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# Xerox® FreeFlow® VI eCompose Software

Workshop Guide

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## Contents

# Getting Started

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Welcome to the VI eCompose (VIeC) Workshop. This document is designed to provide background information and hands-on lessons in using the program, to walk you through the basic configuration and operation of VIeC.

By the end of this workshop you will be able to configure the VIeC Server and understand the operation of **lpr**, the Watched Folder, and the VIeC Job Submission Client. In the workshop, the capability of VIeC Dispatch will be demonstrated.

Before using the workshop materials, read the *FreeFlow VI eCompose User Guide*, and have the user guide available while you are completing the workshop exercises.



Note: Refer to the following information:

- Case-sensitive entries

When using VIeC, remember that values in all database fields, index fields, and rule values are case-sensitive.

- Supported distillation job parameters

The built-in PDF authoring engine supports all distillation job parameters except those that require post-processing such as DoThumbnails, CompressObjects, EmbedJobOptions, and Optimize.

The following subjects are not covered in this workshop:

- VIeC Web GUI: For information about this module, refer to the *FreeFlow VI eCompose User Guide*.
- VIPP® programming training: For training on VIPP® programming, contact a local Xerox representative.
- VIeC as a Windows Service: For information about Windows Service, refer to the *FreeFlow VI eCompose User Guide*.

## VI Suite Customer Forum

Xerox hosts a Community Support Forum. The VI Suite Customer forum is now part of the larger Xerox support forum, allowing you to post and review information about Xerox products and services all from one location. Take a minute to log in to this customer forum community: <http://vippsupport.xerox.com>.



## Intended Audience

This workshop is intended for:

- Application and system programmers who are responsible for creating and running VIPP® applications and want to take advantage of the VIPP®-to-PDF workflow available with VIEC.
- Network administrators and system integrators responsible for the network submission of VIPP® applications and the distribution of the PDF files created using VIEC.
- Print operators who have the responsibility to load, delete, or modify VIPP® resources on the VIEC Server.

## What You Will Learn

The scope of this training is limited to the installation, configuration, and operation of VIEC. This workshop does not attempt to cover any VIPP® programming concepts.

The workshop is divided into the following general areas:

- **Getting started**, which you are now reading, provides some introductory information and an overview of the VIEC Compose Workshop.
- **VIEC Workshop Installation** provides an overview of the installation process. You learn about installation, installation verification, VIEC Server configuration, and how and where to load the files provided as a part of this workshop.
- **VIEC and VIEC Workshop overview** provides a summary of VIPP® and VIEC programs, including a short overview of VIPP® and VIEC resources as they relate to VIEC.
- **Job parameters and profiles** provides information about VIEC Job Parameters and Job Profiles, including information about the Init (Nub) file, job types, and creating and using profiles.
- **VIEC job submission** describes the three methods of job submission used by VIEC: lpr, Watched Folder, and Job Submission Client.
- **Hands-on exercises** provides exercises that guide you through the configuration and use of VIEC, including VIEC Dispatch.

# VIeC Software Workshop Installation

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This information helps you understand the installed software, and the minimum requirements for the installation.

## Program Download

To download the FreeFlow VI eCompose, go to [www.xerox.com/support](http://www.xerox.com/support), then select **Software and Platforms**. Select **FreeFlow > FreeFlow Variable Information Suite**, then select **Software and Solutions**. If necessary, to display the correct installer file, select the operating system appropriate for your target platform, then download the FreeFlow VI eCompose installer file.

### Program delivery format

Programs are delivered in .exe format. You can download the application to the target device. When the device does not have Internet access, copy the .exe file to the target device, then install the program.

## Documentation Download

English language versions of all of the FreeFlow Variable Information Suite documentation are available for download. Go to [www.xerox.com/support](http://www.xerox.com/support). Select **Software & Platforms**, select **FreeFlow**, select **FreeFlow Variable Information Suite**, then select **Documentation**.

## Client and Server Software

The VIeC software contains both client and server applications. During the installation, you are prompted to select the type of installation required. You can install the client on the same PC as the server or you can install the client on any network-connected PC that has access to the server.

The server requires a Xerox license file to operate. Client software is distributed without any license requirements. During the installation of the client software, identify a target server. You can change the target server during normal operation of the system, as required.

## Minimum Server Configuration for the VIEC Server

The following are the minimum requirements for the VIEC Server:

- Windows® 10, Windows® 11, Windows Server® 2016, Windows Server® 2019, or Windows Server® 2022.
- 2.4-GHz Processor.
- 2 GB of RAM per instance. For more information on running multiple instances of VIEC, refer to the *FreeFlow VI eCompose User Guide*.
- 40-GB hard drive.
- Ethernet network interface.
- Microsoft .NET Framework 4.8 (installed).

## Minimum Client Configuration

There is no minimum configuration for the client.



## Backup and Storage Requirements

To ensure the normal operation of the VIEC Server, perform the usual backup and housekeeping practices.

The speed of the processor and the amount of memory available on the VIEC Server is a major factor in the processing speed you achieve in the creation of PDF files.

Plan your storage requirements. When you plan for your storage needs, consider the following factors for standard operation, backup, and housekeeping procedures:

- Number of PDF files that you create that require storage
- Size of the PDF files
- Speed at which the PDF files are created
- Where to store the PDF files
- Length of time that the PDF files are stored



Note: For more information on housekeeping, refer to the *FreeFlow® VI eCompose User Guide*.

## Installation Process

For step-by-step installation instructions for VIeC, refer to the *FreeFlow VI eCompose User Guide*. In general, the installation process involves the following steps:

- Select the installation type: **Client/Server**, **Server**, or **Client**.
- Answer the installation prompts. This workshop assumes that you have installed the VIeC Server on the C: drive, and that the VI Compose xgfc directory structure is on the C: drive. If the VIeC Server is not on the C: drive, and if the VI Compose xgfc directory structure is not on the C: drive, certain parts of this workshop cannot function as expected.
- Install the VIeC software.
- Install the lpr client, if required. This installation is recommended.
- Install the license.

## Installation Verification

To verify that the installation ran properly, follow the procedures in this section.

- Ensure that the server is running.
- Look for the VI eCompose Local Server (VIeC) icon in the lower-right task bar.

The VIeC Server is configured to start automatically. When the PC is booted, the VIeC icon is present. When you hover the mouse over the icon, a message appears: `VI eCompose Local Server`.

If the VIeC icon is not displayed, you can start the server, but this is usually only necessary when the server module has been stopped manually. To start the server, select the Start menu, then select **Programs > Xerox FreeFlow VI eCompose > VI eCompose Local Server**.

To verify normal operation, run a test job. The steps outlined here are explained further in the workshop. For now, follow these steps to verify the normal operation of the VIeC Server.

1. In the task bar, right-click the **VIeC** icon.
2. Select **Launch Job Submission Client**. The VI eCompose Job Submission Client appears.
3. On the lower right side of the Job Submission Client window, select the **Submit Job** button. The default billb.lm VIPP® job is submitted to the VIeC Server. The PDF file that is generated is deposited in the folders indicated in the User Name and Output Folder windows.



Tip: As the job is processed, the job status changes from submitted to complete. Note the number of pages distilled. Because this job is not using any split options, the value for pages split and files generated is zero. Split options are explained in more detail later.

4. During the installation of the VIeC software, a shortcut folder called VI eCompose Incoming Folders was created on the desktop. Locate that folder, or you can scroll to `X:\Program Files (x86)\Xerox\VIPP\svtp\users\user_name\incoming\bulk`, where X is the partition where the VI eCompose software is installed, and user\_name is the user name defined during installation.
5. To display a subfolder that is time-stamped and contains the file name billb\_lm, open the default folder. To find the PDF file, open the time-stamped subfolder, then open and view the PDF file.
6. After you have looked at the PDF file, to end this task, close all the windows. To exit the Job Submission Client, select **X** or **Alt-X**. To confirm, answer **Yes**.

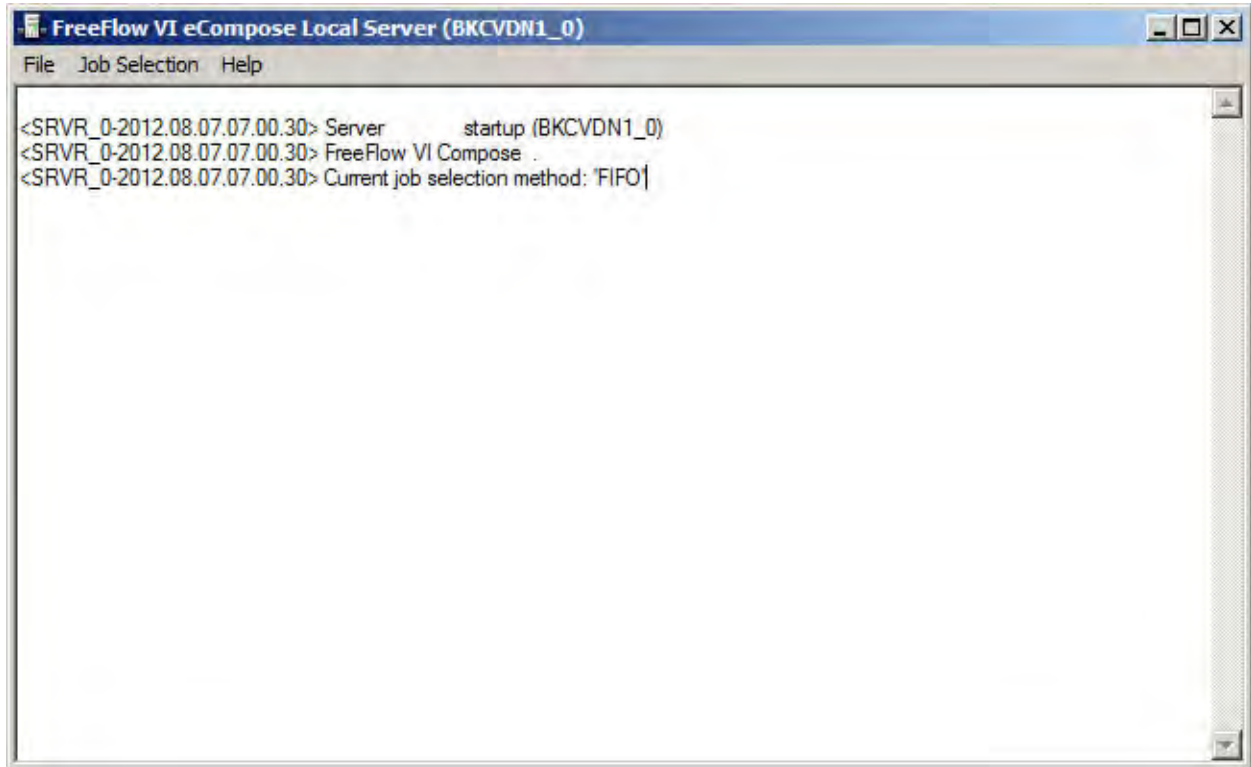
### END OF EXERCISE

This concludes the installation verification process. If you experience any problems, contact a local Xerox representative.

## Server Configuration

Server configuration options are minimal. Configuration involves specifying the order in which the VIeC Server processes incoming jobs.

Configuration of the VIeC Web modules is not covered in this document. For information about the VIeC Web configuration, refer to in the *FreeFlow VI eCompose User Guide*.



To configure the VIeC Server operation, follow these steps:

1. On the task bar, double-click the **VIeC Server** icon located. The VI eCompose Local Server window appears.
2. To review the available options, select the **File** menu:
  - Save Logfile
  - Clear Logfile
  - Dump Accounting File
  - Show Billing Meters

The Dump Accounting File option creates a comma-delimited file that you can port into Excel or a database program for query.

3. From the menu bar, select the **Job Selection** menu. Use the menu to change the operating parameters that the VIeC Server uses to process VIeC jobs in the server queue. For now, leave the default to First In, First Out.
4. To review the help that is available, select the **Help** menu.
5. To close the VI eCompose Local Server window, select the X in the top-right corner.



Tip:

- Selecting X minimizes the VIeC Server, but does not shut down the server.
- To exit the VIeC Local Server, enter Alt-X.
- To restart the server, access the Windows Start menu, then access the VI eCompose menu.

## Load Workshop Files

To find the workshop.zip file containing all the test files and resources used in this workshop, open the VI eCompose Installation zip file, then scroll to the `English\Docs\workshop` folder. Extract files from the workshop.zip file and copy the files to the locations specified in the table.

FILE NAME	DESCRIPTION OF FILE	COPY THE FILE HERE
vtpworkshop	A project folder that contains all resources for the project.	X:\Program Files (x86)\Xerox\VIIP\xgfc\projects, where X is the partition where the VI eCompose software is installed.
VTPmove.bat	DOS batch file, used in the VIeC Dispatch exercise to show Dispatch executing a user-defined process. In this case, the VTPmove.bat process moves the PDF files to the C:\MyArchiveFolder on the PC. In one of the following exercises, you create the folder.	X:\Program Files (x86)\Xerox\VIIP\xgfc\mislib, where X is the partition where the VI eCompose software is installed.
vtpworkshop.dbf	Data submission file.	X:\Program Files (x86)\Xerox\VIIP\xgfc\mislib, where X is the partition where the VI eCompose software is installed.
vtpworkshop.nub	Nub/init file used to populate a data file with the required VIIP® start commands.	X:\Program Files (x86)\Xerox\VIIP\xgfc\mislib, where X is the partition where the VI eCompose software is installed.
vtpworkshop.pfl	VI eCompose Profile file.	X:\Program Files (x86)\Xerox\VIIP\xvtp\users\xxxx\profiles, where X is the partition where the VI eCompose software is installed and xxxx is the user name.
vtpworkshop.rule	VI eCompose DispatchRule file.	X:\Program Files (x86)\Xerox\VIIP\xvtp\dispatch\rules, where X is the partition where the VI eCompose software is installed.
vtpworkshop.vpc	VIeC Workshop VI Project Container file. This container holds all the required VIIP® files to run the vtpworkshop application.	X:\Program Files (x86)\Xerox\VIIP\xgfc\mislib, where X is the partition where the VI eCompose software is installed.

FILE NAME	DESCRIPTION OF FILE	COPY THE FILE HERE
vtpworkshop_error.dbf	A data file that generates an error message. Used to show where error messages are displayed.	X:\Program Files (x86)\Xerox\VIIP\xgfc\mislib, where X is the partition where the VI eCompose software is installed.
vtpworkshop_nub.dbf	A data file that contains no VIIP® start commands. This data file uses the nub/ init feature to process files properly.	X:\Program Files (x86)\Xerox\VIIP\xgfc\mislib, where X is the partition where the VI eCompose software is installed.

Adobe Security options can be applied to the PDF files created. You can add password protection to the PDF and child PDF files created. The password can be a generic password for all PDF files produced or a unique password driven by the user data. For more information on PDF security supported by VI eCompose, refer to the *FreeFlow VI eCompose User Guide*.





# VIeC and VIeC Workshop Overview

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VIeC is a client-server application that allows you to generate Adobe PDF documents from VIPP®-based variable data applications. Using the same VIPP® workflow that generates hard copy output on a print device, the same data file can be sent to the VIeC Server and PDF output created. Use of the VIeC Dispatch module can integrate the PDF files into the workflow process.

VIeC outputs the PDF files to a local directory structure on the server. The VIeC Dispatch module can call a user-defined process and pass to that process the PDF file and other information contained in the VIPP® Bookmark. This action provides a rule-based manual or automated API to web presentment, archive, viewing, email servers, or other up stream processes as required by customers.

A standard VIPP® application that is submitted to a VIPP®-enabled print device can be submitted to the VIeC Server. No changes in the data or VIPP® resources are required. VIeC operates like any other VIPP®-enabled print device. A job using lpr to submit to a printer can use lpr to submit to the lpr client of the VIeC Server by changing the destination TCP/IP address and queue name. Watched Folders and the VIeC Job Submission Client can be used to submit data files to VIeC. In addition, a VIeC Web module, not covered in this workshop, can be used to configure and submit jobs to the VIeC Server. For more information about VIeC Web, refer to the *FreeFlow VI eCompose User Guide*.

A VIPP® job processed by the VIeC Server results in the generation of an Adobe PDF file. The PDF file is output to a named directory on the server. A print path can be specified. The data file processed by VIeC is forwarded to the print device after being processed by the VIeC Server. This action allows for both electronic and hard copy printing from a single job submission. It is important to note that the print path passes the data file, not the PDF file, to the target print device. To forward the PDF file, review the information about the VIeC Dispatch module described later in this workshop and review the VIeC Dispatch chapter of the *FreeFlow VI eCompose User Guide*.

Any VIPP® application that uses the VIPP® BOOKMARK command can be further enhanced to create individual sets of PDF files. For example, a statement run containing 10,000 customer records can be split into 10,000 individual variable-length customer PDF statements. Web presentment applications, or archive and viewing systems, can take advantage of the individual PDF files, all without making any changes to the data or the workflow. The VIPP® BOOKMARK and extended BOOKMARK can contain additional data that can be passed to a user-defined process using the VIeC Dispatch module. For more information about the VIPP® BOOKMARK and extended BOOKMARK features, refer to the *Xerox® VIPP® Language Reference Manual*.

PDF Interactive features such as PDF Bookmarks, PDF notes, or URLs can be included in the output PDF file using the VIPP® SETPIF command. For example, in the statement example, several additional PDF bookmarks can be created to assist with navigation through the PDF document. URLs can be inserted into the PDF file that links the

customer to a company home page or customer support page.

PDF interactive features are processed only when the job is sent to VIeC. PDF interactive features are ignored when the data file is processed by a VIPP®-enabled printer.

## Third-Party Support for VIEC

There are third-party VIPP® GUI design tools that support the creation of VIPP® Bookmarks, PDF Interactive Features, and VIEC DispatchRules. For information on how these easy-to-use tools can help you design and create VIPP® applications without VIPP® programming knowledge, review the vendor websites.

For information on third-party products that support VIPP® Pro Dynamic Document Construction, contact your local Xerox representative.

## Job Submission Methods

VIeC supports four methods of job submission, three are discussed in this workshop:

- lpr
- Watched Folder
- VIeC Job Submission Client

The VIeC Web interface can be used to administer the system and submit jobs for processing. For more information on the VIeC Web interface, refer to the *FreeFlow VI eCompose User Guide*.

VIeC provides the capability to append a .nub initialization file to the data file. This action enables the delimited, XML, or line mode data file to be submitted directly to the VIeC Server. The VIPP® commands required to initiate the VIPP® processing are added to the incoming data file using a VIeC profile. Each job submission method allows for the use of VIeC profiles. A VIeC profile contains all the job options, such as output file folder, distill options, and file name templates needed to process the VIPP® data file on the VIeC Server. The lpr client must be able to process the -T option. If the -T option is not available, a default lpr profile can be established or you can include the startup commands with the data file. For additional information, refer to the *FreeFlow VI eCompose User Guide*.

## What is the VIPP® Language?

This workshop does not provide training on the VIPP® language. To use VIEC, it is necessary to understand some of the basics of the VIPP® language and the FreeFlow Variable Information Suite. For training on the VIPP® Language, or any of the VI Suite applications, contact your local Xerox representative, who has information on the available training in your area.

VIEC uses an embedded VI Compose software to process any VIPP® application that VIEC receives. With the introduction of VIEC, this same workflow can be used to create Adobe PDF files. Those files can contain additional interactive features that can add value to the document produced, such as a URL link or a link to additional PDF documents.

VIPP® is a set of high-level PostScript macros that reside at the VIPP® device. The key advantage of VIPP® software for the enterprise is that the majority of the information required to format the data file is stored at the device. Only the unformatted variable data file with the initial VIPP® start command or nub file is required to process the data file, producing highly customized and personalized documents across the enterprise.

VIPP® applications can be sent to a variety of printers: desktop, office, production monochrome, highlight color, or full color printers. The same data file can be sent to VIEC to output PDF files, all with no changes required to the workflow or the data.

### VIPP® RESOURCES

VIPP® jobs consist typically of three types of resources.

- User resources consist of objects used in the job:
  - JPEG or TIFF images
  - PostScript, EPS, .txt files, decomp files, or RDO files; Tiff only
  - Native-mode VIPP® forms or segments of VIPP® code
  - Fonts
- VIPP® Template files consist of the following:
  - Job Descriptor Ticket (JDT)
  - XML Job Descriptor Ticket (XJT)
  - Data Base Master (DBM)
  - Font lists and encoding tables
  - Distribution lists
- VIPP® Data files: VIPP® can be configured to run in these modes:
  - Native Mode
  - Line Mode
  - Data Base Mode
  - XML Mode

### **VIeC and VIPP® Resources**

The VIeC Server has the same VI Compose software that can be found on the printer. The VI Compose software processes the data file and builds the variable data pages on the VIeC Server in the same way as on a print device. The only difference is that the output consists of PDF files instead of paper documents.

As on a print device, the VIeC Server needs access to the same VIPP® user and template resources files. The resource files must be loaded to the standard customer VIPP® directories on the VIeC Server. VIeC supports both the legacy resource structure and the VI Project resource structure. For more information on the customer XGFC directory structure, review the *FreeFlow VI Compose User Guide*.

The data file is sent to the VIeC Server using one of three standard methods. The `lpr` command can be used to submit jobs from clients, including mainframe hosts. The data file can be deposited in a Watched Folder, typically using FTP software or copied using other networking methods. The PC-based Job Submission Client can be used to submit files for processing. In addition, the VIeC Web interface is capable of submitting and reviewing jobs submitted for processing.

