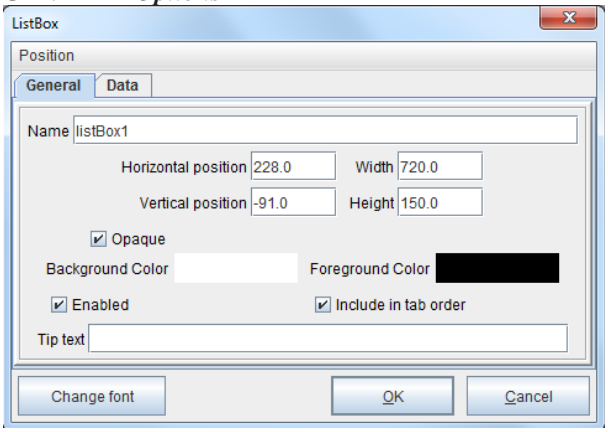
Once the combo box has reached the specified limits an auto tab to the next item will be issued.

Select on focus

Causes the text in the field to be selected (highlighted) when a field gets the focus.

ListBox

GENERAL Options



Name
Input data field name.

Horizontal/Vertical Position
(Decipoints) Input data field position in the Form and Data Viewer.

Width
Text box width in decipoints.

Height
Text box height in decipoints.

Opaque
If set, the control will have an opaque background the color of the "Background Color" property, otherwise, the control will be transparent.

Background Color
Text box background color.

Foreground Color
Text box foreground color.

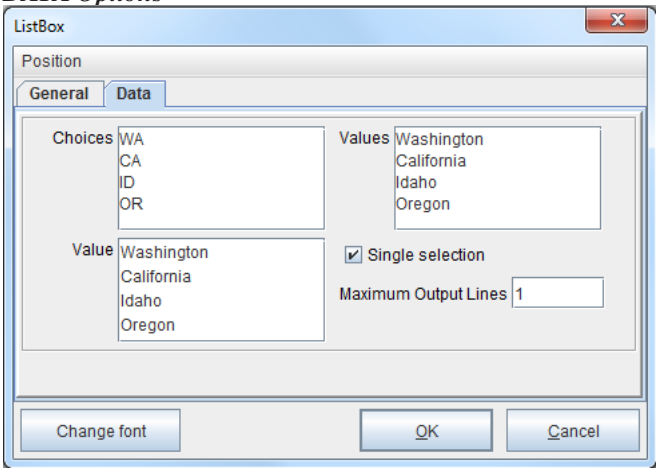
Enable
(Default checked) When unchecked the text box input field will become shaded.

Include in tab order
Check this option if you would like to include the text box in a tab order determined by the order the fields are defined in the project file.

Tip Text
Include a text tip when the mouse scroll over the text box input field.

Change Font
Allows you to change the default text font contained in the input field.

DATA Options



Choices

List of items by which the user can select from.

Single Selection

Check box permitting the selection of only one item from the list of choices.

Values

Data placed in document corresponding to the user selected index(es). Note, if there are no items in "Values" then the items in "Choices" is used.

Value

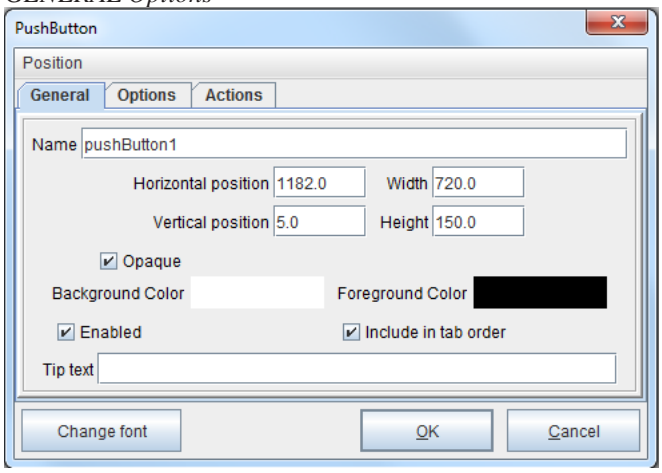
Allows one to specify the initial selection(s) of the ListBox field.

Max Output Lines

Set the number of line the value of the input field will take when in .efd format and used as a data file.

PushButton

GENERAL Options



Name
Input data field name.

Horizontal/Vertical Position
(Decipoints) Input data field position in the Form and Data Viewer.

Width
Text box width in decipoints.

Height
Text box height in decipoints.

Opaque
If set, the control will have an opaque background the color of the "Background Color" property, otherwise, the control will be transparent.

Background Color
Text box background color.

Foreground Color
Text box foreground color.