VIeC can accept a VI Project Container as a job submission file. For more information on VI Project Containers, review the VI Project section of the *FreeFlow VI eCompose User Guide* or the *FreeFlow VI Design Pro User Guide*.

## What is a VIPP® Bookmark?

The VIPP® BOOKMARK command is a marker. When used in a VIPP® application and processed by VIEC; the command creates a document boundary, enabling splitting of the output PDF file into individual PDF sets. Information contained in the bookmark can be accessed in the index file that is created when the Distill and Split into Pages option is selected in the Job Option Menu of VIEC or set in a Job Profile.

The BOOKMARK accepts a field name or variable as the input string to the command. Two examples are shown here:

```
/VARname 4 10 20 GETFIELD
```

```
VARname BOOKMARK
```

```
Fieldname BOOKMARK
```

The input string can consist of one or more variables, fields, and fixed text concatenated using VSUB. Use this example when you want the bookmark to contain a customer account number and email address separated by a space:

```
($$VARaccountNo.$$VARemail.) VSUB BOOKMARK
```

The BOOKMARK is limited to 256 characters. An extended bookmark of up to 64 K can be created, and is typically seen when large volumes of text data need to be passed. For example, the extended bookmark can contain a text string that is used as the body of an email message. The VIPP® application in this workshop contains such an extended bookmark.

The BOOKMARK command is ignored when processed by a print device. The BOOKMARK command is acted upon only when processed by VIEC.

Other commands that can be used in the creation and use of the BOOKMARK command include GETFIELD, SETVAR, and CS.

For more information about the BOOKMARK command, refer to the *VIPP® Language Reference Manual* and the *FreeFlow VI eCompose User Guide*.

## What is a VIPP® PDF Interactive Feature?

A VIPP® PDF Interactive Feature is a text or image object in a PDF document that can be selected by Adobe reader and which, when activated, results in some form of interaction, such as a link to a web page or the opening of a note within the PDF document.

These examples show other uses for bookmarks:

- To help navigate a document.
- A PDF note can flag up-to-date information.
- To insert links to other PDF documents or to a page in a PDF document.
- A URL link can be inserted and associated with a text or graphic element that when selected transports the user to a web site.

A typical example is an interactive PDF billing statement. The billing statement can contain links to PDF documents describing the various sections of the statement or billing terms and conditions. The PDF can contain a URL link to the company home page or a link to another document offering additional services. This capability adds value to the PDF document that you produce. For more information, refer to the VIPP® SETPIF command in the *VIPP® Language Reference Manual*.



## VIEC Features

This section describes briefly the major features of the VIEC Server. These features, along with the VIEC unique job-splitting capabilities, make this an industry-unique VIPP®-to-PDF workflow that is powerful, yet easy to use and configure.

More details about these features are provided later in this workshop. For additional information, and information about features not covered in this workshop, review the *FreeFlow VI eCompose User Guide*.

### VIEC

VIEC is designed to process a VIPP® data file and generate a single PDF file or multiple PDF files and associated index information. VIEC can accept data input from several sources and can pass the PDF files to a user-defined process using the VIEC Dispatch module. The VIEC Server has a print path so that the data file submitted to the server can be passed to an identified printer.

### VIEC AND PRINT PATH

The VIEC Server provides a print path that can be used to submit the data file to a networked VIPP®-enabled print device. The data file can be sent to both the VIEC Server and a hard copy printer without the need to resubmit the data file.

The print device requires that the VIPP® user and template files are loaded or available using a network file server.

### VIEC AND NUB FILE

On many Xerox DocuPrint devices, the VIEC Server supports a feature called XGFnub. VIEC supports virtual printer settings on FreeFlow Print Server systems. The nub feature allows an ASCII file to be appended to the data file before being processed by VIPP®. End users can submit the database, XML, or line mode data file directly to the VIEC Server, without the need to make changes at the host to add the required VIPP® start commands. When the VIPP® start commands are referenced in a file stored at the VIEC Server using the nub feature, before being processed by VIPP®, the VIPP® start commands are appended to the incoming data.

### VIEC TEMPLATES

The VIEC Server allows templates to be created that control the parameters used to define the name of the PDF files created and the index files that are generated. These templates are available only when the Distill and Split into Pages job option is selected. When the Distill Only job option is selected, the templates have no effect.



Note: For a VIEC job that does not split but requires Dispatch, to generate the necessary index file, you can select the \_Distill Only option using the Output Filename Template with the <GET\_INDEX\_WITHOUT\_SPLIT> option set.

### VIEC PROFILES

The VIEC Server allows VIEC profiles to be created and saved. A VIEC profile is a file that contains a list of options and template settings that can be applied to a job using options in the various job-submission clients. A profile can be assigned to a data file using the Job Submission Client or lpr -T options if supported, or assigned to a VIEC Watched Folder.

## USER NAME OUTPUT FOLDER

The user name indicates the signed-on user. Each user has a set of default output folders that are created during installation, and any additional user folders that were created by the system administrator.

The Default, Alt1, and Alt2 folders can be selected as the output destination for the subfolders containing the Adobe PDF files created during normal operation of the VIeC Server.

For each file processed by the VIeC Server, a time-dated subfolder is created in the selected output folder. All PDF files associated with the current job being processed are inside the time-dated subfolder. This action is necessary to avoid overwriting PDF files created by job runs with the same name. For example, if you use a web-based application that collects customer data and submits the data file. There is a special output folder called bulk. Using the bulk folder as the output folder disables the time-date subfolder. The bulk folder is useful for processes that scan a known directory location and sweep or process those files. The danger here is that files of the same name overwrite each other, so be careful when using the bulk directory option.

## VIEC DISPATCH

VIeC Dispatch is a powerful rule-based Dispatch module. The job of Dispatch is to evaluate the index file created by the application, using the Distill and Split into Pages job type option. If a DispatchRule can be applied, VIeC Dispatch passes the rule to a PDF file, along with other information contained in the index file that is generated by the VIPP® Bookmark command, to a user-defined process defined in the rule. The DispatchRule can include a process that interfaces with email servers, a Xerox DocuShare repository, archive repositories, or other user-defined systems. The Dispatch module does not email or process the PDF file. The module passes the PDF and other information as required to a process that can interface with additional workflow steps in the customer environment.



Note: For a VIeC job that does not split but requires Dispatch, to generate the necessary index file, you can select the \_Distill Only option using the Output Filename Template with the <GET\_INDEX\_WITHOUT\_SPLIT> option set.

## VIEC JOB SUBMISSION CLIENT

VIeC Job Submission Client is supplied on the VIeC installation CD and can be distributed freely. The VIeC Job Submission Client has two main functions:

- To configure the operation of VIeC to create profiles and do other tasks.
- To select a VIPP® data file or a VI Project container and submit those entities for processing by the VIeC Server.

## VIEC WEB

VIeC Web allows VIeC configuration and job submission from a web interface. This module is not covered in this workshop. For more information on the VIeC Web module and security issues related to its use, review the *FreeFlow VI eCompose User Guide*.

# Job Parameters and Profiles

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A VIEC Profile contains parameters related to job processing and control. The job parameters include job type, print options, file name and index template information, and the target VIEC destination folder.

A VIEC Profile is an ASCII file containing VIEC parameters and values. A VIEC Profile can be created using a text editor, or using the Save as Profile option in the VIEC Job Submission Client or VIEC Web interface to save the current settings. The input data file name is not saved.

User-defined VIEC Profiles and default profiles can be created. An example of a default profile is the `lpr_default.pfl` file. This file is not present when the system is installed but users can create the file to set `lpr` default options. If the `lpr` client cannot support the `-T` option, create a file to set the `lpr` options. Default settings apply to all submitted `lpr` jobs. Be aware that this action may not be desirable in your work environment.

## VIeC Profiles

An example of a profile is shown. A description of the parameters follows. In Exercises 5, 7, and 8 you work with these job parameters to change the way that the VIeC Server works with input and output files.

```
[_]  
InitFile=C:\xvtp\users\DNkirk\profiles\vtpworkshop.nub  
JobType=distill_and_split  
OutputFolderName=default  
OutputFilenameTemplate=<FS='^'><BKMARK[F0]>_<BKMARK[F1]>.pdf  
IndexFileTemplate=<FS=', '>Filename, InputFile, EndSplitDate, EndSplitTime,  
OutputDir, Pages, FileSequence,  
firstname|<BFS='^'>[F0], lastname[F1], email[F2], info1[F3], info2[F4]  
PrinterName=none  
PrinterAction=print_if_job_completes
```

## VIeC Parameters

VIeC parameters specify various paths, actions, locations, file names, field names, and printer information for VIeC jobs.

### INIT (NUB) FILE

The InitFile parameter allows the specification of the path to the nub file. The nub file is a set of VIPP® start commands in an ASCII file that is appended to the raw data file being submitted. The nub file allows raw line, XML, or delimited database data to be submitted directly to the VIeC Server without the VIPP® start commands. The start commands are required in the nub file specified in the path provided.

This is an example of the contents of a nub file:

```
%!  
  
XGF  
  
(Myjob.dbm) STARTDBM
```

The nub file contains the required VIPP® start commands to process the job and to call in the needed VIPP® resource files. In the example, the Myjob.dbm file is used to process any file submitted using the nub file.

### JOB TYPE

The Job Type parameter defines the actions that the VIeC Server performs. The actions are described here.

Distill Only	This option distills the input data stream and creates a single PDF file. When planning to use VIeC Dispatch, set the Output Filename Template to use <GET_INDEX_WITHOUT_SPLIT>.
Distill and Split into Pages	This option requires that the VIPP® job contain the VIPP® BOOKMARK command. VIeC acts on the VIPP® BOOKMARK command contained in a VIPP® job. The PDF files produced are split, based on the information in the bookmark. For example, a billing statement that uses the account number as the bookmark can create individual PDF statements based on the bookmark value. A single record can be processed using this option. To create an index file that can be used in a DispatchRule, use the Distill and Split into Pages option.
Split into Pages Only	This option is used to split PDF files that have one or more bookmarks present. This option is used rarely.

### OUTPUT FOLDER NAME

The Output Folder Name parameter defines the location of the folder that contains the PDF files. The folder is under the user name that you used to log in.

## OUTPUT FILENAME TEMPLATE

The output file name template affects the way that the VIEC Server names the multiple PDF files generated when the Job Type parameter is set to Distill and Split into Pages or Split into Pages Only. If Distill Only is selected, the output file name template has no effect on the output file name. When a single PDF file is generated using the Distill Only job type, VIEC names the PDF file using the same name as the input file name.

## INDEX FILE TEMPLATE

The Index File Template is used to specify the field names that make up the index file generated as the result of the Distill and Split into Pages or Split into Pages Only Job Type being selected. When the Job Type is set to Distill Only, no index file is created, unless the Output Filename Template is set to use <GET\_INDEX\_WITHOUT\_SPLIT>.

The purpose of the index file is to provide an API to an archive, email, CRM, or other customer process. The index file can be used to build a path to the required PDF file and to provide fields for additional information contained in the VIPP® BOOKMARK or extended bookmark that are passed to a user-defined process using the Dispatch option. In a run of many thousands, it is clear that the index file is an important component of VIEC output. The index file is output as a comma-delimited .csv file and an XML file. The index file contains seven standard fields and the bookmark and extended bookmark, if present. The bookmark field can be split into many separate fields. For example, if the bookmark was based on the account number, customer name, and email address.

An index file can be generated that contains separate fields for the account number, customer name, and email address. These fields can be passed to a user-defined process that uses the information to submit the PDF file using an email server. The customer PDF statement can be emailed directly to the customer email account.

### Example of a Standard Index File

This example shows the standard fields available in a VIEC index file. The example is taken from the XML format index file. An XML file is easier to read than a .csv file.

```
<FileName>VTPworkshop000000.pdf</FileName>
<InputFile>VTPworkshop.pdf</InputFile>
<EndSplitDate>2004-11-15</EndSplitDate>
<EndSplitTime>15:06:19:136</EndSplitTime>
<OutputDir>C:\xvtp\users\DNkirk\incoming\default\DNkirk_VTPworkshop_vpc_2004_11_15_15_05_51</OutputDir>
<Pages>1</Pages>
<FileSequence>0</FileSequence>
<Bookmark>David^Kirk^David.kirk@zvwgz.com </Bookmark>
```

Additional fields can be generated from the data available in the VIPP® bookmark, using the Index File Template options. This is demonstrated in an exercise later in this workshop.

## PRINTER NAME

The Printer Name parameter is used to identify a connected networked VIPP®-enabled print device to which the data stream is sent after being processed by the VIEC Server. By default, no printer is identified. To select a printer, the printer must be available to the Windows Printers Dialog box on the PC. The printer requires access to all the normal VIPP® resources, including a production license to run the VIPP® application. The printer processes the VIPP® data in the usual manner.



Note: The printer does not print the PDF files created by the VIEC Server, the printer processes the VIPP® data file.

## PRINTER ACTION

The Printer Action parameter specifies two conditions for sending the data file to the target print device:

- Always send the data
- Send the data only if the VIEC Server successfully processes the data file

## Creating an Output Filename Template

VIeC allows you to create a template that can be assigned to a profile or selected as an option in the VIeC Job Submission Client. The template defines how the PDF files are named. The default naming convention uses the data file name and a six-digit counter.

For example, a file called myjob.dbf submitted to the VIeC Server using the Distill and Split into Pages option and the default Output Filename template creates PDF files named myjob000000.pdf, myjob000001.pdf, myjob000002.pdf, and so on.

The Output Filename Template editor allows customizing the naming convention, using fields or strings contained in the VIPP® BOOKMARK or labels entered in the template editor.

In Exercises 5 and 8, the Output Filename Template is used to modify the naming convention of a job file submitted to the VIeC Server. The available options are reviewed in this section. For a description of the field names, review the *FreeFlow VI eCompose User Guide*.

1. To open or launch the VIeC Job Submission Client, in the lower right task bar, right-click the **VIeC** icon. When the menu appears, select **Launch Job Submission Client**.
2. In the Output Filename Template field, notice the default naming convention:

```
<DFNAME><DIGITS=6>.pdf
```

Where:

<DFNAME>	is the Data File Name.
<DIGITS=6>	is the six-digit counter.
.pdf	is the pdf file extension.

3. Next to the Output Filename Template field, select **Create Template**. The Create an Output Filename Template editor appears.

 Note:

- To add a field, insert the cursor at the needed insertion point, then select the appropriate action button in the template window.
  - To delete a field, highlight the field, then press the **Delete** key.
4. Add a BOOKMARK field. Place the insertion point between the <DFNAME> and the <DIGITS=6> comments. Select **Add Bookmark**.

<BKMARX> is added to the template. The VIPP® bookmark contents appear between the file name and the six-digit counter.

5. Make these changes:
  - In the template, select the <DFNAME> comment, then press the **Delete** key.
  - Overwrite the <DIGITS=6> comment with <DIGITS=3>.

The new template appears, and the PDF files use the bookmark value and a three-digit counter.



- When you are satisfied with the parameters selected, to exit the Output Filename editor window, select **OK**. The template contents appear in the Output Filename Template window. The list at the side contains several previously defined templates that you can select.

When completing normal VIeC operations, after completing the steps outlined here, make changes to the Index File Template, if required. Save your changes and any other job parameters to a profile for later use. Saving a profile is discussed later in this chapter.

## ADVANCED OPTIONS

The VIPP® bookmark that is used to split the VIPP® data file into individual PDF files, can be created as a simple file name, or can contain several field or variable names concatenated into a single value. The VIPP® bookmark can include characters that are used later as field separators within the actual bookmark. The Add Field Separator, Add Field Index, and Add Start/End Index features are used to break out areas of the bookmark into fields that can be used in the Output Filename.

For example, a bookmark can contain the following:

```
521-99-0684ADavid Kirk^Dave_Kirk@zxyzzx.com
```

The string example consists of a customer account number, customer name, and an email address separated by a ^ character that is used as the field separator. To use the customer name as part of a naming convention, create a template that splits the bookmark into fields using the ^ as a separator. To do this, follow these steps:

- To launch the VIeC Job Submission Client, in the lower right task bar, right-click the **VIeC** icon. When the menu appears, select **Launch Job Submission Client**.
- To the right of the Output Filename Template field, click **Create Template**.
- In the top window, place the cursor at the beginning of the template syntax.
- In the Add Field Separator field, type the ^ character. To add this comment to the output template, click **Add Field Separator**.
- Specify the BOOKMARK. If not already displayed in the template, to insert the BOOKMARK field <BKMARK>, select **ADD Bookmark**.
- Specify which part of the bookmark to use. Place the cursor inside the bookmark comment, just before the closing >, the insertion point required for the field index that you want to specify.
- To add the customer email, which is the second field in the bookmark, select a Field Index value of 1. In the Add Field Index field, type 1. To add the Field Index value to the template, click **Add Field Index**. This action works on zero-based indices where 0 = the first field. The new bookmark comment appears:

```
<BKMARK [ F1 ] >
```

This syntax tells VIPP® to select the second field, the customer name, from the bookmark. In addition to separating the bookmark into fields, you can select a number of characters, or a number of characters based on a selected field.



Note: The Output Filename Template editor is sensitive to the current cursor position. The editor inserts fields and other comments at the current cursor position, even if the information does not make sense or is invalid. Before saving the information to a profile, review the Output Filename Template contents.

## Creating an Index File Template

To create an Index File template, use the same process and concepts described in [Creating an Output Filename template](#). For more information, review the *FreeFlow VI eCompose User Guide*.

## Create a Profile

After the Output Filename and Index templates have been created, the next step is to save a profile for use within the VIeC system containing the information created in the next few steps.

 Note:

- Remember, the templates are only available using the Distill and Split into Pages job type option.
- Use a text editor or the Job Submission Client to create a profile. It is recommended that you start by creating the profiles using the Job Submission Client.

Follow these steps to create the first VIeC Profile.

1. If the Job Submission Client is not open, on the lower right task bar, right-click the **VIeC** icon. When the menu appears, select **Launch Job Submission Client**.
2. Select the following options for each of the Job Parameters:

### Data file

The data file is not considered part of the profile. A profile is optionally attached to the data file when processed.

### Init (Nub) File

Select **Browse**. In the `X:\Program Files (x86)\Xerox\VIIPP\xgfc\mislib` directory, select the **VTPworkshop.nub** file. The nub files that you create can be located anywhere on the network as long as the VIeC Server has access to the files.

### User Name

Leave the user name as the default.

### Output Folder

Scroll the options, then select something other than the default.

### Printer for VIIPP Job Output

To view a list of printers, select the menu. If no printers are available, leave the selection at `none`.

Otherwise, select a printer name. VIeC has no way to know if the printer that you select is a VIIPP®-enabled printer. Ensure that you select a VIIPP®-enabled printer, with access to all the required VIIPP® resources. If you select a printer that is not VIIPP®-enabled, the job aborts on the target printer.

### Output Filename Template

Select the menu, then select one of the options.

3. After you have completed setting up the job parameters for the profile, click **Save Profile**.

A dialog box appears that allows you to enter a file name. For the profile name, type `My_first_profile`, then select **Save**.

## Using an Existing Profile

When you use the Job Submission Client, you can load an existing profile, either to use when submitting a data file or to edit some key parameter.

Follow these steps to load a VIEC Profile:

1. Open the Job Submission Client, if not already open.
2. To access the Please choose Profile to load dialog box, click **Load Profile**.
3. Select **My\_first\_profile.pfl**. When the profile loads, it populates the Job Submission Client with the information contained in the profile.

## Editing an Existing Profile

Follow these steps to edit an existing VIEC Profile.

1. Load the profile My\_first\_profile.pfl.
2. Make a change in one or more of the available options.
3. To save the profile, select **Save Profile**. Use the same profile name to overwrite the existing profile, or enter a new profile name to create a new profile.

An alternative is to open the profile in a text editor, then make the required changes there.



# VIeC Job Submission

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These three methods for job submission to the VIeC Server are described in the workshop:

## **VIeC Job Submission Client**

A stand-alone VIeC Job Submission Client that can be installed on any PC with network access to the VIeC Server.

## **Watched Folder Client**

A Watched Folder is created on the VIeC Server PC. Data files can be deposited into the Watched Folder using methods such as FTP, or manual file transfer using the network. Parameters are set for the Watched Folder that control VIeC Profiles, time intervals that the Watched Folder is checked for data files, and the disposition of the data file after processing.

## **LPR**

The VIeC Server supports lpr file printing. The VIeC lpr client can be enabled during installation or loaded at a later time. Jobs submitted to a printer using lpr can be routed to the VIeC Server without changing the job submission workflow. The VIeC TCP/IP address must be assigned.

The VIeC Web client allows job submission to the VIeC Server. The VIeC Web client is not covered in this workshop. For more information, refer to the *FreeFlow VI eCompose User Guide*.

## VIeC Job Submission Client

You have already become familiar with the VIeC Job Submission Client. The client software can reside on any PC that is networked to the VIeC Server. The VIeC Job Submission Client can be used to submit a data file to the VIeC Server.

### OPEN THE JOB SUBMISSION WINDOW

Use one of these methods to open the Job Submission Client:

- Right-click the **VIeC** icon, if on a local server
- Select **Start > Programs > VI eCompose > VI eCompose Job Submission Client**

### SUBMIT A JOB

To submit a job for processing:

1. Select the data file or VI Project Container using the browse dialog box.
2. Set the job parameter options you wish to use, or load an existing profile.
3. Press the **Submit Job** button located at the bottom of the window.

### CLOSE THE JOB SUBMISSION WINDOW

Closing the Job Submission Client window does not affect the VIeC Server in any way. You can open and close the Job Submission Client as often as you need.

To close the Job Submission Client, in the top-right corner, select **X**, or choose **File > Exit** or **Alt-X**.



## VIeC Watched Folders Client

The Watched Folder Client allows you to specify one or more directories where you can place VIPP® jobs for automatic submission to the VIeC Server. Sometimes, this folder is known as a hot folder. If the network supports shared folders, you can access the VIeC Server Watched Folder on the remote desktop, using the network.

You can place a data file into the Watched Folder using FTP or other file transfer methods. When you configure the Watched Folder, you set a time interval and assign a VIeC Profile. At each time interval, the Watched Folder is searched for data files. If a data file is present, it is submitted to the VIeC Server, and deleted or stored in a saved job folder, depending on the file disposition parameters.

### CREATE AND ACTIVATE A WATCHED FOLDER

To create a Watched Folder, create a directory on the VIeC Server that is defined as the watched folder, and ensure that at least one user profile is available. If a profile you can use already exists, you can skip this step, otherwise create a dummy generic profile.

After the directory is created, use the VIeC Watched Folders Client to define the Watched Folder as a VIeC Server resource. Set the options, including the VIeC User name, VIeC Profile, time interval, and input file disposition. The final step is to activate the watch.

1. Create a folder called `VTP_Watched_Folder` on the `C:\` drive. Use the new folder option in the Windows operating system.
2. Use the VIeC Job Submission Client to create the new profile. To start the VIeC Job Submission Client, right-click the **VIeC** icon on the task bar, then select **VIeC Job Submission Client**.

When the Job Submission Client starts, all the job parameters are set to default. No nub files, printer names, and so on, are assigned. The Job Type is set to Distill Only. These parameters are suitable for our generic profile.

3. Select **Save Profile**. Enter the name **Generic** as the profile name, then select **Save**.
4. To close the VIeC Job Submission Client, select **X** or **Alt-X**.

### Configuring a VIeC Watched Folder

To configure a VIeC Watched Folder, start the VIeC Watched Folder Client as follows:

1. Right-click the **VIeC Server** icon on the task bar, then select **Launch Watched Folders Client**. Alternatively, from the Windows **Start** menu, select **Programs > Xerox > VI eCompose Watched Folders Client**.

The FreeFlow VI eCompose Watched Folders Client window opens. The window displays the existing Watched Folder configurations. The function buttons are arranged on the right side of the window. If you click **Add Folder**, the Watched Folders Client window expands, which contains the Watched folder details and its profile information. Function buttons that control the operation of the Watched Folder Client are arranged down the right side.

2. If any existing profiles appear in the top window, delete them. To delete profiles, highlight the Watched Folder in the top window, then select **Delete**. This action deletes the selected Watched Folder configuration. If no Watched Folder configurations are present, ignore this step.

3. To create a new Watched Folder configuration, select **Browse**. A Windows directory tree appears. Scroll through the desktop and select the **VTP\_Watched\_Folder** created in step 1 of **Create and Activate a Watched Folder**. To confirm the selection, click **OK**.

The path to the Watched Folder appears in the Watched Folder Details window, under the Watched Folder label.

Ensure that the VIeC User is set to your user name. Available users appear in the User menu.

4. From the Profile menu, select the `generic.pfl` profile file you created. The profile contents appear in the Profile Details window.
5. Select **Change Interval**. Set the time interval to 5. The time interval is set in seconds. To confirm the setting, select **OK**.



Tip: For this training example, 5 seconds is sufficient to quickly demonstrate how this feature works. In production, you can set this time interval anywhere from 5–10,000 seconds, depending on the frequency of file transmission.

6. Select **Add**. The defined folder moves into the watched area. When the Watched Folder process is activated, this folder can be watched for data files.

To avoid data files being resubmitted, to define a file disposition for submitted files, follow the next steps:



**Caution:** Failure to assign a file disposition results in the same file being submitted repeatedly.

7. In the top window, highlight the Watched Folder.
8. From the top menu bar, select **File**.
9. Select **Input File Disposition**.



Tip: After the VIeC Server processes the data files, two options are available for the disposition of the data files. You can either delete the files, or move them to a Saved Job Folder. The VIeC Server creates the Saved Job Folder in the Watched Folder directory. If you select **Move Input Files to Saved Job Folders**, be aware of space constraints and housekeeping requirements to ensure that you do not exceed the available disk space on the VIeC Server. Unpredictable results can occur if you exceed the available disk space.

10. Select **Move Input File to Saved Jobs Folder**.
11. Before you activate the Watched Folder process, save the changes. Click **Save Changes**, then answer **Yes** to the Save Changes prompt.
12. To start the Watched Folder process, select **Resume**. A Watched Folder status indicator message and the selected time interval appear at the bottom of the Watched Folder window.



Tip:

- A status of `Watching Folders` indicates that the system is active.
- A status of `Not Watching Folders` indicates that the system is paused.
- To change from one status to the other, select the **Resume** and **Pause** toggle button. The label of this toggle button appears as either `Resume` or `Pause`, depending on the current status of the Watched Folder process.

## Process a Job Using the Watched Folder

To process a VIPP® job using the Watched Folder, move a data file into the Watched Folder directory. You can move the file using many different methods, from drag and drop, to FTP.

Ensure that the Watched Folder process is active, then follow this process to demonstrate this capability:



Tip: Steps 1 and 2 are included for demonstration purposes only. In normal operation, none of the windows opened in these steps needs to be visible.

1. To open the **Job Submission Client** window, right-click the **VIeC** icon, then select **Launch Job Submission Client**. While the Watched Folder VIPP® job processes, activity is displayed in this window.
2. If it is not already open, open the folder `C:\VTP_Watched_Folder`,

Reduce the size of this window, then move it to the upper right of the screen. This window is the watched directory to which you copy the VIPP® Data file. As the file is processed, notice that the file is deleted from this directory and placed into a Saved Input File directory. If the Saved Input File directory does not already exist, the VIeC Server creates the directory automatically.

3. Move the Job Submission Client window to the top left of the screen.
4. Use Windows Explorer to locate then drag and drop the file `X:\Program Files (x86)\Xerox\VIIPP\Xgfc\mislib\vtpporkshop.vpc` to the `VTP_Watched_Folder` directory.

Wait for approximately 5 seconds. During this time, the Watched Folder time interval passes and the Watched Folders Client searches the `VTP_Watched_Folder` for data files. The Watched Folders Client finds the `vtpporkshop.vpc` file, and marks the file for processing by the VIeC Server. The `vtpporkshop.vpc` file is a VI project container that contains all resources and the data file to run the job.

The Watched Folders Client forwards the job to the VIeC Server, which processes the file based on the profile attached to the Watched Folder. In this case, the `generic.pfl` profile is attached to the Watched Folder.

During this process, these changes occur:

VI eCompose Local Server Window	A log entry is made for the start of the job. As the job is processed through to completion, other log entries are made.
VI eCompose Job Submission Client Window	The <code>vtpporkshop.vpc</code> job appears in the bottom window, and a status appears during the process of that job.
<code>VTP_Watched_Folder</code>	The submitted file disappears from this folder. A new directory called <code>SavedjobFiles</code> is created, if it does not already exist. The submitted file is moved to this directory. If the file disposition is set to delete, the file is not deleted and no backup copy is saved.

VI eCompose processes the file and generates a PDF file. In this case, because the file is a VI Project Container, the VIeC Server expands the project container, then processes the data file contained in the project container. If a data file, such as a VIPP® .dbf file, is pointed to, the VIPP® start commands contained in the data file, or in a nub file attached to the data file, specifies the directory location and the VIPP® start commands that VIeC uses to process the data file.

## DELETE A WATCHED FOLDER

The steps used to delete a Watched Folder from the system are listed here. However, do not perform this task as a part of this exercise as the folder you created here will be used in the hands-on exercises later in this document.

1. Open the Watched Folder Client.
2. Select the **Pause** button to pause the Watched Folder process.
3. Highlight the Watched Folder in the top window.
4. Select the **Delete** button.
5. Restart the Watched Folder process by selecting the **Resume** button for other Watched Folders that are present.

## VIeC LPR Option

The `lpr` command is probably one of the most common interfaces used to submit VIPP® applications to printers. Jobs are submitted from mainframe or client-server systems, using TCP/IP, a printer address, and a queue name. The VIeC Server looks just like any other VIPP®-enabled printer and can accept `lpr` jobs as input.

TCP/IP print server services must be started in the Windows operating system running on the VIeC Server. This action is normally a function of the network system administrator. Without this service started, `lpr` is unable to communicate with the VIeC Server. This service is not always loaded, so confirm that the TCP/IP print server is installed, started, and active. For more information, refer to the *FreeFlow VI eCompose User Guide*.

Ensure that the VIeC Server is not be active when installing the LPR option. The LPR Option must be configured on the VIeC Server.

- To configure the LPR Option during the initial installation, select **LPR Option**.
- To complete the configuration at a later time, from the Windows Start menu, select **Programs > VI eCompose > Install VI eCompose LPR Option**.

After the LPR Option has been installed, a target `lpr` printer can be defined on the VIeC Server. The steps to complete this are covered in the *FreeFlow VI eCompose User Guide*. Multiple printers can be defined.

The syntax of the `lpr` command and available or supported options changes, based on the type and system that you are using. If the system that you are using supports the `-T` or `-C` options, a profile name can be included in the `lpr` command syntax. If the options are not supported, VIeC uses a default `lpr_default.pfl` profile or system defaults if `lpr_default.pfl` is not present, when processing the `lpr` input. For more information on `lpr` job submission, refer to the *FreeFlow VI eCompose User Guide*.

The scope of this training does not permit an in-depth discussion of `lpr` and the supported syntax. For more information about the `lpr` command and the supported syntax, refer to the *FreeFlow VI eCompose User Guide* and the `readme_lpr.txt` file.

## VIeC Dispatch Option

The VIeC Dispatch option is a powerful rule-based Dispatch system. Its primary function is to watch output folders for PDF files and index records. VIeC Dispatch validates the index against a set of user defined rules. If a rule is valid (only one rule can be valid for any one job, else Dispatch will flag the job as ineligible or conflicted), the instructions in that rule are applied to each PDF file that is generated.

The instructions in the rule include the execution of a user defined process and the passing of parameter information to that process. This includes the path to the PDF file and any information that VIPP® stored in either the standard or extended VIPP® bookmark fields. The user defined process then interacts with whatever customer process or system is required.

Typical uses of this process includes passing:

- PDF file and field information, such as email address, subject field, body text to an email system
- PDF files to an archive system
- PDF files to the next step in the user defined process

This workshop shows a simple example of using the VIeC Dispatch module. Because VIeC Dispatch calls a user defined process, it is impossible to describe every use for the Dispatch module. One user may use it to email, another to archive, and another to pass the PDF files to another system or process, or another user may use it for all of the above.

The Dispatch module is a very powerful module and does require system integration knowledge to configure effectively. Xerox also offers a set of integration services around the setup and configuration of VIeC using the Dispatch module, including the creation of the user defined processes. Contact a local Xerox representative for additional information about how Xerox can integrate VIeC into the workflow.

# Hands-On Exercises

This chapter contains:

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Eleven exercises are included in this workshop. The first 10 exercises are designed to familiarize you with the operation of the VIeC Local Server, the job submission clients, and the Dispatch module. Exercise 11 is optional and is dependent on the site email and firewall configuration. All the exercises are summarized here:

- **Exercise 1: VIeC Job Submission Client overview:** Familiarizes you with the functions of the VIeC Job Submission Client.
- **Exercise 2: Job submission:** Demonstrates how to use the Job Submission Client to submit a VIPP® application to VIeC. In the first part of the exercise, you submit a VI Project Container. In the second part of the exercise, you submit a data file to VIeC. Both exercises create the same PDF file.
- **Exercise 3: Simple job submission:** Shows you how to change the job options to create 20 unique PDF files from the same data file. You learn how to view the VIeC Server window that displays VIeC system-generated messages.
- **Exercise 4: Using the Bulk Output folder:** Demonstrates how to select the Bulk Output Folder as the target output folder. You learn the difference between the Bulk Output Folder and other VIeC output folders.
- **Exercise 5: Using the Output Filename template:** Shows you how to use the Output Filename template to change the name of the PDF files being generated. You learn how to save the current Job Submission processing options to a VIeC Profile.
- **Exercise 6: VI Compose error condition:** Shows you what happens when a data file with a misspelled VIPP® resource is submitted. VI Compose aborts jobs with a VIPP®\_unable\_to\_locate message. This exercise shows what happens when a job aborts and where to locate the error messages.
- **Exercise 7: Watched Folder job submission:** Allows you to use the Watched Folder Client to set up a Watched Folder and use the folder to submit the data file. You learn how to assign a VIeC Profile to the Watched Folder that contains the job options you need to use to process the file. This exercise demonstrates an automated workflow.
- **Exercise 8: Output Filename and Index Template manipulation:** Shows you how the Job Submission Client can be used to create an Output Filename template and an Index Template that uses information contained in the Bookmark field.
- **Exercise 9: Init (Nub) files:** Demonstrates how to set up a VIeC DispatchRule. You learn how the DispatchRule is used to automate a process to copy the PDF files to another directory. This process is user-defined, and in a customer environment, could do a lot more than just copying a file to a new location.
- **Exercise 10: Using Dispatch:** Demonstrates how to configure VIeC Dispatch to move the PDF files created in this exercise to a new location automatically, which emulates moving the PDF files to the next step in a customer workflow.
- **Exercise 11: Email:** Shows you one way to automate the dispatch of VIeC files using email. This is an optional exercise. Depending on the current network and email server configuration, you may or may not be able to automate the dispatch of the PDF file to an email server. Some customer environments may not allow this

action, so ask your system administrators if this exercise is possible. If you cannot complete the exercise, it describes the approximate process used to configure the Dispatch module in the environment to automate this workflow. You are asked to edit a job submission data file and change the email address to your own email. For testing purposes, this test job contains only three records.

Xerox Corporation offers fee-based services to install, configure, and create a VIeC Workflow for customer environments. For more information, contact your Xerox representative.



Note:

- Before you begin the following exercises, load the VIPP® files supplied with this workshop to the locations described in the table on page 16 of this document. It is assumed that you have successfully installed and licensed VI eCompose.
- The VIPP® resources for this workshop are included with the VI eCompose download. Refer to [Program download](#). You can download this workshop guide. Refer to [Documentation download](#).



## What to Expect

In these exercises, you submit a VIPP® database application created using the VI Design Pro tool. This tool simplifies the VIPP® application design process for VIPP® application programmers, and requires VIPP® programming knowledge.

VTPWorkshop.vpc is a VIPP® database mode application that contains 20 delimited records. It prints 20 simplex pages, one page per record. The data file is a comma delimited data file called vtpworkshop.dbf. This application is a simple mail merge application. At the conclusion of this workshop, feel free to edit the files or create unique applications.

The first nine exercises take you through the basic settings, configuration, and use of VIeC. In the 10th exercise, you use what you have learned to create an end-to-end workflow. The exercise implements VIeC Dispatch to call a user process, in this case an XCOPY command, to move the PDF files to a new location. The process used in this exercise copies the created PDF files to another folder on the PC. In a real customer environment, you can use the user-defined process to do a lot more than only copy the files. You can use the process to start an email server, archive files, or start the Web presentment processes. There is no limit to what the user-defined process can do.

This workshop can be completed within a day.



Note: VI eCompose Workshop is designed to demonstrate the functionality of VIeC. It is not intended as an image quality application, but is used to provide a functional demonstration of VIeC and the VIeC Dispatch module. The images used are low resolution and not suitable for presentation. If required, to upgrade this application, supply unique image files and logos, or edit the application to fit individual demonstration purposes. However, make these changes only after completing the workshop.


## VI eCompose Workshop Code Descriptions

The purpose of this section is to familiarize you with certain sections of the VIPP® code that create the interactions necessary for VIeC to perform its job.

This workshop assumes you are familiar with the VIPP® scripting language and does not attempt to teach you VIPP® programming. It may be useful to have the *VIPP® Language Reference Manual* handy for review of individual commands.

VI eCompose Workshop will produce a single sided mail-merge application.

David Kirk  
98 National Street  
KingsLynn, CA 93829



### VI Mail Merge Demonstration

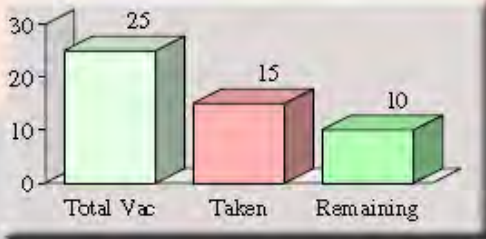
David,

The demonstration that you have just completed shows one use of the FreeFlow VI Suite Workflow. The FF VI Suite components FF VI Compose, FF VI Design Pro and the FF VI eCompose have been used to create, process and distribute this mail merge document to you.


So what is special about this document? It is personalized just for you. The data you entered in the form, including your name "David Kirk", your location code, WW and the e-mail and vacation details you provided, "David.kirk@zxwgz.com" were used to create this document directed at YOU.

The FF VI eCompose Dispatch module will use the e-mail address you entered to dispatch a PDF of this document, via a user defined e-mail process, to your mail box. The FreeFlow VI Suite workflow is supported across office, light production, production and full color Xerox printers.

This Data Driven Graphic was generated using the vacation data you entered. The image is generated on the fly at run time. There are several chart styles to select from.




Category	Value
Total Vac	25
Taken	15
Remaining	10



**FreeFlow**  
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David you are entitled to a \$20 refund on any Xerox FreeFlow VI Suite solution. Please contact your local Xerox representative.

This coupon is for demonstration purposes only and has no real value.



**FreeFlow**  
Digital Workflow Collection

David you are entitled to a 20% discount on any Optimized for FreeFlow Partner product. Please contact your local Xerox representative.

This coupon is for demonstration purposes only and has no real value.

## VTPWORKSHOP.DBF

The data file used in the demonstration is a 20-record comma delimited data file that begins with the lines of code shown here:

```
%!
[(projects) (VTPworkshop)] SETPROJECT
QSTRIP_on
(,) SETDBSEP
(vtpworkshop.dbm) STARTDBM
Fname,Lname,Emailfield,Combo1,num1,num2
david,kirk,david.kirk@zxwgz.com,ww,25,15
anne,brown,anne.brown@zxwgz.com,c1,25,15
...
```

The first five lines in the data file are VIPP® startup information described here. For additional information, refer to the *VIPP® Language Reference Manual*.

%!	Is generic PostScript start syntax
[(projects) (VTPworkshop)] SETPROJECT	Points to the location on the device that contains the VIPP® resources used in this application.
QSTRIP_on	Strips the first and last quotes from a field. The data entry program used in exercise nine puts quotes around the data fields it generates. This is not unusual.
(,) SETDBSEP	Sets the delimiter character to a comma.
(vtpworkshop.dbm) STARTDBM	Tells VI Compose to use the vtpworkshop.dbm file to process this data file. The vtpworkshop.dbm file is located in the path set by SETPPROJECT, in this case X:\Program Files (x86)\Xerox\VIIP\Xgfc\projects\VTPworkshop.



Tip:

- You can include the information in the first five lines in a nub file, then use a VIeC Profile to attach the information to the data file. This method enables you to submit the data file only to VIeC. This method is demonstrated later in the workshop.
- For better visibility, the line that begins the data portion of the data file is placed in bold text. This line contains the data file field names, followed by one or more data records that use the same syntax and field order.

In this example, the names of the six data fields used in this application are listed in line six. They are:

Fname	Contains the first name
Lname	Contains the last name
Emailfield	Contains the email address associated with this user
Combo1	Contains a location identifier



Dispatch module passed the PDF file to a mail server along with the subject field and the text you are reading. This demonstrates how a personalized document can be created from a simple data record and printed on a FreeFlow VI Compose enabled print device and/or sent to you via e-mail using the FreeFlow VI eCompose and the dispatch module included with this software.

All of this was triggered by you filling out the data entry form on the PC and hitting the submit button. Open the PDF file and see what happens when you click on the photograph. This is an interactive PDF feature embedded into the document by the FreeFlow VI Compose software.

\$\$VARFname., for additional information contact your Xerox Sales rep.

Thank you

The FreeFlow VI Digital Collection)

VSUB

% This is Inf01 and will be used as the E-mail subject field, field index F4

% Again this is a line of text laid out how you want it to be written

(\$\$VARFname., your personalized e-mail generated from the Teamwork demo.) VSUB

% Now we add the two text strings to the extended bookmark

% Note because of the way we laid these out, the big text block is the 2nd field.