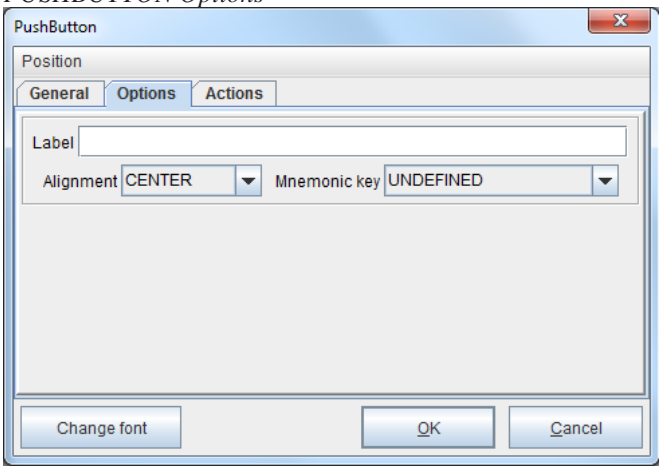
Enable
(Default checked) When unchecked the text box input field will become shaded.

Include in tab order
Check this option if you would like to include the text box in a tab order determined by the order the fields are defined in the project file.

Tip Text
Include a text tip when the mouse scroll over the text box input field.

Change Font
Allows you to change the default text font contained in the input field.

PUSHBUTTON Options

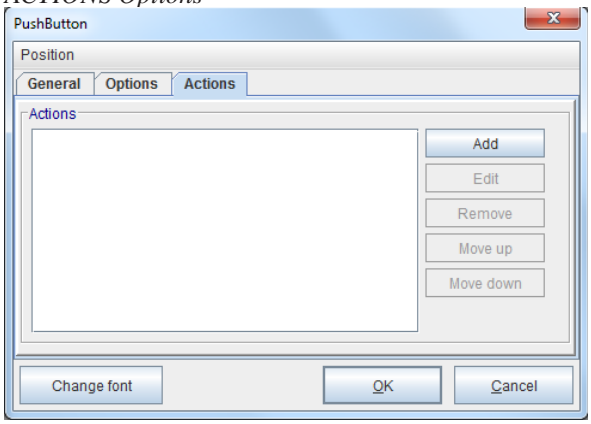


Label
Information displayed in the input field.

Alignment
Option to align the label fields (left, right, or center).

Mnemonic key
Value associated with a drop down list of pre-defined instructions.

ACTIONS Options



Add

A new action entry is added to the push button list. Add Options:

Save

Permits saving the document using the original name.

Save As

Permits saving the document and specifying a new name.

Print

Prints the document. Specify a selected printer, format type (PCL/image), number of copies, and selected pages (all, current, or range).

e-Mail

Emails the document. Specify the SMTP server, TO, From, CC, BCC, Subject, Body, and Attach Name.

Export

Exports all data to either a PDF, EFD (eFORMz document file), PCL, PRN, XML, or TXT file.

Edit

An existing action entry can be edited from within the push button list.

Remove

An existing action entry is deleted from the push button list.

Move Up

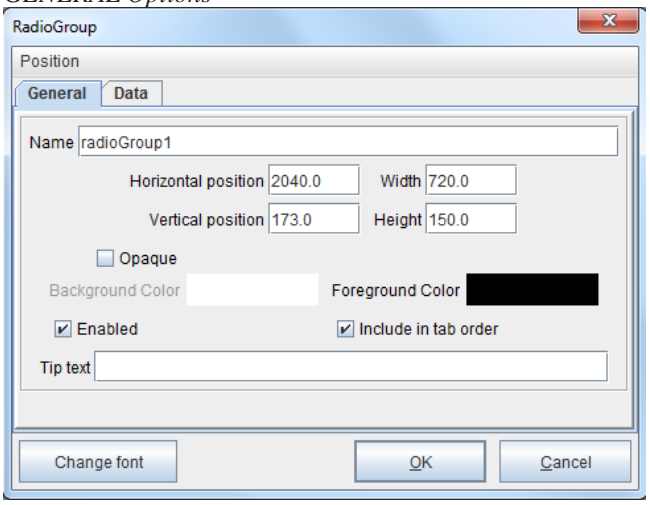
The action item is moved up in the push button list.

Move Down

The action item is moved down in the push button list.

RadioGroup

GENERAL Options



Name
Input data field name.

Horizontal/Vertical Position
(Decipoints) Input data field position in the Form and Data Viewer.

Width
Text box width in decipoints.

Height
Text box height in decipoints.

Opaque
If set, the control will have an opaque background the color of the "Background Color" property, otherwise, the control will be transparent.

Background Color
Text box background color.

Foreground Color
Text box foreground color.