(A\$\$ .A\$\$.) VSUB [ /EX 1 1 ] BOOKMARK

```
% =====
%                               Body of Mail Merge letter                               &
% =====

% Document heading
/NTMBI 32 SETFONT
1367 2817 MOVETO
(VI Mail Merge Demonstration) 2 SHP
```

```

% ~~~~~
%   Add small image and set some variables based on location   &
% ~~~~~

% Add interactive URI link to PDF file
% Used only when processed by VIEC
[ /URI (http://www.xerox.com/vipp) ] SETPIF

104 2921 MOVETO
CASE Combol {(Sunset72img1.jpg) 1 0 ICALL
  /VARCombol Combol SETVAR
  /VARCoupon (20) SETVAR
  }
  (C1) {(Center172img1.jpg) 1 0 ICALL
    /VARCombol Combol SETVAR
    /VARCoupon (10) SETVAR
    }
  (A&E) {(AE72img1.jpg) 1 0 ICALL
    /VARCombol Combol SETVAR
    /VARCoupon (35) SETVAR
    }
  (M1) {(m172img1.jpg) 1 0 ICALL
    /VARCombol Combol SETVAR
    /VARCoupon (25) SETVAR
    }
ENDCASE

% ~~~~~
%   Lay down main text in mail merge document                 &
% ~~~~~

541 2684 MOVETO
B
60 SETLSP
(/25$Fname./1, ) VSUB CASE1 0 SHP
NL
(The demonstration that you have just completed shows one use of the FreeFlow VI Suite
workflow.
The FreeFlow VI Suite components FreeFlow VI Compose, FreeFlow VI Design Pro and the FreeFlow
VI eCompose have been used to
create, process and distribute this mail merge document to you.) 1700 0 SHP
NL

```

(So what is special about this document? It is personalized just for you. The data you entered in the form, including your name "//25\$VARFname. \$\$VARLname.//1", your location code, //25\$Combo1.//1 and the e-mail and vacation details you provided, "//25\$VAREmail.//1" were used to create this document directed at YOU.//1) VSUB 1700 0 SHP

NL

(The FreeFlow VI eCompose Dispatch module will use the e-mail address you entered to dispatch a PDF of this document, via a user defined e-mail process, to your mail box. The FreeFlow VI Suite workflow is supported across office, light production, production and full color xerox printers.) 1700 0 SHP

533 1397 MOVETO

(This Data Driven Graphic was generated using the vacation data you entered. The image is generated

on the fly at run time. There are several chart styles to select from.) 429 3 SHP

```
% ~~~~~
% Data Driven Graphic &
% ~~~~~
% Calculate Vacation Days left assign to VARnum3
% num1 - num2 = VARnum3 (Days left)
/VARnum3 num1-'num2 SETVAR
```

1036 1477 MOVETO

(chartbg.jpg) 1 0 ICALL % background box which chart is printed on top of

1137 1016 MOVETO [(Total vac) num1 (Taken) num2 (Remaining) VARnum3]

1029 429

[/65 /BGColor null] DRAWBAR

```
% ~~~~~
% Case statement to lay down both address blocks based on location &
% ~~~~~
```

188 1858 MOVETO

68 SETLSP

```
CASE Combo1 {{(//298 National Street) 2 SHP
(KingsLynn,CA 93829) 2 SHP
} 1 90 SCALL % 90 degree rotation
1275 3213 MOVETO
(//25$VARFname. $$VARLname.) VSUB 2 SHP
(98 National Street) 2 SHP
(KingsLynn,CA 93829) 2 SHP
}
(C1) {{(//2101 Ranch Road) 2 SHP
(E1 Torro, CA 90235) 2 SHP
} 1 90 SCALL % 90 degree rotation
1275 3213 MOVETO
(//25$VARFname. $$VARLname.) VSUB 2 SHP
(101 Ranch Road) 2 SHP
(E1 Torro, CA 90235) 2 SHP
}
(A&E) {{(//2701 Washington Lane) 2 SHP
(E1 Castaic, CA 90845) 2 SHP
} 1 90 SCALL
1275 3213 MOVETO
(//25$VARFname. $$VARLname.) VSUB 2 SHP
(701 Washington Lane) 2 SHP
(E1 Castaic, CA 90845) 2 SHP
}
(M1) {{(//272 Long Lane) 2 SHP
(Flitcham, CA 90345) 2 SHP
} 1 90 SCALL
1275 3213 MOVETO
(//25$VARFname. $$VARLname.) VSUB 2 SHP
(72 Long Lane) 2 SHP
(Flitcham, CA 90345) 2 SHP
}
ENDCASE
```

```

% =====
% Coupon Code &
% =====

% Draw box outlines
491.667 950 MOVETO
95 775 1175 705 B3 DRAWB
96 770 1165 695 FWHITE DRAWB
1285 775 1175 705 B3 DRAWB
1290 770 1165 695 FWHITE DRAWB

% Place FreeFlow jpg image
154 730 MOVETO
(freeflow99.jpg) 1 0 ICALL
1350 730 MOVETO
(freeflow99.jpg) 1 0 ICALL

% Watermrk on coupon
246 117 MOVETO
/NTMR 40 SETFONT
XLBLUE SETTXC
{
(DEMO ONLY) SH
1040 -610 MOVETO
(DEMO ONLY) SH
} 1 30 SCALL

% Coupon Text
/NTMR 14 SETFONT
80 SETLSP
680 450 MOVETO
(//2[=VARFname=]//1 you are entitled to a //2$[=VARCoupon=]//1 refund
on any Xerox FreeFlow workflow solution. Please contact your local Xerox
representative.) VSUB 1000 2 SHP

1880 450 MOVETO
(//2[=VARFname=]//1 you are entitled to a//2 [=VARCoupon=]%/1 discount
on any Optimized for FreeFlow Partner product. Please contact your local Xerox
representative.)VSUB 1000 2 SHP

221 100 MOVETO
/NTMR 8 SETFONT
(This coupon is for demonstration purposes only and has no real value) SH
1413 100 MOVETO
(This coupon is for demonstration purposes only and has no real value) SH

PAGEBRK
%%EOF

```

### Basic Setup Information

The first eight lines of code in the DBM contain basic setup information created by the VI Design Pro tool.

```

%!
%%Title: vtpworkshop.dbm
%%Creator: VI Design Pro DataBase Mode
%%CreationDate: Mon Jun 14 2004, 13:44:07,
%%WIZVAR:BEGIN
%%WIZVAR FIELD1
%%WIZVAR:END
%%EndComments

```



## Font and Color Indexes

This section of the DBM shows some basic setup of font and color indexes. The section creates three variable fields that contain title case text values contained in Fname, Lname, and Emailfield. This ensures that the name fields look correct in the document.

```
% ~~~~~
%          SETUP          &
% ~~~~~
DOT3 SETUNIT
PORT
60 SETLSP
% Set font index values
/B /NTMR 14 INDEXFONT
/1 BLACK INDEXCOLOR
/2 BLUE INDEXCOLOR
% SETUP variables for bookmark, mainly to set them as title case
/VARFname Fname CASETI SETVAR
/VARLname Lname CASETI SETVAR
/VAREmail Emailfield CASETI SETVAR
```

## Form Selection

The section of the DBM that defines form selection is shown here. The CASE statement uses the Combol field. This field contains location information to set the background form. For example, if the field Combol contains the text C1, the Center172bg.jpg file is set as the background form. If the value in Combol does not match any of the values shown, the default value Sunset72bg.jpg is used as the background form.

```
% ~~~~~
%          Form Selection          &
% ~~~~~
% Select Form to use - based on Combol value
CASE Combol {(Sunset72bg.jpg) CACHE SETFORM }
  (C1)      {(Center172bg.jpg) CACHE SETFORM }
  (A&E)    {(AE72bg.jpg) CACHE SETFORM }
  (M1)     {(m172bg.jpg) CACHE SETFORM }
ENDCASE
```

## Defining a VIPP® BOOKMARK

The section of the DBM file, shows the definition of the standard VIPP® BOOKMARK. The VIPP® BOOKMARK (and extended bookmark) command is only activated when processed by VIeC. This command is ignored if the application is processed on a print device.

The command substitutes the current value in VARFname, VARLname and VAREmail into a string that is passed to the BOOKMARK command. The ^ character is inserted between the three fields. The ^ character will be used by the VIeC index template as a delimiter character. This will enable us to break the string into usable fields.

In the comment line (starting with the % character) above the BOOKMARK command the field number of each variable is indicated as it will be represented in the VIeC index file. This is just a comment and has no other value other than to help clarify the code to someone who may later need to troubleshoot the code. (Not that that ever happens!) The index fields will be explained in more detail later in the exercises.

```

% ~~~~~
%      SETUP of VIEC BOOKMARK & Extended BOOKMARK      &
% ~~~~~
% Standard BOOKMARK
% F0          F1          F2  Field values used in VIEC Index template
($$VARfname.^$$VARlname.^$$VAREmail.) VSUB BOOKMARK

```

### Defining an extended VIPP® BOOKMARK

The standard VIPP® BOOKMARK is limited to 256 characters. This is normally large enough to hold standard parameter information. Because the job specifies the e-mailing of the PDF files using the Dispatch module, it is required that additional information be passed to the user defined process. The additional information includes the body text used in the email note and the email subject information, which exceeds 256 characters. When the 256 character limitation is exceeded the information must be placed in an extended bookmark.

Again, there is a comment (indicated by the % character) to make it clear that this text will appear as index field 5 in the bookmark and its assigned name will be info2.

#### Email text, first string

After the comment, the body of the email text, as it is to appear in the email note, is entered. No commands have been added to the end of this text. This is just a trick to add two string fields to the stack (this being the first of the two). The extended bookmark will be created using these two strings from the stack.



Tip: No commands have been added to the end of this text. This is just a trick to add two string fields to the stack (this being the first of the two). The extended bookmark will be created using these two strings from the stack.

```

% Extended BOOKMARK field index F3 in VTP Index Template
% This will be Info2 text and will be used in the body of the e-mail message
% The text is built up as it should be shown in the e-mail text body. For now
% I am just placing this on the stack. I will assign it to the Bookmark later.
($$VARfname.,
thank you for taking part in the FreeFlow VI Suite Demonstration.

You completed the FreeFlow VI Suite demonstration data entry form, providing name, e-mail,
location codes and some information about your vacation details. These were used to create a
delimited data file. The FreeFlow VI Compose and the VIPP command language was used to
process the file and create the variable data mail merge document.

Behind the scenes the FreeFlow VI eCompose passed your data record to the FreeFlow VI Compose
enabled print device for the hard copy output you received. It also processed the data record
and produced a personalized PDF file for you. The FreeFlow VI eCompose Dispatch module passed
the PDF file to a mail server along with the subject field and the text you are reading. This
demonstrates how a personalized document can be created from a simple data record and printed
on a FreeFlow VI Compose enabled print device and/or sent to you via e-mail using the FreeFlow
VI eCompose and the dispatch module included with this software.

All of this was triggered by you filling out the data entry form on the PC and hitting the
submit button.
Open the PDF file and see what happens when you click on the photograph. This is an
interactive PDF feature embedded into the document by the FreeFlow VI Compose software.

$$VARfname., for additional information contact your Xerox Sales rep.

Thank you

The FreeFlow VI Digital Collection
) VSUB

```

#### Email text, second string

The second string to add to the stack also requires the VSUB command because of the variable it contains. This

string will be used for the email subject line. The comments indicate that this will appear as index field 4 in the VIEC index file that will be generated when running this application to VIEC using the **Distill and Split into Pages** option.

```
% This is Infol and will be used as the Email subject field, field index F4 ($
$VARFname., your personalized email generated from the VI eCompose Workshop demo.)
VSUB
```

### Completing the extended BOOKMARK

To complete this example the BOOKMARK command uses the Extended Bookmark syntax. Review the BOOKMARK command in the *VIPP® Language Reference Manual* for information and a description of the available options.

The important capability used here is the ability to merge the extended bookmark with the associated regular bookmark for index file processing by VIEC.

Note the ^ character added to the strings. As with the regular bookmark, the ^ character is introduced into the string to use as a delimiter to separate the fields in the bookmark.



Tip: The \$\$\$. \$\$\$. is pulling the two strings placed previously on the stack, then passing the complete string, with separator characters to the BOOKMARK command. Note it will pull the subject field string first before it pulls the body text. This is because the subject string was placed on the stack last.

BOOKMARK set up in the Data Base Master file is completed with these lines of code:

```
% Now we add the two text strings to the extended bookmark
% Note because of the way we laid t hese out, the big text block is the 2nd field.
(A$$$.A$$$.) VSUB [ /EX 1 1 ] BOOKMARK
```

### Mail Merge Information

The next section of code in the DBM positions and prints the string VI Mail Merge Demonstration using a bold Times Roman font. The code positions the string at the location indicated by the MOVETO command, using SHP and the center justify option.

```
% ~~~~~
%          Body of Mail Merge letter
% ~~~~~
% Document heading
/NTMBI 32 SETFONT
1367 2817 MOVETO
(VI Mail Merge Demonstration) 2 SHP
```

### PDF Interactive Link Information

This section of code in the DBM sets up a PDF Interactive link, which is set using the SETPIF command. The action specified in the SETPIF command will attach itself to the next marking command, be that a text string or an image. The action, a call to a URL link, is attached to a variable image (based on the value in the Combo1 field, placed with the ICALL command.

In addition, other variables are defined that will be used later. VARCombol will be used to print the location, VARCoupon will be used to print a discount amount or percentage on the two coupons printed at the bottom of the application.

```

% ~~~~~
% Add small image and set some variables based on location &
% ~~~~~
% Add interactive URI link to PDF file used only when processed by VIEC
[ /URI (http://www.xerox.com/vipp) ] SETPIF

104 2921 MOVETO
CASE Combo1 {(Sunset72img1.jpg) 1 0 ICALL
  /VARCombo1 Combo1 SETVAR
  /VARCoupon (20) SETVAR
  }
  (C1) {(Center172img1.jpg) 1 0 ICALL
    /VARCombo1 Combo1 SETVAR
    /VARCoupon (10) SETVAR
    }
  (A&E) {(AE72img1.jpg) 1 0 ICALL
    /VARCombo1 Combo1 SETVAR
    /VARCoupon (35) SETV
    }
  (M1) {(m172img1.jpg) 1 0 ICALL
    /VARCombo1 Combo1 SETVAR
    /VARCoupon (25) SETVAR
    }
}

ENDCASE

```

### Layout of the Remainder of the Document

The section of the code reproduced below uses standard database VIPP® syntax to lay out the remainder of the one page application. It is not described, as the key points have already been discussed. However, after you have completed this workshop, review the code here and compare it to the printed output. The *VIPP® Language Reference Manual* can be used to identify what each command used in the application does.

```

% ~~~~~
% lay down main text in mail merge document      &
% ~~~~~

541 2684 MOVETO
B
60 SETLSP
(//2$$Fname.//1, ) VSUB CASETI 0 SHP
NL
(The demonstration that you have just completed shows one use of the FreeFlow VI workflow.
The VI workflow components VI Interpreter, VI Designer and VI eCompose have been used to
create, process and distribute this mail merge document to you.) 1700 0 SHP
NL
(So what is special about this document? It is personalized just for you. The data you entered
in the form, including your name "//2$$VARFname. $$VARLname.//1", your location code, //
2$$Combol.//1 and the email and vacation details you provided, "//2$$VAREmail.//1" were used
to create this document directed at YOU. //1) VSUB 1700 0 SHP
NL
(The ViEC Dispatch module will use the email address you entered to dispatch a PDF of this
document, via a user defined email process, to your mail box. The VI FreeFlow workflow is
supported across office, light production, production and full color Xerox printers.) 1700 0
SHP

533 1397 MOVETO
(This Data Driven Graphic was generated using the vacation data you entered. The image is
generated on the fly at run time. There are several chart styles to select from.) 429 3 SHP %
% ~~~~~
% lay down main text in mail merge document      &
% ~~~~~

541 2684 MOVETO
B
60 SETLSP
(//2$$Fname.//1, ) VSUB CASETI 0 SHP
NL
(The demonstration that you have just completed shows one use of the FreeFlow VI Suite
Workflow.
The VI workflow components FreeFlow VI Compose, FreeFlow VI Design Pro and the FreeFlow VI
eCompose have been used to create, process and distribute this mail merge document to you.)
1700 0 SHP
NL
(So what is special about this document? It is personalized just for you. The data you
entered in the form, including your name "//2$$VARFname. $$VARLname.//1", your location code,
//2$$Combol.//1 and the e-mail and vacation details you provided, "//2$$VAREmail.//1" were
used to create this document directed at YOU.//1) VSUB 1700 0 SHP
NL
(The FreeFlow VI eCompose Dispatch module will use the e-mail address you entered to dispatch
a PDF of this document, via a user defined e-mail process, to your mail box. The FreeFlow VI
Suite workflow is supported across office, light production, production and full color Xerox
printers.) 1700 0 SHP

533 1397 MOVETO
(This Data Driven Graphic was generated using the vacation data you entered. The image is
generated on the fly at run time. There are several chart styles to select from.) 429 3 SHP

```

## Data Driven Graphics

The part of the DBM shown below is the VIPP® code that generates the data driven business graphics. The database field num2 contains the number of vacation days allocated, num2 the number of days taken. VARnum3 is a variable created to contain the number of vacation days remaining. Num1, num2 and VARnum3 are used in the DRAWBAR command to draw the variable bar chart on the page.

```

% =====
% Data Driven Graphic &
% =====
% Calculate Vacation Days left assign to VARnum3
% num1 - num2 = VARnum3 (Days left)
/VARnum3 num1-'num2 SETVAR
1036 1477 MOVETO
(chartbg.jpg) 1 0 ICALL % background box which chart is printed ontop of
1137 1016 MOVETO [(Total Vac) num1 (Taken) num2 (Remaining) VARnum3]
1029 429
[/65 /BGColor null] DRAWBAR

% =====
% Case statement to lay down both address blocks based on location &
% =====

188 1858 MOVETO
68 SETLSP

CASE Combo1 {{{(//298 National Street) 2 SHP
(KingsLynn,CA 93829) 2 SHP
} 1 90 SCALL % 90 degree rotation
1275 3213 MOVETO
(//2$$VARFname. $$VARLname.) VSUB 2 SHP
(98 National Street) 2 SHP
(KingsLynn,CA 93829) 2 SHP
}
(CL) {{{(//2101 Ranch Road) 2 SHP
(El Torro, CA 90235) 2 SHP
} 1 90 SCALL % 90 degree rotation
1275 3213 MOVETO
(//2$$VARFname. $$VARLname.) VSUB 2 SHP
(101 Ranch Road) 2 SHP
(El Torro, CA 90235) 2 SHP
}
(A&E) {{{(//2701 Washington Lane) 2 SHP
(El Castaic, CA 90845) 2 SHP
} 1 90 SCALL
1275 3213 MOVETO
(//2$$VARFname. $$VARLname.) VSUB 2 SHP
(701 Washington Lane) 2 SHP
(El Castaic, CA 90845) 2 SHP
}
(M1) {{{(//272 Long Lane) 2 SHP
(Flitcham, CA 90345) 2 SHP
} 1 90 SCALL
1275 3213 MOVETO
(//2$$VARFname. $$VARLname.) VSUB 2 SHP
(72 Long Lane) 2 SHP
(Flitcham, CA 90345) 2 SHP
}
ENDCASE

```

```

% ~~~~~
% Coupon Code &
% ~~~~~

% Draw box outlines
491.667 950 MOVETO
95 775 1175 705 B3 DRAWB
96 770 1165 695 FWHITE DRAWB
1285 775 1175 705 B3 DRAWB
1290 770 1165 695 FWHITE DRAWB

% Place FreeFlow jpg image
154 730 MOVETO
(freeflow99.jpg) 1 0 ICALL
1350 730 MOVETO
(freeflow99.jpg) 1 0 ICALL

% Watermark on coupon
246 117 MOVETO
/NTMR 40 SETFONT
XLBLUE SETTXC
{
(DEMO ONLY) SH
1040 -610 MOVETO
(DEMO ONLY) SH
} 1 30 SCALL

% Coupon Text
/NTMR 14 SETFONT
80 SETLSP
680 450 MOVETO
(//2[=VARFname=]//1 you are entitled to a //2$[=VARCoupon=]//1 refund
on any Xerox FreeFlow workflow solution. Please contact your local Xerox
representative.) VSUB 1000 2 SHP

1880 450 MOVETO
(//2[=VARFname=]//1 you are entitled to a//2 [=VARCoupon=]%/1 discount
on any Optimized for FreeFlow Partner product. Please contact your local Xerox
representative.) VSUB 1000 2 SHP

221 100 MOVETO
/NTMR 8 SETFONT
(This coupon is for demonstration purposes only and has no real value) SH
1413 100 MOVETO
(This coupon is for demonstration purposes only and has no real value) SH

PAGEBRK

```

## END OF EXERCISE

Now that you have reviewed the VIPP® code found in the workshop files, begin Exercise 1.





# Exercise 1: VIeC Job Submission Client Overview

This chapter contains:

Job Creation Area .....	75
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Function Buttons.....	79

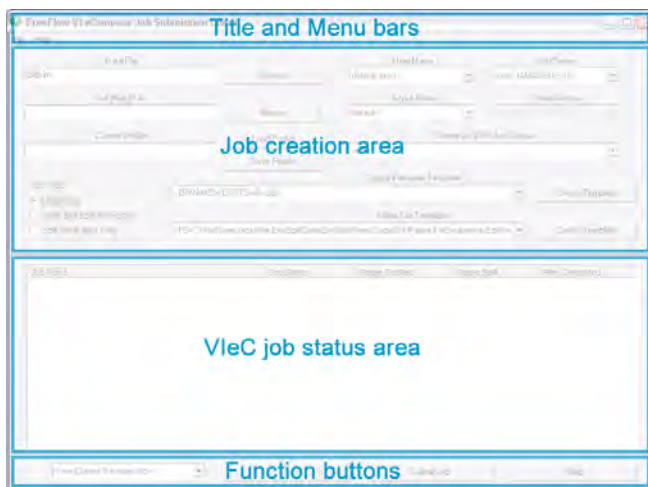
This exercise provides an overview of the functionality of the VIeC Job Submission Client.