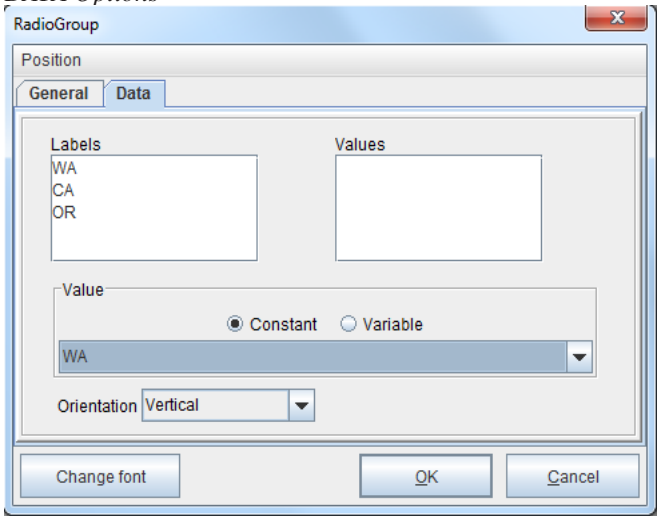
Enable
(Default checked) When unchecked the text box input field will become shaded.

Include in tab order
Check this option if you would like to include the text box in a tab order determined by the order the fields are defined in the project file.

Tip Text
Include a text tip when the mouse scroll over the text box input field.

Change Font
Allows you to change the default text font contained in the input field.

DATA Options



Choices
List of data items by which the user can select from.

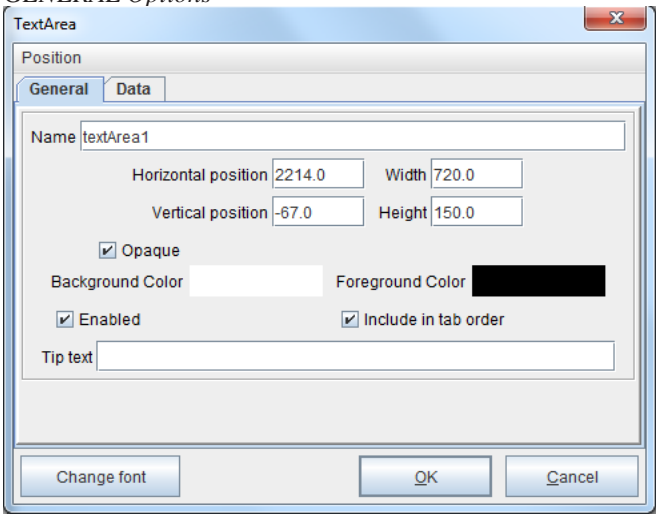
Orientation
Displays choices vertically or horizontally across the form.

Values
Representation of the data items corresponding to the choice(s) selected.

Value
Select a value from the Value list that will be the default selected item.

Text Area

GENERAL Options



Name
Input data field name.

Horizontal/Vertical Position
(Decipoints) Input data field position in the Form and Data Viewer.

Width
Text box width in decipoints.

Height
Text box height in decipoints.

Opaque
If set, the control will have an opaque background the color of the "Background Color" property, otherwise, the control will be transparent.

Background Color
Text box background color.

Foreground Color
Text box foreground color.

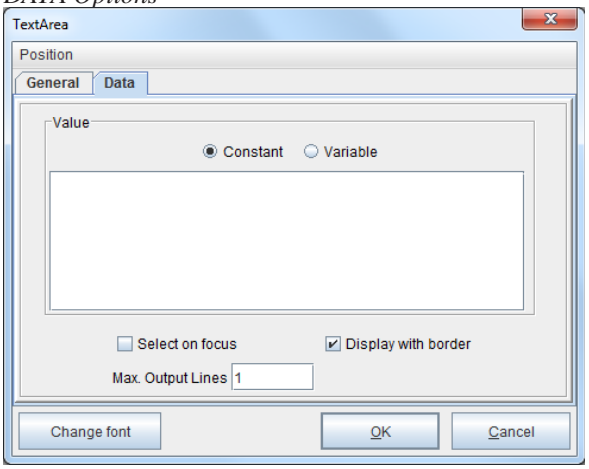
Enable
(Default checked) When unchecked the text box input field will become shaded.

Include in tab order
Check this option if you would like to include the text box in a tab order determined by the order the fields are defined in the project file.

Tip Text
Include a text tip when the mouse scroll over the text box input field.

Change Font
Allows you to change the default text font contained in the input field.

DATA Options



Value

Text can be entered in this field which will be displayed when the form is first opened.

Select on focus

Causes the text in the field to be selected (highlighted) when a field gets the focus.

Display with border

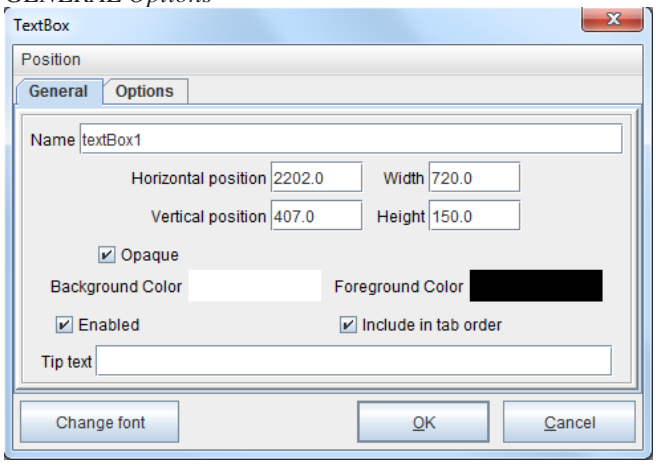
Includes a border around the input field.