To open or launch the VIeC Job Submission Client, in the lower-right task bar, right-click the **VIeC** icon. When the menu appears, select **Launch Job Submission Client**.

The VIeC Job Submission Client is a manual job submission client for the VIeC Server. The VIeC Job Submission Client submits to VIeC a VIPP® data file with options for processing the data file.

The two areas that are discussed in detail during the VI eCompose Workshop exercises are the Job creation area and VIeC job status area. Refer to the illustration in this topic.

In the Job creation area at the top of the screen, you can select the data file and the options to process the data file. The VIeC job status area in the lower half of the screen displays status information about each job and updates as each job progresses.



The primary function of the VI eCompose Job Submission Client is to submit VIPP® data files for processing by the VIeC Server. In most customer environments, the submission of data files to VIeC is handled by the VIeC lpr client or the VIeC Watched Folder Client. Both clients can enable an automated job submission workflow. The Job Submission Client is typically only used in the following scenarios:

- During development to test the feature functions of VIeC
- In VIeC application development
- In circumstances where users want manual control over job submissions

The Job Submission client provides another important function: the Job submission client can create VIeC Profiles. A VIeC Profile contains the list of processing options used to process the data file that is submitted to the VIeC Server.

## Exercise 1: VIEC Job Submission Client Overview

When you select the VIEC Job Submission client window, then select Save Profile, a VIEC Profile is created. The saved profile is assigned a user-defined name and contains the current settings displayed in the VIEC Job Submission Client window. The data file path is not saved in a VIEC Profile. A job submission client uses a VIEC Profile to assign processing options automatically to the file being processed.



Tip: In Exercises 5 and 8 you create and use a VIEC Profile. For more information, refer to [Job parameters and profiles](#), found at the beginning of this document.

## Job Creation Area

### DATA FILE

This option allows you to browse through the file system to select the VIPP® data file that will be submitted to the VIeC Server. VIeC can process:

- Raw data files (without any VIPP® start commands, which can be added using the nub file option)
- VIPP® files containing the VIPP® start commands and the data to be processed
- VIeC container files, compressed VIPP® files containing all the required resources to run a job

The data file and path information selected in this field is not saved in any profile file when the **Save Profile** option is selected.

### INIT (NUB) FILE

This option allows you to browse and select a previously defined file that contains the VIPP® start commands necessary to process the data file selected in the Data File option described above. This option will pre-append the start commands to the data file before submitting the file to the VIeC processor. This option is only used if the data file does not contain VIPP® start commands.

### CURRENT PROFILE

This is optional and will allow you to select a previously saved profile or create a new profile based on the options currently selected in the Job Submission Client window. The Load Profile button will load the currently selected profile and populate the Job Submission Client with the options in the profile. The Save Profile option will save the currently displayed options. You will be asked to assign a name when saving a profile. This field can be left blank. When left blank, the currently displayed options shown in the Job Submission Client window will be used to process the selected data file.

### JOB TYPE

VIeC can process a file in three ways. Two of which will be described here, and elsewhere in this workshop.

Distill Only	This will process the currently selected data file and create a single PDF file containing all the data records in the data file. When this option is selected, the Output Filename Template and the Index File Template options are ignored.
Distill and Split into Pages	This option provides a powerful mechanism that can be used to drive user defined processes upstream of VIEC in the customer's workflow. This option enables the data file to be split into individual PDF document sets, based on the VIPP® BOOKMARK, coded in the VIPP™ template file (.dbm, .jdt, or .xjt). This creates a PDF file at the logical job boundary. Each PDF document can be variable in length. Which is totally dependant on the VIPP® data being processed and the VIPP® code being used to process the application. When this option is selected the Output Filename Template and Index File Template options ARE used. The default templates are displayed. These can be modified and you will do this later in this workshop.
Split into Pages	For information on this option, refer to the <i>FreeFlow VI eCompose User Guide</i> .

### USER NAME

This option allows you to specify the User Name that will be used on the VIEC Server to process the job. This is typically the logged on user.

### JOB SERVER

Job Server allows you to select the target VIEC Server. Refer to the *FreeFlow VI eCompose User Guide*, cluster and server configuration sections.

### OUTPUT FOLDER

This is where you select the destination folder for VIEC output. This can include VIEC generated folders, PDF files and VIEC job status files. Default folders are created during install, including a special bulk folder, which will be discussed later. The administrator can also add additional folders as required.

### PRINTER ACTION

This option is only available if the Printer for VIPP® Job Output option is selected. Choose to send the data file to the printer identified in the option below:

- Only if VIEC reports a successful completion of the job
- Without regard to the reported VIEC status

## PRINTER FOR VIPP® JOB OUTPUT

This setting provides a print path to a networked printer that needs to be available to the VIeC Server. Ensure that the printer is VIPP®-enabled and has access to all the VIPP® resources needed to print the data file. Next, depending on the printer action selected, VIeC passes the DATA file, and not the created PDF files, to the target print device. This action enables you to send a data file to VIeC to create PDF output, and to a print device to print high quality output. Printing to a device includes any finishing that is available on the print device.

## OUTPUT FILENAME TEMPLATE

This option (only available when the Job Type is set to **Distill and Split into Pages** or **Split into Pages Only**) defines how the individual PDF files generated by the split option (and the VIPP® BOOKMARK command in the template files) will be named. If you are going to create 10,000 PDF files you probably want some control over the naming conventions used. The Output Filename Template has several built in templates you can select from or you can define your own template. You will use the Output Filename Template later in this workshop.

## INDEX FILE TEMPLATE

This option (only available when the Job Type is set to **Distill and Split into Pages** or **Split into Pages Only**) defines what information will be included in the index files (comma delimited and XML) that are generated by VIeC. This is the header information and bookmark extraction information that will be provided in the index files that can be used by the VIeC Dispatch module and other third party processes to identify and locate a particular PDF file and to pass information from the record that generated that PDF file. For example, if the VIPP® BOOKMARK command included name and email address information for that record, then the path to that PDF file and the name and email address information could be passed to some upstream system such as an email server to email the PDF file to that user. You will use the Index File Template later in this workshop.

## VIEC Job Status Area

The window at the bottom of the screen will display processing information about the jobs submitted by the current user, including current status, pages distilled, pages split, and files created (if options are selected).

## Function Buttons

The buttons at the bottom of the screen provide control over what jobs are displayed in the window. There is also a button to submit the data file selected in the Data File option, using the processing options currently shown in the client window. When you click on the submit button the job will start to process and will be displayed in the status window.

### END OF EXERCISE

This completes the overview of the Job Submission Client window. Now you will start to use these options to process VIPP® jobs.

Exercise 1: VIEC Job Submission Client Overview



# Exercise 2: Job Submission

This chapter contains:

VPC Job Submission ..... 82  
Data File Job Submission..... 84

Exercise 2 is divided into two parts:

- VPC Job Submission
- Data File Job Submission

Both exercises use the Job Type option to create a single PDF file. The PDF file is created in the default user directory, and contains images for all 20 records in the data file. You can scroll backward and forward to review each PDF image in the file. The difference between the exercises is how the job is submitted to the VIeC Server, using a VI Project Container file, or the vtpworkshop.dbf data file.

## VPC Job Submission

In this exercise, you process the vtpworkshop.vpc VI Project Container file. This exercise uses the Distill Only job type option to create a single PDF file. The PDF file is created in the default user directory. The single PDF file contains images for all 20 records. You can scroll backwards and forwards to review each PDF image in the file.

To complete this exercise, follow these steps:

1. To launch the VIeC Job Submission Client, right-click the **VIeC** icon in the lower-right task bar. When the pop-up menu appears, select **Launch Job Submission Client**.
2. To locate the data file, select **Browse** next to the Data File window. Scroll to the `X:\Program Files (x86)\Xerox\VIIP\mgfc\mislib` directory, then locate the vtpworkshop.vpc file. To select the file, select **Open**.



Tip: If you have problems locating the file, you can change the Files of Type setting to \*.\*.

3. Leave all other job settings unchanged. The default values are listed here. If the values shown on your Job Submission Client are different than those described here, change the values to these settings:

Init (Nub) File	Empty
Current Profile	Empty
User Name	Set to the user name you defined during installation
Output Folder	Set to a folder called Default. This is the default setting.
Job Server	Set to local
Printers for VIPP Job Output	Set to none
Output Filename Template	Set to default. The default is the filename plus 6–digit counter.
Index File Template	Set to default value
Job Type	Set to Distill Only. This setting creates a single PDF file from the data.

4. To submit the data file, select **Submit Job** located at the bottom of the window.

The job appears in the status window. The job is named as follows:

User_name	The logged on user shown in the User Name window.
Job_Name	The data filename
Date & time stamp	The date and time the job was submitted.

After a few seconds, the information shown in the status window will indicate that the job completed. The status information indicates that 20 pages were distilled, 0 pages were split, and 0 files were generated. The pages split and files generated counters are active only when the Distill and Split into Pages job type is used. If the **Distill Only** job type is used, the counters remain at zero.

- Next, locate the shortcut to the default folder on your desktop. This is the folder that contains the subfolder containing the PDF file.

Alternatively, you can use your browser to scroll to the folder. On an XP system with VIeC installed using the default settings, the folder is located at `X:\Program Files (x86)\Xerox\VIIP\XVTP\users\user_name\incoming\default`, where `X` is the partition where the VI eCompose software is installed.

In the default folder, there is a directory with the name based on the following:

user_name	This is the current user
job_name	This is the filename submitted
date/time stamp	This is the time and date the job was processed by the VIeC Server

- Open the folder to display the PDF file. The PDF file in this case is named `VTPworkshop.pdf`. The data file in the VI Project Container file was named `vtworkshop.dbf`. VIeC defaulted to the name of the data file and the `.pdf` extension. There is another folder named `status` and a `VTPworkshop.cfg` file. `VTPworkshop.cfg` contains a list of the job options used to create the PDF file.



Tip: The status folder contains information about the job processing. If your job aborts, the VI Compose error message is located in this folder.

- Open the `VTPworkshop.pdf` file and view the PDF file. Scroll through the records.
- As you scroll through the records, note that the PDF name does not reflect the Output Filename Template setting of `<DFNAME><DIGITS=6>.pdf`.



Tip: When a data file is sent to the VIeC Server using the Distill Only job option, which generates a single PDF file only, the VIeC Server uses the submitted data filename `VTPworkshop` to name the PDF file. The Filename and Index templates are not used in this mode.

- Close the PDF file and exit the default folder. Select the **Job Submission Client** window to make this the active window.

## Data File Job Submission

In the first part of this exercise you sent a VI Project Container file to the VIeC Server. The project file was expanded, then the data file was processed. Expanding the resources adds extra overhead. What if the project folder was installed in the VIPP® resource directory already?

In exercise 2-B you will submit only the vtpworkshop.dbf file, which is the data file, to the VIeC Server. The job locates the VIPP® resources in the directory location specified in the SETPROJECT command in the data file.

Only the data file and not all other job resources is sent, because all other resources already exist on the server. For this reason, the file can process faster, because it does not need to expand the VI project container file first.

1. First, look at the data file to see what you are about to submit to VIeC. Open the file, X:\Program Files (x86)\Xerox\VIPP\xgfc\mislib\vtpworkshop.dbf with a text editor such as Notepad, where X is the partition where the VI eCompose software is installed.

You will see an ASCII file that contains comma delimited data fields. The file contains 20 records and contains the VIPP® start commands shown here:

```
%!  
[ (projects) (VTPworkshop) ] SETPROJECT  
QSTRIP_on  
(, ) SETDBSEP  
(vtpworkshop.dbm) STARTDBM  
Fname, Lname, Emailfield, Combo1, num1, num2  
Data Records ..
```

When you have reviewed the data file, close it without changing anything.

2. To launch the VIeC Job Submission Client, right-click the **VIeC** icon in the lower-right task bar. If the client is not already open, when the pop-up menu appears, select **Launch Job Submission Client**.
3. To locate the data file, select **Browse** next to the Data File window.

The data file needed for this exercise is located in X:\Program Files (x86)\Xerox\VIPP\xgfc\mislib, where X is the partition where the VI eCompose software is installed. The name of the data file is vtpworkshop.dbf, which is the file you just reviewed. Highlight the file, then select **Open**.

4. Leave all other job settings unchanged. To submit the data file, select **Submit Job**.

The information shown in the status window indicates that the job completed. The status information shows that 20 pages were distilled, 0 pages were split, and 0 files were generated.

- Next, locate the shortcut to the default folder on your desktop. This is the folder that contains the subfolder containing the PDF file.

Alternatively, you can use your browser to scroll to the folder. On an XP system with VIeC installed using the default settings, the folder is located at `X:\Program Files (x86)\Xerox\VIPP\xvtp\users\user_name\incoming\default`, where *X* is the partition where the VI eCompose software is installed.

In the default directory, you now see two folders. The two folders look the same, but one has a time stamp that shows a later time. The folder with the later time stamp is the folder you just created with the submission of this data file.



Tip: Why is the creation of a time-stamped folder important?

- If VIeC did not add the date and time stamp as part of the file name, there would be no way to tell the jobs apart. The system would overwrite the folder, or stop and wait for an operator to acknowledge a prompt to overwrite the file. To avoid this result, VIeC adds a date and time stamp as part of the folder name.
  - This feature makes it possible to submit numerous files using the same data file name, without the risk of overwriting folders or mixing PDF output. For example, a Web-based interface can be configured to submit a data file called `mydata.dbf`. Because VI eCompose creates a date and time-stamped folder name, each job submission can be clearly identified.
- Open the most recent folder to display and open `VTPworkshop.pdf`. As you scroll through the records, notice that the PDF is the same as the PDF generated in Exercise 2-A. The difference is that this file was created by the submission of the data file only.
  - Close the PDF file and exit the folder. Select the **Job Submission Client** window to make it active.

#### END OF EXERCISE

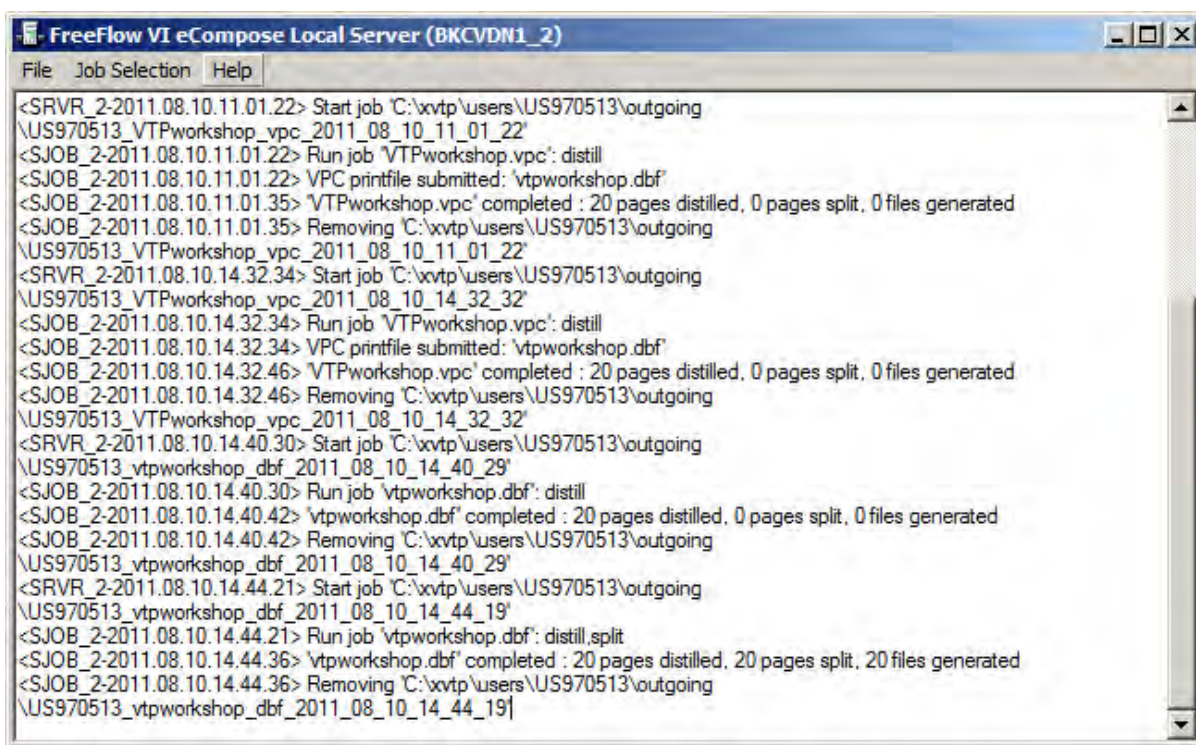
Exercises 2-A and 2-B are complete. In the next exercise you use the Distill and Split into Pages job type.

## Exercise 2: Job Submission

## Exercise 3: Simple Job Submission

In Exercise 3, you use the Distill and Split into Pages Job Type option. You can see how using the options changes the way VIEC produces the PDF files that are output. For VIEC to distill and split into pages, a valid VIPP® BOOKMARK is required in the VIPP® template file. In this case, select the .dbm file and the **Distill and Split into Pages** Job Type option. To complete this exercise, follow the steps in this exercise.

1. If not already the active window, launch the **VIEC Job Submission Client**.
2. To locate the data file: X:\Program Files (x86)\Xerox\VI PP\xgfc\mislib\vtppworkshop.dbf, where X is the partition where the VI eCompose software is installed. Select the **Browse** button next to the Data File window.
3. In the Job Submission Client, change the Job Type setting from Distill Only to **Distill and Split into Pages**. Leave all other job settings unchanged.
4. View the VIEC Log file. Viewing the log file is an optional step that would not be done in a production environment unless there were troubleshooting issues to resolve. To view the log file, in the task bar, double-click the **VIEC** icon. The VIEC Server Window opens. This window displays the VIEC Log file that contains messages generated by the VIEC operation. You can save the log file as a regular file and print the file as required. The options to save or clear the log file are located under the File menu.



```
<SRVR_2-2011.08.10.11.01.22> Start job 'C:\xvtp\users\US970513\outgoing
\US970513_VTPworkshop_vpc_2011_08_10_11_01_22'
<SJOB_2-2011.08.10.11.01.22> Run job 'VTPworkshop.vpc': distill
<SJOB_2-2011.08.10.11.01.22> VPC printfile submitted: 'vtpworkshop.dbf'
<SJOB_2-2011.08.10.11.01.35> 'VTPworkshop.vpc' completed : 20 pages distilled, 0 pages split, 0 files generated
<SJOB_2-2011.08.10.11.01.35> Removing 'C:\xvtp\users\US970513\outgoing
\US970513_VTPworkshop_vpc_2011_08_10_11_01_22'
<SRVR_2-2011.08.10.14.32.34> Start job 'C:\xvtp\users\US970513\outgoing
\US970513_VTPworkshop_vpc_2011_08_10_14_32_32'
<SJOB_2-2011.08.10.14.32.34> Run job 'VTPworkshop.vpc': distill
<SJOB_2-2011.08.10.14.32.46> 'VTPworkshop.vpc' completed : 20 pages distilled, 0 pages split, 0 files generated
<SJOB_2-2011.08.10.14.32.46> Removing 'C:\xvtp\users\US970513\outgoing
\US970513_VTPworkshop_vpc_2011_08_10_14_32_32'
<SRVR_2-2011.08.10.14.40.30> Start job 'C:\xvtp\users\US970513\outgoing
\US970513_vtpworkshop_dbf_2011_08_10_14_40_29'
<SJOB_2-2011.08.10.14.40.30> Run job 'vtpworkshop.dbf': distill
<SJOB_2-2011.08.10.14.40.42> 'vtpworkshop.dbf' completed : 20 pages distilled, 0 pages split, 0 files generated
<SJOB_2-2011.08.10.14.40.42> Removing 'C:\xvtp\users\US970513\outgoing
\US970513_vtpworkshop_dbf_2011_08_10_14_40_29'
<SRVR_2-2011.08.10.14.44.21> Start job 'C:\xvtp\users\US970513\outgoing
\US970513_vtpworkshop_dbf_2011_08_10_14_44_19'
<SJOB_2-2011.08.10.14.44.21> Run job 'vtpworkshop.dbf': distill,split
<SJOB_2-2011.08.10.14.44.36> 'vtpworkshop.dbf' completed : 20 pages distilled, 20 pages split, 20 files generated
<SJOB_2-2011.08.10.14.44.36> Removing 'C:\xvtp\users\US970513\outgoing
\US970513_vtpworkshop_dbf_2011_08_10_14_44_19'
```

Move this window to one side so that you can view the window when you run a job. As you submit the job, check this screen to view the log messages that appear.

5. To make the VIeC Job Submission window the active window, click **VIeC Job Submission**. To submit the data file, select the **Submit Job** button.

The job appears in the status window. The job name is created from the User\_name, job\_name, and a date and time stamp. The filename is the name of a folder created in the default directory that contains the PDF file. When the job has finished processing, the status changes to complete. Note the status window displays the amount of pages distilled. Because the Distill and Split into Pages option was used, notice that a value of 20 is assigned to the Pages Split and 20 to the files generated. The values show that the data file processed was split into 20 pages and into 20 separate files. Remember, in this application each record generates one page. If the application created variable page PDF files, the number of pages in the split column would be higher than the number of files created.

6. After the job has completed, you can review the directory that contains the PDF files. On your desktop, locate the shortcut to the default folder. The folder contains the subfolder that contains the PDF file.

You can scroll to that folder using your browser. On an XP system with VIeC installed, using the default settings, the folder is located at X:\Program Files (x86)\Xerox\VIIPP\vxvtp\users\user\_name\incoming\default, where X is the partition where the VI eCompose software is installed.



Note: When reviewing the default folder for the latest subfolder, because the names are similar, you can sort by the date modified, or review the date and time stamp in the folder name to identify the latest file.

7. To view the PDF files, open the latest folder. Notice a folder named status, a file called VTPworkshop.cfg, and two new files called VTPworkshop.csv and VTPworkshop.xml. The two new files are VIeC index files. The index files are generated when the Distill and Split into Pages Job Type options are selected. The VIeC Server generates a comma-delimited (CSV) file and an XML-formatted index file. The index files provide a way for VIeC Dispatch and other third-party processes to locate and use the PDF files generated. The test file contains only 20 records. In a production run, you can expect a data file to create several thousand PDF files. The index file is a vital part of VIeC.

Instead of a single PDF file, you have 21 PDF files. A master PDF file called VTPworkshop.pdf is a 20–page PDF file that contains the complete data file of 20 customer records. The other PDF files use the naming convention specified by the Output Filename Template. The file is named using the data file name and a six-digit counter as defined in the default template.

8. Open VTPworkshop000001 .pdf, then review the file. Note the PDF file is one page in length. Open some of the other PDF files and note that they are all single-record PDF files. You have just taken the original 20–record delimited data file, and by just selecting the Distill and Split into Pages job type option, you created 20 individual customized PDF files, without making any changes to the data file. VIeC acted on the VIIPP® BOOKMARK command and split the PDF at the logical record boundary.
9. Close the PDF file, then open the VTPworkshop.xml file. The XML index file contains the 20 records processed. This action is described later in more detail. When finished, close the XML index file.
10. Open the VTPworkshop.csv file. The .csv file is the comma-delimited index file for the 20 records processed. When finished, close the .csv file.
11. Close the folder, then select the **Job Submission Client** window to make it the active window.

## END OF EXERCISE

This completes Exercise 3. Go on to Exercise 4 to see how to use the Bulk Output Folder.



## Exercise 4: Using the Bulk Output Folder

What if you had a program that every night swept a known folder and moved whatever files were in that folder to another process such as an archive system? The fact that VIeC uses the date and time in the name of the subfolder it creates makes it almost impossible to know the name of a folder. This scenario is where the Bulk Output Folder comes into play.

When the bulk directory is selected as the Output Folder, the VIeC disables the creation of the date- and time-stamped subfolder, and deposits the PDF files directly into the folder named bulk, which is a known folder location in VIeC. The bulk folder is generated during the default installation of VIeC software.

The good news is that you know the location of the folder that contains the PDF files. The bad news is that jobs that use the same data file name overwrite one another. So, if you use the Bulk Output Folder, you have to understand the feature and use it appropriately. Even when each file name submitted is unique, a problem can still occur.



Tip: The VIeC Dispatch module can be used as a better-featured alternative to the Bulk Output Folder. When you use Dispatch, you can use a normal output folder and still start a process to move the PDF files to a new location or upstream process. The Dispatch module is discussed later in this workshop.

To see an overview of the Bulk Output Folder, follow these steps:

1. Launch the **VIeC Job Submission Client**.
2. To locate the data file, select the **Browse** button next to the Data File window. Select `X:\Program Files (x86)\Xerox\VIIPP\xgfc\mislib\vtpporkshop.dbf`, where X is the partition where the VI eCompose software is installed.
3. Change the Job Type setting from Distill Only to **Distill and Split into Pages**.
4. Scroll the list of Output Folders, then select **bulk**.
5. To submit the data file, select the **Submit Job** button.

The job appears in the status window. When the job has finished processing, the status changes to complete.

You can review the PDF file in two ways:

- You can click the shortcut that points to the incoming folder, then select the **bulk** folder.
  - You can scroll to that folder using your browser. If default installation settings were used, the folder is located at `X:\Program Files (x86)\Xerox\VIIPP\xvtp\users\user_name\incoming\bulk`, where X is the partition where the VI eCompose software is installed.
6. To display the PDF files, open the bulk folder. There is no subfolder with the data file name, user name, or a date and time stamp. Instead, all PDF files were dumped into the bulk directory. The advantage of the Bulk Output Folder is that you know the location of the folder containing the PDF files. The danger is that files of the same name overwrite each other, which is an important point to remember if you use the Bulk Output Folder.
  7. Close any open files and folders, then select the **Job Submission Client Window**.

### END OF EXERCISE

Go on to Exercise 5 to learn about Using the output Filename Template.

## Exercise 4: Using the Bulk Output Folder

# Exercise 5: Using the Output Filename Template

In the exercises you have completed so far, you have used VIEC default naming conventions for the PDF files created. When using the Distill Only Job Type option, you have no control over the file names. VIEC uses the data file name and a PDF extension. However, if you use the other Job Type options, such as Distill and Split into Pages, VIEC allows you more control over the naming of the PDF files created. For more control over PDF file naming, you can use the Output Filename Template. Several predefined templates are available. Use the menu to select a template, or create your own template.

In this exercise, you use the Output Filename Template to create a template that uses the first and second fields from the VIPP® BOOKMARK in the VIPP® job. The first and second fields contain the first and last name of the client. The PDF files generated are named using the first and last name information passed from the BOOKMARK. More typically you would use an account number or other unique field or combination of fields.

1. Launch the **VIEC Job Submission Client**.
2. To locate the data file, select the **Browse** button. The data file needed is `X:\Program Files (x86)\Xerox\VIPP\xgfc\mislib\vtppworkshop.dbf`, where X is the partition where the VI eCompose software is installed.
3. If the Job Type setting is not set, change the Job Type setting to **Distill and Split into Pages**.
4. Change the Output Folder to the **default** option.
5. To access the Output Filename template, click the **Create Template** button. The default naming convention, `<DFNAME><DIGITS=6>` appears. The file name includes a six-digit counter, starting from 000000. This default option has been used previously. In Exercise 2 PDF, files were created using the data file name VTPWorkshop and an added a six-digit counter starting at 000000.

Beginning with the next step, you change the way VIEC names the PDF file by editing or creating a new Output Filename Template.

6. To change the Output Filename `<DFNAME><DIGITS=6>.pdf`, select the **Create Template** button to the right of the window. This action opens the Create an Output Filename Template window.
7. `<DFNAME><DIGITS=6>.pdf` appears in the top section of the window. Highlight the text `<DFNAME><DIGITS=6>`, then delete the text. Leave just the `.pdf` extension.
8. To add the new Output Filename template, you can type the new syntax or use the built-in syntax generator. Type the following syntax for the Output Filename Template:

```
<FS=' ^ '><BKMARK [ F0 ] >_<BKMARK [ F1 ] >.pdf
```

In the VIPP® BOOKMARK command coded in the vtpworkshop.dbm file, the ^ character was used to separate the various fields in the bookmark. This file is where those separator characters come into play. From the BOOKMARK, select **field 0** and **field 1**. Separate the two fields using the underline character.

9. When the Output Filename Template window displays 

```
<FS=' ^ '><BKMARK [ F0 ] >_<BKMARK [ F1 ] >.pdf
```

, to save the changes, select **OK**.
10. The current options should be saved as a VIEC Profile. This action enables the reuse of these settings without having to retype everything. To save the options, select the **Save Profile** button.
11. For the profile name, type the name `Exercise5`, then select **Save**.

## Exercise 5: Using the Output Filename Template

12. To submit the data file, select the **Submit Job** button. Watch the job status window to see the job appear and the status change to Complete when finished.
13. To review the PDF files, open the shortcut that points to the incoming folder on your desktop, or browse to X:\Program Files (x86)\Xerox\VIIP\XVTP\users\user\_name\incoming\default, where X is the partition where the VI eCompose software is installed.

In the default directory is a folder with the name User\_name, jobname, date/time stamp. Open this folder to display the PDF files. The folder contains all the same files as were seen in Exercise 3.

Notice that the names of the PDF files have changed because VIeC is using the new File Name Template that you created. The file name is made up of the first two fields of the VIIP® Bookmark. The VIIP® BOOKMARK defined in the vtpworkshop.dbm contains values that are concatenated by the Output Filename template. The result is a file name that includes the first name, an underline character, and the last name fields. Using this technique, you can control the naming conventions that VIeC uses to name the PDF files that it generates. This action allows VIeC to produce a more meaningful file name.

14. Close the PDF file, then notice the files VTPWorkshop.xml and VTPWorkshop.csv. These are the two index files that VIeC generates. Open the VTPWorkshop.xml file. The .xml file is easier to view due in part to the large amount of data contained in the VIIP® BOOKMARK and coded in the vtpworkshop.dbm file. Review the standard set of index fields that are generated automatically by VIeC during a split operation. The file names, start and end times, and the path to the PDF file are all included in the index file. Other processes can gain access to the individual PDF file location. Later, you will see how to expand the number of fields in the index record by adding additional data fields extracted from the VIIP® BOOKMARK.
15. Close all open files.

### END OF EXERCISE

This completes Exercise 5. Go to Exercise 6 to learn about VI Compose error conditions.

# Exercise 6: VI Compose Error Condition

So far, all the jobs you have run have been created completely and without error. But what happens if there is an error condition or the job aborts? This exercise generates an error condition and shows you how to locate information that can help in troubleshooting the problem.

1. Open the **Job Submission Client** window.
2. Select the **Browse** option by the Data File Window.
3. Browse to and select the `X:\Program Files (x86)\Xerox\VIIP\mgfc\mislib\VTPWorkshop_error.dbf` file, where X is the partition where the VI eCompose software is installed.
4. Without changing any other options, select the **Submit Job** button to process the data file.

In this case, the data file contains an error. The job fails and a Failed Distill Error message appears in the Job Status window.

No PDF file is created in this instance because the job failed. However, you can review error messages.

5. Click the shortcut that points to the incoming folder created on your desktop during installation, or browse to `X:\Program Files (x86)\Xerox\VIIP\xtvp\users\user_name\incoming\default`, where X is the partition where the VI eCompose software is installed.
6. Open the VTPWorkshop folder that was just created. If you have trouble locating the folder, sort by date and time. Inside this folder is a subfolder called status. Open the status folder. To view the VI Compose error message, locate and open the job.failed file. In this case, the job was unable to locate the file VTPWorkshop\_error.dbm because the file does not exist.
7. To review the log file, in the task bar, double-click the **VIeC** icon. The VI eCompose Local Server window opens. Scroll to the bottom of the file, then review the last few entries. If needed, select the **File** menu, then save the log file to a file that can be emailed or printed for diagnostic purposes.
8. Close all open windows, including the Job Submission Client window.


## END OF EXERCISE

Now that you know how to identify error conditions, go to Exercise 7 to learn about Watched Folder job submissions.

## Exercise 6: VI Compose Error Condition

# Exercise 7: Watched Folder Job Submission

So far, you have used the Job Submission Client to submit jobs manually to VIEC. In this exercise, you configure the Watched Folder Client. In a demonstration of how workflow can be automated, a data file is dropped into a Watched Folder and the Watched Folder Client forwards the file automatically to the VIEC Server to process.


 Note: In addition to the Watched Folder Client, there is an lpr client that can receive data sent to it from an lpr command and process that data file automatically on VIEC. For example, data submitted from a host system. The lpr client is not discussed in this workshop, but is described in the *VI eCompose User Guide*.

1. Start this exercise by creating the folder `C:\VTP_Watched_Folder`, if you have not already created it. Use this folder as the VIEC Watched Folder.
2. To open the Watched Folder Client window, right-click the **VIEC** icon, then select **Launch Watched Folders Client**.


If there is already a Watched Folder entry in the top window, highlight it, then select **Delete**. To continue, answer **OK**.

3. To scroll through your file system to find the `VTP_Watched_Folder` folder that you just created, select **Browse**. The path populates in the Watched Folder details area in the middle of the screen.
4. Assign a VIEC Profile to use to process all files processed by this Watched Folder. Use the scroll bar by the profile option and select the **Exercise5.pfl** profile. The profile options are displayed in the window shown.
5. To move this entry into the top window, select **Add**. This window lists all the Watched Folders controlled by the Watch Folder Client.

Highlight the Watched Folder in the top window, then select the **File** menu option on the top bar. Change the file disposition setting to **Delete Input File**. This allows the VIEC Client to delete the data file after the client has passed the file onto the VIEC Server.

 Note: If you do not set the disposition setting to Delete Input File, the other option, Move Input Job to Saved Jobs Folder, saves a copy of the file in a saved folder that it creates in the `VTP_Watched_Folder`. If you use the second option, there are housekeeping considerations that you need to implement to ensure that you do not fill the disk with old files.

6. Change the default File Ready Check value from the default value to 5.
7. Change the time interval that VIEC Client uses to look at the Watched Folder. For this exercise, select a time between 5–10 seconds. Select **Save Changes**.

 Note: Adjust both the file ready check and watch timer values for use in a production system. The times should be based on reasonable intervals for your production system.

8. To start the Watched Folder process, select **Resume**.

The status line at the bottom of the window provides the current status of the Watched Folder, showing the Watch interval, File Check interval, and the text Watching Folders, which indicates that the Watched Folder Client is waiting for data files to be dropped into the Watched Folder.



Note: To stop the VIEC Watched Client from watching the folder, select **Pause**. The status changes to Not Watching Folders. Do not do this now. If you did, select **Resume** to resume watching the folders.

The next few steps show how to open some windows that provide a visual indication that something is happening. This is an automated process designed to work without operator intervention. So no bells, whistles, or alarms sound. However, by opening two windows that would not normally be open during production, you are able to trace the file through VIEC.

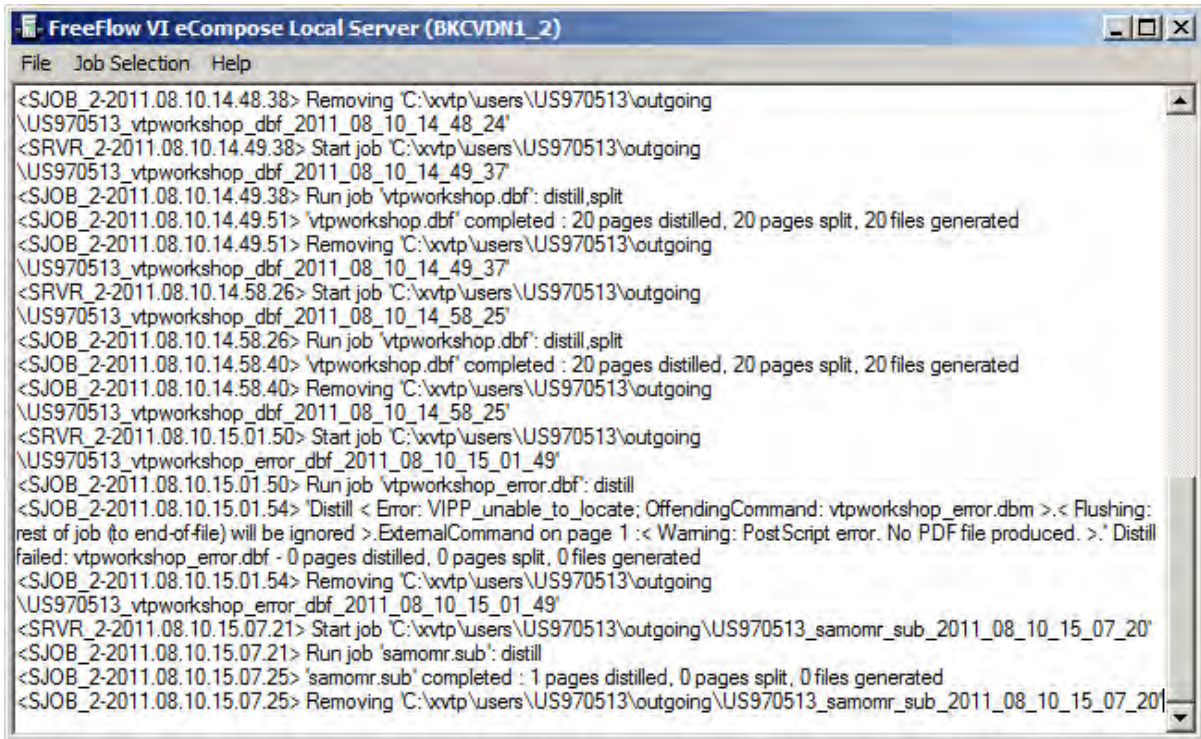
9. To trace your file, open the VIEC Local Server window and folder. These steps are not required in a production environment.
  - **VIEC Local Server window:** To open the VIEC Local Server window, in the task bar, double-click the **VIEC** icon. To confirm that the file has been processed, view the VIEC Log file. The VIEC icon flashes red as it processes a file.
  - **C:\VTP\_Watched\_Folder:** Open the file in Windows Explorer. In the next step, drop a data file into this folder. By having the folder open, you can see the VIEC Client delete the file after the time interval has passed and the client has passed the data file to the VIEC Server for processing.



10. Now that the Watched Folder is active, copy the X:\Program Files (x86)\Xerox\VIIP\Xgfc\mislib\vtppworkshop.dbf file and paste it into the C:\VTP\_Watched\_folder folder, where X is the partition where the VI eCompose software is installed.

Keep watching both the VTP\_Watched\_Folder and the VIeC Local server window for indications that something is happening.

When the time interval has expired, the job moves from the VTP\_Watched\_Folder and passes to the VIeC Server. You can see the start of a job entry appear in the log file window when the client passes the data file to the VIeC Server.



```


FreeFlow VI eCompose Local Server (BKCVDN1_2)
File Job Selection Help
<SJOB_2-2011.08.10.14.48.38> Removing 'C:\xvtp\users\US970513\outgoing
\US970513_vtpworkshop_dbf_2011_08_10_14_48_24'
<SRVR_2-2011.08.10.14.49.38> Start job 'C:\xvtp\users\US970513\outgoing
\US970513_vtpworkshop_dbf_2011_08_10_14_49_37'
<SJOB_2-2011.08.10.14.49.38> Run job 'vtpworkshop.dbf': distill,split
<SJOB_2-2011.08.10.14.49.51> 'vtpworkshop.dbf' completed : 20 pages distilled, 20 pages split, 20 files generated
<SJOB_2-2011.08.10.14.49.51> Removing 'C:\xvtp\users\US970513\outgoing
\US970513_vtpworkshop_dbf_2011_08_10_14_49_37'
<SRVR_2-2011.08.10.14.58.26> Start job 'C:\xvtp\users\US970513\outgoing
\US970513_vtpworkshop_dbf_2011_08_10_14_58_25'
<SJOB_2-2011.08.10.14.58.26> Run job 'vtpworkshop.dbf': distill,split
<SJOB_2-2011.08.10.14.58.40> 'vtpworkshop.dbf' completed : 20 pages distilled, 20 pages split, 20 files generated
<SJOB_2-2011.08.10.14.58.40> Removing 'C:\xvtp\users\US970513\outgoing
\US970513_vtpworkshop_dbf_2011_08_10_14_58_25'
<SRVR_2-2011.08.10.15.01.50> Start job 'C:\xvtp\users\US970513\outgoing
\US970513_vtpworkshop_error_dbf_2011_08_10_15_01_49'
<SJOB_2-2011.08.10.15.01.50> Run job 'vtpworkshop_error.dbf': distill
<SJOB_2-2011.08.10.15.01.54> 'Distill < Error: VIIP_unable_to_locate: vtpworkshop_error.dbm >.< Flushing:
rest of job (to end-of-file) will be ignored >. ExternalCommand on page 1 :< Warning: PostScript error. No PDF file produced. >.' Distill
failed: vtpworkshop_error.dbf - 0 pages distilled, 0 pages split, 0 files generated
<SJOB_2-2011.08.10.15.01.54> Removing 'C:\xvtp\users\US970513\outgoing
\US970513_vtpworkshop_error_dbf_2011_08_10_15_01_49'
<SRVR_2-2011.08.10.15.07.21> Start job 'C:\xvtp\users\US970513\outgoing\US970513_samomr_sub_2011_08_10_15_07_20'
<SJOB_2-2011.08.10.15.07.21> Run job 'samomr.sub': distill
<SJOB_2-2011.08.10.15.07.25> 'samomr.sub' completed : 1 pages distilled, 0 pages split, 0 files generated
<SJOB_2-2011.08.10.15.07.25> Removing 'C:\xvtp\users\US970513\outgoing\US970513_samomr_sub_2011_08_10_15_07_20'

```

11. After the job has completed, change to the default output folder. A new folder has been created. Check the date and time stamp in the folder name. To review the PDF files created, open the folder.

The original data file was deleted from C:\VTP\_Watched\_folder. You set the disposition to Delete. If you had set the disposition to Save, the data file would have been moved to the saved folder located in the VTP\_Watched\_folder directory.

12. Close all open windows and exit the VIeC Job Submission Client.  
 13. For convenience sake, open the default output folder, delete all the subfolders, then close the Output folder.

 Note: By creating many Watched Folders, each assigned a different profile, you are in effect creating several virtual printers, each one having different processing options applied.

**End of Exercise:** You have watched your folders. Now go on to manipulating Output Filenames and Index Templates in Exercise 8.