Max. Output Line

Set the number of lines the value of the input field will take when in .efd format and used as a data file.

Text Box

GENERAL Options



Name
Input data field name.

Horizontal/Vertical Position
(Decipoints) Input data field position in the Form and Data Viewer.

Width
Text box width in decipoints.

Height
Text box height in decipoints.

Opaque
If set, the control will have an opaque background the color of the "Background Color" property, otherwise, the control will be transparent.

Background Color
Text box background color.

Foreground Color
Text box foreground color.

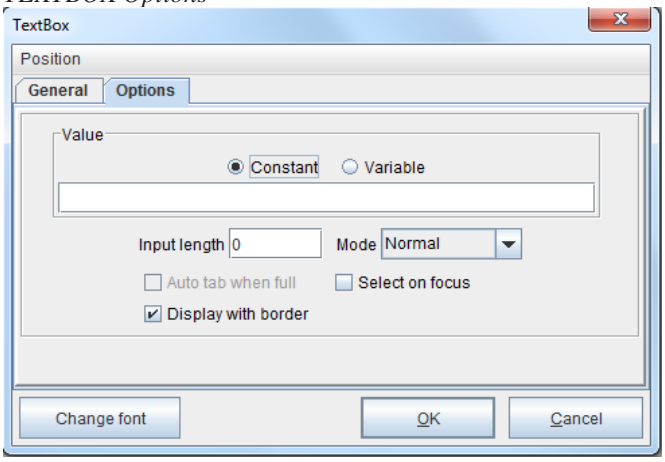
Enable
(Default checked) When unchecked the text box input field will become shaded.

Include in tab order
Check this option if you would like to include the text box in a tab order determined by the order the fields are defined in the project file.

Tip Text
Include a text tip when the mouse scroll over the text box input field.

Change Font
Allows you to change the default text font contained in the input field.

TEXTBOX Options



Value
Enter a value that will appear in the input field when it is viewed in eReader.

Input Length
Character length of the input field text box.

Mode

(Default Normal) Options available are:

Normal - Allows you to enter any character into the value field when a eFORMz document file is produced.
Secure - Characters entered into the text box will appear as asterisks (****).
Display Only - Displays only the value entered in the Value field.

Auto Tab when full

When a TextBox is full with the number of characters specified in the Input Length field an auto tab will be issued to the next input field.

Select on Focus

Causes the text in the field to be selected (highlighted) when a field gets the focus.

Display with Border

Includes a border around the text box fields.

Appendix A

Advanced Processing

Command File Processor

Script Example

```
java -jar Run.jar - com.minisoft.HostTools.Local.eFORMz -d c:\Minisoft\eFORMz_6\
input -f *.dat:rename -p project.efz -t PrinterA
```

Parameters

In this example, the java executable is assumed to be in the path of the dos shell. The printer name is PrinterA as defined in the Printers.xml file. The project file (project.efz) is in the current directory.

-v	Log to stdout
-l <filename>	Log to new <filename>
-a <filename>	Append log to <filename>
-g <number>	Log priority fence
-d <directory>	Specify input directory
-f <filename[:disposition>]	Specify file selection and optionally disposition
-p <project>	Specify project
-t <printer>	Print (Black and White PCL)
-tc <printer>	Print (Color PCL)
-tp <printer>	Print (Postscript)
-o <filename>	Output to file
-u <basefilename>	Output to file with unique name
-e <basedirectory>	Process with eDIRECT
-x <command>	Execute external command after output
-c <directory>;<filemask>;<copy to directory>	Copy files after output
-r <directory>;<filemask>	Delete files after output
-n <directory>;<filemask>;<printer>	Print files after output
-help	

Preprocessor Data Parsing Control Codes

\b	backspace
\t	tab
\n	linefeed
\r	carriage return
\f	formfeed
\\	backward slash
\a<3 decimal digits>	character represented by its decimal value (000-255)
\x<2 hexadecimal digits>	character represented by its hexadecimal value (00 - ff)

eSUBMIT Command Processing

Overview

This utility of eFORMz permits host-independent redirection of application data. Originally designed to simply write data destined for standard output device to unique file names in a local directory for processing by the eFORMz local queue monitor.

While still accomplishing the original goal, eSubmit has been expanded to handle a variety of file redirection tasks independent of host operating system or third party subsystems.

Details

For parameters with characters that may be handled by the host command processor (such as semicolons on UNIX, use double quotes around the parameter value:

```
java -jar jars/eSubmit.jar -lpr “FILEPRINT;TITLEA;lphost”
```

Commands

File Name (-f)

Specify file selection and optionally disposition. Optional dispositions include: rename and delete

Example: -f ”inv.data:rename”

Output Directory (-d)

Specify input directory.