## Exercise 7: Watched Folder Job Submission

# Exercise 8: Output Filename and Index Template Manipulation

In Exercise 8 you use the Job Submission Client to create an Output Filename template and an Index Template that use information contained in the Bookmark field.

Using these templates to manipulate data in the VIPP® BOOKMARK is critical to operating the VIeC Dispatch module. The Dispatch module is used to automate the dispatch of the PDF files by passing to a user-defined process the path to the PDF file and other specified information that VIeC extracts from the BOOKMARK information.

1. Open the Job Submission Client.
2. Select the **Browse** button by the Data File window, then select the `X:\Program Files (x86)\Xerox\VIIPP\xgfc\mislib\vtppworkshop.dbf` data file, where X is the partition where the VI eCompose software is installed.
3. For Job Type, select **Distill and Split into pages**.
4. To create the Output Filename Template, select the **Create Template** button by the Output Filename Template window.
5. The default value `<DFNAME><DIGITS=6>.pdf` or a previously defined template may be visible. Delete the current entry and replace it with this text: `<FS=' ^ '><BOOKMARK [F2] >.pdf`.

The syntax tells VIeC to use the third field in the BOOKMARK, which is the email address.

6. To save the changes, select **OK**. This completes the Output Filename Template.

Use a similar process to edit and add additional fields to the index files that VIeC creates. You are adding the additional fields, extracted from the BOOKMARK command, so that the index files generated by VIeC when it processes the data file, have the required information for the configuration of the Dispatch module.

In the next few steps, you create a new Index Template to control the fields that populate the index file created when the Distill and Split into pages Job Type option is selected.



Note: Third-party processes can use the index file to locate the created PDF files and to populate values to another process using the Dispatch module.

7. On the Job Submission Client window, to the right of the Index File Template window, select **Create Template**.

The default Index Template is displayed in the window, which looks similar to the Output Filename Template window. However, this window edits the Index template.

The text below shows the complete index template that is created. The text is spread over three lines to fit this document.

The bold text in this example is used just to show the additional text that needs to be added to the existing index template. Delete the word **Bookmark** from the original template, then add the bold text.

Index File Template = `< FS = ','> File Name, Input File, End Split Date, End Split Time, Output Dir, Pages, File Sequence, firstname < BFS = '^' > [F0] , lastname [F1] , email [F2] , info1 [F3] , info2 [F4]`

8. To save all the changes and exit the Template Editor, select **OK**.

9. Because so many changes to the Output Filename and Index Template have been made, create a new profile that contains these changes. Select **Save Profile**. Assign this profile the name `Exercise8`, then select **Save**. Select **OK**.
10. To submit the job for processing, select **Submit Job**.

The job completes, but notice that VIEC reports the job as `Complete (with warnings)`.

11. To see the warnings and open the log window, double-click the **VIEC** icon in the task bar. Scroll to the last job processed, then review the warnings. The warnings look something like this:

```
<SJOB-2004.07.14.14.35.43> Split Warning: Invalid characters found for filename  
were replaced with the underscore character.
```

The warning means that the file name selected using the Filename Output Template found an invalid character in the data making up the name. In this case, `@` is considered an invalid character and is replaced by the underscore character in the actual file names. This character substitution affects only the file name. The index files include the correct email address and can use the `@` character.



Note: The character substitution can be overridden. For more information about invalid characters, review the *FreeFlow VI eCompose User Guide*.

12. Close the log window.
13. Open the default folder, then review the latest folder containing the PDF files. Note the effect of the field index value `F2` in the Output Filename Template. The PDF files now use the email address as a file name. However the `@` character as described was replaced with the underscore character.
14. Open a couple of the PDF files to view the contents. Close the PDF files.
15. Use any text editor to open and review the `VTPWorkshop.xml` file. You could view the `VTPWorkshop.csv` index file, but the XML file is easier to read due to the large amount of data in the `BOOKMARK`.

Note the standard seven fields that you saw in Exercise 4. You can see the additional fields that you added as a result of the Index Template you created. In this exercise, you replaced the bookmark field from the old index with the field `firstname`. You added the fields `lastname`, `email`, `info1`, and `info2` extracted from the `VIPP® BOOKMARK`.

Review the top seven default fields and see how all the information you need to find and access the PDF files is included in the information contained in this index file. Review the other information that you extracted from the `BOOKMARK` fields that contain first name, last name, email address, and text that could be used to populate the Subject field of an email, and text that could be used to populate the body of an email message. Seeing the ability to include this information in the `VIPP® BOOKMARK` file, then being able to extract it and place in into an index file under meaningful field names must start you thinking: *Wow, with this index information, I could pass all the required information, including the actual PDF file, to an email process and create an automated hands-off data submission to email delivery workflow.*

You bet you can. Or an automated archive system, or a million and one other processes. The power here is that by using VIEC you can extract information from the data file and populate an index file that can be used by a user-defined process to pass the PDF and additional information to whatever process you want. VIEC creates an index record for every record processed.



Note: Later, use the fields in the index file to activate the Dispatch module and copy the PDF files to a new location emulating a user process in a workflow.

16. Close all open windows and folders. If the Job Submission Client is still active, exit and close the Job Submission Client.

**END OF EXERCISE**

Go on to Exercise 9 to learn how to use Init (Nub) files.

## Exercise 8: Output Filename and Index Template Manipulation

## Exercise 9: Init (Nub) Files

This chapter contains:

Submit a Data File without VIPP® Commands.....	104
Append the VIPP® Commands .....	105
Load and Save a Profile.....	107

So far, all the VIPP® data files sent to VIeC have contained the VIPP® start commands required to process the data file. The start commands are shown here:

```
%!  
[ (projects) (vtpworkshop) ] SETPROJECT  
QSTRIP_on  
( , ) SETDBSEP  
(vtpworkshop.dbm) STARTDEM
```

What if the data file was created by a system that could not add the VIPP® start commands to the data file? Examples are a web-based interface that builds and submits delimited files to a process, or a legacy data file that cannot be modified to include the VIPP® start commands. The Init (Nub) feature allows you to select a nub file, which is a simple ASCII text file that includes the required VIPP® start commands, and appends the text file to the front of the data file before submitting the file to the VIeC Server.

In Exercise 9 you learn the following information:

### Submit a data file without VIPP commands

After you select and submit a data file without VIPP® commands using the Job Submission Client, the job fails. You review the error message.

### Append the VIPP commands

After you select a nub file that contains all the required VIPP® start commands to process the data file, you use the Job Submission Client to select the data file without VIPP® start commands and attach the nub file using the Init (Nub) option.

### Load and save a profile

After completing the first two parts of Exercise 9, you save all the options you have selected to a profile for use in Exercise 10.

## Submit a Data File without VIPP® Commands

1. Open the file, `X:\Program Files (x86)\Xerox\VI PP\xgfc\mislib\VTPWorkshop_nub.dbf`, in a text editor. This will be the data file you will submit to the VIeC Server. The file begins with these lines of code:

```
david,Kirk,david.kirk@xerox.com,A&E,25,15
```

```
anne,brown,anne.Brown@xerox.com,C1,25,1
```

As you review the file, notice that it does not contain any VIPP® start commands, only the delimited data records. Close the text editor window

2. Open the **Job Submission Client**.
3. Select the **Browse** button by the Data File window and select the `X:\Program Files (x86)\Xerox\VI PP\xgfc\mislib\VTPWorkshop_nub.dbf` data file.

All the default options displayed in the Job Submission Client can remain at the default settings.

4. Select the **Submit Job** button to submit the selected data file to the VIeC Server.

The status window will show the status of the job. It will go from a pending state, to a process state, then to a fail state.

5. Click the shortcut that points to the incoming folder created on your desktop during installation, or browse to `X:\Program Files (x86)\Xerox\VI PP\xvtp\users\user_name\incoming\default`, where X is the partition where the VI eCompose software is installed. Open the folder that was just created. The folder name will include the text VTPWorkshop\_nub.

Inside the folder you will notice that no PDF file was produced. This is because the job failed.

6. Open the status folder and select the file **job.failed**, to see the error message. The following error message will be displayed:

```
0 0 0 Distill Error: undefined; OffendingCommand: david,Kirk,david.kirk@xerox.com,A&E,25,15 Flushing: rest of job (to end-of-file) will be ignored Warning: PostScript error. No PDF file produced.
```

VIeC tried to process this job. It was presented with the first line in the data file, which it tried to process as a command. Because this is not a valid VIPP® or PostScript command, the job failed with a PostScript Offending Command error. In this case, this is because the job did not contain any VIPP® start commands to inform the PostScript interpreter that a VIPP® data file was about to be sent.



## Append the VIPP® Commands

Next, correct the cause of the error by appending the VIPP® start commands to the selected data file, using the Init (Nub) option in the Job Submission Client.

X:\Program Files (x86)\Xerox\VIPP\xgfc\mislib

1. Open the file X:\Program Files (x86)\Xerox\VIPP\xgfc\mislib\VTPWorkshop.nub in a text editor.

VTPWorkshop.nub is a simple text file that contains the required VIPP® start commands and the database header name files required to process the VI eCompose Workshop data file.

The VTPWorkshop.nub file contains this information:

```
%!
[(projects) (VTPWorkshop)] SETPROJECT
QSTRIP_on
(, ) SETDBSEP
(vtpworkshop.dbm) STARTDBM
Fname, Lname, Emailfield, Combo1, num1, num2
```

2. Close the text editor window.
3. If not already open, open the **Job Submission Client**.
4. Select **Browse** next to the Data File window, then select the X:\Program Files (x86)\Xerox\VIPP\xgfc\mislib\VTPWorkshop\_nub.dbf data file, where X is the partition where the VI eCompose software is installed. It is possible that the data file already appears in the data file window.
5. If you submit this file now, the job will abort because the data file contains no VIPP® start commands. To add the VIPP® start command, select the **Browse** button next to the Init (Nub) window.

Browse to the X:\Program Files (x86)\Xerox\VIPP\xgfc\mislib folder, then select the **VTPWorkshop.nub** file. To select the file and populate the path to the nub file in the Init (Nub) window, select **Open**.



Tip: Nub files can be located anywhere on your system. You can create a special folder called nubfiles to make management easier.

6. Select the **Distill and Split into Pages** job type.
7. Select **Submit Job** to submit the selected data file to the VIeC Server.

The status window shows the status of the job. The status moves from a pending state, to a process state, then complete.

8. Click the shortcut that points to the incoming folder created on your desktop during installation, or you can browse to X:\Program Files (x86)\Xerox\VIPP\xvtp\users\user\_name\incoming\default. Open the folder that was just created. The folder name includes the text VTPWorkshop\_nub, and has a later date and time stamp than any other folder.

The folder contains the expected PDF files, which demonstrates that the VIPP® start commands were appended to the data file before the VIeC Server processed the job.

Exercise 9: Init (Nub) Files

9. Close the folders that contain the PDF files, then select the **Job Submission Client**.

## Load and Save a Profile

In this exercise, you will load a previous profile, make sure the nub file information is available, and save it to a new profile making sure that all the information needed for Exercise 10 is contained in the new profile.

Before you can save this new profile, change the displayed values in the Output Filename and Index File templates, which are the default values. For the next exercise you will use the Output Filename and Index File values used in Exercise 8. You could re-enter the values, but an easier way is to reload the previous profile, and make any changes to add the nub file option, then save the displayed values as a new profile.

1. In the Job Submission Client window, select the **Load Profile** button.
2. Browse to the profile you created in Exercise 8, exercise8.pfl. Select **Open** to load this profile. Although hard to spot the difference, the profile changed the Output Filename and Index File values to those used in Exercise 8.
3. Check the Init (Nub) value. If not pointing to the X:\Program Files (x86)\Xerox\VIIP\Xgfc\mislib\VTPWorkshop.nub file, select the **Browse** button and then select the **VTPWorkshop.nub** file, where X is the partition where the VI eCompose software is installed.

At this point you can create a new profile. The new profile will contain modified Output Filename and Index File templates to control the PDF file names and the index records generated by the VIeC Server. It contains the Output folder name, the Job Type to be applied to the data file, and the nub file to add to the data file.

4. Select **Save Profile**, enter the new profile name, Exercise9, and select **Save**.
5. If you want you can select the **Submit Job** button to submit the job for processing. It will create the 20 PDF files using the naming convention used in Exercise 8, and put them in the latest output folder. It will also create the index files with the additional index fields.
6. Close the PDF files, any open windows, and the Job Submission Client.

Once the Job Submission Client is closed, open the default output folder (using the shortcut or browsing to its location) and delete all the sub-folders to clear up space. This will make it easier to find the output folders in the next few steps.

7. Close the output folder.

### END OF EXERCISE

See how to use VIeC Dispatch in Exercise 10.

## Exercise 9: Init (Nub) Files

# Exercise 10: Using Dispatch

So far you have learned:

- How to select a data file or VI Project Container and submit the file to the VIEC Server using the manual Job Submission Client.
- How to configure and use the Watched Folder Client to automate job submission.
- How to append a nub file to the data file.
- How the various options available through the Job Submission Client can affect the way the job is processed, including the capability to create multiple unique PDF files.
- How to control the file names using the Output Filename template.
- How to add index fields from the BOOKMARK to the index files created by VIEC during the split operation, using the Index File template.
- How to save all these settings to a profile and how to select and use a profile.

Next, you learn about the Dispatch module. The Dispatch module is an extremely powerful, yet flexible, module that adds significant value to VIEC.

The job of the Dispatch module is to execute a user-defined process when a trigger condition is met. This activity is triggered by a combination of factors, described in more detail in the *FreeFlow VI eCompose User Guide*. The Dispatch module must be active to check the incoming folders for PDF files. When a PDF file is generated, Dispatch compares a user-defined rule with the index file generated for that job. The rule must be true for the user-defined process to execute. The scope of folders being reviewed by Dispatch is controlled by filter settings within the Dispatch module.

The user-defined process could perform any number of tasks. Typically, the user-defined process passes the PDF file and additional parameters to some other system or step in the user workflow. The user-defined process could perform some function not related to the PDF files, such as sending an email note signifying that a job has completed or triggering another user process to submit a job to the host. The functions that can be performed are unlimited.

In this exercise, the user-defined process that executes moves the PDF files to the `C:\MyArchiveFolder`, emulating moving the files to an Archive system. In a production environment, the process can include any of the following actions:

- Emailing the PDF files
- Archiving the PDF files
- Loading the PDF files to a web presentment server
- Printing the PDF files

- Any combination of the above

Because the Dispatch module calls a user-defined process, it is up to the user what the next process will do. The user-defined process provides unlimited flexibility.

The VIeC Dispatch module calls a single user-defined process and hands to that process the files and information that it is directed to. The user-defined process does not email, archive, or do web presentment. It is that process that integrates with the email system, archive system, or other process in the customer workflow. The user-defined process can do whatever the customer wishes, including starting several other processes. The Dispatch module is used to initiate the next step in the customer workflow.

To complete this exercise, start the VIeC Dispatch module and configure a DispatchRule. Additional information about the Dispatch module is included in the *FreeFlow VI eCompose User Guide*. Xerox recommends that you read this information.

After the Dispatch module is started and the DispatchRule has been created, submit the same application that you used in Exercise 9. The job uses the profile that you saved in Exercise 9. The profile selects options to do the following:

- Distills and splits the data file into unique PDF files.
- Points to the nub file needed to start VIPP®.
- Defines how the PDF files are named using the Output File Name template.
- Populates the index template used to generate the index fields that Dispatch uses to verify the DispatchRule, depending on the command template in the DispatchRule and the field information that Dispatch could pass to a user-defined process.

In this example, you pass only the path and PDF file name information to the DOS move command. If you were starting an email process, you can pass the email address, subject field, and text information.

To complete this exercise, follow these steps:

1. On your C:\ drive, create a folder called `MyArchiveFolder`. This folder is used as a repository for the PDF files created in this exercise.
2. Start the VIeC Dispatch module. Right-click the **VIeC** icon and select **Launch Dispatcher**, or go to the **Start** menu, then select **VI eCompose > Start VI eCompose Dispatch**.

A new icon appears in the task bar and the VI eCompose Dispatch window opens.

3. Review the menu options under the File and Edit window. The options are explained in the *VI eCompose User Guide*.
4. Select the **Edit** menu, then select **IncomingFolders Filters**

The IncomingFolders Filter File window appears. This window is used to control the users and user folders that VIeC Dispatch monitors. This window is explained in more detail in the *VI eCompose User Guide*. If you are aware of your user and folder IDs, then use those in the following options. If you are not sure of the user and folder IDs, follow the instructions in which VIeC Dispatch monitors all users and all folders under each user.



Note: In a production environment, all users and all folders are probably not monitored. Typically, only certain users and certain folders for each user are monitored by VIeC Dispatch.

5. Click the entry to highlight it, then select **Edit**.
6. In the Filter Entry box, highlight the entry for Users, then click **Clear**.

7. Highlight the entry for Folders, then click **Clear**.
8. To add `all` to the Filter Entry window, in the User Name window, double-click **all**. To add `all` to the Filter Entry window, in the Incoming Folder Names window, double-click **all**.
9. To save changes and exit the Edit Entry in IncomingFolders Filter window and return to the DispatchRule File window, click **OK**.
10. Select the **Edit** menu, then select **DispatchRules**. The DispatchRule File window opens and displays the `sample1.rule`.

In the interest of time, the DispatchRule `vtpworkshop.rule` has been created and copied to the `VIeC\dispatch\rules` directory.

11. To select this DispatchRule, from the Rule Filename menu, select the rule called **vtpworkshop.rule**. The window displays the contents of the `vtpworkshop.rule`.

The *FreeFlow VI eCompose User Guide* provides a detailed description of each key name. For this exercise, the Data File Template and the Command Template options are discussed briefly, because these are the only keys needed to edit in this exercise.

When you have completed this workshop, review the *FreeFlow VI eCompose User Guide* to learn about the functionality of the other keys.



Note: In the next few steps, the `VTPworkshop.rule` is set to run automatically, should `VIeC Dispatch` match a rule. The `AutoRun` entry in the rule syntax controls this action. If the `VTPworkshop.rule` is set to `false`, the operator action is required to start the dispatch process for this job. If the `VTPworkshop.rule` entry is set to `true`, `VIeC Dispatch` processes automatically the user-defined process called in the Command template entry.

12. To set the correct `AutoRun` option, click **AutoRun**, then select **Edit**.
13. To save the new settings, select **True**, then select **OK**. Select **Save**.
14. Answer **Yes** to the warning notice `Overwrite Rule File with new entries?`
15. To view the contents of the file, highlight the Data File Template, then select **Edit**. Do not alter any of the contents of the file.

The Data File Template is designed to write the contents of the index field `info2` to a temporary file called `c:\temp.txt`. This action is done because the index field `info2` contains a personalized paragraph of text, based upon information submitted in the original data file. The personalized paragraph is intended to be the body text of an email note. Because each record processed is different, the Dispatch module, using this rule, writes to a temporary file the contents of the index field `info2`, for the record currently being processed by Dispatch. The Data File Template passes the temporary file to the user-defined process that is integrated with the email system. In this exercise, a process to integrate with an email system is not being called in, but in Exercise 11, for extra credit, you can use Blat to email from a POP3 account to see how this works. If you cannot email from a POP3 account or are blocked by your email system, you cannot complete Exercise 11.

For now, to exit this window, select **Cancel**.

16. To display the contents of the template, highlight the Command Template, then select **Edit**. This text appears:

```
X:\Program Files (x86)\Xerox\VIIP\Xgfc\mislib\VTPmove.bat $(PDF_FILE_PATH) c:\MyArchiveFolder $email, where X is the partition where the VI eCompose software is installed.
```

The file `X:\Program Files (x86)\Xerox\VIIP\Xgfc\mislib\VTPmove.bat` calls a user-defined process, in this case, a simple DOS batch file. At the start of the workshop, you loaded the file `VTPmove.bat` to the `X:\Program Files (x86)\Xerox\VIIP\Xgfc\mislib` directory. The syntax above executes this batch file. Again, this batch file is executed for each PDF created by the original data file that was submitted. In this case, the data file created 20 PDF files, so this process is repeated 20 times.

This is the content of the DOS batch file:

```
@echo off  
  
move /Y %1 %2
```

The batch file turns off the display to the screen, then executes the DOS move command. The move command has the `/Y` flag set, which overwrites any file of the same name when the MOVE command is executed. In a production environment, you can evaluate if you want this flag set. Two additional arguments are supplied to the MOVE command, and are variable as indicated by the `%1` and `%2` variables. The two arguments are the path to the PDF file and the destination location.

The `%1` variable in the batch file is replaced with the information contained in the VIeC built-in variable `PDF_FILE_PATH`. The *FreeFlow VI eCompose User Guide* contains a listing of all the built-in variables and a description of the information the variables hold.

`PDF_FILE_PATH` is populated with the path to the PDF file and the PDF name. The DOS MOVE command has all the information that it needs to access the PDF file. Note how much easier it is to use this built-in variable. How else could you establish the directory name containing the PDF files? Remember, when the directory is generated by VIeC, it includes a unique time and date stamp. Dispatch has its own syntax to substitute the variable with the actual information. That is why you see the syntax, `$(PDF_FILE_PATH)`, in the command template. The `$` tells Dispatch to substitute the variable name enclosed within the `( )` with the actual information in the variable. In this case, the path and name of the PDF file.

The `%2` variable in the batch file is the destination path for the MOVE command. In the Command Template, that address is hard-coded as `C:\MyArchiveFolder`. This folder was created at the start of this workshop.

So, for this exercise, the user-defined process or the batch file, in effect, moves the PDF file being pointed to by the `PDF_FILE_PATH` variable to the hard-coded destination `C:\MyArchiveFolder`.



17. Look at the Command Template syntax once again.

```
X:\Program Files (x86)\Xerox\VIIP\Xgfc\mislib\VTMove.bat $(PDF_FILE_PATH) c:\MyArchiveFolder $email
```

What is unaccounted for so far is the \$email variable. The \$ character indicates to Dispatch that this is a variable and that the variable field name is email. At run time, the content of the field email is substituted in the command template.

This field is necessary in the command template because for a job to be considered eligible for dispatch, a single rule defined in the Dispatch system must be considered 'true.' For that to happen, there must be a field match in the rule and the index file for the job. Only when a single rule is true for a job does Dispatch perform the functions in that rule. In this case, the index file and the rule contain a field called email, so our rule is evaluated to be true.

Any of the fields in the index template can be selected. However, this is slightly more complex because if multiple rules use the same field, email, then multiple rules are eligible for the job, and Dispatch does not know which rule to process. In this case, the job goes into a conflict state until the conflict is resolved. So only ONE rule must be eligible.

 Note:

- It is possible that you have several jobs that contain a field called email, and each job requires different processing by Dispatch. In this case, simply using the email field does not work. Plan for this. Create a unique field that the rule can test for to execute the rule. Failure to do this can result in Dispatch reporting a job as being in conflict or ineligible. For more information, review the Dispatch module in the *FreeFlow VI eCompose User Guide*.
- When Dispatch detects that a job has completed, and PDF files have been deposited into one of the directories that Dispatch is watching, it interrogates the index file and tests the field names against the rules defined. If Dispatch finds a single rule that it can apply it considers that rule to be true and executes that rule file. If no rule can be found, Dispatch reports that the job is ineligible. If more than one rule can be applied, Dispatch reports that the job is in conflict.

18. Exit the Command Template editor and get back to the VIeC Dispatch window.

 Note:

- In normal operation, the VIeC Dispatch window is closed. For now, leave the window open so that you can see Dispatch work when you submit the data file.
- Now that everything is set up, you can submit a job. Watch the VIeC Server process the data file. The output is 20 unique PDF files and an index file for that job. Dispatch becomes active as it starts to compare the rules defined in the Dispatch module with the index file. When a single rule is considered to be true, the job becomes eligible for dispatch and the process defined in the rule is executed for each PDF file, in this case, the batch file or the DOS move command is executed.
- The batch file is the user-defined process and was created just to demonstrate the invocation of a process. The batch file moves the PDF files from the directory VIeC created to the C:\MyArchiveFolder folder. This demonstrates a simple usage of Dispatch. In a production environment, the C:\MyArchiveFolder in our example could be replaced by an archive system.

19. To make it the active window, click **Job Submission Client**. If the window is closed, to launch the window, click **Job Submission Client**.

20. Select **Browse** by the Data File window, then select the X:\Program Files (x86)\Xerox\VIIP\Xgfc\mislib\vtppworkshop\_nub.dbf data file.
21. Select the **Load Profile** option, then select **exercise9.pfl**. This action loads the Job Submission Client with all the required options to:
  - Point to the correct nub file to start VIIP®.
  - Select the distill and split option to create unique PDF files.
  - Select the PDF naming template to name the PDF files.
  - Select the index template that will populate the index file with the additional BOOKMARK information described in Exercise 8, including the email field that the VTPWorkshop.rule is looking for in order to execute the process to move the PDF files.
22. Open the **C:\MyArchiveFolder**. Click **Submit Job**. The file should be empty at this point. Move the Dispatch window and the MyArchiveFolder window around on your desktop so that you can see parts of each window. This action allows you to see activity as it happens.
23. To submit the VIIP® data file to the VIeC Server, select **Submit Job** on the Job Submission Client.

Over the next 30 to 40 seconds VIeC processes the data file and creates 20 unique PDF files in the default directory. After the job is complete, Dispatch activates, and because the VTPWorkshop.rule is true, the batch file executes. For each PDF file, the batch file receives the path and file name information used in the move operation. Dispatch works through all 20 records, moving them to the C:\MyArchiveFolder.



Note:

- VIeC Dispatch can be configured to run automatically based on the AutoRun filters available from the Edit menu in the VIeC Dispatch window. For more information about the AutoRun filter, refer to the FreeFlow VI eCompose User Guide.
  - If Dispatch did not start automatically, it was probably related to a folder or an AutoRun setting. To manually start the job for Dispatch, open the VIeC Dispatch window, select the job that is waiting in the Eligible Jobs folder, then click **Submit Job**.
24. To bring the file to the front, click **MyArchiveFolder**. Look at any of the PDF files that VIeC generated.
  25. Click the shortcut to the default folder. Notice that all the expected standard files, including a single PDF file of all the records, is in the folder. The unique PDF files are not in this folder because Dispatch moved them to MyArchiveFolder.

To show why identifying the email field in the Command Template is so important, remove the email field name from the DispatchRule and see what happens when the same job is run again.
  26. Select the **Dispatch** window.
  27. Select **Edit**.
  28. From the list, select **DispatchRules** and the vtpworkshop.rule.
  29. Highlight the Command Template, then click **Edit**. Delete the text **\$email** from the template, then select **OK**. To save the modified Command Template file, select **Save**. To get back to the Dispatch window, select **OK**.
  30. To make it the active window, click the **Job Submission Client** window. The options displayed should be the same as the options displayed previously.

31. To submit the data file, select the **Submit Job** button.

The VIeC Server processes the data file and 20 PDF files are generated. Dispatcher wakes up and attempts to match a DispatchRule with the index file created. The following message appears:

```
<VTPD-2004.11.30.12.13.18> Job 'DNkirk_vtpworkshop_dbf_2004_11_30_12_12_54'
is INELIGIBLE.
```

The job is reported as ineligible because Dispatch could not match a field name defined in the rule with field names in the generated index file. The \$email was removed from the rule. To find a listing of all the ineligible jobs, in the Dispatch window, click the **Ineligible Job** tab.

32. Highlight the job, then select **View Index Record Field Names**. The available field names that make up the index file generated by VIeC are displayed. Your rule must match one of these field names in the DispatchRule for the job to become eligible.

Do not select Cancel Job. If you do, this cancels and removes the ineligible job from this list. In a production environment, that may be a required action, but to complete this exercise, edit the DispatchRule to return the email field.

33. Select the **VIeC Dispatch** window to make it active.
34. Select the **Edit** menu and **DispatchRules**. The DispatchRule File window opens, displaying the sample1.rule.
35. Select the rule called vtpworkshop.rule. Once selected, the window displays the contents of vtpworkshop.rule.
36. To display the contents of this template, highlight the Command Template, then select **Edit**. This message appears:

```
X:\Program Files (x86)\Xerox\VIIPP\xgfc\mislib\VTPmove.bat $(PDF_FILE_PATH) c:
\MyArchiveFolder
```

Add the text, \$email, to the end of the line. Ensure that you include a space character before the \$email text. The line should look like this:

```
X:\Program Files (x86)\Xerox\VIIPP\xgfc\mislib\VTPmove.bat $(PDF_FILE_PATH) c:
\MyArchiveFolder $email, where X is the partition where the VI eCompose software is installed.
```

37. Select **OK**.
38. To save the modified rule, select **Save**. Answer **Yes** to overwrite the rule. To exit the editor, select **OK**.
- As soon as you have saved the changes to the rule, Dispatch tests the ineligible job. Now the rule becomes eligible and is processed by Dispatch. The PDF files are moved to C:\MyArchiveFolder.
39. Exit from the Dispatch module. Selecting the red X in the top-right corner just closes the window, but it does not exit the Dispatch module. To exit the Dispatch module, select the **File** option, then select **Exit**. Answer any prompts to exit the Dispatch module.

## END OF EXERCISE

The optional Exercise 11 is next. In it, you learn how VIeC and Dispatch can be automated to distribute the PDF files using an email system.

## Exercise 10: Using Dispatch

# Exercise 11: Email

This chapter contains:

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Exercise 11 is an optional exercise designed to show how VIEC and Dispatch can be automated to distribute the PDF files using an email system. In this exercise, you use a utility called Blat, available from [www.blat.net](http://www.blat.net). Blat is a public domain utility that sends the contents of a file in an email format.

Your completion of the exercise depends on your configuration and network administrator settings for users, so the operation of Blat can be blocked from use. It is recommended that you edit the data file and insert your email into the data file so that you can see how Blat works. The Dispatch software calls the Blat software, then Dispatch sends an email to you. This action is explained later in the exercise.

Blat is just one of many email systems available. Blat is command-line driven. Other email systems such as Microsoft Outlook do not support a command-line interface and do not work, based on this example. Xerox can provide services to integrate VIEC with your environment and can integrate Microsoft Outlook or other email systems with VIEC. For more information, contact your local Xerox Analyst.

This exercise shows you how to do the following steps:

- Download and configure Blat.



Note: Blat is not a Xerox product. Changes to Blat or other programs can invalidate the information contained in this exercise. Xerox offers no support for this exercise.

- Edit the data file:
  - To avoid filling up your email Inbox with messages, reduce the number of data records.
  - Replace the dummy email addresses in the data file with your email address.
- Set up a command template that passes to Blat the PDF file and the required email parameterst. The Blat software sends an email to the email address that you entered in the data file.

## Download and Configure Blat

To begin, download and install the Blat software on your computer. To do this, open a Web browser, then type [www.blat.net](http://www.blat.net). On the Blat website, comply with all requirements and agreements, then download the software. After the download completes, install the Blat software on your computer.

1. Copy the **Blat.exe** to your `Windows\System32` folder, or to any other folder in your path.
2. Run the Blat configuration utility. To do this, select the **Start** menu option on your PC, then select the **Run** option.

Enter the following information in the dialog box:

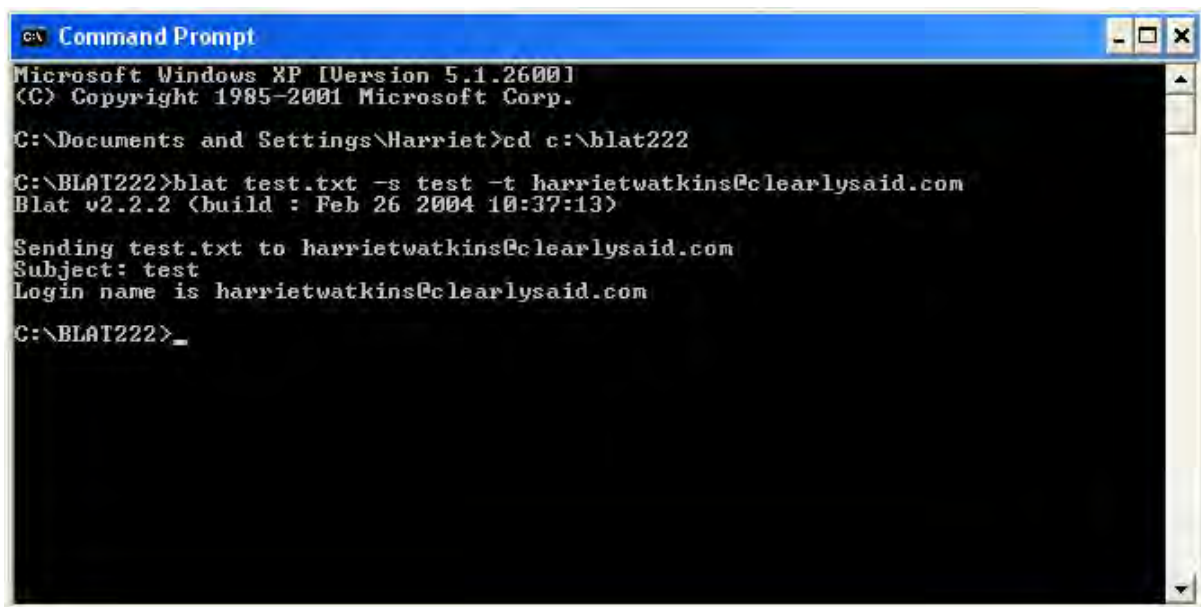
```
Blat -install yourhost.site youruserid@site.ext
```

Where:

- `yourhost.site` is the POP/SMTP server information for your email server or provider.
  - `youruserid@site.ext` is your email address.
3. After this completes, to test the functionality, send an email to yourself. To do this, create a simple text file called `test.txt` in the folder containing the Blat files. Then open a command window. At the DOS prompt, change directories to the folder that contains the Blat software, then enter the following information:

```
Blat test.txt -s test -t your email address
```

Where your email address is the email address that you want to send an email to.



```

c:\ Command Prompt
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Harriet>cd c:\blat222

C:\BLAT222>blat test.txt -s test -t harrietwatkins@clearlysaid.com
Blat v2.2.2 (build : Feb 26 2004 10:37:13)

Sending test.txt to harrietwatkins@clearlysaid.com
Subject: test
Login name is harrietwatkins@clearlysaid.com

C:\BLAT222>_
  
```

Blat sends the `test.txt` file in an email with the subject name of `test` to the email address identified.

 Tip: At this point, the meaning of an error message is that:

- you did not configure Blat correctly
- your POP/SMTP information is incorrect

- your system does not allow a command line email system to operate

In any of these situations, you cannot complete this exercise.

## Edit the Data File

Next edit the data file, reducing the number of records processed (for ease of use) and replacing the dummy email addresses with your email address.

1. Open the file `X:\Program Files (x86)\Xerox\VIIP\Xgfc\mslib\vtpworkshop.dbf` in a text editor. Immediately save this file as `X:\Program Files (x86)\Xerox\VIIP\Xgfc\mslib\myblatfile.dbf`. Make sure that the file open in your text editor is `myblatfile.dbf`.
2. Delete seventeen of the records. To do this, highlight the record lines, then press the **Delete** key. Only three records will remain in the file.

```

%!
[(projects) (vtpworkshop)] SETPROJECT
QSTRIP_on
(,) SETDBSEP
(vtpworkshop.dbm) STARTDBM
Fname, Lname, Emailfield, Combol, num1, num2
david, kirk, david.kirk@zxwgz.com, ww, 25, 15
anne, brown, anne.Brown@zxwgz.com, C1, 25, 15
tom, smart, Thomas.Smart@zxwgz.com, M1, 30, 2
%%EOF

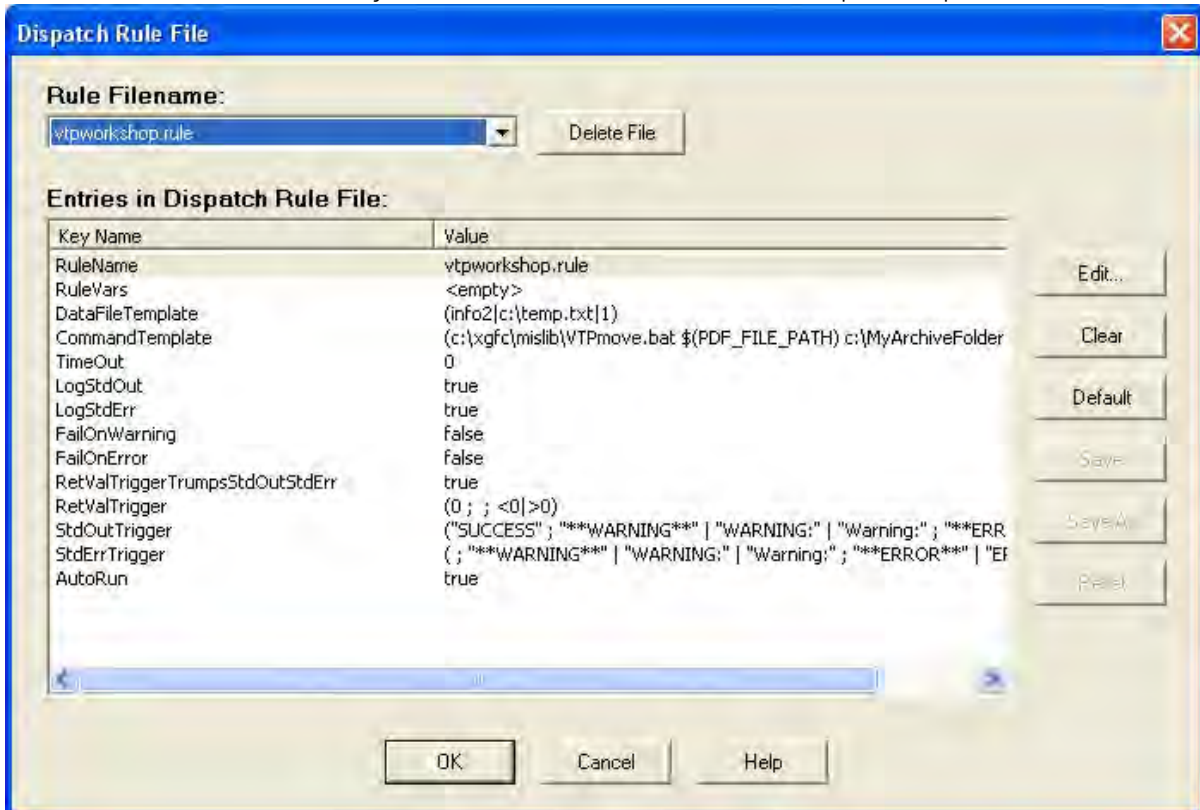
```

3. Replace the email address in each of the remaining records with your email address. VIeC uses that email address to populate the index file it builds. Dispatch then uses the email address from the index file as a parameter that it passes to Blat. Blat then emails the PDF to the email address.
4. Save the file `X:\Program Files (x86)\Xerox\VIIP\Xgfc\mslib\myblatfile.dbf`, then exit the text editor.



## Edit the DispatchRule

1. Start the **VIeC Dispatch** module. A new icon appears in the task bar and the Dispatch window opens.
2. Select the **Edit** menu, then select **DispatchRules**. The DispatchRule File window opens, and shows the sample1.rule.
3. Click the **Rule Filename** menu, then select **vtpworkshop.rule**. This is the rule used in Exercise 10. You can edit this rule to call the Blat email utility. The window shows the contents of the vtpworkshop.rule.



4. To view the contents of the template that appears in this rule, highlight the line that contains **Command Template**, then select **Edit**:

X:\Program Files (x86)\Xerox\VI PP\xgfc\mislib\VTPmove.bat \$(PDF\_FILE\_PATH) c:\MyArchiveFolder \$email, where X is the partition where the VI eCompose software is installed.

5. To change the command template to call the Blat utility and pass the required parameters, such as email address and subject field, to Blat, replace the contents of the command template with this string:

```
blat.exe $(PDF_FILE_PATH) -subject "VIeCworkshop email" -to $email -base64
```

Where:

**blat.exe**

is the executable command line utility.

**\$(PDF\_FILE\_PATH)**

is a built-in variable that returns the PDF file.

**-subject "VTPworkshop email"**

places the text, VTPworkshop email, in the email subject field.

**-to \$email**

places the contents of email into the To field of the email. Ensure that the contents are a valid email address.

**-base64**

is a Blat option used to send binary files using base64 (binary MIME).

The command line provides Blat with the PDF file, the email subject name, the body text of the email, and the destination address for the email. To use Blat to automate email from VIeC and Dispatch, ensure that Blat is configured correctly, and that you can use Blat for email.

6. Save the new command template, then exit the VIeC Dispatch screens.  
You are now ready to submit your data file to VIeC. VIeC processes the data file and creates three separate PDF files. After the job has completed, VIeC Dispatch initiates to processes the command template for each record. During processing, VIeC Dispatch calls Blat, and passes the required parameters to the email utility.
7. Right-click the **VIeC** icon at the bottom of the screen, then select **Launch Dispatcher**. VIeC Dispatch starts and the VIeC Dispatch window appears. Move this window to one side. When VIeC Dispatch starts to dispatch the PDF files using Blat, dispatch messages appear in this window.
8. Open the **Job Submission Client**.
9. Browse the file system to select `X:\Program Files (x86)\Xerox\VI PP\xgfc\mslib\myblatfile.dbf`, where X is the partition where the VI eCompose software is installed.
10. Select **Load Profile**, then load the profile called **exercise8.pfl**. Delete any entry in the Init (Nub) file window, because the myblatfile.dbf contains all the required VI PP® start commands, and a nub file is not required. All other settings can remain unchanged.

11. To start the job submission process, select **Submit Job**.

VIeC processes the job. In the profile you chose the split option to create three separate PDF files, based on the BOOKMARK inside the VIPP® job. The split option creates an index file based on the index template in the profile. The index template captures fields such as the email address, the subject field, and body text for the email.

After VIeC completes processing, VIeC Dispatch wakes up and compares its rule information against the index file just created. When VIeC Dispatch evaluates the rule and finds it to be true, Dispatch executes the Command Line template. In the case of this template, the Blat starts and passes the destination email address to Blat, with the PDF file, the subject field, and text that becomes the part of the body text email.

12. Next, go to your email in-box and review three new emails that have been sent to you. Each email has a personalized subject field and personalized body text. A PDF file based on the personalized information is sent as an attachment to the email document.
13. Close all open windows.

#### END OF EXERCISE

Congratulations on completing the VI eCompose Workshop.

For the options that are not covered in this workshop, such as the VIeC Web interface, Xerox recommends that you review the *FreeFlow VI eCompose User Guide*.