Example: -d ”/minisoft/salesorders”

MQ Queue (-mq)

This option directs the data to an IBM© MQ Queue on a remote system.

Message Queue Format (-mqm)

Specify message format.

Secure FTP (-rd)

This option has five parameters; remote directory, host, port, user name, password.

Use the File Name (-f) option to set the file name mask.

Project (-p)

Specify project file.

Example: -p ”sampinv.efz”

LPR (-lpr)

Send data to an LPD service. Three required parameters.

The first parameter is the queue name on the remote host.

The second parameter is used in the naming of the file on the receiving host. Use it to direct the queue monitor in what project to use. The title can also be used in defining which output device eFORMz will use.

The fourth parameter, used to define the port to connect to, is optional.

Secure LPR (-slp)

Send data securely to an LPD service. Eight required parameters.

The first parameter is the queue name on the remote host.

The second parameter is used in the naming of the file on the receiving host. Use it to direct the queue monitor in what project to use. The title can also be used in defining which output device eFORMz will use.

The fourth parameter, used to define the port to connect.

PCL Print, Black and White (-t)
PCL Print, Color (-tc)

Printer name.

Example: -t ”LJ5si” or -tc “LJ3800DN”

Output to File (-o)

Output to file. Output file extension options include: .pdf, .prn, .pcl, .xml.

Example: -o ”inv.pdf”

Output to unique file name (-u)

Output to file with unique names. Output file extension options include: .pdf, .prn, .pcl, .xml.

Example: -u ”inv_.pdf”

Process with eDirect (-e)

Process with eDirect. The base directory will be the directory the eDirect output will be sent to.

Example: -e ”/minisoft/invoice/output”

Process with eDirectPlus (-ep)

Process with eDirectPlus. The base directory will be the directory the eDirectPlus output will be sent to.

Example: -ep ”/minisoft/invoice/output”

Execute external command after output (-x)

Execute external command after output. Command options: mv - move command

Example: -x ”mv /minisoft/input/*.hld /minisoft/backup”

Copy files after output (-c)

Copy files after output.

Example: -c ”/minisoft/input/*.hld /minisoft/backup”

Delete files after output (-r)

Delete files after output.

Example: -r ”/minisoft/input/*.hld”

Print files after output (-n)

Print files after output.

Example: -n “/minisoft/output/*.prn roadrunner”

Static input file (-i)

This option is used to read from a fixed file in place of the standard input device. It is useful to simulate input during testing.

Log file location and name (–l)

This option has two required parameters, the directory in which to create log files and the file mask used to create log files.

Example: -l ”/minisoft/log;eformzlog.txt”

Verbose tracing (-v)

Use this option at the direction of Minisoft support to identify configuration issues.

Timeout in seconds (-w)

While reading stdin (or a static file) time to wait for data or EOF.

Execute after data is copied (-exe)

It will launch a local queue monitor to execute against the copied file using the configuration set by the other arguments or configuration file.

So if you used the arguments:

-d <directory> -f<file> -p<project> -t <printer>

eSubmit would copy the stdin to a unique file in <directory> and execute a queue monitor to execute a project against that file to print to <printer>

If you used the arguments:

<iqname> -exe

eSubmit would use the settings in the configuration file for <iqname> to copy the file and execute a queue monitor to process the file using those same settings, except the file selection will be set to the destination file name.

eFORMz is needed with a valid license.

Configuration (-cfg)

Use configuration file. Defaults to eSubmit.cfg. The configuration is based upon the monitor object and read looking for a matching InputQueue. The queue name to match is the parameter if only one bare (without a leading hyphen) parameter is supplied. If there is not a single bare parameter, an attempt will be made to locate a blank (no characters) queue name.

Help (-help)

Display utility parameter usage.

Quick Reference Guide

-f <filemask[:disposition]>	Specify file name
-d <directory>	Specify output directory
-mq <host>;<port>;<channel>;<queue manager>;<message queue>	Specify MQ queue
-mqm <file format>	Specify message format
-rd <remote directory>;<host>;<port>;<user>,<password>	Specify remote (SFtp) output directory
-p <project>	Specify project
-lpr <queue>;<title>;<host>[;<port>]	Send data to an LPD service
-slp <queue>;<title>;<lpd host>;<lpd port>;<ssh host>;<sshport>;<user>;<password>	Send data to an LPD Service via SSL
-t <printer>	Print (Black and White PCL)
-tc <printer>	Print (Color PCL)
-tp <printer>	Print (Postscript)
-o <filename>	Output to file
-u <basefilename>	Output to file with unique name
-e <basedirectory>	Process with eDIRECT
-ep <basedirectory>	Process with eDirectPlus
-x <command>	Execute external command after output
-c <directory>;<filemask>;<directory>	Copy files after output
-r <directory>;<filemask>	Delete files after output
-n <directory>;<filemask>;<printer>	Print files after output
-i <filename>	Specify static input file (in place of stdin)
-l <directory:filemask>	Specify logfile location and name
-v	Verbose (stdout) tracing
-w <number>	Time in seconds to wait for more data (default 30)
-exe	Execute after the data is copied
-cfg	Configuration filename (defaults to eSubmit.cfg)
-help	

User Configuration Files

Site specific configuration files available:

eFORMzCfg_User.xml
FontSpecs_User.xml

The above files are not installed with an eFORMz installation to insure that the files are never overwritten. Files with the above naming convention should be placed in the following directory:

C:\Minisoft\eFORMz_6\

Custom Form Sizes

Site specific custom form sizes can be added to the *eFORMzCfg_User.xml*, for example:

```
<PageDimension Name="B6" PCLNumber="1" PortraitA="5250" PortraitB="7560" PortraitC="4860" PortraitD="7560" PortraitE="180" PortraitF="0" PortraitG="120" PortraitH="360" LandscapeA="7560" LandscapeB="5250" LandscapeC="7272" LandscapeD="5250" LandscapeE="144" LandScapeF="0" LandscapeG="120" LandscapeH="360" />
```

Contact Minisoft (support@minisoft.com) for custom form sizes.

Preprocessors and External Functions

Place preprocessors and/or external function references in the following file:

eFORMzCfg_User.xml

Minisoft will provide a user with the custom file reference and external files needed, for example:

```
<?xml version="1.0" encoding="UTF-8"?>
<eFORMzConfiguration>
<Preprocessor Name="Macro Insert" Class="com.sample.MacroInsertPreprocessor" />
<ExternalFunction Name="eVS Barcode Data Generator"
    Class="com.minisoft.ExternalFunctions.eVSBarcodeDataGenerator" />
</eFORMzConfiguration>
```

Font Configuration

Site specific font configurations can be placed in a file referred as follows:

FontSpecs_User.xml

Example:

```
<?xml version=”1.0” encoding=”UTF-8”?>
<Fonts>
    <Font Name=”Arial Black” PCLTypeface=”-1” Spacing=”Proportional”
        PitchFactor=”0.008332330903266” ViewerFont=”Arial Black” PDFFont=”fonts/ariblk.ttf”>
    <Style Style=”4” Factor=”.66667” />
    <Style Style=”5” Factor=”.66667” BaseStyle=”1” />
    <Style Style=”8” Factor=”.5” />
    <Style Style=”24” Factor=”1.5” />
    </Font>
    <RTFInputFonts>
        <Font InputName=”Arial Black” FontName=”Arial Black” />
    </RTFInputFonts>
</Fonts>
```

Appendix B

Database URL and Driver Classes

Supported URL and Driver Classes

DB2 (iSeries)

Database name:
Connection name. Actual database name not needed in this field.

Driver Class:
com.ibm.as400.access.AS400JDBCDriver

URL:
jdbc:as400://123.456.78.90

Add the following properties and their values:

user
password
databasename

If you do not know the database name, logon to your AS/400 and run WRKRDBDIRE from the command line. Only the database marked *LOCAL is the local database that resides on the AS/400 system.

Image and Eloquence

Database name:
Connection name. Actual database name not needed in this field.

Driver Class:
com.minisoft.jdbc.MSJDBCDriver

URL:
Write access:
jdbc:MSJDBC:///?Server=xxx.xxx.xx.xxx&ServerPort=30007&User=xxx&UserPassword=xxx&Group=xxx&Account=xxx&ImageDatabase0=eformz,WRITE,0,1,0

Read access:
jdbc:MSJDBC:///?Server=xxx.xxx.xx.xxx&ServerPort=30007&User=xxx&UserPassword=xxx&Group=xxx&Account=xxx&ImageDatabase0=eformz,READALL,0,5,0

Note: Requires Minisoft's JDBC (Java Database Connectivity) driver.

Informix

Driver Class:

com.informix.jdbc.IfxDriver

URL:

jdbc:informix-sqli://<IP address of host machine>:<port no>/<database>:
INFORMIXSERVER=<server_name>;user=<user_name>;password=<password>

Example:

jdbc:informix-sqli://Sturgeon:9088/stores_demo:
INFORMIXSERVER=informix_server;user=admin;password=xxx

Microsoft Access

Driver Class:
sun.jdbc.odbc.JdbcOdbcDriver

URL direct path example:

jdbc:odbc:DRIVER={Microsoft Access Driver (*.mdb)};
DBQ=c:\\Minisoft\\eFORMz_6\\Projects\\eDirect\\Sample3\\emaildb.mdb

Note: Path specification is case sensitive.

URL using system DSN:

jdbc:odbc:[database name]

Example:
jdbc:odbc:emaildb

Create a System DSN

1. From your Start menu, select *Settings* > *Control Panel*.
2. The Control Panel dialog box appears. Select *Administrative Tools* and *ODBC Data Source*.
3. The ODBC Data Source Administrator window appears. Select the *System DSN* tab and then click *Add*.

4. The Create New Data Source dialog box appears. Select *Microsoft Access Driver (*.mdb)* from the list of drivers. Click *Finish*.
5. The ODBC Microsoft Access Setup dialog box appears.
6. From the Database section click on *Select* to establish the path to your database, located on your PC.
7. Once the Database path has been established, enter a database reference name in the Data Source Name field.
8. Enter a database description, if needed, in the Description field. Once complete click OK.
10. Your newly created database reference will appear in the ODBC Data Source Administrator dialog box under the System DSN tab. Click *OK*.

MySQL

Driver Class:

com.mysql.jdbc.Driver

URL:

jdbc:mysql://[host name or ip address]/[database name]?user=[user name]&password=[user password]

jdbc:mysql://123.456.78.90/eformz?user=eformz&password=eformz

Note: When referencing the database url address in the web.xml file, the user name and password values can be excluded. For example:

jdbc:mysql://123.456.78.90/eformz

Note: In order for eFORMz to connect to your MySQL database you will need to copy your MySQL jdbc driver class into your eFORMz jar folder:

Copy:
\sqlDriver\mysql-connector-java-xxxx\mysql-connector-java-xxxxx-bin.jar

to the following directory:
C:\Minisoft\eFORMz_6\jars\Local

Oracle

Driver Class:

oracle.jdbc.driver.OracleDriver

URL:

jdbc:oracle:thin:[user]/[password]@[hostname or ip address]:[Listener Port]:
[SID – Database Name]

Example:
jdbc:oracle:thin:@123.456.78.90:1521:emaildb

Note: In order for eFORMz to connect to your Oracle database, you will need to copy your oracle jdbc driver class into your eFORMz jar folder:

Copy:
[Oracle_Home]\jdbc\lib\classesXXX.zip

to the following directory:
C:\Minisoft\eFORMz_6\jars\Local

and then rename the classesXXX.zip to classesXXX.jar

Oracle Cluster

JDBC URL for Oracle RAC (Real Application Cluster)

jdbc:oracle:thin:[user]/[password]@(DESCRIPTION=(LOAD_BALANCE=on)
(ADDRESS=(PROTOCOL=TCP)(HOST=host1) (PORT=1521))
(ADDRESS=(PROTOCOL=TCP)(HOST=host2) (PORT=1521))
(CONNECT_DATA=(SERVICE_NAME=service)))

Progress

Driver Class:
com.ddtek.jdbc.openedge.OpenEdgeDriver

URL:
jdbc:datadirect:openedge://*servername*:*10005*;databaseName=*c:\progressdb\sportstest*;user=*username*;password=*password*;defaultschema=*pub*

JAR Files:

From your *Progress* installation folder copy the following files into the C:\Minisoft\eFORMz_6\jars\Local\ folder:

base.jar
openedge.jar
util.jar

SQL Server

Driver Class:
com.microsoft.sqlserver.jdbc.SQLServerDriver

URL:
jdbc:sqlserver://12.34.567.899:1433;databaseName=ECOMVER;user=minisoft;password=minisoft2007;selectMethod=cursor;parametersAsUnicode=false

Note, you will need to specify the correct IP address, port (if different), database name, user, and password.

Sybase

Driver Class:

com.sybase.jdbc3.jdbc.SybDriver

URL:

jdbc:sybase:Tds:localhost:2638

Parameters:

SERVICENAME=demo
HOSTNAME=localhost
user=DBA
password=sql
STREAM_CACHE_SIZE=10000
LITERAL_PARAMS=false
CURSOR_ROWS=0
SESSION_TIMEOUT=300
JCONNECT_VERSION=6
CANCEL_ALL=true
DYNAMIC_PREPARE=true
LANGUAGE_CURSOR=false
SEND_LONG_PARAMS_REGARDLESS_OF_CAPABILITIES=false
IGNORE_DONE_IN_PROC=false
REQUEST_HA_SESSION=false
ELIMINATE_010SM=true
GET_BY_NAME_USES_COLUMN_LABEL=false
ESCAPE_PROCESSING_DEFAULT=false

JAR File:

Place the Sybase jar file into the C:\Minisoft\eFORMz_6\Local\ folder:

jconn3.jar

Appendix C

Alternate Form Template Creation

Creating a Form Template File for eFORMz

To import a form template into the eFORMz project file, you will first need to create a pcl print file (.prn) of your template. To create a pcl print file, follow the steps below using the suggested print driver.

Windows XP/2003 Print Driver

1. Install the *HP LaserJet 5Si PCL 5e* print driver located in the C:Minisoft\ eFORMz_6\Doc subfolder (NT_2000 5SI Print Driver.exe). The following folder will be created in the following directory:

   c:\lj371en

2. From the *Add Printer Wizard* proceed with the setup.
3. Select the *Local Printer Option* from the Print Wizard.
4. Select *File:Print to File* as your Port and click *Next*.
5. Select the *HPBLFF2.inf* file (print driver) from the associated directory (c:\lj371en). Once selected, click *OK*.
6. Click *Next*.
7. Enter a Printer Name *efzprinter*.
8. Select *No* if you do not wish this to become your default printer.
9. Click *Finish*.
10. The new *efzprinter* will appear in your printer listing. *Right click* the *efzprinter* and select *Properties*.
11. From the *General* tab click *Printing Preferences*.
12. The *Finishing* tab will display. Click *Details* under the Print Quality section.
13. From the *Print Quality Details* dialog box, select the following:

    Graphic Settings > *Complex Graphics > Use HP MEt*

    Rendering Mode > Send Page as Raster

Output Settings > *Resolution > 600dpi*

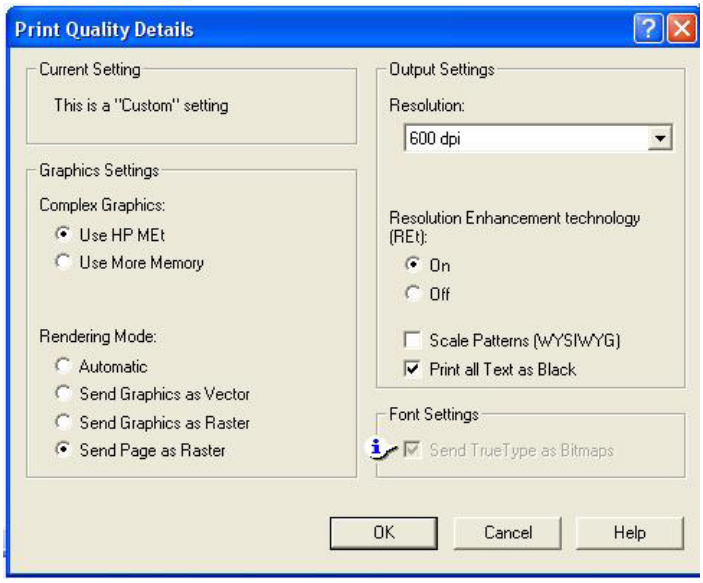
REt > ON

Uncheck > Scale Patterns

Check > Print all Text as Black

Font Settings > *Check > Send TrueType as Bitmap*

Note: In order to select *Send TrueType as Bitmap* you must first select *Rendering Mode > Send Graphics as Raster*. When *Send TrueType as Bitmap* has been selected return settings to *Send Page as Raster*.



14. When finished click *OK*.

Note: If you have any questions please contact Minisoft for further advice.

Windows Vista / 7 Print Driver

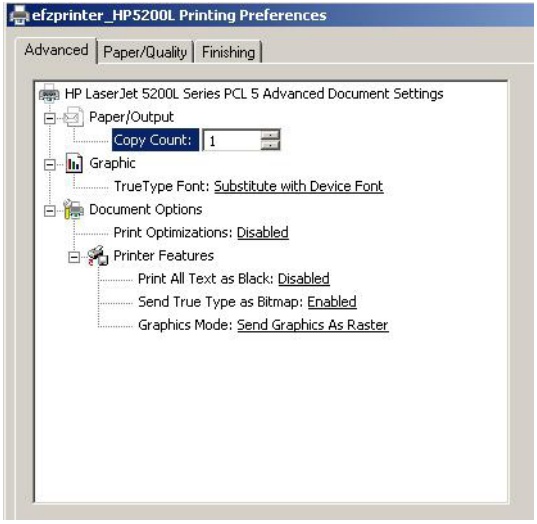
Install the *HP LaserJet 5200L Series PCL 5* print driver using the following method:

1. Create a new printer using the *Add Printer* option from the *Control Panel* > *Printers and Faxes* dialog box.
2. From the *Add Printer Wizard* proceed with the setup.
3. Select the *Local Printer Option* from the Print Wizard.
4. Select *File:Print to File* as your Port. Click *Next*.
5. From the list of manufactures select *HP.* Select *LaserJet 5200L Series PCL 5* as the model type. Once completed, click *OK*.
6. Click *Next*.
7. Enter a Printer Name of *efzprinter* and click *Next*.
8. Select *No* if you do not wish this to become your default printer.
9. Click *Finish*.

Once your HP LaserJet 5200L Series PCL 5 print driver has been installed (efzprinter) click the *Properties* of this printer from the *Printers and Faxes* dialog box:

1. From the *Printing Preferences* dialog box click the *Advanced* tab and select the following options:

Print Optimizations:	*Disabled*
Print All Text as Black:	*Disabled*
Send True Type as Bitmap:	*Enabled*
Graphics Mode:	*Send Graphics as Raster*



2. When finished click *OK*.

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